

Administrative Procedures – Final Proposed Rule Filing

Instructions:

In accordance with Title 3 Chapter 25 of the Vermont Statutes Annotated and the “Rule on Rulemaking” adopted by the Office of the Secretary of State, this filing will be considered complete upon filing and acceptance of these forms with the Office of the Secretary of State, and the Legislative Committee on Administrative Rules.

All forms requiring a signature shall be original signatures of the appropriate adopting authority or authorized person, and all filings are to be submitted at the Office of the Secretary of State, no later than 3:30 pm on the last scheduled day of the work week.

The data provided in text areas of these forms will be used to generate a notice of rulemaking in the portal of “Proposed Rule Postings” online, and the newspapers of record if the rule is marked for publication. Publication of notices will be charged back to the promulgating agency.

PLEASE REMOVE ANY COVERSHEET OR FORM NOT REQUIRED WITH THE CURRENT FILING BEFORE DELIVERY!

Certification Statement: As the adopting Authority of this rule (see 3 V.S.A. § 801 (b) (11) for a definition), I approve the contents of this filing entitled:

Vermont Hazardous Waste Management Regulations

_____/s/ Julia S. Moore_____, on 11/30/2021
 (signature) (date)

Printed Name and Title:

Julia S. Moore, Secretary
 Vermont Agency of Natural Resources

RECEIVED BY: _____

- Coversheet
- Adopting Page
- Economic Impact Analysis
- Environmental Impact Analysis
- Strategy for Maximizing Public Input
- Scientific Information Statement (if applicable)
- Incorporated by Reference Statement (if applicable)
- Clean text of the rule (Amended text without annotation)
- Annotated text (Clearly marking changes from previous rule)
- ICAR Minutes
- Copy of Comments
- Responsiveness Summary

1. TITLE OF RULE FILING:

Vermont Hazardous Waste Management Regulations

2. PROPOSED NUMBER ASSIGNED BY THE SECRETARY OF STATE

21P-022

3. ADOPTING AGENCY:

Agency of Natural Resources

4. PRIMARY CONTACT PERSON:

(A PERSON WHO IS ABLE TO ANSWER QUESTIONS ABOUT THE CONTENT OF THE RULE).

Name: Anna Bourakovsky

Agency: ANR

Mailing Address: 1 National Life Drive, Davis 1,
Montpelier VT 05620-3704

Telephone: 802 477 - 2981 Fax: -

E-Mail: anna.bourakovsky@vermont.gov

Web URL *(WHERE THE RULE WILL BE POSTED)*:

5. SECONDARY CONTACT PERSON:

(A SPECIFIC PERSON FROM WHOM COPIES OF FILINGS MAY BE REQUESTED OR WHO MAY ANSWER QUESTIONS ABOUT FORMS SUBMITTED FOR FILING IF DIFFERENT FROM THE PRIMARY CONTACT PERSON).

Name: Jordan Gonda

Agency: ANR

Mailing Address: 1 National Life Drive, Montpelier VT
05620-3704

Telephone: 802 338 - 7522 Fax: -

E-Mail: jordan.gonda@vermont.gov

6. RECORDS EXEMPTION INCLUDED WITHIN RULE:

(DOES THE RULE CONTAIN ANY PROVISION DESIGNATING INFORMATION AS CONFIDENTIAL; LIMITING ITS PUBLIC RELEASE; OR OTHERWISE EXEMPTING IT FROM INSPECTION AND COPYING?) No

IF YES, CITE THE STATUTORY AUTHORITY FOR THE EXEMPTION:

PLEASE SUMMARIZE THE REASON FOR THE EXEMPTION:

7. LEGAL AUTHORITY / ENABLING LEGISLATION:

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(THE SPECIFIC STATUTORY OR LEGAL CITATION FROM SESSION LAW INDICATING WHO THE ADOPTING ENTITY IS AND THUS WHO THE SIGNATORY SHOULD BE. THIS SHOULD BE A SPECIFIC CITATION NOT A CHAPTER CITATION).

10 V.S.A. § 6603(9), 6607, and 6608a.

8. EXPLANATION OF HOW THE RULE IS WITHIN THE AUTHORITY OF THE AGENCY:

Pursuant to 10 V.S.A. § 6603(9), the Agency of Natural Resources is required to manage hazardous waste generated, transported, treated, stored, or disposed in the State by administering a regulatory and management program that, at a minimum, meets the requirements of subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976 and amendments thereto, codified as 42 U.S.C. Chapter 82, subchapter 3. 10 V.S.A. § 6607 (Transportation of Hazardous Waste) requires coordination of rulemaking with the Agency of Transportation. 10 V.S.A. § 6608a (Economic Poisons) requires coordination of rulemaking with the Agency of Agriculture, Food & Markets.

9. THE FILING HAS CHANGED SINCE THE FILING OF THE PROPOSED RULE.

10. THE AGENCY HAS INCLUDED WITH THIS FILING A LETTER EXPLAINING IN DETAIL WHAT CHANGES WERE MADE, CITING CHAPTER AND SECTION WHERE APPLICABLE.

11. SUBSTANTIAL ARGUMENTS AND CONSIDERATIONS WERE RAISED FOR OR AGAINST THE ORIGINAL PROPOSAL.

12. THE AGENCY HAS INCLUDED COPIES OF ALL WRITTEN SUBMISSIONS AND SYNOPSES OF ORAL COMMENTS RECEIVED.

13. THE AGENCY HAS INCLUDED A LETTER EXPLAINING IN DETAIL THE REASONS FOR THE AGENCY'S DECISION TO REJECT OR ADOPT THEM.

14. CONCISE SUMMARY (150 WORDS OR LESS):

Vermont has maintained Hazardous Waste Management Regulations since 1980. This rule, which has been revised routinely since 1980 to remain equivalent to the federal RCRA subtitle C hazardous waste regulations, provides a regulatory framework for managing hazardous waste by identifying wastes subject to regulation as hazardous and establishing management

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standards for businesses that generate, transport, treat, store or dispose of them.

In general, the rule is being revised to incorporate required new federal rules, clarify existing requirements, and address non-federal deficiencies identified in the current version (e.g., limiting the scope of the VT06 listing for pesticides, clarifying generator closure requirements, correcting typos). Changes include: adoption of the federal Generator Improvement, Electronic Manifest, and Hazardous Waste Pharmaceutical rules; revisions to hazardous waste import/export requirements; addition of new universal wastes; and revision of the used oil management standards.

15. EXPLANATION OF WHY THE RULE IS NECESSARY:

Refer to items 7 and 8, above. In general, the rule is being revised to incorporate required new federal rules, clarify existing requirements, and address deficiencies identified in the current version. Vermont is required to keep its regulations up-to-date with the federal RCRA subtitle C hazardous waste regulations.

16. EXPLANATION OF HOW THE RULE IS NOT ARBITRARY:

The rule is not arbitrary because it is developed in accordance with state statute (10 V.S.A. § 6603(9)). Elements related to the RCRA/Hazardous Waste programs are written in accordance with federal law. The specific permitting requirements and standards in the rule were carefully considered and designed to meet the requirements of state and federal law, without exceeding the Agency's statutory authority. The permitting parameters in the rule are as narrow in scope and extent as possible while still conforming to statutory requirements.

17. LIST OF PEOPLE, ENTERPRISES AND GOVERNMENT ENTITIES AFFECTED BY THIS RULE:

Affected parties include: hazardous waste generators (e.g., auto repair shops, manufacturing facilities, laboratories, metal working facilities, universities, medical facilities, waste management facilities);

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permitted transporters; permitted hazardous waste treatment, storage and disposal facilities; the solid waste management districts; environmental contractors and consultants; the U.S. Environmental Protection Agency (EPA); the Vermont Department of Health; the Vermont Agency of Agriculture, Food & Markets; the Vermont Agency of Transportation; and various divisions and programs within the Department of Environmental Conservation.

18. BRIEF SUMMARY OF ECONOMIC IMPACT (150 WORDS OR LESS):

Overall, in comparison to current state and federal hazardous waste regulations, we do not expect the proposed rule to result in additional economic impact on most affected parties. Any minor economic that does result from implementation of the proposed rule will likely be offset by savings that will result from added flexibility leaving it neutral. The anticipated economic impact upon Agency and DEC staff is, in general, minimal; the new eManifest rule will provide an economic benefit to the Agency by eliminating the need for a manifest data entry position. Many of the new federal rules provide flexibility to small businesses and will likely have a positive economic impact (e.g., episodic generation, pharmaceutical waste rules, new universal waste listings).

19. A HEARING WAS HELD.

20. HEARING INFORMATION

(THE FIRST HEARING SHALL BE NO SOONER THAN 30 DAYS FOLLOWING THE POSTING OF NOTICES ONLINE).

IF THIS FORM IS INSUFFICIENT TO LIST THE INFORMATION FOR EACH HEARING PLEASE ATTACH A SEPARATE SHEET TO COMPLETE THE HEARING INFORMATION.

Date: 8/10/2021

Time: 06:00 PM

Street Address: Pavilion Auditorium, 109 State Street,
Montpelier

Zip Code: 05609

Date:

Time: AM

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Street Address:

Zip Code:

Date:

Time: AM

Street Address:

Zip Code:

Date:

Time: AM

Street Address:

Zip Code:

21. DEADLINE FOR COMMENT (NO EARLIER THAN 7 DAYS FOLLOWING LAST HEARING):

8/20/2021

KEYWORDS (PLEASE PROVIDE AT LEAST 3 KEYWORDS OR PHRASES TO AID IN THE SEARCHABILITY OF THE RULE NOTICE ONLINE).

hazardous waste

manifest

generator

universal waste

used oil

Administrative Procedures – Adopting Page

Instructions:

This form must accompany each filing made during the rulemaking process:

Note: To satisfy the requirement for an annotated text, an agency must submit the entire rule in annotated form with proposed and final proposed filings. Filing an annotated paragraph or page of a larger rule is not sufficient. Annotation must clearly show the changes to the rule.

When possible, the agency shall file the annotated text, using the appropriate page or pages from the Code of Vermont Rules as a basis for the annotated version. New rules need not be accompanied by an annotated text.

1. TITLE OF RULE FILING:

Vermont Hazardous Waste Management Regulations

2. ADOPTING AGENCY:

Agency of Natural Resources

3. TYPE OF FILING (*PLEASE CHOOSE THE TYPE OF FILING FROM THE DROPDOWN MENU BASED ON THE DEFINITIONS PROVIDED BELOW*):

- **AMENDMENT** - Any change to an already existing rule, even if it is a complete rewrite of the rule, it is considered an amendment as long as the rule is replaced with other text.
- **NEW RULE** - A rule that did not previously exist even under a different name.
- **REPEAL** - The removal of a rule in its entirety, without replacing it with other text.

This filing is **AN AMENDMENT OF AN EXISTING RULE** .

4. LAST ADOPTED (*PLEASE PROVIDE THE SOS LOG#, TITLE AND EFFECTIVE DATE OF THE LAST ADOPTION FOR THE EXISTING RULE*):

SOS Log #16-604, Vermont Hazardous Waste Management Regulations, Effective Date December 31, 2016



INTERAGENCY COMMITTEE ON ADMINISTRATIVE RULES (ICAR) MINUTES

Meeting Date/Location: June 14, 2021, Microsoft Teams Virtual Meeting

Members Present: Chair Kristin Clouser, Diane Bothfeld, Jennifer Mojo, Matt Langham, Diane Sherman, Clare O'Shaughnessy and John Kessler

Members Absent: Ashley Berliner, Dirk Anderson

Minutes By: Melissa Mazza-Paquette

- 2:01 p.m. meeting called to order, welcome and introductions.
- Review and approval of minutes from the May 10, 2021 meeting.
- No additions/deletions to agenda. Agenda approved as drafted.
- No public comments made.
- Presentation of Proposed Rules on pages 2-6 to follow:
 1. Allocation and Apportionment of Vermont Net Income By Corporations, Department of Taxes, page 2
 2. Electrical Safety Rules – 2020, Vermont Electricians' Licensing Board, page 3
 3. Rule 8.000: Data Submission, Green Mountain Care Board, page 4
 4. Rule 9.000: Data Release, Green Mountain Care Board, page 5
 5. Vermont Hazardous Waste Management Regulations, Agency of Natural Resources, page 6
- Next scheduled meeting is July 12, 2021 at 2:00 p.m. via Microsoft Teams.
- 3:45 p.m. meeting adjourned.

Proposed Rule: Vermont Hazardous Waste Management Regulations, Agency of Natural Resources

Presented By: Anna Bourakovsky, Jordan Gonda and Steve Simoes

Motion made to accept the rule by John Kessler, seconded by Diane Sherman, and passed unanimously except for Jennifer Mojo and Diane Bothfeld who abstained, with the following recommendations:

1. Proposed Rule Coversheet, #8: Either in this location or elsewhere in the filing, incorporate language about the scope of items addressed and deficiency examples. Add clarity of federal standard updates. Provide category of changes that were outside of the federal rule updates.
2. Proposed Rule Coversheet, #12: If appropriate, state there are savings that could potentially offset any minimal impact leaving it neutral.
3. Proposed Rule Coversheet, #13 - #15 and Public Input #3 - #5: Update to include hearing information.
4. Adopting Page, #4: Include SOS Log #.
5. Environmental Impact Analysis, #9: Include sufficiency of analysis itself.
6. Public Input, #3 - #5: Identify public engagement and future steps planned, including public hearing(s). List those involved to date and those you intend to engage with.



Administrative Procedures – Economic Impact Analysis

Instructions:

In completing the economic impact analysis, an agency analyzes and evaluates the anticipated costs and benefits to be expected from adoption of the rule; estimates the costs and benefits for each category of people enterprises and government entities affected by the rule; compares alternatives to adopting the rule; and explains their analysis concluding that rulemaking is the most appropriate method of achieving the regulatory purpose.

Rules affecting or regulating schools or school districts must include cost implications to local school districts and taxpayers in the impact statement, a clear statement of associated costs, and consideration of alternatives to the rule to reduce or ameliorate costs to local school districts while still achieving the objectives of the rule (see 3 V.S.A. § 832b for details).

Rules affecting small businesses (excluding impacts incidental to the purchase and payment of goods and services by the State or an agency thereof), must include ways that a business can reduce the cost or burden of compliance or an explanation of why the agency determines that such evaluation isn't appropriate, and an evaluation of creative, innovative or flexible methods of compliance that would not significantly impair the effectiveness of the rule or increase the risk to the health, safety, or welfare of the public or those affected by the rule.

1. TITLE OF RULE FILING:

Vermont Hazardous Waste Management Regulations

2. ADOPTING AGENCY:

Agency of Natural Resources

3. CATEGORY OF AFFECTED PARTIES:

LIST CATEGORIES OF PEOPLE, ENTERPRISES, AND GOVERNMENTAL ENTITIES POTENTIALLY AFFECTED BY THE ADOPTION OF THIS RULE AND THE ESTIMATED COSTS AND BENEFITS ANTICIPATED:

Affected parties include: hazardous waste generators (e.g., auto repair shops, manufacturing facilities, laboratories, metal working facilities, universities, medical facilities, waste management facilities); permitted transporters; permitted hazardous waste treatment, storage and disposal facilities; the solid waste management districts; environmental contractors and consultants; the U.S. Environmental Protection

Economic Impact Analysis

Agency (EPA); the Vermont Department of Health; the Vermont Agency of Agriculture, Food & Markets; and various divisions and programs within the Department of Environmental Conservation.

The majority of the changes being made to the rule are minor revisions and clarifications to existing requirements and will not result in additional economic impact to the regulated community. Several of the revisions being made (e.g., episodic generation, pharmaceutical waste requirements, new universal listings) will provide greater flexibility in the management of hazardous waste and likely result in economic benefit to the regulated community.

While the new federal e-manifest rule implements fees for manifest use, it also provides a public database that all registered generators can access for copies of manifest records and to control their own facility information. In addition, since manifest information is entered into the database by generators, the need for a position at state level dedicated to that task is eliminated.

The Agency plans to provide cost-free training to the regulated community of the revisions being made.

4. IMPACT ON SCHOOLS:

INDICATE ANY IMPACT THAT THE RULE WILL HAVE ON PUBLIC EDUCATION, PUBLIC SCHOOLS, LOCAL SCHOOL DISTRICTS AND/OR TAXPAYERS CLEARLY STATING ANY ASSOCIATED COSTS:

Schools are typically in the least-regulated generator category (very small quantity generators) and changes being made to the rule will not impose additional economic impact.

5. ALTERNATIVES: *CONSIDERATION OF ALTERNATIVES TO THE RULE TO REDUCE OR AMELIORATE COSTS TO LOCAL SCHOOL DISTRICTS WHILE STILL ACHIEVING THE OBJECTIVE OF THE RULE.*

No alternatives were considered. See Cover Sheet item 8; the majority of changes being made are required by federal and state law.

6. IMPACT ON SMALL BUSINESSES:

INDICATE ANY IMPACT THAT THE RULE WILL HAVE ON SMALL BUSINESSES (EXCLUDING IMPACTS INCIDENTAL TO THE PURCHASE AND PAYMENT OF GOODS AND SERVICES BY THE STATE OR AN AGENCY THEREOF):

Most small businesses subject to this rule fall within the least-regulated generator category (very small quantity generators) and changes being made to the rule will not impose additional economic impact.

7. SMALL BUSINESS COMPLIANCE: EXPLAIN WAYS A BUSINESS CAN REDUCE THE COST/BURDEN OF COMPLIANCE OR AN EXPLANATION OF WHY THE AGENCY DETERMINES THAT SUCH EVALUATION ISN'T APPROPRIATE.

Small businesses can reduce the cost of compliance by reducing the amount of hazardous waste generated and the toxicity of products used. As stated in item 7, most small businesses are already in the least-regulated category of the regulated community (very small quantity generators).

8. COMPARISON:

COMPARE THE IMPACT OF THE RULE WITH THE ECONOMIC IMPACT OF OTHER ALTERNATIVES TO THE RULE, INCLUDING NO RULE ON THE SUBJECT OR A RULE HAVING SEPARATE REQUIREMENTS FOR SMALL BUSINESS:

Alternatives (such as no rule) were not considered because adoption of federal RCRA subtitle C regulations is required for Vermont to maintain its EPA authorization to implement a hazardous waste program in lieu of the federal RCRA program. Moreover, many of the federal RCRA regulations would still apply to Vermont small businesses (and be enforced by the EPA) in the absence of equivalent state rules. In order for a state hazardous waste program to be authorized by EPA, the state program must be "at least as stringent" as the federal RCRA program.

9. SUFFICIENCY: EXPLAIN THE SUFFICIENCY OF THIS ECONOMIC IMPACT ANALYSIS.

Each of the federal RCRA subtitle C regulations being adopted is subject to a Regulatory Impact Analysis at the federal level that the Agency considers sufficient for the purposes of this analysis. Other changes being made to the rule are minor and likely to result in either no economic impact or an economic benefit to the regulated community.

Administrative Procedures – Environmental Impact Analysis

Instructions:

In completing the environmental impact analysis, an agency analyzes and evaluates the anticipated environmental impacts (positive or negative) to be expected from adoption of the rule; compares alternatives to adopting the rule; explains the sufficiency of the environmental impact analysis.

Examples of Environmental Impacts include but are not limited to:

- Impacts on the emission of greenhouse gases
- Impacts on the discharge of pollutants to water
- Impacts on the arability of land
- Impacts on the climate
- Impacts on the flow of water
- Impacts on recreation
- Or other environmental impacts

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1. TITLE OF RULE FILING:

Vermont Hazardous Waste Management Regulations

2. ADOPTING AGENCY:

Agency of Natural Resources

3. GREENHOUSE GAS: *EXPLAIN HOW THE RULE IMPACTS THE EMISSION OF GREENHOUSE GASES (E.G. TRANSPORTATION OF PEOPLE OR GOODS; BUILDING INFRASTRUCTURE; LAND USE AND DEVELOPMENT, WASTE GENERATION, ETC.):*

The changes being made to this rule do not impact the emission of greenhouse gasses. An objective of the Vermont Hazardous Waste Management Regulations is to prevent improper management (e.g., evaporation) of volatile wastes.

4. WATER: *EXPLAIN HOW THE RULE IMPACTS WATER (E.G. DISCHARGE / ELIMINATION OF POLLUTION INTO VERMONT WATERS, THE FLOW OF WATER IN THE STATE, WATER QUALITY ETC.):*

A primary objective of the Vermont Hazardous Waste Management Regulations is to prevent discharges/releases of hazardous waste to waters of the state.

Environmental Impact Analysis

5. **LAND:** *EXPLAIN HOW THE RULE IMPACTS LAND (E.G. IMPACTS ON FORESTRY, AGRICULTURE ETC.):*

A primary objective of the Vermont Hazardous Waste Management Regulations is to prevent discharges/releases of hazardous waste to lands of the state.

6. **RECREATION:** *EXPLAIN HOW THE RULE IMPACT RECREATION IN THE STATE:*
The rule does not impact recreation in the state.

7. **CLIMATE:** *EXPLAIN HOW THE RULE IMPACTS THE CLIMATE IN THE STATE:*
The rule does not impact climate in the state.

8. **OTHER:** *EXPLAIN HOW THE RULE IMPACT OTHER ASPECTS OF VERMONT'S ENVIRONMENT:*

There are no other environmental impacts resulting from this rule.

9. **SUFFICIENCY:** *EXPLAIN THE SUFFICIENCY OF THIS ENVIRONMENTAL IMPACT ANALYSIS.*

The Vermont Hazardous Waste Management Regulations (VHWMR) are an environmental protection rule that regulates hazardous waste in Vermont from the point of generation to disposal ("cradle to grave") and are designed to prevent negative impacts to the environment due to mismanagement of hazardous waste. The proposed VHWMR have been reviewed and approved by the U.S. Environmental Protection Agency (EPA) for the purposes of re-authorizing Vermont to implement its Hazardous Waste Program (Program) and the VHWMR in lieu of the federal Resource Conservation & Recovery Act (RCRA) Subtitle C program and regulations. The vast majority of revisions proposed for the VHWMR incorporate new federal RCRA regulations that Vermont is required to adopt in order for Vermont's Program to maintain its EPA-authorized status, and that were adopted pursuant to stringent federal rulemaking and public participation procedures that the Agency considers sufficient for the purposes of this environmental impact analysis.

Administrative Procedures – Public Input

Instructions:

In completing the public input statement, an agency describes the strategy prescribed by ICAR to maximize public input, what it did do, or will do to comply with that plan to maximize the involvement of the public in the development of the rule.

This form must accompany each filing made during the rulemaking process:

1. TITLE OF RULE FILING:

Vermont Hazardous Waste Management Regulations

2. ADOPTING AGENCY:

Agency of Natural Resources

3. PLEASE DESCRIBE THE STRATEGY PRESCRIBED BY ICAR TO MAXIMIZE PUBLIC INVOLVEMENT IN THE DEVELOPMENT OF THE PROPOSED RULE:

As recommended by ICAR, the Agency intends to complete this rulemaking in accordance with Secretary of State rulemaking procedure which includes holding a public hearing during the public comment period.

4. PLEASE LIST THE STEPS THAT HAVE BEEN OR WILL BE TAKEN TO COMPLY WITH THAT STRATEGY:

The Agency has provided a summary of proposed rule changes to the regulated community (i.e., LQGs, SQGs, permitted storage facilities), worked directly with the commercial storage facilities in Vermont to review any proposed changes that may impact their operations, and informed generators of relevant proposed rule changes when conducting compliance inspections and in response to questions. Moving forward, as discussed in item #3, the Agency intends to hold a public hearing during the public comment period for the proposed rule.

5. BEYOND GENERAL ADVERTISEMENTS, PLEASE LIST THE PEOPLE AND ORGANIZATIONS THAT HAVE BEEN OR WILL BE INVOLVED IN THE DEVELOPMENT OF THE PROPOSED RULE:

As stated in item #4, the Agency has worked directly with the commercial storage facilities in Vermont

Public Input

(e.g., ENPRO/US Ecology, Safety-Kleen) to review any proposed changes that may impact their operations, and informed generators of relevant proposed rule changes when conducting compliance inspections and in response to questions.

Administrative Procedures – Scientific Information

THIS FORM IS ONLY REQUIRED WHEN INCORPORATING MATERIALS BY REFERENCE. PLEASE REMOVE PRIOR TO DELIVERY IF IT DOES NOT APPLY TO THIS RULE FILING:

Instructions:

In completing the Scientific Information Statement, an agency shall provide a brief summary of the scientific information including reference to any scientific studies upon which the proposed rule is based, for the purpose of validity.

1. TITLE OF RULE FILING:

Vermont Hazardous Waste Management Regulations

2. ADOPTING AGENCY:

Agency of Natural Resources

3. BRIEF EXPLANATION OF SCIENTIFIC INFORMATION:

None of the changes to the rule are based on scientific information. Any scientific information used by the U.S. Environmental Protection Agency in the development of its rules (i.e., the federal rules being adopted by Vermont as a requirement for EPA authorization of Vermont's Hazardous Waste Program) is cited in the Federal Register notices for those federal rules.

Vermont's EPA contact did not think any federal rules being incorporated by Vermont are based on scientific information.

4. CITATION OF SOURCE DOCUMENTATION OF SCIENTIFIC INFORMATION:

Not applicable

5. INSTRUCTIONS ON HOW TO OBTAIN COPIES OF THE SOURCE DOCUMENTS OF THE SCIENTIFIC INFORMATION FROM THE AGENCY OR OTHER PUBLISHING ENTITY:

Scientific Information

Federal Register notices for the federal rules being adopted by Vermont are available at the U.S. EPA RCRA State Authorization website:

<https://www.epa.gov/rcra/rule-checklists-applications-state-authorization-under-resource-conservation-and-recovery-act>

Administrative Procedures – Incorporation by Reference

THIS FORM IS ONLY REQUIRED WHEN INCORPORATING MATERIALS BY REFERENCE. PLEASE REMOVE PRIOR TO DELIVERY IF IT DOES NOT APPLY TO THIS RULE FILING:

Instructions:

In completing the incorporation by reference statement, an agency describes any materials that are incorporated into the rule by reference and how to obtain copies.

This form is only required when a rule incorporates materials by referencing another source without reproducing the text within the rule itself (e.g. federal or national standards, or regulations).

Incorporated materials will be maintained and available for inspection by the Agency.

1. TITLE OF RULE FILING:

Vermont Hazardous Waste Management Regulations

2. ADOPTING AGENCY:

Agency of Natural Resources

3. DESCRIPTION (*DESCRIBE THE MATERIALS INCORPORATED BY REFERENCE*):

Certain federal hazardous waste regulations (and parts of these regulations) are incorporated by reference through some of the changes being made to the Vermont Hazardous Waste Management Regulations. The federal regulations being incorporated by reference are contained in 40 CFR Parts 260 through 279.

4. FORMAL CITATION OF MATERIALS INCORPORATED BY REFERENCE:

40 CFR Parts 260 through 279

5. OBTAINING COPIES: (*EXPLAIN WHERE THE PUBLIC MAY OBTAIN THE MATERIAL(S) IN WRITTEN OR ELECTRONIC FORM, AND AT WHAT COST*):

40 CFR Parts 260 through 269 are available online at: <https://www.ecfr.gov/>. To obtain copies, select Title40- Protection of the Environment and navigate to Volumes 28 and 29 to view the federal regulations incorporated by reference.

6. MODIFICATIONS (*PLEASE EXPLAIN ANY MODIFICATION TO THE INCORPORATED MATERIALS E.G., WHETHER ONLY PART OF THE MATERIAL IS ADOPTED AND IF SO, WHICH PART(S) ARE MODIFIED*):

Not applicable

RESPONSE TO COMMENTS
HAZARDOUS WASTE MANAGEMENT REGULATIONS
(Proposed Rule 21P022)

The Vermont Agency of Natural Resources (Agency) proposed for public comment revised Hazardous Waste Management Regulations (VHWMR) on June 30, 2021. The comment period remained open through August 27, 2021, and a public hearing was held in Montpelier, Vermont, on August 10th, 2021.

During the public comment period, the Agency received comments from 14 interested parties. Most of those comments opposed the addition of proposed § 7-805(g) requiring that hazardous waste determinations be made on the aqueous component of used oil/water mixtures under certain circumstances. While the Agency believes that subchapter 8 of the VHWMR must eventually address this matter (since it is not currently addressed under the federal Resource Conservation and Recovery Act (RCRA) 40 CFR part 279 regulations), it agrees that more extensive outreach to, and collaboration with, all interested parties is necessary to properly convey the Agency's concerns with the current used oil regulatory framework, as well as the concerns identified by interested parties during the public comment period. As such, the Agency has removed the proposed § 7-805(g) regulation from the final proposed rule.

Since the Agency has removed proposed § 7-805(g) from the final proposed rule and due to the extensive nature of the comments received on that proposed regulation, those comments are not repeated below; they are however attached for review. All other comments received (i.e., those not pertaining to the proposed § 7-805(g) regulation) are repeated below and followed by the Agency's responses.

Comments were received from the following interested parties expressing opposition to proposed §7-805(g); these comments are attached for review (but are not repeated below):

- **Associated General Contractors of Vermont**
- **Associated Industries of Vermont**
- **Automotive Oil Change Association**
- **Casella Waste Systems, Inc.**
- **NORA (formally the National Oil Recyclers Association), an Association of Responsible Recyclers**
- **Safety-Kleen Systems, Inc.**
- **Specialized Environmental Services, L.P.**
- **Sustainable and Renewable Products, LLC**
- **TAS Environmental Services, L.P.**
- **Vermont Fuel Dealers Association**
- **Vermont Vehicle & Automotive Distributors Association**

In addition to the comments received regarding the proposed §7-805(g) regulation, the Agency received the following comments:

- **Casella Waste Systems, Inc. (Casella)**

Regarding the proposed § 7-203(w) conditional exemption for contaminated wipes (which would require as a condition for exemption that containers holding wipes contaminated with hazardous waste be marked “Excluded Contaminated Wipes”), Casella commented as follows:

“Would labeling containers with the words ‘excluded contaminated wipes’ replace the prior marking (requirement) of ‘shop rags for laundering’? Is it acceptable if facilities still label their containers as ‘shop rags for laundering’ or would this be considered a violation? Our shop rag containers either have stickers affixed to or have been hand-written with the words ‘Shop Rags for Laundering’ on the container.”

Casella also submitted a comment regarding proposed § 7-805(g) (see the attached comment document).

Agency Response: The proposed § 7-203(w) conditional exemption is based upon the U.S. Environmental Protection Agency’s “Conditional Exclusion for Solvent Contaminated Wipes” rule and replaces Vermont’s previous exclusion for “used oil contaminated rags or wipes”. As such, the conditions of the proposed exemption will replace those of the previous exemption (including the marking requirements) should the proposed regulation becoming effective.

- **CVS Health** commented as follows:

“This email serves to provide comment by CVS Health on the Vermont Department of Environmental Conservation’s draft rule regarding the management of hazardous waste pharmaceuticals. Over the past several years, CVS Health’s Corporate Environmental Department has worked closely with U.S. EPA on the development of the new Pharmaceutical Waste Rule. This Rule has significant implications for CVS Health as it is a sector-specific rule aimed at addressing regulatory challenges under RCRA faced by all healthcare facilities, including retail pharmacies, hospitals and long-term care facilities. As many states and their respective environmental agencies have chosen to adopt the Rule in full, we hope remaining states recognize the rational and scientific approach U.S. EPA took in crafting the final Pharmaceutical Rule and choose to adopt it in its entirety. Such an approach is protective of the environment and will foster national consistency in the management of pharmaceutical wastes, and maintains the household hazardous waste exemption to facilitate take-back programs for unused pharmaceuticals (an essential component in battling the opioid epidemic).

As you know, traditional RCRA rules were not written with applicability to retail or healthcare settings in mind. In fact, historically, they have created an unnecessary burden on states in terms of voluminous paperwork and number of inspections. At CVS, we work with regulators from across the country every day, facilitating a better understanding of the retail setting and helping inspectors close out their LQG inspections

of small retail locations, so that agencies meet their obligations of their delegated RCRA programs.

Among the key provisions of this Rule which CVS supports include the sector-specific management standards for the reverse distribution of pharmaceuticals that can be classified as hazardous waste when discarded (“hazardous pharmaceutical waste”) and the amendment to the P075 Listing for Nicotine patches, lozenges, and gum. This delisting profoundly impacts CVS retail locations which are LQG facilities solely due to the generation of p-listed waste from nicotine replacement therapy products.

We urge state agencies such as yours to adopt the Rule, in full, to ensure consistent regulations for healthcare facilities across the country. We are happy to work with your team to discuss the Rule to ensure consistent understanding of the nuances applicable to health care facilities.”

Agency Response: Comment noted.

- **Household & Commercial Products Association** commented (see attached original document for footnotes):

“The Household & Commercial Products Association (HCPA) appreciates the opportunity to offer comments to the Vermont Department of Environmental Conservation (DEC), Waste Management and Prevention Division on their proposal to amend the Vermont Hazardous Waste Management Regulations (VHWMR). The amendments include adding aerosol cans in Vermont’s Universal Waste Program. HCPA supports DEC’s proposed changes as it is based on EPA’s Increasing Recycling: Adding Aerosol Cans to the Universal Waste Regulations rule.

HCPA represents a wide range of products, from household cleaners and air fresheners to commercial disinfectant and pest control whose use of aerosol technology makes the aerosol industry an integral part of the household and commercial products industry. HCPA has represented the U.S. aerosol products industry since 1950 through its Aerosol Products Division, representing the interest of companies that manufacture, formulate, supply and market a wide variety of products packaged in an aerosol form.

The proposed amendments to the VHWMR not only maintains consistency with the Federal Resource and Recovery Act (RCRA), but it provides a clear, protective system for managing discarded waste aerosol cans; alleviates the regulatory burden on retail stores, aerosol product manufacturers, aerosol product marketers and others that discard waste aerosol cans by reducing the number of cans that must be treated as hazardous waste; promotes the collection and recycling of aerosol cans; and encourages the development of municipal and commercial programs to reduce the quantity of aerosol can waste going to municipal solid waste landfills.

The proposed revision incorporates flexibility for handlers of discarded waste aerosol cans and lessens the regulatory burden on the regulated community, allowing more aerosol cans that are properly discarded to be recycled. Through this proposal, DEC ensures that programs developed in Vermont can also be safely and universally implemented in other states so that waste handlers with multiple locations within the United States can have one consistent program to handle aerosol cans across multiple sites.

For the reasons stated above, HCPA supports DEC's proposed revisions to the VHWMR. If you have any questions about our support or about aerosol cans, please do not hesitate to contact me directly at (202) 833-7304 or ngeorges@thehcpa.org."

Agency Response: Comment noted.

- **PharmEcology Services** (PharmEcology) commented:

"PharmEcology Services, a division of Waste Management Sustainability Services, appreciates the opportunity to review and comment on the proposed regulations and we support your adoption of the federal Generator Improvement Rule and the Hazardous Waste Pharmaceuticals Rule.

One suggestion we would like to make is: § 7-1009(a)(2)(B) could also include "PHRM" in Item 13 of EPA Form 8700-22 as clarified by EPA in their FAQs to enable entry onto the e-manifest. <https://www.epa.gov/hwgenerators/frequent-questions-about-management-standards-hazardous-waste-pharmaceuticals-and#manifest>

One clarification we would like to request is regarding Vermont Listed Hazardous Wastes. If and when the Subpart P rules are adopted and a healthcare facility chooses to categorize all their pharmaceutical waste as hazardous, is it correct to assume that they would not be required to list VT 99 for their non-hazardous pharmaceutical waste as all waste codes are replaced by PHRM or PHARMS on the manifest?"

Agency Response: The Agency agrees with PharmEcology's suggestion clarification. In fact, the U.S. Environmental Protection Agency issued a clarifying memorandum (in addition to the FAQ) on December 19, 2019, stating its intention to develop a technical correction to replace the PHARMS code with the PHRM code in the federal regulations. Based on this memorandum, the Agency shall revise § 7-1009(a)(2)(B) to specify the use of "PHRM" in Item 13 of EPA Form 8700-22 as clarified by EPA.

Regarding PharmEcology's request for clarification about use of Vermont's VT99 code for non-hazardous waste, PharmEcology's assumption is correct that if pharmaceutical waste is identified on a uniform hazardous waste manifest shipping document by use of the PHRM code, the VT99 code is not also required.

No oral comments were made at the August 10, 2021, public hearing besides those made by the Association of Responsible Recyclers/National Oil Recyclers Association (who also submitted their comments in writing) regarding proposed § 7-805(g). As stated above, the Agency has removed § 7-805(g) from the final proposed rule and the written comments submitted by the Association of Responsible Recyclers/National Oil Recyclers Association are attached for review.

Finally, the Agency made one minor technical correction in the final proposed rule. In the proposed rule, § 7-307(f)(1) stated:

“The small quantity generator shall notify the Secretary at least thirty (30) days prior to receiving the first shipment from a very small quantity generator(s) using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12);”

Because EPA Form 8700-12 does not provide for such notification by small quantity generators, the Agency revised § 7-307(f)(1) in the final proposed rule as follows:

“The small quantity generator shall notify the Secretary in writing at least thirty (30) days prior to receiving the first shipment from a very small quantity generator(s) ~~using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12);~~”



August 20, 2021

Anna Bourakovsky
VTDEC
1 National Life Drive
Montpelier, VT 05620
Anna.bourakovsky@vermont.gov

RE: Comments on Proposed Hazardous Waste Regulations

Dear Ms. Bourakovsky,

Thank you for the opportunity to provide comments on the proposed revisions to the Vermont Hazardous Waste Regulations. Casella's comments are as follows:

- 1) 7-805(g) For any waste liquid material that contains both an aqueous solution and used oil, if the used oil component is not emulsified with the aqueous solution (i.e., the used oil exists in a separate phase) and the aqueous solution comprises greater than 50% of the overall volume of waste liquid material:**

Casella has several oil/water separators at various hauling divisions located throughout Vermont that generate liquid that contains oil. How would the addition of 7-805(g) impact our ability to remove and dispose of the contents from these units or would oil/water separators be considered exempt from this requirement? Being required to sample the aqueous solution each time these units are pumped would represent an undue economic burden.

- 2) 7-203(w)(A) Marked "Excluded Contaminated Wipes."**

Would labeling containers with the words "excluded contaminated wipes" replace the prior marking of "shop rags for laundering"? Is it acceptable if facilities still label their containers as "shop rags for laundering" or would this be considered a violation? Our shop rag containers either have stickers affixed to or have been hand-written with the words "Shop Rags for Laundering" on the container.

Thank you again for the opportunity and consideration of our comments on the proposed rules. Should you have any questions, please feel free to contact me at Kimberly.crosby@casella.com.

Respectfully submitted,

Kim Crosby

Kim Crosby – Environmental Compliance Manager
Casella Waste Systems, Inc.

From: [Ratigan, Nicole](#)
To: [Bourakovsky, Anna](#)
Subject: VT DEC- CVS Official Hazardous Waste Regulation Comments
Date: Friday, August 6, 2021 9:16:39 AM
Attachments: [image001.png](#)

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Good morning Ms. Bourakovsky,

This email serves to provide comment by CVS Health on the Vermont Department of Environmental Conservation's draft rule regarding the management of hazardous waste pharmaceuticals. Over the past several years, CVS Health's Corporate Environmental Department has worked closely with U.S. EPA on the development of the new Pharmaceutical Waste Rule. This Rule has significant implications for CVS Health as it is a sector-specific rule aimed at addressing regulatory challenges under RCRA faced by all healthcare facilities, including retail pharmacies, hospitals and long-term care facilities. As many states and their respective environmental agencies have chosen to adopt the Rule in full, we hope remaining states recognize the rational and scientific approach U.S. EPA took in crafting the final Pharmaceutical Rule and choose to adopt it in its entirety. Such an approach is protective of the environment and will foster national consistency in the management of pharmaceutical wastes, and maintains the household hazardous waste exemption to facilitate take-back programs for unused pharmaceuticals (an essential component in battling the opioid epidemic).

As you know, traditional RCRA rules were not written with applicability to retail or healthcare settings in mind. In fact, historically, they have created an unnecessary burden on states in terms of voluminous paperwork and number of inspections. At CVS, we work with regulators from across the country every day, facilitating a better understanding of the retail setting and helping inspectors close out their LQG inspections of small retail locations, so that agencies meet their obligations of their delegated RCRA programs.

Among the key provisions of this Rule which CVS supports include the sector-specific management standards for the reverse distribution of pharmaceuticals that can be classified as hazardous waste when discarded ("hazardous pharmaceutical waste") and the amendment to the P075 Listing for Nicotine patches, lozenges, and gum. This delisting profoundly impacts CVS retail locations which are LQG facilities solely due to the generation of p-listed waste from nicotine replacement therapy products.

We urge state agencies such as yours to adopt the Rule, in full, to ensure consistent regulations for healthcare facilities across the country. We are happy to work with your team to discuss the Rule to ensure consistent understanding of the nuances applicable to health care facilities.

Kind Regards,

Nicole Ratigan (She.Her.Hers.) | Compliance Manager, Corporate Environmental Health & Safety
p 401-770-6259 | f 401-406-3631
1 CVS Drive, Mail Code 2340, Woonsocket, RI 02895



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Please consider the environment before printing this e-mail

From: Bourakovsky, Anna
Sent: Tuesday, November 30, 2021 11:29 AM
To: Nucci, Michael
Subject: FW: Information from my NADA Source regarding the proposed amendment to VT Hazardous Waste Management Regs
Attachments: L15_Federal Hazardous Waste Law.pdf; SSDEExemption.pdf; L46_Water_Wastewater_v01272020.pdf; Voluntary Standards.pdf

From: Marilyn Miller <mmiller@vermontada.org>
Sent: Tuesday, August 31, 2021 4:08 PM
To: Bourakovsky, Anna <Anna.Bourakovsky@vermont.gov>
Subject: Information from my NADA Source regarding the proposed amendment to VT Hazardous Waste Management Regs

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Hi Anna,

Thanks for your patience with my getting back to you on this.

As I mentioned previously, I was able to talk with my NADA Regulatory staff re the proposed amendment, which would impose additional waste characterization and waste management costs on dealers with no environmental benefit.

Some of the points we discussed:

First, any rule that would designate water/used oil mixtures, normally "used oil", as "hazardous waste" could increase the amount of hazardous waste handled by impacted generators including dealers, potentially knocking them from "VSQGs" to "SQGs" or from "SQGs" to LQGs". This could unnecessarily increase the cost of waste management for dealers with no environmental benefit and would work against all of the efforts dealers have made through the years to reduce/minimize their generation of hazardous waste. (Importantly, unlike for hazardous waste, dealers strive to *maximize* the amount of used oil they manage, including taking used oil from do-it-yourselfers, thereby helping to keep such oil in the recycling system. Next to steel, some claim that used oil is the most recycled material in commerce).

Second, NADA has long counseled dealers against the improper mixing of hazardous wastes into used oil for several reasons. These include 1) the risk of incurring higher waste management costs if the resultant mixture is found to be a hazardous waste that had to be managed as such, 2) the risk of being bumped up into a higher hazardous waste generator status category (see above), 3) potential violations of existing federal and state waste mixing rules. The attached NADA Guide (L15) refers to these issues in several places. See pp. 4, 8, 9, and 10. The Guide is dated and is being rewritten. For example, "CESQGs" are now called "VSQGs". But, the key info on used oil, waste mixing, and oil water separators is good.

Third, another reason why dealers don't mix hazardous waste into used oil is the Service Station Dealer Exemption (SSDE) from Superfund which protects dealer-managed used oil against Superfund liability if certain conditions are met. One of those conditions is improper mixing. See attached one page on the SSDE.

Fourth, we have carefully counseled dealers on proper wastewater management. Just as we've advised against mixing hazardous waste into used oil, we've also advised on the importance of keeping waste oil out of waste waters, whether destined for municipal treatment, shallow wells, or stormwater. See attached NADA Guide L46 in this regard.

Fifth, we've even counseled dealers against mixing antifreeze (typically nonhazardous) into used oil. See attached Coalition Voluntary Standards.

I hope this information is helpful, and thanks again for your patience.

Marilyn B. Miller

Executive Director

Vermont Vehicle & Automotive Distributors Association

1284 US Route 302-Berlin, Suite 2

Barre, VT 05641

p: 802-461-2655 f: 802-461-2659

www.vermontada.org

From: [Matt Cota](#)
To: [Bourakovsky, Anna](#)
Cc: [ANR - Info](#); [Walke, Peter](#)
Subject: Proposed Revisions to Vermont Hazardous Waste Management Regulations
Date: Monday, August 23, 2021 5:11:07 AM

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

On behalf of Vermont's fuel providers, I am writing to urge a delay in the changes to Subchapter 8, Used Oil Management Standards.

After reading the proposed revisions, the inclusion of 7-805(g) could significantly increase the amount of oily water considered as hazardous waste. I am not aware of any other state that has adopted a similar requirement or why this regulatory change is being considered.

Thank you for your consideration and look forward to working with the Agency of Natural Resources on this issue.

Matt Cota
Vermont Fuel
Office: 802-223-7750
Cell: 802-318-2190
www.vermontfuel.com



Matt Musgrave
Associated General Contractors of Vermont
PO Box 750
Montpelier, VT 05601

August 20, 2021

Anna Bourakovsky
Agency of Natural Resources
1 National Life Drive, Davis 1
Montpelier, VT 05620-3704

RE: Proposed Revisions to Vermont Hazardous Waste Management Regulations

Dear Ms. Bourakovsky,

****Please replace my previous comment with this letter******

I am writing to you today regarding the proposed rule change the Used Oil Management Standards. The Associated General Contractors of Vermonts is a trade association whose membership provides construction services to the public, Buildings and General Services, VTRANS and the Agency of Natural Resources.

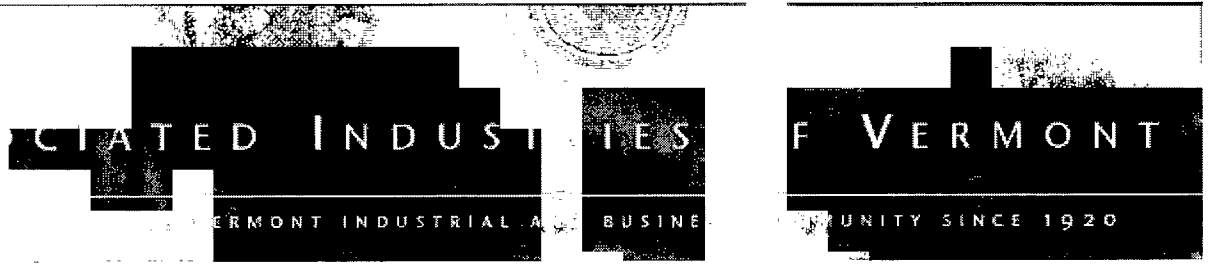
We understand the challenges state employees have faced due to the pandemic and limited ability to message. With that we understand the challenges the agency faces in public outreach during these challenging times.

We have been contacted by state and national advocacy groups who share the message that this policy may be unnecessary, close to impossible to implement, and that Vermont would be the only state with such policy. Without the ability to understand all the aspects of the change we cannot support the proposal. We believe more vetting would improve outcomes, compliance, and results.

We request that the agency withdraw section 7-805(g) from the larger proposal to update the Vermont Hazardous Waste Management Regulations at this time. We propose that the agency and industry stakeholders meet to discuss any confusion with the policy change, curb any unintended consequences and work together to find workable solution/rule. We have many questions and would appreciate the engagement.

Regards,

Matt Musgrave
Associated General Contractors of Vermont
802-223-2374
matt@agcvt.org



August 27, 2021

Anna Bourakovsky
Agency of Natural Resources
1 National Life Drive, Davis 1
Montpelier, VT 05620-3704

RE: Proposed Revisions to Vermont Hazardous Waste Management Regulations

Dear Ms. Bourakovsky:

We appreciate one week extension for public comment on the proposed rule revisions noted above.

However, without more information as requested in our initial comments and additional time to work with potentially impacted generators we are not in a position to offer further detailed comments at this time.

Given that there does not appear to be a compelling reason for the changes proposed in 7-805(g) and there are clear indications that it could significantly increase the amount of oily water waste that would be considered hazardous waste, thereby significantly increasing the cost for generators to contract for the proper handling of such waste, as well as requiring increased costs and technical challenges to ensure their own direct compliance, we strongly recommend that this section be removed from the final rule revision.

If the Agency remains interested in potentially changing the rules for oily water waste, AIV would be very interested in participating in a stakeholder discussion with the Agency and other interested parties to identify and consider issues and options related to this matter and determine what if any changes might be warranted in a future rulemaking.

We appreciate your consideration of these additional comments, and as noted we look forward to working with the Agency and interested parties as the rulemaking process moves forward. Please do not hesitate to contact us to discuss any of these matters further.

Sincerely,

A handwritten signature in black ink, appearing to read 'William Driscoll', with a stylized flourish at the end.

William Driscoll
Vice President



August 27, 2021

Sent Via Electronic Mail

Anna Bourakovsky
Waste Management & Prevention Division
Vermont Department of Environmental Conservation
1 National Life Drive – Davis 1
Montpelier, VT 05620-3704
anna.bourakovsky@vermont.gov

RE: 2021 Proposed Vermont Hazardous Waste Management Regulations

Dear Ms. Bourakovsky:

These comments are submitted in response to the Vermont Department of Environmental Conservation (VDEC)'s request for comments on its 2021 Proposed Vermont Hazardous Waste Management Regulations (<https://dec.vermont.gov/waste-management/hazardous/regulations>). As the national representative for small business fast lube facilities which both generate significant quantities of on-spec used oil and collect do-it-yourselfer used oil from the public, the Automotive Oil Change Association (AOCA) is very concerned that VDEC may inadvertently destroy Vermont fast lube operators' ability to afford accepting household do-it-yourselfer (DIYer) used oil as well as threaten the viability of the fast lube business model overall.

AOCA Background

Founded in 1987, the Automotive Oil Change Association ("AOCA") is a non-profit trade organization representing 4,800 automotive maintenance centers throughout North America and around the world. The association is dedicated to enhancing the competency of fast lube owners, educating the public about the benefits of preventive automotive maintenance, and maintaining a healthy, competitive environment for the industry. AOCA members adhere to a Code of Ethics and a standard of service excellence. When it comes to changing oil, AOCA members have more collective experience than any other segment of the automotive maintenance and repair industry.

AOCA supports empowering consumers with (a) the ability to seek the services they need in a convenient and cost-effective manner, and (b) access to the important information they need to make prudent decisions to protect their safety, vehicle investment, and natural resources. Properly maintained vehicles function better, last longer, have fewer leaks, and emit less pollutants, and the professional facilities that service them also provide superior vehicle waste maintenance. Everybody wins.

The Fast Lube Industry's Positive Impact on Proper Used Oil Recycling

The primary automotive waste generated nationwide by both industry and consumers is used oil. AOCA member fast lube facilities properly manage for recycling used oil drained from customers' vehicles. In 2018, the fast lube industry—represented by NAICS 811191—had approximately 8,395 facilities¹ that received approximately 81,000,000 service visits.² It is unusual for a fast lube service visit not to include an oil change, but allowing for 10% of those service visits as not including an oil change and the average passenger vehicle oil change generating between 4 to 7 quarts of used engine oil, the industry properly manages for recycling approximately 95 million gallons of customers' used oil every year.

AOCA members also collect for recycling do-it-yourselfer (“DIYer”) used oil from members of the public who change their own engine oil. Prior to this service, millions of gallons of used oil were inappropriately disposed each year (e.g., down the sewer, in the trash or on the ground in yards, fields, and parks). Since the fast lube industry began collecting DIYer used oil in the mid-1980s, much of those same millions of gallons of DIYer used oil have been collected for recycling. This public service activity increases daily costs to fast lube operators in terms of storage, employee time and training, management of DIYer overnight dumping of milk-jug mystery mixtures, and excessive fees associated with DIYer “hot loads,” including licensed hauler fees, cleaning and/or replacement of storage equipment, and fines. For their community protection efforts, fast lube operators are supposed to receive protection from off-site third-party liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund)’s Service Station Dealer Exemption (SSDE).

VDEC's Proposal's Potential Negative Impact on the Fast Lube Industry

Since AOCA knows of no evidence to suggest that automotive service facilities are mismanaging used oil, oil/water separators or wash water, it came as a shock to see VDEC's proposed **Section 7-805 Used Oil Determination** which would upend the successful used oil recycling system's non-hazardous presumption for used oil destined for recycling established in 40 CFR Part 279. Incorporating by reference the extensive comments submitted by NORA, an Association of Responsible Recyclers (August 20, 2021), AOCA unfortunately must add that VDEC's mid-pandemic timing could not be worse.

¹ According to the most recent U.S. Census Survey of facilities that qualify as NAICS 811191, *Automotive Oil Change and Lubrication Shop*.

² Based on the average 31 cars-per-day serviced as reported in *2018 NOLN Fast Lube Operator Survey Results, Part One*.

Proposed Section 7-805(g) Used Oil Determination

For any waste liquid material that contains both an aqueous solution and used oil, if the used oil component is not emulsified with the aqueous solution (i.e., the used oil exists in a separate phase) and the aqueous solution comprises greater than 50% of the overall volume of waste liquid material:

- (1) The aqueous solution shall be evaluated to determine if it is a hazardous waste (i.e., exhibits a hazardous waste characteristic) pursuant § 7-303; and
- (2) If the aqueous solution is hazardous waste (i.e., exhibits a hazardous waste characteristic), either:
 - (A) Separate the aqueous solution from the used oil and manage it as hazardous waste in accordance with the applicable requirements of subchapters 1 through 7 of these regulations; or
 - (B) Manage the entire volume of liquid material as hazardous waste in accordance with the applicable requirements of subchapters 1 through 7 of these regulations.

Although AOCA represents an innovative industry always interested in improving results and methods to achieve them, without any actual problems in the field identified by VDEC with regard to automotive service providers and the proposed amendments being designed to force exorbitant operational changes statewide when small business operators and their customers can least afford to absorb the impacts, AOCA must respectfully ask the following:

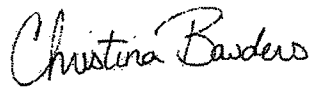
1. How would proposed Section 7-805 improve tangible environmental safety compared to the results currently achieved by the regulatory system based on 40 CFR Part 279?
2. If VDEC has identified a problem with a different type of used oil generator, has VDEC expended all available enforcement options within the existing regulatory system to address the behavior of that particular generator before proposing to significantly change the regulations for all generators?
3. Does VDEC expect every small business automotive service facility to have a licensed laboratory run a TCLP or other tests on every batch of wash water and/or oil-water separator content?
4. Does VDEC realize the proposed Section 7-805 could knock every small business automotive service facility out of VSQG status?
5. Could VDEC give the regulated community more time to study the impacts of this proposal?

Ms. Anna Bourakovsky
VDEC Waste Management & Prevention Division
AOCA Comments 2021 Proposed Vermont Hazardous Waste Management Regulations
August 27, 2021
Page 4 of 4

Conclusion

AOCA very much appreciates this opportunity to provide information and comments. If you have any questions or concerns, please contact AOCA's Policy Advisor, Joanna Johnson, at (515) 991-4971.

Sincerely,

A handwritten signature in cursive script that reads "Christina Bauders".

Christina Bauders
AOCA Executive Director

**Comments of NORA, an Association of Responsible Recyclers
Before the Vermont Department of Environmental Conservation
Concerning
Proposed Regulation 7-805(g) of the
Vermont Hazardous Waste Management Regulations**

August 10, 2021

Good evening. My name is Scott Parker. I am the Executive Director of NORA, an Association of Responsible Recyclers. NORA was founded in 1984 and originally represented only used oil recyclers. NORA's membership has expanded significantly in the subsequent decades and consists of companies that recycle wastewater, antifreeze, parts cleaning chemicals, and oil filters. NORA now has more than 350 members throughout the entire United States as well as several foreign countries.

NORA appreciates the opportunity to offer oral comments today and will submit formal written comments on or before August 20, 2021.

NORA members have taken a close look at the proposed regulation, section 7-805(g), and the consensus is that this would be a regulatory requirement in search of a problem.

It should be emphasized at the outset that oily wastewater, generated by numerous different industries, is currently defined, classified and managed as used oil under 40 CFR Part 279 and EPA guidance documents. It is managed efficiently and in compliance with all applicable environmental regulations as well as permits governing the operations of oily wastewater recycling facilities (formally known as Centralized Water Treatment facilities or CWTs). Currently, CWTs are required to meet numerous and stringent discharge limits set forth in their permits (which requires rigorous testing and laboratory analysis) as well as analysis of solids resulting from treatment prior to RCRA-compliant disposal.

Unfortunately, the proposed regulation, if implemented and enforced, would disrupt and overwhelm the existing treatment system, causing immense frustration and expense to Vermont's generators of oily wastewater. Moreover, as we will discuss, the law of unintended consequences will result in inconsistent measurements and probably improper disposal and pollution.

The Resource Conservation and Recovery Act (“RCRA”) governs the generation, management, recycling treatment and disposal of hazardous waste. It established a “cradle to grave” regulatory system. It also established a distinct regulatory program to encourage legitimate recycling of used oil – compatible with but outside of the hazardous waste management system.

Let me start with the “grave” or disposal component of the impact of section 7-805(g). This proposed regulation would cause most oily wastewater to be classified as hazardous waste because most oily wastewater is comprised of 90 percent or more water and contains contaminants, such as heavy metals or benzene, at low levels, but sufficient to be classified as hazardous waste (in the absence of 40 CFR Part 279). Currently, however, these wastewaters are not classified as hazardous waste because they are regulated by EPA’s used oil management standards set forth in 40 CFR Part 279; see specifically 40 CFR 279.10(c) and the regulations governing CWTs pursuant to the Clean Water Act. Regrettably, proposed section 7-805(g) would instantly transform most of these tremendous quantities of oily wastewater into hazardous wastes.

There are few options for disposing of wastewater as a hazardous waste. Wastewater cannot easily be disposed of in a landfill. It would be illegal to evaporate the water and the cost of attempting to solidify the water would be prohibitively expensive and consume immense quantities of landfill space. Also, if the landfill eventually fails and becomes a Superfund site, the wastewater generators would become liable for remediating the site.

Incineration and Transportation

The only disposal alternative is incineration. The first consideration is the availability and capacity of incinerators. According to EPA, there are 23 licensed incinerators in the United States. Some of these are commercially available. Some of the commercially available incinerators are limited to certain types of hazardous wastes. Before proceeding with the adoption of section 7-805(g), DEC, respectfully, should undertake a reliable and accurate assessment of which incinerators are available to Vermont’s generators of oily wastewater -- and at what cost? I can tell you quite honestly that the research cannot be done with the very limited and outdated information available on the internet. At a minimum, it will require an examination of the incinerators’ permits and interviews of the incinerators’ managers to determine each incinerator’s (1) capacity; (2) price per gallon, including cost of laboratory testing; and (3) availability (e.g., scheduling and waiting time).

There are at least three reasons why incineration capacity is so scarce. First, the Non-Hazardous Secondary Materials rule finalized by EPA three years ago mandates incineration for a wide range of discarded materials (solid wastes) that were potentially burned for energy recovery. For example, discarded railroad ties and wood from construction and/or demolition debris now have to be incinerated.

Second, there is a large category of chemicals classified as Per- and polyfluoroalkyl substances ("PFAS") which are a group of man-made chemicals that EPA has determined are highly toxic. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. Like PCBs, these chemicals are very persistent in the environment and in the human body – meaning they don't break down and they can accumulate over time. Consequently, EPA has determined that incineration is one of the recommended technologies to treat PFAS waste.

Third, generators of chemicals and other materials that must be incinerated who have ongoing need for incineration services have locked incineration facilities into long-term contracts. Therefore, the available incineration capacity for the foreseeable future is extremely limited.

With incineration services in high demand and with very limited incinerator capacity and availability, the law of supply and demand dictates that prices for incineration will increase dramatically.

In addition to the incinerators' ever increasing disposal fees, transportation and possible storage are also major cost factors. Since there are no known hazardous waste incinerators in Vermont, all oily wastewater generated in Vermont would have to be shipped out of state. We don't know which of these out of state incinerators would be available. Consequently, I need to address these costs with hypotheticals. With the significant recent increases in gasoline and diesel fuel, it is realistic to assume that a tank truck transporting a 5000 gallon load of wastewater to an incinerator -- one way -- would cost \$5.00 a mile. A 200 mile one way trip would cost \$1000 and the return trip would also cost \$1000 for a total cost of \$2000. Most incinerators are located in Louisiana and Texas and the approximate distance from Burlington, Vermont to Port Arthur, Texas (the location of a Waste Management hazardous waste incinerator) is 1900 miles. At \$5.00 a mile for the 5000 gallon load for a one way trip is \$9500 and a return trip will cost an additional \$9500. This amount does not take into account lodging and meals for the driver or drivers. Nor does it take into account the waiting time needed for unloading – or the storage costs

at the facility because the generator's 5000 gallons has to wait its turn to be incinerated.

There are a few other incinerators that are closer to Burlington, Vermont. For example, the one operated by Ross Environmental in Grafton, Ohio. The driving distance is 644 miles. At \$5.00 a mile for a 5000 gallon load of oily wastewater the one way cost would be \$3220 and the roundtrip would be \$6440. This amount does not include the other costs I have previously mentioned. While the distance from Burlington, Vermont to Grafton, Ohio is shorter than the distance to the incinerators in Texas and Louisiana, the overriding factor is capacity. DEC should carefully evaluate incineration availability, cost and capacity.

In addition, DEC should consider:

- (1) the very real problem of a nationwide shortage of truck drivers;
- (2) the ever increasing cost of fuel (gasoline and diesel);
- (3) the risks of transporting waste including accidents, spills and leaks;
- (4) the "carbon footprint" left by incineration, storage, and transportation; and
- (5) the cost of compliance with U.S. Department of Transportation's regulation of shipments of hazardous materials.

NORA members who have studied DEC's proposal, including members that operate CWT facilities, have reached a consensus that if section 7-805(g) is adopted, implemented and enforced, the cost to a Vermont oily wastewater generator will be five to seven times greater than the current cost sending wastewater to a CWT facility.

Burden on Vermont Oily Wastewater Generators

It is worth noting that Vermont is the only state that has proposed this requirement that automatically transforms oily wastewater into hazardous waste. Even California (which has the most stringent of all used oil regulatory schemes in the United States) has not proposed any similar regulation. If section 7-805(g) is adopted, Vermont's oily wastewater generators will have a very expensive burden that is not imposed on generators in any other state in the Nation.

To continue with the hypothetical, if a Vermont manufacturer of widgets, generates 5000 gallons each month and the minimum cost is \$19,000 a month, the manufacturer will have an annual cost of disposing of oily wastewater of approximately \$228,000. Even if that amount is cut in half (assuming a more

proximate incinerator has the capacity and is available), the cost to the Vermont manufacturer is \$114,000 a year – a burden not imposed on competing manufacturers in other states.

In addition, generating large quantities of hazardous waste (formerly ordinary oily wastewater) will place Vermont's oily wastewater generators into the RCRA category of large quantity hazardous waste generators. This will impose significant paperwork as well as physical (facility infrastructure) obligations on Vermont generators. Their counterparts in the other 49 states will not suffer these burdens.

Other Practical Problems

Proposed section 7-805(g) states that if the “aqueous solution comprises greater than 50% of the overall volume of waste liquid material” and it exhibits any hazardous characteristic it will be classified as a hazardous waste. This seems straightforward but in fact raises numerous questions.

First, who conducts the measurement and under what conditions? RCRA imposes on the generator the obligation to determine whether his or her waste material is hazardous. Currently, oily wastewater sent by the generator to the CWT is classified as used oil regardless of the quantity of used oil in the wastewater. Under DEC's proposal the generator would need to (1) measure the ratio of water to used oil and (2) obtain laboratory analysis of the material to determine whether it exhibits any hazardous characteristic. An accurate measurement of the ratio would require personnel training and equipment, particularly where the ratio is close to the 50 percent mark.

If the generator states that aqueous phase is less than 50 percent, and a subsequent analysis by the CWT indicates that the water content is more than 50 percent, then the CWT will need to return the entire load to the generator (at the generator's cost) because in most cases the CWT's permit precludes treatment of hazardous waste. The generator would also be liable – potentially criminally liable – for transporting hazardous waste without a hazardous waste manifest and/or without a hazardous waste transporter's permit.

It is worth mentioning that there are at least four places where the wastewater ratio could be measured: the generator's bulk storage tank; (2) the smaller storage tank before being offloaded to the tank truck; (3) the tank truck upon arrival at the CWT facility; and (4) the CWT facility's container after being unloaded from the tank truck. It is highly unlikely that the measurement results would be even close to

identical. Indeed, it is likely that the ratio measurements would differ on the whether the wastewater is hazardous or non-hazardous.

Second, in what situations will be generator be able to alter the ratio of used oil to water? For example, will the generator be able to add used oil to the wastewater to ensure that there is more than 50 percent used oil in the mixture? Alternatively, is the generator allowed to evaporate some of the water to obtain the favorable ratio? If so, is the evaporation process limited to leaving the wastewater exposed to heat and sunlight, or, can he or she cause evaporation by “cooking”?

Third, in the context of the aqueous phased mixed with or emulsified into the used oil phase, when and how should the mixture be measured? Should the generator be able to chemically treat the mixture to promote separation of the two phases? If the generator chemically treats his or her wastewater, is he or she engaging in hazardous waste treatment for which a RCRA permit is required? Alternatively, should the generator be required to only allow “natural separation” over time? And what period of time? These are questions not answered by DEC’s proposal -- even though these technical issues, in the absence of specific clarification, will cause widespread disparity in measuring oily wastewater.

Vermont’s Proposal Would Undermine Congressional and EPA Encouragement of Used Oil Recycling.

In 1984, Congress passed legislation designed to assure that EPA would implement its legislative mandate on used oil. The legislative history of the 1984 amendments to RCRA state that “where protection of human health and the environment can be assured...the [EPA] Administrator should make every effort not to discourage recycling of used oil.” H.R. Rep. 1133, 98th Cong., 2d Sess. 114 (1984); *See also* H.R. Rep. 198 (Part 1) 98th Cong., 1st Sess., 64 (1983). EPA has recognized that this “statute contains a separate provision dealing with used oil as a distinct class and authorizes separate standards for its management (*See* RCRA section 3014).” 50 Fed. Reg. 49175. Under EPA’s Used Oil Management Standard (40 CFR Part 279) oily wastewater is classified as used oil.

Senator John Chaffee, the floor manager of the RCRA reauthorization bill (S. 757) in the Senate and the chairman of the conference committee on the 1984 RCRA Amendments, described the used oil recycling provisions of the 1984 legislation as “a careful effort to balance the stringent environmental requirements of this legislation against the practical experience of businesses that are already engaged in successfully recycling material that would otherwise be harming the environment.”

According to Senator Chafee, the used oil recycling industry “has demonstrated how a potentially hazardous substance can be safely collected and profitably recycled into new, useful products.” 130 Cong. Rec. S. 9193 (daily ed. July 25, 1984).

Following Congress’ 1984 legislative instructions, as well as its previous instructions in the Used Oil Recycling Act of 1980, EPA established a set of balanced regulatory controls that, for all practical purposes, accomplished Congress’ goals. NORA members collect and manage vast quantities of used oil (including used oil recovered from oily wastewater) as a valuable product – in compliance with EPA’s comprehensive regulations now codified at 40 CFR Part 279.

If, instead of a balanced regulatory approach, used oil had been declared a hazardous waste, as had been seriously considered by EPA and now is being proposed by DEC, far less used oil would be recycled and the system for handling used oil would be extremely expensive – without any environmental protection benefits. Indeed, the opposite is likely the case. In adopting 40 CFR Part 279 and rejecting the classification of used oil as a hazardous waste EPA was motivated by its concern that disrupting the used oil recycling system could lead to significant amounts of used oil being disposed of in unsound ways. DEC should share that concern and carefully examine the probability of improper disposal which would be caused by the immense expense relating to incineration.

When EPA promulgated the second phase of the used oil management standards in September 1992, the Agency stated: “EPA has determined that used oils that are recycled do not pose a substantial threat to human health and the environment when they are managed in accordance with the standards promulgated today from the time they are generated until they are recycled in addition to the existing requirements under other statutes or regulatory programs.” 57 Fed. Reg. 41602 (September 10, 1992).

The history of used oil regulation in the United States provides a valuable lesson and blueprint for policy makers including DEC who genuinely care about environmental protection.

To further promote the recycling of used oil, Congress in 1986 adopted the “Service Station Dealers Exemption.” This provision provides a conditional exemption from potential prospective liability under the Comprehensive Environmental Response Compensation and Liability Act (“CERCLA” or “Superfund”) for entities such as car dealers and service stations that comply with all applicable environmental laws (including used oil generator regulations under 40 CFR Part 279) and provide a

collection service for “Do-It-Yourself” (“DIY”) used oil generators. 42 U.S.C. §6914(c).

Taken together, the statutory provisions focusing on used oil establish a clear Congressional mandate to EPA: used oil warrants special regulatory treatment that encourages proper recycling. In light of the legislative history that confirms used oil’s unique place in the tapestry of environmental regulation, it is EPA’s obligation not to disregard Congressional intent. That intent was clearly expressed by Representative Ike Skelton (author of the Service Station Dealers Exemption) in comments on EPA’s pending used oil regulatory scheme. Rep. Skelton observed: “...overregulation in this particular situation can severely undermine the basic goals of environmental protection.” 132 Cong. Rec. H9569 (daily ed., Oct. 8, 1986). Accordingly, in the context of DEC’s present rulemaking affecting used oil, it would be a substantial error for DEC to ignore Congress’ clear and specific directives on used oil. NORA believes that proposed section 7-805(g) would severely undermine the basic goals of environmental protection by discouraging legitimate treatment and recycling of oily wastewater. Congress was right to recognize the direct link between an effective market-based system for properly recycling used oil and environmental protection.

Summary

As I have previously mentioned, NORA believes that section 7-805(g) is a proposal in search of a problem. *And that problem does not exist* because oily wastewater is currently properly managed in compliance with the Used Oil Management Standards, CWTs’ stringent permits, and other applicable provisions of the Clean Water Act.

In addition to NORA’s recommendation that DEC carefully evaluate incineration capacity and availability as well as the costs of incineration, storage and transportation that will be imposed on Vermont oily wastewater generators, NORA respectfully requests that DEC consider to the following six questions:

First, what problem is DEC trying to solve with section 7-805(g)?

Second, what environmental benefit, if any, will be realistically (not theoretically) achieved by the adoption of section 7-805(g)?

Third, what measures will Vermont adopt to mitigate the harsh financial and physical burden that will be imposed by section 7-805(g)?

Fourth, what additional personnel and other resources will DEC need in order to implement, monitor and enforce the obligations imposed by section 7-805(g)?

Fifth, will DEC be prepared to fully investigate and prosecute the “disappearance” of oily wastewater, resulting from the financial burdens imposed by section 7-805(g)?

Finally, what is the basis for establishing the 50 percent dividing line between non-hazardous oily wastewater and oily wastewater that constitutes hazardous waste?

I would be happy to try to answer any questions DEC might care to ask.



**Comments of NORA, an Association of Responsible Recyclers
Concerning
Proposed Section 7-805(g) of the
Vermont Hazardous Waste Management Regulations by the
Vermont Department of Environmental Conservation**

August 20, 2021

The following are comments hereby submitted by NORA, an Association of Responsible Recyclers, a national trade association. NORA, formerly the National Oil Recyclers Association, was founded in 1984 and originally represented only used oil recyclers. NORA's membership has expanded significantly in the subsequent decades and consists of companies that recycle wastewater, antifreeze, parts cleaning chemicals, and oil filters. NORA now has more than 350 members throughout the entire United States as well as several foreign countries.

NORA members have taken a close look at the proposed regulation, section 7-805(g), and the consensus is that this would be a regulatory requirement in search of a problem. Moreover, we cannot discern any environmental benefit if this proposed regulation is adopted. Indeed, it will impose immense financial burdens on Vermont's oily wastewater generators.

It should be emphasized at the outset that oily wastewater, generated by numerous different industries, is currently defined, classified and managed as used oil under 40 CFR Part 279 and EPA guidance documents. EPA has consistently stated that "...wastewater that contains used oil meets the §279.1 definition of used oil and is subject to regulation under the used oil management standards." See letter dated March 22, 1994 from Michael Shapiro, Director, Office of Solid Waste, EPA, to Gary Lindgren, Heritage Environmental Services, Inc.

Oily wastewater is managed efficiently and in compliance with all applicable environmental regulations, including those set forth in 40 CFR Part 437, as well as permits governing the operations of oily wastewater recycling facilities (formally known as Centralized Water Treatment facilities or CWTs). Currently, CWTs are required to meet numerous and stringent discharge limits set forth in their permits (which require rigorous testing and laboratory analysis) as well as analysis of solids resulting from treatment prior to RCRA-compliant disposal.

DEFENDING THE RIGHTS OF NORA MEMBERS TO RESPONSIBLY RECYCLE USED OIL AND RELATED MATERIALS

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Unfortunately, the proposed regulation, if implemented and enforced, would disrupt and overwhelm the existing treatment system, causing immense frustration and expense to Vermont's generators of oily wastewater. Moreover, as will be demonstrated, the law of unintended consequences will result in inconsistent measurements and probably improper disposal and pollution.

The Resource Conservation and Recovery Act ("RCRA") governs the generation, management, recycling treatment and disposal of hazardous waste. It established a "cradle to grave" regulatory system. It also established a distinct regulatory program to encourage legitimate recycling of used oil – compatible with but outside of the hazardous waste management system. *See* 40 CFR Part 279 (the used oil management standards).

NORA recommends that the Vermont Department of Environmental Conservation ("DEC") focus on the "grave" or disposal component of the impact of section 7-805(g). This proposed regulation could cause most oily wastewater to be classified as hazardous waste because most oily wastewater is comprised of 90 percent or more water and contains contaminants, such as heavy metals or benzene, at low levels, but sufficient to be classified as hazardous waste (in the absence of 40 CFR Part 279). Currently, however, these wastewaters are not classified as hazardous waste because they are regulated by EPA's used oil management standards set forth in 40 CFR Part 279; *see specifically* 40 CFR 279.10(c) and the regulations in 40 CFR Part 437 governing CWTs pursuant to the Clean Water Act. Regrettably, proposed section 7-805(g) could instantly transform most of these tremendous quantities of oily wastewater into hazardous wastes.

There are few options for disposing of wastewater as a hazardous waste. In the absence of a RCRA treatment permit and compliance with applicable Clean Air Act regulations, it would be illegal to evaporate the water. Wastewater cannot easily be disposed of in a landfill. The cost of attempting to solidify the water would be prohibitively expensive and consume immense quantities of landfill space. Also, if the landfill eventually fails and becomes a Superfund site, the wastewater generators would become liable for remediating the site.

Incineration and Transportation

The only potentially feasible disposal alternative is incineration. The first consideration is the availability and capacity of incinerators. According to EPA, there are 23 licensed incinerators in the United States. Some of these are commercially available. Some of the commercially available incinerators are limited to certain types of hazardous wastes. Before proceeding with the adoption of section 7-805(g), DEC should undertake a reliable and accurate assessment of which incinerators are available to Vermont's generators of oily wastewater -- and at what cost? Such research cannot be accomplished with the very limited and outdated information available on the internet. At a minimum, it will require an examination of the incinerators' permits and interviews of the incinerators' managers to determine each incinerator's (1) capacity; (2) price per gallon, including cost of laboratory testing; and (3) availability (e.g., scheduling and waiting time).

There are at least three reasons why incineration capacity is so scarce. First, the Non-Hazardous Secondary Materials rule finalized by EPA three years ago mandates incineration for a wide range of discarded materials (solid wastes) that were potentially burned for energy recovery. For example, discarded railroad ties, certain categories of tires and wood from construction and/or demolition debris now have to be incinerated.

Second, there is a large category of chemicals classified as Per- and polyfluoroalkyl substances (“PFAS”) which are a group of chemicals that EPA has determined are highly toxic. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. Like PCBs, these chemicals are very persistent in the environment and in the human body – meaning they do not break down and they can accumulate over time. Consequently, EPA has determined that incineration is one of the recommended technologies to treat PFAS waste.

Third, generators of solid wastes, chemicals and other materials that must be incinerated that have ongoing need for incineration services have locked incineration facilities into long-term contracts. Therefore, the available incineration capacity for the foreseeable future is extremely limited.

With incineration services in high demand and with very limited incinerator capacity and availability, the law of supply and demand dictates that prices for incineration will increase dramatically.

In the addition to the incinerators’ ever-increasing disposal fees, transportation and possible storage are also major cost factors. Since there are no hazardous waste incinerators in Vermont, all oily wastewater generated in Vermont would have to be shipped out of state. It is not known which of these out of state incinerators would be available. With the significant recent increases in gasoline and diesel fuel, it is realistic to assume that a tank truck transporting a 5000 gallon load of wastewater to an incinerator -- one way -- would cost \$5.00 a mile. A 200 mile one way trip would cost \$1000 and the return trip would also cost \$1000 for a total cost of \$2000. Most incinerators are located in Louisiana and Texas and the approximate distance from Burlington, Vermont to Port Arthur, Texas (the location of a Veolia hazardous waste incinerator) is 1900 miles. At \$5.00 a mile for the 5000 gallon load for a one way trip is \$9500 and a return trip will cost an additional \$9500. This amount does not take into account lodging and meals for the driver or drivers. Nor does it take into account the waiting time needed for unloading – or the storage costs at the facility because the generator’s 5000 gallons has to wait its turn to be incinerated.

There are a few other incinerators that are closer to Burlington, Vermont -- for example, the one operated by Ross Environmental in Grafton, Ohio. The driving distance is 644 miles. At \$5.00 a mile for a 5000 gallon load of oily wastewater the one way cost would be \$3220 and the roundtrip would be \$6440. This amount does not include the other costs previously identified. While the distance from Burlington, Vermont to Grafton, Ohio is shorter than the distance to the incinera-

tors in Texas and Louisiana, the overriding factor is capacity. DEC will need to carefully evaluate incineration availability, cost and capacity.

It is worth noting that the lack of incinerator capacity has prompted EPA to issue a memorandum on the problem to all EPA Regions. According to EPA,

“In early June 2021, EPA became aware that some commercial hazardous waste incinerators were informing their customers (hazardous waste generators) that they would no longer accept containerized hazardous waste designated for incineration, due to a backlog at their facilities. This presents a problem for hazardous waste generators because they are only allowed to accumulate hazardous waste on-site for a maximum of 90 days for large quantity generators (LQGs) or 180 days (or 270 days if the waste must be transported a distance of 200 miles or more) for small quantity generators (SQGs). Because many commercial incinerators are currently not accepting containerized hazardous waste that must be incinerated to meet the land disposal restriction treatment standards, some hazardous waste generators are finding it difficult to locate any permitted TSDFs to which they may send their hazardous waste within the regulatory time frames.”

Memorandum dated August 10, 2021 from Carolyn Hoskins, Director of Resource Conservation and Recovery to EPA Regions 1-10.

In addition, DEC should consider:

1. the very real problem of a nationwide shortage of truck drivers;
2. the ever increasing cost of fuel (gasoline and diesel);
3. the risks of transporting waste including accidents, spills and leaks;
4. the very large “carbon footprint” that will be left by incineration, storage, and transportation; and
5. the cost of compliance with U.S. Department of Transportation’s regulation of shipments of hazardous materials.

NORA members who have studied DEC’s proposal, including members that operate CWT facilities, have reached a consensus that if section 7-805(g) is adopted, implemented and enforced, the cost to a Vermont oily wastewater generators will be seven times greater than the current cost sending oily wastewater to a CWT facility.

Burden on Vermont Oily Wastewater Generators

It is worth emphasizing that Vermont is the only state that has proposed this Draconian requirement that automatically transforms oily wastewater into hazardous waste. This is not waste minimization; quite the opposite, it is waste maximization. Even California (which has the most stringent of all used oil regulatory schemes in the United States) has not proposed any similar regulation. If section 7-805(g) is adopted, Vermont's oily wastewater generators will have a very expensive burden that is not imposed on generators in any other state in the Nation.

To continue with the hypothetical, if a Vermont manufacturer of widgets generates 5000 gallons each month and the minimum cost for transportation is \$19,000 a month, the manufacturer will have an annual cost of disposing of oily wastewater of approximately \$228,000. Even if that amount is cut in half (assuming a more proximate incinerator has the capacity and is available), the cost to the Vermont manufacturer is \$64,000 a year – a burden not imposed on competing manufacturers in other states.

In addition, generating large quantities of hazardous waste (formerly ordinary oily wastewater) will place Vermont's oily wastewater generators into the RCRA category of large quantity hazardous waste generators. This will impose significant paperwork, reporting, and tank monitoring requirements as well as physical (facility infrastructure) obligations, such as secondary containment systems, on Vermont's oily wastewater generators. *See* VHWMR §§7-308(b)(7), 7-504(e)(4), 7-311(g). Their counterparts in the other 49 states will not suffer these burdens.

Other Practical Problems

Proposed section 7-805(g) states that if the “aqueous solution comprises greater than 50% of the overall volume of waste liquid material” and it exhibits any hazardous characteristic it will be classified as a hazardous waste. This seems straightforward but in fact raises numerous questions.

First, who conducts the measurement and under what conditions? RCRA imposes on the generator the obligation to determine whether his or her waste material is hazardous. *See* VHWMR §7-202. Currently, oily wastewater sent by the generator to the CWT is classified as used oil regardless of the quantity of used oil in the wastewater. Under DEC's proposal the generator would need to (1) measure the ratio of water to used oil and (2) obtain laboratory analysis of the material to determine whether it exhibits any hazardous characteristic. An accurate measurement of the ratio would require personnel training and equipment, particularly where the ratio is close to the 50 percent mark. As discussed below, *accurate* sampling of a tank with four phases of sludge and liquids is very difficult.

If the generator states that aqueous phase is less than 50 percent, and a subsequent analysis by the CWT indicates that the water content is more than 50 percent, then the CWT will need to return

the entire load to the generator (at the generator's expense) because in most cases the CWT's permit precludes treatment of hazardous waste. The generator would also be liable – potentially criminally liable – for transporting hazardous waste without a hazardous waste manifest and/or shipment without a hazardous waste transporter's permit.

It is worth mentioning that there are at least four places where the wastewater ratio could be measured at: (1) the generator's bulk storage tank; (2) the smaller storage tank before being offloaded to the tank truck; (3) the tank truck upon arrival at the CWT facility; and (4) the CWT facility's container after being unloaded from the tank truck. It is highly unlikely that the measurement results would be even close to identical. Indeed, where the oil/water ratio is close to even it is likely that the ratio measurements would differ on whether the wastewater is hazardous or non-hazardous.

Second, in what situations will the generator be able to alter the ratio of used oil to water? For example, will the generator be able to add used oil to the wastewater to ensure that there is more than 50 percent used oil in the mixture? Alternatively, is the generator allowed to evaporate some of the water to obtain a favorable ratio? If so, is the evaporation process limited to leaving the wastewater exposed to heat and sunlight, or, can he or she cause evaporation by "cooking"?

Third, in the context of the aqueous phase mixed with or emulsified into the used oil phase, when and how should the mixture be measured? Should the generator be able to chemically treat the mixture to promote separation of the two phases? If the generator chemically treats his or her wastewater, is he or she engaging in hazardous waste treatment for which a RCRA permit is required? Alternatively, should the generator be required to only allow "natural separation" over time? And what period of time? These are questions not answered by DEC's proposal -- even though these technical issues, in the absence of specific clarification, will cause widespread disparity in measuring oily wastewater.

ASTM Methodologies Need to be Considered by DEC if it Proceeds With Adoption of Proposed Section 7-805(g).

The American Society for Testing and Materials ("ASTM") has devoted considerable effort to the need for accurate sampling and analysis of petroleum and water mixtures. At least eight different sampling and testing methodologies are applicable to the numerous -- and varied -- oily wastewater situations presented by Vermont's oily wastewater generators. DEC needs to determine which of the following ASTM protocols are applicable and should be followed by Vermont's oily wastewater generators:

D95 Test Method for Water in Petroleum Products By Distillation

D4057 Practice for Sampling of Petroleum and Petroleum Products

D4177 Practice for Automatic Sampling of Petroleum and Petroleum Products

D5854 Practice for Mixing and Handling of Petroleum and Petroleum Products

D6304 Test Method for Determination of Water in Petroleum Products, Lubricating Oils and Additives by Coulometric Karl Fischer Titration

E542 Practice for Calibration of Laboratory Volumetric Apparatus

D1796 Standard Test Method for Water and Sediment In Fuel Oils by Centrifuge Method (attached)

ISO 5272: 1979 Toluene for Industrial Use – Specifications

All of these ASTM documents (and perhaps others) are potentially relevant if DEC is concerned about accurate sampling and measurement of oily wastewaters. D1796 is particularly important because *if followed precisely* it will provide analysis that will be more accurate than measurement techniques that are currently used. However, ASTM has established specific parameters and specifications for the centrifuges that are needed for petroleum/water mixtures. Moreover, centrifuge methodology will only be accurate if a true *representative* sample of the material is obtained – and this would, of course include the sludge (sediment) layer at the bottom of the generator's tank.

DEC should also be aware that the centrifuges described in D1796 cost between \$5000 and \$8000 and must be operated by trained professionals. In addition, each centrifuge test requires the use of toluene which must be discarded after each test. This discarded toluene will be a hazardous waste for ignitability (Flash Point < 140° F.) and will be an F005 listed waste for both ignitability and toxicity.

Problems Inherent In Sampling Tanks Containing Oily Wastewaters

Vermont's wastewater generators will have great difficulty attempting to obtain accurate measurements of the used oil in their tanks. The ASTM method for obtaining representative samples of the contents of various storage tanks has been documented in *Sampling Method ASTM-D7831 – COLIWASA Sampling Device*. This method works well for tanks containing homogenous fluids *provided* that the sampling device collects a full profile of the tank's contents. However, sampling tanks containing various phases of materials presents the sampler with considerable uncertainty. Oily wastewater contained in tanks is usually comprised of four phases. At the top is floating oil; in the middle is a mixture of water with various amounts of entrained emulsions; there is the aqueous layer, and at the bottom are sludges. All of these four phases, if sampled separately, would provide wide differences in the analysis results. Moreover, were a coliwasa sampling tube used, the floating oil at the top of the tank would become attached, by surface tension, to the tube as it

passed through this first phase. This would result in excessive oil being included in the sample than is represented by the undisturbed tank. Sludge at the bottom may, or may not, be collected in the tube, depending on the nature of the material and the method of tube closure. Once this “sample” is collected, and assuming that the material was then thoroughly homogenized prior to the lab-sample being collected, what would the analytical results mean? Are the data accurately representative of the water in the tank, of the oil, of the emulsion, of the sludge (sediment) or to none of the above?

If a very careful sampling effort was accomplished, the coliwasa tube contents completely homogenized, and the homogenized material carefully collected into the laboratory containers, then a rough analysis of the entire contents of the tank would result. If regulatory requirements were based on a single percentage of the contents (e.g., the percent of heavy oil in the tank deciding the regulatory disposition of the contents), then the regulatory decision point would be dependent on the sampling care taken, the nature of the tank contents (the relative amounts of the four phases present), and the amount of time between collection of the tank’s contents and the sampling process. Phase separation within the tank is strongly related to the amount of time the tank sets undisturbed.

The point of this discussion is to illustrate how inaccurate the sampling of multiple phase tank contents is in the real world. Facilities that handle used oils and oily wastewaters process many thousands of gallons of material daily and are able to keep this material out of the environment. However, Vermont’s wastewater generators cannot afford trained and certified professionals to conduct the sampling and analyses. Without the assistance of trained professionals who have carefully studied ASTM-D7831, the results of sampling by Vermont’s oily wastewater generators are guaranteed to be hit and miss – mostly miss. DEC should recognize that its analysis targets cannot be successfully implemented in such a complex setting.

Vermont’s Proposal Would Undermine Congressional and EPA Encouragement of Used Oil Recycling.

In 1984, Congress passed legislation designed to assure that EPA would implement its legislative mandate on used oil. The legislative history of the 1984 amendments to RCRA state that “where protection of human health and the environment can be assured...the [EPA] Administrator should make every effort not to discourage recycling of used oil.” H.R. Rep. 1133, 98th Cong., 2d Sess. 114 (1984); *See also* H.R. Rep. 198 (Part 1) 98th Cong., 1st Sess., 64 (1983). EPA has recognized that this “statute contains a separate provision dealing with used oil as a distinct class and authorizes separate standards for its management (*See* RCRA section 3014).” 50 Fed. Reg. 49175. As previously indicated, under EPA’s Used Oil Management Standards (40 CFR Part 279) oily wastewater is classified as used oil.

Senator John Chaffee, the floor manager of the RCRA reauthorization bill (S. 757) in the Senate and the chairman of the conference committee on the 1984 RCRA Amendments, described the used oil recycling provisions of the 1984 legislation as “a careful effort to balance the stringent environmental requirements of this legislation against the practical experience of businesses that are already engaged in successfully recycling material that would otherwise be harming the environment.” According to Senator Chafee, the used oil recycling industry “has demonstrated how a potentially hazardous substance can be safely collected and profitably recycled into new, useful products.” 130 Cong. Rec. S. 9193 (daily ed. July 25, 1984).

Following Congress’ 1984 legislative instructions, as well as its previous instructions in the Used Oil Recycling Act of 1980, EPA established a set of balanced regulatory controls that, for all practical purposes, accomplished Congress’ goals. NORA members collect and manage vast quantities of used (including used oil recovered from oily wastewater) as a valuable product – in compliance with EPA’s comprehensive regulations now codified at 40 CFR Part 279.

If, instead of a balanced regulatory approach, used oil had been declared a hazardous waste, as had been seriously considered by EPA and now is being proposed by DEC, far less used oil would be recycled and the system for handling used oil would be extremely expensive – without any environmental protection benefits. Indeed, the opposite is likely the case. In adopting 40 CFR Part 279 and rejecting the classification of used oil as a hazardous waste EPA was motivated by its concern that disrupting the used oil recycling system could lead to significant amounts of used oil being disposed of in unsound ways. DEC should share that concern and carefully examine the probability of improper disposal which would be caused by the immense expense relating to incineration.

When EPA promulgated the second phase of the used oil management standards in September 1992, the Agency stated: “EPA has determined that used oils that are recycled do not pose a substantial threat to human health and the environment when they are managed in accordance with the standards promulgated today from the time they are generated until they are recycled in addition to the existing requirements under other statutes or regulatory programs.” 57 Fed. Reg. 41602 (September 10, 1992).

The history of used oil regulation in the United States provides a valuable lesson and blueprint for policy makers including DEC who genuinely care about environmental protection.

To further promote the recycling of used oil, Congress in 1986 adopted the “Service Station Dealers Exemption.” This provision provides a conditional exemption from potential prospective liability under the Comprehensive Environmental Response Compensation and Liability Act (“CERCLA” or “Superfund”) for entities such as car dealers and service stations that comply with all applicable environmental laws (including used oil generator regulations under 40 CFR

Part 279) and provide a collection service for “Do-It-Yourself” (“DIY”) used oil generators. 42 U.S.C. §6914(c).

Taken together, the statutory provisions focusing on used oil establish a clear Congressional mandate to EPA: used oil warrants special regulatory treatment that encourages proper recycling. In light of the legislative history that confirms used oil’s unique place in the tapestry of environmental regulation, it is EPA’s obligation not to disregard Congressional intent. That intent was clearly expressed by Representative Ike Skelton (author of the Service Station Dealers Exemption) in comments on EPA’s pending used oil regulatory scheme. Rep. Skelton observed: “...overregulation in this particular situation can severely undermine the basic goals of environmental protection.” 132 Cong. Rec. H9569 (daily ed., Oct. 8, 1986). Accordingly, in the context of DEC’s present rulemaking affecting used oil, it would be a substantial error for DEC to ignore Congress’ clear and specific directives on used oil. NORA believes that proposed section 7-805(g) would severely undermine the basic goals of environmental protection by discouraging legitimate treatment and recycling of oily wastewater. Congress was right to recognize the direct link between an effective market-based system for properly recycling used oil and environmental protection. DEC would be prudent in heeding Congressional intent.

While states may adopt more stringent RCRA rules and standards than regulations promulgated by EPA, states cannot obliterate a RCRA regulatory program, such as the used oil management standards, under the guise of stricter standards.

Section 7-805(g) is in Conflict with the Commercial Chemical Product Exclusion.

EPA has consistently maintained that “commercial chemical products are not considered a solid waste when used to make a fuel if they themselves are fuels (see 40 CFR 261.2(c)(2)(ii)).” Letter dated Nov. 1, 2016 from Barnes Johnson, Director, Office of Resource Conservation and Recovery, EPA to David Wieties, Illini Environmental, Inc. EPA has also made clear that this provision applies “to commercial chemical products that exhibit a hazardous waste characteristic.” See 50 Fed. Reg. 14219 (April 11, 1985). Accordingly, when either the generator or the CWT recovers fuels such as benzene or methanol that are subsequently (and legitimately) burned for energy recovery, neither the wastewater containing these fuels nor the separated fuels would be considered a solid waste and therefore not a hazardous waste – even when the wastewater exhibits a hazardous characteristic. The commercial chemical product exclusion is a component of the RCRA regulations that Vermont has adopted. Yet it is in direct conflict with proposed section 7-805(g). DEC would have to repeal 40 CFR 261.2(c)(2)(ii) in order to remove such conflict. But in doing so, a host of other regulatory and enforcement problems would occur, including issues about the legitimacy of Vermont’s delegated authority to implement RCRA.

Section 7-803 Addresses DEC's Concern.

As previously indicated, NORA is unaware of exactly what problem proposed section 7-805(g) is intended to remedy. It is our assumption -- which could be incorrect -- that DEC is concerned that a generator of hazardous wastewater (containing no used oil) would deliberately mix that hazardous wastewater with used oil in an effort to have such mixture classified as used oil, rather than as a hazardous waste. If that is indeed DEC's concern, we believe that an existing Vermont regulation would prohibit that practice.

Specifically, section 7-803 in pertinent part states:

“PROHIBITIONS The following uses or activities are prohibited: (a) The mixing of hazardous wastes with used oil, with the exception that used oil may be mixed with waste that is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resultant mixture does not exhibit the characteristic of ignitability;”

Except in the case of ignitable-only hazardous waste, all used oil/hazardous waste mixtures deliberately produced after the completion of the manufacturing process are prohibited by section 7-803. All that is necessary is for DEC to enforce this provision. Moreover, the mixture rule set forth in 40 CFR 261.3(a)(2)(iv) states that mixing any solid waste with any listed (F, K, P, and U-designated wastes) causes the entire mixture to be a hazardous waste.

It is worth pointing out that manufacturing operations very rarely produce wastewater that contains no used oil. Petroleum-based lubricants and coolants, together with water, are essential components of manufacturing. They are mixed in the manufacturing process, not afterwards.

Accordingly, proposed section 7-805(g) is not needed. Indeed, it would only create confusion when section 7-803 and proposed section 7-805(g) are read together.

Summary

As previously stated, NORA believes that section 7-805(g) is a proposal in search of a problem. *And that problem does not exist* because oily wastewater is currently properly managed in compliance with the Used Oil Management Standards, the commercial chemical product exclusion, CWTs' stringent permits, 40 CFR Part 437 and other applicable provisions of the Clean Water Act.

In addition to NORA's recommendation that DEC carefully evaluate incineration capacity and availability as well as the costs of incineration, storage and transportation that will be imposed on

Vermont oily wastewater generators, NORA respectfully requests that DEC respond to the following nine questions:

First, what problem is DEC trying to solve with section 7-805(g)?

Second, what environmental benefit, if any, will be realistically (not theoretically) achieved by the adoption of section 7-805(g)?

Third, what measures will Vermont adopt to mitigate the harsh financial and physical burden that will be imposed on Vermont's generators of oily wastewater by section 7-805(g)?

Fourth, what additional personnel and other resources will DEC need in order to implement, monitor and enforce the obligations imposed by section 7-805(g)?

Fifth, will DEC train Vermont's oily wastewater generators to accurately sample and analyze oily wastewater in compliance with applicable ASTM requirements?

Sixth, will DEC be prepared to fully investigate and prosecute the "disappearance" of oily wastewater, resulting from the financial burdens imposed by section 7-805(g)?

Seventh, does DEC intend to repeal the commercial chemical product exclusion?

Eighth, won't DEC's enforcement of section 7-803 address DEC's concerns?

Finally, what is the basis for establishing the 50 percent dividing line between non-hazardous oily wastewater and oily wastewater that constitutes hazardous waste?

Although there are many factual uncertainties inherent in DEC's proposal, NORA is willing to provide additional information (if available) upon DEC's request.

Respectfully submitted,
Scott D. Parker, Executive Director



Electronic Mail

August 19, 2021

Anna Bourakovsky

RE: Proposed Vermont Hazardous Waste Regulation 7-805(g)

Dear Ms. Bourakovsky:

Safety-Kleen Systems, Inc. (“Safety-Kleen”) appreciates the opportunity to provide comments on the proposed Vermont Hazardous Waste Management Regulations. Specifically, Safety-Kleen requests that the Department of Environmental Conservation (“Department”) consider the comments herein regarding the proposed changes to Vermont Regulation 7-805(g). We ask the Department to consider and balance the environmental and economic harms that are expected to arise from the suggested changes. While Safety-Kleen supports efforts to protect human health and the environment, the standards contained in the proposed rules will result in substantial monetary and environmental costs. Safety-Kleen requests the Department takes into consideration the following comments when evaluating the efficacy and implementation of the proposed rules.

7-805(g) For any waste liquid material that contains both an aqueous solution and used oil, if the used oil component is not emulsified with the aqueous solution (i.e., the used oil exists in a separate phase) and the aqueous solution comprises greater than 50% of the overall volume of waste liquid material:

(1) The aqueous solution shall be evaluated to determine if it is hazardous waste (i.e. exhibits a hazardous waste characteristic) pursuant 7-303; and

(2) If the aqueous solution is hazardous waste (i.e. exhibits a hazardous waste characteristic), either

(A) Separate the aqueous solution from the used oil and manage it as a hazardous waste in accordance with the applicable requirements of subchapters 1 through 7 of these regulations; or

(B) Manage the entire volume of liquid material as hazardous waste in accordance with the applicable requirements of subchapters 1 through 7 of these regulations.

Comment 1. Most generators do not have a means to separate used oil from aqueous (water) mixtures. They instead rely on their selected disposal contractor to remove and recover the used oil and to treat any aqueous material to ensure they are in compliance with their permits and there is no harm to the environment. Therefore, the practical impact of the proposed change is that if the aqueous phase exhibits a characteristic the entire used oil mixture will have to be managed as a hazardous waste, eliminating the potential for recovery of the used oil. This is

inconsistent with the EPA's preferred hierarchical approach to material management source reduction, recycling, energy recovery, treatment, and finally disposal and waste minimization efforts required under 40 CFR Part 262.27.

Arnold & Porter LLP. has discussed the management of oily water with EPA and formerly presented the following points in a letter dated August 31, 2007 to Mr. Jeff Gaines of the USEPA and received verbal concurrence oily water mixtures from used oil mixed with water (containing no solvent) could continue to be managed under Part 279 which was documented in a follow-up letter dated to EPA dated November 7, 2007. These same points are noted below. This proposed rule appears to challenge the following long-standing principles:

1. Like oil filters, sorbents, spent rags and wipe containing or contaminated with used oil, oily wastewater qualifies under the used oil regulations as material containing or otherwise contaminated with used oil. See 40 CFR 279.10(c). The used oil does not lose its identity when mixed with these specified items, and the result should not be different when mixed with water.
2. Just as oil skimming from an oil water separator can qualify as used oil, so too does the water removed from an oil-water separator, which remains blended with trace amounts of oil, continue to qualify as used oil.
3. Oily wastewater is properly viewed as analogous to used oil that is otherwise contaminated with hazardous waste under 40 CFR Part 179.10(d)(1). When used oil is mixed with a waste that is hazardous solely because of the characteristic of the waste the resulting mixture can be managed as used oil if the mixture no longer exhibits the hazardous waste characteristic 40 CFR 279.10(b)(2). This is true even if the mixture fails the Toxicity Characteristic Leaching Procedure, as long as the mixture is no longer ignitable. It is inconsistent and arbitrary to treat a mixture of used oil and characteristic hazardous waste as falling within the used oil exemption, but to treat a mixture of used oil and water as falling outside the exemption.
4. The Used Oil Recycling Act of 1980 ("UORA"), later incorporated into RCRA Section 3014 by the Hazardous and Solid Waste Amendments, is intended to encourage the recycling of used oil. In November 1985, EPA promulgated standards for all used oil exhibiting characteristics of hazardous waste and destined for energy recovery by burning. EPA stated in the preamble: "(1) Where possible, clear, objective tests should be used to classify hazardous wastes and used oil; (2) the Agency should not adopt a scheme whereby most used oil is classified as a hazardous waste ineligible for regulations under the section 3014 standards and (3) any objective test should ensure that massively adulterated used oils are classified as hazardous waste." See 50 Federal Register 49175 (emphasis added). EPA also proposed a rule to list all used oil as hazardous waste, included petroleum-derived and synthetic oils. After receiving comments, EPA agreed not to list used oil as a hazardous waste. It said:

“Our decision today is not based on the hazards of recycled oil. Rather, we believe that listing would discourage recycling of used oil and could have an environmentally counterproductive effect. We believe the statute indicates explicitly that the Agency is to consider effects on recycling in deciding whether to list oil The language of 3014, taken as a whole, further reinforces our view that the Agency is to consider non-technical factors in determining whether to list. The sense of the statute is that EPA must look to the effect its regulations have on used oil recycling and protection of human health and the environment. An action which discourages recycling so as to cause, on balance, an environmentally detrimental effect would not satisfy the statutory mandate EPA believes that listing of recycled oil as a hazardous waste would probably be such an action This determination is based on our conclusion that a listing could lead to major disruptions in the established used oil recycling system in the United States, and our further concern that such disruption could lead to significant amounts of used oil being disposed of in unsound ways.”

Comment 2. EPA has published additional guidance confirming used oil and water mixtures (not just the oil) meet the definition of a used oil in 40 CFR 279.1 and are therefore subject to the Part 279 standards. See 48 FR 26422 and EPA Memo RO11818.

Comment 3. The 50% aqueous determination could vary between individuals assessing the aqueous layer. Several factors could affect the phasing percentage observed such as the amount of time allowed to separate, ability to centrifuge, and chemical or heat treatment. While gravity phase separation is likely the only technique available to most used oil generators it may not fully remove the trace oil within aqueous layer. In some cases, chemical treatment may be necessary to fully remove the trace used oil contaminants from the water phase. If all the trace oil is not separated out of the mixture it could result in all the material being managed as a hazardous waste and none of the oil being recovered as intended by the 40 CFR 279 regulations. The cost to incinerate a high water, hazardous waste is exponentially higher than that to manage the same material under the used oil regulations.

Comment 4. Under the current Vermont Hazardous Waste Management Regulations, a waste generator is not allowed to mix hazardous waste with used oil [7-803(a)] with the exception of hazardous waste solely because it is determined to be ignitable. If wastewater exhibits characteristics after being mixed with used oil, there is not a means at that point to determine if the contaminants were already present in the aqueous phase, if they leached from the used oil, or if there still is trace used oil in the water phase. Therefore, the aqueous characterization must take place by the generator before the materials are mixed as the current regulations already require and not afterward or used oil could potentially be managed as a hazardous waste unnecessarily.

Comment 5. Oily water waste streams being managed under the 40 CFR Part 279 regulations are required to be sent to a facility that will recover the oil and ensure the water/aqueous layer is managed in accordance with the VTDEC approved waste analysis plans and discharge or disposal permits. It is assumed these Part 279 facilities are managing the oily water waste

streams in a safe and responsible manner and in compliance with their permits. Sending oil and water mixtures to facilities with the permits and capabilities to manage the material in accordance with Part 279 regulations is safe, environmentally friendly, and the most cost-effective option for used oil generators.

Comment 6. We do understand that individual states may choose to impose additional requirements or regulations that are more stringent than the federal regulations. We ask that you consider the amount of used oil that could possibly be disposed of rather than recycled (increased hazardous waste generation and disposal within the state), the decreased amount of used oil recycled, the energy and natural resources needed to replace that oil with crude oil, the cost and environmental effects of hazardous waste disposal versus oil recovery, and the disincentive for generators to manage their used oil and water mixtures properly.

Comment 7. Small businesses that view the costs as too onerous may discontinue service. When customers discontinue a service, they continue to operate and may not dispose of generated waste properly if the requirements are too onerous or costly. In this situation, the increased cost burdens result in environmental health and safety consequences that should be considered in this rule proposal.

Comment 8. The new requirements could result in moving hundreds of thousands of gallons of waste out of the used oil regulations and into the conventionally regulated waste streams.

Comment 9. Safety-Kleen requests that if the Department moves forward with this regulation it considers the tremendous undertaking it will be to transition all oil water waste streams through the new waste characterization requirements. If these rules are adopted a three year implementation period is suggested for a change of this magnitude. Some of the factors to consider include the following:

- 1) Any oily water waste stream that is required to be managed as a hazardous waste rather than a used oil in the future will require generators to find properly permitted hazardous waste treatment plants to manage their waste and go through the waste approval process of the facility.
- 2) Adding to the challenges for a service provider and user are the legal contracts with government, municipalities, and large corporations which will require renegotiation to change any agreed upon services or pricing.
- 3) The VTDEC needs to consider the economic impact of the proposed used oil management rules. We estimate the average cost for hazardous waste incineration to be approximately six times higher than typical oil recovery and wastewater treatment in today's market. If the Department moves forward with these regulations, regardless of the size of a business, the cost to manage oil and water mixtures as a hazardous waste and the increased operation and disposal costs will need to be planned and budgeted for within the regulated community.

Anna Bourakovsky
Proposed Hazardous Waste Regulations
August 19, 2021
Page 5 of 5

Safety-Kleen looks forward to working cooperatively with the Department to protect human health and the environment and appreciates the Department's time and consideration.

If you have any questions concerning our comments or require clarification, please contact me at maggie.tenant@safety-kleen.com or (734) 516-0291.

Sincerely,

Maggie Tenant

Maggie Tenant
Vice President of Environmental Compliance

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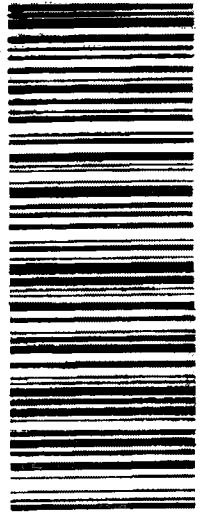
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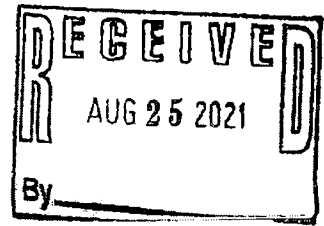
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SPECIALIZED
Environmental Services Company

Waste Provider



August 24, 2021

To Anna Bourakovsky,

Let it be known that Specialized is in agreement with NORA's position as stated in the enclosed letter, *Comments of NORA, an Association of Responsible Recyclers Concerning Proposed Section 7-805(g) of the Vermont Hazardous Waste Management Regulations by the Vermont Department of Environmental Conservation.*

Let it also be known that Specialized vehemently opposes any regulations that would classify oily water per CFR 279 as hazardous waste.

Respectfully,

A handwritten signature in black ink, appearing to read "Andrew Guile". The signature is fluid and cursive.

Andrew C. Guile

Director of Environmental Health and Safety



**Comments of NORA, an Association of Responsible Recyclers
Concerning
Proposed Section 7-805(g) of the
Vermont Hazardous Waste Management Regulations by the
Vermont Department of Environmental Conservation**

August 20, 2021

The following are comments hereby submitted by NORA, an Association of Responsible Recyclers, a national trade association. NORA, formerly the National Oil Recyclers Association, was founded in 1984 and originally represented only used oil recyclers. NORA's membership has expanded significantly in the subsequent decades and consists of companies that recycle wastewater, antifreeze, parts cleaning chemicals, and oil filters. NORA now has more than 350 members throughout the entire United States as well as several foreign countries.

NORA members have taken a close look at the proposed regulation, section 7-805(g), and the consensus is that this would be a regulatory requirement in search of a problem. Moreover, we cannot discern any environmental benefit if this proposed regulation is adopted. Indeed, it will impose immense financial burdens on Vermont's oily wastewater generators.

It should be emphasized at the outset that oily wastewater, generated by numerous different industries, is currently defined, classified and managed as used oil under 40 CFR Part 279 and EPA guidance documents. EPA has consistently stated that "...wastewater that contains used oil meets the §279.1 definition of used oil and is subject to regulation under the used oil management standards." See letter dated March 22, 1994 from Michael Shapiro, Director, Office of Solid Waste, EPA, to Gary Lindgren, Heritage Environmental Services, Inc.

Oily wastewater is managed efficiently and in compliance with all applicable environmental regulations, including those set forth in 40 CFR Part 437, as well as permits governing the operations of oily wastewater recycling facilities (formally known as Centralized Water Treatment facilities or CWTs). Currently, CWTs are required to meet numerous and stringent discharge limits set forth in their permits (which require rigorous testing and laboratory analysis) as well as analysis of solids resulting from treatment prior to RCRA-compliant disposal.

DEFENDING THE RIGHTS OF NORA MEMBERS TO RESPONSIBLY RECYCLE USED OIL AND RELATED MATERIALS

NORA, An Association of Responsible Recyclers
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Unfortunately, the proposed regulation, if implemented and enforced, would disrupt and overwhelm the existing treatment system, causing immense frustration and expense to Vermont's generators of oily wastewater. Moreover, as will be demonstrated, the law of unintended consequences will result in inconsistent measurements and probably improper disposal and pollution.

The Resource Conservation and Recovery Act ("RCRA") governs the generation, management, recycling treatment and disposal of hazardous waste. It established a "cradle to grave" regulatory system. It also established a distinct regulatory program to encourage legitimate recycling of used oil – compatible with but outside of the hazardous waste management system. *See* 40 CFR Part 279 (the used oil management standards).

NORA recommends that the Vermont Department of Environmental Conservation ("DEC") focus on the "grave" or disposal component of the impact of section 7-805(g). This proposed regulation could cause most oily wastewater to be classified as hazardous waste because most oily wastewater is comprised of 90 percent or more water and contains contaminants, such as heavy metals or benzene, at low levels, but sufficient to be classified as hazardous waste (in the absence of 40 CFR Part 279). Currently, however, these wastewaters are not classified as hazardous waste because they are regulated by EPA's used oil management standards set forth in 40 CFR Part 279; *see specifically* 40 CFR 279.10(c) and the regulations in 40 CFR Part 437 governing CWTs pursuant to the Clean Water Act. Regrettably, proposed section 7-805(g) could instantly transform most of these tremendous quantities of oily wastewater into hazardous wastes.

There are few options for disposing of wastewater as a hazardous waste. In the absence of a RCRA treatment permit and compliance with applicable Clean Air Act regulations, it would be illegal to evaporate the water. Wastewater cannot easily be disposed of in a landfill. The cost of attempting to solidify the water would be prohibitively expensive and consume immense quantities of landfill space. Also, if the landfill eventually fails and becomes a Superfund site, the wastewater generators would become liable for remediating the site.

Incineration and Transportation

The only potentially feasible disposal alternative is incineration. The first consideration is the availability and capacity of incinerators. According to EPA, there are 23 licensed incinerators in the United States. Some of these are commercially available. Some of the commercially available incinerators are limited to certain types of hazardous wastes. Before proceeding with the adoption of section 7-805(g), DEC should undertake a reliable and accurate assessment of which incinerators are available to Vermont's generators of oily wastewater -- and at what cost? Such research cannot be accomplished with the very limited and outdated information available on the internet. At a minimum, it will require an examination of the incinerators' permits and interviews of the incinerators' managers to determine each incinerator's (1) capacity; (2) price per gallon, including cost of laboratory testing; and (3) availability (e.g., scheduling and waiting time).

There are at least three reasons why incineration capacity is so scarce. First, the Non-Hazardous Secondary Materials rule finalized by EPA three years ago mandates incineration for a wide range of discarded materials (solid wastes) that were potentially burned for energy recovery. For example, discarded railroad ties, certain categories of tires and wood from construction and/or demolition debris now have to be incinerated.

Second, there is a large category of chemicals classified as Per- and polyfluoroalkyl substances ("PFAS") which are a group of chemicals that EPA has determined are highly toxic. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. Like PCBs, these chemicals are very persistent in the environment and in the human body – meaning they do not break down and they can accumulate over time. Consequently, EPA has determined that incineration is one of the recommended technologies to treat PFAS waste.

Third, generators of solid wastes, chemicals and other materials that must be incinerated that have ongoing need for incineration services have locked incineration facilities into long-term contracts. Therefore, the available incineration capacity for the foreseeable future is extremely limited.

With incineration services in high demand and with very limited incinerator capacity and availability, the law of supply and demand dictates that prices for incineration will increase dramatically.

In the addition to the incinerators' ever-increasing disposal fees, transportation and possible storage are also major cost factors. Since there are no hazardous waste incinerators in Vermont, all oily wastewater generated in Vermont would have to be shipped out of state. It is not known which of these out of state incinerators would be available. With the significant recent increases in gasoline and diesel fuel, it is realistic to assume that a tank truck transporting a 5000 gallon load of wastewater to an incinerator -- one way -- would cost \$5.00 a mile. A 200 mile one way trip would cost \$1000 and the return trip would also cost \$1000 for a total cost of \$2000. Most incinerators are located in Louisiana and Texas and the approximate distance from Burlington, Vermont to Port Arthur, Texas (the location of a Veolia hazardous waste incinerator) is 1900 miles. At \$5.00 a mile for the 5000 gallon load for a one way trip is \$9500 and a return trip will cost an additional \$9500. This amount does not take into account lodging and meals for the driver or drivers. Nor does it take into account the waiting time needed for unloading – or the storage costs at the facility because the generator's 5000 gallons has to wait its turn to be incinerated.

There are a few other incinerators that are closer to Burlington, Vermont -- for example, the one operated by Ross Environmental in Grafton, Ohio. The driving distance is 644 miles. At \$5.00 a mile for a 5000 gallon load of oily wastewater the one way cost would be \$3220 and the roundtrip would be \$6440. This amount does not include the other costs previously identified. While the distance from Burlington, Vermont to Grafton, Ohio is shorter than the distance to the incinera-

tors in Texas and Louisiana, the overriding factor is capacity. DEC will need to carefully evaluate incineration availability, cost and capacity.

It is worth noting that the lack of incinerator capacity has prompted EPA to issue a memorandum on the problem to all EPA Regions. According to EPA,

“In early June 2021, EPA became aware that some commercial hazardous waste incinerators were informing their customers (hazardous waste generators) that they would no longer accept containerized hazardous waste designated for incineration, due to a backlog at their facilities. This presents a problem for hazardous waste generators because they are only allowed to accumulate hazardous waste on-site for a maximum of 90 days for large quantity generators (LQGs) or 180 days (or 270 days if the waste must be transported a distance of 200 miles or more) for small quantity generators (SQGs). Because many commercial incinerators are currently not accepting containerized hazardous waste that must be incinerated to meet the land disposal restriction treatment standards, some hazardous waste generators are finding it difficult to locate any permitted TSDFs to which they may send their hazardous waste within the regulatory time frames.”

Memorandum dated August 10, 2021 from Carolyn Hoskins, Director of Resource Conservation and Recovery to EPA Regions 1-10.

In addition, DEC should consider:

1. the very real problem of a nationwide shortage of truck drivers;
2. the ever increasing cost of fuel (gasoline and diesel);
3. the risks of transporting waste including accidents, spills and leaks;
4. the very large “carbon footprint” that will be left by incineration, storage, and transportation; and
5. the cost of compliance with U.S. Department of Transportation’s regulation of shipments of hazardous materials.

NORA members who have studied DEC’s proposal, including members that operate CWT facilities, have reached a consensus that if section 7-805(g) is adopted, implemented and enforced, the cost to a Vermont oily wastewater generators will be seven times greater than the current cost sending oily wastewater to a CWT facility.

Burden on Vermont Oily Wastewater Generators

It is worth emphasizing that Vermont is the only state that has proposed this Draconian requirement that automatically transforms oily wastewater into hazardous waste. This is not waste minimization; quite the opposite, it is waste maximization. Even California (which has the most stringent of all used oil regulatory schemes in the United States) has not proposed any similar regulation. If section 7-805(g) is adopted, Vermont's oily wastewater generators will have a very expensive burden that is not imposed on generators in any other state in the Nation.

To continue with the hypothetical, if a Vermont manufacturer of widgets generates 5000 gallons each month and the minimum cost for transportation is \$19,000 a month, the manufacturer will have an annual cost of disposing of oily wastewater of approximately \$228,000. Even if that amount is cut in half (assuming a more proximate incinerator has the capacity and is available), the cost to the Vermont manufacturer is \$64,000 a year – a burden not imposed on competing manufacturers in other states.

In addition, generating large quantities of hazardous waste (formerly ordinary oily wastewater) will place Vermont's oily wastewater generators into the RCRA category of large quantity hazardous waste generators. This will impose significant paperwork, reporting, and tank monitoring requirements as well as physical (facility infrastructure) obligations, such as secondary containment systems, on Vermont's oily wastewater generators. See VHWMR §§7-308(b)(7), 7-504(e)(4), 7-311(g). Their counterparts in the other 49 states will not suffer these burdens.

Other Practical Problems

Proposed section 7-805(g) states that if the "aqueous solution comprises greater than 50% of the overall volume of waste liquid material" and it exhibits any hazardous characteristic it will be classified as a hazardous waste. This seems straightforward but in fact raises numerous questions.

First, who conducts the measurement and under what conditions? RCRA imposes on the generator the obligation to determine whether his or her waste material is hazardous. See VHWMR §7-202. Currently, oily wastewater sent by the generator to the CWT is classified as used oil regardless of the quantity of used oil in the wastewater. Under DEC's proposal the generator would need to (1) measure the ratio of water to used oil and (2) obtain laboratory analysis of the material to determine whether it exhibits any hazardous characteristic. An accurate measurement of the ratio would require personnel training and equipment, particularly where the ratio is close to the 50 percent mark. As discussed below, *accurate* sampling of a tank with four phases of sludge and liquids is very difficult.

If the generator states that aqueous phase is less than 50 percent, and a subsequent analysis by the CWT indicates that the water content is more than 50 percent, then the CWT will need to return

the entire load to the generator (at the generator's expense) because in most cases the CWT's permit precludes treatment of hazardous waste. The generator would also be liable – potentially criminally liable – for transporting hazardous waste without a hazardous waste manifest and/or shipment without a hazardous waste transporter's permit.

It is worth mentioning that there are at least four places where the wastewater ratio could be measured at: (1) the generator's bulk storage tank; (2) the smaller storage tank before being offloaded to the tank truck; (3) the tank truck upon arrival at the CWT facility; and (4) the CWT facility's container after being unloaded from the tank truck. It is highly unlikely that the measurement results would be even close to identical. Indeed, where the oil/water ratio is close to even it is likely that the ratio measurements would differ on whether the wastewater is hazardous or non-hazardous.

Second, in what situations will the generator be able to alter the ratio of used oil to water? For example, will the generator be able to add used oil to the wastewater to ensure that there is more than 50 percent used oil in the mixture? Alternatively, is the generator allowed to evaporate some of the water to obtain a favorable ratio? If so, is the evaporation process limited to leaving the wastewater exposed to heat and sunlight, or, can he or she cause evaporation by "cooking"?

Third, in the context of the aqueous phase mixed with or emulsified into the used oil phase, when and how should the mixture be measured? Should the generator be able to chemically treat the mixture to promote separation of the two phases? If the generator chemically treats his or her wastewater, is he or she engaging in hazardous waste treatment for which a RCRA permit is required? Alternatively, should the generator be required to only allow "natural separation" over time? And what period of time? These are questions not answered by DEC's proposal -- even though these technical issues, in the absence of specific clarification, will cause widespread disparity in measuring oily wastewater.

ASTM Methodologies Need to be Considered by DEC if it Proceeds With Adoption of Proposed Section 7-805(g).

The American Society for Testing and Materials ("ASTM") has devoted considerable effort to the need for accurate sampling and analysis of petroleum and water mixtures. At least eight different sampling and testing methodologies are applicable to the numerous -- and varied -- oily wastewater situations presented by Vermont's oily wastewater generators. DEC needs to determine which of the following ASTM protocols are applicable and should be followed by Vermont's oily wastewater generators:

D95 Test Method for Water in Petroleum Products By Distillation

D4057 Practice for Sampling of Petroleum and Petroleum Products

D4177 Practice for Automatic Sampling of Petroleum and Petroleum Products

D5854 Practice for Mixing and Handling of Petroleum and Petroleum Products

D6304 Test Method for Determination of Water in Petroleum Products, Lubricating Oils and Additives by Coulometric Karl Fischer Titration

E542 Practice for Calibration of Laboratory Volumetric Apparatus

D1796 Standard Test Method for Water and Sediment In Fuel Oils by Centrifuge Method (attached)

ISO 5272: 1979 Toluene for Industrial Use – Specifications

All of these ASTM documents (and perhaps others) are potentially relevant if DEC is concerned about accurate sampling and measurement of oily wastewaters. D1796 is particularly important because *if followed precisely* it will provide analysis that will be more accurate than measurement techniques that are currently used. However, ASTM has established specific parameters and specifications for the centrifuges that are needed for petroleum/water mixtures. Moreover, centrifuge methodology will only be accurate if a true *representative* sample of the material is obtained – and this would, of course include the sludge (sediment) layer at the bottom of the generator's tank.

DEC should also be aware that the centrifuges described in D1796 cost between \$5000 and \$8000 and must be operated by trained professionals. In addition, each centrifuge test requires the use of toluene which must be discarded after each test. This discarded toluene will be a hazardous waste for ignitability (Flash Point < 140° F.) and will be an F005 listed waste for both ignitability and toxicity.

Problems Inherent In Sampling Tanks Containing Oily Wastewaters

Vermont's wastewater generators will have great difficulty attempting to obtain accurate measurements of the used oil in their tanks. The ASTM method for obtaining representative samples of the contents of various storage tanks has been documented in *Sampling Method ASTM-D7831 – COLIWASA Sampling Device*. This method works well for tanks containing homogenous fluids *provided* that the sampling device collects a full profile of the tank's contents. However, sampling tanks containing various phases of materials presents the sampler with considerable uncertainty. Oily wastewater contained in tanks is usually comprised of four phases. At the top is floating oil; in the middle is a mixture of water with various amounts of entrained emulsions; there is the aqueous layer, and at the bottom are sludges. All of these four phases, if sampled separately, would provide wide differences in the analysis results. Moreover, were a coliwasa sampling tube used, the floating oil at the top of the tank would become attached, by surface tension, to the tube as it

passed through this first phase. This would result in excessive oil being included in the sample than is represented by the undisturbed tank. Sludge at the bottom may, or may not, be collected in the tube, depending on the nature of the material and the method of tube closure. Once this "sample" is collected, and assuming that the material was then thoroughly homogenized prior to the lab-sample being collected, what would the analytical results mean? Are the data accurately representative of the water in the tank, of the oil, of the emulsion, of the sludge (sediment) or to none of the above?

If a very careful sampling effort was accomplished, the coliwasa tube contents completely homogenized, and the homogenized material carefully collected into the laboratory containers, then a rough analysis of the entire contents of the tank would result. If regulatory requirements were based on a single percentage of the contents (e.g., the percent of heavy oil in the tank deciding the regulatory disposition of the contents), then the regulatory decision point would be dependent on the sampling care taken, the nature of the tank contents (the relative amounts of the four phases present), and the amount of time between collection of the tank's contents and the sampling process. Phase separation within the tank is strongly related to the amount of time the tank sets undisturbed.

The point of this discussion is to illustrate how inaccurate the sampling of multiple phase tank contents is in the real world. Facilities that handle used oils and oily wastewaters process many thousands of gallons of material daily and are able to keep this material out of the environment. However, Vermont's wastewater generators cannot afford trained and certified professionals to conduct the sampling and analyses. Without the assistance of trained professionals who have carefully studied ASTM-D7831, the results of sampling by Vermont's oily wastewater generators are guaranteed to be hit and miss – mostly miss. DEC should recognize that its analysis targets cannot be successfully implemented in such a complex setting.

Vermont's Proposal Would Undermine Congressional and EPA Encouragement of Used Oil Recycling.

In 1984, Congress passed legislation designed to assure that EPA would implement its legislative mandate on used oil. The legislative history of the 1984 amendments to RCRA state that "where protection of human health and the environment can be assured...the [EPA] Administrator should make every effort not to discourage recycling of used oil." H.R. Rep. 1133, 98th Cong., 2d Sess. 114 (1984); *See also* H.R. Rep. 198 (Part 1) 98th Cong., 1st Sess., 64 (1983). EPA has recognized that this "statute contains a separate provision dealing with used oil as a distinct class and authorizes separate standards for its management (*See* RCRA section 3014)." 50 Fed. Reg. 49175. As previously indicated, under EPA's Used Oil Management Standards (40 CFR Part 279) oily wastewater is classified as used oil.

Senator John Chafee, the floor manager of the RCRA reauthorization bill (S. 757) in the Senate and the chairman of the conference committee on the 1984 RCRA Amendments, described the used oil recycling provisions of the 1984 legislation as “a careful effort to balance the stringent environmental requirements of this legislation against the practical experience of businesses that are already engaged in successfully recycling material that would otherwise be harming the environment.” According to Senator Chafee, the used oil recycling industry “has demonstrated how a potentially hazardous substance can be safely collected and profitably recycled into new, useful products.” 130 Cong. Rec. S. 9193 (daily ed. July 25, 1984).

Following Congress’ 1984 legislative instructions, as well as its previous instructions in the Used Oil Recycling Act of 1980, EPA established a set of balanced regulatory controls that, for all practical purposes, accomplished Congress’ goals. NORA members collect and manage vast quantities of used (including used oil recovered from oily wastewater) as a valuable product – in compliance with EPA’s comprehensive regulations now codified at 40 CFR Part 279.

If, instead of a balanced regulatory approach, used oil had been declared a hazardous waste, as had been seriously considered by EPA and now is being proposed by DEC, far less used oil would be recycled and the system for handling used oil would be extremely expensive – without any environmental protection benefits. Indeed, the opposite is likely the case. In adopting 40 CFR Part 279 and rejecting the classification of used oil as a hazardous waste EPA was motivated by its concern that disrupting the used oil recycling system could lead to significant amounts of used oil being disposed of in unsound ways. DEC should share that concern and carefully examine the probability of improper disposal which would be caused by the immense expense relating to incineration.

When EPA promulgated the second phase of the used oil management standards in September 1992, the Agency stated: “EPA has determined that used oils that are recycled do not pose a substantial threat to human health and the environment when they are managed in accordance with the standards promulgated today from the time they are generated until they are recycled in addition to the existing requirements under other statutes or regulatory programs.” 57 Fed. Reg. 41602 (September 10, 1992).

The history of used oil regulation in the United States provides a valuable lesson and blueprint for policy makers including DEC who genuinely care about environmental protection.

To further promote the recycling of used oil, Congress in 1986 adopted the “Service Station Dealers Exemption.” This provision provides a conditional exemption from potential prospective liability under the Comprehensive Environmental Response Compensation and Liability Act (“CERCLA” or “Superfund”) for entities such as car dealers and service stations that comply with all applicable environmental laws (including used oil generator regulations under 40 CFR

Part 279) and provide a collection service for “Do-It-Yourself” (“DIY”) used oil generators. 42 U.S.C. §6914(c).

Taken together, the statutory provisions focusing on used oil establish a clear Congressional mandate to EPA: used oil warrants special regulatory treatment that encourages proper recycling. In light of the legislative history that confirms used oil’s unique place in the tapestry of environmental regulation, it is EPA’s obligation not to disregard Congressional intent. That intent was clearly expressed by Representative Ike Skelton (author of the Service Station Dealers Exemption) in comments on EPA’s pending used oil regulatory scheme. Rep. Skelton observed: “...overregulation in this particular situation can severely undermine the basic goals of environmental protection.” 132 Cong. Rec. H9569 (daily ed., Oct. 8, 1986). Accordingly, in the context of DEC’s present rulemaking affecting used oil, it would be a substantial error for DEC to ignore Congress’ clear and specific directives on used oil. NORA believes that proposed section 7-805(g) would severely undermine the basic goals of environmental protection by discouraging legitimate treatment and recycling of oily wastewater. Congress was right to recognize the direct link between an effective market-based system for properly recycling used oil and environmental protection. DEC would be prudent in heeding Congressional intent.

While states may adopt more stringent RCRA rules and standards than regulations promulgated by EPA, states cannot obliterate a RCRA regulatory program, such as the used oil management standards, under the guise of stricter standards.

Section 7-805(g) is in Conflict with the Commercial Chemical Product Exclusion.

EPA has consistently maintained that “commercial chemical products are not considered a solid waste when used to make a fuel if they themselves are fuels (see 40 CFR 261.2(c)(2)(ii)).” Letter dated Nov. 1, 2016 from Barnes Johnson, Director, Office of Resource Conservation and Recovery, EPA to David Wieties, Illini Environmental, Inc. EPA has also made clear that this provision applies “to commercial chemical products that exhibit a hazardous waste characteristic.” See 50 Fed. Reg. 14219 (April 11, 1985). Accordingly, when either the generator or the CWT recovers fuels such as benzene or methanol that are subsequently (and legitimately) burned for energy recovery, neither the wastewater containing these fuels nor the separated fuels would be considered a solid waste and therefore not a hazardous waste – even when the wastewater exhibits a hazardous characteristic. The commercial chemical product exclusion is a component of the RCRA regulations that Vermont has adopted. Yet it is in direct conflict with proposed section 7-805(g). DEC would have to repeal 40 CFR 261.2(c)(2)(ii) in order to remove such conflict. But in doing so, a host of other regulatory and enforcement problems would occur, including issues about the legitimacy of Vermont’s delegated authority to implement RCRA.

Section 7-803 Addresses DEC's Concern.

As previously indicated, NORA is unaware of exactly what problem proposed section 7-805(g) is intended to remedy. It is our assumption -- which could be incorrect -- that DEC is concerned that a generator of hazardous wastewater (containing no used oil) would deliberately mix that hazardous wastewater with used oil in an effort to have such mixture classified as used oil, rather than as a hazardous waste. If that is indeed DEC's concern, we believe that an existing Vermont regulation would prohibit that practice.

Specifically, section 7-803 in pertinent part states:

“PROHIBITIONS The following uses or activities are prohibited: (a) The mixing of hazardous wastes with used oil, with the exception that used oil may be mixed with waste that is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resultant mixture does not exhibit the characteristic of ignitability;”

Except in the case of ignitable-only hazardous waste, all used oil/hazardous waste mixtures deliberately produced after the completion of the manufacturing process are prohibited by section 7-803. All that is necessary is for DEC to enforce this provision. Moreover, the mixture rule set forth in 40 CFR 261.3(a)(2)(iv) states that mixing any solid waste with any listed (F, K, P, and U-designated wastes) causes the entire mixture to be a hazardous waste.

It is worth pointing out that manufacturing operations very rarely produce wastewater that contains no used oil. Petroleum-based lubricants and coolants, together with water, are essential components of manufacturing. They are mixed in the manufacturing process, not afterwards.

Accordingly, proposed section 7-805(g) is not needed. Indeed, it would only create confusion when section 7-803 and proposed section 7-805(g) are read together.

Summary

As previously stated, NORA believes that section 7-805(g) is a proposal in search of a problem. *And that problem does not exist* because oily wastewater is currently properly managed in compliance with the Used Oil Management Standards, the commercial chemical product exclusion, CWTs' stringent permits, 40 CFR Part 437 and other applicable provisions of the Clean Water Act.

In addition to NORA's recommendation that DEC carefully evaluate incineration capacity and availability as well as the costs of incineration, storage and transportation that will be imposed on

Vermont oily wastewater generators, NORA respectfully requests that DEC respond to the following nine questions:

First, what problem is DEC trying to solve with section 7-805(g)?

Second, what environmental benefit, if any, will be realistically (not theoretically) achieved by the adoption of section 7-805(g)?

Third, what measures will Vermont adopt to mitigate the harsh financial and physical burden that will be imposed on Vermont's generators of oily wastewater by section 7-805(g)?

Fourth, what additional personnel and other resources will DEC need in order to implement, monitor and enforce the obligations imposed by section 7-805(g)?

Fifth, will DEC train Vermont's oily wastewater generators to accurately sample and analyze oily wastewater in compliance with applicable ASTM requirements?

Sixth, will DEC be prepared to fully investigate and prosecute the "disappearance" of oily wastewater, resulting from the financial burdens imposed by section 7-805(g)?

Seventh, does DEC intend to repeal the commercial chemical product exclusion?

Eighth, won't DEC's enforcement of section 7-803 address DEC's concerns?

Finally, what is the basis for establishing the 50 percent dividing line between non-hazardous oily wastewater and oily wastewater that constitutes hazardous waste?

Although there are many factual uncertainties inherent in DEC's proposal, NORA is willing to provide additional information (if available) upon DEC's request.

Respectfully submitted,
Scott D. Parker, Executive Director



**Vermont Department of Environmental Conservation
Comments on Proposed Section 7-805(g)
Vermont Hazardous Waste Management Regulations
August 19, 2021**

I appreciate the opportunity to comment on your proposed regulation. I am a petroleum engineer by education, training and experience. Over the past 50 years I have pioneered a number of recycling systems to handle oily wastewaters including Centralized Water Treatment facilities as well as three used oil re-refineries making new base oil, fuels and treating millions of gallons of oily water monthly.

I was one of the founders of National Oil Recyclers Association (NORA) and served as its Vice President in the 1980s. Currently I am a consultant and active in implementing waste material recycling and recovery facilities.

Your proposed section 7-805(g) is trying to fix a "problem" that does not exist and this provision should not become law. Further, it would do considerable harm to Vermont's environment plus increase costs by six to seven times for Vermont's producers of oily waters. Because of this massive increased expense there will be illegal dumping and air contamination.

In addition, the hazardous waste incineration industry does not have the capacity to handle it.

The present used oil management regulations are providing the appropriate encouragement of legitimate recycling at a reasonable cost to oily water generators.

Should you like more detail, input or discussion, please feel free to call my cell 503-314-0757 or my office 503-286-8352 or my email below

Regards,

W.L. (Bill) Briggs - President
Sustainable and Renewable Products, LLC
Recoverableproductsllc@gmail.com

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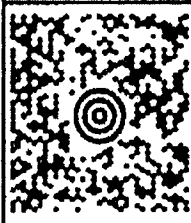
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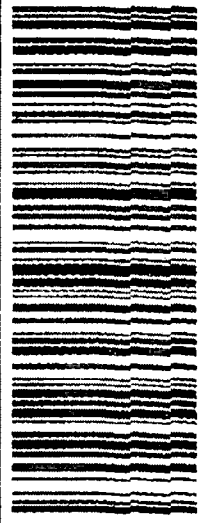
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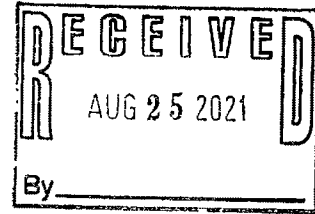
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August 24, 2021

To Anna Bourakovsky,

Let it be known that TAS Environmental Services, L.P. is in agreement with NORA's position as stated in the enclosed letter, *Comments of NORA, an Association of Responsible Recyclers Concerning Proposed Section 7-805(g) of the Vermont Hazardous Waste Management Regulations by the Vermont Department of Environmental Conservation.*

Let it also be known that TAS Environmental Services, L.P. vehemently opposes any regulations that would classify oily water per CFR 279 as hazardous waste.

Respectfully,

A handwritten signature in black ink, appearing to read "Andrew Guile". The signature is fluid and cursive, written over a horizontal line.

Andrew C. Guile
Director of Environmental Health and Safety



**Comments of NORA, an Association of Responsible Recyclers
Concerning
Proposed Section 7-805(g) of the
Vermont Hazardous Waste Management Regulations by the
Vermont Department of Environmental Conservation**

August 20, 2021

The following are comments hereby submitted by NORA, an Association of Responsible Recyclers, a national trade association. NORA, formerly the National Oil Recyclers Association, was founded in 1984 and originally represented only used oil recyclers. NORA's membership has expanded significantly in the subsequent decades and consists of companies that recycle wastewater, antifreeze, parts cleaning chemicals, and oil filters. NORA now has more than 350 members throughout the entire United States as well as several foreign countries.

NORA members have taken a close look at the proposed regulation, section 7-805(g), and the consensus is that this would be a regulatory requirement in search of a problem. Moreover, we cannot discern any environmental benefit if this proposed regulation is adopted. Indeed, it will impose immense financial burdens on Vermont's oily wastewater generators.

It should be emphasized at the outset that oily wastewater, generated by numerous different industries, is currently defined, classified and managed as used oil under 40 CFR Part 279 and EPA guidance documents. EPA has consistently stated that "...wastewater that contains used oil meets the §279.1 definition of used oil and is subject to regulation under the used oil management standards." See letter dated March 22, 1994 from Michael Shapiro, Director, Office of Solid Waste, EPA, to Gary Lindgren, Heritage Environmental Services, Inc.

Oily wastewater is managed efficiently and in compliance with all applicable environmental regulations, including those set forth in 40 CFR Part 437, as well as permits governing the operations of oily wastewater recycling facilities (formally known as Centralized Water Treatment facilities or CWTs). Currently, CWTs are required to meet numerous and stringent discharge limits set forth in their permits (which require rigorous testing and laboratory analysis) as well as analysis of solids resulting from treatment prior to RCRA-compliant disposal.

DEFENDING THE RIGHTS OF NORA MEMBERS TO RESPONSIBLY RECYCLE USED OIL AND RELATED MATERIALS

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Unfortunately, the proposed regulation, if implemented and enforced, would disrupt and overwhelm the existing treatment system, causing immense frustration and expense to Vermont's generators of oily wastewater. Moreover, as will be demonstrated, the law of unintended consequences will result in inconsistent measurements and probably improper disposal and pollution.

The Resource Conservation and Recovery Act ("RCRA") governs the generation, management, recycling treatment and disposal of hazardous waste. It established a "cradle to grave" regulatory system. It also established a distinct regulatory program to encourage legitimate recycling of used oil – compatible with but outside of the hazardous waste management system. *See* 40 CFR Part 279 (the used oil management standards).

NORA recommends that the Vermont Department of Environmental Conservation ("DEC") focus on the "grave" or disposal component of the impact of section 7-805(g). This proposed regulation could cause most oily wastewater to be classified as hazardous waste because most oily wastewater is comprised of 90 percent or more water and contains contaminants, such as heavy metals or benzene, at low levels, but sufficient to be classified as hazardous waste (in the absence of 40 CFR Part 279). Currently, however, these wastewaters are not classified as hazardous waste because they are regulated by EPA's used oil management standards set forth in 40 CFR Part 279; *see specifically* 40 CFR 279.10(c) and the regulations in 40 CFR Part 437 governing CWTs pursuant to the Clean Water Act. Regrettably, proposed section 7-805(g) could instantly transform most of these tremendous quantities of oily wastewater into hazardous wastes.

There are few options for disposing of wastewater as a hazardous waste. In the absence of a RCRA treatment permit and compliance with applicable Clean Air Act regulations, it would be illegal to evaporate the water. Wastewater cannot easily be disposed of in a landfill. The cost of attempting to solidify the water would be prohibitively expensive and consume immense quantities of landfill space. Also, if the landfill eventually fails and becomes a Superfund site, the wastewater generators would become liable for remediating the site.

Incineration and Transportation

The only potentially feasible disposal alternative is incineration. The first consideration is the availability and capacity of incinerators. According to EPA, there are 23 licensed incinerators in the United States. Some of these are commercially available. Some of the commercially available incinerators are limited to certain types of hazardous wastes. Before proceeding with the adoption of section 7-805(g), DEC should undertake a reliable and accurate assessment of which incinerators are available to Vermont's generators of oily wastewater -- and at what cost? Such research cannot be accomplished with the very limited and outdated information available on the internet. At a minimum, it will require an examination of the incinerators' permits and interviews of the incinerators' managers to determine each incinerator's (1) capacity; (2) price per gallon, including cost of laboratory testing; and (3) availability (e.g., scheduling and waiting time).

There are at least three reasons why incineration capacity is so scarce. First, the Non-Hazardous Secondary Materials rule finalized by EPA three years ago mandates incineration for a wide range of discarded materials (solid wastes) that were potentially burned for energy recovery. For example, discarded railroad ties, certain categories of tires and wood from construction and/or demolition debris now have to be incinerated.

Second, there is a large category of chemicals classified as Per- and polyfluoroalkyl substances ("PFAS") which are a group of chemicals that EPA has determined are highly toxic. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. Like PCBs, these chemicals are very persistent in the environment and in the human body – meaning they do not break down and they can accumulate over time. Consequently, EPA has determined that incineration is one of the recommended technologies to treat PFAS waste.

Third, generators of solid wastes, chemicals and other materials that must be incinerated that have ongoing need for incineration services have locked incineration facilities into long-term contracts. Therefore, the available incineration capacity for the foreseeable future is extremely limited.

With incineration services in high demand and with very limited incinerator capacity and availability, the law of supply and demand dictates that prices for incineration will increase dramatically.

In the addition to the incinerators' ever-increasing disposal fees, transportation and possible storage are also major cost factors. Since there are no hazardous waste incinerators in Vermont, all oily wastewater generated in Vermont would have to be shipped out of state. It is not known which of these out of state incinerators would be available. With the significant recent increases in gasoline and diesel fuel, it is realistic to assume that a tank truck transporting a 5000 gallon load of wastewater to an incinerator -- one way -- would cost \$5.00 a mile. A 200 mile one way trip would cost \$1000 and the return trip would also cost \$1000 for a total cost of \$2000. Most incinerators are located in Louisiana and Texas and the approximate distance from Burlington, Vermont to Port Arthur, Texas (the location of a Veolia hazardous waste incinerator) is 1900 miles. At \$5.00 a mile for the 5000 gallon load for a one way trip is \$9500 and a return trip will cost an additional \$9500. This amount does not take into account lodging and meals for the driver or drivers. Nor does it take into account the waiting time needed for unloading – or the storage costs at the facility because the generator's 5000 gallons has to wait its turn to be incinerated.

There are a few other incinerators that are closer to Burlington, Vermont -- for example, the one operated by Ross Environmental in Grafton, Ohio. The driving distance is 644 miles. At \$5.00 a mile for a 5000 gallon load of oily wastewater the one way cost would be \$3220 and the roundtrip would be \$6440. This amount does not include the other costs previously identified. While the distance from Burlington, Vermont to Grafton, Ohio is shorter than the distance to the incinera-

tors in Texas and Louisiana, the overriding factor is capacity. DEC will need to carefully evaluate incineration availability, cost and capacity.

It is worth noting that the lack of incinerator capacity has prompted EPA to issue a memorandum on the problem to all EPA Regions. According to EPA,

“In early June 2021, EPA became aware that some commercial hazardous waste incinerators were informing their customers (hazardous waste generators) that they would no longer accept containerized hazardous waste designated for incineration, due to a backlog at their facilities. This presents a problem for hazardous waste generators because they are only allowed to accumulate hazardous waste on-site for a maximum of 90 days for large quantity generators (LQGs) or 180 days (or 270 days if the waste must be transported a distance of 200 miles or more) for small quantity generators (SQGs). Because many commercial incinerators are currently not accepting containerized hazardous waste that must be incinerated to meet the land disposal restriction treatment standards, some hazardous waste generators are finding it difficult to locate any permitted TSDFs to which they may send their hazardous waste within the regulatory time frames.”

Memorandum dated August 10, 2021 from Carolyn Hoskins, Director of Resource Conservation and Recovery to EPA Regions 1-10.

In addition, DEC should consider:

1. the very real problem of a nationwide shortage of truck drivers;
2. the ever increasing cost of fuel (gasoline and diesel);
3. the risks of transporting waste including accidents, spills and leaks;
4. the very large “carbon footprint” that will be left by incineration, storage, and transportation; and
5. the cost of compliance with U.S. Department of Transportation’s regulation of shipments of hazardous materials.

NORA members who have studied DEC’s proposal, including members that operate CWT facilities, have reached a consensus that if section 7-805(g) is adopted, implemented and enforced, the cost to a Vermont oily wastewater generators will be seven times greater than the current cost sending oily wastewater to a CWT facility.

Burden on Vermont Oily Wastewater Generators

It is worth emphasizing that Vermont is the only state that has proposed this Draconian requirement that automatically transforms oily wastewater into hazardous waste. This is not waste minimization; quite the opposite, it is waste maximization. Even California (which has the most stringent of all used oil regulatory schemes in the United States) has not proposed any similar regulation. If section 7-805(g) is adopted, Vermont's oily wastewater generators will have a very expensive burden that is not imposed on generators in any other state in the Nation.

To continue with the hypothetical, if a Vermont manufacturer of widgets generates 5000 gallons each month and the minimum cost for transportation is \$19,000 a month, the manufacturer will have an annual cost of disposing of oily wastewater of approximately \$228,000. Even if that amount is cut in half (assuming a more proximate incinerator has the capacity and is available), the cost to the Vermont manufacturer is \$64,000 a year – a burden not imposed on competing manufacturers in other states.

In addition, generating large quantities of hazardous waste (formerly ordinary oily wastewater) will place Vermont's oily wastewater generators into the RCRA category of large quantity hazardous waste generators. This will impose significant paperwork, reporting, and tank monitoring requirements as well as physical (facility infrastructure) obligations, such as secondary containment systems, on Vermont's oily wastewater generators. See VHWMR §§7-308(b)(7), 7-504(e)(4), 7-311(g). Their counterparts in the other 49 states will not suffer these burdens.

Other Practical Problems

Proposed section 7-805(g) states that if the "aqueous solution comprises greater than 50% of the overall volume of waste liquid material" and it exhibits any hazardous characteristic it will be classified as a hazardous waste. This seems straightforward but in fact raises numerous questions.

First, who conducts the measurement and under what conditions? RCRA imposes on the generator the obligation to determine whether his or her waste material is hazardous. See VHWMR §7-202. Currently, oily wastewater sent by the generator to the CWT is classified as used oil regardless of the quantity of used oil in the wastewater. Under DEC's proposal the generator would need to (1) measure the ratio of water to used oil and (2) obtain laboratory analysis of the material to determine whether it exhibits any hazardous characteristic. An accurate measurement of the ratio would require personnel training and equipment, particularly where the ratio is close to the 50 percent mark. As discussed below, *accurate* sampling of a tank with four phases of sludge and liquids is very difficult.

If the generator states that aqueous phase is less than 50 percent, and a subsequent analysis by the CWT indicates that the water content is more than 50 percent, then the CWT will need to return

the entire load to the generator (at the generator's expense) because in most cases the CWT's permit precludes treatment of hazardous waste. The generator would also be liable – potentially criminally liable – for transporting hazardous waste without a hazardous waste manifest and/or shipment without a hazardous waste transporter's permit.

It is worth mentioning that there are at least four places where the wastewater ratio could be measured at: (1) the generator's bulk storage tank; (2) the smaller storage tank before being offloaded to the tank truck; (3) the tank truck upon arrival at the CWT facility; and (4) the CWT facility's container after being unloaded from the tank truck. It is highly unlikely that the measurement results would be even close to identical. Indeed, where the oil/water ratio is close to even it is likely that the ratio measurements would differ on whether the wastewater is hazardous or non-hazardous.

Second, in what situations will the generator be able to alter the ratio of used oil to water? For example, will the generator be able to add used oil to the wastewater to ensure that there is more than 50 percent used oil in the mixture? Alternatively, is the generator allowed to evaporate some of the water to obtain a favorable ratio? If so, is the evaporation process limited to leaving the wastewater exposed to heat and sunlight, or, can he or she cause evaporation by "cooking"?

Third, in the context of the aqueous phase mixed with or emulsified into the used oil phase, when and how should the mixture be measured? Should the generator be able to chemically treat the mixture to promote separation of the two phases? If the generator chemically treats his or her wastewater, is he or she engaging in hazardous waste treatment for which a RCRA permit is required? Alternatively, should the generator be required to only allow "natural separation" over time? And what period of time? These are questions not answered by DEC's proposal -- even though these technical issues, in the absence of specific clarification, will cause widespread disparity in measuring oily wastewater.

ASTM Methodologies Need to be Considered by DEC if it Proceeds With Adoption of Proposed Section 7-805(g).

The American Society for Testing and Materials ("ASTM") has devoted considerable effort to the need for accurate sampling and analysis of petroleum and water mixtures. At least eight different sampling and testing methodologies are applicable to the numerous -- and varied -- oily wastewater situations presented by Vermont's oily wastewater generators. DEC needs to determine which of the following ASTM protocols are applicable and should be followed by Vermont's oily wastewater generators:

D95 Test Method for Water in Petroleum Products By Distillation

D4057 Practice for Sampling of Petroleum and Petroleum Products

D4177 Practice for Automatic Sampling of Petroleum and Petroleum Products

D5854 Practice for Mixing and Handling of Petroleum and Petroleum Products

D6304 Test Method for Determination of Water in Petroleum Products, Lubricating Oils and Additives by Coulometric Karl Fischer Titration

E542 Practice for Calibration of Laboratory Volumetric Apparatus

D1796 Standard Test Method for Water and Sediment In Fuel Oils by Centrifuge Method (attached)

ISO 5272: 1979 Toluene for Industrial Use – Specifications

All of these ASTM documents (and perhaps others) are potentially relevant if DEC is concerned about accurate sampling and measurement of oily wastewaters. D1796 is particularly important because *if followed precisely* it will provide analysis that will be more accurate than measurement techniques that are currently used. However, ASTM has established specific parameters and specifications for the centrifuges that are needed for petroleum/water mixtures. Moreover, centrifuge methodology will only be accurate if a true *representative* sample of the material is obtained – and this would, of course include the sludge (sediment) layer at the bottom of the generator's tank.

DEC should also be aware that the centrifuges described in D1796 cost between \$5000 and \$8000 and must be operated by trained professionals. In addition, each centrifuge test requires the use of toluene which must be discarded after each test. This discarded toluene will be a hazardous waste for ignitability (Flash Point < 140° F.) and will be an F005 listed waste for both ignitability and toxicity.

Problems Inherent In Sampling Tanks Containing Oily Wastewaters

Vermont's wastewater generators will have great difficulty attempting to obtain accurate measurements of the used oil in their tanks. The ASTM method for obtaining representative samples of the contents of various storage tanks has been documented in *Sampling Method ASTM-D7831 – COLIWASA Sampling Device*. This method works well for tanks containing homogenous fluids *provided* that the sampling device collects a full profile of the tank's contents. However, sampling tanks containing various phases of materials presents the sampler with considerable uncertainty. Oily wastewater contained in tanks is usually comprised of four phases. At the top is floating oil; in the middle is a mixture of water with various amounts of entrained emulsions; there is the aqueous layer, and at the bottom are sludges. All of these four phases, if sampled separately, would provide wide differences in the analysis results. Moreover, were a coliwasa sampling tube used, the floating oil at the top of the tank would become attached, by surface tension, to the tube as it

passed through this first phase. This would result in excessive oil being included in the sample than is represented by the undisturbed tank. Sludge at the bottom may, or may not, be collected in the tube, depending on the nature of the material and the method of tube closure. Once this "sample" is collected, and assuming that the material was then thoroughly homogenized prior to the lab-sample being collected, what would the analytical results mean? Are the data accurately representative of the water in the tank, of the oil, of the emulsion, of the sludge (sediment) or to none of the above?

If a very careful sampling effort was accomplished, the coliwasa tube contents completely homogenized, and the homogenized material carefully collected into the laboratory containers, then a rough analysis of the entire contents of the tank would result. If regulatory requirements were based on a single percentage of the contents (e.g., the percent of heavy oil in the tank deciding the regulatory disposition of the contents), then the regulatory decision point would be dependent on the sampling care taken, the nature of the tank contents (the relative amounts of the four phases present), and the amount of time between collection of the tank's contents and the sampling process. Phase separation within the tank is strongly related to the amount of time the tank sets undisturbed.

The point of this discussion is to illustrate how inaccurate the sampling of multiple phase tank contents is in the real world. Facilities that handle used oils and oily wastewaters process many thousands of gallons of material daily and are able to keep this material out of the environment. However, Vermont's wastewater generators cannot afford trained and certified professionals to conduct the sampling and analyses. Without the assistance of trained professionals who have carefully studied ASTM-D7831, the results of sampling by Vermont's oily wastewater generators are guaranteed to be hit and miss – mostly miss. DEC should recognize that its analysis targets cannot be successfully implemented in such a complex setting.

Vermont's Proposal Would Undermine Congressional and EPA Encouragement of Used Oil Recycling.

In 1984, Congress passed legislation designed to assure that EPA would implement its legislative mandate on used oil. The legislative history of the 1984 amendments to RCRA state that "where protection of human health and the environment can be assured...the [EPA] Administrator should make every effort not to discourage recycling of used oil." H.R. Rep. 1133, 98th Cong., 2d Sess. 114 (1984); See also H.R. Rep. 198 (Part 1) 98th Cong., 1st Sess., 64 (1983). EPA has recognized that this "statute contains a separate provision dealing with used oil as a distinct class and authorizes separate standards for its management (See RCRA section 3014)." 50 Fed. Reg. 49175. As previously indicated, under EPA's Used Oil Management Standards (40 CFR Part 279) oily wastewater is classified as used oil.

Senator John Chafee, the floor manager of the RCRA reauthorization bill (S. 757) in the Senate and the chairman of the conference committee on the 1984 RCRA Amendments, described the used oil recycling provisions of the 1984 legislation as “a careful effort to balance the stringent environmental requirements of this legislation against the practical experience of businesses that are already engaged in successfully recycling material that would otherwise be harming the environment.” According to Senator Chafee, the used oil recycling industry “has demonstrated how a potentially hazardous substance can be safely collected and profitably recycled into new, useful products.” 130 Cong. Rec. S. 9193 (daily ed. July 25, 1984).

Following Congress’ 1984 legislative instructions, as well as its previous instructions in the Used Oil Recycling Act of 1980, EPA established a set of balanced regulatory controls that, for all practical purposes, accomplished Congress’ goals. NORA members collect and manage vast quantities of used (including used oil recovered from oily wastewater) as a valuable product – in compliance with EPA’s comprehensive regulations now codified at 40 CFR Part 279.

If, instead of a balanced regulatory approach, used oil had been declared a hazardous waste, as had been seriously considered by EPA and now is being proposed by DEC, far less used oil would be recycled and the system for handling used oil would be extremely expensive – without any environmental protection benefits. Indeed, the opposite is likely the case. In adopting 40 CFR Part 279 and rejecting the classification of used oil as a hazardous waste EPA was motivated by its concern that disrupting the used oil recycling system could lead to significant amounts of used oil being disposed of in unsound ways. DEC should share that concern and carefully examine the probability of improper disposal which would be caused by the immense expense relating to incineration.

When EPA promulgated the second phase of the used oil management standards in September 1992, the Agency stated: “EPA has determined that used oils that are recycled do not pose a substantial threat to human health and the environment when they are managed in accordance with the standards promulgated today from the time they are generated until they are recycled in addition to the existing requirements under other statutes or regulatory programs.” 57 Fed. Reg. 41602 (September 10, 1992).

The history of used oil regulation in the United States provides a valuable lesson and blueprint for policy makers including DEC who genuinely care about environmental protection.

To further promote the recycling of used oil, Congress in 1986 adopted the “Service Station Dealers Exemption.” This provision provides a conditional exemption from potential prospective liability under the Comprehensive Environmental Response Compensation and Liability Act (“CERCLA” or “Superfund”) for entities such as car dealers and service stations that comply with all applicable environmental laws (including used oil generator regulations under 40 CFR

Part 279) and provide a collection service for “Do-It-Yourself” (“DIY”) used oil generators. 42 U.S.C. §6914(c).

Taken together, the statutory provisions focusing on used oil establish a clear Congressional mandate to EPA: used oil warrants special regulatory treatment that encourages proper recycling. In light of the legislative history that confirms used oil’s unique place in the tapestry of environmental regulation, it is EPA’s obligation not to disregard Congressional intent. That intent was clearly expressed by Representative Ike Skelton (author of the Service Station Dealers Exemption) in comments on EPA’s pending used oil regulatory scheme. Rep. Skelton observed: “...overregulation in this particular situation can severely undermine the basic goals of environmental protection.” 132 Cong. Rec. H9569 (daily ed., Oct. 8, 1986). Accordingly, in the context of DEC’s present rulemaking affecting used oil, it would be a substantial error for DEC to ignore Congress’ clear and specific directives on used oil. NORA believes that proposed section 7-805(g) would severely undermine the basic goals of environmental protection by discouraging legitimate treatment and recycling of oily wastewater. Congress was right to recognize the direct link between an effective market-based system for properly recycling used oil and environmental protection. DEC would be prudent in heeding Congressional intent.

While states may adopt more stringent RCRA rules and standards than regulations promulgated by EPA, states cannot obliterate a RCRA regulatory program, such as the used oil management standards, under the guise of stricter standards.

Section 7-805(g) is in Conflict with the Commercial Chemical Product Exclusion.

EPA has consistently maintained that “commercial chemical products are not considered a solid waste when used to make a fuel if they themselves are fuels (see 40 CFR 261.2(c)(2)(ii)).” Letter dated Nov. 1, 2016 from Barnes Johnson, Director, Office of Resource Conservation and Recovery, EPA to David Wieties, Illini Environmental, Inc. EPA has also made clear that this provision applies “to commercial chemical products that exhibit a hazardous waste characteristic.” See 50 Fed. Reg. 14219 (April 11, 1985). Accordingly, when either the generator or the CWT recovers fuels such as benzene or methanol that are subsequently (and legitimately) burned for energy recovery, neither the wastewater containing these fuels nor the separated fuels would be considered a solid waste and therefore not a hazardous waste – even when the wastewater exhibits a hazardous characteristic. The commercial chemical product exclusion is a component of the RCRA regulations that Vermont has adopted. Yet it is in direct conflict with proposed section 7-805(g). DEC would have to repeal 40 CFR 261.2(c)(2)(ii) in order to remove such conflict. But in doing so, a host of other regulatory and enforcement problems would occur, including issues about the legitimacy of Vermont’s delegated authority to implement RCRA.

Section 7-803 Addresses DEC's Concern.

As previously indicated, NORA is unaware of exactly what problem proposed section 7-805(g) is intended to remedy. It is our assumption -- which could be incorrect -- that DEC is concerned that a generator of hazardous wastewater (containing no used oil) would deliberately mix that hazardous wastewater with used oil in an effort to have such mixture classified as used oil, rather than as a hazardous waste. If that is indeed DEC's concern, we believe that an existing Vermont regulation would prohibit that practice.

Specifically, section 7-803 in pertinent part states:

“PROHIBITIONS The following uses or activities are prohibited: (a) The mixing of hazardous wastes with used oil, with the exception that used oil may be mixed with waste that is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resultant mixture does not exhibit the characteristic of ignitability;”

Except in the case of ignitable-only hazardous waste, all used oil/hazardous waste mixtures deliberately produced after the completion of the manufacturing process are prohibited by section 7-803. All that is necessary is for DEC to enforce this provision. Moreover, the mixture rule set forth in 40 CFR 261.3(a)(2)(iv) states that mixing any solid waste with any listed (F, K, P, and U-designated wastes) causes the entire mixture to be a hazardous waste.

It is worth pointing out that manufacturing operations very rarely produce wastewater that contains no used oil. Petroleum-based lubricants and coolants, together with water, are essential components of manufacturing. They are mixed in the manufacturing process, not afterwards.

Accordingly, proposed section 7-805(g) is not needed. Indeed, it would only create confusion when section 7-803 and proposed section 7-805(g) are read together.

Summary

As previously stated, NORA believes that section 7-805(g) is a proposal in search of a problem. *And that problem does not exist* because oily wastewater is currently properly managed in compliance with the Used Oil Management Standards, the commercial chemical product exclusion, CWTs' stringent permits, 40 CFR Part 437 and other applicable provisions of the Clean Water Act.

In addition to NORA's recommendation that DEC carefully evaluate incineration capacity and availability as well as the costs of incineration, storage and transportation that will be imposed on

Vermont oily wastewater generators, NORA respectfully requests that DEC respond to the following nine questions:

First, what problem is DEC trying to solve with section 7-805(g)?

Second, what environmental benefit, if any, will be realistically (not theoretically) achieved by the adoption of section 7-805(g)?

Third, what measures will Vermont adopt to mitigate the harsh financial and physical burden that will be imposed on Vermont's generators of oily wastewater by section 7-805(g)?

Fourth, what additional personnel and other resources will DEC need in order to implement, monitor and enforce the obligations imposed by section 7-805(g)?

Fifth, will DEC train Vermont's oily wastewater generators to accurately sample and analyze oily wastewater in compliance with applicable ASTM requirements?

Sixth, will DEC be prepared to fully investigate and prosecute the "disappearance" of oily wastewater, resulting from the financial burdens imposed by section 7-805(g)?

Seventh, does DEC intend to repeal the commercial chemical product exclusion?

Eighth, won't DEC's enforcement of section 7-803 address DEC's concerns?

Finally, what is the basis for establishing the 50 percent dividing line between non-hazardous oily wastewater and oily wastewater that constitutes hazardous waste?

Although there are many factual uncertainties inherent in DEC's proposal, NORA is willing to provide additional information (if available) upon DEC's request.

Respectfully submitted,
Scott D. Parker, Executive Director



PHARMECOLOGY®

July 14, 2021

To: Anna Bourakovsky
Agency of Natural Resources
1 National Life Diver, Davis 1
Montpelier, VT 05620-3704

Fr: Kathy Skibinski, RPh, MS
Manager of Regulatory and Compliance
PharmEcology Services, Waste Management Sustainability Services
800 Capital Street, Suite 3000
Houston, TX 77002

Re: Proposed Vermont Hazardous Waste Management Regulations N21P022

PharmEcology Services, a division of Waste Management Sustainability Services, appreciates the opportunity to review and comment on the proposed regulations and we support your adoption of the federal Generator Improvement Rule and the Hazardous Waste Pharmaceuticals Rule.

One suggestion we would like to make is:

§ 7-1009 (a) (2) (B) could also include "PHRM" in Item 13 of EPA Form 8700-22 as clarified by EPA in their FAQs to enable entry onto the e-manifest. <https://www.epa.gov/hwgenerators/frequent-questions-about-management-standards-hazardous-waste-pharmaceuticals-and#manifest>

One clarification we would like to request is regarding Vermont Listed Hazardous Wastes. If and when the Subpart P rules are adopted and a healthcare facility chooses to categorize all their pharmaceutical waste as hazardous, is it correct to assume that they would not be required to list VT 99 for their non-hazardous pharmaceutical waste as all waste codes are replaced by PHRM or PHARMS on the manifest?

Thank you for your consideration of our comments. I may be reached at kskibin1@wm.com or (608) 698-0616 if you have any questions.

PharmEcology® Services

P.O. Box 1654, Brookfield, WI 53005 Phone 877-247-7430 Fax 262-250-8314 www.pharmecology.com



Innovative Products For **Home. Work. Life.**

August 10, 2021

via electronic transmission

Anna Bourakovsky
Program Manager
Vermont Department of Environmental Conservation
Waste Management and Prevention Division
1 National Life Drive – Davis 1
Montpelier, Vermont 05620-3704

Subject: Proposed Vermont Hazardous Waste Management Regulations

The Household & Commercial Products Association¹ (HCPA) appreciates the opportunity to offer comments to the Vermont Department of Environmental Conservation (DEC), Waste Management and Prevention Division on their proposal² to amend the Vermont Hazardous Waste Management Regulations (VHWMR). The amendments include adding aerosol cans in Vermont's Universal Waste Program. HCPA supports DEC's proposed changes as it is based on EPA's Increasing Recycling: Adding Aerosol Cans to the Universal Waste Regulations³ rule.

HCPA represents a wide range of products, from household cleaners and air fresheners to commercial disinfectant and pest control whose use of aerosol technology makes the aerosol industry an integral part of the household and commercial products industry. HCPA has represented the U.S. aerosol products industry since 1950 through its Aerosol Products Division, representing the interest of companies that manufacture, formulate, supply and market a wide variety of products packaged in an aerosol form.

The proposed amendments to the VHWMR not only maintains consistency with the Federal Resource Conservation and Recovery Act (RCRA), but it provides a clear, protective system for managing discarded waste aerosol cans; alleviates the regulatory burden on retail stores, aerosol product manufacturers, aerosol product marketers and others that discard waste aerosol cans by reducing the number of cans that must be treated as hazardous waste; promotes the collection and recycling of aerosol cans; and encourages the development of

¹ The Household & Commercial Products Association (HCPA) is the premier trade association representing companies that manufacture and sell \$180 billion annually of trusted and familiar products used for cleaning, protecting, maintaining, and disinfecting homes and commercial environments. HCPA member companies employ 200,000 people in the U.S. whose work helps consumers and workers to create cleaner, healthier and more productive lives.

² The Proposed VHWMR can be found at <https://dec.vermont.gov/sites/dec/files/wmp/HazWaste/Documents/Regulations/2021%20Proposed%20VHWMR.pdf>

³ 83 FR 11654-11667; <https://www.govinfo.gov/content/pkg/FR-2018-03-16/pdf/2018-05282.pdf>

municipal and commercial programs to reduce the quantity of aerosol can waste going to municipal solid waste landfills.

The proposed revision incorporates flexibility for handlers of discarded waste aerosol cans and lessens the regulatory burden on the regulated community, allowing more aerosol cans that are properly discarded to be recycled. Through this proposal, DEC ensures that programs developed in Vermont can also be safely and universally implemented in other states so that waste handlers with multiple locations within the United States can have one consistent program to handle aerosol cans across multiple sites.

For the reasons stated above, HCPA supports DEC's proposed revisions to the VHWMR. If you have any questions about our support or about aerosol cans, please do not hesitate to contact me directly at (202) 833-7304 or ngeorges@thehcpa.org.

Sincerely,



Nicholas B. Georges
Vice President, Scientific and International Affairs
Household & Commercial Products Association

Annotated
Text



STATE OF VERMONT

Agency of Natural Resources

Hazardous Waste Management Regulations

Effective: ~~December 31, 2016~~



Waste Management & Prevention Division

Department of Environmental Conservation

1 National Life Drive – Davis 1

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<http://dec.vermont.gov/waste-management/hazardous>

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DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

Subchapter 1: GENERAL PROVISIONS

§ 7-101 AUTHORITY

These regulations are promulgated by the Secretary of the Vermont Agency of Natural Resources pursuant to the authority granted by **3 V.S.A. § 2853(5) and 10 V.S.A. chapter 159.**

Note: The term “these regulations,” when used within this document, means chapter 7 of the Vermont Environmental Protection Rules (Hazardous Waste Management Regulations).

§ 7-102 PURPOSE

These regulations are intended to protect public health and the environment by ~~comprehensively~~ regulating the generation, storage, collection, transport, treatment, disposal, use, reuse, and recycling of hazardous waste, ~~used oil, universal waste, and pharmaceutical waste~~ in Vermont.

§ 7-103 DEFINITIONS

As used in these regulations, all terms not ~~otherwise~~ defined herein shall have the meaning given them in **40 CFR Parts 260 through 266, 268, and 270.** Terms that are used only in **subchapter 8** (used oil management standards), ~~or subchapter 9~~ (universal waste management standards) ~~or subchapter 10~~ (pharmaceutical waste management standards) are defined therein.

“**Active life of a facility**” means the period from the initial receipt of hazardous waste at the facility until the Secretary receives certification of final closure.

“**Acute hazardous waste**” means hazardous wastes that are either listed in § 7-210 with the assigned hazard code of (H) or are listed in § 7-215.

“**Aerosol can**” means a non-refillable receptacle containing a gas compressed, liquefied or dissolved under pressure, the sole purpose of which is to expel a liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.

“**Agency**” means the Vermont Agency of Natural Resources.

“**Board**” means ~~the solid waste and air quality variance board established by 10 V.S.A. § 553.~~

“**Airbag waste**” means any hazardous waste airbag modules or hazardous waste airbag inflators.

“**Airbag waste collection facility**” means any facility that receives airbag waste from airbag handlers subject to regulation under § 7-203(v), and accumulates the waste for more than ten days.

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“Airbag waste handler” means any person, by site, who generates airbag waste that is subject to regulation under subchapters 1 through 7 of these regulations.

“Boiler” means an enclosed device using controlled flame combustion and either:

- (a) Having the following characteristics:
 - (1) Having physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and
 - (2) Being of integral design, in that the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) are physically formed into one manufactured or assembled unit, except that process heaters (units that transfer energy directly to a process stream) and fluidized bed combustion units are not precluded from being boilers solely because they are not of integral design. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not of integral design; however, a unit may be of integral design even though secondary energy recovery equipment (such as economizers or air preheaters) is not physically formed into the same unit as the combustion chamber and the primary energy recovery section; and
 - (3) Maintaining while in operation a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and
 - (4) Exporting and utilizing at least 75 percent of the recovered energy, calculated on an annual basis, not including recovered heat used internally in the same unit, such as the preheating of fuel or combustion air, the driving of induced or forced draft fans or feed-water pumps; or
- (b) The device is one which the Secretary has determined, on a case-by-case basis, to be a boiler, after considering the standards in **40 CFR § 260.32**.

“Carbon regeneration unit” means any enclosed thermal treatment device used to regenerate spent activated carbon.

“CERCLA” means the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.

“Certificate of need” means a certificate issued by the Secretary pursuant to **10 V.S.A. § 6606a** that must be obtained before a person may begin site preparation for or construction of a hazardous waste management facility.

“Certified hazardous waste facility” means a treatment, storage, or disposal facility which is authorized to operate under a federally approved state hazardous waste program, the federal hazardous waste program, or a foreign government.

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“**College/University**” means a private or public, post-secondary, degree-granting, academic institution, that is accredited by an accrediting agency listed annually by the U.S. Department of Education.

“**Completed copy**” means any copy of the manifest which has been signed by the generator, designated transporter, any continuing transporters, and the designated certified hazardous waste treatment, storage, or disposal facility.

“**Compliance points**” or **points of compliance** means the locations identified in § 12-603 of the GWPRS.

“**Consignee**” means the ultimate treatment, storage or disposal facility in a receiving country to which the hazardous waste will be sent.

“**Container**” means any portable device in which a material is stored, transported, treated, disposed of or otherwise handled.

“**Containment building**” means a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of ~~§ Subpart DD of 40 CFR~~ Parts 264 or 265 of 40 CFR (incorporated by reference in subchapter 5).

“**Contaminated wipe**” means:

(a) A wipe that, after being used in a cleaning or degreasing process or after cleaning up a spill, either:

- (1) Contains greater than 5% by weight of VT02 petroleum distillates listed in § 7-211;
- (2) Contains one or more of the F001 through F005 solvents listed in § 7-210 or the corresponding P- or U- listed solvents found in §§ 7-214 and 7-215;
- (3) Exhibits a hazardous characteristic found in §§ 7-205 through 7-208 when that characteristic results from a solvent listed in §§ 7-210 through 7-215; and/or
- (4) Exhibits only the hazardous waste characteristic of ignitability found in § 7-205 due to the presence of one or more solvents that are not listed in §§ 7-210 through 7-215.

(b) Contaminated wipes that contain listed hazardous waste other than VT02 petroleum distillates or the solvents specified in subsection (a)(2) of this section, or exhibit the characteristic of toxicity, corrosivity, or reactivity due to contaminants other than solvents, are not eligible for the exemption at § 7-203(w).

“**Control**” over a waste, unless otherwise defined in these regulations, means the possession, ownership or physical control of such waste, including but not limited to the following activities: (a) generation; (b) treatment; (c) storage; (d) transportation; or (e) disposal, whether or not such

activity is authorized by law.

“Debris” means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: Any material for which a specific treatment standard is provided in **40 CFR §§ 268.40 through 268.49**, namely lead acid batteries, cadmium batteries, and radioactive lead solids; Process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by **40 CFR § 268.45** and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

“Designated facility” means:

- (a) A hazardous waste treatment, storage, or disposal facility which:
 - (1) Has received a permit (or interim status) in accordance with the requirements of 40 CFR Parts 270 and 124;
 - (2) Has received a permit (or interim status) from a State authorized in accordance with **40 CFR Part 271**; or
 - (3) Is regulated under **§ 7-606(a)** or **Subpart F of 40 CFR Part 266** (Refer to **§ 7-204(g)** Recyclable Materials Utilized for Precious Metal Recovery); and
 - (4) Has been designated on the manifest by the generator pursuant to **§ 7-702**.
- (b) A generator site designated on the manifest to receive its waste as a return shipment from a facility that has rejected the waste in accordance with **40 CFR § 264.72(f)** or **40 CFR § 265.72(f)** (Refer to **§ 7-704(g)(1)(4)**)
- (c) If a waste is destined to a facility in an authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility must be a facility allowed by the receiving State to accept such waste.

“Destination facility” means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in **§ 7-912(d)(3)**. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

“Discarded” A material is discarded if it is:

- (a) Abandoned by being:
 - (1) Disposed of; or
 - (2) Burned or incinerated; or

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- (3) Accumulated, stored, or treated before or in lieu of being abandoned by being disposed of, burned, or incinerated;
- (b) Recycled, until the recycling process has been completed;
- (c) Considered inherently waste-like as described in 40 CFR § 261.2(d);
- (d) Applied to or placed on the land in a manner that constitutes disposal, or used to produce products that are applied to or placed on the land, or are otherwise contained in products that are applied to or placed on the land or
- (e) A military munition identified as a solid waste in 40 CFR § 266.202.

“Discharge” or “hazardous waste discharge” means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.

“Disposal” means the discharge, deposit, injection, dumping, spilling, leaking, emitting, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any ground or surface waters.

“Disposal facility” means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure. The term disposal facility does not include a corrective action management unit into which remediation wastes are placed.

“Drip pad” is an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.

“Domestic sewage” means untreated sanitary wastes that pass through a sewer system to a sewage treatment plant.

“Economic poison” means

- ~~(a) Any substance produced, distributed or used as a plant regulator, defoliant, or desiccant;~~
- ~~(b) Any substance produced, distributed or used for preventing, destroying, or repelling any insects, rodents, nematodes, fungi, weeds, or other forms of plant or animal life or viruses, except viruses on or in living man or other animals, which the Secretary of Agriculture, Food & Markets shall declare to be a pest.~~

“Electronic manifest” (or “e-Manifest”) means the electronic format of the hazardous waste manifest that is obtained from EPA’s national e-Manifest system and transmitted electronically

to that system, and that is the legal equivalent of EPA Forms 8700-22 (Manifest) and 8700-22A (Continuation Sheet).

“Electronic Manifest System” (or “e-Manifest system”) means EPA’s national information technology system through which the electronic manifest may be obtained, completed, transmitted, and distributed to users of the electronic manifest and to regulatory agencies.

“Elementary neutralization unit” means a device which:

- (a) Is used for neutralizing wastes that are hazardous only because they exhibit the corrosivity characteristic defined in § 7-206, or they are listed in §§ 7-210 through 7-215 only for this reason; and
- (b) Meets the definition of tank, tank system, container, transport vehicle, or vessel.

“Eligible academic entity” means a college or university, or a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.

“Emergency response” means a response action to a situation that may cause immediate and serious threat of harm to human health or the environment.

“Environmental Protection Agency” or “EPA” means the United States Environmental Protection Agency.

“EPA Acknowledgement of Consent” means the cable sent to EPA from the U. S. Embassy in a receiving country that acknowledges the written consent of the receiving country to accept the hazardous waste and describes the terms and conditions of the receiving country's consent to the shipment.

“EPA Identification number” means the location specific number assigned by either EPA or the Secretary to each generator, transporter and treatment, storage, or disposal facility.

“EPCRA” means the federal Emergency Planning & Community Right to Know Act of 1986, as amended.

“Episodic Event” means an activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous wastes that exceeds the calendar month quantity limits for the generator's usual category.

“Explosives or munitions emergency” means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other

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potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

“Explosives or munitions emergency response” means all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at RCRA facilities.

“Explosives or munitions emergency response specialist” means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Explosives or munitions emergency response specialists include Department of Defense (DOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU), and DOD-certified civilian or contractor personnel; and other Federal, State, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

“Facility” means:

- (a) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).
- (b) For the purpose of implementing corrective action under **40 CFR § 264.101** (incorporated by reference under subchapter 5), all contiguous property under the control of the owner or operator seeking certification under subchapter 5 of these regulations. This definition also applies to facilities implementing corrective action under **RCRA § 3008(h)**.

“FIFRA” means the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, 7 U.S.C. § 136 et seq.

~~**“Final closure” means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that hazardous waste management activities under subchapter 5 of these regulations are no longer conducted at the facility unless subject to the requirements for hazardous waste generators in subchapter 3.**~~

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“Final closure” means the cessation of hazardous waste management activities and either the closure of all short-term storage areas at a large quantity generator facility in accordance with the requirements of § 7-308(b)(16), or the closure of all hazardous waste management units at a facility in accordance with the facility closure plan and all applicable closure requirements of subchapter 5 so that hazardous waste management activities permitted under subchapter 5 are no longer conducted at the facility.

“Generator” means any person, by site, whose act or process produces hazardous waste or whose act first causes hazardous waste to become subject to regulation. This includes any person who imports hazardous waste into Vermont from a foreign country.

“Groundwater enforcement standards” means those standards adopted by § 12-601 of the Groundwater Protection Rule and Strategy.

“Groundwater Protection Rule and Strategy” or “GWPRS” means chapter 12 of the Vermont Environmental Protection Rules, effective July 6, 2019, as amended.

“Hazardous material” means all petroleum and toxic, corrosive or other chemicals and related sludge included in any of the following:

- (a) Any substance defined in CERCLA § 101(14);
- (b) Petroleum, including crude oil or any fraction thereof; ~~or~~
- (c) Hazardous waste, as defined in this section; or
- ~~(e)~~(d) A chemical substance that, when released, poses a risk to human health or other living organisms and that is listed by the Secretary by rule.

Note: “Hazardous material” does not include herbicides and pesticides when applied consistent with good practice conducted in conformity with federal, state and local laws and regulations and according to manufacturers' instructions. Nothing in this subsection shall affect the authority granted and the limitations imposed by 10 V.S.A. § 6608a.

“Hazardous waste” means any waste or combination of wastes of a solid, liquid, contained gaseous, or semi-solid form, including but not limited to those which are toxic, corrosive, ignitable, reactive, strong sensitizers, or which generate pressure through decomposition, heat or other means, which in the judgment of the Secretary may cause, or contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, taking into account the toxicity of such waste, its persistence and degradability in nature, and its potential for assimilation, or concentration in tissue, and other factors that may otherwise cause or contribute to adverse acute or chronic effects on the health of persons or other living organisms, or any matter which may have an unusually destructive effect on water quality if discharged to ground or surface waters of the state. All special nuclear, source, or by-product material, as defined by the Atomic Energy Act of 1954, as amended, codified in 42 U. S. C. § 2014, is specifically excluded from this definition.

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“Hazardous waste management” means the systematic and comprehensive management of the generation, storage, transport, treatment, including recycling and recovery, or disposal of hazardous waste materials.

“Hazardous waste management unit” is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

~~**“Household sewage”** means untreated sanitary wastes from a household which pass through a sewage system to a sewage treatment plant.~~

“Household waste” means any waste material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas). Business waste generated at a household is not household waste.

~~**“Identification number”** means the location specific number assigned by either EPA or the Secretary to each generator, transporter and treatment, storage, or disposal facility.~~

“Impervious surface” means a surface that is sufficiently ~~impervious~~impermeable to any waste material stored thereon to prevent that material from migrating into the surface (e.g., porous concrete) or to the soil, groundwater, or surface water.

“Incinerator” means any enclosed device that:

- (a) Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or
- (b) Meets the definition of infrared incinerator or plasma arc incinerator as defined in 40 CFR § 260.10.

“Incompatible waste” means a hazardous waste which is unsuitable for:

- (a) Placement in a particular device or facility because it may cause corrosion or decay of containment materials (e. g., container inner liners or tank walls); or
- (b) Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases.

(See **Appendix VII** for examples of potentially incompatible waste.)

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"Industrial furnace" means ~~any of the following an~~ enclosed devices that ~~are~~ is an integral component of a manufacturing process ~~es~~ and that uses thermal treatment to accomplish recovery of materials or energy, and that is listed as an "industrial furnace" in 40 CFR § 260.10.

~~Cement kilns;~~

~~Lime kilns;~~

~~Aggregate kilns;~~

~~Phosphate kilns;~~

~~Coke ovens;~~

~~Blast furnaces;~~

~~Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machine, roasters, and foundry furnaces);~~

~~Titanium dioxide-chloride process oxidation reactors;~~

~~Methane reforming furnaces;~~

~~Pulping liquor recovery furnaces;~~

~~Combustion devices used in the recovery of sulfur values from spent sulfuric acid;~~

~~Halogen acid furnaces (HAFs) for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least 3%, the acid product is used in a manufacturing process, and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of 20% as generated; and~~

~~Such other devices as the Secretary may, after notice and comment, add to this list on the basis of one or more of the following factors:~~

~~The design and use of the device primarily to accomplish recovery of material products;~~

~~The use of the device to burn or reduce raw materials to make a material product;~~

~~The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;~~

~~The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;~~

~~The use of the device in common industrial practice to produce a material product; and~~

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~~Other factors, as appropriate.~~

~~“Investigator” means an investigator designated and duly authorized by the Secretary pursuant to 10 V.S.A. § 8002(3).~~

“Investigation and Remediation of Contaminated Properties Rule” means chapter 35 of the Vermont Environmental Protection Rules, effective July 6, 2019, as amended.

“Laboratory” means an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals) are also considered laboratories.

“Land disposal” means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, concrete vault or bunker intended for disposal purposes.

“Landfill” means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

“Large quantity generator” means a generator who generates any of the following amounts in a calendar month:

- (a) Greater than or equal to 1,000 kilograms (2200 lbs) of non-acute hazardous waste; or
- (b) Greater than 1 kilogram (2.2 lbs) of acute hazardous waste listed in § 7-210 or § 7-215; or
- (c) Greater than 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in § 7-210 or § 7-215.

“Low-level mixed waste (LLMW)” is a waste that contains both low-level radioactive waste and RCRA hazardous waste.

“Low-level radioactive waste (LLW)” is a radioactive waste which contains source, special nuclear, or byproduct material, and which is not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material as defined in section 11e.(2) of the Atomic Energy Act. (See also NRC definition of “waste” at 10 CFR 61.2)

“Manifest” means the shipping document EPA Form 8700–22 (including, if necessary, the

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continuation sheet document **EPA Form 8700–22A**), or the **electronic manifest**, originated and signed by the generator or offer or in accordance with the instructions in the appendix to **40 CFR Part 262** and the applicable requirements of **40 CFR Parts 262 through 265**.

“Manifest tracking number” means the alphanumeric identification number (i.e., a unique three letter suffix preceded by nine numerical digits), which is pre-printed in Item 4 of the Manifest by a registered source.

“Manufacturing or mining by-product” is a material that is not one of the primary products of a particular manufacturing or mining operation, is a secondary and incidental product of the particular operation and would not be solely and separately manufactured or mined by the particular manufacturing or mining operation. The term does not include an intermediate manufacturing or mining product which results from one of the steps in a manufacturing or mining process and is typically processed through the next step of the process within a short time.

“Media” means environmental media (e.g., soil, groundwater).

“Military munitions” means all ammunition products and components produced or used by or for the U.S. Department of Defense or the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include non-nuclear components of nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.

“Miscellaneous unit” means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under **40 CFR Part 146**, containment building, corrective action management unit, or unit eligible for a research, development, and demonstration certification under § 7-511(c).

“Mixed waste” means a waste that contains both RCRA hazardous waste and source, special nuclear, or byproduct material subject to the Atomic Energy Act of 1954, as amended.

~~**“Notice of Intent”** means the notice required in 10 V.S.A. § 6606a(b)(2).~~

“No free liquids” as used in § 7-203(w), means that contaminated wipes may not contain free

liquids as determined by Method 9095B (Paint Filter Liquids Test), included in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Publication SW-846), which is incorporated by reference, and that there is no free liquid in the container holding the wipes. No free liquids may also be determined using another standard or test method as defined by an authorized state the Secretary.

"Non-acute hazardous waste" means all hazardous wastes that are not acute hazardous waste.

"Obsolete pesticide products" means concentrated pesticide products which are unusable due to damage to containers or the pesticide formulation; in damaged containers; pesticide products whose U. S. EPA registration number has been canceled or suspended leaving no valid registered uses on the label; or unwanted registered pesticide compounds which the generator wishes to dispose of.

"On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which that person controls and to which the public does not have access, is also considered on-site property.

~~**"Partial closure" means the closure of a hazardous waste management unit in accordance with the applicable closure requirements of subchapter 5 of these regulations at a facility that contains other active hazardous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other hazardous waste management unit, while other units of the same facility continue to operate.**~~

"Partial closure" means the closure of a short-term storage area at a large quantity generator in accordance with the applicable requirements of § 7-308(b)(16), or the closure of a hazardous waste management unit at a facility that contains other active hazardous waste management units in accordance with the facility closure plan and all applicable closure requirements of subchapter 5. For example, partial closure may include the closure of a short-term storage area at a large quantity generator that continues to generate hazardous waste and may maintain other active short-term storage areas; or the closure of a container storage area, tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other hazardous waste management unit at a facility, while other units of the same facility continue to operate.

"Person" means any individual, partnership, company, corporation, association, unincorporated association, joint venture, trust, municipality, the State of Vermont or any agency, department, or subdivision of the state, federal agency, or any other legal or commercial entity.

"Pesticide" means an "economic poison" as defined in this section, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

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(a) Is a new animal drug under the Federal Food, Drug, and Cosmetic Act (FFDCA) section 201(w), or

(b) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or

(c) Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by subsection (a) or (b) of this definition.

“Pesticidal wastes” means unwanted pesticides ~~and their~~ dilutions, rinses, and improperly rinsed containers.

“Pile” means any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage and that is not a containment building.

“Planned episodic event” means an episodic event that the generator planned and prepared for, including regular maintenance, tank cleanouts, short-term projects, and removal of excess chemical inventory

“Primary exporter” means any person who is required to originate the manifest for a shipment of hazardous waste in accordance with subchapter 7 when the manifest specifies a treatment, storage, or disposal facility in a receiving country as the facility to which the hazardous waste will be sent and any intermediary arranging for the export.

“RCRA” means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. § 6901 et seq., as amended.

“RCRA hazardous waste” means hazardous waste regulated under Subtitle C of RCRA; it does not include other wastes regulated as hazardous waste by the State of Vermont that are not regulated under Subtitle C of RCRA.

“~~Reclaimed~~” means that a hazardous waste is processed to recover the hazardous component of the waste as a usable product, or that it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

“Receiving country” means any foreign country to which hazardous waste is sent for the purpose of treatment, storage, or disposal (except short-term storage incidental to transportation).

“Registration” means, for the purposes of ~~§ 7-304(e) and 10 V.S.A. § 6608(f)~~, notifying the Secretary of hazardous waste activity using the Vermont Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) referenced in § 7-104(a), and paying the annual fee specified in 3 V.S.A. § 2822 (refer to § 7-708(e)).

“Release” means any intentional or unintentional action or omission resulting in the spilling, leaking, pumping, pouring, emitting, emptying, dumping, or disposing of hazardous materials into the surface or groundwaters, or onto the lands in the State, or into waters outside the

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jurisdiction of the State when damage may result to the public health, lands, waters or natural resources within the jurisdiction of the State.

“Replacement unit” means a landfill, surface impoundment, or waste pile unit (1) from which all or substantially all of the waste is removed, and (2) that is subsequently reused to treat, store, or dispose of hazardous waste. “Replacement unit” does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with an approved closure plan or EPA or State approved corrective action.

“Representative sample” means a sample of a universe or whole (e.g., waste pile, lagoon, ground water) which can be expected to exhibit the average properties of the universe or whole.

“Re-refining distillation bottoms” means the heavy fraction produced by vacuum distillation of filtered and dehydrated used oil. The composition of still bottoms varies with column operation and feedstock.

“Restricted use pesticides” means pesticides that meet the criteria of 40 CFR § 152.170 and are identified by the designation **“Restricted Use”** on the product label. Restricted use pesticides are not available for purchase or use by the general public.

“Scrap metal” means bits and pieces of metal parts (e. g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e. g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.

“Secretary” means the Secretary of the Agency of Natural Resources or his or her duly authorized representative. When implementing the provisions of 10 V. S. A. §§ 6608a and 6608b relating to economic poisons and low-level radioactive wastes, the term Secretary shall also include the Secretary of the Vermont Agency of Agriculture, Food & Markets and the Commissioner of Health. When implementing the provisions of 10 V.S.A. § 6608b relating to low-level radioactive wastes mixed with hazardous waste, the term shall also include the Commissioner of the Vermont Department of Health.

“Short-term storage area” means any on-site hazardous waste storage area with hazardous waste stored in units that are subject to either § 7-307 (for small quantity generators) or § 7-308 (for large quantity generators). A short-term storage area at an eligible academic entity that chooses to operate under 40 CFR §§ 262.200 through 262.216 (Subpart K) is also subject to 40 CFR § 262.211 when storing unwanted material and/or hazardous waste. The term “short-term storage area” shall have the same meaning as “central accumulation area” as used in 40 CFR Subpart K.

“Sludge” means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

“Sludge dryer” means any enclosed thermal treatment device that is used to dehydrate sludge

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and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb of sludge treated on a wet-weight basis.

“Small quantity generator” means a generator who generates the following amounts in a calendar month:

- (a) Greater than 100 kilograms (220 lbs) but less than 1,000 kilograms (2200 lbs) of non-acute hazardous waste; and**
- (b) Less than or equal to 1 kilogram (2.2 lbs) of acute hazardous waste listed in § 7-210 or § 7-215; and**
- (c) Less than or equal to 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in § 7-210 or § 7-215.**

“Soil” means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles as classified by the U.S. Natural Resources Conservation Service, or a mixture of such materials with liquids, sludges or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited hazardous waste with soil that changes its treatment classification (i.e., from waste to contaminated soil) is not allowed under the dilution prohibition in **40 CFR § 268.3**.

“Solid waste” means any discarded garbage, refuse, septage, sludge from a waste treatment plant, water supply plant, or pollution control facility and other discarded material including solid, liquid, semi-solid, or contained gaseous materials resulting from industrial, commercial, mining, or agricultural operations and from community activities but does not include animal manure and absorbent bedding used for soil enrichment or solid or dissolved materials in industrial discharges which are point sources subject to permits pursuant to **10 V.S.A. chapter 47**.

“Sorbent” means a material that is used to soak up free liquids by either adsorption or absorption, or both.

“Sorb” means to either adsorb or absorb, or both.

“Staging” means the temporary placement of off-site generated recyclable materials within a recycling facility for a period of time no longer than three (3) days.

“Storage” means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere. means the actual or intended containment of wastes, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of such wastes. Storage may be conducted by either generators or designated facilities. Hazardous waste that is being staged at a recycling facility for no more than three (3) days is not considered to be in storage.

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~~“Storage above ground” means the containment of hazardous waste in a discrete vessel on or above ground level, excluding surface impoundments.~~

“Sump” means any pit or reservoir that meets the definition of tank and those troughs/trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities; except that as used in the landfill, surface impoundment, and waste pile rules, “sump” means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.

“Surface impoundment” means a natural topographic depression, artificial excavation, or dike arrangement, including a pit, pond, or lagoon, whether or not it has a permeable bottom or sides allowing seepage of its contents, which is:

- (a) Used primarily for the storage, treatment, or disposal of hazardous waste in liquid, semi-solid, or solid form; and
- (b) Constructed on, below, or partially in the ground.

“Tank” means a stationary device, designed to contain an accumulation of hazardous waste, which is constructed primarily of non-earthen materials (e. g., wood, concrete, steel, plastic) that provide structural support.

“Tank system” means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

“Transfer facility” means any transportation related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

~~“Transit country” means any foreign country, other than a receiving country, through which a hazardous waste is transported.~~

“Transport” or “transportation” means the movement of wastes by air, rail, highway, or water.

“Treatment” means any method, technique, or process, including neutralization, designed to change the physical, chemical or biological character or composition of any hazardous or solid waste, so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste safer for transport, amenable for recovery, amenable for storage, or reduced in volume, or for hazardous wastes, so as to render such waste non-hazardous.

“TSCA” means the Toxic Substances Control Act of 1976, 15 U.S.C. 2601, et seq. as amended, ~~15 U.S.C. 2601 et seq.~~

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“Universal waste” means any of the following hazardous wastes that are subject to the universal waste requirements of **subchapter 9**:

- (a) Batteries as described in § 7-902;
- (b) Pesticides as described in § 7-903;
- (c) Thermostats as described in § 7-904;
- (d) PCB-containing fluorescent light ballasts as described in § 7-905;
- (e) Lamps as described in § 7-906;
- (f) Mercury-containing devices as described in § 7-907; **and**
- (g) Cathode ray tubes (CRTs) as described in § 7-908;
- (h) Postconsumer paint as described in § 7-909; and
- (h)(i) Aerosol cans as described in § 7-910.

“Unplanned episodic event” means an episodic event that the generator did not plan or reasonably did not expect to occur, including production process upsets, product recalls, accidental spills, or “acts of nature,” such as tornado, hurricane, or flood.

“Used” or “reused” means that a hazardous waste is either:

- (a) Employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a hazardous waste will not satisfy this condition if distinct components of the waste are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or
- (b) Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

“Used oil” means any petroleum product oil that has been refined from crude oil (in whole or in part), or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities. Used oil is a free-flowing liquid at standard temperature and pressure and has a flash point of greater than 100 degrees (F). Used oil includes oils used as lubricants, heat transfer fluids, hydraulic fluids, and for other similar uses, but does not include materials derived refined from crude oil or synthetic oils that are used as fuels (e.g., gasoline, jet fuel and diesel fuel), or materials refined from crude oil that are used as cleaning agents or solvents (e.g., naphtha or mineral spirits). ~~These~~ **these** materials are subject to regulation under **subchapters 1 through 7**, as applicable.

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"User of the electronic manifest system" means a hazardous waste generator; a hazardous waste transporter; an owner or operator of a hazardous waste treatment, storage, recycling, or disposal facility; or any other person that:

- (a) Is required to use a manifest to comply with:
 - (1) Any federal or state requirement to track the shipment, transportation, and receipt of hazardous waste or other waste material that is shipped from the site of generation to an off-site designated facility for treatment, storage, recycling, or disposal; or
 - (2) Any federal or state requirement to track the shipment, transportation, and receipt of rejected wastes or regulated container residues that are shipped from a designated facility to an alternative facility, or returned to the generator; and
- (b) Elects to use the system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system; or
- (c) Elects to use the paper manifest form and submits to the system for data processing purposes a paper copy of the manifest (or data from such a paper copy), in accordance with § 7-704(c)(5). These paper copies are submitted for data exchange purposes only and are not the official copies of record for legal purposes.

Vermont Groundwater Protection Rule and Strategy or GWPRS means chapter 12 of the Vermont Environmental Protection Rules, effective July 6, 2019, as amended.

"Very small quantity generator" means a generator who generates less than or equal to the following amounts in a calendar month:

- (a) 100 kilograms (220 lbs) of non-acute hazardous waste; and
- (b) 1 kilogram (2.2 lbs) of acute hazardous waste listed in § 7-210 or § 7-215; and
- (c) 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in § 7-210 or § 7-215.

"Waste" means a material that is discarded or is being accumulated, stored, or physically, chemically or biologically treated prior to being discarded or has served its original intended use and is normally discarded or is a manufacturing or mining by-product and is normally discarded.

"Wastewater evaporation unit" means a tank or tank system that:

- (a) Heats wastewater to intentionally evaporate water to reduce the volume of the wastewater;
- (b) Receives and treats or stores an influent wastewater that is a hazardous waste as

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described in § 7-202(a), or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as described in § 7-202(a), or treats or stores a wastewater treatment sludge which is a hazardous waste as described in § 7-202(a); and

- (c) Is not used to dispose of hazardous waste.

Wastewater evaporation unit does not mean a sludge dryer.

“Wastewater treatment unit” means a device which:

- (a) Is part of a wastewater treatment facility that is subject to regulation under either §§ 402 or 307(b) of the Clean Water Act;
- (b) Receives and treats or stores an influent wastewater that is a hazardous waste as described in § 7-202(a), or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as described in § 7-202(a), or treats or stores a wastewater treatment sludge which is a hazardous waste as described in § 7-202(a);
- (c) Meets the definition of tank or tank system; and
- (d) Is not a wastewater evaporation unit.

“Wipe” means a woven or non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.

§ 7-104 NOTIFICATION REQUIREMENTS

- (a) Except for persons who have been issued a temporary identification number pursuant to **subsection (d) of this section**, any person who generates or transports hazardous waste or who owns or operates a transfer facility or a facility for the treatment, storage, use, disposal, or recycling of hazardous waste shall notify the Secretary of such activity. In addition, persons managing waste under the provisions of the used oil management standards of **subchapter 8**, the universal waste management standards of **subchapter 9**, ~~or the pharmaceutical waste management standards of subchapter 10~~, shall notify the Secretary of such activity as required under those subchapters. Notification shall be made by accurately and completely filling out the **Vermont Hazardous Waste Handler Site Identification ID-Form** ~~(provided by the Secretary)~~ (EPA Form 8700-12) in accordance with the form’s instructions.
- (b) Notification is required upon transfer of ownership of an entity that was required to notify the Secretary under **subsection (a) of this section**.
- (c) Persons subject to the requirements of **this section** shall maintain an **up-to-date Vermont Hazardous Waste Handler Site ID-Identification Form** (EPA Form 8700-12) filed with the Secretary ~~that accurately describes current waste activity and waste generation.~~

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A generator may notify the Secretary of a change in generator status by marking the appropriate status level on the **Hazardous Waste Generator Registration Fee Assessment** form that is sent to generators each year pursuant to § 7-708(e).

- (d) The Secretary may issue a temporary identification number to persons who have generated hazardous waste only from an episodic event and do not otherwise generate hazardous waste.

§ 7-105 EMERGENCY AND CORRECTIVE ACTIONS

- (a) Emergency actions.

~~In the event of a discharge of hazardous waste or a release of a hazardous material (including discharges of hazardous waste), the person in control of such waste or material shall:~~

- (1) Take all appropriate immediate actions to protect human health and the environment including, but not limited to, emergency containment measures and notification as described below; and
- (2) Take any further clean-up actions as may be required and approved by federal, state, or local officials, or corrective actions as specified under ~~subsection (b)(i) of this section~~ **so that the discharged waste or released material and related contaminated materials no longer present a hazard to human health or the environment.**

~~(3) Reporting~~

~~(A) All discharges and/or releases that meet any of the following criteria shall be immediately reported to the Secretary by the person or persons exercising control over such waste by calling the Waste Management & Prevention Division at (802) 828-1128, Monday through Friday, 7:45 a.m. to 4:30 p.m. or the Department of Public Safety, Emergency Management Division at (800) 641-5005, 24 hours/day:~~

- ~~(i) A discharge of hazardous waste, or release of hazardous material that exceeds 2 gallons;~~
- ~~(ii) A discharge of hazardous waste, or release of hazardous material that is less than or equal to 2 gallons and poses a potential or actual threat to human health or the environment; or~~
- ~~(iii) A discharge of hazardous waste, or release of hazardous material that equals or exceeds its corresponding reportable quantity under CERCLA as specified under 40 CFR § 302.4.~~

- (b) Immediate reporting. Pursuant to 10 V.S.A. § 6617, any person who has knowledge of

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an actual or suspected release of hazardous material and who may be subject to liability for a release as detailed under 10 V.S.A. § 6615 shall immediately report any release that:

- (1) Exceeds 2 gallons;
- (2) Is less than or equal to 2 gallons and poses a potential or actual threat to human health or the environment;
- (3) Equals or exceeds its corresponding reportable quantity under CERCLA as specified under 40 CFR § 302.4; or
- (4) Is of non-aqueous phase liquid (NAPL) petroleum, or a material detected in environmental media in an amount that exceeds an environmental media standard pursuant to the criteria specified under §§ 35-102(b)(4) and (5) of the Vermont Investigation and Remediation of Contaminated Properties Rule, as amended.

Note: Reporting under subsection (b) of this section shall be directed as follows:

- Monday through Friday, 7:45 a.m. to 4:30 p.m., to the Waste Management & Prevention Division at (802) 828-1138.
- At all other times including State holidays to the Department of Public Safety, Division of Emergency Management at (800) 641-5005.

Note: Under the Federal Water Pollution Control Act, certain spills of "oil" and/or "hazardous substances" are prohibited and must be reported pursuant to the requirements of 40 CFR Part 110 / Discharge of Oil. Certain spills of hazardous substances must also be reported pursuant to CERCLA. In both cases, the National Response Center must be notified at (800) 424-8802. Finally, in addition to federal and state spill reporting, EPCRA requires that spills are also reported to local authorities.

- ~~(B) A written report shall be submitted to the Secretary within ten (10) days following any discharge or release subject to subsection (a)(1) of this section. The report should be sent to: The Vermont Department of Environmental Conservation, Waste Management & Prevention Division, 1 National Life Drive – Davis I, Montpelier, VT 05620-3704. The person responsible for submitting the written report may request that it not be submitted for small discharges and/or releases that were reported pursuant to subsection (a)(2)(A) of this section, and that have been entirely remediated within the ten (10) day period immediately following the discharge and/or release.~~
- (c) Written follow-up report. If requested by the Secretary, a written report shall be submitted to the Secretary within ten (10) days following any release subject to subsection (b) of this section. The report shall be sent to: Vermont Department of Environmental Conservation, Waste Management & Prevention Division, 1 National Life Drive – Davis I, Montpelier, VT 05620-3704.

(d) Releases during transportation.

~~(4)(1)~~ If ~~the a discharge or release occurred~~ during transportation, the transporter shall, ~~in addition to immediately notifying the Secretary:~~

(A) Report release to the Secretary in accordance with subsection (b) of this section:

~~(A)(B)~~ Notify the National Response Center at (800) 424-8802 or (202) 426-2675, if required by 49 CFR § 171.15; and

~~(B)(C)~~ Report in writing to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590, if required by 49 CFR § 171.16; and

~~(5)(2)~~ A water (bulk shipment) transporter who has discharged hazardous wastes must give the same notice as required by 33 CFR § 153.203 for oil and hazardous substances.

(c) Management of wastes, clean-up debris and residues.

~~(6)(1)~~ If a ~~discharge or release~~ occurs and the Secretary determines that immediate removal of the waste material is necessary to protect human health or the environment, the Secretary may authorize its removal by unpermitted transporters without the preparation of a manifest. Such hazardous waste may be transported to a site authorized by the Secretary under the emergency certification provisions of § 7-503 to temporarily accept hazardous waste generated during an emergency clean-up of a ~~discharge or release.~~

~~(7)(2)~~ In the case of an explosives or munitions emergency response, if a Federal, State, Tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA identification numbers or hold Vermont hazardous waste transportation permits and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

~~(8)(3)~~ All clean-up debris and residues that are hazardous waste ~~must shall~~ be stored in leak-proof containers that are covered so as to prevent contact of the waste with precipitation or run-on from precipitation.

~~(9)(4)~~ All clean-up debris and residues that are hazardous waste ~~must shall~~ be ~~transported~~ ultimately sent to:

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- (A) A designated facility;
- (B) A person authorized by the Secretary to use such waste if the waste has been delisted pursuant to § 7-218;
- (C) Some other location specified and authorized by the Secretary to receive clean-up debris and residues if the waste has been delisted pursuant to § 7-218; or
- (D) ~~For Vermont-listed hazardous waste not defined as hazardous in 40 CFR Part 261 (i.e., waste regulated as hazardous by Vermont),~~ in addition to the options provided under subsections (A) through (C) of this section, to a facility, that is not a designated facility, located in a state other than Vermont provided the facility can receive such waste under applicable state and local laws, regulations and ordinances.

~~(b)(f)~~ Corrective actions

- ~~(1) If a discharge of hazardous waste, or a release of hazardous material has not been adequately addressed under subsection (a)(1)(A) of this section the Secretary shall require that the person or persons responsible pursuant to 10 V.S.A. § 6615 complete the following:
 - ~~Engage the services of an environmental consultant experienced in the investigation and remediation of hazardous waste contaminated sites; and~~
 - ~~(A) Within thirty (30) days from either the date of the discharge/release or the date that the release was discovered if the date of discharge/release is not known, or within a period of time established by an alternative schedule approved by the Secretary, submit for approval by the Secretary a work plan for an investigation of the contaminated site (i.e., site investigation) prepared by the environmental consultant. The site investigation shall define the nature, degree and extent of the contamination; and shall assess potential impacts to human health and the environment (refer to Chapter 2 of the Agency's "Investigation and Remediation of Contaminated Properties Procedure" Rule which is available from the Secretary upon request); and~~
 - ~~(B) Perform the site investigation within either ninety (90) days of receiving written approval of the work plan by the Secretary, or a period of time established by an alternative schedule approved by the Secretary. A report detailing the findings of the site investigation shall be sent to the Secretary for review; and~~
 - ~~(C) Within either thirty (30) days from the date of final acceptance of the site investigation report by the Secretary, or a period of time established by an alternative schedule approved by the Secretary, submit a corrective action plan prepared by the environmental consultant (refer to Chapter 4 of the Agency's~~~~

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~~"Investigation and Remediation of Contaminated Properties Procedure" Rule~~ which is available from the Secretary upon request); and

- ~~(D) Implement the corrective action plan within either ninety (90) days of receiving written approval of the plan by the Secretary, or a period of time established by an alternative schedule approved by the Secretary. The corrective action activity shall continue until the contamination is remediated to levels approved by the Secretary; and~~
- ~~(E) Submit to the Secretary all investigative, corrective action and monitoring reports, and all analytical results related to subsections (b)(1)(C) through (E) of this section, as they become available.~~

(1) In addition to any emergency response required pursuant to subsection (a) of this section, the Secretary may require that the person or persons responsible pursuant to 10 V.S.A. § 6615 take all necessary actions to investigate and remediate the release or discharge in accordance with 10 V.S.A. chapter 159 and the Vermont Investigation and Remediation of Contaminated Properties Rule. Additionally, the Secretary may require that the person or persons responsible for a release or discharge comply with the requirements of 40 CFR Part 264, Subpart F and § 12-607 (Corrective Actions) of the Vermont Groundwater Protection Rule and Strategy.

(2) A used or fired military munition is a waste and is potentially subject to corrective action authorities pursuant to 10 V.S.A. § 6615, and the process described by subsection (b)(1) of this section if the munition lands off-range and is not promptly rendered safe or retrieved. Any imminent and substantial threats associated with any remaining material must be addressed. If remedial action is infeasible, the operator of the range must maintain a record of the event for as long as any threat remains. The record must include the type of munition and its location (to the extent the location is known).

(g) Compliance points. In the event of a release, compliance points for regulated activities shall be established pursuant to the Vermont Groundwater Protection Rule and Strategy.

§ 7-106 LAND DISPOSAL RESTRICTIONS

- (a) Certain hazardous wastes shall not be disposed of in or on the land. 40 CFR Part 268, which is hereby incorporated by reference, except for 40 CFR §§ 268.5, 268.6, and 268.42(b), identifies those wastes which shall not be land disposed and describes the limited circumstances under which an otherwise prohibited waste may continue to be land disposed. The authority for implementing the CFR sections not incorporated by reference remains with the EPA.

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~~Note: A copy of 40 CFR Part 268 (the Land Disposal Restrictions rule), as incorporated by these regulations, is available from the Secretary upon request.~~

- (b) In addition to the prohibitions of **40 CFR Part 268**, the Secretary may restrict the land disposal of any hazardous waste in the State of Vermont which:
- (1) ~~Which may~~ present an undue risk to human health or the environment, immediately or over a period of time; ~~or~~
 - (2) ~~Which would be incompatible with~~ Are prohibited under Subchapter 4 of the Vermont Groundwater Protection Rule and Strategy of chapter 12 of the Vermont Environmental Protection Rules, as amended; ~~or~~
 - (3) May adversely affect public trust uses of groundwater as defined in Subchapter 3 of the Groundwater Protection Rule and Strategy (Chapter 12 of the Vermont Environmental Protection Rules), as amended.
- (c) Dilution of hazardous waste subject to the land disposal restrictions of 40 CFR Part 268 is prohibited pursuant to **40 CFR § 268.3**.

§ 7-107 ENFORCEMENT GROUNDWATER PROTECTION

- (a) ~~Information that the generation, transportation, treatment, storage or disposal of hazardous waste may present an actual or potential threat to human health or the environment, or is a violation of the 10 V.S.A. chapter 159, or these regulations, or any term or condition of certification, order, or assurance, may serve as grounds for an enforcement action by the Secretary, including, but not limited to:~~
- (1) ~~After notice and opportunity for hearing, issuing an order directing any person to take such steps as are necessary to:~~
 - (A) ~~Immediately cease and desist any operation or practice;~~
 - (B) ~~Correct or prevent environmental damage likely to result from any deficiency in operation or practice;~~
 - (C) ~~Suspend or revoke any certification and require temporary or permanent cessation of the operation of such facility;~~
 - (2) ~~A request that the Attorney General or appropriate State's Attorney commence an action for injunctive relief, the imposition of penalties and fines provided in 10 V.S.A. § 6612 and other relief as may be appropriate.~~
 - (3) ~~An order for reimbursement to any agency of federal, state, or local government from any person whose act caused governmental expenditures under 10 V.S.A. § 1283.~~

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- ~~(4) All other powers of enforcement available to the Secretary through 10 V.S.A., chapter 201.~~
- ~~(b) The hearing by the Secretary identified under subsection (a)(1) of this section shall be conducted as a contested case. Pursuant to 10 V.S.A. § 6610(b), the Secretary may issue an emergency order without a prior hearing when an ongoing violation presents an immediate threat of substantial harm to the environment or an immediate threat to public health. An emergency order shall be effective upon actual notice to the person against whom the order is issued. Any person to whom an emergency order is issued shall be given the opportunity for a hearing within five (5) business days of the date the order is issued.~~
- ~~(c) Inspections, investigations, and property access (10 V.S.A. § 8005)~~
- ~~(1) Inspections and investigations~~
- ~~(A) An investigator may perform routine inspections to determine compliance.~~
- ~~(B) An investigator may investigate upon receipt or discovery of information that an activity is being or has been conducted that may constitute or cause a violation.~~
- ~~(C) An investigator, upon presentation of credentials, may seek permission to inspect or investigate any portion of the property, fixtures, or other appurtenances belonging to or used by a person whose activity is required to be in compliance. The investigator shall state the purpose of the inspection or investigation. An inspection or investigation may include monitoring, sampling, testing, and copying of any records, reports, or other documents relating to the purposes to be served by compliance.~~
- ~~(D) If permission for an inspection or investigation is refused, the investigator may seek an access order from the district or superior court in whose jurisdiction the property is located enabling the investigator to perform the inspection or investigation.~~
- ~~(2) Access orders~~
- ~~(A) If access has been refused, an access order may be sought pursuant to either 10 V.S.A. § 8005 or 10 V.S.A. § 6609.~~
- ~~(B) Issuance of an access order shall not negate the Secretary's authority to initiate criminal proceedings in the same matter by referring the matter to the office of the attorney general or a state's attorney.~~
- ~~(d) In an action to enforce these regulations, anyone raising a claim that a certain material is not a hazardous waste, or is exempt from regulation as hazardous waste, must~~

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~~demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. Appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation, must be provided. Owners and operators of facilities claiming that they are actually recycling materials must show that they have the necessary equipment to do so.~~

(a) Compliance; findings.

(1) Whereas, the Vermont Groundwater Protection Rule and Strategy (GWPRS) requires that these regulations include certain requirements, as necessary, to ensure that activities regulated by these regulations comply with requirements of the GWPRS;

(2) Whereas, 10 V.S.A. § 6616 and § 7-302(c) of these regulations prohibit the discharge or release of a hazardous waste to groundwater;

(3) Whereas, these regulations ensure that activities conducted in compliance with these regulations will not result in a discharge or withdrawal of groundwater;

(4) Whereas, any person who violates these regulations and discharges a hazardous waste into groundwater is required to immediately report that discharge and investigate and remediate the discharge pursuant to these regulations and the Vermont Investigation and Remediation of Contaminated Properties Rule, as amended;

(5) Therefore, compliance with these regulations will not result in an exceedance of groundwater enforcement standards at points of compliance or otherwise adversely affect public trust uses of groundwater in the State.

(6) Notwithstanding the provisions of this subsection, the Secretary may require any person subject to these regulations to demonstrate compliance with the GWPRS.

(e)(b) Management of groundwater. Notwithstanding any other provisions of these regulations, activities designated as high potential risk activities and moderate potential risk activities by the GWPRS shall be managed in accordance with Subchapter 4 of the GWPRS.

§ 7-108 SIGNATORIES TO CERTIFICATION APPLICATIONS AND REPORTS

(a) Certification applications and information required by subsection (b) of this section shall be signed as follows:

(1) For a corporation, by a responsible corporate officer. A responsible corporate officer means:

(A) A president, secretary, treasurer or vice-president of the corporation in charge of a

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principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

- (B) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having a gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- (3) For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes:
 - (A) The chief executive officer of the agency; or
 - (B) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- (b) All reports required by certifications, and ~~at the discretion of the Secretary~~ other information requested or required by the Secretary, shall be signed by a person described in **subsection (a) of this section** or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in **subsection (a) of this section**;
 - (2) The authorization specifies either an individual or a position having responsibility for overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - (3) The written authorization is submitted to the Secretary.
- (c) If an authorization described in **subsection (b) of this section** is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirement of **subsection (b) of this section** must be submitted to the Secretary prior to or together with any documents signed by an authorized representative.
- (d) Certification. Any person signing a document pursuant to either **subsections (a) or (b) of this section** shall make the following certification:

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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- (c) The certification described in **subsection (d) of this section** need not appear on a manifest completed in accordance with subchapter 7 of these regulations.

§ 7-109 INCORPORATIONS BY REFERENCE

- (a) When reference is made to CFR titles, their parts, subparts, or sections, the reference is to titles of the Code of Federal Regulations as they existed on July 1, ~~2011~~2020, except that references to the ASTM test methods under § 7-205(a)(1), are to the test methods in SW-846 Test Methods 1010B or 1020C identified in the “Modernizing Ignitable Liquids Determinations” amendments made on July 7, 2020, at 85 FR 40594 through 40608.
- (b) The following federal regulations are incorporated by reference:
- (1) 40 CFR §§ 266.100 through 266.107 and 266.109 through 266.112 for hazardous waste that is burned or processed in a boiler or industrial furnace (as defined in § 7-103) ~~shall be managed pursuant to 40 CFR §§ 266.100 through 266.107 and 266.109 through 266.112.~~ Any person in control of hazardous waste subject to this subsection also shall comply with all applicable provisions of the Vermont Air Pollution Control Regulations. The Secretary may, on a case-by-case basis, grant a variance from classification as a boiler. The standards and criteria used for this variance and the procedures followed ~~can~~ shall be no less stringent than those in 40 CFR §§ 260.32 and 260.33.
- (2) The Mixed Waste Rule of 40 CFR §§ 266.210 through 266.360 (Subpart N) except:
- (A) When the terms “we” or “us” are used within incorporated material, those terms mean the Secretary.
- (B) When incorporated materials reference “261.3” the reference shall mean **subchapter 2** of these regulations.
- (C) When incorporated materials reference “~~P~~parts 260 – 270” as a phrase, it means **subchapters 1 through 7** of these regulations.
- (3) The 40 CFR § 262.21 requirements for manifest tracking numbers, manifest printing, and obtaining manifests.

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(4) The Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities of 40 CFR §§ 262.200 through 262.216 (Subpart K) except:

(A) When the term “EPA Regional Administrator” is used within incorporated material, that term means the Secretary.

(B) The Laboratory Management Plan, and all substantive amendments to the procedures required by 40 CFR § 262.214(a) and subsection (C) of this section, ~~must shall~~ be reviewed and approved by the Secretary prior to being incorporated into the plan.

Note: If there is a question if a change to a Laboratory Management Plan is substantive, a representative of the Eligible Academic Entity should contact the Secretary for clarification.

(C) The Laboratory Management Plan ~~must shall~~, in addition to the elements required by 40 CFR § 262.214(a), include procedures for:

(i) Inspecting at a specified frequency all laboratories covered by the requirements of the Laboratory Management Plan to assess conformance with the requirements of the Laboratory Management Plan. Results of such inspections must be retained for at least three years or, if inspections are scheduled more than three years apart, until the results of the next scheduled lab inspection have been documented; and

(ii) The identification of Laboratory Management Plan non-compliance, and the assignment of responsibility, timelines and corrective actions to prevent their reoccurrence.

(D) Each academic entity ~~must shall~~ maintain up-to-date records that identify those laboratories covered by the requirements of the Laboratory Management Plan.

(5) The 40 CFR §§ 262.80 through 262.89 (Subpart H) requirements for Transboundary Movements of Hazardous Waste for Recovery and Disposal.

~~§ 7-110 IMPLEMENTATION. SEVERABILITY~~

~~The Secretary shall consult with other agencies of state government if he or she has reason to conclude that any action or decision hereunder may conflict with any statute or regulation within the authority of such other agency.~~

The provisions of these regulations are severable. If any provision of these regulations is invalid or if any application of these regulations to any person or circumstance is invalid, the invalidity

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shall not affect other provisions or applications that can be given effect without the invalid provision or application.

§ 7-111-ACCESS TO PUBLIC RECORDS, VARIANCES

A person may apply to the Secretary for, and the Secretary may grant, a variance from these regulations in accordance with 10 V.S.A. § 6613.

~~(a) — Purpose, scope, applicability~~

- ~~(1) — All public records relating to these regulations shall be available to the public unless they are exempt pursuant to subsection (b) of this section.~~
- ~~(2) — This section describes requirements for the availability of public information concerning facilities and sites where hazardous wastes are generated, handled, treated, stored, recycled, or disposed, or where wastes are managed pursuant to either the used oil management standards of subchapter 8 or the universal waste management standards of subchapter 9.~~
- ~~(3) — As specified in 1 V.S.A. § 316(h), information concerning facilities and sites for the treatment, storage, and disposal of hazardous waste shall be made available to the public in substantially the same manner and to the same degree as such information is made available under the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. section 92, subchapter 3, and the Federal Freedom of Information Act, 5 U.S.C. section 552 et seq. In the event that there is a conflict between state requirements for access to public records under 1 V.S.A. chapter 5, subchapter 3 and the cited federal laws, federal law shall govern.~~
- ~~(4) — For the purposes of this section, the term "public record" or "public document" means all papers, documents, machine readable materials or any other written or recorded matters, regardless of their physical form or characteristics, that are produced or acquired in the course of Agency business. Individual salaries and benefits and salary schedules relating to elected or appointed officials and employees of public agencies shall not be exempt from public inspection and copying.~~

~~(b) — Exemption categories~~

~~No request for the review or a copy of an existing public record in the Secretary's possession shall be denied unless the public record contains material that is exempt from disclosure under 1 V.S.A. § 317(e).~~

~~(c) — Procedural requirements~~

- ~~(1) — In responding to requests for public records, the Secretary shall use the procedures established by 1 V.S.A. § 318 and this section.~~

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- (2) ~~If a request for a public record is denied by the Secretary, the requestor may appeal to the Secretary as specified in 1 V.S.A. § 318.~~
- (3) ~~If the Secretary denies an appeal, or if the Secretary fails to comply with the applicable time limit provisions of 1 V.S.A. § 318, the requestor may appeal to the appropriate superior court as specified in 1 V.S.A. § 319.~~
- (d) ~~Public review of files~~
- (1) ~~The public may review files in possession of the Secretary, except those exempted under subsection (b) of this section, after having set up an appointment with the documents control officer for the Division in which the documents are located. The documents control officer may waive the requirement for an appointment if they determine that a waiver is appropriate. Factors to be considered in making such a determination include the time involved to locate and make available requested files, other duties or responsibilities at the time of the request, and whether the files have been reviewed to assure that no records exempted under subsection (b) of this section are present.~~
- (2) ~~In responding to requests for appointments to review files, the Secretary shall use the procedures established in 1 V.S.A. § 318.~~
- (3) ~~When reviewing files, the public may not remove any records from the files, nor may the public remove any of the files from the area designated by the Secretary for file review. If copies are desired, the appropriate records shall be tagged or otherwise designated and presented to the document control officer for copying.~~
- (e) ~~Reserved~~
- (f) ~~Confidential business information~~
- (1) ~~As is specified by subsection (b) of this section, certain confidential business information may be exempted from public disclosure. Any such information shall be determined by the Secretary to be confidential if it is determined to be confidential business information under 1 V.S.A. § 316(l) or § 317(e).~~
- (2) ~~If a business does not assert a claim of business confidentiality at the first opportunity provided by the Secretary, the information will be released upon request without further notice to the business. In addition, for any information submitted in connection with an application for certification pursuant to § 7-505, any business confidentiality claim must be asserted at the time of submission of the information to the Secretary.~~
- (3) ~~Claims of confidentiality for the name and address of any applicant for certification or certified facility shall be denied.~~

~~§ 7-112 RESERVED~~

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~~§ 7-113 SEVERABILITY~~

~~The provisions of any section of these regulations are severable. If any provision of these regulations is invalid or if any application of these regulations to any person or circumstance is invalid, the invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.~~

~~§ 7-114 VARIANCES~~

~~A person may seek a variance from these regulations in accordance with 10 V.S.A. § 6613.~~

Subchapter 2: IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

§ 7-201 PURPOSE, SCOPE, APPLICABILITY

This subchapter identifies or otherwise describes those wastes subject to regulation as hazardous wastes under this chapter and assigns EPA or Vermont “hazardous waste codes” to them. It establishes procedures for determining whether a waste is hazardous waste and for petitioning the addition or removal of a waste to or from the lists of hazardous wastes identified in this subchapter. It also identifies or references sampling, analytical and testing methods and procedures to be used for the purpose of establishing whether or not a waste is hazardous.

§ 7-202 HAZARDOUS WASTE DETERMINATION

- (a) “Hazardous Waste” means any waste or combination of wastes which meets the definition in § 7-103, including but not limited to:
- (1) Any waste which exhibits one or more of the characteristics described in §§ 7-205 through 7-208; except waste that is regulated because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-208, when the waste no longer exhibits any characteristic. However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of **40 CFR Part 268**, even if they no longer exhibit a characteristic at the point of land disposal. Moreover, a waste that exhibits the characteristic of toxicity that has been land disposed shall never cease to be a hazardous waste;
 - (2) Any waste which is listed in §§ 7-210 through 7-215 except waste that is listed solely because it exhibits one or more of the characteristics of ignitability as defined under § 7-205, corrosivity as defined under § 7-206, or reactivity as defined under § 7-207 is not a hazardous waste, if the waste no longer exhibits any characteristic of hazardous waste identified in §§ 7-205 through 7-208 of these regulations. However, wastes excluded under this section are subject to the requirements of **40 CFR Part 268** (as applicable), even if they no longer exhibit a characteristic at the point of land disposal;
 - (3) Any mixture of a solid waste and a hazardous waste except as exempted in § 7-203(k);
 - (4) Any waste generated from the treatment, storage, disposal, or use of a hazardous waste (i.e., sludge, spill residue, ash, emission control dust, leachate, and precipitation runoff which comes in contact with the waste itself) except:
 - (A) A material that is reclaimed from a waste and that is used beneficially is not a waste and hence not a hazardous waste under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal;

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and

- (B) Any waste generated from the treatment, storage, or disposal of hazardous waste that is listed in §§ 7-210 through 7-215 solely because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-207, is not a hazardous waste if the waste no longer exhibits any characteristic of hazardous waste. However, wastes that exhibit a characteristic at the point of generation are subject to the requirements of 40 CFR Part 268, even if they no longer exhibit a characteristic at the point of land disposal;
- (5) Any waste derived from a waste listed in §§ 7-210 through 7-215;
- (6) Any waste generated from the discharge or release of a material which exhibits a characteristic described in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215;
- (7) Any residues from a container or from the inner liner of a container which held a material which exhibits a characteristic described in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215, except as exempted in § 7-203(j);
- ~~(8) Any waste transported into Vermont that is classified as hazardous waste in the state in which the waste was generated; and~~
- ~~(9)(8)~~ Rebuttable presumption for used oil. Used oil containing more than 1000 ppm total halogens ~~is~~ shall be presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in §§ 7-210 through 7-215. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix II).
- (b) A person who generates ~~or who is in control of a waste must determine if~~ shall make an accurate determination as to whether that waste is a hazardous waste as described in ~~subsection (a) of this section by~~ using the following procedure:
 - (1) The hazardous waste determination for each waste shall be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the classification of the waste may change.
 - ~~(1)(2)~~ A person shall determine if the waste is excluded from regulation under § 7-203 or § 7-204.
 - ~~(2)(3)~~ If the waste is not excluded from regulation, the person shall use knowledge of the waste to determine if the waste meets any of the listing descriptions under is listed as a hazardous waste in §§ 7-210 through 7-215. Acceptable knowledge that may be

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used in making an accurate determination as to whether the waste is listed may include waste origin, composition, the process producing the waste, feedstock, and other reliable and relevant information. If the waste is listed, the person may file a delisting petition under § 7-217 to demonstrate to the Secretary or EPA Administrator that the waste from this particular site or operation is not a hazardous waste.

~~(3)~~(4) For purposes of compliance with ~~40 CFR Part 268~~ (incorporated by reference through § 7-106 of these regulations), or if the waste is not listed in §§ 7-210 through 7-215, The person shall also determine whether the waste exhibits ~~a one or more of the hazardous waste characteristics as identified in §§ 7-205 through 7-208 by either:~~ following the procedures in subsection (4)(A) or (B) of this section, or a combination of both.

(A) ~~Testing or analyzing a representative sample of the waste according to the methods and procedures set forth in §§ 7-205 through 7-208 and 7-219 as appropriate;~~ The person shall apply knowledge of the hazard characteristic of the waste in light of the materials or the processes used to generate the waste. Acceptable knowledge may include process knowledge (e.g., information about chemical feedstocks and other inputs to the production process); knowledge of products, by-products, and intermediates produced by the manufacturing process; chemical or physical characterization of wastes; information on the chemical and physical properties of the chemicals used or produced by the process or otherwise contained in the waste; testing that illustrates the properties of the waste; or other reliable and relevant information about the properties of the waste or its constituents. A test other than a test method set forth under §§ 7-205 through 7-208, or an equivalent test method approved by the Administrator of EPA under 40 CFR § 260.21, may be used as part of a person's knowledge to determine whether a solid waste exhibits a characteristic of hazardous waste. However, such tests shall not, by themselves, provide definitive results. Persons testing their waste shall obtain a representative sample of the waste for the testing, as defined in § 7-103.

(B) ~~Applying knowledge of the hazard characteristic of the waste in light of the materials or the processes used. When available knowledge is inadequate to make an accurate determination, the person shall test the waste according to the applicable methods set forth under §§ 7-205 through 7-208 or according to an equivalent method approved by the Administrator of EPA under 40 CFR 260.21 and in accordance with the following:~~

(i) ~~Persons testing their waste shall obtain a representative sample of the waste for the testing, as defined in § 7-103.~~

~~(ii)~~ Where a test method is specified under §§ 7-205 through 7-208, the results of the regulatory test, when properly performed, are definitive for determining the regulatory status of the waste.

Note: Waste that is listed as Vermont regulated hazardous waste under § 7-211

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must be evaluated to determine whether or not it exhibits a hazardous waste characteristic.

- (4)(5) If the waste is determined to be hazardous, the generator ~~must~~ shall refer to **40 CFR Part 268** (incorporated by reference through § 7-106 of these regulations), and **subchapters 1, 3, 5, 6, 7, 8, and 9 and 10** for other possible exclusions or restrictions pertaining to management of the specific waste.
- (5)(6) The person shall maintain records supporting its hazardous waste determinations, including records that identify whether a waste is a hazardous waste, as described in subsection (a) of this section. Records shall be maintained for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. These records must comprise the generator's knowledge of the waste and support the generator's determination, as described at subsections (b)(3) and (b)(4) of this section. The records shall include the following types of information: The results of any tests, sampling, waste analyses, or other determinations made in accordance with this section; records documenting the tests, sampling, and analytical methods used to demonstrate the validity and relevance of such tests; records consulted in order to determine the process by which the waste was generated, the composition of the waste, and the properties of the waste; and records which explain the knowledge basis for the generator's determination, as described at subsection (4)(A) of this section. The periods of record retention referred to in this section shall be extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as required by the Secretary.
- (c) ~~The determination of whether a waste is hazardous waste shall be made using either suitable available product constituent information or the sampling, analytical and test methods and procedures specified in §§ 7-205 through 7-208 and 7-219, as appropriate. The Secretary may require information to be submitted that either has been used to determine whether or not a waste is hazardous waste or that is necessary to make such a determination.~~
- (d) ~~Copies of results from constituent analysis or testing of waste, or other product constituent information used to determine whether or not a waste is hazardous waste must be retained on site by all generators in accordance with § 7-710(a)(2).~~
- (e) ~~Each hazardous waste listed in §§ 7-210 through 7-215 is assigned an EPA or Vermont hazardous waste code that precedes the name of the waste. This code must be used in complying with the notification requirements of § 7-104, the land disposal restriction requirements of § 7-106, the marking requirements of § 7-311(f), and all applicable manifest, recordkeeping and reporting requirements under these regulations.~~
- (f) ~~A waste that exhibits a hazardous characteristic as described in §§ 7-205 through 7-208 is assigned every EPA or Vermont hazardous waste code that is applicable pursuant to §§ 7-205 through 7-208. This (these) code(s) must be used in complying with the notification requirements of § 7-104, the land disposal restriction requirements of § 7-~~

~~106, the marking requirements of § 7-311(f), and all applicable manifest, recordkeeping and reporting requirements under these regulations.~~

~~(c) If the waste is determined to be hazardous, generators shall identify all applicable EPA and Vermont hazardous waste codes assigned to wastes identified in §§ 7-205 through 7-208 and §§ 7-210 through 7-215. Prior to shipping the waste off site, the generator also shall mark its containers with all applicable EPA and Vermont hazardous waste codes according to § 7-309(b)(1). If a waste is identified by both EPA and Vermont hazardous waste codes and descriptions, the EPA hazardous waste code and description shall be used for the purposes of these regulations.~~

~~(e) If a waste is identified by both EPA and Vermont hazardous waste codes and descriptions, the EPA hazardous waste code and description shall be used for the purposes of these regulations.~~

~~(d) Military munitions~~

~~(1) A military munition is a waste, therefore subject to a hazardous waste determination, if unexploded ordinance and contaminants are buried or disposed of on-range and the burial or disposal is not a result of product use.~~

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~~(2) An unused military munition is a waste, and subject to a hazardous waste determination, when any of the following occurs:~~

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~~(A) The munition is abandoned by being disposed of, burned, detonated (except during intended use as specified in § 7-203(z)(1)), incinerated, or treated prior to disposal;~~

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~~(B) The munition is removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, or incinerated, or treated prior to disposal;~~

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~~(C) The munition is deteriorated or damaged (e.g., the integrity of the munition is compromised by cracks, leaks, or other damage) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes; or~~

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~~(D) The munition has been declared a waste by an authorized military official.~~

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~~(3) A used or fired military munition is a waste, and subject to a hazardous waste determination:~~

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~~(A) When transported off range or from the site of use, where the site of use is not a range, for the purposes of storage, reclamation, treatment, disposal, or treatment prior to disposal; or~~

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~~(B) If recovered, collected, and then disposed of by burial, or landfilling either on or~~

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off a range.

§ 7-203 CONDITIONAL EXEMPTIONS

The following wastes are exempted from the provisions of these regulations only if all conditions for exemption are met:

- (a) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. Persons managing household wastes that are of the same type as the universal wastes described by §§ 7-902 through 7-910 may, at their option, manage them under the requirements of subchapter 9. Persons who commingle the household wastes together with universal waste regulated under subchapter 9 must manage the commingled waste under the requirements of that subchapter.
- (b) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment, except as prohibited by § 7-1006. ~~Household sewage and any mixture of household sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment in accordance with the provisions of a permit issued under 10 V.S.A. chapter 47.~~
- (c) Fly ash waste, bottom ash waste, slag waste and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, except residue derived from the burning or processing of hazardous waste in a boiler or industrial furnace as provided by 40 CFR § 266.112 (incorporated by reference through § 7-109(b)(1) of these regulations).
- (d) Mining overburden returned to the mine site.
- (e) Waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock and overburden from the mining of uranium ore), except residue derived from the burning or processing of hazardous waste in a boiler or industrial furnace as provided by 40 CFR § 266.112 (incorporated by reference through § 7-109(b)(1) of these regulations). For purposes of this section, beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water and/or carbon dioxide; roasting, autoclaving, and/or chlorination in preparation for leaching (except where the roasting [and/or autoclaving and/or chlorination]/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching. For the purposes of this section, waste from the processing of ores and minerals includes only those listed by 40 CFR § 261.4(b)(7)(ii) as generated.

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- (f) ~~Hazardous waste~~ Waste containing radioactive waste (“mixed waste”) when it meets the eligibility criteria and conditions of ~~40 CFR § 261.3(h) Part 266, Subpart N~~ Part 266, Subpart N (incorporated by reference through § 7-109(b)(2) of these regulations).
- (g) In the case of any waste consisting of, containing, or derived from any waste or any product or constituent listed in §§ 7-210 through 7-215 of this subchapter, when it has been determined by the Secretary that the waste is not hazardous pursuant to the delisting procedures of § 7-217 or § 7-218.
- (h) A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste treatment manufacturing unit until it exits the unit in which it was generated provided:
 - (1) The unit is not a surface impoundment; and
 - (2) The hazardous waste remains in the unit for less than ninety (90) days after the unit ceases to be operated for manufacturing, storage, or transportation of a product or raw material.
- (i) Samples as follows:
 - (1) Except as provided in ~~subsection (h)(2) and (4) of this section~~, samples collected for the sole purpose of testing to determine their properties, characteristics or composition when:
 - (A) The sample is being transported to a laboratory for the purpose of testing;
 - (B) The sample is being transported back to the sample collector after testing;
 - (C) The sample is being stored by the sample collector before transport to a laboratory for testing;
 - ~~(D)~~ The sample is being stored in a laboratory before testing;
 - ~~(E)~~ The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or
 - (F) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).
 - (2) In order to qualify for the exemption in ~~subsections (h)(1)(A) and (B) of this section~~, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

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- (A) Comply with U. S. Department of Transportation (DOT), U. S. Postal Service (USPS) and any other applicable shipping requirements; or
- (B) Comply with the following requirements if the sample collector determines that DOT, USPS or other shipping requirements do not apply to the shipment of the sample:
 - (i) Assure that the following accompanies the sample:
 - (aa) The sample collector's name, mailing address and telephone number;
 - (bb) The laboratory's name, mailing address and telephone number;
 - (cc) The quantity of the sample;
 - (dd) The date of shipment; and
 - (ee) A description of the sample.
 - (ii) Package the sample so that it does not leak, spill, or vaporize from its packaging.
- (3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in **subsection (1)(1) of this section.**
- (4) In order to qualify for the exemption in subsections (1)(A) and (B) of this section, the mass of a sample that will be exported to a foreign laboratory or that will be imported to a U.S. laboratory from a foreign source must additionally not exceed 25 kg.**
- ~~(4)(5)~~ Treatability study samples as provided in **40 CFR §§ 261.4(e) and (f).**
- (j) Containers and inner liners from containers of hazardous waste provided that the containers and inner liners are empty. Containers and inner liners are empty under the following conditions:
 - (1) For those containers or inner liners which have held hazardous waste, when all material has been removed using the practices commonly employed to remove materials from that type of container, and
 - (A) No more than one inch of residue remains on the bottom of the container or inner liner; and
 - (B) No more than 3 percent by weight of the total capacity of the container remains in

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the container or inner liner if the container is less than or equal to 119 gallons in size; or

- (C) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119 gallons in size.
 - (2) For those containers that held a hazardous waste that is a compressed gas, when the pressure in the container approaches atmospheric pressure.
 - (3) For those containers or inner liners which have held acutely hazardous waste, pesticidal waste, or obsolete pesticide products:
 - (A) When the container or inner liner has been triple-rinsed with a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;
 - (B) When the container or inner liner is cleaned by a method which the generator has demonstrated to achieve equivalent removal; or
 - (C) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.
 - (4) For containers of hazardous waste pharmaceuticals, when such containers are managed in accordance with the requirements of § 7-1008 for determining when they are considered empty.
- (k) Mixtures of solid waste and hazardous waste provided that:
- (1) The hazardous waste in the mixture is listed in §§ 7-210 through 7-215 solely because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-207, and the resultant mixture no longer exhibits any characteristic. However, wastes that exhibit a characteristic at the point of generation are subject to the requirements of 40 CFR Part 268, even if they no longer exhibit a characteristic at the point of land disposal.
 - (2) The hazardous waste in the mixture is listed in §§ 7-210 through 7-215 solely because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-207, and the solid waste is excluded from regulation under ~~subsection (e) of this section~~ § 7-203(c), and the resultant mixture no longer exhibits any hazardous waste characteristic for which the hazardous waste in the mixture was listed. However, wastes that exhibit a characteristic at the point of generation are subject to the requirements of 40 CFR Part 268, even if they no longer exhibit a characteristic at the point of land disposal.
 - (3) The hazardous waste in the mixture is listed in §§ 7-210 through 7-215 and the

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generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either § 402 or § 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater) as specified in 40 CFR § 261.3(a)(2)(iv).

- (4) Nonwastewater mixtures are still subject to the requirements of 40 CFR Part 268 (incorporated by reference by § 7-106 of these regulations), even if they no longer exhibit a characteristic at the point of land disposal.

Note: Dilution of hazardous waste subject to the land disposal restrictions of 40 CFR Part 268 is prohibited pursuant to 40 CFR § 268.3 (incorporated by reference through § 7-106 of these regulations).

- (1) Water-miscible metal cutting and grinding fluid waste that does not exhibit a characteristic of hazardous waste as defined in §§ 7-205 through 7-208 provided:

- (1) It is recycled or treated on-site (e.g., centrifugation, evaporation of aqueous component, filtration and ultrafiltration) in accordance with § 7-502(o) or sent off-site for treatment; and

Note: Evaporation equipment must be operated ~~approved~~ in accordance with Vermont's Air Pollution Control Regulations.

- (2) Containers and/or tanks holding water-miscible metal cutting and grinding fluid are:

- (A) Marked with words that identify the contents;
- (B) Kept closed except to add or remove spent material;
- (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration);
- (D) Stored on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow; and

- (3) If the waste is subject to freezing and expansion, mechanical or physical means are employed to prevent freezing; and

- (4) Any residue resulting from on-site recycling or treatment is managed either as used oil in accordance with the requirements of subchapter 8, or in accordance with applicable hazardous waste management requirements of subchapters 1 through 7; and

- (5) Any water resulting from on-site treatment that is authorized to be discharged in accordance with 10 V.S.A. chapter 47 (including for indirect injection wells, and direct discharges) and ~~chapter 48 (for groundwater protection)~~; and

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- (6) Any water-miscible metal cutting and grinding fluid waste sent off-site for treatment are offered for transport only to a transporter permitted according to the requirements of **subchapter 4**.
- (m) Wood ash subject to regulation as hazardous waste only because it exhibits the characteristic of corrosivity described in § 7-206(a)(3) provided the ash is stored in a location that is either:
 - (1) Protected from precipitation; or
 - (2) Secure from public access (e.g., fenced) and has a sign posted warning of the corrosive hazard of wet wood ash.
- (n) Used oil that meets the criteria of the VT02 hazardous waste code and/or exhibits a hazardous waste characteristic, is not subject to the requirements of **subchapters 3 through 7** of these regulations, but is subject to the Used Oil Management Standards of **subchapter 8**.

Note: Pursuant to 10 V.S.A. § 6621 a, no person shall knowingly dispose of used oil in a landfill.

- (o) Non-terne plated used oil filters that are not mixed with wastes listed in §§ 7-210 through 7-215 if:
 - (1) These oil filters have been gravity drained using one of the following methods:
 - (A) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;
 - (B) Hot-draining and crushing;
 - (C) Hot-draining and dismantling; or
 - (D) Any other equivalent hot-draining method that will remove used oil; or
 - (E) Draining and crushing using a mechanical, pneumatic, or hydraulic device designed for the purpose of crushing oil filters and effectively removing the oil; and
 - (2) All drained oils are collected and managed subject to these regulations.
- Note:** The Agency recommends that drained oil filters be recycled as scrap metal.
- (p) Petroleum contaminated soil provided:
 - (1) The soil does not exhibit a characteristic of hazardous waste as defined in §§ 7-205

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through 7-208, with the exception that soil subject to the corrective action requirements of **40 CFR Part 280** is not subject to regulation as hazardous waste solely for the hazardous waste codes of D018 through D043 of §7-208; and

- (2) The soil does not contain waste listed in §§ **7-210 through 7-215**, with the exception that soil may contain waste identified by the VT02 hazardous waste code; and
- (3) The soil is evaluated **to establish the type and concentration of the contaminant(s) present** in accordance with the **Vermont Investigation and Remediation of Contaminated Properties Rule**, as amended by field screening, review of ~~any~~ **available information about the contaminant (e.g., materials safety data sheet information) and, if necessary, laboratory analysis and/or testing to establish the type and concentration of the contaminant(s) present; and**

Note: Field screening and laboratory analysis or testing must be conducted by an independent professional consulting firm or laboratory using a method or methods that are either identified under § 7-219 of these regulations or that are otherwise approved by the Secretary.

- (4) The soil is managed (e.g., ~~assessed, monitored, excavated, stored, stockpiled, treated, transported, or disposed/stockpiled~~) in a manner that is protective of human health and the environment (refer to **Chapter 3** of accordance with the Agency's **Vermont Investigation and Remediation of Contaminated Properties Procedure Rule, as amended**, which is available from the Secretary upon request).
- (q) Industrial discharges in compliance with **10 V.S.A. chapter 47**. This exemption applies only to the actual point source discharge. It does not exclude wastewaters while they are being collected, stored, or treated before discharge nor does it exclude sludges that are generated by industrial wastewater treatment.
- (r) Pesticidal wastes that are both generated and disposed of by the same farmer provided:
 - (1) The emptied **pesticide** container is triple-rinsed in accordance with the provisions of ~~subsection (j) of this section~~ **§ 7-203(j)**; and
 - (2) The pesticide residues are disposed of on the farmer's own farm in a manner consistent with the disposal instructions on the pesticide label.
- (s) The wastes listed below are exempt from regulation under **subchapters 1 through 7** of these regulations except as specified in **subchapter 9** of these regulations. The following wastes are subject to regulation as universal wastes under **subchapter 9**:
 - (1) Batteries as described in **§ 7-902**;
 - (2) Pesticides as described in **§ 7-903**;

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- (3) Thermostats as described in § 7-904;
 - (4) PCB-containing fluorescent light ballasts as described in § 7-905;
 - ~~(4)(5)~~ Lamps as described in § 7-906;
 - ~~(5)(6)~~ Mercury-containing devices as described in § 7-907; ~~and~~
 - ~~(6)(7)~~ Cathode ray tubes (CRTs) as described in § 7-908;
 - ~~(8)~~ Postconsumer paint as described in § 7-909; and
 - ~~(9)~~ Aerosol cans as described in § 7-910.
- (t) PCB-containing dielectric fluid and, with the exception of fluorescent light ballasts, electric equipment containing such fluid authorized for use and regulated under **40 CFR Part 761** of the Toxic Substances Control Act and that are hazardous only because they either meet the criteria of the VT01 hazardous waste identification code or fail the test for the Toxicity Characteristic (hazardous waste codes D018 through D043 only). This exemption is not applicable to waste contaminated with PCB-containing dielectric fluid.
- (u) The following materials provided they do not exhibit a characteristic identified in §§ 7-205 through 7-208:
- (1) Hazardous debris as defined in **40 CFR Part 268** (Land Disposal Restrictions incorporated by reference through § 7-106) that has been treated using one of the required extraction or destruction technologies specified in **Table 1 of 40 CFR § 268.45**; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or
 - (2) Debris as defined in **40 CFR Part 268** (Land Disposal Restrictions incorporated by reference through § 7-106) that the Secretary, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.
- (v) Waste which consists of discarded arsenical-treated wood or wood products which fails the test for the toxicity characteristic for hazardous waste codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.
- ~~(w) Used oil contaminated rags or wipes that do not exhibit a hazardous waste characteristic provided:~~
- ~~(1) The rags or wipes are picked up and cleaned under a contractual agreement with a commercial laundering service;~~

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- ~~(2) Free liquid is not present in the rags or wipes as per test method 9095 of EPA Publication SW 846 (the paint filter liquids test); and~~
- ~~(3) Prior to being picked up by the launderer, the rags or wipes are accumulated and stored on-site in containers that are:
 - ~~(A) Marked with words that identify the contents as used rags or wipes destined for laundering;~~
 - ~~(B) Kept closed except to add or remove spent material;~~~~
- ~~————— Note: If a bag is used to accumulate and/or store used oil contaminated rags or wipes, it must be kept in a closed container.~~
- ~~(C) In good condition (i.e., no rips, tears, severe rusting, apparent structural defects or deterioration); and~~
- ~~(D) Stored on an impervious surface, and if stored out of doors, within a structure that sheds rain and snow.~~
- (w) Contaminated wipes, as defined in § 7-103, that are to be sent off-site for cleaning and reuse, provided that:
 - (1) The contaminated wipes, when being accumulated and stored, and through the point in time when being transported off-site, are contained in non-leaking containers that are:
 - (A) Marked "Excluded Contaminated Wipes-"; and
 - (B) Able to contain free liquids, should free liquids occur.
 - (2) During accumulation, containers are kept closed except when it is necessary to add or remove contaminated wipes. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the container rim.
 - (3) When a container is becomes full or when contaminated wipes are no longer being accumulated, through the point in time when the container is transported off-site, the container is kept sealed with the lid properly and securely affixed to the container and all openings closed sufficiently to prevent leaks and emissions;
 - (4) The contaminated wipes are accumulated by the generator for no more than 180 days from the start date of accumulation for each container prior to being sent for cleaning;
 - (5) At the point when being transported off-site for cleaning, the contaminated wipes contain no free liquids as defined in § 7-103.

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- (6) Free liquids removed from the contaminated wipes or from the container holding the wipes must be managed according to the applicable requirements of subchapters 1 through 8 of these regulations;
- (7) Generators maintain at their site documentation that:

 - (A) Identifies the name and address of the laundry or dry cleaner that is receiving the contaminated wipes;
 - (B) Verifies the 180-day accumulation time limit requirement of subsection (4) of this section is being met;
 - (C) Provides a description of the process the generator is using to ensure the contaminated wipes contain no free liquids at the point of being transported off-site for laundering or dry cleaning;
 - (8) The contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under sections 301 and 402 or section 307 of the Clean Water Act.
- (x) Reusable absorbent material, contaminated with used oil or petroleum distillate, that does not exhibit a hazardous waste characteristic provided that:

 - (1) The contaminated absorbent material is processed and reused on-site, any residual material that results from processing is managed in accordance with these regulations, and any contaminated water resulting from on-site processing is discharged in accordance with **10 V.S.A. chapter 47** (for indirect injection well, and direct discharges) and **chapter 48** (for groundwater protection); and
 - (2) Prior to being processed, the absorbent materials ~~are~~ is accumulated and stored on-site in containers that are:

 - (A) Marked with words that identify the contents;
 - (B) Kept closed except to add or remove spent material;
 - (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration); and
 - (D) Stored on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow.
- (y) Reserved
- ~~(z)~~ Airbag waste

 - (1) Airbag waste at the airbag waste handler or during transport to an airbag waste

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collection facility or designated facility is not subject to regulation under subchapters 1 through 7 of these regulations provided that:

- (A) The airbag waste is accumulated in a quantity of no more than 250 airbag modules or airbag inflators, for no longer than 180 days;
 - (B) The airbag waste is packaged in a container designed to address the risk posed by the airbag waste and marked "Airbag Waste-Do Not Reuse";
 - (C) The airbag waste is sent directly to either:
 - (i) An airbag waste collection facility in the United States under the control of a vehicle manufacturer or their authorized representative, or under the control of an authorized party administering a remedy program in response to a recall under the National Highway Traffic Safety Administration, or
 - (ii) A designated facility as defined in § 7-103;
 - (D) The transport of the airbag waste complies with all applicable U.S. Department of Transportation regulations in 49 CFR Parts 171 through 180 during transit;
 - (E) The airbag waste handler maintains at the handler facility for no less than three (3) years records of all off-site shipments of airbag waste and all confirmations of receipt from the receiving facility. For each shipment, these records must, at a minimum, contain the name of the transporter and date of the shipment; name and address of receiving facility; and the type and quantity of airbag waste (i.e., airbag modules or airbag inflators) in the shipment. Confirmations of receipt must include the name and address of the receiving facility; the type and quantity of the airbag waste (i.e., airbag modules and airbag inflators) received; and the date which it was received. Shipping records and confirmations of receipt must be made available for inspection and may be satisfied by routine business records (e.g., electronic or paper financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt).
 - (2) Once the airbag waste arrives at an airbag waste collection facility or designated facility, it becomes subject to all applicable hazardous waste regulations, and the facility receiving airbag waste is considered the hazardous waste generator for the purposes of the hazardous waste regulations and must comply with the applicable requirements of subchapter 3.
 - (3) Reuse in vehicles of defective airbag modules or defective airbag inflators subject to a recall under the National Highway Traffic Safety Administration is prohibited.
- (z) A military munition when:
- (1) Used for its intended purpose, including:

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- (A) Use for training military personnel or explosives and munitions emergency response specialists;
 - (B) Use in research, development, testing, or evaluation of military munitions, weapons, or weapon systems; or
 - (C) Recovery, collection, and on-range destruction of unexploded ordnance and munitions fragments during range clearance activities at active or inactive ranges.
- (2) An unused military munition, or component of that munition, is being repaired, reused, recycled, reclaimed, disassembled, reconfigured or otherwise subjected to materials recovery activities, unless those activities include use constituting disposal or burning for energy recovery.
- (aa) Consumer products that are available to the general public in the marketplace which were treated with perfluorooctanoic acid, perfluorooctanesulfonic acid or a material containing perfluorooctanoic acid or perfluorooctanesulfonic acid.
 - (bb) Remediation wastes from an environmental response action that contain perfluorooctanoic acid, perfluorooctanesulfonic acid or a material containing perfluorooctanoic acid or perfluorooctanesulfonic acid and when those remediation wastes disposed in accordance with a corrective action plan or disposal plan approved by the Secretary.
 - (cc) Sludges from wastewater treatment facilities, collected leachate from solid waste management facilities, and residuals from the treatment of drinking water that contain perfluorooctanoic acid, perfluorooctanesulfonic acid or a material containing perfluorooctanoic acid or perfluorooctanesulfonic acid and when those remediation wastes are disposed in accordance with a corrective action plan or disposal plan approved by the Secretary.

§ 7-204 RECYCLING EXEMPTIONS

The following wastes are exempted from the provisions of these regulations only if they are recycled as specified and all conditions for exemption are met:

Note: Refer to **subchapter 6** for standards applicable to hazardous waste recycling activities not exempted under this section.

- (a) (1) Hazardous wastes, other than the wastes described in **subsections (a)(2)(A) through (D) of this section**, that are recycled on-site ~~by being in accordance with the applicable requirements of subchapter 6.~~

~~(A) Used or reused as ingredients in an industrial process to make a product, provided~~

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~~the wastes are not first being processed or reclaimed; or~~

~~(B) Used or reused as effective substitutes for commercial products, provided the wastes are not first being processed or reclaimed; or~~

~~(C)(A) Returned to the original process from which they are generated, without first being reclaimed or land disposed. The wastes must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the wastes must be managed such that there is no placement on the land.~~

(2) The following materials are not exempt from the provisions of these regulations, even if they are recycled according to ~~subsections (a)(1)(A) through (a)(1)(C) of this section~~ subchapter 6:

(A) Except as provided in ~~subsection (k) of this section~~ § 7-204(k), materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

(B) Except as provided in ~~subsection (l) of this section~~ § 7-204(l), materials burned for energy recovery, used to produce a fuel, or contained in fuels; or

(C) Materials accumulated speculatively as defined in **40 CFR § 261.1(c)(8)**; or

(D) Inherently waste-like materials listed in **40 CFR §§ 261.2(d)(1) and (d)(2)**.

(b) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose provided those solutions are managed prior to reuse according to the requirements of **40 CFR § 261.4(a)(9)(iii)**.

(c) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood provided those wastewaters are managed prior to reuse according to the requirements of **40 CFR § 261.4(a)(9)(iii)**.

(d) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.

(e) Scrap metal that is recycled.

(f) Spent lead-acid batteries that are reclaimed or regenerated, provided:

(1) Persons who generate or collect spent lead-acid batteries, who regenerate spent lead-acid batteries, or who store spent lead-acid batteries but do not reclaim them (other

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- than spent lead-acid batteries that are to be regenerated) store such batteries under cover on an impervious surface; and
- (2) Transport of spent lead-acid batteries is done in compliance with **49 CFR Parts 171 through 177**; and
 - ~~(3) Owners or operators of facilities which store lead-acid batteries (other than spent lead-acid batteries that are to be regenerated) before reclaiming them comply with the requirements of **40 CFR Part 266, Subpart G**. Persons who generate, collect, transport, store, or regenerate lead-acid batteries for reclamation purposes are subject to regulation only as specified in the table included under **40 CFR § 266.80(a)**; and~~
 - ~~(3)(4) Persons who store spent lead-acid batteries before reclaiming them, but do not reclaim them through regeneration are subject to regulations only as specified under **40 CFR § 266.80(b)**.~~
- (g) Recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these metals provided:
- (1) Persons who generate, transport, store or recycle these recyclable materials comply with **40 CFR Part 266, Subpart F**.
 - (2) Any generator or facility accumulating or storing these recyclable materials from which precious metals are reclaimed comply with any additional standards and requirements specified by the Secretary as necessary to protect human health and the environment. In making such determination, the Secretary shall use the standards and procedures specified in **40 CFR §§ 260.40 and 260.41**.
- (h) Intact or shredded circuit boards being recycled provided that they are:
- (1) Stored in containers sufficient to prevent a release to the environment prior to recovery; and
 - (2) Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.
- (i) Spent ethylene glycol or water-based ethylene glycol solutions (e.g., antifreeze) that are subject to regulation as hazardous waste for meeting only the criteria of the VT08 hazardous waste code provided that:
- (1) The spent ethylene glycol or water-based ethylene glycol solution is recycled for reuse (e.g., filtered) and/or treated for reuse (e.g., filtered, additives added); and
 - (2) Containers and/or tanks used to hold spent ethylene glycol or water-based ethylene glycol solution are:

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- (A) Marked with words that identify the contents;
 - (B) Kept closed except to add or remove spent material;
 - (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration):
 - (D) Stored on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow; and
- (3) If the spent ethylene glycol or water-based ethylene glycol solution is subject to freezing and expansion, mechanical or physical means are employed to prevent freezing; and
- (4) Any residue resulting from on-site recycling and/or treatment that is hazardous waste is managed as hazardous waste.
- (j) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.
- (k) Commercial chemical products that are applied to the land provided that land application is their ordinary manner of use.
- (l) Commercial chemical products that are themselves fuels (e.g., gasoline, aviation fuel, diesel fuel) provided:
- (1) The commercial chemical product is burned for energy recovery, or is mixed or reclaimed to produce a fuel;
 - (2) The commercial chemical product is not mixed with non-fuel hazardous waste;
 - (3) The generator maintains a written record of any commercial chemical product shipped off-site that includes:
 - (A) The type and amount of material shipped;
 - (B) The date of generation;
 - (C) The date of shipment; and
 - (D) The name, address and phone number of the receiving facility;
 - (4) Prior to shipment off-site, the commercial chemical product is accumulated and stored in containers and/or tanks that are:

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- (A) Marked to identify the date the container or tank becomes full and with words that identify the contents as a usable fuel product;
 - (B) Kept closed except when adding or removing material;
 - (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration);
 - (D) Kept on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow; and
 - (E) Handled and stored in a manner that minimizes the possibility of fire, explosion or a release or discharge to air, soil, groundwater, or surface water;
- (5) If the commercial chemical product is subject to freezing and expansion, mechanical or physical means are employed to prevent freezing; and
- (6) The commercial chemical product is shipped within ~~45~~180 days from the date the container or tank becomes full to: a facility that burns the product for energy recovery, or mixes or reclaims the product to produce a fuel; a designated facility; or an aggregation facility that meets the following:
- (A) The owner of the facility has requested and received approval from the Secretary, using a form provided by the Secretary, to operate an aggregation facility. Any aggregation facility already in operations on the effective date of these regulations shall comply with the requirements of this section within 90 days of the effective date of these regulations.
 - (B) Commercial chemical product is not stored at the aggregation facility for more than 30 days.
 - (C) All commercial chemical product stored at the aggregation facility is shipped to: a facility that burns the product for energy recovery, or mixes or reclaims the product to produce a fuel; or a designated facility.
 - (D) All commercial chemical product stored at the aggregation facility meets the following requirements:
 - (i) Containers must be kept closed except when adding or removing material, be marked with words that identify the contents as a usable fuel product, and be stored:
 - (aa) In a manner to prevent leakage or rupture;
 - (bb) Upon an impervious surface;

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- (cc) Such that the required marking is visible;
 - (dd) With sufficient aisle space between rows of containers to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation. In no circumstance shall the aisle space be less than twenty-four (24) inches wide;
 - (cc) In an area with secondary containment capable of holding 110% of the capacity of the largest container to be placed in temporary storage, or 10% of the total design capacity of the storage area, whichever is greater;
 - (ff) Only with wastes or other materials that are compatible with the commercial chemical product;
 - (gg) Within a structure that sheds rain and snow; and
 - (hh) If the commercial chemical product is subject to freezing and expansion, in an area where mechanical or physical means are employed to prevent freezing.
- (ii) Where applicable, underground storage tanks (USTs) holding commercial chemical product shall be:
 - (aa) Permitted, operated, and maintained in accordance with the Vermont Underground Storage Tank Regulations; and
 - (bb) Equipped with fill pipes that are marked or labeled to clearly identify the contents of the UST as a usable fuel product.
 - (iii) Where applicable, above-ground storage tanks (including unregistered tank trailers) holding a commercial chemical product shall be:
 - (aa) Installed and operated in accordance with Vermont Department of Labor Standards;
 - (bb) Clearly marked with words that identify the contents as a usable fuel product;
 - (cc) Managed in such a manner as to prevent rupture of the tank and to ensure that no release occurs; and
 - (dd) If located out-of-doors, equipped with secondary containment as specified in 40 CFR §§ 279.45(e) and (f).
- (E) The owner or operator of the aggregation facility maintains a written operating log

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that identifies the date that commercial chemical product is received, the amount received, the location from where it was received, the date of shipment off-site, the amount shipped off site, and the location where it was sent.

- (F) The owner of the aggregation facility ~~maintains a written contingency plan for the facility as described in~~ complies with the preparedness, prevention, and emergency procedure requirements of § 7-308(b)(14-13).
- (G) The owner of the aggregation facility has certified, using the form submitted to the Secretary pursuant to subsection (6)(A) of this section, that he or she will comply with the closure requirements of ~~§ 7-309(e)~~ 7-308(b)(16).

§ 7-205 CHARACTERISTIC OF IGNITABILITY

- (a) A waste is an ignitable hazardous waste if a representative sample of the waste has any of the following properties:
 - (1) ~~It is a liquid and has a flash point of less than 60°C, which is approximately 140°F as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D 93-79 or D 93-80 (incorporated by reference, see § 7-219(d)), or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D 3278-78. It is a liquid, other than a solution containing less than 24 percent alcohol by volume and at least 50 percent water by weight, that has a flash point less than 60 °C (140 °F), as determined by using one of the following ASTM standards: ASTM D93-79, D93-80, D3278-78, D8174-18, or D8175-18 as specified in SW-846 Test Methods 1010B or 1020C (incorporated by reference, see § 7-219(d) § 7-109(a)). However, an aqueous solution of alcohol that contains less than 24 percent alcohol by volume will not be considered an ignitable waste;~~
 - (2) It is not a liquid and is capable under standard temperature and pressure of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard, or it is a solid-phase material and is determined to be an “ignitable solid” using the SW-846 Method 1030 test method;
 - (3) It is an ignitable compressed gas as defined in **40 CFR § 261.21(a)(3)(i)** and shall be characterized as ignitable as determined by the test methods described in **40 CFR § 261.21(a)(3)(ii)**; or
 - (4) It is an oxidizer. **An oxidizer for the purposes of this subchapter is a substance such as chlorate, perchlorate, nitrate, nitrite, permanganate, or inorganic peroxide, or a nitrate,** that yields oxygen readily to stimulate the combustion of organic matter. An organic compound containing the bivalent -O-O- structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals must be classed as an organic peroxide unless:

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- (A) The material meets the definition of a ~~Class A explosive or a Class B Division 1.1, 1.2, or 1.3~~ explosive, as defined in **40 CFR § 261.23(a)(8)**, in which case it must be classed as an explosive;
 - (B) The material is forbidden to be offered for transportation according to **49 CFR 172.101 and 49 CFR 173.21**;
 - (C) It is determined that the predominant hazard of the material containing an organic peroxide is other than that of an organic peroxide; or
 - (D) According to data on file with the Pipeline and Hazardous Materials Safety Administration in the U.S. Department of Transportation, it has been determined that the material does not present a hazard in transportation.
- (b) A waste that exhibits the characteristic of ignitability has the EPA hazardous waste code of D001.

§ 7-206 CHARACTERISTIC OF CORROSIVITY

- (a) A waste is a corrosive hazardous waste if a representative sample of the waste has any of the following properties:
- (1) It is an aqueous solution which has a pH of less than or equal to 2 or greater than or equal to 12.5 as determined by a pH meter using Method 9040C in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see **§ 7-219(d)**); or
 - (2) It is a liquid and corrodes steel (type SAE 1020) at a rate greater than 0.250 inch per year at a test temperature of 55°C (130°F) as determined by Method 1110A in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see **§ 7-219(d)**); or
 - (3) It is a solid phase material at standard temperature and pressure which when mixed 50% by weight with distilled water yields a pH less than or equal to 2 or greater than or equal to 12.5 as determined by a pH meter using Method 9045 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see **§ 7-219(d)**).
- (b) A waste that exhibits the characteristic of corrosivity because it meets the criteria of **subsection (a)(1) or (a)(2) of this section** has the EPA hazardous waste code of D002. A waste that exhibits the characteristic of corrosivity because it meets the criteria of **subsection (a)(3) of this section** has the hazardous waste code of VT20.

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§ 7-207 CHARACTERISTIC OF REACTIVITY

- (a) A waste is a reactive hazardous waste if a representative sample of the waste has any of the following properties:
 - (1) It is normally unstable and readily undergoes violent change without detonating;
 - (2) It reacts violently with water;
 - (3) It forms potentially explosive mixtures with water;
 - (4) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or to the environment;
 - (5) It is a cyanide or sulfide bearing waste which, when exposed to a pH condition between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or to the environment;
 - (6) It is capable of detonation or an explosive reaction if it is subjected to a strong initiating source or if heated under confinement;
 - (7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure;
 - (8) It is a forbidden explosive as defined in **49 CFR § 173.54**, or is a Division 1.1, 1.2 or 1.3 explosive as defined in **49 CFR §§ 173.50 and 173.53**.
- (b) A waste that exhibits the characteristic of reactivity has the EPA hazardous waste code of D003.

§ 7-208 CHARACTERISTIC OF TOXICITY

- (a) A waste is a hazardous waste if, using the Toxicity Characteristic Leaching Procedure (TCLP), test Method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see § 7-219(d)), the extract from a representative sample of the waste contains any of the contaminants listed in **Table 1** at the concentration equal to or greater than the respective value given in that Table. Where the waste contains less than 0.5% filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purposes of this section.
- (b) A waste that exhibits the characteristic of toxicity has all applicable EPA hazardous waste codes specified in **Table 1** which correspond to any of the toxic contaminants listed in Table 1 that cause it to be hazardous.

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Table 1
MAXIMUM CONCENTRATION OF CONTAMINANTS
FOR THE CHARACTERISTIC OF TOXICITY

| Hazardous Waste Code | Contaminant | CAS Number | Regulatory Level (mg/L) |
|----------------------|---|------------|-------------------------|
| D004 | Arsenic | 7440-38-2 | 5.0 |
| D005 | Barium | 7440-39-3 | 100.0 |
| D006 | Cadmium | 7440-43-9 | 1.0 |
| D007 | Chromium | 7440-47-3 | 5.0 |
| D008 | Lead | 7439-92-1 | 5.0 |
| D009 | Mercury | 7439-97-6 | 0.2 |
| D010 | Selenium | 7782-49-2 | 1.0 |
| D011 | Silver | 7440-22-4 | 5.0 |
| D012 | Endrin(1,2,3,4,10,10-Hexachloro-1,7-epoxy-1,4,4a,5,6,7,8 8a-octahydro-1,4-endo, endo-5,8-dimethano-naphthalene) | 72-20-8 | 0.02 |
| D013 | Lindane (1,2,3,4,5,6-Hexachlorocyclohexane, gamma isomer) | 58-89-9 | 0.4 |
| D014 | Methoxychlor (1,1,1-Trichloro-2,2-bis[p-methoxyphenyl] ethane) | 72-43-5 | 10.0 |
| D015 | Toxaphene (C ₁₀ H ₁₀ Cl ₈ , Technical chlorinated camphene, 67 to 69 percent chlorine) | 8001-35-2 | 0.5 |
| D016 | 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | 10.0 |
| D017 | 2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid) | 93-72-1 | 1.0 |
| D018 | Benzene | 71-43-2 | 0.5 |
| D019 | Carbon tetrachloride | 56-23-5 | 0.5 |
| D020 | Chlordane | 57-74-9 | 0.03 |
| D021 | Chlorobenzene | 108-90-7 | 100.0 |
| D022 | Chloroform | 67-66-3 | 6.0 |
| D023 | o-Cresol | 95-48-7 | 200.0 ¹ |
| D024 | m-Cresol | 108-39-4 | 200.0 ¹ |
| D025 | p-Cresol | 106-44-5 | 200.0 ¹ |
| D026 | Cresol | | 200.0 ¹ |
| D027 | 1,4-Dichlorobenzene | 106-46-7 | 7.5 |

¹ If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

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| Hazardous Waste Code | Contaminant | CAS Number | Regulatory Level (mg/L) |
|----------------------|------------------------------|------------|-------------------------|
| D028 | 1,2-Dichloroethane | 107-06-2 | 0.5 |
| D029 | 1,1-Dichloroethylene | 75-35-4 | 0.7 |
| D030 | 2,4-Dinitrotoluene | 121-14-2 | 0.13 ² |
| D031 | Heptachlor (and its epoxide) | 76-44-8 | 0.008 |
| D032 | Hexachlorobenzene | 118-74-1 | 0.13 ² |
| D033 | Hexachlorobutadiene | 87-68-3 | 0.5 |
| D034 | Hexachloroethane | 67-72-1 | 3.0 |
| D035 | Methyl ethyl ketone | 78-93-3 | 200.0 |
| D036 | Nitrobenzene | 98-95-3 | 2.0 |
| D037 | Pentachlorophenol | 87-86-5 | 100.0 |
| D038 | Pyridine | 110-86-1 | 5.0 ² |
| D039 | Tetrachloroethylene | 127-18-4 | 0.7 |
| D040 | Trichloroethylene | 79-01-6 | 0.5 |
| D041 | 2,4,5-Trichlorophenol | 95-95-4 | 400.0 |
| D042 | 2,4,6-Trichlorophenol | 88-06-2 | 2.0 |
| D043 | Vinyl Chloride | 75-01-4 | 0.2 |

Note: "CAS" Number means Chemical Abstract Service Number.

§ 7-209 LISTS OF HAZARDOUS WASTES

- (a) Reserved.
- (b) The following hazardous wastes listed in § 7-210 are subject to the exclusion limits for acutely hazardous wastes established in § 7-306(a): hazardous waste codes F020, F021, F022, F023, F026, and F027.
- (c) The wastes listed in §§ 7-210, 7-211, 7-212, 7-214 and 7-215 are identified as toxicity characteristic waste (E), toxic waste (T), reactive waste (R), corrosive waste (C), ignitable waste (I), acutely hazardous waste (H), or a combination thereof.

² Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

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§ 7-210 HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES

The following wastes are listed hazardous wastes from non-specific sources:

| Hazardous Waste Code | Hazardous Wastes from Non-Specific Sources | Hazard |
|----------------------|---|--------|
| Generic F001 | The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (T) |
| F002 | The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (T) |
| F003 | The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (I)* |
| F004 | The following spent non-halogenated solvents: Cresols and cresylic acid and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (T) |
| F005 | The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (I,T) |
| F006 | Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating of carbon steel; and (6) chemical etching and milling of aluminum. | (T) |

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| Hazardous Waste Code | Hazardous Wastes from Non-Specific Sources | Hazard |
|----------------------|--|--------|
| F007 | Spent cyanide plating bath solutions from electroplating operations. | (R,T) |
| F008 | Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process. | (R,T) |
| F009 | Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process. | (R,T) |
| F010 | Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process. | (R,T) |
| F011 | Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations. | (R,T) |
| F012 | Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process. | (T) |
| F019 | Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. | (T) |
| F020 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol). | (H) |
| F021 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives. | (H) |
| F022 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions. | (H) |
| F023 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol). | (H) |
| F024 | Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in Appendix I). | (T) |

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| Hazardous Waste Code | Hazardous Wastes from Non-Specific Sources | Hazard |
|----------------------|--|--------|
| F025 | Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. | (T) |
| F026 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, or hexachlorobenzene under alkaline conditions. | (H) |
| F027 | Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component). | (H) |
| F028 | Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F023, F026, and F027. | (T) |
| F032 | Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with 40 CFR § 261.35 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. | (T) |
| F034 | Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. | (T) |
| F035 | Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. | (T) |

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| Hazardous Waste Code | Hazardous Wastes from Non-Specific Sources | Hazard |
|----------------------|--|--------|
| F037 | Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in 40 CFR § 261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. (Refer to 40 CFR § 261.31(b) for listing specific definitions.) | (T) |
| F038 | Petroleum refinery secondary (emulsified) oil/water/solids separation sludge-Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in dissolved air flotation (DAF) units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in 40 CFR § 261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing. (Refer to 40 CFR § 261.31(b) for listing specific definitions.) | (T) |
| F039 | Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under Subpart D of 40 CFR Part 261 (Leachate resulting from the disposal of one or more of the following EPA hazardous wastes and no other hazardous wastes retains its EPA hazardous waste code(s): F020, F021, F022, F026, F027, and/or F028.) | (T) |

*(I, T) should be used to specify mixtures that are ignitable and contain toxic constituents.

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§ 7-211 VERMONT LISTED HAZARDOUS WASTES

The following wastes are listed in Vermont as hazardous wastes:

Note: A waste that exhibits a hazardous waste characteristic or that is federally listed must be identified by its EPA hazardous waste code (refer to § 7-202(g)(c)).

| Hazardous Waste Code | Vermont Listed Hazardous Waste | Hazard |
|----------------------|--|-------------|
| VT01 | Wastes containing polychlorinated biphenyls (PCB) in concentrations equal or greater than 50 parts per million. Note: Certain waste PCB-containing dielectric fluids, and electric equipment containing such fluid are exempted under § 7-203(t); PCB-containing fluorescent light ballasts managed in accordance with the universal waste management standards of subchapter 9 are exempted under § 7-203(s). | (T) |
| VT02 | Waste containing greater than 5% by weight of petroleum distillates with melting points of less than 100°F, including but not limited to kerosene, fuel oil, hydraulic oils, lubricating oils, penetrating oils, tramp oils, quenching oils, and crankcase and automotive oils. Note: Wastes with a flashpoint less than 140°F are classified as D001 (ignitable). Note: Exemptions are provided for: used oil under § 7-203(n); oil filters under § 7-203(o); and petroleum contaminated soil under § 7-203(p). | (I,T) |
| VT03 | Waste water-miscible metal cutting and grinding fluid. Note: Certain recycled or treated water-miscible metal cutting and grinding fluid wastes are exempted under § 7-203(l). | (T) |
| VT06 | Pesticidal wastes of products classified under FIFRA as restricted use pesticides and obsolete pesticidal products not specifically listed in subchapter 2. Note: Certain pesticides managed in accordance with the universal waste management standards of subchapter 9 are exempted under § 7-203(s). | (T) |
| VT08 | Waste ethylene glycol and solutions containing greater than 700 parts per million of ethylene glycol (e.g., coolants, antifreeze). Note: Spent ethylene glycol and water-based ethylene glycol solutions that are recycled for reuse are exempted under § 7-204(i). | (T) |
| VT11 | Wastes determined to be hazardous pursuant to § 7-216. | (I,T,C,R,H) |
| VT20 | A solid material that when mixed with an equal weight of distilled water causes the liquid fraction of the mixture to exhibit the properties of the corrosivity characteristic as specified in § 7-206(a)(3). | (C,R) |

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| Hazardous Waste Code | Vermont Listed Hazardous Waste | Hazard |
|----------------------|---|--------|
| VT21 | Liquid wastes containing perfluorooctanoic acid (PFOA) in concentrations equal to or greater than 20 parts per trillion (ppt). For PFOA and PFOS, the standard of 20 ppt applies to the sum of the two substances (e.g. if the PFOA concentration is 15 ppt and the PFOS concentration is 6 ppt then there is an exceedance of the standard). | (T) |
| VT22 | Liquid wastes containing perfluorooctanesulfonic acid (PFOS) in concentrations equal to or greater than 20 parts per trillion (ppt). For PFOA and PFOS, the standard of 20 ppt applies to the sum of the two substances (e.g. if the PFOA concentration is 15 ppt and the PFOS concentration is 6 ppt then there is an exceedance of the standard). | (T) |
| VT99 | Non-hazardous waste. Note: This hazardous waste code is to be used only for non-hazardous waste shipped using a hazardous waste manifest. | N/A |

§ 7-212 HAZARDOUS WASTES FROM SPECIFIC SOURCES

Hazardous wastes from specific sources are listed in **Appendix I**.

§ 7-213 HAZARDOUS CONSTITUENT WASTES

Wastes containing any of the hazardous constituents listed in **Appendix II** are hazardous wastes when:

- (a) The waste is not excluded from regulation under § 7-203 or § 7-204; and
- (b) The Secretary concludes, following the listing procedures in § 7-216, that the waste meets the definition of hazardous waste in § 7-103.

§ 7-214 HAZARDOUS WASTES WHICH ARE DISCARDED COMMERCIAL CHEMICAL PRODUCTS

The following materials or items are hazardous waste if and when they are discarded or intended to be discarded, when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use, when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel. The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in subsections (a) through (d) of this section, are identified as toxic wastes (T) unless otherwise designated.

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- (a) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix III**;

Note: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in..." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in **Appendix III**. Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in **Appendix III**, such waste will be listed in either § 7-210 or § 7-212 or will be identified as a hazardous waste by the characteristics set forth in §§ 7-205 through 7-208.

- (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix III**;

~~(c)~~ ~~Reserved.~~

- ~~(c)~~(c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix III**, unless the container is empty as defined in § 7-203(j).

Note: Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, re-use, recycling or reclamation, the Secretary considers the residue to be intended for discard, and thus, a hazardous waste. An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.

- ~~(d)~~(d) Any residue or contaminated soil, water or other debris resulting from the clean-up of a release or discharge into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix III**, or any residue or contaminated soil, water or other debris resulting from the clean-up of a release or discharge into or on any land or water of any off-specification chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix III**.

Note: The primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability), and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.

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§ 7-215 ACUTELY HAZARDOUS WASTES

The following materials or items are acutely hazardous wastes if and when they are discarded or intended to be discarded, when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use, when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of the original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel. The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in subsections (a) through (d) of this section, are identified as acute hazardous wastes (H).

- (a) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix IV**;

Note: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . ." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in **Appendix IV**. Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in **Appendix IV**, such waste will be listed in either § 7-210 or § 7-212 or will be identified as a hazardous waste by the characteristics set forth in §§ 7-205 through 7-208.

- (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix IV**.

~~(c) Reserved.~~

- ~~(d)~~(c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in ~~Appendix III~~ **Appendix IV**, unless the container is empty as defined in § 7-203(j) or ~~§ 7-1008~~.

Note: Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, re-use, recycling or reclamation, the Secretary considers the residue to be intended for discard, and thus, a hazardous waste. An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.

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- ~~(e)~~(d) Any residue or contaminated soil, water or other debris resulting from the clean-up of a release or discharge into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix IV**, or any residue or contaminated soil, water or other debris resulting from the cleanup of a release or discharge into or on any land or water of any off-specification chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix IV**.

Note: The primary hazardous properties of these materials are indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound is only listed for toxicity.

§ 7-216 LISTING OF A HAZARDOUS WASTE

- ~~(a)~~ Any person requesting the addition of a generic class of wastes to the lists at §§ 7-210 through 7-215, must file a petition for rulemaking with the Secretary.
- ~~(b)~~ The Secretary, upon petition or on his or her own motion, may, on a case-by-case basis, make the determination that a waste generated by a particular generator or treated, stored or disposed of by a particular facility, meets the definition of hazardous waste at § 7-103.
- ~~(1)~~ Upon making the determination that a particular waste is hazardous, the Secretary shall notify the waste generator of this determination by certified letter. The letter shall include a fact sheet which briefly sets forth the principal facts and significant factual, methodological, and policy questions concerning the hazard determination.
- ~~(2)~~ Within 30 days following receipt of a hazard determination, the generator may request a hearing before the Secretary to contest that determination. The request for hearing shall state the technical and legal questions at issue and shall contain the necessary documents to support the request.
- ~~(3)~~ If no request for hearing is filed within 30 days, the generator shall be deemed to have accepted the hazard determination for the waste in question.
- ~~(c)~~ When making a determination under this section, the Secretary shall examine and consider the following factors:
- ~~(1)~~ The nature of the hazard presented by the waste;
- ~~(2)~~ The amount and concentration of all hazardous constituents in the waste;
- ~~(3)~~ The potential of all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents to migrate from the waste into the environment;

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- ~~(4) The persistence of all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents;~~
 - ~~(5) The degree to which all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents bioaccumulate in ecosystems;~~
 - ~~(6) The plausible types of improper management to which the waste could be subjected;~~
 - ~~(7) The quantity of waste involved;~~
 - ~~(8) The nature and severity of the damage to human health and the environment that has occurred as a result of the improper management of the type of waste involved;~~
 - ~~(9) Actions taken by other governmental agencies or regulatory programs based on the hazard to human health or the environment posed by the waste or any hazardous constituent in the waste; and~~
 - ~~(10) Such other factors as may be appropriate.~~
- (d) ~~Prior to making any determination under this section, the Secretary shall give notice to the Commissioner of Health and the Commissioner of Labor and may then receive advice and information on the health effects of such determination.~~
- (a) Any person requesting the addition of a generic class of wastes to the lists at §§ 7-210 through 7-215, must shall file a petition for rulemaking with the Secretary. Prior to adopting a rule listing a generic class of wastes as a hazardous waste, the Secretary shall consider the following factors:
- (1) The toxicity of the waste;
 - (2) The waste's persistence and degradability in the environment;
 - (3) The waste's potential to concentrate or bioaccumulate in tissue;
 - (4) The waste's potential to cause or contribute to adverse acute or chronic effects on the health of persons or other living organisms; and
 - (5) The waste's potential to have an unusually destructive effect on water quality if discharged to ground or surface water.
- (b) For generators whose waste is not listed as a hazardous waste, the Secretary, upon petition or on his or her own motion, may, on a case-by-case basis, make the determination that a waste generated by a particular generator or treated, stored or

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disposed of by a particular facility, meets the definition of hazardous waste at § 7-103.

- (1) Upon making the determination that a particular waste is hazardous, the Secretary shall notify the waste generator of this determination by certified letter. The letter shall include a fact sheet which briefly sets forth the principal facts and significant factual, methodological, and policy questions concerning the hazard determination.
 - (2) Within 30 days following receipt of a hazard determination, the generator may request a hearing before the Secretary to contest that determination. The request for hearing shall state the technical and legal questions at issue and shall contain the necessary documents to support the request.
 - (3) If no request for hearing is filed within 30 days, the generator shall be deemed to have accepted the hazard determination for the waste in question.
- (c) When making a determination under subsection (b) of this section, the Secretary shall examine and consider the following factors:
- (1) The nature of the hazard presented by the waste;
 - (2) The amount and concentration of all hazardous constituents in the waste;
 - (3) The potential of all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents to migrate from the waste into the environment;
 - (4) The persistence of all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents;
 - (5) The degree to which all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents bioaccumulate in ecosystems;
 - (6) The plausible types of improper management to which the waste could be subjected;
 - (7) The quantity of waste involved;
 - (8) The nature and severity of the damage to human health and the environment that has occurred as a result of the improper management of the type of waste involved;
 - (9) Actions taken by other governmental agencies or regulatory programs based on the hazard to human health or the environment posed by the waste or any hazardous constituent in the waste; and
 - (10) Such other factors as may be appropriate.
- (d) Prior to making any determination under subsection (b) of this section, the Secretary

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shall give notice to the Commissioner of Health and the Commissioner of Labor and may then receive advice and information on the health effects of such determination.

§ 7-217 DELISTING OF A HAZARDOUS WASTE

- (a) Generators may petition the Secretary to classify their waste as non-hazardous, if they generate either a waste listed at §§ 7-210 through 7-215 or a mixture which contains a waste listed at §§ 7-210 through 7-215.
- (b) The Secretary, upon petition or his or her own motion, may make the determination that a waste which is generated by a particular generator or treated, stored, or disposed of by a particular facility does not meet the definition of hazardous waste at § 7-103 subject to the restrictions listed below.
- (c) Any person seeking to exclude a waste at a particular generating facility from lists in **Subpart D of 40 CFR Part 261** may petition for a regulatory amendment under **40 CFR § 260.20 and § 260.22**. The Administrator of EPA shall retain the authority to exclude such wastes. Delisting determinations made by the EPA Administrator shall take effect in Vermont upon issuance of a “concurrence” letter sent by the Secretary to the EPA Administrator.
- (d) For any waste listed at §§ 7-210 through 7-215 of this subchapter and not listed by EPA as a hazardous waste, the petition to delist shall be made on the delisting form entitled “**Petition Procedures for the Listing and Delisting of Hazardous Waste,**” provided by the Secretary.
- (e) After receipt of a petition under this section, the Secretary may request any additional information which may be reasonably required to evaluate the petition.
- (f) The Secretary shall evaluate each delisting petition using the procedures described in § 7-216(b).
- (g) When making a determination under this section, the Secretary shall examine and consider the factors in § 7-216(c).
- (h) Except as provided in § 7-218, prior to making any determination under this section, the Secretary shall give notice to the Commissioner of Health and the Commissioner of Labor and may then receive advice and information on the health effects of such determination.

§ 7-218 DELISTING OF SPILL CLEAN-UP DEBRIS AND RESIDUES

The Secretary may delist clean-up debris and residues which are not regulated by EPA as hazardous wastes resulting from an emergency action in § 7-105, after considering the factors in

§ 7-216(c), without consulting the Commissioners of Health and Labor.

§ 7-219 SAMPLING, ANALYTICAL AND TESTING METHODOLOGIES

- (a) The appropriate analytical and test methods to determine whether a representative sample exhibits a hazardous waste characteristic are specified in §§ 7-205 through 7-208.
- (b) The appropriate analytical procedures to determine whether a representative sample contains a given toxic constituent are specified in chapter two ("Choosing the Correct Procedure") of EPA Publication SW-846 ("Test Methods for Evaluating Solid Waste Physical/Chemical Methods"), as incorporated by reference in **subsection (d) of this section**. Prior to final sampling and analysis method selection, the individual should consult the specific section or method described in SW-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.
- (c) **Representative Sampling Methods**

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Samples collected using the sampling protocols listed in **Appendix I to 40 CFR Part 261**, for sampling waste with properties similar to the indicated materials, will be considered by the Agency to be representative of the waste.
- (d) When used in 40 CFR ~~p~~parts 260 through 270 or in these regulations, the publications listed in **40 CFR § 260.11** are hereby incorporated by reference.
- (e) Any person seeking to add a sampling, analytical or test method to the methods referenced by this section shall petition the Administrator of EPA in accordance with **40 CFR §§ 260.20 and 260.21**.

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Subchapter 3: HAZARDOUS WASTE GENERATOR STANDARDS

§ 7-301 APPLICABILITY, PURPOSE, SCOPE

- (a) The requirements of this subchapter apply to all hazardous waste generators and:
- (1) Any owner or operator of a treatment, storage or disposal facility who initiates a shipment of hazardous waste from such facility;
 - (2) Any owner or operator of a facility, or a generator, that accepts hazardous waste from ~~conditionally exempt very small quantity generators; and~~
 - (3) ~~Any transporter of hazardous waste who:~~
 - (A) ~~Transports hazardous waste into the United States from abroad; or~~
 - (B) ~~Mixes hazardous waste of different DOT shipping descriptions by placing them into a single container; and~~
 - ~~(4) Any other person that is required to meet hazardous waste generator standards as specified elsewhere in these regulations.~~
- (b) ~~Hazardous waste generators shall determine their generator category in accordance with § 7-305. This subchapter establishes requirements applicable to conditionally exempt Very small quantity generators, small quantity generators and large quantity generators of hazardous waste shall comply with the requirements applicable to their generator category as specified under §§ 7-306 through 7-308.~~
- Note:** A ~~conditionally exempt very small quantity~~ generator may choose to comply with more stringent requirements applicable to **small or large** quantity generators, and a small quantity generator may choose to comply with more stringent requirements applicable to large quantity generators.
- (c) A generator that stores hazardous waste is subject to the applicable requirements of **Subchapter 5**, unless it is one of the following:
- (1) ~~A very small quantity generator that meets the requirements of § 7-306;~~
 - (2) ~~A small quantity generator that meets the requirements of § 7-307; or~~
 - (3) ~~A large quantity generator that meets the requirements of § 7-308.~~
- (d) ~~Persons responding to an explosives or munitions emergency.~~
- ~~(e)(1) Persons are not required to comply with the standards of this subchapter provided that~~

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they are responding to an explosives or munitions emergency:

- ~~(A)~~ That presents an immediate threat to human health, safety, property, or the environment from the known or suspected presence of military munitions, or other explosive materials or devices, as determined by an explosive or munitions emergency response specialist; or
- ~~(B)~~ When a federal, state or local official, acting within the scope of official responsibilities, or an emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official may authorize the removal of the waste by transporters that do not have EPA identification numbers, and not subject to the manifest requirements of **subchapter 7** of these regulations.
- ~~(2)~~ When a military response specialist responds to an emergency pursuant to **subsection (e)(2)-(d)(1)(B) of this section** the specialist's organizational unit shall retain records for three years that identify the dates of the response, the persons responding, the type and description of material addressed, and that material's disposition.
- ~~(3)~~ **40 CFR § 266.205** identifies when the storage requirements, including the generator storage requirements of this subchapter, apply to the storage of hazardous waste military munitions. The treatment and disposal of hazardous waste military munitions are subject to the applicable provisions of **subchapters 1 through 7** of these regulations.
- (e) All reverse distributors (as defined in § 7-1001) are subject to the requirements of subchapter 10 for the management of hazardous waste pharmaceuticals in lieu of this subchapter.
- (f) Each healthcare facility (as defined in § 7-1001) must determine whether it is subject to subchapter 10 for the management of hazardous waste pharmaceuticals, based on the total hazardous waste it generates per calendar month (including both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste). Very small quantity, small quantity and large quantity generators are subject to subchapter 10 as follows:
 - (1) A healthcare facility that is either a small quantity generator or a large quantity generator is subject to subchapter 10 for the management of hazardous waste pharmaceuticals in lieu of this part subchapter.
 - (2) A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, remains subject to § 7-306 and is not subject to subchapter 10, except for §§ 7-1006 and 7-1008 and the optional provisions of § 7-1005.
- (g) Any person who exports or imports hazardous wastes must comply with § 7-304(b) and

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the requirements for Transboundary Movements of Hazardous Waste for Recovery and Disposal (incorporated by reference through § 7-109(b)(5) of these regulations).

§ 7-302 PROHIBITIONS

The following activities are prohibited:

- (a) Disposal of hazardous waste by evaporation ~~is prohibited.~~
- (b) Dilution of hazardous waste subject to the land disposal restrictions of **40 CFR Part 268** is prohibited pursuant to **40 CFR § 268.3** (incorporated by reference through § 7-106 of these regulations).
- (c) The release of hazardous material into the surface or groundwater, or onto the land of the state is prohibited pursuant to **10 V.S.A. § 6616.**
- (d) The placement of hazardous waste in any landfill located in Vermont.
- (e) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill. Prior to disposal in a hazardous waste landfill, liquids must meet additional requirements as specified in 40 CFR §§ 264.314 and 265.314.

§ 7-303 HAZARDOUS WASTE DETERMINATION

Any person who generates a waste shall determine if that waste is a hazardous waste in accordance with § 7-202.

§ 7-304 NOTIFICATION, ~~AND~~ EPA IDENTIFICATION NUMBERS AND REGISTRATION

- (a) No generator shall treat, recycle, store, dispose of, transport, or offer for transportation, hazardous waste without having obtained a permanent EPA identification number by notifying the Secretary using the ~~Vermont Hazardous Waste Handler Site ID Identification Form (EPA Form 8700-12)~~ **Vermont Hazardous Waste Handler Site ID Identification Form (EPA Form 8700-12)** in accordance with § 7-104. As specified under § 7-104, the Secretary may issue a temporary identification number to persons who have generated hazardous waste only from an episodic event.
- (b) In accordance with § 7-104, a generator shall maintain an up-to-date ~~Vermont Hazardous Waste Handler Site Identification ID-Form (EPA Form 8700-12) filed on file~~ **Vermont Hazardous Waste Handler Site Identification ID-Form (EPA Form 8700-12) filed on file** with the Secretary that accurately describes current waste activity and waste generation. In addition:
 - (1) A small quantity generator shall re-notify the Secretary starting in 2021 and every

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- four years thereafter using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12). This re-notification shall be submitted by September 1st of each year in which re-notifications are required.
- ~~(+)(2)~~ A large quantity generator shall re-notify the Secretary by March 1 of each even-numbered year thereafter using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12). A large quantity generator may submit this re-notification as part of its Biennial Report required under § 7-708(a).
- ~~(c)~~ A recognized trader shall not arrange for import or export of hazardous waste without having received an EPA identification number from the Secretary.
- ~~(+)(d)~~ When completing a manifest, a generator shall use the EPA identification number that is assigned to the generator site at the time of shipment.
- ~~(d)(c)~~ In accordance with § 7-309(c)(2), a generator shall submit a Pre-closure Notification Form to the Secretary at least 90 days prior to the commencement of closure activities. All generators of hazardous waste shall register with the Secretary, renew the registration annually, and pay the hazardous waste generator registration fee specified in 3 V.S.A. § 2822. Initial registration shall be made by submitting a completed Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) (see § 7-104(a)). Annual renewal of the registration shall be accomplished by payment of the registration fee.

§ 7-305 ~~DETERMINING GENERATOR STATUS~~ CATEGORY DETERMINATION

- A generator's category is based on the amount of hazardous waste generated each month and may change from month to month. This section sets forth procedures to determine whether a generator is a very small quantity generator, a small quantity generator, or a large quantity generator for a particular month, as defined in § 7-103.
- ~~(a)~~ Generators of either acute hazardous waste or non-acute hazardous waste. A generator who either generates acute hazardous waste or non-acute hazardous waste in a calendar month shall determine its generator category for that month by doing the following:
- ~~(1)~~ Counting the total amount of hazardous waste generated in the calendar month;
 - ~~(2)~~ Subtracting from the total any amounts of waste exempt from counting as described in subsections (c) and (d) of this section; and
 - ~~(3)~~ Determining the resulting generator category for the hazardous waste generated using Table 1 of this section.
- ~~(b)~~ A generator who generates both acute hazardous waste and non-acute hazardous waste in the same calendar month shall determine its generator category for that month by doing

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the following:

- (1) Counting separately the total amount of acute hazardous waste and the total amount of non-acute hazardous waste generated in the calendar month;
- (2) Subtracting from each total any amounts of waste exempt from counting as described in subsections (c) and (d) of this section;
- (3) Determining separately the resulting generator categories for the quantities of acute and non-acute hazardous waste generated using Table 1 of this section; and
- (4) Comparing the resulting generator categories from subsection (b)(3) of this section and applying the more stringent generator category to the accumulation and management of both non-acute hazardous waste and acute hazardous waste generated for that month.

Table 1. Generator Categories Based on Quantity of Waste Generated in a Calendar Month

| <u>Quantity of acute hazardous waste generated in a calendar month</u> | <u>Quantity of non-acute hazardous waste generated in a calendar month</u> | <u>Quantity of residues from a cleanup of acute hazardous waste generated in a calendar month</u> | <u>Generator category</u> |
|--|--|---|--------------------------------------|
| <u>> 1 kg (2.2 pounds)</u> | <u>Any amount</u> | <u>Any amount</u> | <u>Large quantity generator</u> |
| <u>Any amount</u> | <u>> 1,000 kg (2,200 pounds)</u> | <u>Any amount</u> | <u>Large quantity generator</u> |
| <u>Any amount</u> | <u>Any amount</u> | <u>> 100 kg (220 pounds)</u> | <u>Large quantity generator</u> |
| <u>≤ 1 kg (2.2 pounds)</u> | <u>> 100 kg (220 pounds) and < 1,000 kg (2,200 pounds)</u> | <u>≤ 100 kg (220 pounds)</u> | <u>Small quantity generator</u> |
| <u>≤ 1 kg (2.2 pounds)</u> | <u>≤ 100 kg (220 pounds)</u> | <u>≤ 100 kg (220 pounds)</u> | <u>Very small quantity generator</u> |

(c) A generator who generates Vermont listed hazardous waste may average the amount of such waste generated over the six month period elapsed immediately prior to making its generator status determination. The generator shall add that average amount to the amount of other non-acute hazardous waste generated in the calendar month when determining its generator category.

(d) In determining the quantity of hazardous waste generated, a person shall count all

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hazardous wastes except:

- (1) Wastes exempted from regulation under §§ 7-203 and 7-204;
- (2) Hazardous waste when it is removed from on-site short-term storage ~~(it is counted when first generated)~~ so long as the hazardous waste was previously counted once;
- (3) Hazardous waste spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been previously counted once;
- (4) Hazardous waste produced by on-site treatment, including reclamation, of hazardous waste, so long as the hazardous waste that is treated was previously counted once;
- (5) Used oil managed in accordance with the standards set forth under subchapter 8 of these regulations;
- (6) Wastes managed in accordance with the universal waste standards set forth under subchapter 9 of these regulations; ~~or~~

Note: As provided for by § 7-203(s), wastes managed according to the standards of subchapter 9 are exempt from regulation under subchapters 1 through 7 except as specified in subchapter 9.

- ~~(7)~~ Hazardous waste that is an unused commercial chemical product (listed in §§ 7-210 through 7-215 or exhibiting one or more characteristics described in §§ 7-205 through 7-208) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to 40 CFR § 262.213. For purposes of this provision, the term eligible academic entity shall have the meaning as defined in § 7-103;
 - ~~(8)~~ Hazardous waste that is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in § 7-103;
 - ~~(9)~~ Hazardous waste that is managed as part of an episodic event in compliance with § 7-312; or
 - ~~(10)~~ Hazardous waste that is a hazardous waste pharmaceutical, as defined in § 7-1001, that is subject to or managed in accordance with subchapter 10 or is a hazardous waste pharmaceutical that is also a Drug Enforcement Administration controlled substance and is conditionally exempt under § 7-1007.
- ~~(e)~~ A generator is regulated as a conditionally exempt very small quantity generator, small quantity generator, or large quantity generator based upon the types and quantities of hazardous waste produced or handled, and shall comply with the requirements applicable to its generator category. ~~For the purpose of establishing generator status, a person may~~

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evaluate either:

- ~~(1) The amount of hazardous waste generated in each calendar month; or~~
- ~~(2) For any hazardous waste not defined as hazardous in 40 CFR Part 261 (i.e., waste regulated as hazardous by Vermont), the average amount generated over the six month period elapsed just prior to making the determination.~~

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~~§ 7-306~~ ~~CONDITIONALLY EXEMPT~~ VERY SMALL QUANTITY GENERATOR

(a) A generator is a ~~conditionally exempt very small quantity~~ generator if that person generates less than:

- (1) 220 pounds (100 kilograms) of hazardous waste in a calendar month; and
- (2) 2.2 pounds (1 kilogram) of acutely hazardous waste in a calendar month; and
- (3) 220 pounds (100 kilograms) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste in a calendar month; and

has accumulated less than 2,200 pounds (1000 kilograms) of hazardous waste, 2.2 pounds (one kilogram) of acutely hazardous waste, or 220 pounds (100 kilograms) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste at any time.

~~(b) If any person a very small quantity generator generates or accumulates hazardous wastes in amounts exceeding the limits specified in subsection (a) of this section, that person generator shall become at least a small quantity generator or a large quantity generator as determined under § 7-305, and is subject to full regulation under these regulations.~~

~~(b)(c)~~ A ~~conditionally exempt very small quantity~~ generator is exempt from the requirements of these regulations **except** as provided for in **subsections (c)(1) through (4) of this section:**

- (i) A ~~conditionally exempt very small quantity~~ generator must:
 - (A) Except for laboratories owned by an eligible academic entity as allowed under **subsection (d) of this section**, determine if waste generated is hazardous waste and keep records supporting hazardous waste **determinations** in accordance with the requirement of § 7-303;
 - (B) Maintain an up-to-date **Vermont Hazardous Waste Handler Site Identification ID-Form (EPA Form 8700-12)** and obtain an EPA identification number in accordance with §7-304;

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~~(C)~~ Comply with the annual generator registration and fee requirements of § 7-304(e):

~~(D)~~ Comply with the generator category determination requirements of § 7-305:

~~(E)~~ Conduct hazardous waste management operations in a manner that minimizes the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, groundwater, or surface water, which could threaten human health or the environment.

~~(F)~~ Manage containers holding hazardous wastes in accordance with the container management standards of §§ 7-311(f)(2) through (4), and as follows:

- (i) A container must be in good condition and chemically compatible with any waste stored therein;
- (ii) A container must remain closed except to add or remove waste; and
- (iii) Containers must be marked with the words "Hazardous Waste" and other words that identify the contents;

~~(G)~~ Store wastes in an area that meets the design standards of §§ 7-311(a)(1) through (3);

~~(H)~~ Manage tanks holding hazardous waste in accordance with the tank management requirements of 40 CFR § 265.201;

~~(I)~~ Comply with the annual generator registration and fee requirements of § 7-708(e);

~~Submit a biennial report, if requested by the Secretary under § 7-709; and~~

~~(J)~~ In the event of a discharge of hazardous waste or release of hazardous material, comply with the applicable emergency action requirements of § 7-105.

(2) A conditionally exempt very small quantity generator shall manage his or her own hazardous waste by any one of the following methods ensuring delivery of such waste only to:

(A) ~~Ensure delivery of the waste to a~~ An off-site hazardous waste treatment, storage or disposal facility which if located in the United States is permitted under 40 CFR Part 270, is in interim status under 40 CFR Parts 270 and 265, or is authorized to manage hazardous waste by a state with a hazardous waste management program approved under 40 CFR Part 271;

(B) ~~Ensure delivery of the waste to a~~ A certified solid waste management facility allowed to accept such waste under the terms of its certification;

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Note: Waste that is identified as hazardous waste under these regulations, including that generated by ~~conditionally exempt~~ very small quantity generators, is prohibited from disposal in all Vermont certified **discrete disposal** facilities (landfills).

Note: Hazardous waste may be sent by Vermont ~~conditionally exempt~~ very small quantity generators to municipal solid waste landfills or to non-municipal non-hazardous waste landfills in other states only as authorized by 40 CFR §§ ~~261.5(f)(3)(iv) and (v) and (g)(3)(iv) and (v)~~ 262.14(a)(5)(iv) and (v).

- (C) ~~Ensure delivery of the waste to a~~ facility that beneficially uses or reuses or legitimately recycles or reclaims its waste or treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation;
- (D) ~~Ensure delivery of the waste to another site. An off-site small or large quantity generator located in Vermont that is owned and operated by the owner/operator of under the control of the same person that is in control of the conditionally exempt very small quantity generator site provided:~~
- (i) ~~The off-site generator and that meets either the small quantity generator standards set forth in of § 7-307; or the large quantity generator standards set forth in of § 7-308, as appropriate;~~
 - (ii) ~~and~~ The off-site generator has notified the Secretary as such that it is accepting hazardous waste from the very small quantity generator using the Vermont Hazardous Waste Handler Site Identification ~~HD~~ Form (EPA Form 8700-12);
 - (iii) ~~The hazardous waste delivered to the off-site generator a site that meets either small or large quantity generator standards counts toward the generator status category of that site~~ the off-site generator; and
 - (iv) The very small quantity generator marks its container(s) of hazardous waste with the words "Hazardous Waste" and an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

"Control," for the purposes of this subsection, means the power to direct policies of the generator whether by ownership of stock, voting rights, or otherwise.

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except that contractors who operate on behalf of a different person as defined in § 7-103 shall not be deemed to “control” such generators.

~~(D)~~(E) ~~Ensure delivery of the waste to a~~ A collection event authorized by the Secretary to accept ~~conditionally exempt very small quantity generator waste;~~

~~(F)~~ Ensure delivery of ~~For wastes designated as universal waste, to a universal waste handler or destination facility in accordance with the standards set forth in subchapter 9.~~

~~(E)~~(G) ~~For airbag waste, an airbag waste collection facility or a designated facility subject to the requirements of § 7-203(y); or~~

~~(F)~~(H) ~~A facility that~~ otherwise treats, stores, or disposes of the waste provided if the very small quantity generator has submitted a written request for an alternative handling method to the Secretary and received written approval from the Secretary has stating that he or she has determined that the proposed handling method will not have an adverse impact on human health and the environment. A conditionally exempt generator shall not treat, store, or dispose of waste under this section until receiving written approval from the Secretary for such method.

(I) For pharmaceutical waste:

(i) A reverse distributor (as defined in § 7-1001), if the hazardous waste pharmaceutical is a potentially creditable hazardous waste pharmaceutical generated by a healthcare facility (as defined in § 7-1001).

(ii) A healthcare facility (as defined in § 7-1001) that meets the conditions in §§ 7-1003(l) and 7-1004(b), as applicable, to accept non-creditable hazardous waste pharmaceuticals and potentially creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator.

(3) ~~A conditionally exempt very small quantity generator may transport his or her own hazardous waste to a facility or an event described under § 7-306(c)(2) without complying with the transporter permitting requirements of subchapter 4 provided he or she complies with the requirements of § 7-105 (in the event of a release), with all applicable federal Department of Transportation (DOT) regulations, the regulations of states he or she transports waste through or delivers waste to, and any applicable Vermont Agency of Transportation regulations. A manifest is not required for such transport.~~

(4) ~~If a conditionally exempt very small quantity generator chooses to utilize a manifest, he or she must comply with all applicable manifest instructions.~~

(d) Laboratories owned by an eligible academic entity that chooses to be subject to the

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requirements of 40 CFR §§ 262.200 through 262.216 (Subpart K) are not subject to the requirements of subsections (c)(1)(A) of this section.

~~(e)(e) A very small quantity generator experiencing an episodic event may generate and accumulate hazardous waste in accordance with § 7-312.~~

§ 7-307 SMALL QUANTITY GENERATOR

- (a) ~~A generator is a small quantity generator~~ may accumulate hazardous waste on-site without a permit or interim status, and without complying with the requirements of subchapter 5 if that person meets the requirements of subsection (c) of this section and generates:
- (1) Greater than or equal to 220 pounds (100 kilograms) but less than 2,200 pounds (1,000 kilograms) of hazardous waste in a calendar month;
 - (2) Less than 2.2 pounds (1 kilogram) of acutely hazardous waste in a calendar month;
 - (3) Less than 220 pounds (100 kilograms) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste in a calendar month; and
 - (4) The quantity of hazardous waste accumulated on-site never exceeds 13,200 pounds (6,000 kilograms).
- (b) If any person generates or accumulates hazardous wastes in amounts exceeding the limits specified in this section, that person becomes a large quantity generator and is subject to the requirements of § 7-308.
- (c) A small quantity generator must:
- (1) Except for laboratories owned by an eligible academic entity as allowed under **subsection (d) of this section**, determine if any waste generated is a hazardous waste and keep records supporting hazardous waste determinations in accordance with the requirement of § 7-303;
 - (2) Store hazardous waste on-site no longer than **180 days from the date when the waste is first placed in short-term storage unless an extension of the short-term storage time limit is granted pursuant to § 7-311(c).**
 - ~~(A) 180 days from the date when the waste first started to accumulate, or;~~
 - ~~(B) For waste accumulated in containers according to § 7-310, 180 days from the date when the maximum amount of waste allowed under that section was reached.~~

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Note: Hazardous waste may not otherwise be stored on-site for a period of time greater than 180 days without first obtaining certification under **subchapter 5**.

- (3) Maintain an up-to-date ~~Vermont Hazardous Waste Handler Site Identification ID~~ **Form (EPA Form 8700-12)** and obtain an EPA identification number in accordance with § 7-304;
- (4) Comply with the **40 CFR Part 268** Land Disposal Restrictions (incorporated by reference through § 7-106 of these regulations);
- ~~(5)~~ Comply with the annual generator registration and fee requirements of § 7-304(e);
- ~~(6)~~ Comply with the generator category determination requirements of § 7-305;
- ~~(5)(7)~~ Comply with the general management standards of § 7-309;
- ~~(6)(8)~~ Except for laboratories owned by an eligible academic entity as allowed under **subsection (d) of this section**, accumulate hazardous waste in accordance with § 7-310;
- ~~(7)(9)~~ Comply with the short-term storage area standards of § 7-311;
- ~~(8)(10)~~ Comply with the exports of hazardous waste requirements of § 7-705 requirements for Transboundary Movements of Hazardous Waste for Recovery and Disposal (incorporated by reference through § 7-109(b)(5) of these regulations);
- ~~(9)~~ Comply with the imports of hazardous waste requirements of § 7-706;
- ~~(10)(11)~~ Comply with the exception reporting requirements of § 7-707;
- ~~(11)~~ Comply with the annual generator registration and fee requirements of § 7-708(e);
- (12) ~~Submit a biennial report~~ Comply with additional reporting, if required, under § 7-709;
 - ~~(A)~~ Comply with the recordkeeping requirements of § 7-710; and
- (13) Comply with the following emergency preparedness requirements for those areas of the facility where hazardous waste is generated and managed:
 - (A) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the generator facility within a short period of time) with the responsibility for coordinating all applicable emergency response measures specified in **subsection (D) of this section**. This employee is the emergency coordinator.
 - (B) Post the following information ~~in the immediate vicinity of all short term storage~~

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areas and locations where hazardous wastes are accumulated next to telephones or in areas directly involved in the generation and short-term storage of hazardous waste:

- (i) The name and emergency telephone numbers (~~office, cellular and home~~) of the emergency coordinator(s);
 - (ii) Location of fire extinguishers and spill control material, and, if present, fire alarm; and
 - (iii) The telephone number of the fire department, unless the facility has a direct alarm.
- (C) ~~Ensure that each employee is~~ all employees are thoroughly familiar with evacuation signals and routes, and proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations as well as and emergencies.
- (D) The emergency coordinator must respond to any emergencies that arise. The applicable responses are as follows:
- (i) In the event of a fire, call the fire department or, if appropriate, attempt to extinguish it using a fire extinguisher;
 - (ii) In the event of a ~~discharge of hazardous waste or a~~ release of hazardous material, comply with the applicable emergency action requirements of § 7-105;
 - (iii) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include:
 - (aa) Name, address, and EPA identification number of the generator;
 - (bb) Date, time, and type of incident (e.g., spill or fire);
 - (cc) Quantity and type of hazardous waste involved in the incident;
 - (dd) Extent of injuries, if any; and
 - (ee) Estimated quantity and disposition of recovered materials, if any.
- (d) Laboratories owned by an eligible academic entity that chooses to be subject to the requirements of **40 CFR §§ 262.200 through 262.216 (Subpart K)** are not subject to the

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requirements of **subsections (c)(1) and (c)(6)(8) of this section.**

- (c) A small quantity generator experiencing an episodic event may generate and accumulate hazardous waste in accordance with § 7-312.
- (f) A small quantity generators may accumulate on-site hazardous waste received from very small quantity generators under control of the same person (as defined in § 7-103), without a storage permit or interim status and without complying with the requirements of subchapter 5, and the notification requirements of § 7-104, provided that they comply with the following conditions.

“Control.” for the purposes of this section, means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate generator facilities on behalf of a different person shall not be deemed to “control” such generators.

- (1) The small quantity generator shall notify the Secretary in writing at least thirty (30) days prior to receiving the first shipment from a very small quantity generator(s); and
- (A) Identify on the form the name(s) and site address(es) for the very small quantity generator(s) as well as the name and business telephone number for a contact person for the very small quantity generator(s); and
- (B) Submits an updated Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) within 30 days after a change in the name or site address for the very small quantity generator.
- (2) The small quantity generator shall maintain records of shipments for three years from the date the hazardous waste was received from the very small quantity generator. These records must identify the name, site address, and contact information for the very small quantity generator and include a description of the hazardous waste received, including the quantity and the date the waste was received.
- (3) The small quantity generator shall comply with the requirements identified in this section for all hazardous waste received from a very small quantity generator. For purposes of the labeling and marking regulations in § 7-311(f), the small quantity generator must label the container or unit with the date the hazardous waste was received from the very small quantity generator. If the small quantity generator is consolidating incoming hazardous waste from a very small quantity generator with either its own hazardous waste or with hazardous waste from other very small quantity generators, the small quantity generator must label each container or unit with the earliest date any hazardous waste in the container was stored on site (i.e., placed in a short-term storage area).

§ 7-308 LARGE QUANTITY GENERATOR

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- (a) ~~A generator is a large quantity generator if~~ may accumulate hazardous waste on-site without a permit or interim status, and without complying with the requirements of subchapter 5 if that person meets the requirements of subsection (b) of this section and generates:
- (1) That person generates 2,200 pounds (1,000 kilograms) or more of hazardous waste in a calendar month; or
 - (2) That person generates 2.2 pounds (1 kilogram) or more of acutely hazardous waste in a calendar month; or
 - (3) That person generates 220 pounds (100 kilograms) or more of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste in a calendar month; or
 - (4) The quantity of hazardous waste accumulated on-site exceeds 13,200 pounds (6,000 kilograms) at any one time; or
 - (5) The quantity of acutely hazardous waste accumulated on-site equals or exceeds 2.2 pounds (1 kilograms) at any one time; or
 - (6) The quantity of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste, accumulated on-site equals or exceeds 220 pounds (100 kilograms) at any one time.
- (b) A large quantity generator must:
- (1) Except for laboratories owned by an eligible academic entity as allowed under **subsection (c) of this section**, determine if any waste generated is a hazardous waste and keep records supporting hazardous waste determinations in accordance with the requirement of § 7-303;
 - (2) Store hazardous waste on-site no longer than 90 days, or 180 days for wastewater treatment sludges from electroplating operations that meet the listing description for the hazardous waste code F006 and that are managed in accordance with the provisions of 40 CFR §§ 262.17(c) through (e), from the date when the waste is first placed in short-term storage unless an extension of the short-term storage time limit is granted pursuant to § 7-311(c).
 - (A) ~~90 days from the date when the waste first started to accumulate; or~~
 - (B) ~~For waste accumulated in containers according to § 7-310, 90 days from the date when the maximum amount allowed under that section was reached; or~~
 - (C) ~~180 days for wastewater treatment sludges from electroplating operations that meet~~

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~~the listing description for the hazardous waste code F006 and that are managed in accordance with the provisions of 40 CFR § 262.34(g).~~

Note: Hazardous waste may not be stored on-site for a period of time that exceeds any of the above timeframes without first obtaining certification under **subchapter 5**.

- (3) Maintain an up-to-date ~~Vermont Hazardous Waste Handler Site Identification ID Form (EPA Form 8700-12)~~ and obtain an EPA identification number in accordance with § 7-304;
- (4) Comply with the **40 CFR Part 268** Land Disposal Restrictions incorporated by reference through § 7-106 of these regulations;
- ~~(5)~~ Comply with the annual generator registration and fee requirements of § 7-304(e);
- ~~(6)~~ Comply with the generator category determination requirements of § 7-305;
- ~~(S)7)~~ Comply with the general management standards of § 7-309;
- ~~(6)8)~~ Except for laboratories owned by an eligible academic entity as allowed under **subsection (c) of this section**, accumulate hazardous waste in accordance with § 7-310;
- ~~(7)9)~~ Comply with the short-term storage area standards of § 7-311;
- ~~(8)10)~~ Comply with the exports of hazardous waste requirements of § 7-705 requirements for Transboundary Movements of Hazardous Waste for Recovery and Disposal (incorporated by reference through § 7-109(b)(5) of these regulations);
- ~~(9)~~ Comply with the imports of hazardous waste requirements of § 7-706;
- ~~(10)11)~~ Comply with the exception reporting requirements of § 7-707;
- ~~(11)12)~~ Submit a ~~Comply with the biennial reporting requirements of in accordance with §§ 7-708(a) and (c);~~
- (13) Comply with additional reporting, if required, under § 7-709;
- ~~(12)~~ Comply with the annual generator registration and fee requirements of § 7-708(e);
 - ~~(A)~~ Comply with the recordkeeping requirements of § 7-710;
- ~~(13)14)~~ Maintain a written contingency plan for the facility as described below Comply with the following preparedness, prevention, and emergency procedure requirements:

(A) A large quantity generator must have a contingency plan for the facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, ground water, or surface water. The plan must be carried out immediately whenever there is a fire, explosion or discharge of hazardous waste or hazardous waste constituents which could threaten human health or the environment. The contingency plan must contain:

- (i) A description of the actions facility personnel must take to comply with §§ 7-308(b)(14)(A) and 7-308(b)(14)(E) in response to fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, groundwater, or surface water at the facility.
- (ii) If the owner or operator-generator has already prepared a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 CFR Part 112 or 1510, or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements in this subchapter. The generator may develop one contingency plan that meets all regulatory standards.

Note: EPA recommends that the plan be based on the National Response Team's Integrated Contingency Plan Guidance ("One Plan").

- (iii) Arrangements agreed to ~~by~~ with the local police departments, fire departments, local hospitals, emergency response contractors, and state and local emergency response teams, or, if applicable, the Local Emergency Planning Committee, to coordinate emergency services pursuant to § 7-309(a)(4).
- (iv) **An up-to-date list of names and emergency telephone numbers of names, addresses, and phone numbers (office, cellular and home) of all persons qualified to act as emergency coordinator. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. In situations where the generator facility has an emergency coordinator continuously on duty because it operates 24 hours per day, every day of the year, the plan may list the staffed position (e.g., operations manager, shift coordinator, shift operations supervisor) as well as an emergency telephone number that can be guaranteed to be answered at all times.**
- (v) An up-to-date list of all emergency equipment at the facility **(such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. In addition, the plan must include the including**

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location, and a physical description of each item on the list listed, and a brief outline of its capabilities.

- (vi) An evacuation plan for generator personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) including signals to be used to begin evacuation, evacuation routes and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

- (B) Copies of the contingency plan and all revisions must be maintained at the facility and submitted to all local police and fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services. Documentation verifying that the most recent version of the contingency plan has been submitted to local emergency service providers must be maintained at the facility. A large quantity generator must maintain copies of the contingency plan and all revisions to the plan at its facility and comply with the following:
 - (i) Submit a copy of the contingency plan and all revisions to all local emergency responders (i.e., police departments, fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services). This document may also be submitted to the Local Emergency Planning Committee, as appropriate.

 - (ii) A large quantity generator that first becomes subject to these provisions after May 30, 2017 or a large quantity generator that is otherwise amending its contingency plan must at that time submit a quick reference guide of the contingency plan to the local emergency responders identified at subsection (i) of this section or, as appropriate, the Local Emergency Planning Committee. The quick reference guide must include the following elements:
 - (aa) The types/names of hazardous wastes in layman's terms and the associated hazard associated with each hazardous waste present at any one time (e.g., toxic paint wastes, spent ignitable solvent, corrosive acid);

 - (bb) The estimated maximum amount of each hazardous waste that may be present at any one time;

 - (cc) The identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff;

 - (dd) A map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes;

 - (cc) A street map of the facility in relation to surrounding businesses, schools and residential areas to understand how best to get to the facility and also evacuate citizens and workers;

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- (ff) The locations of water supply (e.g., fire hydrant and its flow rate);
- (gg) The identification of on-site notification systems (e.g., a fire alarm that rings off site, smoke alarms); and
- (hh) The name of the emergency coordinator(s) and 7/24-hour emergency telephone number(s) or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator.
- ~~(B)(iii)~~ Update, if necessary, their quick reference guides, whenever the contingency plan is amended and submit these documents to the local emergency responders identified at subsection (i) of this section or, as appropriate, the Local Emergency Planning Committee.
- (C) The contingency plan must be reviewed and immediately amended by the large quantity generator ~~amended whenever:~~
- (i) Applicable regulations are revised;
 - (ii) The plan fails in an emergency;
 - (iii) The generator facility changes (i.e., in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;
 - (iv) The list of emergency coordinators changes; or
 - (v) The list of emergency equipment changes.
- (D) At all times there must be at least one employee either at the facility, or available to respond to an emergency by reaching the facility within a short period of time, with the responsibility for coordinating all emergency response measures. This emergency coordinator must be familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the locations and characteristics of waste handled, the location of all records within the facility and the facility layout. This person must have the authority to commit the resources needed to carry out the contingency plan. At all times, there must be at least one employee either on the generator's premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures and implementing the necessary emergency procedures outlined in subsection (b)(14)(E) of this section. Although responsibilities may vary depending on factors such as type and variety of hazardous waste(s) handled by the facility, as well as type and

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complexity of the facility, this emergency coordinator must be thoroughly familiar with all aspects of the generator's contingency plan, all operations and activities at the facility, the location and characteristics of hazardous waste handled, the location of all records within the facility, and the facility's layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

(E) Emergency Procedures

(i) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his or her designee when the emergency coordinator is on call) must do the following immediately:

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(i)(aa) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

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(i)(bb) Notify appropriate state or local agencies with designated response roles if their help is needed;

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(ii) Whenever there is a release, fire, or explosion, the emergency coordinator shall perform the following concurrently:

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(ii)(aa) Immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of the facility records or manifests and, if necessary, by chemical analysis. If a release has occurred, identify the source, character, amount and extent of any released materials by record review or chemical analysis;

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(ii)(bb) Assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions). Assess hazards to human health and the environment, considering all direct and indirect effects;

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(iii) If the emergency coordinator determines that the facility has had a release, fire, or explosion or release which could threaten human health, or the environment, outside the facility, the emergency coordinator must report the findings as follows:

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(aa) If the assessment indicates that evacuation of local areas may be advisable, the emergency coordinator must immediately notify appropriate local authorities. The emergency coordinator must be available to help

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appropriate officials decide whether local areas should be evacuated; and

- (bb) The emergency coordinator must immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:

Name and telephone number of reporter;

Name and address of the generator;

Time and type of incident (e.g., release, fire);

Name and quantity of material(s) involved, to the extent known;

The extent of injuries, if any; and

The possible hazards to human health, or the environment, outside the facility.

- ~~(aa) Determine if local evacuation may be necessary; and, if so, notify appropriate local authorities and be available to assist local authorities in evacuation measures; and~~
- ~~(bb) Notify the National Response Center (800-424-8802) and indicate his or her name and telephone number; name and address of the facility; time and type of incident; quantity of material(s) involved to the extent known; the extent of any injuries; and the possible hazards to human health or the environment outside the facility.~~

~~(vii)(iv) During an emergency, the emergency coordinator must take ~~Take all~~ reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur, or spread to other hazardous waste at the generator's facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released hazardous waste, and removing or isolating containers;~~

~~(viii)(v) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate;~~

~~(viii)(vi) Immediately after an emergency, the emergency coordinator must provide for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire or explosion at the facility. Unless the generator can demonstrate that the~~

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recovered material is not a hazardous waste, then it is a newly generated hazardous waste that must be managed in accordance with all the applicable requirements of these regulations.

~~(ix)(vii)~~ Ensure that in the affected area(s) of the facility, no hazardous waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed and all emergency equipment listed in the contingency plan is cleaned and restored to a useable condition fit for its intended use before operations are resumed.

~~(F)(viii)~~ The generator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the generator must submit a written report on the incident to the Secretary. ~~Whenever there is an imminent or actual emergency situation, the owner or operator shall:~~

~~(i)~~ Notify the Secretary that the facility is in compliance with ~~subsection (b)(14)(E)(ix) of this section before operations are resumed in the affected areas of the facility:~~

~~(ii)~~ Maintain on file with the contingency plan a record of the time, date and details of any incident that requires implementing the contingency plan; and

~~(iii)~~ Within 10 days after the incident, submit a written report on the incident to the Secretary. The report must include:

~~(aa)~~ Name, address and telephone number of ~~the owner or operator~~ generator;

~~(bb)~~ Name address and telephone number of the facility;

~~(ee)(bb)~~ Date, time and type of incident (e.g., fire, explosion);

~~(dd)(cc)~~ Name and quantity of material(s) involved;

~~(ee)(dd)~~ The extent of injuries, if any;

~~(ff)(cc)~~ An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

~~(gg)(ff)~~ Estimated quantity and disposition of recovered material that resulted from the incident.

(15) Personnel Training

~~(14)(A)~~ Maintain a training program for facility personnel as described below:

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~~(A)(i)~~ ~~Facility personnel must successfully complete a program of classroom or on the job instruction that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of these regulations. Facility personnel must successfully complete a program of classroom instruction, online training (e.g., computer-based or electronic), or on-the-job training that teaches them to perform their duties in a way that ensures compliance with these regulations. The large quantity generator must ensure that this program includes all the elements described in the document required under subsection (b)(15)(D)(iii) of this section.~~

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~~(B)(ii)~~ This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

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~~(C)(iii)~~ At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems, including, where applicable:

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~~(i)(aa)~~ Waste handling procedures;

~~(ii)(bb)~~ Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment;

~~(iii)(cc)~~ Key parameters for automatic waste feed cutoff systems;

~~(iv)(dd)~~ Communications or alarm systems;

~~(v)(ee)~~ Response to fires or explosions;

~~(vi)(ff)~~ Response to groundwater contamination incidents; and

~~(vii)(gg)~~ Shutdown of operations.

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~~(iv)~~ For facility employees that receive emergency response training pursuant to Occupational Safety and Health Administration regulations 29 CFR 1910.120(p)(8) and 1910.120(q), the large quantity generator is not required to provide separate emergency response training pursuant to this section, provided that the overall facility training meets all requirements of this section.

~~(D)(B)~~ Facility personnel must successfully complete the program required in subsections (b)(15)(A) through (C) of this section within six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations

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must not work in unsupervised positions until they have completed the training requirements of **subsections (b)(15)(A) through (C) of this section.**

~~(E)(C)~~ At least once each calendar year, facility personnel must take part in a review of the initial training required under **subsections (b)(15)(A) through (C) of this section.**

~~(F)(D)~~ The ~~owner or operator~~ **large quantity generator** must maintain the following documents and records at the facility:

- (i) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
- (ii) **A written job description for each position listed under subsection (b)(15)(F)(i) (b)(15)(D)(i) of this section, which includes the This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications and duties of facility personnel assigned to each position;**
- (iii) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under **subsection (b)(15)(F)(i) (b)(15)(D)(i) of this section;**
- (iv) **Records that document that the training or job experience, required under subsections (b)(15)(A) through (C) of this section, has been given to and completed by facility personnel in accordance with subsections (b)(15)(A) through (E) of this section; and**

Note: Documentation of training is required for at least one employee per satellite accumulation area.

- (v) Training records on current personnel must be kept on ~~current personnel~~ until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

(16) In the event of a discharge of hazardous waste or release of hazardous material, comply with the applicable emergency action requirements of § 7-105.

(17) Closure

When closing a short-term storage area (e.g., container storage area, tank, drip pad, containment building) at the facility (i.e., partial closure), and when closing the generator facility (i.e., final closure), a large quantity generator must implement

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closure in accordance with the following conditions, as applicable:

- (A) Closure performance standard. A large quantity generator must close the short-term storage area(s) and the generator facility in a manner that:
- (i) Minimizes the need for further maintenance by controlling, minimizing or eliminating, to the extent necessary to protect human health and the environment, the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the groundwater or surface waters or to the atmosphere; and
 - (ii) Removes or decontaminates all contaminated equipment, structures and soil and any remaining hazardous waste residues from short-term storage areas including containment system components (e.g., pads, liners, etc.), contaminated soils and subsoils, bases, and structures and equipment contaminated with waste.
 - (iii) If the generator demonstrates that any contaminated soils and wastes cannot be practicably removed or decontaminated as required in subsection (A)(ii) of this section, then the short-term storage area is considered to be a landfill and the generator must close the area and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (40 CFR § 265.310). In addition, for the purposes of closure, post-closure, and financial responsibility, such an area is then considered to be a landfill, and the generator must meet all of the requirements for landfills specified in subchapter 5 of these regulations and subparts G and H of 40 CFR part 265.
- (B) Pre-closure notification form.
- (i) Partial closure. At least 30 days prior to commencement of partial closure activities, a large quantity generator must submit a completed Pre-closure Notification Form to the Secretary. The form shall be signed in accordance with signatory requirements of § 7-108 of these regulations.
 - (ii) Final closure. At least 60 days prior to the commencement of final closure activities, a large quantity generator must submit a completed Pre-closure Notification Form to the Secretary. The form shall be signed in accordance with signatory requirements of § 7-108 of these regulations. On a case-by-case basis, the Secretary may approve a written request from a large quantity generator to submit a Pre-closure Notification Form less than 90 days prior to the commencement of final closure.
- (C) Closure plan. Based on the information provided in the Pre-closure Notification Form, or otherwise on a case-by-case basis, the Secretary may require a large

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quantity generator to submit a closure plan for review and approval by the Secretary. A closure plan shall be signed in accordance with signatory requirements of § 7-108 of these regulations and demonstrate how a large quantity generator will complete closure of the short-term storage area(s) or the facility by:

- (i) Identifying all portions of the facility that will be subject to closure, including, if applicable:
 - (aa) Short-term storage area(s);
 - (bb) Equipment and structures to be removed and/or decontaminated during closure; and
 - (cc) Locations at the facility where discharges of hazardous waste or releases of hazardous materials are likely to be encountered during closure (e.g., soil beneath an indoor short-term storage area located on a cracked concrete slab);
- (ii) Providing a schedule for all closure activities; and
- (iii) Describing:
 - (aa) How each portion of the facility identified pursuant to subsection (C)(i) of this section will be closed in accordance with this section;
 - (bb) The methods for removing, transporting, treating, storing or disposing of all hazardous wastes including any hazardous waste generated in the process of closure;
 - (cc) The criteria for determining the extent of decontamination necessary to satisfy the closure performance standard of subsection (A) of this section (e.g., visual observation, analytical testing);
 - (dd) The procedures for removing and/or decontaminating the portions of the facility undergoing closure;
 - (ee) The sampling and analytical testing methods to evaluate effectiveness of decontamination procedures, and the methods for sampling and testing surrounding soils as appropriate; and
 - (ff) Any other activities necessary to ensure compliance with the closure performance standard of subsection (A) of this section.
- (D) Closure requirements. Closure shall be performed in accordance with the following requirements, as applicable:

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- (i) All short-term storage areas subject to closure, and the facility (if subject to closure) shall be closed in accordance with the closure performance standard of subsection (A) of this section;
 - (ii) If a closure plan is required by the Secretary, closure activities shall be conducted in accordance with the closure plan as approved by the Secretary;
 - (iii) All containers, tanks, liners, bases, materials, equipment, structures, soils, and debris contaminated with hazardous waste or hazardous waste residues shall be decontaminated or disposed of at a designated facility;
 - (iv) All tank systems shall be closed in accordance with the requirements of 40 CFR §§ 265.197;
 - (v) All hazardous waste, including any hazardous waste generated in the process of closure, shall be managed in accordance with these regulations;
 - (vi) All hazardous waste shall be removed to a designated facility in accordance with short-term storage timeframes and prior to the completion of closure; and
 - (vii) Actual or suspected releases of hazardous materials or discharges of hazardous wastes shall be reported and managed in accordance with § 7-105 (Emergency and Corrective Actions) of these regulations.
- (E) Notification and certification of closure completion.
- (i) Within 90 days of completion of closure, submit a revised Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) to the Secretary that the closure performance standard of subsection (A) of this section has been met. If the large quantity generator cannot meet the closure performance standard of subsection (A) of this section, notify the Secretary using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) that it will close as a landfill under 40 CFR § 265.310 in the case of a container, tank or containment building unit(s), or for a facility with drip pads, notify using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) that it will close under the standards of 40 CFR § 265.445(b).
 - (ii) On a case-by-case basis, the Secretary may also require certification by an independent professional engineer licensed in Vermont that closure has been completed in accordance with the requirements of this section. Such certification shall be signed in accordance with the requirements of § 7-108 of these regulations.
- (F) Any generator identified as a large quantity generator (i.e., submitted a Hazardous Waste Handler Site Identification Form (EPA Form 8700-12)) for at least a

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continuous one-year period within the five-year period prior to closure is subject to the requirements of this section regardless of their generator category at the time of closure.

- (c) Laboratories owned by an eligible academic entity that chooses to be subject to the requirements of 40 CFR §§ 262.200 through 262.216 (Subpart K) are not subject to the requirements of subsections (b)(1) and (b)(6)(8) of this section.
- (d) A large quantity generator may accumulate on-site hazardous waste received from very small quantity generators under control of the same person (as defined in § 7-103), without a storage permit or interim status and without complying with the requirements of subchapter 5, and the notification requirements of § 7-104, provided that they comply with the following conditions.

“Control,” for the purposes of this section, means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate generator facilities on behalf of a different person shall not be deemed to “control” such generators.

- (1) The large quantity generator shall notify the Secretary at least thirty (30) days prior to receiving the first shipment from a very small quantity generator(s) using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12); and
- (A) Identify on the form the name(s) and site address(es) for the very small quantity generator(s) as well as the name and business telephone number for a contact person for the very small quantity generator(s); and
- (B) Submits an updated Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) within 30 days after a change in the name or site address for the very small quantity generator.
- (2) The large quantity generator shall maintain records of shipments for three years from the date the hazardous waste was received from the very small quantity generator. These records must identify the name, site address, and contact information for the very small quantity generator and include a description of the hazardous waste received, including the quantity and the date the waste was received.
- (3) The large quantity generator shall comply with the requirements identified in this section for all hazardous waste received from a very small quantity generator. For purposes of the labeling and marking regulations in § 7-311(f), the large quantity generator must label the container or unit with the date the hazardous waste was received from the very small quantity generator. If the large quantity generator is consolidating incoming hazardous waste from a very small quantity generator with either its own hazardous waste or with hazardous waste from other very small quantity generators, the large quantity generator must label each container or unit with the earliest date any hazardous waste in the container was stored on site (i.e.,

placed in a short-term storage area).

§ 7-309 GENERAL MANAGEMENT STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS

(a) Preparedness and Prevention

Small and large quantity generator facilities must be maintained and operated to minimize the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, groundwater, or surface water which could threaten human health or the environment.

(1) Required equipment

~~All facilities must be equipped with the following, unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below. All areas where hazardous waste is either generated or accumulated must be equipped with the following items (unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below or the actual waste generation or accumulation area does not lend itself for safety reasons to have a particular kind of equipment specified below):~~

- (A) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;
- (B) A device, such as a cellular telephone or hand-held two-way radio, immediately available at the scene of operations, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;
- (C) Portable fire extinguishers, fire control equipment (including special extinguishing equipment such as that using foam, inert gas or dry chemicals), spill control and decontamination equipment; and
- (D) Water at adequate volume and pressure to supply water hose streams or foam producing equipment, or automatic sprinklers or water spray systems.

Note: Small and large quantity generators may determine the most appropriate locations to locate equipment necessary to prepare for and respond to emergencies.

(2) Testing and maintenance of equipment

All communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

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(3) Access to communications or alarm system

- (A) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access (i.e., direct and unimpeded access) to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under § 7-309 subsection (a)(1) of this section.
- (B) ~~If there is ever~~ In the event there is just one employee on the premises while the facility is operating, that employee must have immediate access (i.e., direct and unimpeded access) to a device, such as a cellular telephone (immediately available at the scene of operation) capable of summoning external emergency assistance, unless such a device is not required under § 7-309 subsection (a)(1) of this section.

(4) Arrangements with local authorities

~~The owner or operator must attempt to make the following arrangements as appropriate for the type of waste handled at their facility and the potential need for the services of these organizations. Refusal of any authorities to enter into such arrangements must be documented.~~

- ~~(A) Arrangements to familiarize police departments, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where the facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;~~
- ~~(B) Agreements designating primary emergency authority to a specific police department and a specific fire department and agreements with any others to provide support to the primary emergency authority;~~
- ~~(C) Agreements with emergency response teams, emergency response contractors and equipment suppliers; and~~
- ~~(D) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.~~
- (A) Small and large quantity generators must attempt to make arrangements with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility. Arrangements may be made with the Local Emergency Planning Committee, if it is determined to be the appropriate organization with which to make arrangements.
- (i) A small or large quantity generator attempting to make arrangements with its

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local fire department must determine the potential need for the services of the local police department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals.

- (ii) As part of this coordination, the small or large quantity generator shall attempt to make arrangements, as necessary, to familiarize the above organizations with the layout of the facility, the properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes as well as the types of injuries or illnesses that could result from fires, explosions, or releases at the facility.
 - (iii) Where more than one police or fire department might respond to an emergency, the small or large quantity generator shall attempt to make arrangements designating primary emergency authority to a specific fire or police department, and arrangements with any others to provide support to the primary emergency authority.
- (B) Small and large quantity generators shall maintain records documenting the arrangements with the local fire department as well as any other organization necessary to respond to an emergency. This documentation must include documentation in the operating record that either confirms such arrangements actively exist or, in cases where no arrangements exist, confirms that attempts to make such arrangements were made.
- (C) A facility possessing 24-hour response capabilities may seek a waiver from the authority having jurisdiction (AHJ) over the fire code within the facility's state or locality as far as needing to make arrangements with the local fire department as well as any other organization necessary to respond to an emergency, provided that the waiver is documented in the operating record.
- (5) Small and large quantity generators must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.
- (b) Offering Hazardous Waste for Transportation
- (1) Before transporting hazardous waste or offering hazardous waste for transportation off-site, small and large quantity generators shall ~~shall~~ must:
 - (A) Package the waste in accordance with the applicable Department of Transportation regulations under 49 CFR Parts 173, 178, and 179;
 - (B) ~~Mark and label~~ Label each package in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR Part 172.

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- (C) ~~Mark each package in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR Part 172.~~ For each container of 119 gallons or less used in such transportation, such marking shall include mark with the following words and information ~~displayed in~~ accordance with the requirements of 49 CFR § 172.304:
- (i) HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.
 - (ii) Generator's Name and Address _____.
 - (iii) Generator's EPA Identification Number _____.
 - (iv) Manifest Tracking Number _____.
 - (v) EPA Hazardous Waste Code(s) _____.
- (D) A generator may use a nationally recognized electronic system, such as bar coding, to identify the EPA Hazardous Waste Code(s), as required by subsections (1)(C)(v) and (1)(E) of this section.
- (E) Lab packs that will be incinerated in compliance with 40 CFR §268.42(c) are not required to be marked with EPA Hazardous Waste Code(s), however such lab packs shall be marked with the following codes, where applicable: D004, D005, D006, D007, D008, D010, and D011.
- ~~(F)~~ Placard or offer the initial transporter the appropriate placards according to federal Department of Transportation regulations for hazardous materials under 49 CFR Part 172, Subpart F.
- (2) Small and large quantity generators shall not offer hazardous waste, as defined in 40 CFR Part 261, to:
- (A) Transporters or to treatment, storage, recycling, or disposal facilities that have not received an EPA identification number; or
 - (B) Transporters that do not possess a permit to transport hazardous waste in Vermont.
- (3) For any Vermont-listed hazardous waste not defined as hazardous in 40 CFR Part 261 (i.e., waste regulated as hazardous by Vermont), a small or large quantity generator shall not offer such waste to a transporter that does not possess a permit to transport hazardous waste in Vermont unless the Secretary has provided prior written authorization to do so after determining that the practice will not pose a threat to human health or the environment.

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- (4) Small and large quantity generators shall not transport, or offer for transport, or otherwise cause its hazardous waste, as defined in 40 CFR Part 261, to be sent to a facility that is not only to a designated facility, or not otherwise authorized by the Secretary to receive the generator's hazardous waste.
- (5) Small and large quantity generators shall not transport or offer for transport Vermont-listed hazardous waste that is not defined as hazardous in 40 CFR Part 261 (i.e., waste regulated as hazardous by Vermont), to a facility that is not either:
- (A) A designated facility; or
 - (B) A facility that is not a designated facility; located in a state other than Vermont, provided the facility ~~can~~ is authorized to receive such waste under applicable state and local laws, regulations and ordinances.
- (6) Except as provided in **subsection (b)(7) of this section**, small and large quantity generators shall not transport or offer for transport a hazardous waste for off-site treatment, storage, recycling, disposal or use without completing the generator's portion of the hazardous waste manifest in accordance with the applicable requirements of **subchapter 7**, unless exempted from these requirements under § 7-608 (Recycle/Reuse).

Note: Outside of Vermont, the hazardous waste manifest may not serve to replace the shipping papers required by the U. S. Department of Transportation under **Subpart C of 49 CFR Part 172**, if the waste being shipped is Vermont-listed hazardous waste not defined as hazardous in 40 CFR Part 261 (i.e., waste regulated as hazardous by Vermont).

- (7) In lieu of using a manifest, small or large quantity generators shipping Vermont-listed hazardous waste, not defined as hazardous in 40 CFR Part 261 (i.e., waste regulated as hazardous by Vermont), to a facility other than a designated facility, as provided for under **subsection (b)(5)(B) of this section**, shall comply with the following:
- (A) Maintain a record on-site of each shipment as follows:
 - (i) The record for each shipment must include the following information:
 - (aa) The name, address, and telephone number of the facility to which the waste was sent;
 - (bb) The name, address, and EPA identification number of the transporter that picked up the waste;
 - (cc) The type and quantity of waste shipped; and

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- (dd) The date of shipment.
- (ii) The record for each shipment must be retained for three years.
- (B) Submit to the Secretary, within 10 days of the date of shipment, a copy of the DOT shipping papers required by the U. S. Department of Transportation under **Subpart C of 49 CFR Part 172** and the following information if it is not already addressed in the shipping papers:
 - (i) The name, address, and EPA identification number of the generator;
 - (ii) The type and quantity of waste shipped;
 - (iii) The Vermont hazardous waste identification code(s) for the waste shipped;
 - (iv) The name, address, and telephone number of the facility to which the waste was sent; and
 - (v) The treatment method to be used by the facility to which the waste was sent.
- (8) A small or large quantity generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of § 7-704~~(g)(i)~~ may accumulate the returned waste on-site in accordance with §§ 7-307(c)(4), ~~(7)(9)~~, and ~~(14)(13)~~ or §§ 7-308(b)(4), ~~(7)(9)~~, (14), (15) and (16), depending on the amount of hazardous waste on-site in that calendar month. Upon receipt of the returned shipment, the small or large quantity generator must:
 - (A) Sign **Item 18c** of the manifest, if the transporter returned the shipment using the original manifest; or
 - (B) Sign **Item 20** of the manifest, if the transporter returned the shipment using a new manifest.

~~(e) Closure~~

- ~~(1) A generator who no longer generates or manages hazardous waste at a site must, within 90 days of cessation of hazardous waste activities, close the site in a manner that:
 - ~~(A) Minimizes the need for further maintenance;~~
 - ~~(B) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition~~~~

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~~products to the groundwater or surface waters or to the atmosphere; and~~

- ~~(C) Complies with the closure requirements of this section, and for closure of tank systems, the requirements of 40 CFR §§ 265.197.~~

~~An extension to the 90-day closure period may be granted on a case-by-case basis.~~

- ~~(2) A Pre-closure Notification Form completed in conformance with Vermont's Hazardous Waste Generator Closure Procedure must be submitted to the Secretary at least 90 days prior to the commencement of closure activities. Based on the information provided in the Pre-closure Notification Form, the Secretary may require submittal of a closure plan.~~
- ~~(3) A generator who no longer generates or manages hazardous waste at a site shall remove all hazardous waste to a designated facility. Remaining containers, tanks, liners, bases, materials, equipment, structures, soil and debris contaminated with hazardous waste or hazardous waste residues shall be decontaminated or disposed of at a designated facility.~~
- ~~(4) A generator shall submit to the Secretary, within 90 days of completion of closure, certification, signed in accordance with § 7-108, that closure was completed in accordance with the provisions of subsections (e)(1) and (3) of this section. The generator shall make this certification and the Secretary may also require certification by an independent professional engineer licensed in Vermont.~~
- ~~(5) Any generator identified as a small or large quantity generator on or after October 15, 2006, is subject to the requirements of this section regardless of their generator status at the time of closure.~~
- ~~(6) When a generator closes a portion of a facility, or ceases operations for an indefinite period of time, partial closure shall be conducted. The generator must notify the Secretary of any partial closure. Partial closure must, at a minimum, minimize the need for further maintenance of the facility, or the closed portion of the facility, and ensure that hazardous wastes from discontinued processes and activities are removed to a designated facility.~~

§ 7-310 ACCUMULATION OF HAZARDOUS WASTE

(a) Satellite Accumulation of Hazardous Waste

- (1) Small and large quantity generators may accumulate as much as one cubic yard of non-liquid Vermont-listed hazardous waste not defined as hazardous in 40 CFR Part 261 (i.e., waste regulated as hazardous by Vermont), **one quart of liquid acutely hazardous waste, 2.2 pounds (1 kg) of solid acute hazardous waste, or 55 gallons of any other hazardous waste** in containers at or near any point of generation where

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wastes initially accumulate, which is under the control of the operator of the process generating the waste, without obtaining certification as a storage facility provided that:

- (A) ~~The waste and the container are chemically compatible;~~ is made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be accumulated, so that the ability of the container to contain the waste is not impaired.
- (B) ~~The container is in good condition;~~ If a container holding hazardous waste is not in good condition, or if it begins to leak, the generator must immediately transfer the hazardous waste from this container to a container that is in good condition and does not leak, or immediately transfer and manage the waste in a short-term storage area operated in compliance with § 7-311.
- (C) ~~The container is both~~ located within a structure that sheds rain and snow and upon an impervious surface;
- (D) The container holding the waste remains closed except:
 - (i) When adding, removing, or consolidating to add or remove waste; or
 - ~~(ii)~~ When temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.
- (E) The container is marked or labeled with the following:
 - (i) ~~The~~ the words "Hazardous Waste" and
 - (ii) ~~other words that identify the contents;~~ An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).
- ~~(F)~~ The container is managed in accordance with the container management requirements of §§ 7-311(b)(3) and 7-311(f)(4);
- (G) ~~The generator indicates on the container label the date, w~~ When either acute hazardous waste or non-acute hazardous waste has accumulated in excess of the amounts listed in subsection (a) of this section, or a container holding a lesser

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~~amount of such waste becomes full, one cubic yard of non-liquid hazardous waste that is not defined as hazardous in 40 CFR Part 261, one quart of acutely hazardous waste, or 55 gallons of any other hazardous waste has been accumulated in the container, and the generator shall:~~

- ~~(i) Mark the date on the container or container label; and~~
- ~~(ii) Within three consecutive calendar days of the date marked on the container or container label, moves the container to a short-term storage area or an off-site designated facility within three days of reaching the specified amount.~~

~~(H)~~
~~(E) During the three- consecutive calendar days identified in subsection (G)(ii) of this section period, for the period of time the container remains in the satellite accumulation area, the generator must shall continue to comply with the §§ 7-311(b)(3) and 7-311(f)(4) container management requirements. Once placed in a short-term storage area, the container shall be managed in accordance with all applicable requirements of § 7-311, and~~

~~(2) All full containers are dated when filled and moved to a short-term storage area within three days of becoming full.~~

(2) Satellite accumulation areas operated by:

(A) Small quantity generators must meet the preparedness and prevention requirements of §§ 7-307(c)(13) and 7-309(a).

(B) Large quantity generators must meet the preparedness, prevention and emergency procedure requirements of §§ 7-308(b)(14) and 7-309(a).

(b) Accumulation of Hazardous Waste in a Short-Term Storage Area

Small and large quantity generators may accumulate as much as one cubic yard of non-liquid Vermont-listed hazardous waste that is not defined as hazardous in 40 CFR Part 261 (i.e., waste regulated as hazardous by Vermont), one quart of liquid acutely hazardous waste, 2.2 pounds (1 kg) of solid acute hazardous waste, or 55 gallons of any other hazardous waste in containers in a short-term storage area without obtaining certification as a storage facility provided that:

(1) The waste is brought directly from the point of generation to the short-term storage area by the end of each work shift (not to exceed 12 hours) under the following conditions:

(A) The waste has been collected in a shift accumulation container that is:

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- (i) Chemically compatible with any accumulated waste;
 - (ii) In good condition;
 - (iii) Kept closed except to add or remove waste; and
 - (iv) Marked or labeled with the words “hazardous waste” and other words that identify the contents of the container;
- (B) The waste is brought directly to the short-term storage area by a trained employee; and
- (C) No more than one shift accumulation container is in use ~~for each per process line wastestream at each point of generation at any time;~~ **for each per process line**
- (2) Any accumulation container maintained in the short-term storage area is:
- (A) Managed in accordance with the short-term storage requirements of § 7-311 with the exception that the container need not be marked with the date that the container was first used to accumulate hazardous waste;
 - (B) Marked to indicate that it is an accumulation container, and provide information to describe the point of waste generation; and
 - (C) Marked to identify the date **when one cubic yard** of non-liquid **Vermont-listed** hazardous waste ~~that is not defined as hazardous in 40 CFR Part 261,~~ one quart of acutely hazardous waste, or 55 gallons of any other hazardous waste has been accumulated in the container, or when a container of smaller capacity becomes full.
- ~~(c) Only one accumulation container per process line wastestream may be used under this section at any one time. That is, a particular process line wastestream may be accumulated under the provisions of either subsection (a) of this section or subsection (b) of this section, but not both.~~

§ 7-311 SHORT-TERM STORAGE AREA STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS

- (a) Short-Term Storage Area Design Standards
- (1) Generators must accumulate and store hazardous waste upon an impervious surface except for spill clean-up debris that is generated in response to an emergency action completed pursuant to § 7-105.
 - (2) Hazardous waste containers may be placed out-of-doors only if they are within a

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structure that sheds rain and snow.

- (3) Hazardous wastes subject to freezing and expansion may not be stored in containers or aboveground tanks unless mechanical or physical means are employed to prevent freezing.
- (4) The spill and fire control equipment required under §§ 7-309(a)(1)(A) and (C) shall be available in the immediate vicinity of each short-term storage area.

(b) Short-Term Storage Area Operating Standards

- (1) Containers or tanks holding ~~incompatible~~ hazardous wastes that are ~~incompatible with hazardous wastes held in other containers or tanks~~ must not be stored in the same enclosure, building or structure unless they are segregated in a manner that prevents the wastes from coming into contact with one another under any circumstances (such as spillage or simultaneous leakage).
- (2) Containers of hazardous waste must be stored such that the hazardous waste labeling is visible.
- (3) Aisle space between rows of containers must be sufficient to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation. In no circumstance shall the aisle space be less than twenty-four (24) inches wide.

Note: Some local, state, and federal fire and safety codes and/or regulations require up to 36" of aisle space for the storage of flammable and combustible liquids.

(c) Short-Term Storage Time Limit Extensions

~~A s~~Small or ~~and~~ large quantity generators may be granted up to a thirty (30) day extension of the short-term storage ~~time~~ limits specified in §§ 7-307(c)(2) and 7-308(b)(2), at the discretion of the Secretary, if hazardous waste must remain on-site due to unforeseen temporary and uncontrollable circumstances.

(d) Inventory and Inspection

- (1) Inventory. Small and large quantity generators shall maintain, at a location apart from the short-term storage area, a list of all hazardous waste currently in storage. For generators storing hazardous waste in containers, the list shall identify each container being stored and the type of hazardous waste held by each container. Any hazardous waste being accumulated within a short-term storage area must be included on the list of hazardous waste in storage.

(2) Inspection

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~~(2)(A)~~ With the exception of generators who accumulate hazardous waste in a short-term storage area pursuant to 7-310(b), ~~s~~Small and large quantity generators shall at a minimum conduct ~~daily-weekly~~ inspections during regular business days of each short-term storage area. The inspections shall be recorded in a log that is kept at the facility for at least three years. The log shall contain a checklist of the items to be inspected which shall include:

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~~(A)~~(i) Visual inspection of the short-term storage area for rusting, bulging, or leaking containers or tanks;

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~~(B)~~(ii) Inspection of all safety and emergency equipment required under § 7-311(a)(4);

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~~(C)~~(iii) Inspection of adequate aisle space (minimum of 24 inches as specified in § 7-311(b)(3)) between rows of containers;

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~~(D)~~(iv) Description of discrepancies or problem areas encountered in the inspection and the corrective actions taken; and

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~~(E)~~(v) The signature or initials of the inspector and the date of the inspection.

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Note: Weekly inspections shall be conducted at least every seven days.

~~(B)~~ Small and large quantity generators who accumulate hazardous waste in short-term storage areas pursuant to 7-310(b) shall conduct daily inspections during regular business days of each short-term storage area. The inspections shall be recorded in a log that is kept at the facility for at least three years. The log shall contain a checklist of the items listed in subsections (A)(i) through (v) of this section.

Note: Regular business days are days when personnel are normally scheduled to be on site. Any facility where regular business days occur more than one week apart must still conduct inspections at least once per week.

(c) Security

- (1) Small and large quantity generators must post a sign at each short-term hazardous waste storage area, which must be visible from at least 25 feet with the legend, "Danger-Hazardous Waste Storage Area-Authorized Personnel Only". The legend must be written in both English and French in facilities located in counties bordering the Canadian province of Quebec. Existing signs with a similar legend may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the storage area, and that entry into the storage area can be dangerous.
- (2) Small and large quantity generators storing ignitable waste (flash point less than 140°F) must also post a sign at each short-term hazardous waste storage area, which must be visible from 25 feet with the legend, "No Smoking". The legend must be

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written in both English and French in facilities located in counties bordering the Canadian province of Quebec.

(f) Use and Management of Containers

(1) ~~With the exception of satellite accumulation containers managed in accordance with § 7-310(a), c~~Containers, and packages used for the short-term storage of hazardous wastes shall be clearly marked from the time they are first used to accumulate or store waste in a short-term storage area. Such marking shall be clearly visible for inspection on each container and include:

- (A) ~~The generator's name, address, and EPA identification number~~The words "Hazardous Waste";
- (B) ~~The name and hazardous waste identification code(s) of the hazardous waste stored therein~~An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704); and;

~~(C) With the exception of accumulation containers managed in a short-term storage area in accordance with § 7-310(b), The date upon which the period of short-term storage begins, when the container was first used to accumulate or store hazardous waste; and~~

~~(D)(C) The following language: "Hazardous Waste - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency."~~

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Note: Containers used to store waste that is in the process of having a hazardous waste determination made, and for which the hazardous waste identification code(s) are not known, do not need to be marked to include the hazardous waste identification code(s). The hazardous waste identification code(s) must be marked on the container once the hazardous waste determination has been completed for the waste.

(2) Condition of containers

If a container holding hazardous waste is not in good condition (~~e.g., damaged, bulging, leaking, or otherwise unsafe~~), or if it begins to leak, the owner or operator must immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that

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complies with the requirements of this section.

(3) Compatibility of waste with container

The owner or operator must use a container made of or lined with materials that will not react with and are otherwise compatible with the hazardous waste to be ~~stored~~held, so that the ability of the container to contain the waste is not impaired.

(4) Management of containers

(A) A container holding hazardous waste must always be closed during storage except when it is necessary to add or remove waste;

(B) A container holding hazardous waste must not be opened, handled or stored in a manner that may rupture the container or cause it to leak;

(C) Incompatible wastes

(i) Incompatible wastes, or incompatible wastes and materials must not be placed in the same container. Examples of incompatible wastes are provided in **Appendix VII**.

(ii) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material; and

(iii) A ~~storage~~ container holding a hazardous waste that is incompatible with any waste or other materials accumulated or stored nearby in other containers, piles, open tanks or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

(5) Emissions from containers

A large quantity generator storing hazardous waste in containers must comply with the applicable requirements of 40 CFR Part 265 Subparts AA, BB, and CC.

(6) Containers holding ignitable or reactive waste

A large quantity generator accumulating or storing ignitable or **reactive waste in** containers must comply with the following; ~~keep the containers at least fifty (50) feet from the property line.~~

(A) Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line unless a written approval is obtained from the authority having jurisdiction over the local fire code allowing hazardous waste accumulation or short-term storage to occur within this restricted area. A record of

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the written approval must be maintained as long as ignitable or reactive hazardous waste is accumulated or stored in this area.

- (B) The large quantity generator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to the following: Open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the large quantity generator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(g) Use and Management of Tanks

- (1) Small and large quantity generators using tanks Tanks used for the short-term storage of hazardous wastes shall:

(A) Mark or label its tanks with; be clearly marked with the words "Hazardous Waste" and to identify the name and hazardous waste identification code(s) of the hazardous waste stored therein.

(i) The words "Hazardous Waste"; and

(ii) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR § 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704);

- (B) Demonstrate compliance with short-term storage time limits as follows:

(i) Small quantity generators shall use inventory logs, monitoring equipment, or other records to demonstrate that hazardous waste has been emptied within 180 days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 180 days of first entering; A large quantity generator storing hazardous wastes in tanks must comply with:

(ii) Large quantity generators shall use inventory logs, monitoring equipment or other records to demonstrate that hazardous waste has been emptied within 90

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days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 90 days of first entering; and

~~(B)(C)~~ Keep inventory logs or records with the above information on site and readily available for inspection

~~(C)~~ All secondary containment, monitoring, tank testing and other requirements in 40 CFR §§ 265.190 through 265.199 except 265.197(e); and

~~(D)~~ 40 CFR Part 265 Subparts AA, BB and CC.

(2) A small quantity generator storing hazardous wastes in tanks must comply with the general operating standards of 40 CFR § 265.204 262.16(b)(3).

(3) A large quantity generator storing hazardous wastes in tanks must comply with:

(A) All secondary containment, monitoring, tank testing and other requirements of 40 CFR §§ 265.190 through 265.199, except § 265.197(e); and

~~(E)(B)~~ 40 CFR Part 265 Subparts AA, BB and CC.

(h) **Use and Management of Drip Pads and Containment Buildings**

Small and large Large-quantity generators placing hazardous wastes on drip pads or in containment buildings must comply with the requirements of 40 CFR Part 265 Subparts W and DD, and §§ 262.34(a)(1)(iii) and (iv) 262.16(b)(4) and (5), and 262.17(a)(3) and (4) as applicable.

§ 7-312 ADDITIONAL REQUIREMENTS MANAGING HAZARDOUS WASTE FROM AN EPISODIC EVENT

~~On a case-by-case basis, any person subject to this subchapter may be required to meet additional requirements when the Secretary determines that such actions are necessary to protect human health or the environment.~~

(a) A very small quantity generator or small quantity generator may maintain its existing generator category for hazardous waste generated during an episodic event provided that the generator complies with the following requirements:

(1) The very small quantity generator or small quantity generator is limited to one episodic event per calendar year, unless a petition is granted under subsection (b) of this section;

(2) The very small quantity generator or small quantity generator must notify the

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Secretary no later than thirty (30) calendar days prior to initiating a planned episodic event using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12). In the event of an unplanned episodic event, the generator must notify the Secretary within 72 hours of the unplanned event via phone, email, or fax, and subsequently submit a Hazardous Waste Handler Site Identification Form (EPA Form 8700-12). The generator shall include the start date and end date of the episodic event and the reason(s) for the event, types and estimated quantities of hazardous wastes expected to be generated as a result of the episodic event, and identify a facility contact and emergency coordinator with 24-hour telephone access to discuss the notification submittal or respond to an emergency;

- (3) The very small quantity generator or small quantity generator must have an EPA identification number or obtain an EPA identification number using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12);
- (4) Very small quantity generators and small quantity generators are prohibited from storing hazardous wastes generated from an episodic event waste on drip pads and in containment buildings. When storing hazardous waste generated from an episodic event in containers and tanks, the following requirements apply:
 - (A) Hazardous waste must be managed in a manner that minimizes the possibility of a fire, explosion, or release of hazardous waste or hazardous waste constituents to the air, soil, or water.
 - (B) Containers
 - (i) Very small quantity generators and small quantity generators storing episodic hazardous waste in containers must mark or label its containers with the following:
 - (aa) The words "Episodic Hazardous Waste"; and
 - (bb) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704); and
 - (cc) The date upon which the episodic event began, clearly visible for inspection on each container.
 - (ii) Very small quantity generators and small quantity generators must ensure that

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containers are in good condition, compatible with the hazardous waste stored therein, and kept closed except to add or remove waste in accordance with §§ 7-311(f)(2) through (4).

- (iii) Small quantity generators storing episodic hazardous waste in containers must meet the inspection requirements of § 7-311(d)(2).

(C) Tanks

- (i) Very small quantity generators and small quantity generators storing episodic hazardous waste in tanks must mark or label its tank with the following:

(aa) The words “Episodic Hazardous Waste”; and

(bb) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704);

- (ii) Very small quantity generators and small quantity generators storing episodic hazardous waste in tanks must use inventory logs, monitoring equipment or other records to identify the date upon which each period of accumulation begins and ends; and

- (iii) Very small quantity generators and small quantity generators storing episodic hazardous waste in tanks must keep inventory logs or records with the above information on site and available for inspection.

- (iv) Very small quantity generators storing episodic hazardous waste in tanks must ensure that such tanks are in good condition and compatible with the hazardous waste stored therein. Tanks must have procedures in place to prevent the overflow (e.g., be equipped with a means to stop inflow with systems such as a waste feed cutoff system or bypass system to a standby tank when hazardous waste is continuously fed into the tank). Tanks must be inspected at least once each operating day to ensure all applicable discharge control equipment, such as waste feed cutoff systems, bypass systems, and drainage systems are in good working order and to ensure the tank is operated according to its design by reviewing the data gathered from monitoring equipment such as pressure and temperature gauges from the inspection.

- (v) Small quantity generators storing episodic hazardous waste in tanks must

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comply with the requirements of § 7-311(g)(2).

- (5) Within sixty (60) calendar days from the start of the episodic event:
- (A) A very small quantity generator must send its hazardous waste generated from the episodic event to a designated facility. The very small quantity generator must comply with the hazardous waste manifest requirements of § 7-702 when it sends its episodic event hazardous waste off site to a designated facility.
 - (B) A small quantity generator must either treat hazardous waste generated from an episodic event on-site in accordance with the conditions of § 7-502(o), or manifest and ship such hazardous waste off site to a designated facility.
- (6) Very small quantity generators and small quantity generators must maintain the following records for three (3) years from the end date of the episodic event:
- (A) Beginning and end dates of the episodic event;
 - (B) A description of the episodic event;
 - (C) A description of the types and quantities of hazardous wastes generated during the event;
 - (D) A description of how the hazardous waste was managed as well as the name of the designated facility that received the hazardous waste;
 - (E) Name(s) of hazardous waste transporters; and
 - (F) An approval letter from the Secretary if the generator petitioned to conduct one additional episodic event per calendar year.
- (b) Petition to manage one additional episodic event per calendar year.
- (1) A generator may petition the Secretary for a second episodic event in a calendar year without impacting its generator category under the following conditions:
 - (A) If a very small quantity generator or small quantity generator has already held a planned episodic event in a calendar year, the generator may petition the Secretary for an additional unplanned episodic event in that calendar year within 72 hours of the unplanned event.
 - (B) If a very small quantity generator or small quantity generator has already held an unplanned episodic event in a calendar year, the generator may petition the Secretary for an additional planned episodic event in that calendar year.
 - (2) The petition must include the following:

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- (A) The reason(s) why an additional episodic event is needed and the nature of the episodic event;
 - (B) The estimated amount of hazardous waste to be managed from the event;
 - (C) How the hazardous waste is to be managed;
 - (D) The estimated length of time needed to complete management of the hazardous waste generated from the episodic event (not to exceed 60 days); and
 - (E) Information regarding the previous episodic event managed by the generator, including the nature of the event, whether it was a planned or unplanned event, and how the generator complied with the conditions.
- (3) The petition must be made to the Secretary in writing, either on paper or electronically.
 - (4) The generator must retain written approval in its records for three (3) years from the date the episodic event ended.

§ 7-313 ADDITIONAL REQUIREMENTS

On a case-by-case basis, any person subject to this subchapter may be required to meet additional requirements when the Secretary determines that such actions are necessary to protect human health or the environment.

Subchapter 4: REQUIREMENTS FOR TRANSPORTERS OF HAZARDOUS WASTE

§ 7-401 PURPOSE, SCOPE, APPLICABILITY

- (a) This subchapter establishes requirements for persons transporting hazardous waste within or through Vermont.
- (b) This subchapter applies to:
 - (1) Transportation of hazardous waste accepted from:
 - (A) ~~Conditionally exempt~~ Very small quantity generators when the total amount accepted from all such generators in any shipment (i.e., combined in any single load in transport) exceeds the accumulation amounts allowed under in § 7-306(a);
 - (B) Any small or large quantity generator; or
 - (C) Any owner or operator of a facility;
 - (2) Transportation of recyclable hazardous wastes unless exempted from some or all provisions under § 7-608;
 - (3) Transportation of used oil as specified under § 7-811; and
 - (4) Any owner or operator of a transfer facility.
- (c) This subchapter does not apply to:
 - (1) Transportation of hazardous waste and used oil by generators within the site where the hazardous waste or used oil is generated;
 - (2) Transportation of hazardous waste within the site of a certified treatment, storage or disposal facility by the owner or operator of the facility;
 - (3) Self-transportation of hazardous waste by ~~conditionally exempt~~ very small quantity generators, ~~conducted~~ in accordance with § 7-306(c)(3);
 - (4) Transportation of used oil by do-it-yourselfers, and used oil generators self-transporting up to 55 gallons of used oil, ~~conducted~~ in accordance with § 7-807(d)(1);
 - (5) Transportation of universal waste conducted in accordance with the universal waste management standards of **subchapter 9**;
 - (6) Transportation during an emergency response to a ~~discharge or release, conducted in~~ accordance with § 7-105(a)(4)(c)(1); and

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- (7) Transportation during an explosives or munitions emergency response, conducted in accordance with §§ ~~7-105(a)(5)(c)(2)~~ and 7-502(p).
- (d) Standards applicable to transportation of military munitions are specified under 40 CFR § 266.203.
- (c) A transporter of hazardous waste shall comply with all applicable requirements of 49 CFR Parts 171 through 180.

§ 7-402 APPLICABILITY OF OTHER SUBCHAPTERS

- (a) A transporter ~~transporting~~ of hazardous waste into Vermont from a foreign country is a generator and must comply with the generator requirements of subchapter 3- if he or she:
 - (1) Transports hazardous waste into the United States from abroad; or
 - (2) Mixes hazardous waste of different DOT shipping descriptions by placing them into a single container.
- ~~(b)~~ A transporter of hazardous waste that is being imported from or exported to any other country for purposes of recovery or disposal is subject to the applicable requirements of Subpart H of 40 CFR Part 262, including, but not limited to, 40 CFR § 262.83(d) and § 262.84(d) for movement documents.
- ~~(c)~~ A transporter of hazardous waste shall comply with the applicable manifest, export and import, and reporting, and recordkeeping requirements of subchapter 7.
- ~~(d)~~ In the event of a release or discharge of hazardous waste during transport, a transporter shall comply with the emergency action requirements of § 7-105.

§ 7-403 RESERVED

§ 7-404 TRANSFER FACILITY STANDARDS

- (a) Any transporter who owns or operates a transfer facility located in Vermont must:
 - (1) Obtain an EPA identification number for the facility and maintain an up-to-date ~~Vermont Hazardous Waste Handler Site Identification ID-Form~~ (EPA Form 8700-12) in accordance with § 7-104.

Note: Written approval of the Secretary will not be granted for a transfer facility until a complete ~~Vermont Hazardous Waste Handler Site Identification ID-Form~~ (EPA

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- Form 8700-12 is submitted for the facility.
- (2) Ensure that all shipments of hazardous waste to the transfer facility comply with the applicable manifest requirements of **subchapter 7**.
 - (3) Hold hazardous waste at the transfer facility for a period of ten **(10)** days or less.
 - (4) Ensure that all hazardous waste managed at the transfer facility is packaged, labeled, and marked in accordance with **49 CFR Parts 172, 173, 178, and 179**.
 - (5) When consolidating the contents of two or more containers with the same hazardous waste into a new container, or when combining and consolidating two different hazardous wastes that are compatible with each other, the transporter must mark its containers of 119 gallons or less with the following information:
 - (A) The words "Hazardous Waste" and
 - (A)(B) The applicable EPA hazardous waste code(s) in subchapter 2, or in compliance with § 7-309(b)(1).
 - (6) Comply with the personnel training requirement of § 7-308(b)(15).
- (b) A transporter who stores manifested shipments of hazardous waste in containers meeting the packaging requirements of § 7-309(b)(1)(A) at a transfer facility for a period of ten (10) days or less is not subject to regulation under subchapter 5 or 40 CFR Part 268 with respect to the storage of those wastes.
- (c) If containers of hazardous waste are off-loaded from a transport vehicle for temporary storage (10 days or less) at a transfer facility, the transporter must ensure that:
- (1) Prior to commencing container off-loading operations for the first time at a transfer facility, the owner or operator must submit a written request to, and receive written approval from, the Secretary to conduct such operations. The request for approval shall describe how the requirements of this subsection will be met;

Note: If the Secretary determines that the operations of a transfer facility are taking place in a manner that circumvents the requirements of this section the Secretary may require changes to the facility operations or require the activity cease.
 - (2) The containers ~~must~~ remain closed and be stored:
 - (A) In a manner to prevent leakage or rupture;
 - (B) Upon an impervious surface;

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- (C) ~~In a manner where~~ ~~Such that~~ the hazardous waste labeling is visible;
 - (D) With ~~sufficient~~ a **minimum of 24-inch** wide aisle space between rows of containers to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation. ~~In no circumstance shall the aisle space be less than twenty-four (24) inches wide;~~
 - (E) In an area with secondary containment capable of holding 110% of the capacity of the largest container to be placed in temporary storage, or 10% of the total design capacity of the storage area, whichever is greater;
 - (F) Within a structure that sheds rain and snow;
 - (G) If the waste is subject to freezing and expansion, in an area where mechanical or physical means are employed to prevent freezing; and
 - (H) If wastes are incompatible with any waste or other materials stored nearby in other containers, in separate enclosures, buildings or structures unless the wastes are separated by means of a dike, berm, wall, or other device capable of preventing the wastes from coming in contact with one another under any circumstances (such as spillage or simultaneous leakage).
- (3) The owner or operator of the transfer facility ~~must maintain~~ a written operating log that tracks all hazardous waste managed at the transfer facility by date of receipt, date of shipment off-site, and manifest tracking number, if applicable;
 - (4) The owner or operator of the transfer facility ~~must maintain~~ a written contingency plan for the facility as described in **§ 7-308(b)(14)(A)**;
 - (5) The owner or operator of the transfer facility ~~must comply~~ **complies** with the closure requirements of ~~§ 7-309(c) § 7-308(b)(17)~~; and
 - (6) The owner or operator of the transfer facility ~~must maintain~~ a written closure cost estimate, in current dollars, of the cost of closing the facility in accordance with the standards of **§ 7-309(c) and 40 CFR § 265.142**. This estimate must be adjusted annually for inflation, changes in operations, and changes in site conditions. The estimate must represent a worst-case scenario for closure. Proof of financial responsibility adequate to cover all costs of closure must be maintained until closure is complete. The financial responsibility mechanism must comply with the requirements of **40 CFR § 265.143**. Proof of financial responsibility must be submitted by April 30th of each year.

§ 7-405 PROHIBITIONS

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No transporter subject to this subchapter shall:

- (a) Remove hazardous waste from the container in which it was placed once it has been manifested and moved from the site of generation until it is accepted at the designated facility except:
 - (1) Under the emergency provisions of § 7-105; or
 - (2) For wastes of like DOT shipping descriptions, at a transfer facility with written consent of the generator.
- (b) Transport or accept for transport hazardous wastes which are unlabeled or which are in damaged, bulging, leaking, unsuitable or otherwise unsafe containers; or
- (c) Transport or accept for transport hazardous wastes which are incompatible with each other such that a danger to public health or safety or the environment could result from their being transported together.
- (d) Accept hazardous waste from a small or large quantity generator unless it is accompanied by a manifest signed in accordance with the provisions of § 7-702. In the case of exports:
 - (1) A transporter may not accept **such waste** from a primary exporter or other person if the transporter knows or has reason to know the shipment does not conform to the EPA Acknowledgment of **Consent**; **and**
 - (2) A transporter may not accept such waste from a primary exporter or other person unless, in addition to a manifest signed in accordance with the provisions of § 7-702, such waste is also accompanied by an EPA Acknowledgment of Consent which, except for shipment by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)).
- (e) Dilute any hazardous waste subject to the land disposal restrictions of **40 CFR Part 268**, as prohibited under **40 CFR § 268.3** (incorporated by reference through § 7-106 of these regulations).
- (f) Release hazardous material into the surface or groundwater, or onto the land of the state in violation of **10 V.S.A. § 6616**.

§ 7-406 WASTE TRANSPORTATION PERMIT

- (a) With the exception of those persons and activities specified under § 7-401(c), **no person shall transport any hazardous waste or used oil within Vermont to or accept for transport from any location in Vermont any hazardous waste or used oil without first obtaining a permit to do so from the Secretary, as required under 10 V.S.A. § 6607a.**

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- (b) Any transporter who is required to obtain a permit shall complete, sign, and submit ~~an application to the Secretary on the form provided a~~ **Vermont Waste Transporter Vehicle Report Form and a Supplemental Application for Hazardous Waste Transporters to the Secretary.** The application form shall include, but not be limited to, the following information:
- ~~(1) The nature of the wastes to be transported;~~
 - ~~(2) The method of transportation; and~~
 - ~~(3) Specific information concerning the vehicles to be used.~~
- (c) Disclosure statement
- (1) With the exception of those persons exempted under 10 V.S.A. § 6605f(k), any transporter who is required to obtain a permit under this section shall, pursuant to the requirements of 10 V.S.A. § 6605f, complete, sign, and submit to the Secretary at the time of application a ~~disclosure statement~~ **Business Disclosure Statement, and a Personal History Disclosure statement for each person identified in the Business Disclosure Statement** as a sole proprietor or key employee ~~pursuant to the requirements of 10 V.S.A. § 6605f.~~ In the event of any change in ownership, a disclosure statement must be submitted pursuant to the requirements of 10 V.S.A. § 6605f(e). **The disclosure statements must be filed with the Agency at least 90 days before the proposed change in ownership.**
 - (2) Any person who has received a transporter permit under this section shall file an ~~statement annually~~ **Annual Statement** within 30 days prior to the month and day of issuance of that permit disclosing any changes in facts that would render the disclosure statement filed in connection with that permit inaccurate in any way, or stating that no such changes have occurred in the period of time covered by the annual statement. The annual statement shall be under oath or affirmation.
- (d) Any transporter who is required to obtain a permit under this section shall:
- (1) Maintain an up-to-date ~~Vermont Hazardous Waste Handler Site Identification ID Form (EPA Form 8700-12)~~ **Vermont Hazardous Waste Handler Site Identification ID Form (EPA Form 8700-12)** filed with the Secretary as required in § 7-104;
 - (2) Obtain an EPA identification number either from the Secretary by applying on the ~~Vermont Hazardous Waste Handler Site Identification ID Form (EPA Form 8700-12)~~ **Vermont Hazardous Waste Handler Site Identification ID Form (EPA Form 8700-12)** provided, or from the state in which the transporter's base of operations is located;
 - (3) Maintain liability insurance for sudden accidental occurrences as specified in § 7-410; **and**
 - (4) Conduct a personnel training program for all employees handling either hazardous

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waste or used oil as specified in § 7-409, ~~and~~

~~(5) Report annually on the Hazardous Waste Annual Report (Transporters) Form provided by the Secretary.~~

~~(e) Reserved~~

~~(f)(e) A permit shall be issued for a period of time not to exceed Waste transportation permits shall have a duration of five years.~~

§ 7-407 MODIFICATION, SUSPENSION, REVOCATION, OR DENIAL OF A PERMIT

- (a) The Secretary may modify any transporter permit upon his or her own motion or upon the receipt of a written request for modification that contains facts and reasons supporting the request. If the Secretary determines that modification is appropriate, only the conditions subject to modification are reopened. Cause for modification of a transporter's permit is:
- (1) Material alterations to the transporter's activities which occurred after issuance of the permit to the transporter which justify the application of permit conditions that are different or absent from the existing permit;
 - (2) The receipt of information concerning the transporter which was not available when the permit was issued; or
 - (3) A change in the standards or regulations on which the permit was based, by promulgation of amended standards or regulations or by judicial decision after the permit was issued;
- (b) The Secretary may suspend or revoke any transporter permit or deny any application for a transporter permit upon his or her own motion or upon receipt of a written request for suspension, revocation, or denial which contains facts and reasons supporting the request. Cause for suspension, revocation or denial is:
- (1) Non-compliance by the transporter with the requirements of **10 V.S.A., chapter 159**, these regulations, the regulations promulgated by the Vermont Agency of Transportation for the transportation of hazardous wastes, or any term or condition of a permit, order, or assurance;
 - (2) Failure by the transporter to disclose all relevant facts during the permit application process that were known at that time;
 - (3) A determination by the Secretary that:
 - (A) Any of the grounds for denial of a permit under **10 V.S.A. § 6605f(a)** either existed at the time of application or have arisen since that time; or

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- (B) The holder of the permit, or the applicant for the permit, knowingly omitted or falsified information required to be disclosed under § 7-406(c).
 - (4) Misrepresentation of any relevant fact at any time;
 - (5) A felony conviction of the transporter in any jurisdiction when the conviction concerns violations of hazardous waste statutes or regulations; or
 - (6) A determination by the Secretary that the transporter's activities constitute a serious threat to human health or the environment and that such threat can only be regulated to acceptable levels by suspension, revocation or denial of the permit.
- (c) The Secretary shall provide written notice of modification, suspension, revocation, or denial, including the reasons for such actions, to the transporter involved. Any transporter who receives such notification shall have thirty days from the receipt of the notice to submit a written request for a hearing to the Secretary. If requested, the Secretary shall provide an opportunity for a hearing. The submission of a request for a hearing does not stay the effective date of the Secretary's decision.
- (d) An appeal may be taken from a final decision on the approval or denial of a request for the modification of a permit.

§ 7-408 ACCEPTING SHIPMENTS OF HAZARDOUS WASTE

A transporter may accept hazardous waste only from the following:

- (a) A generator who has an EPA identification number issued by the Secretary;
- (b) Another transporter who at the time has a valid transporter permit from the Secretary;

§ 7-409 PERSONNEL TRAINING

- (a) Permitted hazardous waste and used oil transporters must provide employee training to all persons who in the course of employment directly affect hazardous waste transportation safety. The training program shall be consistent with DOT employee training requirements of 49 CFR § 172.700. Such training, at a minimum, shall include:
 - (i) For hazardous waste transporters:
 - (A) DOT's labeling, packing, placarding and shipping requirements as set forth in 49 CFR Parts 171 through 179 and all other applicable DOT regulations;
 - (B) Familiarity with and use of the most recent edition of the North American

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Emergency Response Guidebook for hazardous materials published by the DOT;

- (2) For hazardous waste and used oil transporters:
 - (A) Safe vehicle operations to avoid creating hazards to public health, safety, or welfare or the environment;
 - (B) Safe handling of hazardous waste and used oil; and
 - (C) Emergency handling procedures in the event of a release or discharge of hazardous waste or used oil during transportation.
- (b) For each person required to be trained pursuant to **subsection (a) of this section**, a record of current training inclusive of the preceding three (3) years shall be kept on file by the transporter while these individuals are employed by the transporter, and for 90 days after these individuals cease being employed by the transporter. This period shall be extended automatically for the duration of any unresolved enforcement action, or as ordered by the Secretary. These records shall include the following:
 - (1) Name of employee;
 - (2) Date of most recent training;
 - (3) Description of training materials;
 - (4) Name and address of person providing training; and
 - (5) Certification that the employee has been trained and tested.

Note: It is recommended that each person required to be trained pursuant to **subsection (a) of this section** have knowledge of the Vermont Hazardous Waste Management Regulations, in particular: **subchapter 4** (requirements for transporters of hazardous waste), **§ 7-105** (emergency and corrective actions), **§ 7-211** (Vermont listed hazardous wastes), and **subchapter 7** (manifest, reporting and recordkeeping requirements).

§ 7-410 LIABILITY INSURANCE REQUIREMENTS

- (a) All permitted hazardous waste transporters shall carry liability insurance, as required by U.S. DOT regulations, for sudden and accidental occurrences, exclusive of legal defense costs, for claims arising out of bodily injury and property damage from the hazardous waste transport operations of the transporter. Such insurance policy shall carry an approved DOT endorsement (Form MCS 90 - DOT) covering liability for accidents, including environmental restoration, bodily injury, and property damage.
- (b) The insurance policy shall be maintained in full force at all times during the term of the

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permit.

§ 7-411 EMERGENCY PREPAREDNESS

No transporter shall transport hazardous waste in Vermont without being in possession of the following on each vehicle:

- (a) Telephone numbers of:
 - (1) The generator of the waste being transported; and
 - (2) The Vermont Agency of Natural Resources and the telephone numbers specified in § 7-105.
- (b) A copy of the most recent edition of the North American Emergency Response Guidebook for hazardous materials published by DOT.
- (c) All of the following equipment in good operating condition:
 - (1) A first aid kit with eyewash;
 - (2) An Underwriters' Laboratory listed explosion proof flashlight; and
 - (3) A fire extinguisher of appropriate size and type for the vehicle and wastes carried.

Subchapter 5: REQUIREMENTS FOR HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

§ 7-501 PURPOSE, SCOPE, APPLICABILITY

- (a) This subchapter establishes requirements for the design, construction, operation, and maintenance of hazardous waste treatment, storage, and disposal facilities. This subchapter also describes the procedures for certification of hazardous waste facilities.
- (b) The requirements of this subchapter apply to owners and operators of hazardous waste facilities including all facilities which treat, store, or dispose of hazardous wastes referred to in **40 CFR Part 268** (incorporated by reference through § 7-106).
- (c) The requirements of this subchapter apply to any person who accepts, treats, stores, or disposes of hazardous waste unless the person or activity is exempted under § 7-502.
- (d) **40 CFR § 266.205** identifies when storage requirements, as incorporated by reference through § 7-504(e)(1), apply to the storage of hazardous waste military munitions. The treatment and disposal of hazardous waste military munitions are subject to the applicable provisions of **subchapters 1 through 7 of these regulations**.

§ 7-502 EXEMPTIONS

The following facilities and activities are exempted from the provisions of this subchapter:

- (a) A resource recovery facility managing municipal solid waste provided:
 - (1) The facility receives and burns only household waste, and solid waste from commercial or industrial sources which does not contain hazardous wastes; and
 - (2) The facility does not accept hazardous wastes, and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.
- (b) A totally enclosed treatment facility. A totally enclosed treatment facility is a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of hazardous waste or any constituent thereof into the environment during treatment.
- (c) The owner or operator of an elementary neutralization unit or wastewater treatment unit as defined in § 7-103 provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in **40 CFR § 268.40**, Table Treatment Standards for Hazardous Wastes), or reactive (D003) waste, to

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remove the characteristic before land disposal, the owner/operator must comply with the general requirements for ignitable, reactive, or incompatible wastes set out in **40 CFR § 264.17(b)**.

- (d) Any person engaged in treatment or containment activities ~~performed during and as a result of an immediate emergency response to a release of hazardous material or discharge of a hazardous waste and during an imminent and substantial threat of a release of hazardous material or discharge of hazardous waste~~, provided that the person:
 - (1) Complies with all applicable provisions of § 7-105 on emergency actions; and
 - (2) Obtains certification under this subchapter when he or she continues or initiates treatment or containment activities after the ~~immediate emergency~~ response is over.
- (e) The treatment of hazardous waste by mixing absorbent material with containerized hazardous waste provided:
 - (1) The mixing occurs when the waste is first placed in the container; and
 - (2) The person treating the waste complies with **40 CFR §§ 264.17(b), 264.171, and 264.172**.
- (f) **A solid waste management facility that accepts hazardous waste only from conditionally exempt very small quantity generators provided the facility is certified by the Secretary to accept such waste.**
- (g) Generators who ~~accumulate or place in short-term storage~~ store hazardous waste on-site in compliance with the applicable timeframes specified in ~~subchapter 3~~ **subchapter 3** of these regulations **requirements of §§ 7-306, 7-307, 7-308 and 7-310**.
- (h) Farmers who dispose of hazardous waste pesticides from their own use as provided in § **7-203(r)** of these regulations.
- (i) Transporters storing manifested shipments of hazardous waste at a transfer facility for a period of ten days or less and in accordance with § **7-404**.
- (j) Universal waste handlers and universal waste transporters managing the wastes listed below. Universal waste handlers and universal waste transporters are subject to regulation under **subchapter 9** of these regulations.
 - (1) Batteries as described in § **7-902**;
 - (2) Pesticides as described in § **7-903**;
 - (3) Thermostats as described in § **7-904**;

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- (4) PCB-containing fluorescent light ballasts as described in § 7-905;
 - (5) Lamps as described in § 7-906;
 - (6) Mercury-containing devices as described in § 7-907; ~~and~~
 - (7) Cathode ray tubes (CRTs) as described in § 7-908;
 - (8) Postconsumer paint as described in § 7-909; and
 - (9) Aerosol cans as described in § 7-910.
- (k) Facilities that recycle hazardous waste in accordance with the standards of **subchapter 6** and as follows:
- (1) Facilities that recycle hazardous waste on-site provided:
 - (A) Any hazardous waste being recycled is generated on-site;
 - (B) The hazardous waste to be recycled is not held in short-term storage for longer than the amount of time allowed under **subchapter 3** of these regulations for the facility's generator category; and
 - (C) The facility owner or operator complies with the applicable requirements of § 7-502(o) ~~or~~.
 - (2) Facilities that recycle hazardous waste received from off-site provided the hazardous waste is not stored prior to being recycled. Hazardous waste that is being staged at a recycling facility is not considered to be in storage.

~~Note: Owners or operators of recycling facilities that store hazardous wastes before they are recycled prior to recycling that waste, or that otherwise treats, stores or disposes of hazardous wastes are subject to certification under the requirements of this subchapter.~~

Note: Owners or operators of facilities that treat mercury-containing lamps using drum-top crushing equipment are subject to certification under the requirements of this subchapter. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather than a recycling activity.

- ~~(1) The evaporation of water from hazardous waste that is identified only by the VT02 or VT03 hazardous waste codes provided:~~
 - ~~(1) The water component of the waste is evaporated on-site using evaporation equipment approved in accordance with Vermont's Air Pollution Control Regulations; and~~
 - ~~(2) The oily residue resulting from the evaporation process is managed either as~~

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~~hazardous waste or in accordance with the Used Oil Management Standards of subchapter 8.~~

- (l) ~~Reverse distributors accumulating potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals, as defined in § 7-1001. Reverse distributors are subject to regulation under Subchapter 10 of these regulations in lieu of this part for the accumulation of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.~~
- (m) Oil-water separators provided:
- (1) The waste oil-water mixture to be separated is identified only by the VT02 hazardous waste code; and
 - (2) Any contaminated water resulting from the separation process is discharged in accordance with 10 V.S.A. chapter 47 (for indirect injection well, and direct discharges) and chapter 48 (for groundwater protection); and
 - (3) The oily residue resulting from the separation process is managed either as hazardous waste or in accordance with the used oil management standards of subchapter 8.
- (n) Facilities conducting site investigation and/or corrective action pursuant to § 7-105(b)(f) of these regulations may be exempted by the Secretary from the permitting (but not the substantive) requirements of this subchapter, to the extent allowed under federal regulations incorporated by reference in this chapter.
- (o) Treatment of hazardous waste in containers or tanks by generators provided:
- (1) ~~The generator provides submits written notification the following information in writing to the Secretary for written approval that includes:~~
- (A) ~~The facility name, EPA identification number, NAICS code(s), generator status category classification, mailing address, street address, telephone number, contact person, legal owner or operator;~~
 - (B) A detailed description of the treatment process(es) to be used including process design drawings, plans or process flow diagrams;
 - (C) An estimate of the frequency that treatment will occur;
 - (D) The type(s) and estimated quantity of hazardous waste to be treated including a detailed description of the process(es) generating the waste; and
 - (E) A detailed description of how all treatment products and by-products will be managed following treatment.

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Note: The Secretary reserves the right, upon receiving written notification of treatment by a generator, to require that treatment-specific requirements be met.

- (2) A revised written notification is provided to the Secretary is notified in writing if the information required under **subsection (o)(1) of this section** changes significantly.
- (3) The hazardous waste being treated is generated and treated on-site.
- (4) During treatment and during any storage prior to treatment, hazardous waste is:
 - (A) Counted for the purpose of determining generator ~~status category~~ under § 7-305; and
 - (B) Managed in accordance with the applicable requirements of **subchapter 3**.
- (5) The generator determines if treatment by-products are hazardous waste in accordance with § 7-303.
- (6) The generator maintains records for three years documenting:
 - (A) Copies of the written information submitted to the Secretary pursuant to subsection (1) of this section, and the written approval received from the Secretary.
 - ~~(A)(B)~~ The type(s) and quantity of waste treated;
 - ~~(B)(C)~~ The method(s) of treatment used; and
 - ~~(C)(D)~~ The date(s) that treatment occurred.
- (7) All hazardous waste generated from the treatment is managed in accordance with the applicable standards of **subchapter 3**.
- (8) If a generator is treating wastewater using a wastewater evaporation unit, the generator must:
 - (A) Ensure that treatment in the evaporation unit shall result in the concentration of hazardous waste constituents for proper recycling or disposal, and not allow evaporation of the hazardous waste constituents into the air. Air emissions of hazardous constituents shall be controlled through compliance with all applicable air emission control requirements under the **Clean Air Act, U.S. Code, Title 42, c. 85** as administered by USEPA, the emission thresholds established under § 5-261 (control of hazardous air contaminants) of the **Vermont Air Pollution Control Regulations** and, for large quantity generators, with the air emission control requirements in 40 CFR ~~Part~~ **265, subparts AA, BB and CC** as applicable; and

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- (B) Ensure that operation of the evaporation unit or placement of hazardous waste within the unit does not:
- (i) Result in the generation of extreme heat or pressure, fire or explosion, or violent reaction;
 - (ii) Produce uncontrolled toxic mists, fumes, or gases in sufficient quantities to threaten human health;
 - (iii) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion; or
 - (iv) Damage the structural integrity of the unit, or cause the unit or any of its ancillary equipment to rupture, leak, abnormally corrode, or otherwise fail before the end of its intended life.

(C) Ensure that oily residue resulting from the evaporation of water from hazardous waste identified only by the VT02 or VT03 hazardous waste codes is managed as either hazardous waste or in accordance with the Used Oil Management Standards of subchapter 8.

Note: Disposal of hazardous waste by evaporation is prohibited pursuant to § 7-302(a).

- (9) If a generator is managing and treating waste or contaminated soil in tanks or containers to meet Land Disposal Restriction treatment standards found at 40 CFR § 268.40, the generator develops and follows a written waste analysis plan in accordance with the requirements of 40 CFR § 268.7(a)(5).
- (10) The generator does not treat hazardous waste using thermal treatment processes.

Note: Distillation and use of a wastewater evaporation unit pursuant to subsection (8) of this section are not considered a thermal treatment processes.

- (11) The generator does not treat mercury-containing wastes or devices (e.g., fluorescent lamps, thermostats).
- (12) Treatment does not result in any adverse impact to human health or the environment.

~~**Note:** The Secretary reserves the right, upon receiving written notification of treatment by a generator, to require that treatment specific requirements be met.~~

Note: Owners or operators of facilities that treat mercury-containing lamps using drum-top crushing equipment are subject to certification under the requirements of this subchapter. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather

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than a recycling activity.

- (p) A person engaged in treatment or containment activities during immediate response to an immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in § 7-103 of these regulations. An owner or operator of a facility otherwise regulated by this subchapter must comply with all applicable requirements of **40 CFR Part 264 subparts C and D**. In the case of emergency responses involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.
- (q) A facility that meets either small or large quantity generator standards and that accepts hazardous waste from a ~~conditionally exempt~~ very small quantity generator pursuant to § 7-306(c)(2)(D).

§ 7-503 EMERGENCY CERTIFICATION

- (a) Notwithstanding any other section of these regulations, in the event the Secretary finds an imminent and substantial endangerment to human health or the environment, the Secretary may issue a temporary emergency certification to an uncertified facility to allow the treatment, storage, or disposal of hazardous waste or to a certified facility to allow treatment, storage, or disposal of a hazardous waste not covered by an effective certification.
- (b) This emergency certification:
 - ~~(1)~~ (1) May be oral or written. If oral, it shall be followed in five days by a written emergency certification;
 - ~~(2)~~ (2) Shall not exceed 90 days in duration;
 - ~~(2)~~ (3) Shall clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage, or disposal;
 - ~~(3)~~ (4) May be terminated by the Secretary at any time without process if he or she determines that termination is appropriate to protect human health and the environment;
 - ~~(4)~~ (5) Shall be accompanied by a public notice published under 40 CFR § 124.10(b) including:
 - (A) Name and address of the office granting the emergency authorization;

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- (B) Name and location of the facility;
- (C) A brief description of the waste involved;
- (D) A brief description of the action authorized and reasons for authorizing it; and
- (E) The duration of the emergency certificate.

~~(5)(6)~~ Shall incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of these regulations.

§ 7-504 GENERAL FACILITY CERTIFICATION STANDARDS

- (a) Except for the facilities and activities excluded under § 7-502, certification from the Secretary is required to treat, store, dispose, or accept any hazardous waste as identified or listed under **subchapter 2** of these regulations.

Note: The terms “treatment”, “storage”, “disposal”, and “hazardous waste” are defined in § 7-103.

(b) Certificate of Need

- (1) Except as provided for in **subsection (b)(2) of this section**, no person shall begin site preparation for or construction of a hazardous waste management facility for the purpose of treatment or disposal of hazardous waste, without first obtaining a certificate of need pursuant to the requirements of **10 V.S.A. § 6606a**.
- (2) The certificate of need requirement does not apply to:
 - (A) The replacement of an existing facility at the original site with an equivalent facility in the usual course of business; or
 - (B) A hazardous waste management facility that is operated only by or on behalf of the owner of the facility for the treatment or disposal of hazardous waste generated in Vermont by the owner of the facility. Such facility shall be located on a site of generation.
- (3) To determine that a proposed facility is needed for the general good of the state, the Secretary must find that:
 - (A) The proposed facility is consistent with any applicable provisions of the state hazardous waste management plan, if such plan has been adopted by the Secretary, or, if such plan has not been adopted by the Secretary, the proposed facility is consistent with the general goals and priorities of **10 V.S.A. chapter 159** as determined by the Secretary; and

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- (B) The proposed facility location:
- (i) Is suitable for the type and amount of hazardous waste intended for treatment or disposal at the facility; and
 - (ii) Is accessible by transportation routes that minimize the threat to the public health and safety and to the environment; and
 - (iii) Reasonably accommodates the plans and preferences of the proposed host municipality, as expressed by local government entities; and
- (C) The need for the facility is demonstrated by the need to assure the environmentally sound treatment or disposal of hazardous waste generated within Vermont, recognizing the effects of any state hazardous waste plan and:
- (i) The further need to meet Vermont's obligations under an interstate agreement or regional compact; or
 - (ii) The lack of adequate current or projected treatment or disposal capacity within the region to handle the hazardous waste generated by Vermont generators which is proposed for the facility.
- (c) Disclosure Statement
- (1) With the exception of those persons exempted under 10 V.S.A. § 6605f(k), any person who is required to obtain a certification under this subchapter shall, pursuant to the requirements of 10 V.S.A. § 6605f, complete, sign, and submit to the Secretary at the time of application a **Business Disclosure Statement**, and a **Personal History Disclosure** statement for each person identified in the **Business Disclosure Statement** as a sole proprietor or key employee ~~disclosure statement pursuant to the requirements of 10 V.S.A. § 6605f.~~ In the event of any change in ownership, a disclosure statement must be submitted pursuant to the requirements of 10 V.S.A. § 6605f(e). The disclosure statements must be filed with the Agency at least 90 days before the proposed change in ownership
 - (2) Any person who **has** received a certification under this subchapter shall file an ~~statement annually.~~ **Annual Statement** within 30 days prior to the month and day of issuance of that permit disclosing any changes in facts that would render the disclosure statement filed in connection with that permit inaccurate in any way, or stating that no such changes have occurred in the period of time covered by the annual statement. The annual statement shall be under oath or affirmation.
- (d) No person shall initiate construction of a hazardous waste treatment, storage, or disposal facility without first applying for and receiving certification for such facility in accordance with §§ 7-505 and 7-506 of these regulations. In addition, any hazardous

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waste treatment, storage or disposal facility that was in existence on November 19, 1980, or any facility that treats, stores or disposes of a material that has been newly defined or listed as a Vermont or federal hazardous waste, must apply for interim certification in accordance with § 7-510 of these regulations.

- (c) Every hazardous waste treatment, storage, or disposal facility issued a certification under the provisions of this subchapter shall, at a minimum, be designed, constructed, operated, and maintained in accordance with all applicable requirements of:
 - (1) 40 CFR Part 264;
 - (2) 40 CFR Part 266;
 - (3) The land disposal restrictions (40 CFR Part 268) incorporated by reference under § 7-106;
 - (4) The large quantity generator standards of § 7-308 except § 7-308(b)(12);
 - (4)(5) The biennial reporting requirements of §§ 7-708(b) and (c); and
 - (5)(6) All applicable sections of the Vermont Environmental Protection Rules, Chapters 1 through 19.
- (f) Certification is required during the active life (including the closure period) of all hazardous waste management units. Owners and operators of landfills, surface impoundments, land treatment units, and waste pile units must have post-closure permits (i.e., certification) as specified in 40 CFR § 270.1(c).
- (g) Certification shall be for a period not to exceed ten (10) years. Each certification for a land disposal facility shall be reviewed by the Secretary five years after the date of certification issuance or reissuance and shall be modified, if necessary, as provided in § 7-507.
- (h) Continuation of Expiring Certificates
 - (1) If the certificate holder has submitted an administratively complete application to renew certification at least 180 calendar days prior to expiration of the effective certification and the Secretary, through no fault of the certificate holder, does not issue a new certificate with an effective date prior to the expiration date of the previous certificate, the conditions of the expired certificate continue in force until the effective date of a new certificate.
 - (2) Certificates continued under this section remain fully effective and enforceable.
 - (3) When the certificate holder is not in compliance with the conditions of the expired or expiring certification, the Secretary may do any or all of the following:

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- (A) Initiate an enforcement action based on the certificate that has been continued;
 - (B) Issue a notice of intent to deny the new request for certification. If the certification is denied, the activities authorized by the continued certificate would have to cease or become subject to an enforcement action;
 - (C) Issue a new certification with appropriate conditions; or
 - (D) Take other actions authorized by these regulations.
- (i) A certification may be transferred by the permittee to a new owner or operator under the provisions of **40 CFR § 270.40**.
 - (j) For the purposes of construing **40 CFR Parts 260 through 270**, a person who receives certification (i.e., the certificate holder) under this chapter shall also be known as the permittee.
 - (k) In lieu of the negative assurance required by **40 CFR § 264.143(f)(3)(iii)(B)**, the Secretary shall accept a certified public accountant's report describing the procedures performed and related findings, including whether or not there were discrepancies found in the comparison.

§ 7-505 APPLICATION FOR INITIAL AND RENEWAL CERTIFICATION

- (a) Any person who is required to obtain or renew certification under **§ 7-504** shall sign and submit an application for certification to the Secretary. When a facility is owned by one person but is operated by another person, it is the operator's duty to obtain certification except that the owner must also sign any documents submitted for the purpose of applying for certification.
- (b) At the time of application, the applicant must:
 - (1) If seeking initial certification for a hazardous waste treatment or disposal facility, have already obtained a certificate of need pursuant to the requirements of **10 V.S.A. § 6606a** (refer to **§ 7-504(b)**);
 - (2) Submit a disclosure statement pursuant to **§ 7-504(c)**;
 - (3) Have complied with the pre-application public meeting and notice requirements of **40 CFR § 124.31**.
- (c) An application for certification may be submitted in narrative form. Each application for certification must be signed in accordance with **§ 7-108**, and must contain all applicable information required under **40 CFR §§ 270.10(j), 270.13 (Part A) and 270.14 through**

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270.28 (Part B).

- (d) In addition to the requirements of **subsection (c) of this section**, each application for a hazardous waste land treatment or disposal facility shall include, but not be limited to, the following information:
- (1) A description of the provisions for hydrogeological studies, monitoring analysis, and protection of groundwater and surface waters;
 - (2) A description of the provisions for post-closure monitoring and maintenance of the facility; and
 - (3) A description of the actions taken by the facility to assure financial responsibility for the post-closure care monitoring period and civil liability arising from non-sudden incidents at the facility.
- (e) ~~Certain~~ Technical data ~~that are required to be submitted in an application, such as including design drawings, and specifications and engineering studies that are required to be submitted in an application,~~ shall be certified by a professional engineer registered in Vermont.
- (f) The Secretary shall not issue a draft certification until the applicant has fully complied to the Secretary's satisfaction with the specific application requirements for the type of facility involved, unless the only information not submitted is the information required for exposure assessments for surface impoundments or landfills.
- (g) Applicants shall keep records of all data used to complete certification applications and any supplemental information submitted to the Secretary for a period of at least three (3) years from the date the application is signed.

§ 7-506 PROCEDURE FOR CERTIFICATION

- (a) Upon completing review of each application for certification under **§ 7-505**, the Secretary shall either issue a draft certificate or deny certification. The Secretary shall prepare a written justification for any certification that has been denied and give public notice of the decision to deny.
- (b) Each draft and final certificate shall contain:
- (1) All standards, conditions, and requirements that the Secretary has determined to be the best control technology for the specific facility involved. At a minimum, best control technology shall be the design, construction, operation and maintenance requirements referenced in **§ 7-504(e)**;
 - (2) All standards, conditions, and requirements that the Secretary has determined

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necessary to protect human health and the environment, including the “conditions applicable to all permits” specified under **40 CFR § 270.30**; and

- (3) When appropriate, a schedule of compliance leading to compliance with the Waste Management Act and these regulations. Any schedule of compliance shall meet the provisions of **40 CFR § 270.33**.
- (c) ~~As necessary, the Secretary shall consult with the Commissioner of the Vermont Department of Health and the Commissioner of the Vermont Department of Labor to~~ As necessary, the Secretary shall consult with the Commissioner of the Vermont Department of Health and the Commissioner of the Vermont Department of Labor to avoid conflicts of the standards and conditions of any draft certification with requirements that may be imposed under **18 V.S.A. chapter 28** or any other applicable state safety or health regulation.
- (d) A fact sheet shall be compiled for every draft certificate prepared by the Secretary. The fact sheet shall briefly set forth the significant factual, legal, methodological, and policy questions considered in preparing the draft certificate. In addition, the fact sheet shall include the information described in **40 CFR § 124.8(b)**.
- (e) For preparing a draft certificate, the record shall consist of: the application, if required, and any supporting data furnished by the applicant; the draft certificate or notice of intent to deny the application or to revoke the certificate; the fact sheet; all documents cited in the fact sheet; and other documents contained in the supporting file for the draft certificate.
- (f) Public Notice
 - (1) The Secretary shall provide notice that a draft certificate has been prepared for a hazardous waste facility, of the opportunity for public comment on such draft certificate, and of the informational public hearing which shall be held for such draft certificate.
 - (2) Notice shall be provided by advertisement in major local newspapers of general circulation, broadcast over local radio station and by mailing a copy of a written notice to those persons listed in **40 CFR § 124.10**, who shall be included on the facility mailing list. The applicant shall reimburse the Secretary for all costs incurred under this subsection.
 - (3) At a minimum, for each draft certificate, the applicable public notice and public comment requirements of **40 CFR §§ 124.10 and 124.32** shall be met.
 - (4) The Secretary may assess the need, on a case-by-case basis, for an information repository, and may require that such a repository be maintained by the applicant, in accordance with the requirements of **40 CFR § 124.33**.
- (g) Copies of the fact sheet, draft certificate and written notice shall be sent to the applicant, the town in which the facility is located or proposed to be located, any other Agency or

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subdivision thereof which has issued or may be requested to issue a permit or certificate for the facility, the U.S. Environmental Protection Agency, and any other appropriate government authorities. Copies of the fact sheet, draft certificate and notice shall also be made available to any other interested party.

- (h) Prior to the issuance of each final certificate, the Secretary shall consider all comments raised during the public comment period and prepare a response to comments which specifies:
 - (1) The content of all significant comments;
 - (2) The Secretary's response to those comments;
 - (3) Any changes that will be made to the draft certificate; and
 - (4) The reasons for those changes.
- (i) An appeal may be taken from a final decision on the issuance or denial of a certificate.

§ 7-507 MODIFICATION OF CERTIFICATIONS

- (a) Based upon information received (e.g., findings of a facility inspection, or information submitted by the certificate holder), the Secretary may determine whether one or more of the causes listed in **subsection (e) of this section** to modify a certification exist. If cause exists, the Secretary may modify the certification accordingly, and may request an updated application if necessary.
- (b) When a certification is modified, only the conditions subject to modification ~~are~~ shall be reopened.
- (c) Suitability of the facility location shall not be considered at the time of modification unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time when the certification was issued.
- (d) If cause does not exist under this section, the Secretary shall not modify the certification, unless the modification is at the request of the certificate holder.
- (e) The following are causes for modification of a certification:
 - (1) There are material and substantial alterations or additions to the certified facility or activity which occurred after the certification was issued which justify the application of certification conditions that are different from or absent in the existing certification.
 - (2) Information is received by the Secretary that was not available at the time that the

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certification was issued (other than revised regulations, guidance, or test methods) and would have justified the application of different certification conditions at the time of issuance.

- (3) The standards or regulations on which the certification was based have been changed by statute, through promulgation of new or amended standards or regulations, or by judicial decision, after the certification was issued.
 - (4) The Secretary determines good cause exists for modification of a certification, such as an act of God, strike, flood, or materials shortage or other events over which the certificate holder has little or no control and for which there is no reasonably available remedy.
 - (5) Cause exists for revocation under § 7-509, and the Secretary determines that modification of the certification is appropriate.
 - (6) The Secretary has received notification (as required in the certification) of a proposed transfer of the certification.
- (f) Modification Procedures
- (1) If a modification is requested by the permittee, the Secretary shall approve or deny the request according to the procedures of **40 CFR § 270.42**.
 - (2) For all modifications sought on the motion of the Secretary, a draft certification shall be prepared, and the procedures and requirements of § 7-506 shall be met.
 - (3) If a modification is requested to transfer a facility to a new owner or operator, the Secretary shall review the request according to the procedures of **40 CFR § 270.40**.
- (g) An appeal may be taken from a final decision on the approval or denial of a request for the modification of a certificate.

§ 7-508 REVOCATION AND REISSUANCE OF CERTIFICATIONS

- (a) Based upon information received (e.g., findings of a facility inspection, or information submitted by the certificate holder), the Secretary may determine whether one or more of the causes listed in **subsection (e) of this section** to revoke and reissue a certification exist. If cause exists, the Secretary may revoke and reissue the certification accordingly, and may request an updated application if necessary.
- (b) If a certification is revoked and reissued, the entire certification is reopened and subject to revision and the certification is reissued for a new term. (See **40 CFR § 124.5(c)(2)**)
- (c) Suitability of the facility location shall not be considered at the time of revocation and

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reissuance unless new information or standards indicate that a threat to human health or the environment exists which was unknown or which did not exist at the time when the certification was issued.

- (d) If cause does not exist under this section, the Secretary shall not revoke and reissue a certification, except at the request of the certificate holder.
- (e) The following are causes for revocation and reissuance of a certification:
 - (1) Cause exists for termination under § 7-509, and the Secretary determines that revocation and reissuance of the certification is appropriate.
 - (2) The Secretary has received notification (as required in the certification) of a proposed transfer of the certification. When revocation and reissuance is used to transfer a certification to a new owner or operator, the requirements of 40 CFR § 270.41 shall be met.
- (f) The causes for modification listed under §§ 7-507(e)(1) through (4) may be causes for revocation and reissuance of a certification when the certificate holder requests or agrees.

§ 7-509 VOLUNTARY AND INVOLUNTARY TERMINATION OF CERTIFICATIONS

(a) Voluntary Termination of Certifications

The Secretary may terminate a certification upon request of the certificate holder provided the certificate holder:

- (1) Notifies the Secretary in writing of his or her intent to close the facility;
- (2) Closes the facility in accordance with the facility closure plan;
- (3) Requests and receives a determination by the Secretary that the facility has been successfully closed; and
- (4) Notifies persons included on the facility mailing list.

(b) Involuntary Termination of Certifications

- (1) The following are causes for terminating a certification during its term, or for denying an application to renew certification:
 - (A) Noncompliance by the certificate holder with any condition of the certification;
 - (B) Failure by the certificate holder to disclose fully all relevant facts in the application or during the certification process;

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- (C) Misrepresentation by the certificate holder of any relevant facts at any time; or
 - (D) A determination by the Secretary that the certified activity endangers human health or the environment and can only be regulated to acceptable levels by termination of the certification.
- (2) The Secretary shall follow the applicable procedures of **40 CFR § 124.5 and 3 V.S.A. § 814** when terminating any certification under this section.
 - (3) The Secretary may, pursuant to the procedures of this subchapter, deny an application for renewal of certification either in its entirety or as to the active life of a hazardous waste management facility or unit only.

§ 7-510 INTERIM STATUS CERTIFICATION

- (a) The purpose of this section is to establish minimum standards that define the acceptable management of hazardous waste during the period of interim status and until certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled.
- (b) The standards of **40 CFR Part 265, Subpart S of 40 CFR Part 264**, and this section apply to owners and operators of facilities that treat, store or dispose of hazardous waste who have fully complied with the requirements for interim status under **§ 3005(e) of RCRA and 40 CFR § 270.10** until either certification is made under this subchapter or until applicable Part 265 closure and post-closure responsibilities are fulfilled, and to those owners and operators of facilities in existence on November 19, 1980 who have failed to provide timely notification as required by **RCRA § 3010(a)** and/or failed to file an application for certification as required by **subsections (g) and (h) of this section**. These standards apply to all treatment, storage and disposal of hazardous waste at these facilities after the effective date of these regulations, except as specifically provided for in this subchapter or subchapter 2.
- (c) All hazardous waste facilities which were in operation or under construction as of November 19, 1980, which have been in operation or under construction since that date, or which are currently operating or under construction without certification shall, at a minimum, be designed, constructed, operated and maintained in accordance with all applicable requirements of:
 - (1) **40 CFR Part 265;**
 - (2) **40 CFR Part 266;**
 - (3) The land disposal restrictions (40 CFR Part 268) incorporated by reference under **§ 7-106;** and

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- (4) All applicable sections of the Vermont Environmental Protection Rules, **chapters 1 through 19**.
- (d) In order for a facility to qualify for interim status, the owner or operator must submit a ~~Vermont Hazardous Waste Handler Site Identification ID-Form (EPA Form 8700-12)~~, an application for interim certification that meets the requirements of **subsection (g) of this section**, and must otherwise meet the requirements of **40 CFR §§ 270.70 through 270.73**.
- (e) The following hazardous wastes must not be managed at facilities subject to regulation under this section: EPA hazardous waste codes F020, F021, F022, F023, F026, or F027.
- (f) The requirements of this section apply to owners and operators of all facilities which treat, store or dispose of hazardous waste subject to the land disposal restrictions of **40 CFR Part 268** incorporated by reference under § 7-106.
- (g) Owners and operators of hazardous waste management facilities in existence on November 19, 1980 must submit an application for certification or interim certification as required by **40 CFR § 270.10(e)**. Any person applying for interim certification under this section shall submit a document, signed in accordance with § 7-108, that provides the information required by **40 CFR § 270.13**. This document shall be submitted in accordance with the requirements of **40 CFR § 270.10(e)**.
- ~~(h)~~ ~~(+)~~
- (1) If any owner or operator of a hazardous waste management facility has filed for interim status certification and has not yet filed for certification, the owner or operator shall file an amended interim status application:
- (A) With the Secretary no later than the effective date of regulatory provisions listing or designating wastes as hazardous in the state in addition to those already listed or designated hazardous by the Agency, if the facility is treating, storing or disposing of any of those newly listed or designated wastes; or
- (B) As necessary to comply with provisions of **40 CFR § 270.72** for changes during interim status.
- (2) The owner or operator of a facility who fails to comply with the updating requirements of this section does not receive interim status as to the wastes not covered by a duly filed interim status application.
- ~~(h)~~(i) In lieu of the negative assurance required by **40 CFR § 265.143(e)(3)(iii)(B)**, the Secretary shall accept a certified public accountant's report describing the procedures performed and related findings, including whether or not there were discrepancies found in the comparison.

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§ 7-511 SPECIAL CERTIFICATION

- (a) The Secretary may issue a certificate for a hazardous waste incinerator in accordance with **40 CFR § 270.62**.
- (b) The Secretary may issue a certificate for using field tests or laboratory analyses for a land treatment demonstration in accordance with **40 CFR § 270.63**.
- (c) The Secretary may issue a research, development, and demonstration certificate for any hazardous waste treatment facility which proposes to utilize an innovative and experimental hazardous waste treatment technology or process for which certification standards for such experimental activity have not been promulgated under **40 CFR Part 264 or 266**. Any such certificate shall include such terms and conditions as will assure protection of human health and the environment. Such certificates shall meet the requirements of **40 CFR § 270.65**.
- (d) The Secretary may issue a certificate for hazardous waste boilers and industrial furnaces in accordance with **40 CFR § 270.66**.

§ 7-512 ADDITIONAL REQUIREMENTS

On a case-by-case basis, any person subject to this subchapter may be required to meet additional requirements when the Secretary determines that such actions are necessary to protect human health or the environment.

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Subchapter 6: STANDARDS FOR HAZARDOUS WASTES THAT ARE RECYCLED

§ 7-601 PURPOSE, SCOPE, APPLICABILITY

This subchapter defines “hazardous waste recycling,” establishes management standards for facilities that recycle hazardous waste, and provides a mechanism for the Secretary to, on a case-by-case basis, exempt a waste that is recycled or reused from part or all of these regulations.

§ 7-602 DEFINITION OF HAZARDOUS WASTE RECYCLING

Hazardous waste is recycled if it is used, reused, or reclaimed as follows:

- (a) A hazardous waste is used or reused if it is:
 - (1) Used or reused as an ingredient in an industrial process to make a product, provided the waste is not first being processed or reclaimed; or
 - (2) Used or reused as an effective substitute for a commercial product, provided the waste is not first being processed or reclaimed; or
 - (3) Returned to the original process from which the waste is generated, without first being reclaimed or land disposed. The waste must be returned as a substitute for a feedstock material. In cases where the original process to which the material is returned is a secondary process, the waste must be managed such that there is no placement on the land.

Note: Certain hazardous wastes that are recycled by being used or reused as described by **subsection (a) of this section** are exempted from regulation as hazardous waste under § 7-204(a)(1).

- (b) A hazardous waste is reclaimed if it is processed to recover the hazardous component of the waste as a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

§ 7-603 OTHER SECTIONS OF THESE REGULATIONS APPLICABLE TO HAZARDOUS WASTE RECYCLING

- (a) Definitions for the terms: “designated facility,” “discarded,” “reclaimed,” “staging,” and “used or reused” are provided in § 7-103.
- (b) Exemptions for certain hazardous wastes that are recycled are provided in § 7-204.
- (c) **Subsections (3) and (4) of § 7-305(a)(d)** specify how on-site recycled waste is counted

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toward generator ~~status~~ category.

- (d) Exemptions for certain recycling activities, from **subchapter 5** certification requirements, are provided in § 7-502(k).

§ 7-604 GENERAL STANDARDS APPLICABLE TO ALL HAZARDOUS WASTE RECYCLING ACTIVITIES

- (a) Any residual material resulting from a recycling process must be evaluated in accordance with § 7-303 to determine whether it is subject to regulation as hazardous waste.
- (b) Any facility that treats hazardous waste without recycling it, or that treats hazardous waste prior to recycling it, is subject to regulation under subchapter 5.

Note: Generators that treat hazardous waste in containers or tanks, and comply with § 7-502(o), are exempt from regulation under subchapter 5.

- (c) Owners or operators of facilities otherwise subject to subchapter 5 certification requirements are subject to the requirements of **Subparts AA, BB and CC of 40 CFR Part 264 or 265** for hazardous waste management units that recycle hazardous wastes.
- (d) Hazardous waste that is exported or imported for purpose of recovery is subject to the requirements of 40 CFR Part 262, Subpart H.

§ 7-605 HAZARDOUS WASTE RECYCLING BY GENERATORS

- (a) Hazardous waste that is recycled on-site by the generator of the waste, ~~and not exempt under § 7-204(a)~~, must be managed in accordance with:

(1) The requirements of § 7-502(o);

~~(1)(2)~~ The requirements of § 7-604; and

~~(2)(3)~~ All applicable standards of **subchapter 3** (i.e., standards applicable to ~~conditionally exempt very small quantity~~, small quantity, or large quantity generators) until such time that the **recycling** process is complete.

- (b) Generators that recycle their own hazardous waste on-site according to **subsection (a) of this section** are not subject to certification under **subchapter 5** (refer to § 7-502(k)) for the recycling process.
- (c) Generators shipping hazardous waste off-site for recycling shall ship such waste to:
 - (1) A designated facility;

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- (2) A facility approved by the Secretary under a recycle/reuse exemption issued according to the requirements of § 7-608; or
- (3) For ~~Vermont-listed hazardous waste that is not defined as hazardous in 40 CFR Part 261 (i.e., waste regulated as hazardous by Vermont)~~, to a facility that is not a designated facility, located in a state other than Vermont provided the facility can receive such waste under applicable state and local laws, regulations and ordinances.

§ 7-606 HAZARDOUS WASTE RECYCLING AT OFF-SITE FACILITIES

- (a) Owners or operators of facilities that receive recyclable materials, stage such materials for no more than three consecutive calendar days, and recycle them without storing them before they are recycled are subject to:
 - (1) The requirements of § 7-604;
 - (2) The large quantity generator requirements of § 7-308; and
 - (3) Financial AssurancePrior to staging any material, demonstrate financial assurance for closure of the facility by:
 - (A) Maintaining a closure cost estimate that meets the requirements of 40 CFR § 265.142, and that has been approved by the Secretary; and
 - (B) Establishing financial assurance in accordance 40 CFR § 265.143.
- (b) Owners or operators of facilities that store recyclable materials before they are recycled are subject to § 7-604 and all applicable provisions of **subchapters 1, 2, 3, 5 and 7** of these regulations.

§ 7-607 RECYCLABLE MATERIALS USED IN A MANNER CONSTITUTING DISPOSAL

Any recyclable materials that are applied to or placed on the land before or after mixing or combination with any other substance(s) shall be managed in accordance with 40 CFR §§ 266.20 through 266.23. These materials are referred to as "materials used in a manner that constitutes disposal."

§ 7-608 RECYCLE/REUSE EXEMPTIONS FOR RECYCLABLE HAZARDOUS WASTES AND/OR RECYCLING ACTIVITIES

- (a) The Secretary may, on a case by case basis, exempt from part or all of the regulations, a

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waste generated by a particular generator, transported by a particular transporter, or treated or stored by a particular facility if the waste is legitimately recycled provided that:

- (1) The recycled material is:
 - (A) Vermont regulated waste listed under § 7-211 of these regulations; or
 - (B) Recycled material described by 40 CFR § 260.30; or
 - ~~(B)(C) Material that is reclaimed and noted with a “ – ” in column 3 of Table 1 in 40 § CFR 261.2(c).~~
 - (2) The procedural and durational requirements and the criteria and standards used by the Secretary in exempting waste under this section shall be no less stringent than those specified in 40 CFR §§ 260.30, 260.31, and 260.33;
 - (3) The standards and requirements which apply to these wastes can be no less stringent than those outlined in 40 § CFR 261.6 and Part 266, if the waste in question is one addressed by these sections of 40 CFR; and
 - (4) The recycling, reclamation, or reuse of the waste does not present an actual or potential threat to human health or the environment.
- (b) Any person seeking an exemption under this section shall apply to the Secretary using the **Exemption Procedures for the Recycle and Reuse of Hazardous Waste Form**.
 - (c) Any generator or facility whose waste is exempted under this section shall comply with those additional management standards and requirements that the Secretary, after an examination of the factors listed in § 7-216(c), deems to be necessary to protect human health and the environment.
 - (d) Recycle/Reuse exemptions shall be issued for a period not to exceed five (5) years.
 - (e) If the holder of a Recycle/Reuse exemption has submitted an administratively complete application to renew the exemption at least 30 calendar days prior to expiration of the effective exemption and the Secretary, through no fault of the Recycle/Reuse exemption holder, does not issue a new exemption with an effective date prior to the expiration date of the previous exemption, the conditions of the expired exemption continue in force until ~~the effective date of a new exemption, either:~~
- (1) The effective date of a new exemption (should the Secretary approve the application);
or
 - (2) If the Secretary denies the application to renew, the last day for seeking appeal of the denial, or a later date fixed by order of the reviewing court.

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- (f) Any Recycle/Reuse exemption without a durational requirement shall expire on July 1, 2013.**

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***Subchapter 7: MANIFEST, AND REPORTING AND RECORDKEEPING
REQUIREMENTS***

§ 7-701 PURPOSE, SCOPE, APPLICABILITY

- (a) ~~This subchapter establishes requirements for the use of manifests by hazardous waste generators, transporters, and treatment, storage and disposal facilities to track the movement of hazardous waste from the point of generation to any intermediate points and finally to its ultimate point of disposition. This subchapter also establishes requirements for persons exporting or importing hazardous waste, for reporting and recordkeeping by generators and transporters, and for biennial reporting by generators, transporters and treatment, storage, and disposal facilities. Other reporting and recordkeeping requirements for treatment, storage, and disposal facilities are specified in subchapter 5.~~
- (b) Applicability of electronic manifest system and user fee requirements to facilities receiving state-only regulated waste shipments.
- (1) For purposes of this subchapter, "state-only regulated waste" means:
- (A) A non-RCRA waste that a state regulates more broadly under its state regulatory program. or
- (B) A RCRA hazardous waste that is federally exempt from manifest requirements, but not exempt from manifest requirements under Vermont state law.
- (2) In any case in which a state requires a manifest to be used under state law to track the shipment and transportation of a state-only regulated waste to a receiving facility, the facility receiving such a waste shipment for management shall:
- (A) Comply with the provisions of § 7-704; and
- ~~(A)(B) Pay the appropriate per manifest fee to EPA for each manifest submitted to the e-Manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in 40 CFR §§ 264.1300 through 264.1316.~~
- (c) Availability of information; confidentiality of information
- (1) After August 6, 2014, no claim of business confidentiality may be asserted by any person with respect to information entered on a Hazardous Waste Manifest (EPA Form 8700-22), a Hazardous Waste Manifest Continuation Sheet (EPA Form 8700-22A), or an electronic manifest format that may be prepared and used in accordance with 40 CFR § 262.20(a)(3).

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- (2) EPA will make any electronic manifest that is prepared and used in accordance with 40 CFR § 262.20(a)(3), or any paper manifest that is submitted to the system under 40 CFR §§ 264.71(a)(6) or 265.71(a)(6) available to the public under this section when the electronic or paper manifest is a complete and final document. Electronic manifests and paper manifests submitted to the system are considered by EPA to be complete and final documents and publicly available information after 90 days have passed since the delivery to the designated facility of the hazardous waste shipment identified in the manifest.

§ 7-702 MANIFEST REQUIREMENTS FOR ~~APPLICABLE TO~~ GENERATORS

- (a) (1) Unless otherwise specified in these regulations, a small or large quantity generator who transports or offers for transport a hazardous waste for offsite treatment, storage, or disposal, or a treatment, storage, and disposal facility who offers for transport a rejected hazardous waste load, must prepare a manifest on EPA Form 8700-22, and, if necessary, EPA Form 8700-22A, ~~according to the instructions included in Appendix V.~~
- (2) In lieu of using the manifest form specified in subsection (a)(1) of this section, a person required to prepare a manifest may prepare and use an electronic manifest, provided that the person complies with the requirements of:
- (A) 40 CFR § 262.24 for use of electronic manifests.
 - (B) 40 CFR § 262.25 for electronic manifest signatures, and
 - (C) 40 CFR § 3.10 for the reporting of electronic documents to EPA.
- ~~(2) Any conditionally exempt generator that chooses to utilize a manifest for shipping hazardous waste must comply with the manifest instructions included in Appendix V.~~
- ~~(3) When completing a manifest, a generator shall use the EPA identification number that is assigned to the generator site at the time of shipment.~~
- ~~(4)(3) Paper manifests may be obtained from any source that is registered with the U.S. EPA as a supplier of manifests (e.g., states, waste handlers, and/or commercial forms printers).~~
- ~~(5)(4) Any small or large quantity generator shipping hazardous waste using a manifest person initiating a shipment of hazardous waste in Vermont, who is required to file a manifest, or other similar report pursuant to 10 V.S.A. chapter 159 or these regulations, shall pay a tax based on the quantity of hazardous waste reported on such manifest or such other report is subject to the requirements of the tax assessed pursuant to 32 V.S.A. chapter 237. When completing a manifest, a generator of waste subject to an alternative tax rate must use the appropriate tax code listed in~~

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Appendix VI in order for the Secretary to recognize the alternative rate.

- (b) Any generator who transports or offers for transport hazardous waste to a designated facility using a manifest shall:

~~(1)~~ When completing the manifest, use the EPA identification number that is assigned to the generator site at the time of shipment.

~~(2)~~ Ensure that all hazardous waste codes used on the manifest to identify a hazardous waste are the same codes identified for that waste pursuant to 7-202(c).

~~(1)(3)~~ Designate on the manifest one facility that is permitted to handle the waste described on the manifest. A generator may also designate one alternate facility which is permitted to handle the waste in the event an emergency prevents delivery of the waste to the primary designated facility.

~~(4)~~ Sign the manifest certification by hand. Certify to one of the following statements in Item 15 of the manifest:

~~(A)~~ "I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment;" or

~~(B)~~ "I am a small quantity generator. I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford."

~~(5)~~ Obtain the initial transporter's name, handwritten signature of the initial transporter, and date of acceptance on the manifest. Give the manifest to the transporter after retaining copies as described in subsection (b)(5) of this section.

~~(2)(6)~~ Retain one copy of the manifest in accordance with subsection (b)(5) of this section and give the transporter the remaining copies.

Certify to one of the following statements in Item 15 of the manifest:

~~(3)~~ _____

~~(4)~~ "I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment;" or

~~(5)~~ _____

~~(6)~~ "I am a small quantity generator. I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me

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and that I can afford.²²

~~(7) Sign the manifest and otherwise complete each manifest as required under § 7-702(a).~~

~~(8)(7)~~ Retain a signed copy of the each manifest signed in accordance with subsections (4) and (5) of this section for at least three (3) years from the date of initial shipment or until receipt of the generator receives a signed completed copy from the designated facility that received the waste. ~~A completed copy of the manifest.~~ The signed copy from the designated facility must be retained as a record for at least three years from the date the waste was accepted by the initial transporter. All retained copies must be legible.

~~(9)(8)~~ For shipments of hazardous waste made within the United States solely by water (bulk shipments only), send three copies of the manifest dated and signed in accordance with this section to:

- (A) The owner or operator of the designated facility; or
- (B) The last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.

~~(10)(9)~~ For rail shipments of hazardous waste made within the United States which originate at the site of generation, send at least three copies of the manifest dated and signed in accordance with this section to:

- (A) The next non-rail transporter; if any; or
- (B) The designated facility if transported solely by rail; or
- (C) The last rail transporter to handle the waste in the United States if exported by rail.

~~(11)(10)~~ If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, immediately either designate another facility or instruct the transporter to return the waste.

~~(12)(11)~~ Wait for confirmation of the shipment by the return of a completed copy of the manifest from the designated facility. ~~All completed copies not returned by the designated facility within 35 days, or not returned by the foreign consignee within 60 days of the initial shipment, must be investigated and reported as provided in § 7-707.~~

~~For each manifested shipment of hazardous waste, assure that a completed copy of each manifest is sent to the Secretary.~~

~~(13)(12)~~ For shipments of hazardous waste made to a designated facility in an EPA-authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, assure that the designated facility agrees to sign and return the

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manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.

~~(14)~~(13) For rejected shipments of hazardous waste or container residues contained in non-empty containers that are returned to the generator by the designated facility (following the procedures of 40 CFR §§ 264.72(f) or 265.72(f)), the generator must:

- (A) Sign either:
 - (i) Item 20 of the new manifest if a new manifest is used for the returned shipment; or
 - (ii) Item 18c of the original manifest if the original manifest is used for the returned shipment;
- (B) Provide the transporter a copy of the manifest;
- (C) Within 30 days of delivery of the rejected shipment or container residues contained in non-empty containers, send a copy of the manifest to the designated facility that returned the shipment to the generator; and
- (D) Retain at the generator's site a copy of each manifest for at least three years from the date of delivery.

(c) The manifest requirements of this section do not apply to:

- (1) Hazardous waste produced by small quantity generators (generators of greater than 220 pounds (100 kilograms) but less than 2,200 pounds (1,000 kilograms) in a calendar month) where:
 - (A) The waste is reclaimed under a contractual agreement pursuant to which:
 - (i) The type of waste and frequency of shipments are specified in the agreement; and
 - (ii) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and
 - (B) The generator maintains a copy of the reclamation agreement in his or her files for a period of at least three (3) years after termination or expiration of the agreement; and
- (2) The transport of hazardous waste on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way. Nevertheless, the

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generator or transporter must comply with the requirements ~~of for transporters set forth in § 7-105(a)~~ in the event of a discharge of hazardous waste or release of hazardous material on a public or private right-of-way.

- (3) Hazardous waste produced by ~~conditionally exempt very small quantity generators,~~
- ~~(A) Offered to a certified solid waste management facility that is allowed to accept such waste under the terms of its certification; or the operator of a collection event authorized by the Secretary to accept conditionally exempt generator waste;~~
 - ~~(B) Transported by a transporter that possesses a permit to transport hazardous waste in Vermont; and~~
 - ~~(C) Delivered to a hazardous waste treatment, storage or disposal facility as allowed under § 7-306(e)(2)(A); or a solid waste management facility as allowed under § 7-306(e)(2)(B).~~

§ 7-703 MANIFEST REQUIREMENTS FOR TRANSPORTERS

- (a) Unless otherwise specified in these regulations, a transporter may ~~only not~~ accept hazardous waste from a generator ~~if unless~~ the transporter is also provided with a manifest form (EPA Form 8700-22, and if necessary, EPA Form 8700-22A) signed in accordance with the requirements of § 7-702(b)(4) through (6), or is provided with an electronic manifest that is obtained, completed, transmitted, and signed with a valid and enforceable electronic signature in accordance with § 7-702(a)(2)(B).
- (b) For exports of hazardous waste subject to the requirements of Subpart H of 40 CFR Part 262 (Transboundary Movements of Hazardous Waste for Recovery Within OECD), a transporter may not accept hazardous waste without a manifest signed by the generator in accordance with this section, as appropriate, and for exports occurring under the terms of a consent issued by EPA on or after December 31, 2016, a movement document that includes all information required by 40 CFR § 262.83(d).
- (c) Use of the Electronic Manifest System
- (1) Electronic manifests that are obtained, completed, and transmitted in accordance with § 7-702(a)(2), and used in accordance with this section in lieu of EPA Forms 8700-22 and 8700-22A, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, carry, provide, give, use, or retain a manifest.
 - (A) Any requirement in these regulations to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of § 7-702(a)(2)(B).

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- (B) Any requirement in these regulations to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person by submission to the system.
- (C) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment, except that to the extent that the Hazardous Materials regulation on shipping papers for carriage by public highway requires transporters of hazardous materials to carry a paper document to comply with 49 CFR § 177.817, a hazardous waste transporter must carry one printed copy of the electronic manifest on the transport vehicle.
- (D) Any requirement in these regulations for a transporter to keep or retain a copy of a manifest is satisfied by the retention of an electronic manifest in the transporter's account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector.
- (E) No transporter may be held liable for the inability to produce an electronic manifest for inspection under this section if that transporter can demonstrate that the inability to produce the electronic manifest is exclusively due to a technical difficulty with the EPA system for which the transporter bears no responsibility.
- (2) A transporter may participate in the electronic manifest system either by accessing the electronic manifest system from the transporter's own electronic equipment, or by accessing the electronic manifest system from the equipment provided by a participating generator, by another transporter, or by a designated facility.
- (3) Electronic manifest signatures shall meet the criteria described in 40 CFR § 262.25.
- (4) If after a manifest has been originated electronically and signed electronically by the initial transporter, and the electronic manifest system should become unavailable for any reason, then:
 - (A) The transporter in possession of the hazardous waste when the electronic manifest becomes unavailable shall reproduce sufficient copies of the printed manifest that is carried on the transport vehicle pursuant to § 7-703(c)(1)(C), or obtain and complete another paper manifest for this purpose. The transporter shall reproduce sufficient copies to provide the transporter and all subsequent waste handlers with a copy for their files, plus two additional copies that will be delivered to the designated facility with the hazardous waste.
 - (B) On each printed copy, the transporter shall include a notation in the Special Handling and Additional Description space (Item 14) that the paper manifest is a replacement manifest for a manifest originated in the electronic manifest system.

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shall include (if not pre-printed on the replacement manifest) the manifest tracking number of the electronic manifest that is replaced by the paper manifest, and shall also include a brief explanation why the electronic manifest was not available for completing the tracking of the shipment electronically.

- (C) A transporter signing a replacement manifest to acknowledge receipt of the hazardous waste must ensure that each paper copy is individually signed and that a legible handwritten signature appears on each copy.
- (D) From the point at which the electronic manifest is no longer available for tracking the waste shipment, the paper replacement manifest copies shall be carried, signed, retained as records, and given to a subsequent transporter or to the designated facility, following the instructions, procedures, and requirements that apply to the use of all other paper manifests.
- (5) If a transporter using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the transporter shall sign the electronic manifest electronically and also sign with an ink signature the transporter acknowledgement of receipt of materials on the printed copy of the manifest that is carried on the vehicle in accordance with § 7-703(c)(1)(C). This printed copy bearing the generator's and transporter's ink signatures shall also be presented by the transporter to the designated facility to sign in ink to indicate the receipt of the waste materials or to indicate discrepancies. After the owner/operator of the designated facility has signed this printed manifest copy with its ink signature, the printed manifest copy shall be delivered to the designated facility with the waste materials.
- (6) After facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) named on the manifest. Transporters may participate electronically in the post-receipt data corrections process by following the process described in § 7-704(d)(7), which applies to corrections made to either paper or electronic manifest records.
- (d) Before transporting the hazardous waste, the transporter must sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter must return a signed copy to the generator before leaving the generator's property.
- (c) The transporter must ensure that the manifest accompanies the hazardous waste. In the case of exports occurring under the terms of a consent issued by EPA to the exporter on or after December 31, 2016, the transporter must ensure that a movement document that includes all information required by 40 CFR 262.83(d) also accompanies the hazardous waste. In the case of imports occurring under the terms of a consent issued by EPA to the country of export or the importer on or after December 31, 2016, the transporter must ensure that a movement document that includes all information required by 40 CFR

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262.84(d) also accompanies the hazardous waste.

- (f) A transporter who delivers a hazardous waste to another transporter or to the designated facility must:
- (1) Obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest; and
 - (2) Retain one copy of the manifest in accordance with § 7-703(1); and
 - (3) Give the remaining copies of the manifest to the accepting transporter or designated facility.
- (b) ~~Any transporter of a shipment of hazardous waste for which a manifest is required shall comply with the following:~~
- ~~(1) Prior to accepting the shipment, check for discrepancies between the manifest and the wastes being offered for shipment. A transporter shall not accept a shipment if discrepancies exist.~~
 - ~~(2) Before transporting the shipment, ensure that the manifest has been signed and completed by the generator as required by § 7-702(b):~~
 - ~~(3) Sign and date the manifest and return a signed copy of the manifest to the generator before leaving the site with the shipment:~~
 - ~~(4) Ensure that the manifest accompanies the shipment at all times;~~
 - ~~(5) Deliver the entire quantity of hazardous waste accepted for transport and the manifest to:
 - ~~(A) The designated facility listed on the manifest; or~~
 - ~~(B) The alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery; or~~
 - ~~(C) The next designated transporter; or~~
 - ~~(D) The place outside the United States designated by the generator.~~~~
 - ~~(6) If the hazardous waste cannot be delivered in accordance with subsection (5) of this section because of an emergency condition other than rejection of the waste by the designated facility, contact the generator for further directions and revise the manifest according to the generator's instructions.~~
 - ~~(7) If hazardous waste is rejected by the designated facility while on the facility's~~

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~~premises, comply with the requirements of 40 CFR § 263.21(b)(2).~~

~~(8) Upon delivering the hazardous waste shipment to another transporter or to the designated facility:~~

~~(A) Obtain the date of delivery and the handwritten signature of the transporter or the owner or operator of the designated facility after such person has had an opportunity to inspect the shipment for discrepancies; and~~

~~(B) Retain one copy of the manifest in accordance with § 7-710 and give the remaining copies of the manifest to the accepting transporter or designated facility.~~

~~(e)(g)~~ A transporter transporting hazardous waste from a small quantity generator who generates greater than or equal to 220 pounds (100 kilograms) but less than 2,200 pounds (1,000 kilograms) of hazardous waste in a calendar month need not comply with the requirements of § 7-703 when:

- (1) The waste is being transported pursuant to a reclamation agreement as provided in § 7-702(c)(1); and
- (2) The transporter records on a log or shipping paper, the following information for each shipment:
 - (A) The name, address and EPA identification number of the generator of the waste;
 - (B) The quantity of waste accepted;
 - (C) All DOT-required shipping information;
 - (D) The date the waste is accepted; and
- (3) The records required under subsection (2) of this section accompany the waste shipment to the reclamation facility; and
- ~~(3)(4)~~ The transporter retains a copy of the reclamation agreement and the records required under subsection (eg)(2) of this section for a period of at least three (3) years after termination or expiration of the agreement.

~~(d)(h)~~ A water (bulk shipment) transporter need not comply with §§ 7-703(b)(4)(c), (f) and ~~(6)(i)~~ provided the transporter complies with 40 CFR § 263.20(e). Any person utilizing this exemption need not comply with §§ 7-710(b), (c) and (e).

~~(e)(i)~~ For shipments involving rail transportation, the requirements of §§ 7-703(b)(4)(c), (f) and ~~(6)(h)~~ do not apply provided the shipment complies with 40 CFR § 263.20(f). Any person utilizing this exemption need not comply with §§ 7-710(b), (c) and (e).

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(i) Transporters who transport hazardous waste out of the United States must:

- (1) Sign and date the manifest in the International Shipments block to indicate the date that the shipment left the United States;
- (2) Retain one copy in accordance with § 7-703(I)(4);
- (3) Return a signed copy of the manifest to the generator; and
- (4) For paper manifests only:
 - (A) Send a copy of the manifest to the e-Manifest system in accordance with the allowable methods specified in § 7-704(c)(5); and
 - (A)(B) For shipments initiated prior to the AES filing compliance date, when instructed by the exporter to do so, give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.

(k) Compliance with the manifest

- (1) Except as provided in subsection (2) of this section, the transporter must deliver the entire quantity of hazardous waste which he or she has accepted from a generator or a transporter to:
 - (A) The designated facility listed on the manifest; or
 - (B) The alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery; or
 - (C) The next designated transporter; or
 - (D) The place outside the United States designated by the generator.
- (2) Hazardous waste not delivered in accordance with subsection (1) of this section
 - (A) If the hazardous waste cannot be delivered in accordance with subsection (1)(A), (B), or (D) of this section because of an emergency condition other than rejection of the waste by the designated facility or alternate designated facility, then the transporter must contact the generator for further instructions and must revise the manifest according to the generator's instructions.
 - (B) If the hazardous waste is not delivered to the next designated transporter in accordance with subsection (1)(C) of this section, and the current transporter is without contractual authorization from the generator to act as the generator's agent with respect to transporter additions or substitutions, then the current transporter

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must contact the generator for further instructions prior to making any revisions to the transporter designations on the manifest. The current transporter may thereafter make such revisions if:

- (i) The hazardous waste is not delivered in accordance with subsection (1)(C) of this section because of an emergency condition; or
 - (ii) The current transporter proposes to change the transporter(s) designated on the manifest by the generator, or to add a new transporter during transportation, to respond to an emergency, or for purposes of transportation efficiency, convenience, or safety; and
 - (iii) The generator authorizes the revision.
- (C) If the hazardous waste is not delivered to the next designated transporter in accordance with subsection (1)(C) of this section, and the current transporter has authorization from the generator to act as the generator's agent, then the current transporter may change the transporter(s) designated on the manifest, or add a new transporter, during transportation without the generator's prior, explicit approval, provided that:
- (i) The current transporter is authorized by a contractual provision that provides explicit agency authority for the transporter to make such transporter changes on behalf of the generator;
 - (ii) The transporter enters in Item 14 of each manifest for which such a change is made, the following statement of its agency authority: "Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf;" and
 - (iii) The change in designated transporters is necessary to respond to an emergency, or for purposes of transportation efficiency, convenience, or safety.
- (D) The grant by a generator of authority to a transporter to act as the agent of the generator with respect to changes to transporter designations under subsection (2)(C) of this section does not affect the generator's liability or responsibility for complying with any applicable requirement under this chapter, or grant any additional authority to the transporter to act on behalf of the generator.
- (3) If hazardous waste is rejected by the designated facility while the transporter is on the facility's premises, then the transporter must obtain the following:
- (A) For a partial load rejection or for regulated quantities of container residues, a copy of the original manifest that includes the facility's date and signature, and the Manifest Tracking Number of the new manifest that will accompany the shipment.

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and a description of the partial rejection or container residue in the discrepancy block of the original manifest. The transporter must retain a copy of this manifest in accordance with § 7-703(I), and give the remaining copies of the original manifest to the rejecting designated facility. If the transporter is forwarding the rejected part of the shipment or a regulated container residue to an alternate facility or returning it to the generator, the transporter must obtain a new manifest to accompany the shipment, and the new manifest must include all of the information required in 40 CFR §§ 264.72(e)(1) through (6) or (f)(1) through (6) or 40 CFR §§ 265.72(e)(1) through (6) or (f)(1) through (6).

(B) For a full load rejection that will be taken back by the transporter, a copy of the original manifest that includes the rejecting facility's signature and date attesting to the rejection, the description of the rejection in the discrepancy block of the manifest, and the name, address, phone number, and Identification Number for the alternate facility or generator to whom the shipment must be delivered. The transporter must retain a copy of the manifest in accordance with § 7-703(I), and give a copy of the manifest containing this information to the rejecting designated facility. If the original manifest is not used, then the transporter must obtain a new manifest for the shipment and comply with 40 CFR §§ 264.72(e)(1) through (6) or 40 CFR §§ 265.72(e)(1) through (6).

(I) Recordkeeping

(1) A transporter of hazardous waste must keep a copy of the manifest signed by the generator, himself, and the next designated transporter or the owner or operator of the designated facility for a period of three years from the date the hazardous waste was accepted by the initial transporter.

(2) For shipments delivered to the designated facility by water (bulk shipment), each water (bulk shipment) transporter must retain a copy of the shipping paper containing all the information required in 40 CFR § 263.20(e)(2) for a period of three years from the date the hazardous waste was accepted by the initial transporter.

(3) For shipments of hazardous waste by rail within the United States:

(A) The initial rail transporter must keep a copy of the manifest and shipping paper with all the information required in 40 CFR § 263.20(f)(2) for a period of three years from the date the hazardous waste was accepted by the initial transporter; and

(B) The final rail transporter must keep a copy of the signed manifest (or the shipping paper if signed by the designated facility in lieu of the manifest) for a period of three years from the date the hazardous waste was accepted by the initial transporter.

Note: Intermediate rail transporters are not required to keep records pursuant to these

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regulations.

- (4) A transporter who transports hazardous waste out of the United States must keep a copy of the manifest, indicating that the hazardous waste left the United States, for a period of three years from the date the hazardous waste was accepted by the initial transporter.

§ 7-704 MANIFEST REQUIREMENTS FOR DESIGNATED FACILITIES

- (a) If a facility receives hazardous waste accompanied by a manifest, the owner, operator or his/her agent must sign and date the manifest as indicated in **subsection (b) of this section** to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy space.
- (b) In any case in which the state in which waste is generated, or the state in which waste will be transported to a designated facility, requires that the waste be regulated as a hazardous waste or otherwise be tracked through a hazardous waste manifest, the designated facility that receives the waste shall, regardless of the state in which the facility is located:
- (1) Complete the facility portion of the applicable manifest;
 - (2) Sign and date the facility certification;
 - (3) Submit to the e-Manifest system a final copy of the manifest for data processing purposes; and
 - (4) Pay the appropriate per manifest fee to EPA for each manifest submitted to the e-Manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in 40 CFR §§ 264.1300 through 264.1316.
- ~~(b)(c)~~ (c) If the facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or his agent must~~An owner or operator of a designated facility who accepts a shipment of hazardous waste for which a manifest is required shall comply with the following:~~
- (1) Perform an inspection upon receipt of each shipment of hazardous waste, comparing the description appearing on the manifest and the waste actually received, noting any ~~significant discrepancies, as defined in subsection (g)(i) of this section on each copy of the manifest in the space provided.~~ Any ~~significant discrepancies~~ shall be noted on each copy of the manifest and immediately reported to the Secretary as provided by subsection (g)(i) of this section;

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- (2) Sign and date, by hand, each copy of the manifest to certify that the hazardous waste covered by the manifest was received;
- (3) Immediately give the transporter at least one copy of the manifest;
- ~~(4) Immediately send the appropriate completed copy of the manifest to:~~
 - ~~(A) The Secretary if the waste was generated in Vermont; or~~
 - ~~(B) The appropriate state authority if the waste was generated in a state other than Vermont and that state requires a completed copy of the manifest;~~
- ~~(5) Immediately send the appropriate completed copy of the manifest to the appropriate state or federal authority for the state where the facility is located;~~
- ~~(6)(4) Within 30 days of delivery, send a copy (Page 2) of the manifest to the generator;~~
- (5) Paper manifest submission requirements are:
 - (A) Beginning on June 30, 2018, send the top copy (Page 1) of any paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing, or in lieu of submitting the paper copy to EPA, the owner or operator may transmit to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or both a data file and image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Submissions of copies to the e-Manifest system shall be made at the mailing address or electronic mail/submission address specified at the e-Manifest program website's directory of services. Beginning on June 30, 2021, EPA will not accept mailed paper manifests from facilities for processing in e-Manifest.
 - (B) Beginning on June 30, 2021, the requirement to submit the top copy (Page 1) of the paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing may be met by the owner or operator only by transmitting to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or by transmitting to the EPA system both a data file and the image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Submissions of copies to the e-Manifest system shall be made to the electronic mail/submission address specified at the e-Manifest program website's directory of services; and
- ~~(7)(6) Retain at the facility a copy of each manifest for at least three years from the date of delivery.~~
- (d) Use of the Electronic Manifest System
 - (1) Electronic manifests that are obtained, completed, and transmitted in accordance with § 7-702(a)(2), and used in accordance with this section in lieu of the paper manifest

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form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest.

- (A) Any requirement in these regulations for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of 40 CFR § 262.25.
 - (B) Any requirement in these regulations to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person.
 - (C) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment.
 - (D) Any requirement in these regulations for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in its account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector.
 - (E) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under this section if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the owner or operator bears no responsibility.
- (2) An owner or operator may participate in the electronic manifest system either by accessing the electronic manifest system from the owner's or operator's electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the owner's or operator's site by the transporter who delivers the waste shipment to the facility.
- (3) If a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, the following procedures apply to the delivery of the hazardous waste by the final transporter:
- (A) Upon delivery of the hazardous waste to the designated facility, the owner or operator must sign and date each copy of the paper replacement manifest by hand in Item 20 (Designated Facility Certification of Receipt) and note any discrepancies in Item 18 (Discrepancy Indication Space) of the paper replacement manifest.

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- (B) The owner or operator of the facility must give back to the final transporter one copy of the paper replacement manifest.
- (C) Within 30 days of delivery of the waste to the designated facility, the owner or operator of the facility must send one signed and dated copy of the paper replacement manifest to the generator, and send an additional signed and dated copy of the paper replacement manifest to the electronic manifest system, and
- (D) The owner or operator of the facility must retain at the facility one copy of the paper replacement manifest for at least three years from the date of delivery.
- (4) If an owner or operator using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the owner or operator shall also sign with an ink signature the facility's certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing its ink signature on this printed copy, the owner or operator shall retain this original copy among its records for at least 3 years from the date of delivery of the waste.
- (5) Imposition of user fee for manifest submissions.
- (A) As prescribed in 40 CFR § 264.1311, and determined in 40 CFR § 264.1312, an owner or operator who is a user of the electronic manifest system shall be assessed a user fee by EPA for the submission and processing of each electronic and paper manifest. EPA shall update the schedule of user fees and publish them to the user community, as provided in 40 CFR § 264.1313.
- (B) An owner or operator subject to user fees under this section shall make user fee payments in accordance with the requirements of 40 CFR § 264.1314, subject to the informal fee dispute resolution process of 40 CFR § 264.1316, and subject to the sanctions for delinquent payments under 40 CFR § 264.1315.
- (6) Electronic manifest signatures shall meet the criteria described in 40 CFR § 262.25 of this chapter.
- (7) After facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) shown on the manifest.
- (A) Interested persons must make all corrections to manifest data by electronic submission, either by directly entering corrected data to the web based service provided in e-Manifest for such corrections, or by an upload of a data file containing data corrections relating to one or more previously submitted manifests.
- (B) Each correction submission must include the following information:

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- (i) The Manifest Tracking Number and date of receipt by the facility of the original manifest(s) for which data are being corrected;
 - (ii) The item number(s) of the original manifest that is the subject of the submitted correction(s); and
 - (iii) For each item number with corrected data, the data previously entered and the corresponding data as corrected by the correction submission.
 - (C) Each correction submission shall include a statement that the person submitting the corrections certifies that to the best of his or her knowledge or belief, the corrections that are included in the submission will cause the information reported about the previously received hazardous wastes to be true, accurate, and complete:
 - (i) The certification statement must be executed with a valid electronic signature; and
 - (ii) A batch upload of data corrections may be submitted under one certification statement.
 - (D) Upon receipt by the system of any correction submission, other interested persons shown on the manifest will be provided electronic notice of the submitter's corrections.
 - (E) Other interested persons shown on the manifest may respond to the submitter's corrections with comments to the submitter, or by submitting another correction to the system, certified by the respondent as specified in subsection (d)(7)(C) of this section, and with notice of the corrections to other interested persons shown on the manifest.
- (c) If a facility receives hazardous waste imported from a foreign source, the receiving facility must mail a copy of the manifest and documentation confirming EPA's consent to the import of hazardous waste to the following address within thirty (30) days of delivery: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460. The owner or operator of a facility receiving hazardous waste subject to 40 CFR Part 262, subpart H from a foreign source must:
- (1) Additionally list the relevant consent number from consent documentation supplied by EPA to the facility for each waste listed on the manifest, matched to the relevant list number for the waste from block 9b. If additional space is needed, the owner or operator should use a Continuation Sheet(s) (EPA Form 8700-22A); and

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- ~~(8)~~(2) Send a copy of the manifest within thirty (30) days of delivery to EPA using the addresses listed in 40 CFR § 262.82(e) until the facility can submit such a copy to the e-Manifest system in accordance with subsection (c)(5) of this section.
- ~~(e)~~(f) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator's certification, and signatures), the owner or operator, or his agent, shall comply with 40 CFR § 264.71(b) or 40 CFR § 265.71(b), as applicable.
- ~~(d)~~(g) Within three working days of the receipt of a shipment subject to 40 CFR part 262, subpart H, the owner or operator of the facility must provide a copy of the movement document bearing all required signatures to the exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, and to competent authorities of all other concerned countries. The original copy of the movement document must be maintained at the facility for at least three years from the date of signature. As per 40 CFR § 262.84(d)(2)(xv), within three (3) working days of the receipt of a shipment subject to 40 CFR Part 262, Subpart H, the owner or operator of a facility must provide a copy of the movement document bearing all required signatures to the foreign exporter; to the competent authorities of the countries of export and transit that control the shipment as an export and transit of hazardous waste respectively; and on or after the electronic import-export reporting compliance date, to EPA electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system. The original copy of the movement document must be maintained at the facility for at least three (3) years from the date of signature. The owner or operator of a facility may satisfy this recordkeeping requirement by retaining electronically submitted documents in the facility's account on EPA's Waste Import Export Tracking System (WIETS), or its successor system, provided that copies are readily available for viewing and production if requested by any EPA or authorized state inspector. No owner or operator of a facility may be held liable for the inability to produce the documents for inspection under this section if the owner or operator of a facility can demonstrate that the inability to produce the document is due exclusively to technical difficulty with EPA's Waste Import Export Tracking System (WIETS), or its successor system, for which the owner or operator of a facility bears no responsibility.
- ~~(e)~~(h) A facility must determine whether the consignment state for a shipment regulates any additional wastes (beyond those regulated by Vermont) as hazardous wastes under its state hazardous waste program. Facilities must also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.
- ~~(f)~~(i) Manifest discrepancies
- (1) Manifest discrepancies are:

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- (A) Significant differences (as defined by **subsection ~~(g)~~(i)(2) of this section**) between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives;
 - (B) Rejected wastes, which may be a full or partial shipment of hazardous waste that the designated facility cannot accept; or
 - (C) Container residues, which are residues that exceed the quantity limits for “empty” containers set forth in § 7-203(j).
- (2) Significant differences in quantity are: For bulk waste, variations greater than 10 percent in weight; for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. Significant differences in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.
 - (3) Upon discovering a significant difference in quantity or type, the facility owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Secretary a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.
 - (4) For any rejected wastes, or container residues described in **subsection ~~(g)~~(i)(1)(C) of this section**, the facility shall comply with the applicable requirements of **40 CFR §§ 264.72(d) through (g)** and **40 CFR §§ 265.72(d) through (g)**.
- ~~(e)~~(i) If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper as described by **40 CFR §263.20(e)** for water (bulk shipment) transporters, and if the waste is not excluded from the manifest requirement, then the owner or operator must prepare and submit a letter to the Secretary within 15 days after receiving the waste. The unmanifested waste report must contain the following information:
- (1) The EPA identification number, name and address of the facility;
 - (2) The date the facility received the waste;
 - (3) The EPA identification number, name and address of the generator and the transporter, if available;
 - (4) A description and the quantity of each unmanifested hazardous waste the facility received;

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- (5) The method of treatment, storage, or disposal for each hazardous waste;
- (6) The certification signed by the owner or operator of the facility or his authorized representative; and,
- (7) A brief explanation of why the waste was unmanifested, if known.

§ 7-705 EXPORTS OF HAZARDOUS WASTE ~~RESERVED~~

~~(a) The export of any waste defined as hazardous in 40 CFR Part 261 is prohibited unless:~~

- ~~(1) The primary exporter submits a notification in accordance with this section;~~
- ~~(2) The receiving country has consented to accept the hazardous waste;~~
- ~~(3) A copy of the "EPA Acknowledgment of Consent" (defined in § 7.103 of these regulations) accompanies the shipment in accordance with this section; and~~
- ~~(4) The hazardous waste shipment conforms to the terms of the receiving country's written consent as reflected in the EPA Acknowledgment of Consent.~~

~~(b) Primary exporters~~

~~Each primary exporter of a waste, which is defined as hazardous in 40 CFR Part 261, shall comply with the following requirements:~~

~~(c) A primary exporter of hazardous waste shall notify EPA of an intended export before such waste is scheduled to leave the United States. A complete notification shall be submitted sixty (60) days before the initial shipment is intended to be shipped off site. This notification may cover export activities extending over a twelve (12) month or lesser period. The notification must be in writing, signed by the primary exporter and include the following information:~~

- ~~(A) Name, mailing address, telephone number and EPA identification number of the primary exporter;~~
- ~~(B) By consignee, for each hazardous waste type:
 - ~~(i) A description of the hazardous waste and the EPA hazardous waste code, U.S. DOT proper shipping name, hazard class and identification number (UN/NA) for each hazardous waste as identified in 49 CFR Parts 171 through 177;~~
 - ~~(ii) The estimated frequency or rate at which such waste is to be exported and the period of time over which such waste is to be exported;~~~~

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- ~~(iii) The estimated total quantity of the hazardous waste in units as specified in the instructions to the uniform hazardous waste manifest;~~
 - ~~(iv) All points of entry to and departure from each foreign country through which the hazardous waste will pass;~~
 - ~~(v) A description of the means by which each shipment of the hazardous waste will be transported (e.g., mode of transportation vehicle, type(s) of container);~~
 - ~~(vi) A description of the manner in which the hazardous waste will be treated, stored or disposed of in the receiving country;~~
 - ~~(vii) The name and site address of the consignee and any alternate consignee; and~~
 - ~~(viii) The name of any transit countries through which the hazardous waste will be sent and a description of the approximate length of time the hazardous waste will remain in such country and the nature of its handling while there.~~
- ~~(2) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, DC 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 12th St. and Pennsylvania Ave., NW, Washington, DC 20004. In both cases, the following shall be prominently displayed on the front of the envelope: "Attention: Notification of Intent to Export."~~
- ~~(3) Except for changes to the telephone number in subsection (b)(1)(A) of this section, changes to subsection (b)(1)(B)(v) of this section, and decreases in the quantity indicated pursuant to subsection (b)(1)(B)(iii) of this section, when the conditions are specified on the original notification change (including any exceedance of the estimate of the quantity of hazardous waste specified in the original notification), the primary exporter must provide EPA with a written renotification of the change. The shipment cannot take place until consent of the receiving country to the changes (except for changes to subsection (b)(1)(B)(viii) of this section and in the ports of entry to and departure from transit countries pursuant to subsection (b)(1)(B)(iv) of this section) has been obtained and the primary exporter receives an EPA Acknowledgement of Consent reflecting the receiving country's consent to the changes.~~
- ~~(4) Upon request by EPA, a primary exporter shall furnish to EPA any additional information that a receiving country requests in order to respond to a notification.~~
- ~~(5) In conjunction with the Department of State, EPA will provide a complete notification to the receiving country and any transit countries. A notification is~~

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complete when EPA receives a notification that EPA determines satisfies the requirements of subsection (b)(1) of this section. Where a claim of confidentiality is asserted with respect to any notification information required by subsection (b)(1) of this section, EPA may find the notification not complete until any such claim is resolved in accordance with 40 CFR § 260.2.

~~(6) Where the receiving country consents to the receipt of the hazardous waste, EPA will forward an EPA Acknowledgement of Consent to the primary exporter for purposes of subsection (b)(7)(II) of this section. Where the receiving country objects to receipt of the hazardous waste or withdraws a prior consent, EPA will notify the primary exporter in writing. EPA will also notify the primary exporter of any responses from transit countries.~~

~~(7) The manifest requirements of § 7.702 must be complied with except that:~~

~~(A) In lieu of the name, site address and EPA identification number of the designated permitted facility, the primary exporter must enter the name and site address of the consignee;~~

~~(B) In lieu of the name, site address, and EPA identification number of a permitted alternate facility, the primary exporter may enter the name and site address of any alternate consignee;~~

~~(C) In the International Shipments block of the manifest, the primary exporter must check the export box and enter the point of exit (city and State) from the United States;~~

~~(D) The following statement must be added to the end of the first sentence of the certification set forth in item 16 of the uniform hazardous waste manifest form: "and conforms to the terms of the attached EPA Acknowledgement of Consent;"~~

~~(E) The primary exporter may obtain the manifest from any source that is registered with the U.S. EPA as a supplier of manifests (e.g., states, waste handlers, and/or commercial forms printers);~~

~~(F) The primary exporter must require the consignee to confirm in writing the delivery of the hazardous waste to that facility and to describe any significant discrepancies (as defined in 40 CFR § 264.72(a) and 40 CFR § 265.72(a)), between the manifest and the shipment. A copy of the manifest signed by such facility may be used to confirm delivery of the hazardous waste.~~

~~(G) In lieu of the requirements of § 7.702(b)(8), where a shipment cannot be delivered for any reason to the designated or alternate consignee, the primary exporter must:~~

~~(i) Renotify EPA of a change in the conditions of the original notification to allow shipment to a new consignee in accordance with § 7.705(b)(3) and~~

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- ~~(ii) — Obtain an EPA Acknowledgement of Consent prior to delivery; or~~

~~(ii) — Instruct the transporter to return the waste to the primary exporter in the United States or designate another facility within the United States; and~~

~~(iii) — Instruct the transporter to revise the manifest in accordance with the primary exporter's instructions.~~
- ~~(H) — The primary exporter must attach a copy of the EPA Acknowledgement of Consent to the shipment to the manifest that must accompany the hazardous waste shipment. The primary exporter must assure that the hazardous waste shipment conforms to the terms of the receiving country's written consent as reflected in the EPA Acknowledgement of Consent. For exports by rail or water (bulk shipment), the primary exporter must provide the transporter with an EPA Acknowledgement of Consent which must accompany the hazardous waste but which need not be attached to the manifest except that for exports by water (bulk shipment) the primary exporter must attach the copy of the EPA Acknowledgement of Consent to the shipping paper.~~

~~(I) — The primary exporter shall provide the transporter with an additional copy of the manifest for delivery to the U.S. Customs official at the point the hazardous waste leaves the United States in accordance with § 7-705(e)(3)(D).~~
- ~~(d) — Transporters~~

~~In addition to the requirements of § 7-703, a transporter transporting hazardous waste for export shall:~~

 - ~~(1) — For shipments other than those subject to Subpart H of 40 CFR Part 262, not accept such waste from a primary exporter or other person if the transporter knows the shipment does not conform to the EPA Acknowledgement of Consent; and unless, in addition to a manifest signed by the generator as provided in this section, the transporter shall also be provided with an EPA Acknowledgement of Consent which, except for shipments by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)). For exports of hazardous waste subject to the requirements of Subpart H of 40 CFR Part 262, a transporter may not accept hazardous waste without a tracking document that includes all information required by 40 CFR § 262.84.~~

~~(2) — Ensure that a copy of the EPA Acknowledgement of Consent accompanies the hazardous waste.~~

~~(3) — Do the following if transporting the hazardous waste out of the country:~~

 - ~~(A) — Indicate in the International Shipments block of the manifest the date that the shipment left the United States;~~

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- (B) — Sign the manifest and retain one copy in accordance with § 7-710(e);
- (C) — Return a signed copy of the manifest to the generator; and
- (D) — Give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.

(e) — International agreements

- (1) — Any person who exports hazardous waste subject to the manifest requirements of this subchapter, or universal waste subject to the management standards of subchapter 9, to designated member countries of the Organization for Economic Cooperation and Development (OECD) as defined in 40 CFR §§ 262.58(a)(1) and (2) for purposes of recovery is subject to the requirements of 40 CFR Part 262 Subpart 11 (Transfrontier Shipments of Hazardous Waste for Recovery within the OECD). The export requirements of this section do not apply.
- (2) — Any person who exports hazardous waste to a designated OECD member country for purposes other than recovery (e.g., incineration, disposal), Mexico (for any purpose), or Canada (for any purpose) remains subject to the export requirements of this section.

§ 7-706 IMPORTS OF HAZARDOUS WASTE ~~RESERVED~~

- (a) — Any person who imports hazardous waste from a foreign country into Vermont is a generator and must comply with the generator requirements of subchapter 3 and the special requirements of this section.
- (b) — When importing hazardous waste a person must meet all the requirements of § 7-702(b)(1) for the manifest except that:
 - (1) — In place of the generator's name, address and EPA identification number, the name and address of the foreign generator and the importer's name, address and EPA identification number must be used.
 - (2) — In place of the generator's signature on the certification statement, the U.S. importer or his or her agent must sign and date the certification and obtain the signature of the initial transporter.
 - (3) — A person who imports hazardous waste may obtain the manifest form from any source that is registered with the U.S. EPA as a supplier of manifests (e.g., states, waste handlers, and/or commercial forms printers).
 - (4) — In the International Shipments block, the importer must check the import box and enter the point of entry (city and State) into the United States.

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~~(5) The importer must provide the transporter with an additional copy of the manifest to be submitted by the receiving facility to U.S. EPA in accordance with § 7-704(e).~~

~~(c) International agreements~~

~~(1) Any person who imports hazardous waste subject to the manifest requirements of this subchapter, or universal waste subject to the management standards of subchapter 9, from designated member countries of the Organization for Economic Cooperation and Development (OECD) as defined in 40 CFR §§ 262.58(a)(1) and (2) for purposes of recovery is subject to the requirements of 40 CFR Part 262 Subpart H (Transfrontier Shipments of Hazardous Waste for Recovery within the OECD). The import requirements of this section do not apply.~~

~~(2) Any person who imports hazardous waste from a designated OECD member country for purposes other than recovery (e.g., incineration, disposal), Mexico (for any purpose), or Canada (for any purpose) remains subject to the import requirements of this section.~~

§ 7-707 EXCEPTION REPORTING

(a) Each generator who does not receive a completed copy of the manifest

- (1) from the designated facility within 35 days, or
- (2) from the foreign consignee within 60 days,

of the initial shipment must take all actions necessary to locate the shipment and manifest, including contacting the designated transporter and designated facility.

(b) Each generator who does not receive a completed copy of the manifest from the designated facility within 45 days of the initial shipment must immediately submit an exception report to the Secretary. The report must include a legible copy of the manifest and a cover letter signed by the generator or his or her authorized representative explaining the efforts taken to locate the waste and results of those efforts.

(c) Each generator who submits an exception report under subsection (b) of this section shall keep a copy of each submitted report for at least three (3) years from the due date of the report.

~~(e) A primary exporter must immediately file an exception report with the Secretary and the EPA Administrator at the addresses listed under § 7-705(b)(2) if:~~

- ~~(1) He or she has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within forty-five (45) days from~~

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- ~~the date it was accepted by the initial transporter;~~
- ~~(2) Within ninety (90) days from the date the waste was accepted by the initial transporter, the primary exporter has not received written confirmation from the consignee that the hazardous waste was received;~~
- ~~(3) The waste is returned to the United States.~~
- (d) For rejected shipments of hazardous waste or container residues contained in non-empty containers that are forwarded to an alternate facility by a designated facility using a new manifest (following the procedures of **40 CFR §§ 264.72(e)(1) through (6) or 40 CFR §§ 265.72(e)(1) through (6)**), the generator must comply with the requirements of **subsection (a) or (b) of this section**, as applicable, for the shipment forwarding the material from the designated facility to the alternate facility instead of for the shipment from the generator to the designated facility. For purposes of **subsections (a) or (b) of this section** for a shipment forwarding such waste to an alternate facility by a designated facility:
- (1) The copy of the manifest received by the generator must have the handwritten signature of the owner or operator of the alternate facility in place of the signature of the owner or operator of the designated facility, and
 - (2) The 35/45/60-day timeframes begin the date the waste was accepted by the initial transporter forwarding the hazardous waste shipment from the designated facility to the alternate facility.

§ 7-708 ANNUAL & BIENNIAL REPORTINGS

(a) Biennial report for large quantity generators:

- (1) ~~Every large quantity generator shall submit a biennial report, on USEPA Form 8700-13A provided by the Secretary. The report shall be submitted on or before March 1 of each even numbered year and shall describe all hazardous waste activity in the previous calendar year. The report shall accurately describe the composition, quantity, and destination of each hazardous waste stream generated and shall include a compilation of the data contained in all manifests prepared in such year. A generator who is a large quantity generator for at least one month of an odd-numbered year (reporting year) who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States must complete and submit EPA Form 8700-13 A/B to the Secretary by March 1 of the following even-numbered year and must cover generator activities during the previous year.~~
- (2) Any generator who is a large quantity generator for at least one month of an odd-numbered year (reporting year) who treats, stores, or disposes of hazardous waste on site must complete and submit EPA Form 8700-13 A/B to the Regional

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Administrator by March 1 of the following even-numbered year covering those wastes in accordance with the provisions of 40 CFR Parts 264, 265, 266, 267 and 270. This requirement also applies to large quantity generators that receive hazardous waste from very small quantity generators pursuant to § 7-308(d).

- (3) Exports of hazardous waste to foreign countries are not required to be reported on the Biennial Report form. A separate annual report requirement is set forth at 40 CFR § 262.83(g) for hazardous waste exporters.
- ~~(e)(b) The owner or operator of each~~Every designated facility shall must complete and submit EPA Form 8700-13 A/B to the Secretary by March 1 of the following even numbered year and must cover activities during the previous year. submit a biennial report on USEPA Form 8700-13B provided by the Secretary. The report shall be submitted on or before March 1 of each even numbered year and shall describe all hazardous waste activity in the previous calendar year. The report shall accurately describe the composition, quantity, and management of each hazardous waste stream treated, stored, recycled, or disposed of, and shall include a compilation of the data contained in all manifests prepared in such year.
- ~~(e)(c) Exports of hazardous waste shall be reported by the primary exporter to EPA annually in accordance with 40 CFR § 262.56. Every large quantity generator and designated facility shall keep a copy of each biennial report for at least three (3) years from the due date of the report.~~
- ~~(e) A transporter of either hazardous waste or used oil shall report annually to the Secretary as required in § 7-406(d)(5).~~
- ~~(h) All generators of hazardous waste shall register with the Secretary, renew the registration annually, and pay the hazardous waste generator registration fee specified in 3 V.S.A. § 2822. Initial registration shall be made by submitting a completed Vermont Hazardous Waste Handler Site ID Form (see § 7-104(a)). Subsequent updates may be made by completing the form provided annually by the Secretary.~~

§ 7-709 ADDITIONAL REPORTING

The Secretary may require any generator, transporter or facility to submit such additional information as he or she deems necessary to implement and manage a hazardous waste program under these regulations.

§ 7-710 RECORDKEEPING RETENTION

- ~~(a) All generators shall keep the following records for the specified time periods:~~

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- (1) ~~A copy of each biennial report and manifest exception report for at least three (3) years from the due date of the report; and~~
- (2) ~~A copy of any test result, waste analysis or other determination made under § 7-303 for at least three (3) years from the date the waste was last sent to an on-site or off-site treatment, storage or disposal facility.~~
- (b) ~~All generators and transporters shall keep a copy of each manifest signed by the generator, transporter and designated facility for at least three (3) years from the date that the waste involved was accepted by the transporter except for:~~
 - (1) ~~Water (bulk shipment) transporters who shall comply with 40 CFR § 263.22(b);~~
 - (2) ~~Rail transporters who shall comply with 40 CFR § 263.22(c); and~~
 - (3) ~~Initial transporters that deliver waste to a next designated transporter that shall retain a copy of the manifest which has been signed by the generator and next designated transporter.~~
- (c) ~~A transporter who transports hazardous waste out of the United States must keep a copy of the manifest indicating that the hazardous waste left the United States, for a period of three (3) years from the date the hazardous waste was accepted by the initial transporter.~~
- (d) ~~For all exports a primary exporter must:~~
 - (1) ~~Keep a copy of each notification of intent to export for a period of at least three (3) years from the date the hazardous waste was accepted by the initial transporter;~~
 - (2) ~~Keep a copy of each EPA Acknowledgement of Consent for a period of at least three (3) years from the date the hazardous waste was accepted by the initial transporter;~~
 - (3) ~~Keep a copy of each confirmation of delivery of the hazardous waste from the consignee for at least three (3) years from the date the hazardous waste was accepted by the initial transporter; and~~
 - (4) ~~Keep a copy of each annual report for a period of at least three years from the due date of the report.~~

All record retention periods specified in this section ~~subchapter~~ shall be automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Secretary, or as requested by the EPA Administrator in the case of records required for hazardous waste exports.

Subchapter 8: USED OIL MANAGEMENT STANDARDS

§ 7-801 PURPOSE AND APPLICABILITY

This subchapter provides an alternative to managing used oil as hazardous waste; it identifies those materials that may (and those that may not) be managed as used oil, and establishes standards for their handling, storage, transport, aggregation, collection, and burning as used oil fuel. This subchapter presumes that used oil is reused, processed or burned for energy recovery. Since used oil that meets fuel burning specifications has value without prior processing; this subchapter distinguishes used oil fuel from used oil by allowing used oil fuel to be managed according to abbreviated standards. Used oil that is to be disposed of cannot be managed under this subchapter and must be evaluated to determine if it is subject to regulation as hazardous waste. Unless being managed as a hazardous waste, all used oil is subject to regulation under this subchapter.

The following rules incorporate provisions and exemptions from other environmental protection rules promulgated under the authority of 10 V.S.A. chapters 59 and 159.

§ 7-802 DEFINITIONS

Terms defined in § 7-103 of these regulations or in 40 CFR Parts 260 through 270 and Part 279 have the same meaning when used in this subchapter. For the purposes of this subchapter, the terms listed below are defined as follows:

"**Burner**" means a person who burns used oil fuel for energy recovery.

"**Do-it-yourselfer used oil**" means used oil that is derived from households, such as used oil generated by individuals through the maintenance of their personal vehicles.

"**Do-it-yourselfer used oil generator**" or "**do-it-yourselfer**" means an individual who generates "do-it-yourselfer used oil".

"**Marketer**" means any person, with the exception of do-it-yourselfers, who conducts either of the following activities:

- (a) Directs a shipment of off-specification used oil from their facility to a used oil burner; or
- (b) With the exception of used oil generators, and transporters who transport used oil received only from generators, any person who first claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in **Table 1 of § 7-812(c)**.

"**Off-specification used oil**" is used oil that exceeds any maximum allowable level or that does not meet any minimum allowable level listed in **Table 1 of § 7-812(c)**.

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"**Processing**" means chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived product. Processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oils to meet the used oil fuel specification, filtration, simple distillation, chemical or physical separation and re-refining.

"Re-refining distillation bottoms" means the heavy fraction produced by vacuum distillation of filtered and dehydrated used oil. The composition of still bottoms varies with column operation and feedstock.

"**Small fuel burning equipment**" means fuel burning equipment with a maximum operating heat input equal to or less than 500,000 BTU per hour.

Note: For provisions in this subchapter related to "small fuel burning equipment," the maximum operating heat input of all fuel burning equipment designated for burning used oil at a single location may not combine to more than 500,000 BTU per hour. If this threshold is exceeded, the "small fuel burning equipment" provisions of this subchapter no longer apply, and the fuel burning equipment is subject to the Vermont Air Pollution Control Regulations which include a requirement to demonstrate a minimum combustion efficiency of 99%.

"**Specification used oil**" is any used oil that does not exceed any maximum allowable level, and meets the minimum allowable levels listed in **Table 1 of § 7-812(c)**.

"**Used Oil**" means any petroleum product oil that has been refined from crude oil (in whole or in part), or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities. Used oil is a free-flowing liquid at standard temperature and pressure and has a flash point of greater than 100 degrees (F). Used oil includes oils used as lubricants, heat transfer fluids, hydraulic fluids, and for other similar uses, but does not include materials derived refined from crude oil or synthetic oils that are fuels (e.g., gasoline, jet fuel and diesel fuel), or materials refined from crude oil that are used as cleaning agents or solvents (e.g., naphtha or mineral spirits). ~~These materials are subject to regulation under subchapters 1 through 7, as applicable.~~

"**Used Oil Aggregation Point**" means any site or facility that accepts, aggregates, and/or stores used oil collected only from other used oil generation sites owned or operated by the owner or operator of the aggregation point, from which used oil is transported to the aggregation point in shipments of no more than 55 gallons. Used oil aggregation points may also accept do-it-yourselfer generated used oil.

"**Used Oil Collection Facility**" means any facility or site that accepts/aggregates and stores used oil collected from used oil generators who bring used oil to the collection facility in shipments of no more than 55 gallons. Used oil collection facilities may also accept used oil from do-it-yourselfers.

"**Used Oil Fuel**" means used oil shown to meet the **Table 1** specifications in accordance with § 7-812(c) and that is burned for energy recovery.

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"**Used Oil Generator**" means any person, by site, whose act or process produces used oil that is not "do-it-yourselfer used oil" or whose act first causes used oil to become subject to regulation.

"**Used Oil Handler**" means any person subject to §§ 7-807 through 7-813 of this subchapter.

"**Used Oil Processor**" means a facility that processes used oil.

"**Used Oil Transfer Facility**" means any transportation related facility including loading docks, parking areas, storage areas and other areas where shipments of used oil are held for more than 24 hours and not longer than 35 days during the normal course of transportation. Transfer facilities that store used oil for more than 35 days are subject to the used oil processor requirements of § 7-813.

"**Used Oil Transporter**" means any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities.

"**Vaporizing Used-Oil Burning Equipment**" means any equipment which generates heat by the introduction of fuel onto a heated device to produce vapors which are then burned for heat recovery.

§ 7-803 PROHIBITIONS

The following uses or activities are prohibited:

- (a) The mixing of hazardous wastes with used oil, with the exception that used oil may be mixed with waste that is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resultant mixture does not exhibit the characteristic of ignitability;
- (b) The use of any used oil for road oiling or dust suppression;
- (c) Burning off-specification used oil in small fuel burning equipment;
- (d) Burning used oil for firefighter training;
- (e) Burning used oil for energy recovery in any food product processing unless approved by the Secretary in writing;
- (f) The sale or use of vaporizing used-oil burning equipment;
- (g) Management of used oil in anything other than containers or tanks as specified under § 7-806 unless the units are subject to regulation under **subchapter 5** of these regulations;

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- (h) Pursuant to **10 V.S.A. § 6621a**, the knowing disposal of used oil in a solid waste landfill; and
- (i) Pursuant to **10 V.S.A. § 6616**, the release of hazardous material (including used oil) into the surface or groundwater, or onto the land of the state.

§ 7-804 EXEMPTIONS

- (a) Do-it-yourselfers who produce used oil (specification or off-specification) are exempt from the provisions of this subchapter. Once do-it-yourselfer used oil is accepted by a used oil aggregation point, collection facility, marketer, burner, or processor, the used oil is subject to regulation under this subchapter.
- ~~(b) Small fuel burning equipment, in use prior to January 1, 1994, is exempt from § 5-261 of the Air Pollution Control Regulations.~~
- ~~(e)~~(b) Used oil generated from normal shipboard operations, aboard vessels at sea, lake, or river or at port, is considered to be generated at the time it is transported ashore and is not subject to the requirements of this subchapter until the time it is transported ashore. The owner or operator of the vessel and the person(s) removing or accepting used oil from the vessel are co-generators of the used oil and are both responsible for managing the oil in compliance with the requirements of this subchapter once the used oil is transported ashore. The co-generators may decide among them which party will fulfill the requirements of this subchapter.
- ~~(d)~~(c) Farmers who, in a calendar year, generate an average of 25 gallons per month or less of used oil from vehicles or machinery used on the farm are not subject to the requirements of this subchapter.
- ~~(e)~~(d) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products are not subject to the requirements of this subchapter.
- ~~(f)~~(c) Wastewater, the discharge of which is subject to regulation under either § 402 or § 307(b) of the Clean Water Act (including wastewaters at facilities which have eliminated the discharge of wastewater), contaminated with de minimis quantities of used oil is not subject to the requirements of this subchapter. For purposes of this paragraph, "de minimis" quantities of used oils are defined as small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment, during normal operations, or small amounts of oil lost to the wastewater treatment system during washing or draining operations. This exception will not apply if the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases, and will not apply to used oil recovered from wastewaters.
- ~~(g)~~(f) Used oil that is to be burned for energy recovery (i.e., "used oil fuel") in small fuel burning equipment is exempt from the provisions of this subchapter provided:

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- (1) The requirements of § 7-812(a) are met, and the used oil has been shown to meet the **Table 1** specifications in accordance with §§ 7-812(c)(1) through (3);
- (2) The person making that showing complies with any applicable marketer requirements of § 7-809; and
- (3) The used oil is managed in accordance with the general used oil management standards of § 7-806.

§ 7-805 USED OIL DETERMINATION

This section identifies those materials that may be managed as used oil or used oil fuel under this subchapter. It also identifies certain materials that cannot be managed as used oil and indicates whether they may be subject to regulation as hazardous waste.

- (a) Used oil drained, separated, or removed from materials containing or otherwise contaminated with used oil may be managed as used oil under this subchapter.
- (b) Materials containing or otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible such that no visible signs of free-flowing oil remain in or on the material are not used oil, and are subject to the hazardous waste determination requirement of § 7-303.

Note: These materials may be subject to regulation as hazardous waste if the criteria for the VT02 hazardous waste code listed under § 7-211 are met and/or they exhibit a hazardous characteristic.
- (c) Mixtures of used oil and fuels or other fuel products are subject to regulation as used oil under this subchapter.
- (d) Used oil that contains PCBs at any concentration less than 50 parts per million may be managed as used oil under this subchapter unless, because of dilution, it is regulated under **40 CFR Part 761** as a used oil containing PCBs at 50 parts per million or greater. Used oil containing PCBs at concentrations equal to or greater than 50 parts per million is subject to regulation both as hazardous waste under § 7-211/VT01 (unless it is exempt pursuant to § 7-203(t)), and under **40 CFR Part 761**. No person may avoid these provisions by diluting used oil containing PCBs, unless otherwise specifically provided for in this subchapter or **40 CFR Part 761**. PCB-containing used oil subject to the requirements of this subchapter may also be subject to the prohibitions and requirements found at **40 CFR Part 761, including 40 CFR §§ 761.20(d) and (e)**.
- (e) Materials derived from used oil.
 - (1) Materials that are reclaimed from used oil that are used beneficially and are not

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burned for energy recovery or used in a manner constituting disposal (e.g., re-refined lubricants) are:

- (A) Not used oil and thus are not subject to this subchapter, and
 - (B) Not hazardous wastes and thus are not subject to the remainder of these regulations.
 - (2) Materials produced from used oil that are burned for energy recovery (e.g., used oil fuels) are subject to regulation as used oil under this subchapter.
 - (3) Except as provided in § 7-804(e)(d), materials derived from used oil that are disposed of or used in a manner constituting disposal are not used oil, and are subject to the hazardous waste determination requirement of § 7-303 and to management as a hazardous waste when applicable.
- (f) Rebuttable presumption
- (1) Used oil containing more than 1,000 parts per million total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in §§ 7-210 through 7-215 of these regulations. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix II of these regulations). The rebuttable presumption does not apply to:
 - ~~(A)~~ Metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in § 7-807(e), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.
 - (B) Used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.
 - (2) Any person choosing to rebut a presumption that used oil is hazardous waste because it contains more than 1,000 parts per million total halogens must maintain written records demonstrating that the used oil does not contain hazardous waste.

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§ 7-806 GENERAL USED OIL MANAGEMENT STANDARDS

With the exception of do-it-yourselfers, the following requirements and standards apply to all used oil handlers:

- (a) Used oil shall be stored only in containers or tanks as specified by subsections (b)

through (d) of this section.

- (b) Containers holding used oil shall be managed as follows:
- (1) Containers shall be kept closed at all times, except when adding or removing used oil;
 - ~~(2)~~ (2) A container holding used oil must not be opened, handled or stored in a manner which may rupture the container or cause a release. If a container begins to leak, the used oil must immediately be transferred from the leaking container to a container that is in good condition, or the used oil shall be managed in some other way that complies with the requirements of this section;
 - ~~(2)(3)~~ (3) A container holding used oil must be made of or lined with materials which will not react with and are otherwise compatible with used oil;
 - ~~(3)(4)~~ (4) Containers holding used oil must be in good condition (no severe rusting, apparent structural defects or deterioration);
 - ~~(4)(5)~~ (5) Containers holding used oil must be labeled or marked with the words "Used Oil" or "Used Oil Fuel," as appropriate, such that the label or marking is visible;
 - ~~(5)(6)~~ (6) Containers holding used oil must be stored on an impervious surface;
 - ~~(6)(7)~~ (7) A container holding used oil may be stored out-of-doors only if the container is placed within a structure that sheds rain and snow; and
 - ~~(7)(8)~~ (8) A container holding a mixture of used oil and water shall be placed within a structure that protects the container from freezing.
- (c) Underground storage tanks (USTs) holding used oil shall be managed as follows:
- (1) An UST holding used oil must be permitted, operated, and maintained in accordance with the Vermont Underground Storage Tank ~~Regulations~~ Rules;
 - (2) Fill pipes used to transfer used oil into an UST must be marked or labeled to clearly indicate used oil storage; and
 - (3) Any residue removed from within an UST system being used (or that was last used) to hold used oil, that is generated as a result of normal operation, maintenance or closure of the UST and that cannot be managed as used oil under this subchapter, must be evaluated to determine if it is a hazardous waste and managed as a hazardous waste when applicable.
- (d) Above-ground storage tanks (including unregistered tank trailers) holding used oil shall be:

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- (1) Installed and operated in accordance with Vermont Aboveground Tank Rules Department of Labor Standards.
 - (2) Clearly marked with the words "Used Oil" or "Used Oil Fuel," as appropriate.
 - (3) Managed in such a manner as to prevent rupture of the tank and to ensure that no release occurs. If a tank begins to leak, the owner or operator must immediately either transfer the used oil from that tank to another tank or to containers that are in good condition, or manage the used oil in some other way that complies with the requirements of this section.
 - (4)** If located out-of-doors, equipped with secondary containment as specified in **40 CFR §§ 279.45(e) and (f)**.
- (c) Response to a Release of Used Oil
- (1) Upon detection of a release of used oil to the environment that is not subject to the requirements of **40 CFR Part 280 Subpart F** (Release Response and Corrective Action for UST Systems Containing Petroleum or Hazardous Substances), a used oil handler must perform the following cleanup steps:
 - (A) Stop the release;
 - (B) Contain the released used oil;
 - (C) Clean up and manage properly the released used oil and other materials so that they no longer present a hazard to human health or the environment; and
 - (D) If necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

Note: Clean-up materials may be subject to regulation as hazardous waste if the criteria for the VT02 hazardous waste code listed under § 7-211 are met and/or they exhibit a hazardous characteristic.

- (2) A release of two (2) gallons or more of used oil to the lands or surface waters of the state shall be immediately reported to the Secretary by the person or persons exercising control of such oil ~~by calling the Waste Management & Prevention Division at (802) 828-1138, Monday through Friday, 7:45 a.m. to 4:30 p.m. or the Department of Public Safety, Emergency Management Division at (800) 641-5005, 24 hours/day in accordance with the requirements of § 7-105(b).~~
- (3) ~~If requested by the Secretary, a~~ written report shall be submitted to the Secretary within ten (10) days following any release subject to **subsection (e)(2) of this section**. The report ~~should~~ **shall** be sent to: The Vermont Department of Environmental Conservation, Waste Management & Prevention Division, 1 National

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Life Drive – Davis 1, Montpelier, VT 05620-3704.

Note: Under the Federal Water Pollution Control Act, certain discharges of “oil” are prohibited and must be reported pursuant to the requirements of **40 CFR Part 110 / Discharge of Oil**.

- (f) Used oil handlers are subject to all applicable Spill Prevention, Control and Countermeasure requirements of **40 CFR Part 112**.
- (g) Disposal of Used Oil

The following requirements apply to used oils that cannot be processed or burned for energy recovery and therefore must be disposed of:

- (1) Used oils that cannot be recycled under this subchapter must be evaluated in accordance with the hazardous waste determination requirement of § 7-303 and managed as a hazardous waste when applicable.
- (2) Used oils that cannot be processed or burned for energy recovery under this subchapter and that are not hazardous wastes must be disposed in accordance with Vermont’s Solid Waste Management Regulations.

Note: “Waste oil” is banned from landfill disposal under **10 V.S.A. § 6621a**. For the purposes of this note, “waste oil” means “used oil” (i.e., used oil is banned from landfill disposal).

§ 7-807 STANDARDS FOR USED OIL GENERATORS

- (a) This section applies to all used oil generators as defined under § 7-802 of this subchapter.
- (b) Used oil generators shall comply with the general standards set forth under § 7-806, and the following, as applicable:
 - (1) The marketer standards set forth under § 7-809; and
 - (2) The standards for burning used oil for energy recovery set forth under § 7-812.
- (c) Except as provided in **subsections (d) and (e) of this section**, used oil generators must ensure that their used oil is transported only by transporters who are permitted according to the requirements of § 7-811(b)(2).
- (d) A used oil generator may transport used oil that is either generated at the used oil generator’s site or collected from household do-it-yourselfers to a used oil collection facility or an aggregation point without complying with the transporter requirements of § 7-811, provided that:

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- (1) The used oil is transported in a vehicle owned by the used oil generator or a vehicle owned by an employee of the used oil generator;
- (2) Containers used to transport used oil must meet the standards set forth under § 7-806(b), and the applicable Department of Transportation regulations of 49 CFR Parts 173, and 178;
- (3) No more than 55 gallons of used oil is transported at any time; and
- (4) The used oil is transported to either a used oil collection facility or to an aggregation point as defined under § 7-802.

(c) Tolling arrangements

A used oil generator may arrange for used oil to be transported by a transporter without an EPA identification number if the used oil is reclaimed under a contractual agreement pursuant to which reclaimed oil is returned by the processor to the generator for use as a lubricant, cutting oil, or coolant. The contract (known as a "tolling arrangement") must indicate:

- (1) The type of used oil and the frequency of shipments;
 - (2) That the vehicle used to transport the used oil to the processing/re-refining facility and to deliver recycled used oil back to the generator is owned and operated by the used oil processor/re-refiner; and
 - (3) That reclaimed oil will be returned to the generator.
- (f) Used oil generators who transport more than 55 gallons of used oil at one time must comply with the transporter requirements of § 7-811.
- (g) Except as provided in **subsections (g)(1)(A) through (E) of this section**, used oil generators who process used oil shall comply with the requirements of § 7-813.
- (1) Used oil generators who perform the following activities are not processors provided that the used oil is generated on-site and is not being sent off-site to a burner of on- or off-specification used oil fuel:
 - (A) Filtering, cleaning, or otherwise reconditioning used oil before returning it for reuse by the used oil generator;
 - (B) Separating used oil from wastewater generated on-site, to make the wastewater acceptable for discharge or reuse pursuant to § 402 or § 307(b) of the Clean Water Act or other applicable Federal or state regulations governing the management or discharge of wastewaters;

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- (C) Using oil mist collectors to remove small droplets of used oil from in-plant air to make plant air suitable for continued recirculation;
 - (D) Draining or otherwise removing used oil from materials containing or otherwise contaminated with used oil, in order to remove excessive oil to the extent possible pursuant to § 7-805; or
 - (E) Filtering, separating or otherwise reconditioning used oil before burning it in small fuel burning equipment pursuant to § 7-812.
- (h) Used oil generators who provide used oil or used oil fuel to an off-site facility shall retain records which document the amount of used oil or used oil fuel provided, the date of each shipment, and the name, address, and telephone number of the facility to which the used oil or used oil fuel was provided for a period of three years.

§ 7-808 STANDARDS FOR USED OIL AGGREGATION POINTS

- (a) This section applies to owners or operators of used oil aggregation points as defined under § 7-802 of this subchapter.
- (b) Owners or operators of used oil aggregation points shall comply with the generator standards set forth under § 7-807 of this subchapter.

§ 7-809 STANDARDS FOR USED OIL FUEL MARKETERS

- (a) This section applies to marketers as defined under § 7-802.
- (b) Persons who market used oil fuel shall notify the Secretary of such activity and obtain an EPA identification number using a **Vermont Hazardous Waste Handler Site Identification ID-Form (EPA Form 8700-12)** provided by the Secretary pursuant to the requirements of § 7-104.
- (c) Marketers initiating or accepting a shipment of used oil fuel must maintain the following records for a minimum of three years:
 - (1) Copies of all test results applicable to the shipment of used oil fuel, and/or documentation of total halogen field screening results as required under § 7-812(c); and
 - (2) An operating log for all shipments of used oil fuel that includes the following information:
 - (A) The name, EPA identification number, and address of the facility to which used oil

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- fuel is sent or from which used oil fuel is received;
- (B) The quantity of used oil fuel shipped or received;
 - (C) The date of shipment or delivery; and
 - (D) The name, EPA identification number, and address of the transporter.
- (3) The certification required by **subsection (f)(2) of this section**.
- (d) A marketer who stores used oil fuel shall manage his or her facility in accordance with the general standards set forth under **§ 7-806**.
- (c) Marketers shall comply with the following, as applicable:
- (1) The used oil generator standards set forth under **§ 7-807**;
 - (2) The used oil collection facility standards set forth under **§ 7-810**;
 - (3) The used oil transporter standards set forth under **§ 7-811**;
 - (4) The standards for burning used oil fuel for energy recovery set forth under **§ 7-812**; and
 - (5) The used oil processor standards set forth under **§ 7-813**.
- (f) Off-specification used oil
- (1) A marketer may initiate a shipment of off-specification used oil only to a used oil burner that meets the requirements of **§ 7-812(d)**.
 - (2) Before a marketer directs the first shipment of off-specification used oil to a burner, the marketer must obtain a one-time written and signed notice from the burner certifying that:
 - (A) The burner has notified EPA stating the location and general description of used oil management activities; and
 - (B) The burner will burn the off-specification used oil only in an industrial furnace or boiler identified in **40 CFR § 279.61(a)**.

§ 7-810 STANDARDS FOR USED OIL COLLECTION FACILITIES

- (a) This section applies to owners or operators of used oil collection facilities as defined under **§ 7-802** of this subchapter.

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- (b) Persons who own or operate a used oil collection facility shall notify the Secretary of such activity and obtain an EPA identification number using a ~~Vermont Hazardous Waste Handler Site Identification ID-Form~~ (EPA Form 8700-12) provided by the Secretary pursuant to the requirements of § 7-104 of these regulations.
- (c) The owner or operator of a used oil collection facility shall manage such facility in accordance with the general standards set forth under § 7-806, and the following, as applicable:
 - (1) The generator standards set forth under § 7-807;
 - (2) The marketer standards set forth under § 7-809;
 - (3) The standards for burning used oil for energy recovery set forth under § 7-812; and
 - (4) The processor standards set forth under § 7-813.
- (d) Used oil collection facilities shall be equipped with a fire extinguisher or other fire-control equipment, and spill control equipment to assure containment of used oil in the event of a release.

§ 7-811 STANDARDS FOR USED OIL TRANSPORTERS

- (a) This section applies to used oil transporters as defined under § 7-802 of this subchapter.
- (b) With the exception of persons transporting used oil on-site, do-it-yourselfers, used oil generators self-transporting up to 55 gallons of used oil according to the provisions of § 7-807(d), ~~persons transporting used oil fuel,~~ and persons transporting used oil pursuant to tolling agreements that meet the requirements of § 7-807(e), persons transporting used oil ~~must shall~~ comply with the following:
 - (1) ~~Used oil transporters shall n~~Notify the Secretary of such activity and obtain an EPA identification number using a ~~Vermont Hazardous Waste Handler Site Identification ID-Form~~ (EPA Form 8700-12) provided by the Secretary pursuant to the requirements of ~~§§ 7-104 and 7-406(d)(1) and (2).~~
 - (2) ~~Used oil transporters shall e~~Obtain a permit from the Secretary according to the requirements of **subchapter 4** of these regulations.
 - (3) Used oil transporters who operate transfer facilities shall comply with the requirements of **40 CFR § 279.45** (Used Oil Storage at Transfer Facilities).
 - (4) ~~Used oil transporters shall e~~Comply with all applicable requirements under the U.S. Department of Transportation regulations in **49 CFR Parts 171 through 180.**

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Persons transporting used oil that meets the definition of a hazardous material in **49 CFR § 171.8** must comply with all applicable regulations in **49 CFR Parts 171 through 180**.

- (5) Rebuttable presumption for used oil
- (A) To ensure that used oil is not a hazardous waste under the rebuttable presumption of § 7-805(f), the used oil transporter ~~must~~ shall determine whether the total halogen content of used oil being transported or stored at a transfer facility is above or below 1,000 parts per million. The transporter must make this determination by:
- (i) Testing the used oil; or
- (ii) Applying knowledge of the halogen content of the used oil in light of the materials or processes used.
- (B) Records of testing conducted or information used to comply with **subsection (b)(5)(A) of this section** must be maintained by the transporter for at least 3 years.
- (6) In addition to the above, used oil transporters are subject to the following, as applicable:
- (A) The general standards set forth under § 7-806;
- (B) The generator standards set forth under § 7-807;
- (C) The marketer standards set forth under § 7-809;
- (D) The standards for burning used oil for energy recovery set forth under § 7-812; and
- (E) The processor standards set forth under § 7-813.
- Note: Subsection (b) of this section** applies to the transportation of collected do-it-yourselfer used oil from regulated used oil generators, collection facilities, aggregation points, or other facilities where do-it-yourselfer used oil is collected.
- (c) Used oil transporters may consolidate or aggregate loads of used oil for the purposes of transportation but, with the following exceptions, may not process used oil unless the processor standards set forth under § 7-813 are met.
- (1) Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but that are not designed to produce (or make more amenable for production of) used oil derived products or used oil fuel.

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- (2) Transporters may remove used oil from oil bearing electrical transformers and turbines and filter that used oil prior to returning it to its original use.
- (d) Transporters who generate residues from the storage or transport of used oil must manage the residues as specified in § 7-805.
- (c) Transporters who import used oil from abroad or export used oil outside of the United States are subject to the requirements of this section from the time the used oil enters and until the time it exits Vermont.
- (f) Unless trucks previously used to transport hazardous waste are emptied as described in § 7-203(j) of these regulations prior to transporting used oil, the used oil is considered to have been mixed with the hazardous waste and must be managed as hazardous waste.
- (g) A used oil transporter shall deliver used oil to:
 - (1) Another used oil transporter, provided that the transporter is permitted as specified by **subsection (b)(2) of this section**, and has obtained an EPA identification number; or
 - (2) A used oil collection facility that has obtained an EPA identification number, in shipments of no more than 55 gallons; or
 - (3) A used oil burner or processing facility which has been assigned an EPA identification number.
- (h) Used oil transporters shall maintain, for a period of three years, an operating log that documents the following information for each used oil shipment made:
 - (1) The name, address, and EPA identification number (if one is required) of the used oil generator, collection facility, transporter, or processor who provided the used oil for transport;
 - (2) The quantity of used oil accepted;
 - (3) The date that the transporter accepts a shipment of used oil for transport, and the name and signature of the person representing the used oil generator, transporter, or processor who offered the used oil for transport;
 - (4) The name, address, and EPA identification number (if one is required) of the used oil collection facility, transporter, burner, or processor to which the used oil was delivered;
 - (5) The quantity of used oil delivered; and
 - (6) The date of delivery and the name and signature of the person representing the used oil collection facility, transporter, burner, or processor who received the used oil.

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- (i) Response to Releases of Used Oil during Transport
 - (1) In the event of a release of used oil during transport, a used oil transporter shall comply with the release response requirements of § 7-806(e).
 - (2) If a discharge of used oil occurs during transportation and an official (State or local government or a Federal Agency) acting within the scope of official responsibilities determines that immediate removal of the used oil is necessary to protect human health or the environment, that official may authorize the removal of the used oil by transporters who do not have EPA identification numbers.
 - (3) An air, rail, highway, or water transporter who has discharged used oil must:
 - (A) Give notice, if required by 49 CFR § 171.15 to the National Response Center (800-424-8802 or 202-426-2675); and
 - (B) Report in writing as required by 49 CFR § 171.16 to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, DC 20590.
 - (4) A water transporter who has discharged used oil must give notice as required by 33 CFR § 153.203.
- (j) A used oil transporter shall report to the Secretary as required by § 7-406(d)(5).

§ 7-812 STANDARDS FOR BURNING USED OIL FUEL FOR ENERGY RECOVERY

- (a) Any person burning used oil fuel for energy recovery in small fuel burning equipment is subject to the following:
 - (1) The types of used oil which may be burned as fuel in small fuel burning equipment is limited to:
 - (A) Used motor vehicle crankcase oil, transmission fluid, hydraulic oil or machine gearbox oil that meets the specifications listed in **Table 1** of this section;
 - (B) Mixtures of virgin fuel oil and specification used motor vehicle crankcase oil, transmission fluid, hydraulic oil or machine gearbox oil; and
 - (C) Types of specification used oil other than those listed in **subsections (a)(1)(A) and (B) of this section** that have been approved by the Secretary. Approval shall be granted on a case-by-case basis following the review by the Secretary of relevant material safety data information, if available, and a narrative description of the process generating the used oil.

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- (2) Specification used oil fuel from the following sources may be burned in small fuel burning equipment:
 - (A) On-site;
 - (B) Do-it-yourselfers;
 - (C) An off-site facility that is owned or operated by the burner;
 - (D) An off-site facility that is not owned or operated by the burner provided the burner retains records for a period of three years which document the amount of used oil fuel accepted; the name, address, and telephone number of the facility from which the used oil fuel was accepted; and the specification testing results for the used oil fuel.
 - (3) The combustion gases from burning used oil fuel in small fuel burning equipment must be vented to ambient air.
 - (4) The owner or operator of any facility that burns used oil fuel in small fuel burning equipment shall maintain records for a period of three years documenting that the used oil fuel has been evaluated in accordance with **subsection (c) of this section**.
- (b) Any person burning or proposing to burn used oil fuel in fuel burning equipment other than small fuel burning equipment shall:
- (1) Comply with §§ ~~5-221(2), as applicable, and 5-261~~ of the Vermont Air Pollution Control Regulations; and
 - (2) Maintain records for a period of three years documenting:
 - (A) The amount of used oil fuel burned on-site; and
 - (B) That the used oil fuel has been evaluated in accordance with **subsection (c) of this section**.
- (c) Used Oil Fuel Specifications
- (1) Used oil fuel that is marketed or burned for energy recovery must be evaluated to determine if it meets the specifications listed in **Table 1** of this section as follows:
 - (A) Used oil generators that burn their own used oil on-site, or that burn off-site generated used oil received in shipments of less than or equal to 55 gallons, in small fuel burning equipment, must initially test the used oil from each source for total halogens. If there is reason to believe that any of the remaining **Table 1** specifications would not be met by a volume of used oil, the used oil generator

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must test the used oil for any suspected constituents or properties.

- (B) Any used oil fuel delivered to burners in shipments greater than 55 gallons, must be initially tested to establish that all of the **Table 1** specifications are met.

Note: Field screening test kits may be used to determine if the allowable level for total halogens specified in **Table 1** is met.

- (2) Used oil fuel from a specific source must be re-tested if there is reason to believe that the quality of the used oil, or the process that generates the used oil, has changed such that the **Table 1** specifications would not be met.

Note: “ppm” means “parts per million”, by weight on a water free basis.

TABLE 1 - USED OIL FUEL SPECIFICATIONS

| Constituent/Property | Allowable Level |
|----------------------------------|-------------------------------|
| Arsenic | 5 ppm maximum |
| Cadmium | 2 ppm maximum |
| Chromium | 10 ppm maximum |
| Lead | 100 ppm maximum |
| Flash Point | 100° F minimum |
| Total Halogens | 1000 ppm maximum ¹ |
| Polychlorinated biphenyls (PCBs) | < 2 ppm maximum |
| Net Heat of Combustion | 8000 BTU/lb minimum |

- (3) As specified in § 7-804(g)(f), once used oil fuel that meets the requirements of § 7-812(a) has been shown to meet the **Table 1** specifications in accordance with **subsections (1) through (3) of this section**, and the person making that showing complies with the applicable marketer requirements of § 7-809, the used oil fuel is only subject to the general used oil management standards of § 7-806.
- (4) Used oil that does not meet the specifications identified by **Table 1** (i.e., off-specification used oil) must be managed as follows:

¹ Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste as specified under § 7-805(f).

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- (A) As hazardous waste (identified by at least the VT02 hazardous waste code listed under § 7-211); or
- (B) As used oil processed in a manner other than being burned for energy recovery; or
- (C) In accordance with subsection (d) of this section.
- (d) Any person burning off-specification used oil must comply with **40 CFR Part 279, Subpart G** (Standards for Used Oil Burners Who Burn Off-Specification Used Oil for Energy Recovery), and **§§ 5-221(2), as applicable, and 5-261 of the Vermont Air Pollution Control Regulations**.

§ 7-813 STANDARDS FOR USED OIL PROCESSORS

A used oil processor (as defined in § 7-802) must comply with **40 CFR Part 279 Subpart F** (Standards for Used Oil Processors and Re-Refiners).

Subchapter 9: UNIVERSAL WASTE MANAGEMENT STANDARDS

§ 7-901 PURPOSE, SCOPE AND APPLICABILITY

(a) This subchapter establishes alternative management standards for certain batteries, pesticides, thermostats, PCB-containing fluorescent light ballasts, lamps, mercury-containing devices, ~~and cathode ray tubes, and postconsumer paint, and aerosol cans~~ that would otherwise have to be managed as hazardous waste. As allowed by § 7-203(s), these “universal” hazardous wastes can be managed under the streamlined provisions of this subchapter in lieu of the hazardous waste management requirements set forth under **subchapters 1 through 7**. Specifically, this subchapter establishes standards for small and large quantity handlers, universal waste transporters, and destination facilities; it also provides a petition mechanism for amending these regulations to add a hazardous waste to the category of universal wastes.

(b) Persons managing the household wastes that are exempt under § 7-203(a) and are also of the same type as the universal wastes described by §§ 7-902 through 7-910 may, at their option, manage them under the requirements of this subchapter. Persons who commingle the household wastes together with universal waste regulated under this subchapter must manage the commingled waste under the requirements of this subchapter.

§ 7-902 APPLICABILITY TO BATTERIES

With the exception of spent lead-acid batteries exempted under § 7-204(f) of these regulations, persons managing batteries, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208), including spent lead acid batteries that are not managed according to the provisions of § 7-204(f), may comply with the requirements of **40 CFR Part 273** in lieu of managing those batteries as hazardous wastes under **subchapters 1 through 7** of these regulations.

§ 7-903 APPLICABILITY TO PESTICIDES

- (a) With the exception of the pesticides listed in **subsection (b) of this section**, the requirements of this subchapter apply to persons managing pesticides, as defined in § 7-911, that are hazardous waste, and that meet one or more of the following conditions:
- (1) Recalled pesticides that are stocks of a suspended and canceled pesticide that are part of a voluntary or mandatory recall under **FIFRA § 19(b)**, including, but not limited to those owned by the registrant responsible for conducting the recall.
 - (2) Recalled pesticides that are stocks of a suspended or canceled pesticide, or a pesticide that is not in compliance with FIFRA, that are part of a voluntary recall by the registrant.

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- (3) Stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.
- (b) The requirements of this subchapter do not apply to persons managing the following pesticides:
 - (1) Pesticides described in **subsection (a) of this section** that are managed by farmers in compliance with § 7-203(r);
 - (2) Pesticides not meeting one or more of the conditions of **subsection (a) of this section**. These pesticides must be managed in compliance with the hazardous waste regulations set forth under **subchapters 1 through 7, except that aerosol cans as defined in § 7-911 that contain pesticides may be managed as aerosol can universal waste under § 7-912(d)(9); and**
 - (3) Pesticides that do not meet the criteria for waste generation in **subsection (c) of this section**.
- (c) Generation of waste pesticides
 - (1) A recalled pesticide described in **subsections (a)(1) and (a)(2) of this section** becomes a waste on the first date on which both the generator of the recalled pesticide agrees to participate in the recall, and the person conducting the recall decides to discard the pesticide (e.g., burn the pesticide for energy recovery).

Note: A recalled pesticide is not waste if the person conducting the recall has made a decision to use a management option that causes the pesticide to be exempt from regulation under § 7-204(a). This pesticide, including a recalled pesticide that is exported to a foreign destination for use or reuse, remains subject to the requirements of FIFRA.
 - (2) An unused pesticide product described in **subsection (a)(3) of this section** becomes a waste on the date the generator decides to discard it.

§ 7-904 APPLICABILITY TO MERCURY THERMOSTATS

- (a) The requirements of this subchapter apply to persons managing thermostats, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused thermostats become waste on the date the handler decides to discard them.

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§ 7-905 APPLICABILITY TO PCB-CONTAINING FLUORESCENT LIGHT BALLASTS

- (a) The requirements of this subchapter apply to persons managing intact and non-leaking fluorescent light ballasts with small capacitors that contain PCBs (the terms “fluorescent light ballast”, “PCB”, and “small capacitor” are defined in § 7-911), and that are hazardous waste due to meeting the criteria of only the VT01 hazardous waste code identified in § 7-211 of these regulations.
- (b) Both used and unused PCB-containing fluorescent light ballasts become waste on the date the handler decides to discard them.

Note: Various PCB-containing devices (including leaking waste fluorescent light ballasts of any size) and the disposal of the potting material in ballasts with a concentration of PCBs over 50 parts per million are subject to federal regulation under TSCA (40 CFR Part 761).

§ 7-906 APPLICABILITY TO LAMPS

- (a) The requirements of this subchapter apply to persons managing lamps, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused lamps become waste on the date the handler decides to discard them.

§ 7-907 APPLICABILITY TO MERCURY-CONTAINING DEVICES

- (a) The requirements of this subchapter apply to persons managing mercury-containing devices, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused mercury-containing devices become waste on the date the handler decides to discard them.

§ 7-908 APPLICABILITY TO CATHODE RAY TUBES (CRTs)

- (a) The requirements of this subchapter apply to persons managing CRTs, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused CRTs become waste on the date the handler decides to discard them.

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- (c) CRTs that have been collected, but still must be evaluated for reuse or repair (i.e., considered a commodity) are not waste provided:
 - (1) The CRTs are managed to prevent breakage and cosmetic damage;
 - (2) The CRTs remain intact;
 - (3) The CRTs are stored within a structure or transportation unit such that the CRTs are protected from precipitation; and
 - (4) The person in control of the CRTs plans to evaluate the CRTs for reuse or repair on-site, or send the CRTs off-site for such evaluation.
- (d) CRTs that have been evaluated under subsection (c) of this section become waste on the date the handler determines that they cannot be reused or repaired.

§ 7-909 RESERVED APPLICABILITY TO POSTCONSUMER PAINT

- (a) The requirements of this subchapter apply to persons managing postconsumer paints, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) The requirements of this subchapter apply to postconsumer paint that is collected as part of a stewardship plan approved under 10 V.S.A. § 6680.
- (c) Both used and unused postconsumer paints become waste on the date the handler decides to discard them.

§ 7-910 HOUSEHOLD AND CONDITIONALLY EXEMPT GENERATOR WASTE APPLICABILITY TO AEROSOL CANS

- (a) ~~Persons managing the wastes listed below may, at their option, manage them under the requirements of this subchapter:~~
 - (1) ~~Household wastes that are exempt under § 7-203(a) and are also of the same type as the universal wastes described by §§ 7-902 through 7-908; and/or~~
 - (2) ~~Conditionally exempt generator wastes of the same type as the universal wastes described by §§ 7-902 through 7-908 (as allowed under § 7-306(e)(2)(F)).~~
- (b) ~~Persons who commingle the wastes described in subsections (a)(1) and (a)(2) of this section together with universal waste regulated under this subchapter must manage the commingled waste under the requirements of this subchapter.~~

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- (a) The requirements of this subchapter apply to persons managing aerosol cans, as defined in § 7-911, except those listed in subsection (b) of this section.
- ~~(e)~~(b) The requirements of this subchapter do not apply to persons managing the following types of aerosol cans:
- (1) Aerosol cans that are not yet waste. Subsection (c) of this section describes when an aerosol can becomes a waste;
 - (2) Aerosol cans that are not hazardous waste. An aerosol can is a hazardous waste if the aerosol can exhibits one or more of the characteristics identified by §§ 7-205 through 7-208 or the aerosol can contains a substance that is listed in §§ 7-210 through 7-215; and
 - (3) Aerosol cans that meet the standard for empty containers under § 7-203(j).
- (c) Generation of waste aerosol cans.
- (1) A used aerosol can becomes a waste on the date it is discarded.
 - (2) An unused aerosol can becomes a waste on the date the handler decides to discard it.

§ 7-911 DEFINITIONS

Terms defined in § 7-103 of these regulations or in 40 CFR Parts 260 through 270 have the same meaning when used in this subchapter.

"Aerosol can" means a non-refillable receptacle containing a gas compressed, liquefied or dissolved under pressure, the sole purpose of which is to expel a liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.

"Architectural paint" means interior and exterior architectural coatings, including interior or exterior water- and oil-based coatings, primers, sealers, or wood coatings, that are sold in containers of five gallons or less. "Architectural paint" does not mean industrial coatings, original equipment coatings, or specialty coatings.

"Battery" means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

"Cathode ray tube" or "CRT" means a vacuum tube, composed primarily of glass, which is the video display component of a television, computer monitor, or other electronic display device.

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"**Destination facility**" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in § 7-912(d)(3). A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

"**FIFRA**" means the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, (7 U.S.C. §§ 136 ~~et seq.~~ ~~136y~~).

"**Fluorescent light ballast**" means a device that electrically controls fluorescent light fixtures (i.e., provides starting voltage and stabilizes electrical current) and that includes a capacitor containing 0.1 kg or less of dielectric material.

"**Lamp**" means the bulb or tube portion of an electric lighting device specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

"**Large quantity handler**" means a universal waste handler who accumulates 5,000 kilograms (11,000 pounds) or more total of universal waste other than CRTs (batteries, pesticides, thermostats, ballasts, lamps, ~~or~~ mercury-containing devices, post-consumer paint, or aerosol cans, calculated collectively), or who accumulates 36,288 kilograms (40 tons) or more of CRTs, at any time. This designation as a large quantity handler is retained through the end of the calendar year in which either 5,000 kilograms (11,000 pounds) or more total of universal waste other than CRTs, or 40 tons or more of CRTs, is accumulated.

"**Mercury-containing device**" means a device or part of a device (excluding batteries, thermostats, and lamps) that contains elemental mercury necessary for its operation.

"**PCB**" or "**polychlorinated biphenyl**" means any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance.

"**Pesticide**" means ~~an "economic poison" as defined under 6 V.S.A. § 911, 10 V.S.A. § 6602, and § 7-103. The term pesticide does not include substances that are new animal drugs in accordance with § 201 of the Food, Drug and Cosmetic Act (FDCA) or animal drugs regulated by the Secretary of Health and Human Services; any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:~~

(a) Is a new animal drug under the Federal Food, Drug, and Cosmetic Act (FDCA) section 201(w); or

(b) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug; or

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(c) Is an animal feed under FFDCa section 201(x) that bears or contains any substances described by subsections (a) or (b) of this definition.

"Postconsumer paint" means architectural paint and its containers not used and no longer wanted by a purchaser.

"Small quantity handler" means a universal waste handler who does not accumulate 5,000 kilograms (11,000 pounds) or more total of universal waste other than CRTs (batteries, pesticides, thermostats, ballasts, lamps, ~~or~~ mercury-containing devices, postconsumer paint, or aerosol cans, calculated collectively), and who does not accumulate 36,288 kilograms (40 tons) **or more** of CRTs, at any time.

"Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of § 7-912(d)(3)(B).

"TSCA" means the Toxic Substances Control Act, 15 U.S.C. 2601 et seq.

"Universal waste" means any of the following hazardous wastes that are subject to the universal waste requirements of this subchapter:

- (a) Batteries as described in § 7-902;
- (b) Pesticides as described in § 7-903;
- (c) Thermostats as described in § 7-904;
- (d) PCB-containing fluorescent light ballasts as described in § 7-905;
- (e) Lamps as described in § 7-906;
- (f) Mercury-containing devices as described in § 7-907; ~~and~~
- (g) Cathode ray tubes (CRTs) as described in § 7-908;
- (h) Postconsumer paint as described in § 7-909; and**
- (i) Aerosol cans as described in § 7-910.**

"Universal waste handler":

- (a) Means:
 - (1) A generator (as defined in § 7-103) of universal waste; or
 - (2) The owner or operator of a facility, including all contiguous property, that receives

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universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

(b) Does not mean:

- (1) A person who treats, except under the provisions of § 7-912(d)(3), disposes of, or recycles (except under the provisions of § 7-912(d)(9)) universal waste; or
- (2) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

"**Universal waste transfer facility**" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

"**Universal waste transporter**" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

§ 7-912 STANDARDS FOR SMALL AND LARGE QUANTITY HANDLERS OF UNIVERSAL WASTE

(a) Applicability

This section applies to small and large quantity handlers of universal waste as defined above.

(b) Prohibitions

Small and large quantity handlers of universal waste are:

- (1) Prohibited from disposing of universal waste; and
- (2) Prohibited from diluting or treating universal waste, except by responding to releases as provided in **subsection (h) of this section**; or by managing specific wastes as provided in **subsection (d) of this section**.

Note: Intentional breaking or crushing of mercury-containing lamps is banned under this treatment prohibition.

Note: Owners or operators of facilities that treat mercury-containing lamps using drum-top crushing equipment are subject to certification under the requirements of **subchapter 5**. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather than a recycling activity.

(c) Notification

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- (1) A small quantity handler is not required to notify the Secretary of universal waste handling activities.
- (2) A large quantity handler must notify the Secretary as follows:
 - (A) Except as provided in **subsection (c)(2)(B) of this section**, a large quantity handler must have sent written notification of universal waste management to the Secretary, and received an EPA Identification Number, before meeting or exceeding the 5,000 kilogram storage limit.
 - (B) A large quantity handler who manages recalled universal waste pesticides as described in §§ 7-903(a)(1) and (a)(2) and who has sent notification to EPA as required by 40 CFR Part 165 is not required to notify for those recalled universal waste pesticides under this section.

~~Note: A large quantity handler of universal waste who has already notified EPA of his or her hazardous waste management activities and has received an EPA Identification Number is not required to re-notify under this section.~~

- (3) A notification submitted by a large quantity handler must include:
 - (A) The large quantity handler's name and mailing address;
 - (B) The name and business telephone number of the person at the large quantity handler's site who should be contacted regarding universal waste management activities;
 - (C) The address or physical location of the universal waste management activities;
 - (D) A list of all of the types of universal waste managed by the large quantity handler;
 - (E) A statement indicating that the large quantity handler is either accumulating 5,000 kilograms or more of universal waste other than CRTs, or 36,288 kilograms (40 tons) or more of CRTs, at one time and the types of universal waste the handler is accumulating above this quantity.

Note: The ~~Vermont Hazardous Waste Handler Site Identification ID-Form~~ (EPA Form 8700-12) specified under § 7-104 may be used to provide notification of universal waste management to the Secretary.

- (d) Waste management
 - (1) [Reserved]
 - (2) Universal waste pesticides

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(A) Both small and large quantity handlers must manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides must be contained in one or more of the following:

~~(B)~~(i) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or

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~~(C)~~(ii) A container that does not meet the requirements of **subsection (d)(2)(A)(i) of this section**, provided that the unacceptable container is overpacked in a container that does meet the **subsection (d)(2)(A)(i)** requirements; or

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~~(D)~~(iii) A tank that meets the requirements of **40 CFR Part 265 subpart J**, except for 40 CFR §§ 265.197(c), 265.200, and 265.201; or

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~~(E)~~(iv) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

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(B) Store containers of universal waste pesticides within a structure such that the containers are protected from precipitation.

(3) Universal waste thermostats

Both small and large quantity handlers must manage universal waste thermostats in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(A) Package universal waste thermostats in containers that are structurally sound, adequate to prevent breakage, and compatible with the contents of the thermostats. Such containers must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

(B) Store containers of universal waste thermostats within a structure such that the containers are protected from precipitation.

~~(B)~~(C) A small or large quantity handler may remove mercury-containing ampules from universal waste thermostats, provided the handler:

- (i) Removes the ampules in a manner designed to prevent breakage of the ampules;
- (ii) Removes ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case

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of breakage);

- (iii) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules; from the containment device to a container ~~in accordance with the applicable requirements of subchapter 3~~ that is subject to all applicable requirement of subchapters 1 through 7 of these regulations;
- (iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container ~~in accordance with the applicable requirements of subchapter 3~~ that is subject to all applicable requirement of subchapters 1 through 7 of these regulations;
- (v) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;
- (vi) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;
- (vii) Stores removed ampules in closed, non-leaking containers that are in good condition; ~~and~~
- (viii) Stores containers of removed ampules within a structure such that the containers are protected from precipitation; and
- ~~(viii)~~(ix) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation.

~~(C)(D)~~ A small or large quantity handler who removes mercury-containing ampules from thermostats must determine whether the following exhibit a characteristic of hazardous waste identified in §§ 7-205 through 7-208:

- (i) Mercury or clean-up residues resulting from spills or leaks; and/or
- (ii) Other waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units).

~~(D)(E)~~ Any mercury, residue, and/or other waste listed in **subsection (d)(3)(C)(D) of this section** that exhibits a characteristic of hazardous waste must be managed in compliance with all applicable requirements of **subchapters 1 through 7**. The handler is considered the generator of the mercury, residues, and/or other waste and must comply with the applicable requirements of **subchapter 3**.

- (4) Universal waste PCB-containing fluorescent light ballasts

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Small and large quantity handlers must:

- (A) Manage universal waste PCB-containing fluorescent light ballasts in a way that prevents releases of any universal waste or component of a universal waste to the environment.
- (B) Immediately contain and transfer any universal waste PCB-containing fluorescent light ballasts that show evidence of leakage or damage to a container that meets the requirements of §§ 7-311(f)(2) through (4).

Note: Fluorescent light ballasts which contain PCBs in a small capacitor that is either not intact or that is leaking, or that contain PCBs in the potting material, are subject to regulation under TSCA (i.e., 40 CFR Part 761).

- (C) Store universal waste PCB-containing fluorescent light ballasts within a structure such that the ballasts are protected from precipitation.

(5) Universal waste lamps

- (A) Both small and large quantity handlers must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment. Small and large quantity handlers must:
 - (i) Package universal waste lamps in containers that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

- (ii) Store containers of universal waste lamps within a structure such that the containers are protected from precipitation.

~~(ii)~~(iii) Seal full containers with tape.

~~(ii)~~(iv) Stack containers of lamps no higher than five (5) feet.

- ~~(iv)~~(v) Immediately contain and transfer any universal waste lamps that show evidence of damage, and all residue and other waste from broken lamps to a container that meets the requirements of §§ 7-311(f)(2) through (4).

Note: Intentional breaking or crushing of mercury-containing lamps is prohibited under § 7-912(b)(2).

Note: Owners or operators of facilities that treat mercury-containing lamps using drum-top crushing equipment are subject to certification under the

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requirements of **subchapter 5**. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather than a recycling activity.

- (B) A small or large quantity handler must determine whether residue and/or other waste from broken lamps collected pursuant to **subsection (d)(5)(A)(iv)** of this section exhibits a characteristic of hazardous waste identified in §§ 7-205 through 7-208.
- (C) Any residue and/or other waste that exhibits a characteristic of hazardous waste must be managed in compliance with all applicable requirements of **subchapters 1 through 7**. The handler is considered the generator of the residues, and/or other waste and must comply with the applicable requirements of **subchapter 3**.

(6) Universal waste mercury-containing devices

Both small and large quantity handlers must manage universal waste mercury-containing devices in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Package universal waste mercury-containing devices in containers that are structurally sound, adequate to prevent breakage, and compatible with the contents of the ~~thermostats~~ devices. Such containers must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.
- ~~(B)~~ Store containers of universal waste mercury-containing devices within a structure such that the containers are protected from precipitation.
- ~~(B)(C)~~ A small or large quantity handler may remove mercury-containing ampules from universal waste mercury-containing devices, provided the handler adheres to the practices for removing mercury containing ampules from universal waste thermostats set forth in **subsections (d)(3)(B)(C) through (D)(E)** of this section.
- ~~(C)(D)~~ Any residue and/or other waste that exhibits a characteristic of hazardous waste must be managed in compliance with all applicable requirements of **subchapters 1 through 7** of these regulations. The handler is considered the generator of the mercury, residues, and/or other waste and must comply with the applicable requirements of **subchapter 3**.

(7) Universal waste cathode ray tubes (CRTs)

Both small and large quantity handlers must manage universal waste CRTs in a way that prevents breakage, or releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Package universal waste CRTs in a manner adequate to prevent breakage during

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transportation, and when necessary during storage and handling. Such packaging must lack evidence of damage that could cause breakage under reasonably foreseeable conditions;

- (B) Store universal waste CRTs within a structure or transportation unit such that the CRTs are protected from precipitation; and
- (C) Place any universal waste CRT that shows evidence of breakage, leakage, spillage, or damage that could cause the release of glass particles under reasonably foreseeable conditions in a container. Any such container shall be closed, structurally sound, and compatible with the cathode ray tube(s) and shall be capable of preventing leakage, spillage or releases of broken cathode ray tubes, glass particles or other hazardous constituents from such broken tubes to the environment.

(8) Postconsumer paint

Both small and large quantity handlers must manage universal waste postconsumer paint in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Universal waste postconsumer paint shall be managed in containers that remain closed, structurally sound, and compatible with the postconsumer paint. Such containers must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (B) Any container of universal waste postconsumer paint that does not meet the requirements of subsection (A) of this section shall be overpacked in a container that meets the requirements of subsection (A) of this section.
- (C) Store containers of universal waste postconsumer paint within a structure such that the containers are protected from precipitation.

(9) Aerosol cans

Both small and large quantity handlers must manage universal waste aerosol cans in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Universal waste aerosol cans must be accumulated in a container that is structurally sound, compatible with the contents of the aerosol cans, lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and is protected from sources of heat.
- (B) Universal waste aerosol cans that show evidence of leakage must be packaged in a separate closed container or overpacked with absorbents, or immediately

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punctured and drained in accordance with the requirements of subsection (D) of this section.

- (C) Small and large quantity handlers of universal waste may conduct the following activities as long as each individual aerosol can is not breached and remains intact:
- (i) Sorting aerosol cans by type;
 - (ii) Mixing intact cans in one container; and
 - (iii) Removing actuators to reduce the risk of accidental release, and
- (D) A small or large quantity handler of universal waste who punctures and drains their aerosol cans must recycle the empty punctured aerosol cans and meet the following requirements while puncturing and draining universal waste aerosol cans:
- (i) Conduct puncturing and draining activities using a device specifically designed to safely puncture aerosol cans and effectively contain the residual contents and any emissions thereof.
 - (ii) Establish and follow a written procedure detailing how to safely puncture and drain the universal waste aerosol can (including proper assembly, operation and maintenance of the unit, segregation of incompatible wastes, and proper waste management practices to prevent fires or releases); maintain a copy of the manufacturer's specification and instruction on site; and ensure employees operating the device are trained in the proper procedures.
 - (iii) Ensure that puncturing of the can is done in a manner designed to prevent fires and to prevent the release of any component of universal waste to the environment. This manner includes, but is not limited to, locating the equipment on a solid, flat surface in a well-ventilated area.
 - (iv) Immediately transfer the contents from the waste aerosol can or puncturing device, if applicable, to a container or tank that meets the applicable requirements of §§ 7-306, 7-307, 7-308, or 7-310.
 - (v) Conduct a hazardous waste determination on the contents of the emptied aerosol can per § 7-303. Any hazardous waste generated as a result of puncturing and draining the aerosol can is subject to all applicable requirements of subchapters 1 through 7. The handler is considered the generator of the hazardous waste and is subject to the applicable requirements of subchapter 3.
 - (vi) If the contents are determined to be nonhazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state, or

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local solid waste regulations.

(vii) A written procedure must be in place in the event of a spill or leak and a spill clean-up kit must be provided. All spills or leaks of the contents of the aerosol cans must be cleaned up promptly.

(e) Labeling and marking

Small and large quantity handlers must label and mark universal waste to identify its type as specified below:

- (1) [Reserved]
- (2) A container, (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in §§ 7-903(a)(1) and (2) are contained must be labeled and marked clearly with:
 - (A) The label that was on or accompanied the product as sold or distributed; and
 - (B) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."
- (3) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in § 7-903(a)(3) are contained must be labeled and marked clearly with:
 - (A) A label as follows:
 - (i) The label that was on the product when purchased, if still legible;
 - (ii) If using the labels described in ~~subsection (e)(3)(A)(i) of this section~~ is not feasible, the appropriate label as required under the Department of Transportation regulation **49 CFR Part 172**;
 - (iii) If using the labels described in ~~subsections (e)(3)(A)(i) and (e)(3)(A)(ii) of this section~~ are not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a state; and
 - (B) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."
- (4) Containers holding universal waste thermostats must be labeled or marked clearly with one of the following phrases: "Universal Waste-Mercury Thermostat(s)," or "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."
- (5) Universal waste PCB-containing fluorescent light ballasts (i.e., each ballast), or a container in which the ballasts are contained, must be labeled or marked clearly with one of the following phrases: "Universal Waste-PCB Ballast(s)," or "Waste PCB Ballast(s)," or "Used PCB Ballast(s)."

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- (6) Containers holding universal waste lamps must be labeled or marked clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."
 - (7) Containers holding universal waste mercury-containing devices must be labeled or marked clearly with one of the following phrases: "Universal Waste-Mercury Device(s)," or "Waste Mercury Device(s)," or "Used Mercury Device(s)."
 - (8) Universal waste cathode ray tubes (i.e., each CRT), or packages or containers holding universal waste cathode ray tubes, must be labeled or marked clearly with one of the following phrases: "Universal Waste-Cathode Ray Tube(s)," or "Waste Cathode Ray Tube(s)," or "Used Cathode Ray Tube(s)" or "Universal Waste-CRT(s)," or "Waste CRT(s)," or "Used CRT(s)."
 - (9) Containers holding universal waste postconsumer paint must be labeled or marked clearly with one of the following phrases: "Universal Waste-Paint," or "Waste Paint," or "Used Paint."**
 - (10) Universal waste aerosol cans (i.e., each aerosol can), or a container in which the aerosol cans are contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste—Aerosol Can(s)," "Waste Aerosol Can(s)," or "Used Aerosol Can(s)".**
- (f) Accumulation time limits
- (1) A small or large quantity handler may not accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of **subsection (f)(2) of this section** are met.
 - (2) A small or large quantity handler may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.
 - (3) A small or large quantity handler who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:
 - (A) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;

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- (B) Marking or labeling each individual item of universal waste (e.g., each thermostat, ballast or lamp) with the date it became a waste or was received;
 - (C) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;
 - (D) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;
 - (E) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received;
or
 - (F) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.
- (g) Employee training
- Both small and large quantity handlers must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relative to their responsibilities during normal facility operations and emergencies.
- (h) Response to releases
- (1) Both small and large quantity handlers must respond to and manage a discharge or release of a universal waste in accordance with the requirements and procedures of § 7-105.
 - (2) Both small and large quantity handlers must determine whether any material resulting from the discharge or release is hazardous waste, and if so, must manage the hazardous waste in compliance with all applicable requirements of **subchapters 1 through 7** of these regulations. The handler is considered the generator of the material resulting from the discharge or release, and must comply with the applicable requirements of **subchapter 3**.
- (i) Off-site shipments
- (1) Both small and large quantity handlers of universal waste are prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.
 - (2) If a small or large quantity handler self-transportes universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of § 7-913 while transporting the universal

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- waste.
- (3) If a universal waste being offered for off-site transportation meets the definition of a hazardous material under **49 CFR Parts 171 through 180**, the small or large quantity handler must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under **49 CFR Parts 172 through 180**;
 - (4) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.
 - (5) If a small or large quantity handler sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:
 - (A) Receive the waste back when notified that the shipment has been rejected, or
 - (B) Agree with the receiving handler on a destination facility to which the shipment will be sent.
 - (6) Small and large quantity handlers may reject a shipment containing universal waste, or a portion of a shipment containing universal waste received from another handler. If a handler rejects a shipment or a portion of a shipment, the handler must contact the originating handler to provide notification of the rejection and to discuss reshipment of the load. The handler must:
 - (A) Send the shipment back to the originating handler, or
 - (B) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.
 - (7) If a small or large quantity handler receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the Secretary of that shipment, and provide the name, address, and phone number of the originating shipper.
- (j) Tracking universal waste shipments
- (1) A small quantity handler is not required to keep records of shipments of universal waste.
 - (2) A large quantity handler is subject to the following tracking requirements:
 - (A) Receipt of shipments

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A large quantity handler must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, movement document or other shipping document. The record for each shipment of universal waste received must include the following information:

- (i) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent;
- (ii) The quantity of each type of universal waste received;
- (iii) The date of receipt of the shipment of universal waste.

(B) Shipments off-site

A large quantity handler must keep a record of each shipment of universal waste sent from the handler to other facilities. The record may take the form of a log, invoice, manifest, bill of lading, movement document or other shipping document. The record for each shipment of universal waste sent must include the following information:

- (i) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;
- (ii) The quantity of each type of universal waste sent;
- (iii) The date the shipment of universal waste left the facility.

(C) Record retention

- (i) A large quantity handler must retain the records described in **subsection (j)(2)(A) of this section** for at least three years from the date of receipt of a shipment of universal waste.
- (ii) A large quantity handler must retain the records described in **subsection (j)(2)(B) of this section** for at least three years from the date a shipment of universal waste left the facility.

(k) Exports

- (1) Both small and large quantity handlers who send universal waste to a foreign destination are subject to the requirements of 40 CFR Part 262, Subpart H, other than to those OECD countries specified in 40 CFR § 262.58(a)(1) (in which case the handler is subject to the requirements of 40 CFR Part 262, Subpart H) must:

~~(A) Comply with the requirements applicable to a primary exporter in §§ 7.705(b)(1)~~

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through (6), 7-710(d) and (e), and 40 CFR §§ 262.56(a)(1) through (4), (6), and (b);

- ~~(B) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in § 7-103; and~~
- ~~(C) Provide a copy of the EPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.~~

(2) Cathode ray tubes (CRTs)

(A) Exporters of universal waste cathode ray tubes must comply with the export requirements of 40 CFR § 261.39(a)(5) and the export notification and recordkeeping requirements of 40 CFR § 261.41.

(B) Availability of information; confidentiality of information

- (i) After June 26, 2018, no claim of business confidentiality may be asserted by any person with respect to information contained in cathode ray tube export documents prepared, used and submitted under 40 CFR §§261.39(a)(5) and 261.41(a), and with respect to information contained in hazardous waste export, import, and transit documents prepared, used and submitted under 40 CFR §§262.82, 262.83, 262.84, 263.20, 264.12, 264.71, 265.12, 265.71, and 267.71, whether submitted electronically into EPA's Waste Import Export Tracking System or in paper format.
- (ii) EPA will make any cathode ray tube export documents prepared, used and submitted under 40 CFR §§261.39(a)(5) and 261.41(a), and any hazardous waste export, import, and transit documents prepared, used and submitted under 40 CFR §§262.82, 262.83, 262.84, 263.20, 264.12, 264.71, 265.12, 265.71, and 267.71 available to the public under this section when these electronic or paper documents are considered by EPA to be final documents. These submitted electronic and paper documents related to hazardous waste exports, imports and transits and cathode ray tube exports are considered by EPA to be final documents on March 1 of the calendar year after the related cathode ray tube exports or hazardous waste exports, imports, or transits occur.

§ 7-913 STANDARDS FOR UNIVERSAL WASTE TRANSPORTERS

(a) Applicability

This section applies to universal waste transporters (as defined in § 7-911).

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(b) Prohibitions

A universal waste transporter is:

- (1) Prohibited from disposing of universal waste; and
- (2) Prohibited from diluting or treating universal waste, except by responding to releases as provided in § 7-913(e).

(c) Waste management

- (1) A universal waste transporter must comply with all applicable U.S. Department of Transportation regulations in **49 CFR Part 171 through 180** for transport of any universal waste that meets the definition of hazardous material in **49 CFR § 171.8**. For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the hazardous waste manifest requirements of the U.S. Environmental Protection Agency specified in **40 CFR Part 262**. Because universal waste does not require a hazardous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.
- (2) Some universal waste materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in **49 CFR § 173.2**. As universal waste shipments do not require a manifest under **40 CFR Part 262**, they may not be described by the DOT proper shipping name "hazardous waste, (l) or (s), n.o.s.", nor may the hazardous material's proper shipping name be modified by adding the word "waste".
- (3) Universal waste transporters are subject to the solid waste permit requirements of **10 V.S.A § 6607a**.

(d) Storage time limits

- (1) A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.
- (2) If a universal waste transporter stores universal waste for more than ten days, the transporter becomes a universal waste handler and must comply with the applicable requirements of § 7-912 of this subchapter while storing the universal waste.

(e) Response to releases

- (1) A universal waste transporter must immediately contain all releases of universal wastes and other residues from universal wastes.
- (2) A universal waste transporter must determine whether any material resulting from the release is hazardous waste, and if so, it is subject to all applicable requirements of

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subchapters 1 through 7. If the waste is determined to be a hazardous waste, the transporter must manage such waste in accordance with the applicable generator requirements of **subchapter 3.**

(f) Off-site shipments

- (1) A universal waste transporter is prohibited from transporting universal waste to a place other than a universal waste handler, a destination facility, or a foreign destination.
- (2) If the universal waste being shipped off-site meets the Department of Transportation's definition of a hazardous material under **49 CFR § 171.8**, the shipment must be properly described on a shipping paper in accordance with the applicable Department of Transportation regulations under **49 CFR Part 172.**

(g) Exports

A universal waste transporter transporting a shipment of universal waste to a foreign destination is subject to the requirements of **40 CFR Part 262, Subpart H**, other than to those OECD countries specified in **40 CFR § 262.58(a)(1)** (in which case the transporter is subject to the requirements of **40 CFR Part 262, Subpart H**) may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgment of Consent. In addition the transporter must ensure that:

~~A copy of the EPA Acknowledgment of Consent accompanies the shipment; and~~

~~The shipment is delivered to the facility designated by the person initiating the shipment.~~

§ 7-914 STANDARDS FOR DESTINATION FACILITIES

(a) Applicability

- (1) The owner or operator of a destination facility (as defined in § 7-911) is subject to all applicable requirements of **subchapters 1, 2, 3, 5, 6 and 7.**
- (2) The owner or operator of a destination facility that recycles a particular universal waste without storing that universal waste before it is recycled must comply with the applicable requirements of **subchapter 6.**

(b) Off-site shipments.

- (1) The owner or operator of a destination facility is prohibited from sending or taking universal waste to a place other than a universal waste handler, another destination facility or a foreign destination.

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- (2) The owner or operator of a destination facility may reject a shipment containing universal waste, or a portion of a shipment containing universal waste. If the owner or operator of the destination facility rejects a shipment or a portion of a shipment, the owner must contact the shipper to provide notification of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility must:
 - (A) Send the shipment back to the original shipper, or
 - (B) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.
 - (3) If the owner or operator of a destination facility receives a shipment containing hazardous waste that is not a universal waste, the owner or operator of the destination facility must immediately notify the Secretary of that shipment, and provide the name, address, and phone number of the shipper.
- (c) Tracking universal waste shipments
- (1) The owner or operator of a destination facility must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, movement document or other shipping document. The record for each shipment of universal waste received must include the following information:
 - (A) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent;
 - (B) The quantity of each type of universal waste received; and
 - (C) The date of receipt of the shipment of universal waste.
 - (2) The owner or operator of a destination facility must retain the records described in **subsection (c)(1) of this section** for at least three years from the date of receipt of a shipment of universal waste.

§ 7-915 IMPORT REQUIREMENTS

Persons managing universal waste that is imported from a foreign country into the United States are subject to the requirements of 40 CFR Part 262 Subpart H and the applicable requirements of this section, immediately after the waste enters the United States, as indicated in **subsections (a) through (c) of this section**:

- (a) A universal waste transporter is subject to the universal waste transporter requirements of § 7-913.
- (b) A universal waste handler is subject to the small or large quantity handler requirements of

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§ 7-912, as applicable.

- (c) An owner or operator of a destination facility is subject to the destination facility requirements of § 7-914.
- ~~(d) Persons managing universal waste that is imported from an OECD country as specified in 40 CFR § 262.58(a)(1) are subject to paragraphs (a) through (c) of this section, in addition to the requirements of 40 CFR Part 262, Subpart H.~~

§ 7-916 PETITIONS TO INCLUDE OTHER WASTES AS UNIVERSAL WASTES UNDER THIS SUBCHAPTER

(a) General

- (1) ~~Except as provided in subsection (a)(4) of this section, any~~ Any person seeking to add a hazardous waste or a category of hazardous waste to this subchapter may petition the Secretary for a regulatory amendment under this section.
- (2) To be successful, the petitioner must demonstrate to the satisfaction of the Secretary that regulation of the waste or category of waste under the provisions of this subchapter is: appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the hazardous waste program. The petition must address as many of the factors listed in **subsection (b) of this section** as are appropriate for the waste or waste category addressed in the petition.
- (3) The Secretary will evaluate petitions using the factors listed in **subsection (b) of this section**. The decision of whether or not to amend this subchapter will be based on the weight of evidence showing that regulation under this subchapter is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.
- ~~(4) Hazardous waste pharmaceuticals are regulated under subchapter 10 of these regulations and may not be added as a category of hazardous waste for management under this subchapter.~~

(b) Factors for petitions to include other wastes as universal wastes

- (1) The waste or category of waste, as generated by a wide variety of generators, is listed in §§ 7-210 through 7-215, or (if not listed) a proportion of the waste stream exhibits one or more characteristics of hazardous waste identified in §§ 7-205 through 7-208. (When a characteristic waste is added to the universal waste regulations of this subchapter by using a generic name to identify the waste category, the definition of universal waste in §§ 7-103 and 7-911 will be amended to include only the hazardous waste portion of the waste category.) Thus, only the portion of the waste stream that

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does exhibit one or more characteristics (i.e., is hazardous waste) is subject to the universal waste regulations of this subchapter;

- (2) The waste or category of waste is not exclusive to a specific industry or group of industries, and is commonly generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, office complexes, ~~conditionally exempt very small quantity~~ generators, small businesses, government organizations, as well as large industrial facilities);
- (3) The waste or category of waste is generated by a large number of generators (e.g., more than 1,000 nationally) and is frequently generated in relatively small quantities by each generator;
- (4) Systems to be used for collecting the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste;
- (5) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes, and specific management standards proposed or referenced by the petitioner (e.g., waste management requirements appropriate to be added to §§ 7-912(d), and 7-913(c); and/or applicable U.S. Department of Transportation requirements) would be protective of human health and the environment during accumulation and transport;
- (6) Regulation of the waste or category of waste under this subchapter will increase the likelihood that the waste will be diverted from non-hazardous waste management systems (e.g., the municipal waste stream, non-hazardous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with **subchapters 1 through 7**.
- (7) Regulation of the waste or category of waste under this subchapter will improve implementation of and compliance with the hazardous waste regulatory program; and/or
- (8) Such other factors as may be appropriate.

Subchapter 10: HAZARDOUS WASTE PHARMACEUTICALS

§ 7-1001 DEFINITIONS

The following definitions apply to this subchapter:

“Evaluated hazardous waste pharmaceutical” means a prescription hazardous waste pharmaceutical that has been evaluated by a reverse distributor in accordance with 40 CFR § 266.510(a)(3) and will not be sent to another reverse distributor for further evaluation or verification of manufacture credit.

“Hazardous waste pharmaceutical” means a pharmaceutical that is a waste, as defined in § 7-103, and exhibits one or more characteristics identified in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215. A pharmaceutical is not a waste, as defined in § 7-103, and therefore not a hazardous waste pharmaceutical, if it is legitimately used/reused (e.g., lawfully donated for its intended purpose) or reclaimed. An over-the-counter pharmaceutical, dietary supplement, or homeopathic drug is not a waste, as defined in § 7-103, and therefore not a hazardous waste pharmaceutical, if it has a reasonable expectation of being legitimately used/reused (e.g., lawfully redistributed for its intended purpose) or reclaimed.

“Healthcare facility” means any person that is lawfully authorized to:

- (a) Provide preventative, diagnostic, therapeutic, rehabilitative, maintenance or palliative care, and counseling, service, assessment or procedure with respect to the physical or mental condition, or functional status, of a human or animal or that affects the structure or function of the human or animal body; or
- (b) Distribute, sell, or dispense pharmaceuticals, including over-the-counter pharmaceuticals, dietary supplements, homeopathic drugs, or prescription pharmaceuticals. This definition includes, but is not limited to, wholesale distributors, third-party logistics providers that serve as forward distributors, military medical logistics facilities, hospitals, psychiatric hospitals, ambulatory surgical centers, health clinics, physicians' offices, optical and dental providers, chiropractors, long-term care facilities, ambulance services, pharmacies, long-term care pharmacies, mail-order pharmacies, retailers of pharmaceuticals, veterinary clinics, and veterinary hospitals. This definition does not include pharmaceutical manufacturers, reverse distributors, or reverse logistics centers.

“Household waste pharmaceutical” means a pharmaceutical that is a waste, as defined in § 7-103, but is excluded from being a hazardous waste under § 7-203(a).

“Long-term care facility” means a licensed entity that provides assistance with activities of daily living, including managing and administering pharmaceuticals to one or more individuals at the facility. This definition includes, but is not limited to, hospice facilities, nursing facilities, skilled nursing facilities, and the nursing and skilled nursing care portions of continuing care retirement communities. Not included within the scope of this definition are group homes.

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independent living communities, assisted living facilities, and the independent and assisted living portions of continuing care retirement communities.

“Non-creditable hazardous waste pharmaceutical” means a prescription hazardous waste pharmaceutical that does not have a reasonable expectation to be eligible for manufacturer credit or a nonprescription hazardous waste pharmaceutical that does not have a reasonable expectation to be legitimately used/reused or reclaimed. This includes but is not limited to, investigational drugs, free samples of pharmaceuticals received by healthcare facilities, residues of pharmaceuticals remaining in empty containers, contaminated personal protective equipment, floor sweepings, and clean-up material from the spills of pharmaceuticals.

“Non-hazardous waste pharmaceutical” means a pharmaceutical that is a waste, as defined in § 7-103, and is not listed in §§ 7-210 through 7-215, and does not exhibit a characteristic identified in §§ 7-205 through 7-208.

“Non-pharmaceutical hazardous waste” means a waste, as defined in § 7-103, that is listed in §§ 7-210 through 7-215, or exhibits one or more characteristics identified in §§ 7-205 through 7-208, but is not a pharmaceutical, as defined in this section.

“Pharmaceutical” means any drug or dietary supplement for use by humans or other animals; any electronic nicotine delivery system (e.g., electronic cigarette or vaping pen); or any liquid nicotine (e-liquid) packaged for retail sale for use in electronic nicotine delivery systems (e.g., pre-filled cartridges or vials). This definition includes, but is not limited to, dietary supplements, as defined by the Federal Food, Drug and Cosmetic Act; prescription drugs, as defined by 21 CFR § 203.3(v); over-the-counter drugs; homeopathic drugs; compounded drugs; investigational new drugs; pharmaceuticals remaining in non-empty containers; personal protective equipment contaminated with pharmaceuticals; and clean-up material from spills of pharmaceuticals. This definition does not include dental amalgam or sharps.

“Potentially creditable hazardous waste pharmaceutical” means a prescription hazardous waste pharmaceutical that has a reasonable expectation to receive manufacturer credit and is:

- (a) In original manufacturer packaging (except pharmaceuticals that were subject to a recall);
- (b) Undispensed; and
- (c) Unexpired or less than one year past expiration date. The term does not include evaluated hazardous waste pharmaceuticals or nonprescription pharmaceuticals including, but not limited to, over-the-counter drugs, homeopathic drugs, and dietary supplements.

“Reverse distributor” means any person that receives and accumulates prescription pharmaceuticals that are potentially creditable hazardous waste pharmaceuticals for the purpose of facilitating or verifying manufacturer credit. Any person, including forward distributors, third-party logistics providers, and pharmaceutical manufacturers, that processes prescription pharmaceuticals for the facilitation or verification of manufacturer credit is considered a reverse distributor.

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§ 7-1002 APPLICABILITY

- (a) A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, remains subject to § 7-306 and is not subject to this subchapter, except for §§ 7-1006 and 7-1008 and the optional provisions of § 7-1005.
- (b) A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, has the option of complying with § 7-1002(d) for the management of its hazardous waste pharmaceuticals as an alternative to complying with § 7-306 and the optional provisions of § 7-1005.
- (c) A healthcare facility or reverse distributor remains subject to all applicable hazardous waste regulations with respect to the management of its non-pharmaceutical hazardous waste.
- (d) With the exception of healthcare facilities identified in subsection (a) of this section, a healthcare facility is subject to the following in lieu of subchapters 3 through 5:
- (1) Sections 7-1003 and 7-1006 through 7-1009 of this subchapter with respect to the management of:
- (A) Non-creditable hazardous waste pharmaceuticals, and
- (B) Potentially creditable hazardous waste pharmaceuticals if they are not destined for a reverse distributor.
- (2) Sections 7-1003(a), 7-1004, 7-1006 through 7-1008, and 7-1010 of this subchapter with respect to the management of potentially creditable hazardous waste pharmaceuticals that are prescription pharmaceuticals and are destined for a reverse distributor.
- (e) A reverse distributor is subject to §§ 7-1006 through 7-1011 of this subchapter in lieu of subchapters 3 through 5 with respect to the management of hazardous waste pharmaceuticals.
- (f) Hazardous waste pharmaceuticals generated or managed by entities other than healthcare facilities and reverse distributors (e.g., pharmaceutical manufacturers and reverse logistics centers) are not subject to this subchapter. Other generators are subject to Subchapter 3 for the generation and accumulation of hazardous wastes, including hazardous waste pharmaceuticals.
- (g) The following are not subject to Subchapters 1 through 9, except as specified:
- (1) Pharmaceuticals that are not waste, as defined in § 7-103, because they are

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legitimately used/reused (e.g., lawfully donated for their intended purpose) or reclaimed.

- ~~(2) Over-the-counter pharmaceuticals, dietary supplements, or homeopathic drugs that are not wastes, as defined in § 7-103, because they have a reasonable expectation of being legitimately used/reused (e.g., lawfully redistributed for their intended purpose) or reclaimed.~~
- ~~(3) Pharmaceuticals being managed in accordance with a recall strategy that has been approved by the Food and Drug Administration in accordance with 21 CFR part 7 subpart C. This subchapter does apply to the management of the recalled hazardous waste pharmaceuticals after the Food and Drug Administration approves the destruction of the recalled items.~~
- ~~(4) Pharmaceuticals being managed in accordance with a recall corrective action plan that has been accepted by the Consumer Product Safety Commission in accordance with 16 CFR part 1115. This subchapter does apply to the management of the recalled hazardous waste pharmaceuticals after the Consumer Product Safety Commission approves the destruction of the recalled items.~~
- ~~(5) Pharmaceuticals stored according to a preservation order, or during an investigation or judicial proceeding until after the preservation order, investigation, or judicial proceeding has concluded and/or a decision is made to discard the pharmaceuticals.~~
- ~~(6) Investigational new drugs for which an investigational new drug application is in effect in accordance with the Food and Drug Administration's regulations in 21 CFR part 312. This subchapter does apply to the management of the investigational new drug after the decision is made to discard the investigational new drug or the Food and Drug Administration approves the destruction of the investigational new drug, if the investigational new drug is a hazardous waste.~~
- ~~(7) Household waste pharmaceuticals, including those that have been collected by an authorized collector (as defined by the Drug Enforcement Administration), provided the authorized collector complies with the conditional exemption in §§ 7-1007(a)(2) and 7-1007(b).~~

§ 7-1003 STANDARDS FOR HEALTHCARE FACILITIES MANAGING NON-CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS

- ~~(a) Notification and withdrawal from this subchapter for healthcare facilities managing hazardous waste pharmaceuticals:~~
- ~~(1) Notification. A healthcare facility must notify the Secretary, using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12), that it is a healthcare facility operating under this subchapter. A healthcare facility is not~~

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required to fill out Box 10.B. (Waste Codes for Federally Regulated Hazardous Waste) of the Site Identification Form with respect to its hazardous waste pharmaceuticals. A healthcare facility must submit a separate notification (Site Identification Form) for each site or EPA identification number.

- (A) A healthcare facility that already has an EPA identification number must notify the Secretary, using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12), that it is a healthcare facility as part of its next Biennial Report, if it is required to submit one; or if not required to submit a Biennial Report, within 60 days of the effective date of this subchapter, or within 60 days of becoming subject to this subchapter.
- (B) A healthcare facility that does not have an EPA identification number must obtain one by notifying the Secretary, using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12), that it is a healthcare facility as part of its next Biennial Report, if it is required to submit one; or if not required to submit a Biennial Report, within 60 days of the effective date of this subchapter, or within 60 days of becoming subject to this subchapter.
- ~~(A)(C)~~ A healthcare facility must keep a copy of its notification on file for as long as the healthcare facility is subject to this subchapter.
- (2) Withdrawal. A healthcare facility that operated under this subchapter but is no longer subject to this subchapter, because it is a very small quantity generator under § 7-306, and elects to withdraw from this subchapter, must notify the Secretary using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) that it is no longer operating under this subchapter. A healthcare facility is not required to fill out Box 10.B. (Waste Codes for Federally Regulated Hazardous Waste) of the Site Identification Form with respect to its hazardous waste pharmaceuticals. A healthcare facility must submit a separate notification (Site Identification Form) for each EPA identification number.
- (A) A healthcare facility must submit the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) notifying that it is withdrawing from this subchapter before it begins operating under § 7-306.
- (B) A healthcare facility must keep a copy of its withdrawal on file for three years from the date of signature on the notification of its withdrawal.
- (b) A healthcare facility must ensure that all personnel that manage non-creditable hazardous waste pharmaceuticals are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.
- (c) A healthcare facility that generates a waste that is a non-creditable pharmaceutical must determine whether that pharmaceutical is a hazardous waste pharmaceutical (i.e., it

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exhibits a characteristic identified in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215) in order to determine whether the waste is subject to this subchapter. A healthcare facility may choose to manage its non-hazardous waste pharmaceuticals as non-creditable hazardous waste pharmaceuticals under this subchapter.

- (d) Standards for containers used to accumulate non-creditable hazardous waste pharmaceuticals at healthcare facilities.
- (1) A healthcare facility must place non-creditable hazardous waste pharmaceuticals in a container that is structurally sound, compatible with its contents, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (2) A healthcare facility that manages ignitable or reactive non-creditable hazardous waste pharmaceuticals, or that mixes or commingles incompatible non-creditable hazardous waste pharmaceuticals must manage the container so that it does not have the potential to:
- (A) Generate extreme heat or pressure, fire or explosion, or violent reaction;
- (B) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;
- (C) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
- (D) Damage the structural integrity of the container of non-creditable hazardous waste pharmaceuticals; or
- (E) Through other like means threaten human health or the environment.
- (3) A healthcare facility must keep containers of non-creditable hazardous waste pharmaceuticals closed and secured in a manner that prevents unauthorized access to its contents.
- (4) A healthcare facility may accumulate non-creditable hazardous waste pharmaceuticals and non-hazardous non-creditable waste pharmaceuticals in the same container, except that non-creditable hazardous waste pharmaceuticals prohibited from being combusted because of the dilution prohibition of 40 CFR § 268.3(c) must be accumulated in separate containers and labeled with all applicable hazardous waste codes.
- (e) A healthcare facility must label or clearly mark each container of non-creditable hazardous waste pharmaceuticals with the phrase "Hazardous Waste Pharmaceuticals."
- (f) Maximum accumulation time for non-creditable hazardous waste pharmaceuticals at

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healthcare facilities.

- (1) A healthcare facility may accumulate non-creditable hazardous waste pharmaceuticals on site for one year or less without a permit or having interim status.
- (2) A healthcare facility that accumulates non-creditable hazardous waste pharmaceuticals on-site must demonstrate the length of time that the non-creditable hazardous waste pharmaceuticals have been accumulating, starting from the date it first becomes a waste. A healthcare facility may make this demonstration by any of the following methods:
 - (A) Marking or labeling the container of non-creditable hazardous waste pharmaceuticals with the date that the non-creditable hazardous waste pharmaceuticals became a waste;
 - (B) Maintaining an inventory system that identifies the date the non-creditable hazardous waste pharmaceuticals being accumulated first became a waste;
 - (C) Placing the non-creditable hazardous waste pharmaceuticals in a specific area and identifying the earliest date that any of the non-creditable hazardous waste pharmaceuticals in the area became a waste.
- (g) The non-creditable hazardous waste pharmaceuticals generated by a healthcare facility are subject to the land disposal restrictions of 40 CFR Part 268. A healthcare facility that generates non-creditable hazardous waste pharmaceuticals must comply with the land disposal restrictions in accordance with 40 CFR § 268.7(a) requirements, except that it is not required to identify the hazardous waste codes on the land disposal restrictions notification.
- (h) A healthcare facility that sends a shipment of non-creditable hazardous waste pharmaceuticals to a designated facility with the understanding that the designated facility can accept and manage the waste, and later receives that shipment back as a rejected load in accordance with the manifest discrepancy provisions of 40 CFR § 264.72 or 40 CFR § 265.72 may accumulate the returned non-creditable hazardous waste pharmaceuticals on site for up to an additional 90 days provided the rejected or returned shipment is managed in accordance with subsections (d) and (e) of this section. Upon receipt of the returned shipment, the healthcare facility must:
 - (1) Sign either:
 - (A) Item 18c of the original manifest, if the original manifest was used for the returned shipment; or
 - (B) Item 20 of the new manifest, if a new manifest was used for the returned shipment;
 - (2) Provide the transporter a copy of the manifest;

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- (3) Within 30 days of receipt of the rejected shipment, send a copy of the manifest to the designated facility that returned the shipment to the healthcare facility; and
- (4) Within 90 days of receipt of the rejected shipment, transport or offer for transport the returned shipment in accordance with the shipping standards of § 7-1009(a).
- (i) Reporting by healthcare facilities for non-creditable hazardous waste pharmaceuticals.
- (1) Biennial reporting by healthcare facilities. Healthcare facilities are not subject to biennial reporting requirements under § 7-708(a), with respect to non-creditable hazardous waste pharmaceuticals managed under this subchapter.
- (2) Exception reporting by healthcare facilities for a missing copy of the manifest:
- (A) For shipments from a healthcare facility to a designated facility.
- If a healthcare facility does not receive a copy of the manifest with the signature of the owner or operator of the designated facility within 60 days of the date the non-creditable hazardous waste pharmaceuticals were accepted by the initial transporter, the healthcare facility must submit:
- (i) A legible copy of the original manifest, indicating that the healthcare facility has not received confirmation of delivery, to the Secretary; and
- (ii) A handwritten or typed note on the manifest itself, or on an attached sheet of paper, stating that the return copy was not received and explaining the efforts taken to locate the non-creditable hazardous waste pharmaceuticals and the results of those efforts.
- (B) For shipments rejected by the designated facility and shipped to an alternate facility.
- If a healthcare facility does not receive a copy of the manifest for a rejected shipment of the non-creditable hazardous waste pharmaceuticals that is forwarded by the designated facility to an alternate facility (using appropriate manifest procedures), with the signature of the owner or operator of the alternate facility, within 60 days of the date the non-creditable hazardous waste was accepted by the initial transporter forwarding the shipment of non-creditable hazardous waste pharmaceuticals from the designated facility to the alternate facility, the healthcare facility must submit:
- (i) A legible copy of the original manifest, indicating that the healthcare facility has not received confirmation of delivery, to the Secretary; and
- (ii) A handwritten or typed note on the manifest itself, or on an attached sheet of

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paper, stating that the return copy was not received and explaining the efforts taken to locate the non-creditable hazardous waste pharmaceuticals and the results of those efforts.

- (3) Additional reports. The Secretary may require healthcare facilities to furnish additional reports concerning the quantities and disposition of non-creditable hazardous waste pharmaceuticals.
- (i) Recordkeeping by healthcare facilities for non-creditable hazardous waste pharmaceuticals.
 - (1) A healthcare facility must keep a copy of each manifest signed in accordance with §§ 7-702(b)(2) through (5) for three years or until it receives a signed copy from the designated facility which received the non-creditable hazardous waste pharmaceuticals. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter.
 - (2) A healthcare facility must keep a copy of each exception report for a period of at least three years from the date of the report.
 - (3) A healthcare facility must keep records of any test results, waste analyses, or other determinations made to support its hazardous waste determination(s) consistent with § 7-202(b)(6), for at least three years from the date the waste was last sent to on-site or off-site treatment, storage or disposal. A healthcare facility that manages all of its non-creditable non-hazardous waste pharmaceuticals as non-creditable hazardous waste pharmaceuticals is not required to keep documentation of hazardous waste determinations.
 - (4) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the Secretary.
 - (5) All records must be readily available upon request by an inspector.
- (k) A healthcare facility must immediately contain all spills of non-creditable hazardous waste pharmaceuticals and manage the spill clean-up materials as non-creditable hazardous waste pharmaceuticals in accordance with the requirements of this subchapter.
- (l) A healthcare facility may accept non-creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator under § 7-306, without a permit or without having interim status, provided the receiving healthcare facility:
 - (1) Is under the control of the same person (as defined in § 7-103) as the very small quantity generator healthcare facility that is sending the non-creditable hazardous waste pharmaceuticals off-site ("control," for the purposes of this section, means the power to direct the policies of the healthcare facility, whether by the ownership of

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stock, voting rights, or otherwise, except that contractors who operate healthcare facilities on behalf of a different person as defined in § 7-103 of this chapter shall not be deemed to "control" such healthcare facilities) or has a contractual or other documented business relationship whereby the receiving healthcare facility supplies pharmaceuticals to the very small quantity generator healthcare facility:

- (2) Is operating under this subchapter for the management of its non-creditable hazardous waste pharmaceuticals;
- (3) Manages the non-creditable hazardous waste pharmaceuticals that it receives from off site in compliance with this subchapter; and
- (4) Keeps records of the non-creditable hazardous waste pharmaceuticals shipments it receives from off site for three years from the date that the shipment is received.

§ 7-1004 STANDARDS FOR HEALTHCARE FACILITIES MANAGING POTENTIALLY CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS

- (a) A healthcare facility that generates a waste that is a potentially creditable pharmaceutical must determine whether the potentially creditable pharmaceutical is a potentially creditable hazardous waste pharmaceutical (i.e., it is listed in §§ 7-210 through 7-215 or exhibits a characteristic identified in §§ 7-205 through 7-208). A healthcare facility may choose to manage its potentially creditable non-hazardous waste pharmaceuticals as potentially creditable hazardous waste pharmaceuticals under this subchapter.
- (b) A healthcare facility may accept potentially creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator under § 7-306, without a permit or without having interim status, provided the receiving healthcare facility:
 - (1) Is under the control of the same person, as defined in § 7-103, as the very small quantity generator healthcare facility that is sending the potentially creditable hazardous waste pharmaceuticals off site, or has a contractual or other documented business relationship whereby the receiving healthcare facility supplies pharmaceuticals to the very small quantity generator healthcare facility;
 - (2) Is operating under this subchapter for the management of its potentially creditable hazardous waste pharmaceuticals;
 - (3) Manages the potentially creditable hazardous waste pharmaceuticals that it receives from off site in compliance with this subchapter; and
 - (4) Keeps records of the potentially creditable hazardous waste pharmaceuticals shipments it receives from off site for three years from the date that the shipment is received.

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- (c) Healthcare facilities are prohibited from sending hazardous wastes other than potentially creditable hazardous waste pharmaceuticals to a reverse distributor.
- (d) Healthcare facilities are not subject to biennial reporting requirements under § 7-708(a) with respect to potentially creditable hazardous waste pharmaceuticals managed under this subchapter.
- (e) Recordkeeping by healthcare facilities
 - (1) A healthcare facility that initiates a shipment of potentially creditable hazardous waste pharmaceuticals to a reverse distributor must keep the following records (paper or electronic) for each shipment of potentially creditable hazardous waste pharmaceuticals for three years from the date of shipment:
 - (A) The confirmation of delivery; and
 - (B) The shipping papers prepared in accordance with 49 CFR Part 172 subpart C, if applicable.
 - (2) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the Secretary.
 - (3) All records must be readily available upon request by an inspector.
- (f) A healthcare facility must immediately contain all spills of potentially creditable hazardous waste pharmaceuticals and manage the spill clean-up materials as non-creditable hazardous waste pharmaceuticals in accordance with this subchapter.

§ 7-1005 HEALTHCARE FACILITIES THAT ARE VERY SMALL QUANTITY GENERATORS FOR BOTH HAZARDOUS WASTE PHARMACEUTICALS AND NON-PHARMACEUTICAL HAZARDOUS WASTE

- (a) A healthcare facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste may send its potentially creditable hazardous waste pharmaceuticals to a reverse distributor.
- (b) A healthcare facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste may send its hazardous waste pharmaceuticals off-site to another healthcare facility, provided:
 - (1) The receiving healthcare facility meets the conditions in § 7-1003(1) and § 7-1004(b), as applicable; or
 - (2) The very small quantity generator healthcare facility meets the conditions in § 7-306(c)(2)(d) and the receiving large quantity generator meets the conditions in § 7-

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308(d).

- (c) A long-term care facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste may dispose of its hazardous waste pharmaceuticals (excluding contaminated personal protective equipment or clean-up materials) in an on-site collection receptacle of an authorized collector (as defined by the Drug Enforcement Administration) that is registered with the Drug Enforcement Administration provided the contents are collected, stored, transported, destroyed and disposed of in compliance with all applicable Drug Enforcement Administration regulations for controlled substances.
- ~~(e)~~(d) A long-term care facility with 20 beds or fewer is presumed to be a very small quantity generator subject to § 7-306 for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste and not subject to this subchapter, except for §§ 7-1006 and 7-1008 and the other optional provisions of this section. The Secretary has the responsibility to demonstrate that a long-term care facility with 20 beds or fewer generates quantities of hazardous waste that are in excess of the very small quantity generator limits as defined in § 7-103. A long-term care facility with more than 20 beds that operates as a very small quantity generator under § 7-306 must demonstrate that it generates quantities of hazardous waste that are within the very small quantity generator limits as defined by § 7-103.

§ 7-1006 PROHIBITION OF SEWERING HAZARDOUS WASTE PHARMACEUTICALS

All healthcare facilities (including very small quantity generators operating under § 7-306 in lieu of this subchapter) and reverse distributors are prohibited from discharging hazardous waste pharmaceuticals to a sewer system that passes through to a publicly-owned treatment works. Healthcare facilities and reverse distributors remain subject to the prohibitions in 40 CFR 403.5(b)(1).

§ 7-1007 CONDITIONAL EXEMPTIONS FOR HAZARDOUS WASTE PHARMACEUTICALS THAT ARE ALSO CONTROLLED SUBSTANCES AND HOUSEHOLD WASTE PHARMACEUTICALS COLLECTED IN A TAKE-BACK EVENT OR PROGRAM

- (a) Provided the conditions of subsection (b) of this section are met, the following are exempt from 40 CFR Parts 262 through 273:
- (1) Hazardous waste pharmaceuticals that are also listed on a schedule of controlled substances by the Drug Enforcement Administration in 21 CFR Part 1308, and
 - (2) Household waste pharmaceuticals that are collected in a take-back event or program, including those that are collected by an authorized collector (as defined by the Drug

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Enforcement Administration) registered with the Drug Enforcement Administration that commingles the household waste pharmaceuticals with controlled substances from an ultimate user (as defined by the Drug Enforcement Administration).

(b) Conditions for exemption. The hazardous waste pharmaceuticals must be:

- (1) Managed in compliance with the sewer prohibition of § 7-1006; and
- (2) Collected, stored, transported, and disposed of in compliance with all applicable Drug Enforcement Administration regulations for controlled substances; and
- (3) Destroyed by a method that Drug Enforcement Administration has publicly deemed in writing to meet their non-retrievable standard of destruction or combusted at one of the following:
 - (A) A permitted large municipal waste combustor, subject to 40 CFR Part 62 subpart FFF or applicable state plan for existing large municipal waste combustors, or 40 CFR Part 60 subparts Eb for new large municipal waste combustors; or
 - (B) A permitted small municipal waste combustor, subject to 40 CFR Part 62 subpart JJJ or applicable state plan for existing small municipal waste combustors, or 40 CFR Part 60 subparts AAAA for new small municipal waste combustors; or
 - (C) A permitted hospital, medical and infectious waste incinerator, subject to 40 CFR Part 62 subpart IIII or applicable state plan for existing hospital, medical and infectious waste incinerators, or 40 CFR Part 60 subpart Ec for new hospital, medical and infectious waste incinerators.
 - (D) A permitted commercial and industrial solid waste incinerator, subject to 40 CFR Part 62 subpart III or applicable state plan for existing commercial and industrial solid waste incinerators, or 40 CFR Part 60 subpart CCCC for new commercial and industrial solid waste incinerators.
 - (E) A permitted hazardous waste combustor subject to 40 CFR Part 63 subpart FEE.

§ 7-1008 RESIDUES OF HAZARDOUS WASTE PHARMACEUTICALS IN EMPTY CONTAINERS

- (a) A stock bottle, dispensing bottle, vial, or ampule (not to exceed 1 liter or 10,000 pills); or a unit-dose container (e.g., a unit-dose packet, cup, wrapper, blister pack, or delivery device) is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals have been removed from the stock bottle, dispensing bottle, vial, ampule, or the unit-dose container using the practices commonly employed to remove materials from that type of container.
- (b) A syringe is considered empty and the residues are not regulated as hazardous waste

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under this subchapter provided the contents have been removed by fully depressing the plunger of the syringe. If a syringe is not empty, the syringe must be placed with its remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a non-creditable hazardous waste pharmaceutical under this subchapter and any applicable federal, state, and local requirements for sharps containers and medical waste.

- (c) An IV bag is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals in the IV bag have been fully administered to a patient. If an IV bag is not empty, the IV bag must be placed with its remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a non-creditable hazardous waste pharmaceutical under this subchapter, unless the IV bag held non-acute hazardous waste pharmaceuticals and is empty as defined in § 7-203(j)(1).
- (d) Hazardous waste pharmaceuticals remaining in all other types of unused, partially administered, or fully administered containers must be managed as non-creditable hazardous waste pharmaceuticals under this subchapter, unless the container held non-acute hazardous waste pharmaceuticals and is empty as defined in § 7-203(j)(1) or (2). This includes, but is not limited to, residues in inhalers, aerosol cans, nebulizers, tubes of ointments, gels, or creams.

§ 7-1009 SHIPPING NON-CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS FROM A HEALTHCARE FACILITY OR EVALUATED HAZARDOUS WASTE PHARMACEUTICALS FROM A REVERSE DISTRIBUTOR

- (a) A healthcare facility must ship non-creditable hazardous waste pharmaceuticals and a reverse distributor must ship evaluated hazardous waste pharmaceuticals off-site to a designated facility (such as a permitted or interim status treatment, storage, or disposal facility) in compliance with:
 - (1) The following pre-transport requirements, before transporting or offering for transport off-site:
 - (A) Packaging. Package the waste in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR Parts 173, 178, and 180.
 - (B) Labeling. Label each package in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR Part 172 subpart E.
 - (C) Marking
 - (i) Mark each package of hazardous waste pharmaceuticals in accordance with the applicable Department of Transportation (DOT) regulations on hazardous

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materials under 49 CFR Part 172 subpart D:

- (ii) Mark each container of 119 gallons or less used in such transportation with the following words and information in accordance with the requirements of 49 CFR § 172.304:

HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Healthcare Facility's or Reverse distributor's Name and Address

Healthcare Facility's or Reverse distributor's EPA Identification Number

Manifest Tracking Number

- (iii) Lab packs that will be incinerated in compliance with 40 CFR § 268.42(c) are not required to be marked with EPA Hazardous Waste Code(s), except D004, D005, D006, D007, D008, D010, and D011, where applicable. A nationally recognized electronic system, such as bar coding or radio frequency identification, may be used to identify the EPA Hazardous Waste Code(s).

- (D) Placarding. Placard or offer the initial transporter the appropriate placards according to Department of Transportation regulations for hazardous materials under 49 CFR Part 172 subpart F.

(2) The manifest requirements of § 7-702, except that:

- (A) A healthcare facility shipping non-creditable hazardous waste pharmaceuticals is not required to list all applicable hazardous waste codes in Item 13 of EPA Form 8700-22.
- (B) A healthcare facility shipping non-creditable hazardous waste pharmaceuticals must write the word "PHRM" in Item 13 of EPA Form 8700-22.
- (b) A healthcare facility or reverse distributor that exports non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals is subject to 40 CFR Part 262 subpart H.
- (c) Any person that imports non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals is subject to 40 CFR Part 262 subpart H. A healthcare facility or reverse distributor may not accept imported non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals unless they have a permit or interim status that allows them to accept hazardous waste from off site.

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§ 7-1010 SHIPPING POTENTIALLY CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS FROM A HEALTHCARE FACILITY OR A REVERSE DISTRIBUTOR TO A REVERSE DISTRIBUTOR

- (a) A healthcare facility or a reverse distributor who transports or offers for transport potentially creditable hazardous waste pharmaceuticals off-site to a reverse distributor must comply with all applicable U.S. Department of Transportation regulations in 49 CFR Part 171 through 180 for any potentially creditable hazardous waste pharmaceutical that meets the definition of hazardous material in 49 CFR § 171.8. For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR Part 262. Because a potentially creditable hazardous waste pharmaceutical does not require a manifest, it is not considered hazardous waste under the Department of Transportation regulations.
- (b) Upon receipt of each shipment of potentially creditable hazardous waste pharmaceuticals, the receiving reverse distributor must provide confirmation (paper or electronic) to the healthcare facility or reverse distributor that initiated the shipment that the shipment of potentially creditable hazardous waste pharmaceuticals has arrived at its destination and is under the custody and control of the reverse distributor.
- (c) If a healthcare facility or reverse distributor initiates a shipment of potentially creditable hazardous waste pharmaceuticals to a reverse distributor and does not receive delivery confirmation within 35 calendar days from the date that the shipment of potentially creditable hazardous waste pharmaceuticals was sent, the healthcare facility or reverse distributor that initiated the shipment must contact the carrier and the intended recipient (i.e., the reverse distributor) promptly to report that the delivery confirmation was not received and to determine the status of the potentially creditable hazardous waste pharmaceuticals.
- (d) A healthcare facility or reverse distributor that sends potentially creditable hazardous waste pharmaceuticals to a foreign destination must comply with the applicable sections of 40 CFR Part 262 subpart H, except the manifesting requirement of 40 CFR § 262.83(c), in addition to subsections (a) through (c) of this section.
- (c) Any person that imports potentially creditable hazardous waste pharmaceuticals into the United States is subject to subsections (a) through (c) of this section in lieu of 40 CFR Part 262 subpart H. Immediately after the potentially creditable hazardous waste pharmaceuticals enter the United States, they are subject to all applicable requirements of this subchapter.

§ 7-1011 STANDARDS FOR THE MANAGEMENT OF POTENTIALLY CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS AND EVALUATED HAZARDOUS WASTE PHARMACEUTICALS AT REVERSE DISTRIBUTORS

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A reverse distributor may accept potentially creditable hazardous waste pharmaceuticals from off site and accumulate potentially creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals on site without a hazardous waste permit or without having interim status, provided that it complies with the requirements of 40 CFR § 266.510.

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APPENDIX I

Hazardous Wastes from Specific Sources

The following wastes are referred to in § 7-212 and are hazardous wastes from specific sources.

| Industry EPA Hazardous Waste Code | Hazardous Waste | Hazard Code |
|--|---|----------------|
| Wood preservation: | | |
| K001 | Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol. | (T) |
| Inorganic pigments: | | |
| K002 | Wastewater treatment sludge from the production of chrome yellow and orange pigments. | (T) |
| K003 | Wastewater treatment sludge from the production of molybdate orange pigments. | (T) |
| K004 | Wastewater treatment sludge from the production of zinc yellow pigments. | (T) |
| K005 | Wastewater treatment sludge from the production of chrome green pigments. | (T) |
| K006 | Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated). | (T) |
| K007 | Wastewater treatment sludge from the production of iron blue pigments. | (T) |
| K008 | Oven residue from the production of chrome oxide green pigments. | (T) |
| Organic chemicals: | | |
| K009 | Distillation bottoms from the production of acetaldehyde from ethylene. | (T) |
| K010 | Distillation side cuts from the production of acetaldehyde from ethylene. | (T) |
| K011 | Bottom stream from the wastewater stripper in the production of acrylonitrile. | (R, T) |
| K013 | Bottom stream from the acetonitrile column in the production of acrylonitrile. | (R, T) |
| K014 | Bottoms from the acetonitrile purification column in the production of acrylonitrile. | (T) |
| K015 | Still bottoms from the distillation of benzyl chloride. | (T) |
| K016 | Heavy ends or distillation residues from the production of carbon tetrachloride. | (T) |
| K017 | Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin. | (T) |
| K018 | Heavy ends from the fractionation column in ethyl chloride production. | (T) |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Industry | Hazardous Waste | Hazard Code |
|--------------------------|---|-------------|
| EPA Hazardous Waste Code | | |
| K019 | Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production. | (T) |
| K020 | Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production. | (T) |
| K021 | Aqueous spent antimony catalyst waste from fluoromethanes production. | (T) |
| K022 | Distillation bottom tars from the production of phenol/acetone from cumene. | (T) |
| K023 | Distillation light ends from the production of phthalic anhydride from naphthalene. | (T) |
| K024 | Distillation bottoms from the production of phthalic anhydride from naphthalene. | (T) |
| K025 | Distillation bottoms from the production of nitrobenzene by the nitration of benzene. | (T) |
| K026 | Stripping still tails from the production of methy ethyl pyridines. | (T) |
| K027 | Centrifuge and distillation residues from toluene diisocyanate production. | (R, T) |
| K028 | Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane. | (T) |
| K029 | Waste from the product steam stripper in the production of 1,1,1-trichloroethane. | (T) |
| K030 | Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene. | (T) |
| K083 | Distillation bottoms from aniline production. | (T) |
| K085 | Distillation or fractionation column bottoms from the production of chlorobenzenes. | (T) |
| K093 | Distillation light ends from the production of phthalic anhydride from ortho-xylene. | (T) |
| K094 | Distillation bottoms from the production of phthalic anhydride from ortho-xylene. | (T) |
| K095 | Distillation bottoms from the production of 1,1,1-trichloroethane. | (T) |
| K096 | Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane. | (T) |
| K103 | Process residues from aniline extraction from the production of aniline. | (T) |
| K104 | Combined wastewater streams generated from nitrobenzene/aniline production. | (T) |
| K105 | Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes. | (T) |
| K107 | Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. | (C,T) |

APPENDIX I-2

NOVEMBER 2021 FINAL PROPOSED RULE

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| Industry EPA Hazardous Waste Code | Hazardous Waste | Hazard Code |
|--|---|----------------|
| K108 | Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. | (I,T) |
| K109 | Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. | (T) |
| K110 | Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. | (T) |
| K111 | Product washwaters from the production of dinitrotoluene via nitration of toluene. | (C,T) |
| K112 | Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene. | (T) |
| K113 | Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. | (T) |
| K114 | Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. | (T) |
| K115 | Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. | (T) |
| K116 | Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine. | (T) |
| K117 | Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene. | (T) |
| K118 | Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. | (T) |
| K136 | Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. | (T) |
| K149 | Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.) | (T) |
| K150 | Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. | (T) |
| K151 | Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. | (T) |
| K156 | Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) | (T) |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Industry | | |
|--------------------------|--|-------------|
| EPA Hazardous Waste Code | Hazardous Waste | Hazard Code |
| K157 | Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) | (T) |
| K158 | Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) | (T) |
| K159 | Organics from the treatment of thiocarbamate wastes. | (T) |
| K161 | Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.) | (R, T) |
| K174 | Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) they are disposed of in a subtitle C or non-hazardous landfill licensed or permitted by the state or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Respondents in any action brought to enforce the requirements of subtitle C must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met. | (T) |
| K175 | Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process. | (T) |

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| Industry | | |
|-----------------------------|---|-------------|
| EPA Hazardous Waste Code | Hazardous Waste | Hazard Code |
| K181 | Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in 40 CFR § 261.32(c) that are equal to or greater than the corresponding 40 CFR § 261.32(c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are: (i) disposed in a Subtitle D landfill unit subject to the design criteria in 40 CFR § 258.40, (ii) disposed in a Subtitle C landfill unit subject to either 40 CFR § 264.301 or § 265.301, (iii) disposed in other Subtitle D landfill units that meet the design criteria in 40 CFR § 258.40, § 264.301, or § 265.301, or (iv) treated in a combustion unit that is permitted under Subtitle C, or an onsite combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in 40 CFR § 261.32(b)(1). 40 CFR § 261.32(d) describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as hazardous under 40 CFR §§ 261.21-261.24 and 40 CFR 261.31-261.33 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met. | (T) |
| Inorganic chemicals: | | |
| K071 | Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used. | (T) |
| K073 | Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production. | (T) |
| K106 | Wastewater treatment sludge from the mercury cell process in chlorine production. | (T) |
| K176 | Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide). | (E) |
| K177 | Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide). | (T) |
| K178 | Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process. | (T) |
| Pesticides: | | |
| K031 | By-product salts generated in the production of MSMA and cacodylic acid. | (T) |
| K032 | Wastewater treatment sludge from the production of chlordane. | (T) |
| K033 | Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. | (T) |
| K034 | Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. | (T) |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Industry | Hazardous Waste | Hazard Code |
|---------------------------------|---|--------------------|
| EPA Hazardous Waste Code | | |
| K035 | Wastewater treatment sludges generated in the production of creosote. | (T) |
| K036 | Still bottoms from toluene reclamation distillation in the production of disulfoton. | (T) |
| K037 | Wastewater treatment sludges from the production of disulfoton. | (T) |
| K038 | Wastewater from the washing and stripping of phorate production. | (T) |
| K039 | Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. | (T) |
| K040 | Wastewater treatment sludge from the production of phorate. | (T) |
| K041 | Wastewater treatment sludge from the production of toxaphene. | (T) |
| K042 | Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T. | (T) |
| K043 | 2,6-Dichlorophenol waste from the production of 2,4-D. | (T) |
| K097 | Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. | (T) |
| K098 | Untreated process wastewater from the production of toxaphene. | (T) |
| K099 | Untreated wastewater from the production of 2,4-D. | (T) |
| K123 | Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt. | (T) |
| K124 | Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts. | (C, T) |
| K125 | Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts. | (T) |
| K126 | Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts. | (T) |
| K131 | Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide. | (C,T) |
| K132 | Spent absorbent and wastewater separator solids from the production of methyl bromide. | (T) |
| Explosives: | | |
| K044 | Wastewater treatment sludges from the manufacturing and processing of explosives. | (R) |
| K045 | Spent carbon from the treatment of wastewater containing explosives. | (R) |
| K046 | Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds. | (T) |
| K047 | Pink/red water from TNT operations. | (R) |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Industry | Hazardous Waste | Hazard Code |
|------------------------------------|--|--------------------|
| EPA Hazardous Waste Code | | |
| Petroleum refining: | | |
| K048 | Dissolved air flotation (DAF) float from the petroleum refining industry. | (T) |
| K049 | Slop oil emulsion solids from the petroleum refining industry. | (T) |
| K050 | Heat exchanger bundle cleaning sludge from the petroleum refining industry. | (T) |
| K051 | API separator sludge from the petroleum refining industry. | (T) |
| K052 | Tank bottoms (leaded) from the petroleum refining industry. | (T) |
| K169 | Crude oil storage tank sediment from petroleum refining operations. | (T) |
| K170 | Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations. | (T) |
| K171 | Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). | (I, T) |
| K172 | Spent Hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). | (I, T) |
| Iron and steel: | | |
| K061 | Emission control dust/sludge from the primary production of steel in electric furnaces. | (T) |
| K062 | Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332). | (C,T) |
| Primary aluminum: | | |
| K088 | Spent potliners from primary aluminum reduction. | (T) |
| Secondary lead: | | |
| K069 | Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the Federal Register). | (T) |
| K100 | Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. | (T) |
| Veterinary pharmaceuticals: | | |
| K084 | Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. | (T) |

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| Industry | | |
|--------------------------|--|-------------|
| EPA Hazardous Waste Code | Hazardous Waste | Hazard Code |
| K101 | Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. | (T) |
| K102 | Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. | (T) |
| Ink formulation: | | |
| K086 | Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead. | (T) |
| Coking: | | |
| K060 | Ammonia still lime sludge from coking operations. | (T) |
| K087 | Decanter tank tar sludge from coking operations. | (T) |
| K141 | Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations). | (T) |
| K142 | Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal. | (T) |
| K143 | Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal. | (T) |
| K144 | Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal. | (T) |
| K145 | Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal. | (T) |
| K147 | Tar storage tank residues from coal tar refining. | (T) |
| K148 | Residues from coal tar distillation, including but not limited to, still bottoms. | (T) |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

APPENDIX II

Hazardous Constituents

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|------------------------------|---|------------------------|----------------------|
| A2213 | Ethanimidothioic acid, 2- (dimethylamino) -N-hydroxy-2-oxo-, methyl ester | 30558-43-1 | U394 |
| Acetonitrile | Same | 75-05-8 | U003 |
| Acetophenone | Ethanone, 1-phenyl- | 98-86-2 | U004 |
| 2-Acetylaminefluarone | Acetamide, N-9H-fluoren-2-yl- | 53-96-3 | U005 |
| Acetyl chloride | Same | 75-36-5 | U006 |
| 1-Acetyl-2-thiourea | Acetamide, N-(aminothioxomethyl)- | 591-08-2 | P002 |
| Acrolein | 2-Propenal | 107-02-8 | P003 |
| Acrylamide | 2-Propenamamide | 79-06-1 | U007 |
| Acrylonitrile | 2-Propenenitrile | 107-13-1 | U009 |
| Aflatoxins | Same | 1402-68-2 | |
| Aldicarb | Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime | 116-06-3 | P070 |
| Aldicarb sulfone | Propanal, 2-methyl-2-(methylsulfonyl) -, O-[(methylamino) carbonyl] oxime | 1646-88-4 | P203 |
| Aldrin | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)- | 309-00-2 | P004 |
| Allyl alcohol | 2-Propen-1-ol | 107-18-6 | P005 |
| Allyl chloride | 1-Propane, 3-chloro | 107-05-1 | |
| Aluminum phosphide | Same | 20859-73-8 | P006 |
| 4-Aminobiphenyl | [1,1'-Biphenyl]-4-amine | 92-67-1 | |
| 5-(Aminomethyl)-3-isoxazolol | 3(2H)-Isoxazolone, 5-(aminomethyl)- | 2763-96-4 | P007 |
| 4-Aminopyridine | 4-Pyridinamine | 504-24-5 | P008 |
| Amitrole | 1H-1,2,4-Triazol-3-amine | 61-82-5 | U011 |

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| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|--|------------------------|----------------------|
| Ammonium vanadate | Vanadic acid, ammonium salt | 7803-55-6 | P119 |
| Aniline | Benzenamine | 62-53-3 | U012 |
| o-Anisidine (2-methoxyaniline) | Benzenamine, 2-Methoxy- | 90-04-0 | |
| Antimony | Same | 7440-36-0 | |
| Antimony compounds, N.O.S. ¹ | | | |
| Aramite | Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester | 140-57-8 | |
| Arsenic | Same | 7440-38-2 | |
| Arsenic compounds, N.O.S. ¹ | | | |
| Arsenic acid | Arsenic acid H3AsO4 | 7778-39-4 | P010 |
| Arsenic pentoxide | Arsenic oxide As2O5 | 1303-28-2 | P011 |
| Arsenic trioxide | Arsenic oxide As2O3 | 1327-53-3 | P012 |
| Auramine | Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl | 492-80-8 | U014 |
| Azaserine | L-Serine, diazoacetate (ester) | 115-02-6 | U015 |
| Barban | Carbamic acid, (3-chlorophenyl) -, 4-chloro-2-butynyl ester | 101-27-9 | U280 |
| Barium | Same | 7440-39-3 | |
| Barium compounds, N.O.S. ¹ | | | |
| Barium cyanide | Same | 542-62-1 | P013 |
| Bendiocarb | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate | 22781-23-3 | U278 |
| Bendiocarb phenol | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, | 22961-82-6 | U364 |
| Benomyl | Carbamic acid, [1- [(butylamino) carbonyl]- 1H-benzimidazol-2-yl] -, methyl ester | 17804-35-2 | U271 |
| Benz[c]acridine | Same | 225-51-4 | U016 |
| Benz[a]anthracene | Same | 56-55-3 | U018 |

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| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|---|------------------------|----------------------|
| Benzal chloride | Benzene, (dichloromethyl)- | 98-87-3 | U017 |
| Benzene | Same | 71-43-2 | U019 |
| Benzearsonic acid | Arsonic acid, phenyl- | 98-05-5 | |
| Benzidine | [1,1'-Biphenyl]-4,4'-diamine | 92-87-5 | U021 |
| Benzo[b]fluoranthene | Benz[e]acephenanthrylene | 205-99-2 | |
| Benzo[j]fluoranthene | Same | 205-82-3 | |
| Benzo(k)fluoranthene | Same | 207-08-9 | |
| Benzo[a]pyrene | Same | 50-32-8 | U022 |
| p-Benzoquinone | 2,5-Cyclohexadiene-1,4-dione | 106-51-4 | U197 |
| Benzotrichloride | Benzene, (trichloromethyl)- | 98-07-7 | U023 |
| Benzyl chloride | Benzene, (chloromethyl)- | 100-44-7 | P028 |
| Beryllium powder | Same | 7440-41-7 | P015 |
| Beryllium compounds, N.O.S. ¹ | | | |
| Bis(pentamethylene)-thiuram tetrasulfide | Piperidine, 1,1[prime]-(tetrathiodicarbonothioyl)-bis- | 120-54-7 | |
| Bromoacetone | 2-Propanone, 1-bromo- | 598-31-2 | P017 |
| Bromoform | Methane, tribromo- | 75-25-2 | U225 |
| 4-Bromophenyl phenyl ether | Benzene, 1-bromo-4-phenoxy- | 101-55-3 | U030 |
| Brucine | Strychnidin-10-one, 2,3-dimethoxy- | 357-57-3 | P018 |
| Butyl benzyl phthalate | 1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester | 85-68-7 | |
| Butylate | Carbamothioic acid, bis(2-methylpropyl)-, S-ethyl ester | 2008-41-5 | |
| Cacodylic acid | Arsinic acid, dimethyl- | 75-60-5 | U136 |
| Cadmium | Same | 7440-43-9 | |
| Cadmium compounds, N.O.S. ¹ | | | |
| Calcium chromate | Chromic acid H ₂ CrO ₄ , calcium salt | 13765-19-0 | U032 |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|---|------------------------|----------------------|
| Calcium cyanide | Calcium cyanide Ca(CN) ₂ | 592-01-8 | P021 |
| Carbaryl | 1-Naphthalenol, methylcarbamate | 63-25-2 | U279 |
| Carbendazim | Carbamic acid, 1H-benzimidazol-2-yl, methyl ester | 10605-21-7 | U372 |
| Carbofuran | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate | 1563-66-2 | P127 |
| Carbofuran phenol | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- | 1563-38-8 | U367 |
| Carbon disulfide | Same | 75-15-0 | P022 |
| Carbon oxyfluoride | Carbonic difluoride | 353-50-4 | U033 |
| Carbon tetrachloride | Methane, tetrachloro- | 56-23-5 | U211 |
| Carbosulfan | Carbamic acid, [(dibutylamino) thio] methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester | 55285-14-8 | P189 |
| Chloral | Acetaldehyde, trichloro- | 75-87-6 | U034 |
| Chlorambucil | Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]- | 305-03-3 | U035 |
| Chlordane | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- | 57-74-9 | U036 |
| Chlordane (alpha and gamma isomers) | | | U036 |
| Chlorinated benzenes, N.O.S. ¹ | | | |
| Chlorinated ethane, N.O.S. ¹ | | | |
| Chlorinated fluorocarbons, N.O.S. ¹ | | | |
| Chlorinated naphthalene, N.O.S. ¹ | | | |
| Chlorinated phenol, N.O.S. ¹ | | | |
| Chlornaphazin | Naphthalenamine, N,N'-bis(2-chloroethyl)- | 494-03-1 | U026 |
| Chloroacetaldehyde | Acetaldehyde, chloro- | 107-20-0 | P023 |
| Chloroalkyl ethers, N.O.S. ¹ | | | |
| p-Chloroaniline | Benzenamine, 4-chloro- | 106-47-8 | P024 |

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| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|---|------------------------|----------------------|
| Chlorobenzene | Benzene, chloro- | 108-90-7 | U037 |
| Chlorobenzilate | Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester | 510-15-6 | U038 |
| p-Chloro-m-cresol | Phenol, 4-chloro-3-methyl- | 59-50-7 | U039 |
| 2-Chloroethyl vinyl ether | Ethene, (2-chloroethoxy)- | 110-75-8 | U042 |
| Chloroform | Methane, trichloro- | 67-66-3 | U044 |
| Chloromethyl methyl ether | Methane, chloromethoxy- | 107-30-2 | U046 |
| beta-Chloronaphthalene | Naphthalene, 2-chloro- | 91-58-7 | U047 |
| o-Chlorophenol | Phenol, 2-chloro- | 95-57-8 | U048 |
| 1-(o-Chlorophenyl)thiourea | Thiourea, (2-chlorophenyl)- | 5344-82-1 | P026 |
| Chloroprene | 1,3-Butadiene, 2-chloro- | 126-99-8 | |
| 3-Chloropropionitrile | Propanenitrile, 3-chloro- | 542-76-7 | P027 |
| Chromium | Same | 7440-47-3 | |
| Chromium compounds, N.O.S. ¹ | | | |
| Chrysene | Same | 218-01-9 | U050 |
| Citrus red No. 2 | 2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]- | 6358-53-8 | |
| Coal tar creosote | Same | 8007-45-2 | |
| Copper cyanide | Copper cyanide CuCN | 544-92-3 | P029 |
| Copper dimethyldithiocarbamate | Copper, bis (dimethylcarbamo-dithioato-S,S')-, | 137-29-1 | |
| Creosote | Same | | U051 |
| p-Cresidine | 2-Methoxy-5-methylbenzenamine | 120-71-8 | |
| Cresol (Cresylic acid) | Phenol, methyl- | 1319-77-3 | U052 |
| Crotonaldehyde | 2-Butenal | 4170-30-3 | U053 |
| m-Cumenyl methylcarbamate | Phenol, 3-(methylethyl)-, methyl carbamate | 64-00-6 | P202 |

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| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|--|------------------------|----------------------|
| Cyanides (soluble salts and complexes) N.O.S. ¹ | | | P030 |
| Cyanogen | Ethanedinitrile | 460-19-5 | P031 |
| Cyanogen bromide | Cyanogen bromide (CN)Br | 506-68-3 | U246 |
| Cyanogen chloride | Cyanogen chloride (CN)Cl | 506-77-4 | P033 |
| Cycasin | beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl | 14901-08-7 | |
| Cycloate | Carbamothioic acid, cyclohexylethyl-, S-ethyl ester | 1134-23-2 | |
| 2-Cyclohexyl-4,6-dinitrophenol | Phenol, 2-cyclohexyl-4,6-dinitro- | 131-89-5 | P034 |
| Cyclophosphamide | 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide | 50-18-0 | U058 |
| 2,4-D | Acetic acid, (2,4-dichlorophenoxy)- | 94-75-7 | U240 |
| 2,4-D, salts, esters | | | U240 |
| Daunomycin | 5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxohexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)- | 20830-81-3 | U059 |
| Dazomet | 2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl | 533-74-4 | |
| DDD | Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro- | 72-54-8 | U060 |
| DDE | Benzene, 1,1'-(dichloroethenylidene)bis[4-chloro- | 72-55-9 | |
| DDT | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- | 50-29-3 | U061 |
| Diallate | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester | 2303-16-4 | U062 |
| Dibenz[a,h]acridine | Same | 226-36-8 | |
| Dibenz[a,j]acridine | Same | 224-42-0 | |
| Dibenz[a,h]anthracene | Same | 53-70-3 | U063 |
| 7H-Dibenzo[c,g]carbazole | Same | 194-59-2 | |

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| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---------------------------------------|---|------------------------|----------------------|
| Dibenzo[a,e]pyrene | Naphtho[1,2,3,4-def]chrysene | 192-65-4 | |
| Dibenzo[a,h]pyrene | Dibenzo[b,def]chrysene | 189-64-0 | |
| Dibenzo[a,i]pyrene | Benzo[rs]pentaphene | 189-55-9 | U064 |
| 1,2-Dibromo-3-chloropropane | Propane, 1,2-dibromo-3-chloro- | 96-12-8 | U066 |
| Dibutyl phthalate | 1,2-Benzenedicarboxylic acid, dibutyl ester | 84-74-2 | U069 |
| o-Dichlorobenzene | Benzene, 1,2-dichloro- | 95-50-1 | U070 |
| m-Dichlorobenzene | Benzene, 1,3-dichloro- | 541-73-1 | U071 |
| p-Dichlorobenzene | Benzene, 1,4-dichloro- | 106-46-7 | U072 |
| Dichlorobenzene, N.O.S. ¹ | Benzene, dichloro- | 25321-22-6 | |
| 3,3'-Dichlorobenzidine | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro- | 91-94-1 | U073 |
| 1,4-Dichloro-2-butene | 2-Butene, 1,4-dichloro- | 764-41-0 | U074 |
| Dichlorodifluoromethane | Methane, dichlorodifluoro- | 75-71-8 | U075 |
| Dichloroethylene, N.O.S. ¹ | Dichloroethylene | 25323-30-2 | |
| 1,1-Dichloroethylene | Ethene, 1,1-dichloro- | 75-35-4 | U078 |
| 1,2-Dichloroethylene | Ethene, 1,2-dichloro-, (E)- | 156-60-5 | U079 |
| Dichloroethyl ether | Ethane, 1,1'-oxybis[2-chloro- | 111-44-4 | U025 |
| Dichloroisopropyl ether | Propane, 2,2'-oxybis[2-chloro- | 108-60-1 | U027 |
| Dichloromethoxy ethane | Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro- | 111-91-1 | U024 |
| Dichloromethyl ether | Methane, oxybis[chloro- | 542-88-1 | P016 |
| 2,4-Dichlorophenol | Phenol, 2,4-dichloro- | 120-83-2 | U081 |
| 2,6-Dichlorophenol | Phenol, 2,6-dichloro- | 87-65-0 | U082 |
| Dichlorophenylarsine | Arsonous dichloride, phenyl- | 696-28-6 | P036 |
| Dichloropropane, N.O.S. ¹ | Propane, dichloro- | 26638-19-7 | |
| Dichloropropanol, N.O.S. ¹ | Propanol, dichloro- | 26545-73-3 | |

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| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|--|------------------------|----------------------|
| Dichloropropene, N.O.S. ¹ | 1-Propene, dichloro- | 26952-23-8 | |
| 1,3-Dichloropropene | 1-Propene, 1,3-dichloro- | 542-75-6 | U084 |
| Dieldrin | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- | 60-57-1 | P037 |
| 1,2:3,4-Diepoxybutane | 2,2'-Bioxirane | 1464-53-5 | U085 |
| Diethylarsine | Arsine, diethyl- | 692-42-2 | P038 |
| Diethylene glycol, dicarbamate | Ethanol, 2,2'-oxybis-, dicarbamate | 5952-26-1 | U395 |
| 1,4-Diethyleneoxide | 1,4-Dioxane | 123-91-1 | U108 |
| Diethylhexyl phthalate | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester | 117-81-7 | U028 |
| N,N'-Diethylhydrazine | Hydrazine, 1,2-diethyl- | 1615-80-1 | U086 |
| O,O-Diethyl S-methyl dithiophosphate | Phosphorodithioic acid, O,O-diethyl S-methyl ester | 3288-58-2 | U087 |
| Diethyl-p-nitrophenyl phosphate | Phosphoric acid, diethyl 4-nitrophenyl ester | 311-45-5 | P041 |
| Diethyl phthalate | 1,2-Benzenedicarboxylic acid, diethyl ester | 84-66-2 | U088 |
| O,O-Diethyl O-pyrazinyl phosphorothioate | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester | 297-97-2 | P040 |
| Diethylstilbesterol | Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)- | 56-53-1 | U089 |
| Dihydrosafrole | 1,3-Benzodioxole, 5-propyl- | 94-58-6 | U090 |
| Diisopropylfluorophosphate (DFP) | Phosphorofluoridic acid, bis(1-methylethyl) ester | 55-91-4 | P043 |
| Dimethoate | Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester | 60-51-5 | P044 |
| 3,3'-Dimethoxybenzidine | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy- | 119-90-4 | U091 |
| P-Dimethylaminoazobenzene | Benzenamine, N,N-dimethyl-4-(phenylazo)- | 60-11-7 | U093 |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|-------------------------------------|---|------------------------|----------------------|
| 2,4-Dimethylaniline (2,4-xylydine) | Benzenamine, 2,4-dimethyl- | 95-68-1 | |
| 7,12-Dimethylbenz[a]anthracene | Benz[a]anthracene, 7,12-dimethyl- | 57-97-6 | U094 |
| 3,3'-Dimethylbenzidine | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl- | 119-93-7 | U095 |
| Dimethylcarbamoyl chloride | Carbamic chloride, dimethyl- | 79-44-7 | U097 |
| 1,1-Dimethylhydrazine | Hydrazine, 1,1-dimethyl- | 57-14-7 | U098 |
| 1,2-Dimethylhydrazine | Hydrazine, 1,2-dimethyl- | 540-73-8 | U099 |
| alpha,alpha-Dimethylphenethylamine | Benzeneethanamine, alpha,alpha-dimethyl- | 122-09-8 | P046 |
| 2,4-Dimethylphenol | Phenol, 2,4-dimethyl- | 105-67-9 | U101 |
| Dimethyl phthalate | 1,2-Benzenedicarboxylic acid, dimethyl ester | 131-11-3 | U102 |
| Dimethyl sulfate | Sulfuric acid, dimethyl ester | 77-78-1 | U103 |
| Dimetilan | Carbamic acid, dimethyl-, 1-[(dimethylamino) carbonyl]-5-methyl-1H-pyrazol-3-yl ester | 644-64-4 | P191 |
| Dinitrobenzene, N.O.S. ¹ | Benzene, dinitro- | 25154-54-5 | |
| 4,6-Dinitro-o-cresol | Phenol, 2-methyl-4,6-dinitro- | 534-52-1 | P047 |
| 4,6-Dinitro-o-cresol salts | | | P047 |
| 2,4-Dinitrophenol | Phenol, 2,4-dinitro- | 51-28-5 | P048 |
| 2,4-Dinitrotoluene | Benzene, 1-methyl-2,4-dinitro- | 121-14-2 | U105 |
| 2,6-Dinitrotoluene | Benzene, 2-methyl-1,3-dinitro- | 606-20-2 | U106 |
| Dinoseb | Phenol, 2-(1-methylpropyl)-4,6-dinitro- | 88-85-7 | P020 |
| Di-n-octyl phthalate | 1,2-Benzenedicarboxylic acid, dioctyl ester | 117-84-0 | U017 |
| Diphenylamine | Benzenamine, N-phenyl- | 122-39-4 | |
| 1,2-Diphenylhydrazine | Hydrazine, 1,2-diphenyl- | 122-66-7 | U109 |

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| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|--|------------------------|----------------------|
| Di-n-propylnitrosamine | 1-Propanamine, N-nitroso-N-propyl- | 621-64-7 | U111 |
| Disulfiram | Thioperoxydicarbonic diamide, tetraethyl | 97-77-8 | |
| Disulfoton | Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester | 298-04-4 | P039 |
| Dithiobiuret | Thioimidodicarbonic diamide [(H2N)C(S)]2NH | 541-53-7 | P049 |
| Endosulfan | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide | 115-29-7 | P050 |
| Endothall | 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid | 145-73-3 | P088 |
| Endrin | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)- | 72-20-8 | P051 |
| Endrin metabolites | | | P051 |
| Epichlorohydrin | Oxirane, (chloromethyl)- | 106-89-8 | U041 |
| Epinephrine | 1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)- | 51-43-4 | P042 |
| EPTC | Carbamothioic acid, dipropyl-, S-ethyl ester | 759-94-4 | |
| Ethyl carbamate (urethane) | Carbamic acid, ethyl ester | 51-79-6 | U238 |
| Ethyl cyanide | Propanenitrile | 107-12-0 | P101 |
| Ethyl Ziram | Zinc, bis(diethylcarbamodithioato-S,S')- | 14324-55-1 | |
| Ethylenebisdithiocarbamic acid | Carbamodithioic acid, 1,2-ethanediybis- | 111-54-6 | U114 |
| Ethylenebisdithiocarbamic acid, salts and esters | | | U114 |
| Ethylene dibromide | Ethane, 1,2-dibromo- | 106-93-4 | U067 |
| Ethylene dichloride | Ethane, 1,2-dichloro- | 107-06-2 | U077 |
| Ethylene glycol monoethyl ether | Ethanol, 2-ethoxy- | 110-80-5 | U359 |

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| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|-----------------------------------|---|------------------------|----------------------|
| Ethyleneimine | Aziridine | 151-56-4 | P054 |
| Ethylene oxide | Oxirane | 75-21-8 | U115 |
| Ethylenethiourea | 2-Imidazolidinethione | 96-45-7 | U116 |
| Ethylidene dichloride | Ethane, 1,1-dichloro- | 75-34-3 | U076 |
| Ethyl methacrylate | 2-Propenoic acid, 2-methyl-, ethyl ester | 97-63-2 | U118 |
| Ethyl methanesulfonate | Methanesulfonic acid, ethyl ester | 62-50-0 | U119 |
| Famphur | Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester | 52-85-7 | P097 |
| Ferbam | Iron, tris(dimethylcarbamodithioato-S,S')- | 14484-64-1 | |
| Fluoranthene | Same | 206-44-0 | U120 |
| Fluorine | Same | 7782-41-4 | P056 |
| Fluoroacetamide | Acetamide, 2-fluoro- | 640-19-7 | P057 |
| Fluoroacetic acid, sodium salt | Acetic acid, fluoro-, sodium salt | 62-74-8 | P058 |
| Formaldehyde | Same | 50-00-0 | U122 |
| Formetanate hydrochloride | Methanimidamide, N,N-dimethyl-N[prime]-[3-[[[(methylamino)carbonyl]oxy]phenyl]-, monohydrochloride | 23422-53-9 | P198 |
| Formic acid | Same | 64-18-6 | U123 |
| Formparanate | Methanimidamide, N,N-dimethyl-N[prime]-[2-methyl-4- [[[(methylamino)carbonyl]oxy]phenyl]- | 17702-57-7 | P197 |
| Glycidylaldehyde | Oxiranecarboxyaldehyde | 765-34-4 | U126 |
| Halomethanes, N.O.S. ¹ | | | |
| Heptachlor | 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- | 76-44-8 | P059 |
| Heptachlor epoxide | 2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexa- hydro-, (1aalpha,1bbeta,2alpha,5alpha,5abeta,6beta,6aalpha)- | 1024-57-3 | |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|---|------------------------|----------------------|
| Heptachlor epoxide (alpha, beta, and gamma isomers) | | | |
| Heptachlorodibenzofurans | | | |
| Heptachlorodibenzo-p-dioxins | | | |
| Hexachlorobenzene | Benzene, hexachloro- | 118-74-1 | U127 |
| Hexachlorobutadiene | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- | 87-68-3 | U128 |
| Hexachlorocyclopentadiene | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- | 77-47-4 | U130 |
| Hexachlorodibenzo-p-dioxins | | | |
| Hexachlorodibenzofurans | | | |
| Hexachloroethane | Ethane, hexachloro- | 67-72-1 | U131 |
| Hexachlorophene | Phenol, 2,2'-methylenebis[3,4,6-trichloro- | 70-30-4 | U132 |
| Hexachloropropene | 1-Propene, 1,1,2,3,3,3-hexachloro- | 1888-71-7 | U243 |
| Hexaethyl tetraphosphate | Tetraphosphoric acid, hexaethyl ester | 757-58-4 | P062 |
| Hydrazine | Same | 302-01-2 | U133 |
| Hydrogen cyanide | Hydrocyanic acid | 74-90-8 | P063 |
| Hydrogen fluoride | Hydrofluoric acid | 7664-39-3 | U134 |
| Hydrogen sulfide | Hydrogen sulfide H ₂ S | 7783-06-4 | U135 |
| Indeno[1,2,3-cd]pyrene | Same | 193-39-5 | U137 |
| 3-Iodo-2-propynyl n-butylcarbamate | Carbamic acid, butyl-, 3-iodo-2-propynyl ester | 55406-53-6 | |
| Isobutyl alcohol | 1-Propanol, 2-methyl- | 78-83-1 | U140 |
| Isodrin | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro,(1alpha,4alpha,4abeta,5beta,8beta,-8abeta) - | 465-73-6 | P060 |
| Isolan | Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester | 119-38-0 | P192 |

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| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|--|------------------------|----------------------|
| Isosafrole | 1,3-Benzodioxole, 5-(1-propenyl)- | 120-58-1 | U141 |
| Kepon | 1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro- | 143-50-0 | U142 |
| Lasiocarpine | 2-Butenoic acid, 2-methyl-, 7-[[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl] ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]- | 303-34-4 | U143 |
| Lead | Same | 7439-92-1 | |
| Lead compounds, N.O.S. ¹ | | | |
| Lead acetate | Acetic acid, lead(2+) salt | 301-04-2 | U144 |
| Lead phosphate | Phosphoric acid, lead(2+) salt (2:3) | 7446-27-7 | U145 |
| Lead subacetate | Lead, bis(acetato-O)tetrahydroxytri- | 1335-32-6 | U146 |
| Lindane | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- | 58-89-9 | U129 |
| Maleic anhydride | 2,5-Furandione | 108-31-6 | U147 |
| Maleic hydrazide | 3,6-Pyridazinedione, 1,2-dihydro- | 123-33-1 | U148 |
| Malononitrile | Propanedinitrile | 109-77-3 | U149 |
| Manganese dimethyldithiocarbamate | Manganese, bis(dimethylcarbamodithioato-S,S[prime])- | 15339-36-3 | P196 |
| Melphalan | L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]- | 148-82-3 | U150 |
| Mercury | Same | 7439-97-6 | U151 |
| Mercury compounds, N.O.S. ¹ | | | |
| Mercury fulminate | Fulminic acid, mercury(2+) salt | 628-86-4 | P065 |
| Metam Sodium | Carbamodithioic acid, methyl-, monosodium salt | 137-42-8 | |
| Methacrylonitrile | 2-Propenenitrile, 2-methyl- | 126-98-7 | U152 |
| Methapyrilene | 1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- | 91-80-5 | U155 |

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| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|-------------------------------------|---|------------------------|----------------------|
| Methiocarb | Phenol, (3,5-dimethyl-4- (methylthio)-, methylcarbamate | 2032-65-7 | P199 |
| Methomyl | Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester | 16752-77-5 | P066 |
| Methoxychlor | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy- | 72-43-5 | U247 |
| Methyl bromide | Methane, bromo- | 74-83-9 | U029 |
| Methyl chloride | Methane, chloro- | 74-87-3 | U045 |
| Methyl chlorocarbonate | Carbonochloridic acid, methyl ester | 79-22-1 | U156 |
| Methyl chloroform | Ethane, 1,1,1-trichloro- | 71-55-6 | U226 |
| 3-Methylcholanthrene | Benz[<i>j</i>]aceanthrylene, 1,2-dihydro-3-methyl- | 56-49-5 | U157 |
| 4,4'-Methylenebis (2-chloroaniline) | Benzenamine, 4,4'-methylenebis[2-chloro- | 101-14-4 | U158 |
| Methylene bromide | Methane, dibromo- | 74-95-3 | U068 |
| Methylene chloride | Methane, dichloro- | 75-09-2 | U080 |
| Methyl ethyl ketone (MEK) | 2-Butanone | 78-93-3 | U159 |
| Methyl ethyl ketone peroxide | 2-Butanone, peroxide | 1338-23-4 | U160 |
| Methyl hydrazine | Hydrazine, methyl- | 60-34-4 | P068 |
| Methyl iodide | Methane, iodo- | 74-88-4 | U138 |
| Methyl isocyanate | Methane, isocyanato- | 624-83-9 | P064 |
| 2-Methylacetonitrile | Propanenitrile, 2-hydroxy-2-methyl- | 75-86-5 | P069 |
| Methyl methacrylate | 2-Propenoic acid, 2-methyl-, methyl ester | 80-62-6 | U162 |
| Methyl methanesulfonate | Methanesulfonic acid, methyl ester | 66-27-3 | |
| Methyl parathion | Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester | 298-00-0 | P071 |
| Methylthiouracil | 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo- | 56-04-2 | U164 |

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| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---------------------------------------|--|------------------------|----------------------|
| Metolcarb | Carbamic acid, methyl-, 3-methylphenyl ester | 1129-41-5 | P190 |
| Mexacarbate | Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester) | 315-18-4 | P128 |
| Mitomycin C | Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[[(aminocarbonyloxy)methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha,8beta,8aalpha,8balpha)]]-. | 50-07-7 | U010 |
| MNNG | Guanidine, N-methyl-N'-nitro-N-nitroso- | 70-25-7 | U163 |
| Molinate | 1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester | 2212-67-1 | |
| Mustard gas | Ethane, 1,1'-thiobis[2-chloro- | 505-60-2 | |
| Naphthalene | Same | 91-20-3 | U165 |
| 1,4-Naphthoquinone | 1,4-Naphthalenedione | 130-15-4 | U166 |
| alpha-Naphthylamine | 1-Naphthalenamine | 134-32-7 | U167 |
| beta-Naphthylamine | 2-Naphthalenamine | 91-59-8 | U168 |
| alpha-Naphthylthiourea | Thiourea, 1-naphthalenyl- | 86-88-4 | P072 |
| Nickel | Same | 7440-02-0 | |
| Nickel compounds, N.O.S. ¹ | | | |
| Nickel carbonyl | Nickel carbonyl Ni(CO) ₄ , (T-4)- | 13463-39-3 | P073 |
| Nickel cyanide | Nickel cyanide Ni(CN) ₂ | 557-19-7 | P074 |
| Nicotine | Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- | 54-11-5 | P075 |
| Nicotine salts | | | P075 |
| Nitric oxide | Nitrogen oxide NO | 10102-43-9 | P076 |
| p-Nitroaniline | Benzenamine, 4-nitro- | 100-01-6 | P077 |
| Nitrobenzene | Benzene, nitro- | 98-95-3 | U169 |
| Nitrogen dioxide | Nitrogen oxide NO ₂ | 10102-44-0 | P078 |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|---|------------------------|----------------------|
| Nitrogen mustard | Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl- | 51-75-2 | |
| Nitrogen mustard, hydro-chloride salt | | | |
| Nitrogen mustard N-oxide | Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide | 126-85-2 | |
| Nitrogen mustard, N-oxide, hydrochloride salt | | | |
| Nitroglycerin | 1,2,3-Propanetriol, trinitrate | 55-63-0 | P081 |
| p-Nitrophenol | Phenol, 4-nitro- | 100-02-7 | U170 |
| 2-Nitropropane | Propane, 2-nitro- | 79-46-9 | U171 |
| Nitrosamines, N.O.S. ¹ | | 35576-91-1 | |
| N-Nitrosodi-n-butylamine | 1-Butanamine, N-butyl-N-nitroso- | 924-16-3 | U172 |
| N-Nitrosodiethanolamine | Ethanol, 2,2'-(nitrosoimino)bis- | 1116-54-7 | U173 |
| N-Nitrosodiethylamine | Ethanamine, N-ethyl-N-nitroso- | 55-18-5 | U174 |
| N-Nitrosodimethylamine | Methanamine, N-methyl-N-nitroso- | 62-75-9 | P082 |
| N-Nitroso-N-ethylurea | Urea, N-ethyl-N-nitroso- | 759-73-9 | U176 |
| N-Nitrosomethylethylamine | Ethanamine, N-methyl-N-nitroso- | 10595-95-6 | |
| N-Nitroso-N-methylurea | Urea, N-methyl-N-nitroso- | 684-93-5 | U177 |
| N-Nitroso-N-methylurethane | Carbamic acid, methylnitroso-, ethyl ester | 615-53-2 | U178 |
| N-Nitrosomethylvinylamine | Vinylamine, N-methyl-N-nitroso- | 4549-40-0 | P084 |
| N-Nitrosomorpholine | Morpholine, 4-nitroso- | 59-89-2 | |
| N-Nitrosornicotine | Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)- | 16543-55-8 | |
| N-Nitrosopiperidine | Piperidine, 1-nitroso- | 100-75-4 | U179 |
| N-Nitrosopyrrolidine | Pyrrolidine, 1-nitroso- | 930-55-2 | U180 |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|-----------------------------------|--|------------------------|----------------------|
| N-Nitrososarcosine | Glycine, N-methyl-N-nitroso- | 13256-22-9 | |
| 5-Nitro-o-toluidine | Benzenamine, 2-methyl-5-nitro- | 99-55-8 | U181 |
| Octachlorodibenzo-p-dioxin (OCDD) | 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin | 3268-87-9 | |
| Octachlorodibenzofuran (OCDF) | 1,2,3,4,6,7,8,9-Octachlorodibenzofuran | 39001-02-0 | |
| Octamethylpyrophosphoramidate | Diphosphoramidate, octamethyl- | 152-16-9 | P085 |
| Osmium tetroxide | Osmium oxide OsO ₄ , (T-4)- | 20816-12-0 | P087 |
| Oxamyl | Ethanimidothioic acid, 2- (dimethylamino)-N- [[[methylamino]carbonyl]oxy]-2-oxo-, methyl ester | 23135-22-0 | P194 |
| Paraldehyde | 1,3,5-Trioxane, 2,4,6-trimethyl- | 123-63-7 | U182 |
| Parathion | Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester | 56-38-2 | P089 |
| Pebulate | Carbamothioic acid, butylethyl-, S-propyl ester | 1114-71-2 | |
| Pentachlorobenzene | Benzene, pentachloro- | 608-93-5 | U183 |
| Pentachlorodibenzo-p-dioxins | | | |
| Pentachlorodibenzofurans | | | |
| Pentachloroethane | Ethane, pentachloro- | 76-01-7 | U184 |
| Pentachloronitrobenzene (PCNB) | Benzene, pentachloronitro- | 82-68-8 | U185 |
| Pentachlorophenol | Phenol, pentachloro- | 87-86-5 | See F027 |
| Phenacetin | Acetamide, N-(4-ethoxyphenyl)- | 62-44-2 | U187 |
| Phenol | Same | 108-95-2 | U188 |
| 1,2-Phenylenediamine | 1,2-Benzenediamine | 95-54-5 | |
| 1,3-Phenylenediamine | 1,3-Benzenediamine | 108-45-2 | |
| Phenylenediamine | Benzenediamine | 25265-76-3 | |
| Phenylmercury acetate | Mercury, (acetato-O)phenyl- | 62-38-4 | P092 |
| Phenylthiourea | Thiourea, phenyl- | 103-85-5 | P093 |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|---|------------------------|----------------------|
| Phosgene | Carbonic dichloride | 75-44-5 | P095 |
| Phosphine | Same | 7803-51-2 | P096 |
| Phorate | Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester | 298-02-2 | P094 |
| Phthalic acid esters, N.O.S. ¹ | | | |
| Phthalic anhydride | 1,3-Isobenzofurandione | 85-44-9 | U190 |
| Physostigmine | Pyrolo[2,3-b]indol-5-01, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)- | 57-47-6 | P204 |
| Physostigmine salicylate | Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5-yl methylcarbamate ester (1:1) | 57-64-7 | P188 |
| 2-Picoline | Pyridine, 2-methyl- | 109-06-8 | U191 |
| Polychlorinated biphenyls, N.O.S. ¹ | | | |
| Potassium cyanide | Potassium cyanide K(CN) | 151-50-8 | P098 |
| Potassium dimethyldithiocarbamate | Carbamodithioic acid, dimethyl, potassium salt | 128-03-0 | |
| Potassium n-hydroxymethyl-n-methyl-dithiocarbamate | Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt | 51026-28-9 | |
| Potassium n-methyldithiocarbamate | Carbamodithioic acid, methyl-monopotassium salt | 137-41-7 | |
| Potassium pentachlorophenate | Pentachlorophenol, potassium salt | 7778736 | None |
| Potassium silver cyanide | Argentate(1-), bis(cyano-C)-, potassium | 506-61-6 | P099 |
| Promecarb | Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate | 2631-37-0 | P201 |
| Pronamide | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)- | 23950-58-5 | U192 |
| 1,3-Propane sultone | 1,2-Oxathiolane, 2,2-dioxide | 1120-71-4 | U193 |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|--|------------------------|----------------------|
| n-Propylamine | 1-Propanamine | 107-10-8 | U194 |
| Propargyl alcohol | 2-Propyn-1-ol | 107-19-7 | P102 |
| Propham | Carbamic acid, phenyl-, 1-methylethyl ester | 122-42-9 | U373 |
| Propoxur | Phenol, 2-(1-methylethoxy)-, methylcarbamate | 114-26-1 | U411 |
| Propylene dichloride | Propane, 1,2-dichloro- | 78-87-5 | U083 |
| 1,2-Propylenimine | Aziridine, 2-methyl- | 75-55-8 | P067 |
| Propylthiouracil | 4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo- | 51-52-5 | |
| Prosulfocarb | Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester | 52888-80-9 | U387 |
| Pyridine | Same | 110-86-1 | U196 |
| Reserpine | Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-smethyl ester, (3beta,16beta,17alpha,18beta,20alpha)- | 50-55-5 | U200 |
| Resorcinol | 1,3-Benzenediol | 108-46-3 | U201 |
| Safrole | 1,3-Benzodioxole, 5-(2-propenyl)- | 94-59-7 | U203 |
| Selenium | Same | 7782-49-2 | |
| Selenium compounds, N.O.S. ¹ | | | |
| Selenium dioxide | Selenious acid | 7783-00-8 | U204 |
| Selenium sulfide | Selenium sulfide SeS ₂ | 7488-56-4 | U205 |
| Selenium, tetrakis(dimethyl-dithiocarbamate) | Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid | 144-34-3 | |
| Selenourea | Same | 630-10-4 | P103 |
| Silver | Same | 7440-22-4 | |
| Silver compounds, N.O.S. ¹ | | | |
| Silver cyanide | Silver cyanide Ag(CN) | 506-64-9 | P104 |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|--|------------------------|----------------------|
| Silvex (2,4,5-TP) | Propanoic acid, 2-(2,4,5-trichlorophenoxy)- | 93-72-1 | See F027 |
| Sodium cyanide | Sodium cyanide Na(CN) | 143-33-9 | P106 |
| Sodium dibutyldithiocarbamate | Carbamodithioic acid, dibutyl, sodium salt | 136-30-1 | |
| Sodium diethyldithiocarbamate | Carbamodithioic acid, diethyl-,sodium salt | 148-18-5 | |
| Sodium dimethyldithiocarbamate | Carbamodithioic acid, dimethyl-,sodium salt | 128-04-1 | |
| Sodium pentachlorophenate | Pentachlorophenol, sodium salt | 131522 | None |
| Streptozotocin | D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)carbonyl]amino]- | 18883-66-4 | U206 |
| Strychnine | Strychnidin-10-one | 57-24-9 | P108 |
| Strychnine salts | | | P108 |
| Sulfallate | Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester | 95-06-7 | |
| TCDD | Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- | 1746-01-6 | |
| Tetrabutylthiuram disulfide | Thioperoxydicarbonic diamide, tetrabutyl | 1634-02-2 | |
| 1,2,4,5-Tetrachlorobenzene | Benzene, 1,2,4,5-tetrachloro- | 95-94-3 | U207 |
| Tetrachlorodibenzo-p-dioxins | | | |
| Tetrachlorodibenzofurans | | | |
| Tetrachloroethane, N.O.S. ¹ | Ethane, tetrachloro-, N.O.S. | 25322-20-7 | |
| 1,1,1,2-Tetrachloroethane | Ethane, 1,1,1,2-tetrachloro- | 630-20-6 | U208 |
| 1,1,2,2-Tetrachloroethane | Ethane, 1,1,2,2-tetrachloro- | 79-34-5 | U209 |
| Tetrachloroethylene | Ethene, tetrachloro- | 127-18-4 | U210 |
| 2,3,4,6-Tetrachlorophenol | Phenol, 2,3,4,6-tetrachloro- | 58-90-2 | See F027 |
| 2,3,4,6-tetrachlorophenol, potassium salt | same | 53535276 | None |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|--|------------------------|----------------------|
| 2,3,4,6-tetrachlorophenol, sodium salt | same | 25567559 | None |
| Tetraethyldithiopyrophosphate | Thiodiphosphoric acid, tetraethyl ester | 3689-24-5 | P109 |
| Tetraethyl lead | Plumbane, tetraethyl- | 78-00-2 | P110 |
| Tetraethyl pyrophosphate | Diphosphoric acid, tetraethyl ester | 107-49-3 | P111 |
| Tetramethylthiuram monosulfide | Bis(dimethylthiocarbonyl) sulfide | 97-74-5 | |
| Tetranitromethane | Methane, tetranitro- | 509-14-8 | P112 |
| Thallium | Same | 7440-28-0 | |
| Thallium compounds, N.O.S. ¹ | | | |
| Thallic oxide | Thallium oxide Tl ₂ O ₃ | 1314-32-5 | P113 |
| Thallium(I) acetate | Acetic acid, thallium(1+) salt | 563-68-8 | U214 |
| Thallium(I) carbonate | Carbonic acid, dithallium(1+) salt | 6533-73-9 | U215 |
| Thallium(I) chloride | Thallium chloride TlCl | 7791-12-0 | U216 |
| Thallium(I) nitrate | Nitric acid, thallium(1+) salt | 10102-45-1 | U217 |
| Thallium selenite | Selenious acid, dithallium(1+) salt | 12039-52-0 | P114 |
| Thallium(I) sulfate | Sulfuric acid, dithallium(1+) salt | 7446-18-6 | P115 |
| Thioacetamide | Ethanethioamide | 62-55-5 | U218 |
| Thiodicarb | Ethanimidothioic acid, N,N'- [(thiobis [(methylimino) carbonyloxy]] bis-, dimethyl ester | 59669-26-0 | U410 |
| Thiofanox | 2-Butanone, 3,3-dimethyl-1-(methylthio)-, 0-[(methylamino)carbonyl] oxime | 39196-18-4 | P045 |
| Thiomethanol | Methanethiol | 74-93-1 | U153 |
| Thiophanate-methyl | Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)] bis-,dimethyl ester | 23564-05-8 | U409 |
| Thiophenol | Benzenethiol | 108-98-5 | P014 |
| Thiosemicarbazide | Hydrazinecarbothioamide | 79-19-6 | P116 |
| Thiourea | Same | 62-56-6 | U219 |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---------------------------------------|--|------------------------|----------------------|
| Thiram | Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl- | 137-26-8 | U244 |
| Tirpate | 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl] oxime | 26419-73-8 | P185 |
| Toluene | Benzene, methyl- | 108-88-3 | U220 |
| Toluenediamine | Benzenediamine, ar-methyl- | 25376-45-8 | U221 |
| Toluene-2,4-diamine | 1,3-Benzenediamine, 4-methyl- | 95-80-7 | |
| Toluene-2,6-diamine | 1,3-Benzenediamine, 2-methyl- | 823-40-5 | |
| Toluene-3,4-diamine | 1,2-Benzenediamine, 4-methyl- | 496-72-0 | |
| Toluene diisocyanate | Benzene, 1,3-diisocyanatomethyl- | 26471-62-5 | U223 |
| o-Toluidine | Benzenamine, 2-methyl- | 95-53-4 | U328 |
| o-Toluidine hydrochloride | Benzenamine, 2-methyl-, hydrochloride | 636-21-5 | U222 |
| p-Toluidine | Benzenamine, 4-methyl- | 106-49-0 | U353 |
| Toxaphene | Same | 8001-35-2 | P123 |
| Triallate | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester | 2303-17-5 | U389 |
| 1,2,4-Trichlorobenzene | Benzene, 1,2,4-trichloro- | 120-82-1 | |
| 1,1,2-Trichloroethane | Ethane, 1,1,2-trichloro- | 79-00-5 | U227 |
| Trichloroethylene | Ethene, trichloro- | 79-01-6 | U228 |
| Trichloromethanethiol | Methanethiol, trichloro- | 75-70-7 | P118 |
| Trichloromonofluoromethane | Methane, trichlorofluoro- | 75-69-4 | U121 |
| 2,4,5-Trichlorophenol | Phenol, 2,4,5-trichloro- | 95-95-4 | See F027 |
| 2,4,6-Trichlorophenol | Phenol, 2,4,6-trichloro- | 88-06-2 | See F027 |
| 2,4,5-T | Acetic acid, (2,4,5-trichlorophenoxy)- | 93-76-5 | See F027 |
| Trichloropropane, N.O.S. ¹ | | 25735-29-9 | |
| 1,2,3-Trichloropropane | Propane, 1,2,3-trichloro- | 96-18-4 | |
| Triethylamine | Ethanamine, N,N-diethyl- | 121-44-8 | U404 |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|---|------------------------|----------------------|
| O,O,O-Triethyl phosphorothioate | Phosphorothioic acid, O,O,O-triethyl ester | 126-68-1 | |
| 1,3,5-Trinitrobenzene | Benzene, 1,3,5-trinitro- | 99-35-4 | U234 |
| Tris(1-aziridiny)phosphine sulfide | Aziridine, 1,1',1''-phosphinothioylidynetris- | 52-24-4 | |
| Tris(2,3-dibromopropyl) phosphate | 1-Propanol, 2,3-dibromo-, phosphate (3:1) | 126-72-7 | U235 |
| Trypan blue | 2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'diyl)bis(azo)]-bis[5-amino-4-hydroxy-, tetrasodium salt | 72-57-1 | U236 |
| Uracil mustard | 2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]- | 66-75-1 | U237 |
| Vanadium pentoxide | Vanadium oxide V2O5 | 1314-62-1 | P120 |
| Vernolate | Carbamothioic acid, dipropyl-,S-propyl ester | 1929-77-7 | |
| Vinyl chloride | Ethene, chloro- | 75-01-4 | U043 |
| Warfarin | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3% | 81-81-2 | U248 |
| Warfarin | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations greater than 0.3% | 81-81-2 | P001 |
| Warfarin salts, when present at concentrations less than 0.3% | | | U248 |
| Warfarin salts, when present at concentrations greater than 0.3% | | | P001 |
| Zinc cyanide | Zinc cyanide Zn(CN)2 | 557-21-1 | P121 |
| Zinc phosphide | Zinc phosphide Zn3P2, when present at concentrations greater than 10% | 1314-84-7 | P122 |
| Zinc phosphide | Zinc phosphide Zn3P2, when present at concentrations of 10% or less | 1314-84-7 | U249 |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|-------------|--|------------------------|----------------------|
| Ziram | Zinc, bis(dimethylcarbamodithioato-S,S'), (T-4)- | 137-30-4 | P205 |

FOOTNOTE: 'The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

APPENDIX III

Hazardous wastes which are Discarded Commercial Chemical Products or Off-Specification Batches of Commercial Chemical Products or Spill Residues of Either
(Alphabetical by Substance)

The following hazardous wastes are referred to in § 7-214.

Note: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U394 | 30558-43-1 | A2213 |
| U001 | 75-07-0 | Acetaldehyde (I) |
| U034 | 75-87-6 | Acetaldehyde, trichloro- |
| U187 | 62-44-2 | Acetamide, N-(4-ethoxyphenyl)- |
| U005 | 53-96-3 | Acetamide, N-9H-fluoren-2-yl- |
| U240 | 194-75-7 | Acetic acid, (2,4-dichlorophenoxy)-, salts & esters |
| U112 | 141-78-6 | Acetic acid ethyl ester (I) |
| U144 | 301-04-2 | Acetic acid, lead(2+) salt |
| U214 | 563-68-8 | Acetic acid, thallium(1+) salt |
| see F027 | 93-76-5 | Acetic acid, (2,4,5-trichlorophenoxy)- |
| U002 | 67-64-1 | Acetone (I) |
| U003 | 75-05-8 | Acetonitrile (I,T) |
| U004 | 98-86-2 | Acetophenone |
| U005 | 53-96-3 | 2-Acetylaminofluorene |
| U006 | 75-36-5 | Acetyl chloride (C,R,T) |
| U007 | 79-06-1 | Acrylamide |
| U008 | 79-10-7 | Acrylic acid (I) |
| U009 | 107-13-1 | Acrylonitrile |
| U011 | 61-82-5 | Amitrole |
| U012 | 62-53-3 | Aniline (I,T) |
| U136 | 75-60-5 | Arsinic acid, dimethyl- |
| U014 | 492-80-8 | Auramine |
| U015 | 115-02-6 | Azaserine |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U010 | 50-07-7 | Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[[aminocarbonyloxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta, 8aalpha, 8balpha)]- |
| U280 | 101-27-9 | Barban |
| U278 | 22781-23-3 | Bendiocarb |
| U364 | 22961-82-6 | Bendiocarb phenol |
| U271 | 17804-35-2 | Benomyl |
| U157 | 56-49-5 | Benz[j]aceanthrylene, 1,2-dihydro-3-methyl- |
| U016 | 225-51-4 | Benz[c]acridine |
| U017 | 98-87-3 | Benzal chloride |
| U192 | 23950-58-5 | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)- |
| U018 | 56-55-3 | Benz[a]anthracene |
| U094 | 57-97-6 | Benz[a]anthracene, 7,12-dimethyl- |
| U012 | 62-53-3 | Benzenamine (1,T) |
| U014 | 492-80-8 | Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl- |
| U049 | 3165-93-3 | Benzenamine, 4-chloro-2-methyl-, hydrochloride |
| U093 | 60-11-7 | Benzenamine, N,N-dimethyl-4-(phenylazo)- |
| U328 | 95-53-4 | Benzenamine, 2-methyl- |
| U353 | 106-49-0 | Benzenamine, 4-methyl- |
| U158 | 101-14-4 | Benzenamine, 4,4'-methylenebis[2-chloro- |
| U222 | 636-21-5 | Benzenamine, 2-methyl-, hydrochloride |
| U181 | 99-55-8 | Benzenamine, 2-methyl-5-nitro- |
| U019 | 71-43-2 | Benzene (1,T) |
| U038 | 510-15-6 | Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester |
| U030 | 101-55-3 | Benzene, 1-bromo-4-phenoxy- |
| U035 | 305-03-3 | Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]- |
| U037 | 108-90-7 | Benzene, chloro- |
| U221 | 25376-45-8 | Benzenediamine, ar-methyl- |
| U028 | 117-81-7 | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester |
| U069 | 84-74-2 | 1,2-Benzenedicarboxylic acid, dibutyl ester |
| U088 | 84-66-2 | 1,2-Benzenedicarboxylic acid, diethyl ester |
| U102 | 131-11-3 | 1,2-Benzenedicarboxylic acid, dimethyl ester |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U107 | 117-84-0 | 1,2-Benzenedicarboxylic acid, dioctyl ester |
| U070 | 95-50-1 | Benzene, 1,2-dichloro- |
| U071 | 541-73-1 | Benzene, 1,3-dichloro- |
| U072 | 106-46-7 | Benzene, 1,4-dichloro- |
| U060 | 72-54-8 | Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro- |
| U017 | 98-87-3 | Benzene, (dichloromethyl)- |
| U223 | 26471-62-5 | Benzene, 1,3-diisocyanatomethyl- (R,T) |
| U239 | 1330-20-7 | Benzene, dimethyl- (I) |
| U201 | 108-46-3 | 1,3-Benzenediol |
| U127 | 118-74-1 | Benzene, hexachloro- |
| U056 | 110-82-7 | Benzene, hexahydro- (I) |
| U220 | 108-88-3 | Benzene, methyl- |
| U105 | 121-14-2 | Benzene, 1-methyl-2,4-dinitro- |
| U106 | 606-20-2 | Benzene, 2-methyl-1,3-dinitro- |
| U055 | 98-82-8 | Benzene, (1-methylethyl)- (I) |
| U169 | 98-95-3 | Benzene, nitro- |
| U183 | 608-93-5 | Benzene, pentachloro- |
| U185 | 82-68-8 | Benzene, pentachloronitro- |
| U020 | 98-09-9 | Benzenesulfonic acid chloride (C,R) |
| U020 | 98-09-9 | Benzenesulfonyl chloride (C,R) |
| U207 | 95-94-3 | Benzene, 1,2,4,5-tetrachloro- |
| U061 | 50-29-3 | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- |
| U247 | 72-43-5 | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4- methoxy- |
| U023 | 98-07-7 | Benzene, (trichloromethyl)- |
| U234 | 99-35-4 | Benzene, 1,3,5-trinitro- |
| U021 | 92-87-5 | Benzidine |
| U202 | 181-07-2 | 1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts |
| U278 | 22781-23-3 | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-,methyl carbamate |
| U364 | 22961-82-6 | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, |
| U203 | 94-59-7 | 1,3-Benzodioxole, 5-(2-propenyl)- |
| U141 | 120-58-1 | 1,3-Benzodioxole, 5-(1-propenyl)- |

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| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U367 | 1563-38-8 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- |
| U090 | 94-58-6 | 1,3-Benzodioxole, 5-propyl- |
| U064 | 189-55-9 | Benzo[rs]pentaphene |
| U248 | 181-81-2 | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less |
| U022 | 50-32-8 | Benzo[a]pyrene |
| U197 | 106-51-4 | p-Benzoquinone |
| U023 | 98-07-7 | Benzotrichloride (C,R,T) |
| U085 | 1464-53-5 | 2,2'-Bioxirane |
| U021 | 92-87-5 | [1,1'-Biphenyl]-4,4'-diamine |
| U073 | 91-94-1 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro- |
| U091 | 119-90-4 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy- |
| U095 | 119-93-7 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl- |
| U225 | 75-25-2 | Bromoform |
| U030 | 101-55-3 | 4-Bromophenyl phenyl ether |
| U128 | 87-68-3 | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- |
| U172 | 924-16-3 | 1-Butanamine, N-butyl-N-nitroso- |
| U031 | 71-36-3 | 1-Butanol (I) |
| U159 | 78-93-3 | 2-Butanone (I,T) |
| U160 | 1338-23-4 | 2-Butanone, peroxide (R,T) |
| U053 | 4170-30-3 | 2-Butenal |
| U074 | 764-41-0 | 2-Butene, 1,4-dichloro- (I,T) |
| U143 | 303-34-4 | 2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]- 2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]- |
| U031 | 71-36-3 | n-Butyl alcohol (I) |
| U136 | 75-60-5 | Cacodylic acid |
| U032 | 13765-19-0 | Calcium chromate |
| U372 | 10605-21-7 | Carbamic acid, 1H-benzimidazol-2-yl, methyl ester |
| U271 | 17804-35-2 | Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester |
| U280 | 101-27-9 | Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester |
| U238 | 51-79-6 | Carbamic acid, ethyl ester |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U178 | 615-53-2 | Carbamic acid, methylnitroso-, ethyl ester |
| U373 | 122-42-9 | Carbamic acid, phenyl-, 1-methylethyl ester |
| U409 | 23564-05-8 | Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester |
| U097 | 79-44-7 | Carbamic chloride, dimethyl- |
| U389 | 2303-17-5 | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester |
| U387 | 52888-80-9 | Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester |
| U114 | 111-54-6 | Carbamodithioic acid, 1,2-ethanediybis-, salts & esters |
| U062 | 2303-16-4 | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester |
| U279 | 63-25-2 | Carbaryl |
| U372 | 10605-21-7 | Carbendazim |
| U367 | 1563-38-8 | Carbofuran phenol |
| U215 | 6533-73-9 | Carbonic acid, dithallium(1+) salt |
| U033 | 353-50-4 | Carbonic difluoride |
| U156 | 79-22-1 | Carbonochloridic acid, methyl ester (I,T) |
| U033 | 353-50-4 | Carbon oxyfluoride (R,T) |
| U211 | 56-23-5 | Carbon tetrachloride |
| U034 | 75-87-6 | Chloral |
| U035 | 305-03-3 | Chlorambucil |
| U036 | 57-74-9 | Chlordane, alpha & gamma isomers |
| U026 | 494-03-1 | Chlormaphazin |
| U037 | 108-90-7 | Chlorobenzene |
| U038 | 510-15-6 | Chlorobenzilate |
| U039 | 59-50-7 | p-Chloro-m-cresol |
| U042 | 110-75-8 | 2-Chloroethyl vinyl ether |
| U044 | 67-66-3 | Chloroform |
| U046 | 107-30-2 | Chloromethyl methyl ether |
| U047 | 91-58-7 | beta-Chloronaphthalene |
| U048 | 95-57-8 | o-Chlorophenol |
| U049 | 3165-93-3 | 4-Chloro-o-toluidine, hydrochloride |
| U032 | 13765-19-0 | Chromic acid H ₂ CrO ₄ , calcium salt |

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| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U050 | 218-01-9 | Chrysene |
| U051 | | Creosote |
| U052 | 1319-77-3 | Cresol (Cresylic acid) |
| U053 | 4170-30-3 | Crotonaldehyde |
| U055 | 98-82-8 | Cumene (I) |
| U246 | 506-68-3 | Cyanogen bromide (CN)Br |
| U197 | 106-51-4 | 2,5-Cyclohexadiene-1,4-dione |
| U056 | 110-82-7 | Cyclohexane (I) |
| U129 | 58-89-9 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- |
| U057 | 108-94-1 | Cyclohexanone (I) |
| U130 | 77-47-4 | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- |
| U058 | 50-18-0 | Cyclophosphamide |
| U240 | 94-75-7 | 2,4-D, salts & esters |
| U059 | 20830-81-3 | Daunomycin |
| U060 | 72-54-8 | DDD |
| U061 | 50-29-3 | DDT |
| U062 | 2303-16-4 | Diallate |
| U063 | 53-70-3 | Dibenz[a,h]anthracene |
| U064 | 189-55-9 | Dibenzo[a,i]pyrene |
| U066 | 96-12-8 | 1,2-Dibromo-3-chloropropane |
| U069 | 84-74-2 | Dibutyl phthalate |
| U070 | 95-50-1 | o-Dichlorobenzene |
| U071 | 541-73-1 | m-Dichlorobenzene |
| U072 | 106-46-7 | p-Dichlorobenzene |
| U073 | 91-94-1 | 3,3'-Dichlorobenzidine |
| U074 | 764-41-0 | 1,4-Dichloro-2-butene (I,T) |
| U075 | 75-71-8 | Dichlorodifluoromethane |
| U078 | 75-35-4 | 1,1-Dichloroethylene |
| U079 | 156-60-5 | 1,2-Dichloroethylene |
| U025 | 111-44-4 | Dichloroethyl ether |
| U027 | 108-60-1 | Dichloroisopropyl ether |

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| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U024 | 111-91-1 | Dichloromethoxy ethane |
| U081 | 120-83-2 | 2,4-Dichlorophenol |
| U082 | 87-65-0 | 2,6-Dichlorophenol |
| U084 | 542-75-6 | 1,3-Dichloropropene |
| U085 | 1464-53-5 | 1,2:3,4-Diepoxybutane (I,T) |
| U108 | 123-91-1 | 1,4-Diethyleneoxide |
| U028 | 117-81-7 | Diethylhexyl phthalate |
| U395 | 5952-26-1 | Diethylene glycol, dicarbamate |
| U086 | 1615-80-1 | N,N'-Diethylhydrazine |
| U087 | 3288-58-2 | O,O-Diethyl S-methyl dithiophosphate |
| U088 | 84-66-2 | Diethyl phthalate |
| U089 | 56-53-1 | Diethylstilbesterol |
| U090 | 94-58-6 | Dihydrosafrole |
| U091 | 119-90-4 | 3,3'-Dimethoxybenzidine |
| U092 | 124-40-3 | Dimethylamine (I) |
| U093 | 60-11-7 | p-Dimethylaminoazobenzene |
| U094 | 57-97-6 | 7,12-Dimethylbenz[a]anthracene |
| U095 | 119-93-7 | 3,3'-Dimethylbenzidine |
| U096 | 80-15-9 | alpha,alpha-Dimethylbenzylhydroperoxide (R) |
| U097 | 79-44-7 | Dimethylcarbamoyl chloride |
| U098 | 57-14-7 | 1,1-Dimethylhydrazine |
| U099 | 540-73-8 | 1,2-Dimethylhydrazine |
| U101 | 105-67-9 | 2,4-Dimethylphenol |
| U102 | 131-11-3 | Dimethyl phthalate |
| U103 | 77-78-1 | Dimethyl sulfate |
| U105 | 121-14-2 | 2,4-Dinitrotoluene |
| U106 | 606-20-2 | 2,6-Dinitrotoluene |
| U107 | 117-84-0 | Di-n-octyl phthalate |
| U108 | 123-91-1 | 1,4-Dioxane |
| U109 | 122-66-7 | 1,2-Diphenylhydrazine |
| U110 | 142-84-7 | Dipropylamine (I) |

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| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U111 | 621-64-7 | Di-n-propylnitrosamine |
| U041 | 106-89-8 | Epichlorohydrin |
| U001 | 75-07-0 | Ethanal (I) |
| U404 | 121-44-8 | Ethanamine, N,N-diethyl- |
| U174 | 55-18-5 | Ethanamine, N-ethyl-N-nitroso- |
| U155 | 91-80-5 | 1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- |
| U067 | 106-93-4 | Ethane, 1,2-dibromo- |
| U076 | 75-34-3 | Ethane, 1,1-dichloro- |
| U077 | 107-06-2 | Ethane, 1,2-dichloro- |
| U131 | 67-72-1 | Ethane, hexachloro- |
| U024 | 111-91-1 | Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro- |
| U117 | 60-29-7 | Ethane, 1,1'-oxybis-(I) |
| U025 | 111-44-4 | Ethane, 1,1'-oxybis[2-chloro- |
| U184 | 76-01-7 | Ethane, pentachloro- |
| U208 | 630-20-6 | Ethane, 1,1,1,2-tetrachloro- |
| U209 | 79-34-5 | Ethane, 1,1,2,2-tetrachloro- |
| U218 | 62-55-5 | Ethanethioamide |
| U226 | 71-55-6 | Ethane, 1,1,1-trichloro- |
| U227 | 79-00-5 | Ethane, 1,1,2-trichloro- |
| U410 | 59669-26-0 | Ethanimidothioic acid, N,N'- [thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester |
| U394 | 30558-43-1 | Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-,methyl ester |
| U359 | 110-80-5 | Ethanol, 2-ethoxy- |
| U173 | 1116-54-7 | Ethanol, 2,2'-(nitrosoimino)bis- |
| U395 | 5952-26-1 | Ethanol, 2,2[prime]-oxybis-, dicarbamate |
| U004 | 98-86-2 | Ethanone, 1-phenyl- |
| U043 | 75-01-4 | Ethene, chloro- |
| U042 | 110-75-8 | Ethene, (2-chloroethoxy)- |
| U078 | 75-35-4 | Ethene, 1,1-dichloro- |
| U079 | 156-60-5 | Ethene, 1,2-dichloro-, (E)- |
| U210 | 127-18-4 | Ethene, tetrachloro- |

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| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U228 | 79-01-6 | Ethene, trichloro- |
| U112 | 141-78-6 | Ethyl acetate (I) |
| U113 | 140-88-5 | Ethyl acrylate (I) |
| U238 | 51-79-6 | Ethyl carbamate (urethane) |
| U117 | 60-29-7 | Ethyl ether (I) |
| U114 | 111-54-6 | Ethylenebisdithiocarbamic acid, salts & esters |
| U067 | 106-93-4 | Ethylene dibromide |
| U077 | 107-06-2 | Ethylene dichloride |
| U359 | 110-80-5 | Ethylene glycol monoethyl ether |
| U115 | 75-21-8 | Ethylene oxide (I,T) |
| U116 | 96-45-7 | Ethylenethiourea |
| U076 | 75-34-3 | Ethylidene dichloride |
| U118 | 97-63-2 | Ethyl methacrylate |
| U119 | 62-50-0 | Ethyl methanesulfonate |
| U120 | 206-44-0 | Fluoranthene |
| U122 | 50-00-0 | Formaldehyde |
| U123 | 64-18-6 | Formic acid (C,T) |
| U124 | 110-00-9 | Furan (I) |
| U125 | 98-01-1 | 2-Furancarboxaldehyde (I) |
| U147 | 108-31-6 | 2,5-Furandione |
| U213 | 109-99-9 | Furan, tetrahydro-(I) |
| U125 | 98-01-1 | Furfural (I) |
| U124 | 110-00-9 | Furfuran (I) |
| U206 | 18883-66-4 | Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoimido)-, D- |
| U206 | 18883-66-4 | D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)- carbonyl]amino]- |
| U126 | 765-34-4 | Glycidylaldehyde |
| U163 | 70-25-7 | Guanidine, N-methyl-N'-nitro-N-nitroso- |
| U127 | 118-74-1 | Hexachlorobenzene |
| U128 | 87-68-3 | Hexachlorobutadiene |
| U130 | 77-47-4 | Hexachlorocyclopentadiene |
| U131 | 67-72-1 | Hexachloroethane |

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| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U132 | 70-30-4 | Hexachlorophene |
| U243 | 1888-71-7 | Hexachloropropene |
| U133 | 302-01-2 | Hydrazine (R,T) |
| U086 | 1615-80-1 | Hydrazine, 1,2-diethyl- |
| U098 | 57-14-7 | Hydrazine, 1,1-dimethyl- |
| U099 | 540-73-8 | Hydrazine, 1,2-dimethyl- |
| U109 | 122-66-7 | Hydrazine, 1,2-diphenyl- |
| U134 | 7664-39-3 | Hydrofluoric acid (C,T) |
| U134 | 7664-39-3 | Hydrogen fluoride (C,T) |
| U135 | 7783-06-4 | Hydrogen sulfide |
| U135 | 7783-06-4 | Hydrogen sulfide H2S |
| U096 | 80-15-9 | Hydroperoxide, 1-methyl-1-phenylethyl- (R) |
| U116 | 96-45-7 | 2-Imidazolidinethione |
| U137 | 193-39-5 | Indeno[1,2,3-cd]pyrene |
| U190 | 85-44-9 | 1,3-Isobenzofurandione |
| U140 | 78-83-1 | Isobutyl alcohol (I,T) |
| U141 | 120-58-1 | Isosafrole |
| U142 | 143-50-0 | Kepone |
| U143 | 303-34-4 | Lasiocarpine |
| U144 | 301-04-2 | Lead acetate |
| U146 | 1335-32-6 | Lead, bis(acetato-O)tetrahydroxytri- |
| U145 | 7446-27-7 | Lead phosphate |
| U146 | 1335-32-6 | Lead subacetate |
| U129 | 58-89-9 | Lindane |
| U163 | 70-25-7 | MNNG |
| U147 | 108-31-6 | Maleic anhydride |
| U148 | 123-33-1 | Maleic hydrazide |
| U149 | 109-77-3 | Malononitrile |
| U150 | 148-82-3 | Melphalan |
| U151 | 7439-97-6 | Mercury |
| U152 | 126-98-7 | Methacrylonitrile (I, T) |

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| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U092 | 124-40-3 | Methanamine, N-methyl- (I) |
| U029 | 74-83-9 | Methane, bromo- |
| U045 | 74-87-3 | Methane, chloro- (I, T) |
| U046 | 107-30-2 | Methane, chloromethoxy- |
| U068 | 74-95-3 | Methane, dibromo- |
| U080 | 75-09-2 | Methane, dichloro- |
| U075 | 75-71-8 | Methane, dichlorodifluoro- |
| U138 | 74-88-4 | Methane, iodo- |
| U119 | 62-50-0 | Methanesulfonic acid, ethyl ester |
| U211 | 56-23-5 | Methane, tetrachloro- |
| U153 | 74-93-1 | Methanethiol (I, T) |
| U225 | 75-25-2 | Methane, tribromo- |
| U044 | 67-66-3 | Methane, trichloro- |
| U121 | 75-69-4 | Methane, trichlorofluoro- |
| U036 | 57-74-9 | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- |
| U154 | 67-56-1 | Methanol (I) |
| U155 | 91-80-5 | Methapyrilene |
| U142 | 143-50-0 | 1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro- |
| U247 | 72-43-5 | Methoxychlor |
| U154 | 67-56-1 | Methyl alcohol (I) |
| U029 | 74-83-9 | Methyl bromide |
| U186 | 504-60-9 | 1-Methylbutadiene (I) |
| U045 | 74-87-3 | Methyl chloride (I,T) |
| U156 | 79-22-1 | Methyl chlorocarbonate (I,T) |
| U226 | 71-55-6 | Methyl chloroform |
| U157 | 56-49-5 | 3-Methylcholanthrene |
| U158 | 101-14-4 | 4,4'-Methylenebis(2-chloroaniline) |
| U068 | 74-95-3 | Methylene bromide |
| U080 | 75-09-2 | Methylene chloride |
| U159 | 78-93-3 | Methyl ethyl ketone (MEK) (I,T) |

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| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U160 | 1338-23-4 | Methyl ethyl ketone peroxide (R,T) |
| U138 | 74-88-4 | Methyl iodide |
| U161 | 108-10-1 | Methyl isobutyl ketone (I) |
| U162 | 80-62-6 | Methyl methacrylate (I,T) |
| U161 | 108-10-1 | 4-Methyl-2-pentanone (I) |
| U164 | 56-04-2 | Methylthiouracil |
| U010 | 50-07-7 | Mitomycin C |
| U059 | 20830-81-3 | 5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl]oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)- |
| U167 | 134-32-7 | 1-Naphthalenamine |
| U168 | 91-59-8 | 2-Naphthalenamine |
| U026 | 494-03-1 | Naphthalenamine, N,N'-bis(2-chloroethyl)- |
| U165 | 91-20-3 | Naphthalene |
| U047 | 91-58-7 | Naphthalene, 2-chloro- |
| U166 | 130-15-4 | 1,4-Naphthalenedione |
| U236 | 72-57-1 | 2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'- dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt |
| U279 | 63-25-2 | 1-Naphthalenol, methylcarbamate |
| U166 | 130-15-4 | 1,4-Naphthoquinone |
| U167 | 134-32-7 | alpha-Naphthylamine |
| U168 | 91-59-8 | beta-Naphthylamine |
| U217 | 10102-45-1 | Nitric acid, thallium(1+) salt |
| U169 | 98-95-3 | Nitrobenzene (I,T) |
| U170 | 100-02-7 | p-Nitrophenol |
| U171 | 79-46-9 | 2-Nitropropane (I,T) |
| U172 | 924-16-3 | N-Nitrosodi-n-butylamine |
| U173 | 1116-54-7 | N-Nitrosodiethanolamine |
| U174 | 55-18-5 | N-Nitrosodiethylamine |
| U176 | 759-73-9 | N-Nitroso-N-ethylurea |
| U177 | 684-93-5 | N-Nitroso-N-methylurea |
| U178 | 615-53-2 | N-Nitroso-N-methylurethane |
| U179 | 100-75-4 | N-Nitrosopiperidine |

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| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U180 | 930-55-2 | N-Nitrosopyrrolidine |
| U181 | 99-55-8 | 5-Nitro-o-toluidine |
| U193 | 1120-71-4 | 1,2-Oxathiolane, 2,2-dioxide |
| U058 | 50-18-0 | 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide |
| U115 | 75-21-8 | Oxirane (I,T) |
| U126 | 765-34-4 | Oxiranecarboxyaldehyde |
| U041 | 106-89-8 | Oxirane, (chloromethyl)- |
| U182 | 123-63-7 | Paraldehyde |
| U183 | 608-93-5 | Pentachlorobenzene |
| U184 | 76-01-7 | Pentachloroethane |
| U185 | 82-68-8 | Pentachloronitrobenzene (PCNB) |
| See F027 | 87-86-5 | Pentachlorophenol |
| U161 | 108-10-1 | Pentanol, 4-methyl- |
| U186 | 504-60-9 | 1,3-Pentadiene (I) |
| U187 | 62-44-2 | Phenacetin |
| U188 | 108-95-2 | Phenol |
| U048 | 95-57-8 | Phenol, 2-chloro- |
| U039 | 59-50-7 | Phenol, 4-chloro-3-methyl- |
| U081 | 120-83-2 | Phenol, 2,4-dichloro- |
| U082 | 87-65-0 | Phenol, 2,6-dichloro- |
| U089 | 56-53-1 | Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)- |
| U101 | 105-67-9 | Phenol, 2,4-dimethyl- |
| U052 | 1319-77-3 | Phenol, methyl- |
| U132 | 70-30-4 | Phenol, 2,2'-methylenebis[3,4,6-trichloro- |
| U411 | 114-26-1 | Phenol, 2-(1-methylethoxy)-, methylcarbamate |
| U170 | 100-02-7 | Phenol, 4-nitro- |
| See F027 | 87-86-5 | Phenol, pentachloro- |
| See F027 | 58-90-2 | Phenol, 2,3,4,6-tetrachloro- |
| See F027 | 95-95-4 | Phenol, 2,4,5-trichloro- |
| See F027 | 88-06-2 | Phenol, 2,4,6-trichloro- |
| U150 | 148-82-3 | L-Phenylalanine, 4-[bis(2-chloroethyl)amino]- |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U145 | 7446-27-7 | Phosphoric acid, lead(2+) salt (2:3) |
| U087 | 3288-58-2 | Phosphorodithioic acid, O,O-diethyl S-methyl ester |
| U189 | 1314-80-3 | Phosphorus sulfide (R) |
| U190 | 85-44-9 | Phthalic anhydride |
| U191 | 109-06-8 | 2-Picoline |
| U179 | 100-75-4 | Piperidine, 1-nitroso- |
| U192 | 23950-58-5 | Pronamide |
| U194 | 107-10-8 | 1-Propanamine (I,T) |
| U111 | 621-64-7 | 1-Propanamine, N-nitroso-N-propyl- |
| U110 | 142-84-7 | 1-Propanamine, N-propyl- (I) |
| U066 | 96-12-8 | Propane, 1,2-dibromo-3-chloro- |
| U083 | 78-87-5 | Propane, 1,2-dichloro- |
| U149 | 109-77-3 | Propanedinitrile |
| U171 | 79-46-9 | Propane, 2-nitro- (I,T) |
| U027 | 108-60-1 | Propane, 2,2'-oxybis[2-chloro- |
| U193 | 1120-71-4 | 1,3-Propane sultone |
| See F027 | 93-72-1 | Propanoic acid, 2-(2,4,5-trichlorophenoxy)- |
| U235 | 126-72-7 | 1-Propanol, 2,3-dibromo-, phosphate (3:1) |
| U140 | 78-83-1 | 1-Propanol, 2-methyl- (I,T) |
| U002 | 67-64-1 | 2-Propanone (I) |
| U007 | 79-06-1 | 2-Propenamide |
| U084 | 542-75-6 | 1-Propene, 1,3-dichloro- |
| U243 | 1888-71-7 | 1-Propene, 1,1,2,3,3,3-hexachloro- |
| U009 | 107-13-1 | 2-Propenenitrile |
| U152 | 126-98-7 | 2-Propenenitrile, 2-methyl- (I,T) |
| U008 | 79-10-7 | 2-Propenoic acid (I) |
| U113 | 140-88-5 | 2-Propenoic acid, ethyl ester (I) |
| U118 | 97-63-2 | 2-Propenoic acid, 2-methyl-, ethyl ester |
| U162 | 80-62-6 | 2-Propenoic acid, 2-methyl-, methyl ester (I,T) |
| U373 | 122-42-9 | Propham |
| U411 | 114-26-1 | Propoxur |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U387 | 52888-80-9 | Prosulfocarb |
| U194 | 107-10-8 | n-Propylamine (I,T) |
| U083 | 78-87-5 | Propylene dichloride |
| U148 | 123-33-1 | 3,6-Pyridazinedione, 1,2-dihydro- |
| U196 | 110-86-1 | Pyridine |
| U191 | 109-06-8 | Pyridine, 2-methyl- |
| U237 | 66-75-1 | 2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]- |
| U164 | 56-04-2 | 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thio- |
| U180 | 930-55-2 | Pyrrolidine, 1-nitroso- |
| U200 | 50-55-5 | Reserpine |
| U201 | 108-46-3 | Resorcinol |
| U203 | 94-59-7 | Safrole |
| U204 | 7783-00-8 | Selenious acid |
| U204 | 7783-00-8 | Selenium dioxide |
| U205 | 7488-56-4 | Selenium sulfide |
| U205 | 7488-56-4 | Selenium sulfide SeS ₂ (R,T) |
| U015 | 115-02-6 | L-Serine, diazoacetate (ester) |
| See F027 | 93-72-1 | Silvex (2,4,5-TP) |
| U206 | 18883-66-4 | Streptozotocin |
| U103 | 77-78-1 | Sulfuric acid, dimethyl ester |
| U189 | 1314-80-3 | Sulfur phosphide (R) |
| See F027 | 93-76-5 | 2,4,5-T |
| U207 | 95-94-3 | 1,2,4,5-Tetrachlorobenzene |
| U208 | 630-20-6 | 1,1,1,2-Tetrachloroethane |
| U209 | 79-34-5 | 1,1,2,2-Tetrachloroethane |
| U210 | 127-18-4 | Tetrachloroethylene |
| See F027 | 58-90-2 | 2,3,4,6-Tetrachlorophenol |
| U213 | 109-99-9 | Tetrahydrofuran (I) |
| U214 | 563-68-8 | Thallium(I) acetate |
| U215 | 6533-73-9 | Thallium(I) carbonate |
| U216 | 7791-12-0 | Thallium(I) chloride |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U216 | 7791-12-0 | Thallium chloride TlCl |
| U217 | 10102-45-1 | Thallium(I) nitrate |
| U218 | 62-55-5 | Thioacetamide |
| U410 | 59669-26-0 | Thiodicarb |
| U153 | 74-93-1 | Thiomethanol (I,T) |
| U244 | 137-26-8 | Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl- |
| U409 | 23564-05-8 | Thiophanate-methyl |
| U219 | 62-56-6 | Thiourea |
| U244 | 137-26-8 | Thiram |
| U220 | 108-88-3 | Toluene |
| U221 | 25376-45-8 | Toluenediamine |
| U223 | 26471-62-5 | Toluene diisocyanate (R,T) |
| U328 | 95-53-4 | o-Toluidine |
| U353 | 106-49-0 | p-Toluidine |
| U222 | 636-21-5 | o-Toluidine hydrochloride |
| U389 | 2303-17-5 | Triallate |
| U011 | 61-82-5 | 1H-1,2,4-Triazol-3-amine |
| U227 | 79-00-5 | 1,1,2-Trichloroethane |
| U228 | 79-01-6 | Trichloroethylene |
| U121 | 75-69-4 | Trichloromonofluoromethane |
| See F027 | 95-95-4 | 2,4,5-Trichlorophenol |
| See F027 | 88-06-2 | 2,4,6-Trichlorophenol |
| U404 | 121-44-8 | Triethylamine |
| U234 | 99-35-4 | 1,3,5-Trinitrobenzene (R,T) |
| U182 | 123-63-7 | 1,3,5-Trioxane, 2,4,6-trimethyl- |
| U235 | 126-72-7 | Tris(2,3-dibromopropyl) phosphate |
| U236 | 72-57-1 | Trypan blue |
| U237 | 66-75-1 | Uracil mustard |
| U176 | 759-73-9 | Urea, N-ethyl-N-nitroso- |
| U177 | 684-93-5 | Urea, N-methyl-N-nitroso- |
| U043 | 75-01-4 | Vinyl chloride |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U248 | 181-81-2 | Warfarin, & salts, when present at concentrations of 0.3% or less |
| U239 | 1330-20-7 | Xylene (I) |
| U200 | 50-55-5 | Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)- |
| U249 | 1314-84-7 | Zinc phosphide Zn ₃ P ₂ , when present at concentrations of 10% or less |

FOOTNOTE: ¹CAS Number given for parent compound only.

Hazardous wastes which are Discarded Commercial Chemical Products or Off-Specification Batches of Commercial Chemical Products or Spill Residues of Either (Numerical by Hazardous Waste Code)

The following hazardous wastes are referred to in § 7-214.

Note: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Irritability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|------------------------------|
| U001 | 75-07-0 | Acetaldehyde (I) |
| U001 | 75-07-0 | Ethanal (I) |
| U002 | 67-64-1 | Acetone (I) |
| U002 | 67-64-1 | 2-Propanone (I) |
| U003 | 75-05-8 | Acetonitrile (I,T) |
| U004 | 98-86-2 | Acetophenone |
| U004 | 98-86-2 | Ethanone, 1-phenyl- |
| U005 | 53-96-3 | Acetamide, -9H-fluoren-2-yl- |
| U005 | 53-96-3 | 2-Acetylaminofluorene |
| U006 | 75-36-5 | Acetyl chloride (C,R,T) |
| U007 | 79-06-1 | Acrylamide |
| U007 | 79-06-1 | 2-Propenamide |
| U008 | 79-10-7 | Acrylic acid (I) |
| U008 | 79-10-7 | 2-Propenoic acid (I) |
| U009 | 107-13-1 | Acrylonitrile |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| U009 | 107-13-1 | 2-Propenenitrile |
| U010 | 50-07-7 | Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[[(aminocarbonyloxy)methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1alpha,8beta,8alpha,8beta)]- |
| U010 | 50-07-7 | Mitomycin C |
| U011 | 61-82-5 | Amitrole |
| U011 | 61-82-5 | 1H-1,2,4-Triazol-3-amine |
| U012 | 62-53-3 | Aniline (I,T) |
| U012 | 62-53-3 | Benzenamine (I,T) |
| U014 | 492-80-8 | Auramine |
| U014 | 492-80-8 | Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl- |
| U015 | 115-02-6 | Azaserine |
| U015 | 115-02-6 | L-Serine, diazoacetate (ester) |
| U016 | 225-51-4 | Benz[c]acridine |
| U017 | 98-87-3 | Benzal chloride |
| U017 | 98-87-3 | Benzene, (dichloromethyl)- |
| U018 | 56-55-3 | Benz[a]anthracene |
| U019 | 71-43-2 | Benzene (I,T) |
| U020 | 98-09-9 | Benzenesulfonic acid chloride (C,R) |
| U020 | 98-09-9 | Benzenesulfonyl chloride (C,R) |
| U021 | 92-87-5 | Benzidine |
| U021 | 92-87-5 | [1,1'-Biphenyl]-4,4'-diamine |
| U022 | 50-32-8 | Benzo[a]pyrene |
| U023 | 98-07-7 | Benzene, (trichloromethyl)- |
| U023 | 98-07-7 | Benzotrichloride (C,R,T) |
| U024 | 111-91-1 | Dichloromethoxy ethane |
| U024 | 111-91-1 | Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro- |
| U025 | 111-44-4 | Dichloroethyl ether |
| U025 | 111-44-4 | Ethane, 1,1'-oxybis[2-chloro- |
| U026 | 494-03-1 | Chlornaphazin |
| U026 | 494-03-1 | Naphthalenamine, N,N'-bis(2-chloroethyl)- |
| U027 | 108-60-1 | Dichloroisopropyl ether |
| U027 | 108-60-1 | Propane, 2,2'-oxybis[2-chloro- |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| U028 | 117-81-7 | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester |
| U028 | 117-81-7 | Diethylhexyl phthalate |
| U029 | 74-83-9 | Methane, bromo- |
| U029 | 74-83-9 | Methyl bromide |
| U030 | 101-55-3 | Benzene, 1-bromo-4-phenoxy- |
| U030 | 101-55-3 | 4-Bromophenyl phenyl ether |
| U031 | 71-36-3 | 1-Butanol (l) |
| U031 | 71-36-3 | n-Butyl alcohol (l) |
| U032 | 13765-19-0 | Calcium chromate |
| U032 | 13765-19-0 | Chromic acid H ₂ CrO ₄ , calcium salt |
| U033 | 353-50-4 | Carbonic difluoride |
| U033 | 353-50-4 | Carbon oxyfluoride (R,T) |
| U034 | 75-87-6 | Acetaldehyde, trichloro- |
| U034 | 75-87-6 | Chloral |
| U035 | 305-03-3 | Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]- |
| U035 | 305-03-3 | Chlorambucil |
| U036 | 57-74-9 | Chlordane, alpha & gamma isomers |
| U036 | 57-74-9 | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- |
| U037 | 108-90-7 | Benzene, chloro- |
| U037 | 108-90-7 | Chlorobenzene |
| U038 | 510-15-6 | Benzenecetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester |
| U038 | 510-15-6 | Chlorobenzilate |
| U039 | 59-50-7 | p-Chloro-m-cresol |
| U039 | 59-50-7 | Phenol, 4-chloro-3-methyl- |
| U041 | 106-89-8 | Epichlorohydrin |
| U041 | 106-89-8 | Oxirane, (chloromethyl)- |
| U042 | 110-75-8 | 2-Chloroethyl vinyl ether |
| U042 | 110-75-8 | Ethene, (2-chloroethoxy)- |
| U043 | 75-01-4 | Ethene, chloro- |
| U043 | 75-01-4 | Vinyl chloride |
| U044 | 67-66-3 | Chloroform |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| U044 | 67-66-3 | Methane, trichloro- |
| U045 | 74-87-3 | Methane, chloro- (L.T) |
| U045 | 74-87-3 | Methyl chloride (L.T) |
| U046 | 107-30-2 | Chloromethyl methyl ether |
| U046 | 107-30-2 | Methane, chloromethoxy- |
| U047 | 91-58-7 | beta-Chloronaphthalene |
| U047 | 91-58-7 | Naphthalene, 2-chloro- |
| U048 | 95-57-8 | o-Chlorophenol |
| U048 | 95-57-8 | Phenol, 2-chloro- |
| U049 | 3165-93-3 | Benzenamine, 4-chloro-2-methyl-, hydrochloride |
| U049 | 3165-93-3 | 4-Chloro-o-toluidine, hydrochloride |
| U050 | 218-01-9 | Chrysene |
| U051 | | Creosote |
| U052 | 1319-77-3 | Cresol (Cresylic acid) |
| U052 | 1319-77-3 | Phenol, methyl- |
| U053 | 4170-30-3 | 2-Butenal |
| U053 | 4170-30-3 | Crotonaldehyde |
| U055 | 98-82-8 | Benzene, (1-methylethyl)-(1) |
| U055 | 98-82-8 | Cumene (1) |
| U056 | 110-82-7 | Benzene, hexahydro-(1) |
| U056 | 110-82-7 | Cyclohexane (1) |
| U057 | 108-94-1 | Cyclohexanone (1) |
| U058 | 50-18-0 | Cyclophosphamide |
| U058 | 50-18-0 | 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide |
| U059 | 20830-81-3 | Daunomycin |
| U059 | 20830-81-3 | 5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl]oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)- |
| U060 | 72-54-8 | Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro- |
| U060 | 72-54-8 | DDD |
| U061 | 50-29-3 | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- |
| U061 | 50-29-3 | DDT |
| U062 | 2303-16-4 | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| | | ester |
| U062 | 2303-16-4 | Diallate |
| U063 | 53-70-3 | Dibenz[a,h]anthracene |
| U064 | 189-55-9 | Benzo[rs]pentaphene |
| U064 | 189-55-9 | Dibenzo[a,i]pyrene |
| U066 | 96-12-8 | 1,2-Dibromo-3-chloropropane |
| U066 | 96-12-8 | Propane, 1,2-dibromo-3-chloro- |
| U067 | 106-93-4 | Ethane, 1,2-dibromo- |
| U067 | 106-93-4 | Ethylene dibromide |
| U068 | 74-95-3 | Methane, dibromo- |
| U068 | 74-95-3 | Methylene bromide |
| U069 | 84-74-2 | 1,2-Benzenedicarboxylic acid, dibutyl ester |
| U069 | 84-74-2 | Dibutyl phthalate |
| U070 | 95-50-1 | Benzene, 1,2-dichloro- |
| U070 | 95-50-1 | o-Dichlorobenzene |
| U071 | 541-73-1 | Benzene, 1,3-dichloro- |
| U071 | 541-73-1 | m-Dichlorobenzene |
| U072 | 106-46-7 | Benzene, 1,4-dichloro- |
| U072 | 106-46-7 | p-Dichlorobenzene |
| U073 | 91-94-1 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro- |
| U073 | 91-94-1 | 3,3'-Dichlorobenzidine |
| U074 | 764-41-0 | 2-Butene, 1,4-dichloro-(1,T) |
| U074 | 764-41-0 | 1,4-Dichloro-2-butene (1,T) |
| U075 | 75-71-8 | Dichlorodifluoromethane |
| U075 | 75-71-8 | Methane, dichlorodifluoro- |
| U076 | 75-34-3 | Ethane, 1,1-dichloro- |
| U076 | 75-34-3 | Ethylidene dichloride |
| U077 | 107-06-2 | Ethane, 1,2-dichloro- |
| U077 | 107-06-2 | Ethylene dichloride |
| U078 | 75-35-4 | 1,1-Dichloroethylene |
| U078 | 75-35-4 | Ethene, 1,1-dichloro- |
| U079 | 156-60-5 | 1,2-Dichloroethylene |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|---|
| U079 | 156-60-5 | Ethene, 1,2-dichloro-, (E)- |
| U080 | 75-09-2 | Methane, dichloro- |
| U080 | 75-09-2 | Methylene chloride |
| U081 | 120-83-2 | 2,4-Dichlorophenol |
| U081 | 120-83-2 | Phenol, 2,4-dichloro- |
| U082 | 87-65-0 | 2,6-Dichlorophenol |
| U082 | 87-65-0 | Phenol, 2,6-dichloro- |
| U083 | 78-87-5 | Propane, 1,2-dichloro- |
| U083 | 78-87-5 | Propylene dichloride |
| U084 | 542-75-6 | 1,3-Dichloropropene |
| U084 | 542-75-6 | 1-Propene, 1,3-dichloro- |
| U085 | 1464-53-5 | 2,2'-Bioxirane |
| U085 | 1464-53-5 | 1,2:3,4-Diepoxybutane (1,1) |
| U086 | 1615-80-1 | N,N'-Diethylhydrazine |
| U086 | 1615-80-1 | Hydrazine, 1,2-diethyl- |
| U087 | 3288-58-2 | O,O-Diethyl S-methyl dithiophosphate |
| U087 | 3288-58-2 | Phosphorodithioic acid, O,O-diethyl S-methyl ester |
| U088 | 84-66-2 | 1,2-Benzenedicarboxylic acid, diethyl ester |
| U088 | 84-66-2 | Diethyl phthalate |
| U089 | 56-53-1 | Diethylstilbesterol |
| U089 | 56-53-1 | Phenol, 4,4'-(1,2-diethyl-1,2-ethenedivl)bis-, (E)- |
| U090 | 94-58-6 | 1,3-Benzodioxole, 5-propyl- |
| U090 | 94-58-6 | Dihydrosafrole |
| U091 | 119-90-4 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy- |
| U091 | 119-90-4 | 3,3'-Dimethoxybenzidine |
| U092 | 124-40-3 | Dimethylamine (1) |
| U092 | 124-40-3 | Methanamine, -methyl-(1) |
| U093 | 60-11-7 | Benzenamine, N,N-dimethyl-4-(phenylazo)- |
| U093 | 60-11-7 | p-Dimethylaminoazobenzene |
| U094 | 57-97-6 | Benz[a]anthracene, 7,12-dimethyl- |
| U094 | 57-97-6 | 7,12-Dimethylbenz[a]anthracene |
| U095 | 119-93-7 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl- |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| U095 | 119-93-7 | 3,3'-Dimethylbenzidine |
| U096 | 80-15-9 | alpha.alpha-Dimethylbenzylhydroperoxide (R) |
| U096 | 80-15-9 | Hydroperoxide, 1-methyl-1-phenylethyl-(R) |
| U097 | 79-44-7 | Carbamic chloride, dimethyl- |
| U097 | 79-44-7 | Dimethylcarbamoyl chloride |
| U098 | 57-14-7 | 1,1-Dimethylhydrazine |
| U098 | 57-14-7 | Hydrazine, 1,1-dimethyl- |
| U099 | 540-73-8 | 1,2-Dimethylhydrazine |
| U099 | 540-73-8 | Hydrazine, 1,2-dimethyl- |
| U101 | 105-67-9 | 2,4-Dimethylphenol |
| U101 | 105-67-9 | Phenol, 2,4-dimethyl- |
| U102 | 131-11-3 | 1,2-Benzenedicarboxylic acid, dimethyl ester |
| U102 | 131-11-3 | Dimethyl phthalate |
| U103 | 77-78-1 | Dimethyl sulfate |
| U103 | 77-78-1 | Sulfuric acid, dimethyl ester |
| U105 | 121-14-2 | Benzene, 1-methyl-2,4-dinitro- |
| U105 | 121-14-2 | 2,4-Dinitrotoluene |
| U106 | 606-20-2 | Benzene, 2-methyl-1,3-dinitro- |
| U106 | 606-20-2 | 2,6-Dinitrotoluene |
| U107 | 117-84-0 | 1,2-Benzenedicarboxylic acid, dioctyl ester |
| U107 | 117-84-0 | Di-n-octyl phthalate |
| U108 | 123-91-1 | 1,4-Diethyleneoxide |
| U108 | 123-91-1 | 1,4-Dioxane |
| U109 | 122-66-7 | 1,2-Diphenylhydrazine |
| U109 | 122-66-7 | Hydrazine, 1,2-diphenyl- |
| U110 | 142-84-7 | Dipropylamine (l) |
| U110 | 142-84-7 | 1-Propanamine, N-propyl-(l) |
| U111 | 621-64-7 | Di-n-propylnitrosamine |
| U111 | 621-64-7 | 1-Propanamine, N-nitroso-N-propyl- |
| U112 | 141-78-6 | Acetic acid ethyl ester (l) |
| U112 | 141-78-6 | Ethyl acetate (l) |
| U113 | 140-88-5 | Ethyl acrylate (l) |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| U113 | 140-88-5 | 2-Propenoic acid, ethyl ester (l) |
| U114 | 111-54-6 | Carbamodithioic acid, 1,2-ethanediy/bis-, salts & esters |
| U114 | 111-54-6 | Ethylenebisdithiocarbamic acid, salts & esters |
| U115 | 75-21-8 | Ethylene oxide (l,T) |
| U115 | 75-21-8 | Oxirane (L,T) |
| U116 | 96-45-7 | Ethylenethiourea |
| U116 | 96-45-7 | 2-Imidazolidinethione |
| U117 | 60-29-7 | Ethane, 1,1'-oxybis-(l) |
| U117 | 60-29-7 | Ethyl ether (l) |
| U118 | 97-63-2 | Ethyl methacrylate |
| U118 | 97-63-2 | 2-Propenoic acid, 2-methyl-, ethyl ester |
| U119 | 62-50-0 | Ethyl methanesulfonate |
| U119 | 62-50-0 | Methanesulfonic acid, ethyl ester |
| U120 | 206-44-0 | Fluoranthene |
| U121 | 75-69-4 | Methane, trichlorofluoro- |
| U121 | 75-69-4 | Trichloromonofluoromethane |
| U122 | 50-00-0 | Formaldehyde |
| U123 | 64-18-6 | Formic acid (C,T) |
| U124 | 110-00-9 | Furan (l) |
| U124 | 110-00-9 | Furfuran (l) |
| U125 | 98-01-1 | 2-Furancarboxaldehyde (l) |
| U125 | 98-01-1 | Furfural (l) |
| U126 | 765-34-4 | Glycidylaldehyde |
| U126 | 765-34-4 | Oxiranecarboxyaldehyde |
| U127 | 118-74-1 | Benzene, hexachloro- |
| U127 | 118-74-1 | Hexachlorobenzene |
| U128 | 87-68-3 | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- |
| U128 | 87-68-3 | Hexachlorobutadiene |
| U129 | 58-89-9 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- |
| U129 | 58-89-9 | Lindane |
| U130 | 77-47-4 | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- |
| U130 | 77-47-4 | Hexachlorocyclopentadiene |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|---|
| U131 | 67-72-1 | Ethane, hexachloro- |
| U131 | 67-72-1 | Hexachloroethane |
| U132 | 70-30-4 | Hexachlorophene |
| U132 | 70-30-4 | Phenol, 2,2'-methylenebis[3,4,6-trichloro- |
| U133 | 302-01-2 | Hydrazine (R,T) |
| U134 | 7664-39-3 | Hydrofluoric acid (C,T) |
| U134 | 7664-39-3 | Hydrogen fluoride (C,T) |
| U135 | 7783-06-4 | Hydrogen sulfide |
| U135 | 7783-06-4 | Hydrogen sulfide H ₂ S |
| U136 | 75-60-5 | Arsinic acid, dimethyl- |
| U136 | 75-60-5 | Cacodylic acid |
| U137 | 193-39-5 | Indeno[1,2,3-cd]pyrene |
| U138 | 74-88-4 | Methane, iodo- |
| U138 | 74-88-4 | Methyl iodide |
| U140 | 78-83-1 | Isobutyl alcohol (L,T) |
| U140 | 78-83-1 | 1-Propanol, 2-methyl- (L,T) |
| U141 | 120-58-1 | 1,3-Benzodioxole, 5-(1-propenyl)- |
| U141 | 120-58-1 | Isosafrole |
| U142 | 143-50-0 | Kepone |
| U142 | 143-50-0 | 1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro- |
| U143 | 303-34-4 | 2-Butenoic acid, 2-methyl-, 7-[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy[methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]- |
| U143 | 303-34-4 | Lasiocarpine |
| U144 | 301-04-2 | Acetic acid, lead(2+) salt |
| U144 | 301-04-2 | Lead acetate |
| U145 | 7446-27-7 | Lead phosphate |
| U145 | 7446-27-7 | Phosphoric acid, lead(2+) salt (2:3) |
| U146 | 1335-32-6 | Lead, bis(acetato-O)tetrahydroxytri- |
| U146 | 1335-32-6 | Lead subacetate |
| U147 | 108-31-6 | 2,5-Furandione |
| U147 | 108-31-6 | Maleic anhydride |
| U148 | 123-33-1 | Maleic hydrazide |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| U148 | 123-33-1 | 3,6-Pyridazinedione, 1,2-dihydro- |
| U149 | 109-77-3 | Malononitrile |
| U149 | 109-77-3 | Propanedinitrile |
| U150 | 148-82-3 | Melphalan |
| U150 | 148-82-3 | L-Phenylalanine, 4-[bis(2-chloroethyl)amino]- |
| U151 | 7439-97-6 | Mercury |
| U152 | 126-98-7 | Methacrylonitrile (I,T) |
| U152 | 126-98-7 | 2-Propenenitrile, 2-methyl- (I,T) |
| U153 | 74-93-1 | Methanethiol (I,T) |
| U153 | 74-93-1 | Thiomethanol (I,T) |
| U154 | 67-56-1 | Methanol (I) |
| U154 | 67-56-1 | Methyl alcohol (I) |
| U155 | 91-80-5 | 1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- |
| U155 | 91-80-5 | Methapyrilene |
| U156 | 79-22-1 | Carbonochloridic acid, methyl ester (I,T) |
| U156 | 79-22-1 | Methyl chlorocarbonate (I,T) |
| U157 | 56-49-5 | Benz[<i>j</i>]aceanthrylene, 1,2-dihydro-3-methyl- |
| U157 | 56-49-5 | 3-Methylcholanthrene |
| U158 | 101-14-4 | Benzenamine, 4,4'-methylenebis[2-chloro- |
| U158 | 101-14-4 | 4,4'-Methylenebis(2-chloroaniline) |
| U159 | 78-93-3 | 2-Butanone (I,T) |
| U159 | 78-93-3 | Methyl ethyl ketone (MEK) (I,T) |
| U160 | 1338-23-4 | 2-Butanone, peroxide (R,T) |
| U160 | 1338-23-4 | Methyl ethyl ketone peroxide (R,T) |
| U161 | 108-10-1 | Methyl isobutyl ketone (I) |
| U161 | 108-10-1 | 4-Methyl-2-pentanone (I) |
| U161 | 108-10-1 | Pentanol, 4-methyl- |
| U162 | 80-62-6 | Methyl methacrylate (I,T) |
| U162 | 80-62-6 | 2-Propenoic acid, 2-methyl-, methyl ester (I,T) |
| U163 | 70-25-7 | Guanidine, -methyl-N'-nitro-N-nitroso- |
| U163 | 70-25-7 | MNNG |
| U164 | 56-04-2 | Methylthiouracil |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| U164 | 56-04-2 | 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo- |
| U165 | 91-20-3 | Naphthalene |
| U166 | 130-15-4 | 1,4-Naphthalenedione |
| U166 | 130-15-4 | 1,4-Naphthoquinone |
| U167 | 134-32-7 | 1-Naphthalenamine |
| U167 | 134-32-7 | alpha-Naphthylamine |
| U168 | 91-59-8 | 2-Naphthalenamine |
| U168 | 91-59-8 | beta-Naphthylamine |
| U169 | 98-95-3 | Benzene, nitro- |
| U169 | 98-95-3 | Nitrobenzene (I.T) |
| U170 | 100-02-7 | p-Nitrophenol |
| U170 | 100-02-7 | Phenol, 4-nitro- |
| U171 | 79-46-9 | 2-Nitropropane (I.T) |
| U171 | 79-46-9 | Propane, 2-nitro- (I.T) |
| U172 | 924-16-3 | 1-Butanamine, N-butyl-N-nitroso- |
| U172 | 924-16-3 | N-Nitrosodi-n-butylamine |
| U173 | 1116-54-7 | Ethanol, 2,2'-(nitrosoimino)bis- |
| U173 | 1116-54-7 | N-Nitrosodiethanolamine |
| U174 | 55-18-5 | Ethanamine, -ethyl-N-nitroso- |
| U174 | 55-18-5 | N-Nitrosodiethylamine |
| U176 | 759-73-9 | N-Nitroso-N-ethylurea |
| U176 | 759-73-9 | Urea, N-ethyl-N-nitroso- |
| U177 | 684-93-5 | N-Nitroso-N-methylurea |
| U177 | 684-93-5 | Urea, N-methyl-N-nitroso- |
| U178 | 615-53-2 | Carbamic acid, methylnitroso-, ethyl ester |
| U178 | 615-53-2 | N-Nitroso-N-methylurethane |
| U179 | 100-75-4 | N-Nitrosopiperidine |
| U179 | 100-75-4 | Piperidine, 1-nitroso- |
| U180 | 930-55-2 | N-Nitrosopyrrolidine |
| U180 | 930-55-2 | Pyrrolidine, 1-nitroso- |
| U181 | 99-55-8 | Benzenamine, 2-methyl-5-nitro- |
| U181 | 99-55-8 | 5-Nitro-o-toluidine |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| U182 | 123-63-7 | 1,3,5-Trioxane, 2,4,6-trimethyl- |
| U182 | 123-63-7 | Paraldehyde |
| U183 | 608-93-5 | Benzene, pentachloro- |
| U183 | 608-93-5 | Pentachlorobenzene |
| U184 | 76-01-7 | Ethane, pentachloro- |
| U184 | 76-01-7 | Pentachloroethane |
| U185 | 82-68-8 | Benzene, pentachloronitro- |
| U185 | 82-68-8 | Pentachloronitrobenzene (PCNB) |
| U186 | 504-60-9 | 1-Methylbutadiene (I) |
| U186 | 504-60-9 | 1,3-Pentadiene (I) |
| U187 | 62-44-2 | Acetamide, -(4-ethoxyphenyl)- |
| U187 | 62-44-2 | Phenacetin |
| U188 | 108-95-2 | Phenol |
| U189 | 1314-80-3 | Phosphorus sulfide (R) |
| U189 | 1314-80-3 | Sulfur phosphide (R) |
| U190 | 85-44-9 | 1,3-Isobenzofurandione |
| U190 | 85-44-9 | Phthalic anhydride |
| U191 | 109-06-8 | 2-Picoline |
| U191 | 109-06-8 | Pyridine, 2-methyl- |
| U192 | 23950-58-5 | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)- |
| U192 | 23950-58-5 | Pronamide |
| U193 | 1120-71-4 | 1,2-Oxathiolane, 2,2-dioxide |
| U193 | 1120-71-4 | 1,3-Propane sultone |
| U194 | 107-10-8 | 1-Propanamine (I,T) |
| U194 | 107-10-8 | n-Propylamine (I,T) |
| U196 | 110-86-1 | Pyridine |
| U197 | 106-51-4 | p-Benzoquinone |
| U197 | 106-51-4 | 2,5-Cyclohexadiene-1,4-dione |
| U200 | 50-55-5 | Reserpine |
| U200 | 50-55-5 | Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyloxy)-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)- |
| U201 | 108-46-3 | 1,3-Benzenediol |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| U201 | 108-46-3 | Resorcinol |
| U203 | 94-59-7 | 1,3-Benzodioxole, 5-(2-propenyl)- |
| U203 | 94-59-7 | Safrole |
| U204 | 7783-00-8 | Selenious acid |
| U204 | 7783-00-8 | Selenium dioxide |
| U205 | 7488-56-4 | Selenium sulfide |
| U205 | 7488-56-4 | Selenium sulfide SeS ₂ (R,T) |
| U206 | 18883-66-4 | Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D- |
| U206 | 18883-66-4 | D-Glucose, 2-deoxy-2-[[methylnitrosoamino]-carbonylamino]- |
| U206 | 18883-66-4 | Streptozotocin |
| U207 | 95-94-3 | Benzene, 1,2,4,5-tetrachloro- |
| U207 | 95-94-3 | 1,2,4,5-Tetrachlorobenzene |
| U208 | 630-20-6 | Ethane, 1,1,1,2-tetrachloro- |
| U208 | 630-20-6 | 1,1,1,2-Tetrachloroethane |
| U209 | 79-34-5 | Ethane, 1,1,2,2-tetrachloro- |
| U209 | 79-34-5 | 1,1,2,2-Tetrachloroethane |
| U210 | 127-18-4 | Ethene, tetrachloro- |
| U210 | 127-18-4 | Tetrachloroethylene |
| U211 | 56-23-5 | Carbon tetrachloride |
| U211 | 56-23-5 | Methane, tetrachloro- |
| U213 | 109-99-9 | Furan, tetrahydro-(l) |
| U213 | 109-99-9 | Tetrahydrofuran (l) |
| U214 | 563-68-8 | Acetic acid, thallium(1 +) salt |
| U214 | 563-68-8 | Thallium(I) acetate |
| U215 | 6533-73-9 | Carbonic acid, dithallium(1 +) salt |
| U215 | 6533-73-9 | Thallium(I) carbonate |
| U216 | 7791-12-0 | Thallium(I) chloride |
| U216 | 7791-12-0 | Thallium chloride TlCl |
| U217 | 10102-45-1 | Nitric acid, thallium(1 +) salt |
| U217 | 10102-45-1 | Thallium(I) nitrate |
| U218 | 62-55-5 | Ethanethioamide |
| U218 | 62-55-5 | Thioacetamide |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|---|
| U219 | 62-56-6 | Thiourea |
| U220 | 108-88-3 | Benzene, methyl- |
| U220 | 108-88-3 | Toluene |
| U221 | 25376-45-8 | Benzenediamine, ar-methyl- |
| U221 | 25376-45-8 | Toluenediamine |
| U222 | 636-21-5 | Benzenamine, 2-methyl-, hydrochloride |
| U222 | 636-21-5 | o-Toluidine hydrochloride |
| U223 | 26471-62-5 | Benzene, 1,3-diisocyanatomethyl- (R,T) |
| U223 | 26471-62-5 | Toluene diisocyanate (R,T) |
| U225 | 75-25-2 | Bromoform |
| U225 | 75-25-2 | Methane, tribromo- |
| U226 | 71-55-6 | Ethane, 1,1,1-trichloro- |
| U226 | 71-55-6 | Methyl chloroform |
| U226 | 71-55-6 | 1,1,1-Trichloroethane |
| U227 | 79-00-5 | Ethane, 1,1,2-trichloro- |
| U227 | 79-00-5 | 1,1,2-Trichloroethane |
| U228 | 79-01-6 | Ethene, trichloro- |
| U228 | 79-01-6 | Trichloroethylene |
| U234 | 99-35-4 | Benzene, 1,3,5-trinitro- |
| U234 | 99-35-4 | 1,3,5-Trinitrobenzene (R,T) |
| U235 | 126-72-7 | 1-Propanol, 2,3-dibromo-, phosphate (3:1) |
| U235 | 126-72-7 | Tris(2,3-dibromopropyl) phosphate |
| U236 | 72-57-1 | 2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt |
| U236 | 72-57-1 | Trypan blue |
| U237 | 66-75-1 | 2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]- |
| U237 | 66-75-1 | Uracil mustard |
| U238 | 51-79-6 | Carbamic acid, ethyl ester |
| U238 | 51-79-6 | Ethyl carbamate (urethane) |
| U239 | 1330-20-7 | Benzene, dimethyl- (L,T) |
| U239 | 1330-20-7 | Xylene (l) |
| U240 | 194-75-7 | Acetic acid, (2,4-dichlorophenoxy)-, salts & esters |
| U240 | 194-75-7 | 2,4-D, salts & esters |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|---|
| U243 | 1888-71-7 | Hexachloropropene |
| U243 | 1888-71-7 | 1-Propene, 1,1,2,3,3,3-hexachloro- |
| U244 | 137-26-8 | Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl- |
| U244 | 137-26-8 | Thiram |
| U246 | 506-68-3 | Cyanogen bromide (CN)Br |
| U247 | 72-43-5 | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4- methoxy- |
| U247 | 72-43-5 | Methoxychlor |
| U248 | 181-81-2 | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less |
| U248 | 181-81-2 | Warfarin, & salts, when present at concentrations of 0.3% or less |
| U249 | 1314-84-7 | Zinc phosphide Zn ₃ P ₂ , when present at concentrations of 10% or less |
| U271 | 17804-35-2 | Benomyl |
| U271 | 17804-35-2 | Carbamic acid, [1-(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester |
| U278 | 22781-23-3 | Bendiocarb |
| U278 | 22781-23-3 | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate |
| U279 | 63-25-2 | Carbaryl |
| U279 | 63-25-2 | 1-Naphthalenol, methylcarbamate |
| U280 | 101-27-9 | Barban |
| U280 | 101-27-9 | Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester |
| U328 | 95-53-4 | Benzenamine, 2-methyl- |
| U328 | 95-53-4 | o-Toluidine |
| U353 | 106-49-0 | Benzenamine, 4-methyl- |
| U353 | 106-49-0 | p-Toluidine |
| U359 | 110-80-5 | Ethanol, 2-ethoxy- |
| U359 | 110-80-5 | Ethylene glycol monoethyl ether |
| U364 | 22961-82-6 | Bendiocarb phenol |
| U364 | 22961-82-6 | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, |
| U367 | 1563-38-8 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- |
| U367 | 1563-38-8 | Carbofuran phenol |
| U372 | 10605-21-7 | Carbamic acid, 1H-benzimidazol-2-yl, methyl ester |
| U372 | 10605-21-7 | Carbendazim |
| U373 | 122-42-9 | Carbamic acid, phenyl-, 1-methylethyl ester |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| U373 | 122-42-9 | Propham |
| U387 | 52888-80-9 | Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester |
| U387 | 52888-80-9 | Prosulfocarb |
| U389 | 2303-17-5 | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester |
| U389 | 2303-17-5 | Triallate |
| U394 | 30558-43-1 | A2213 |
| U394 | 30558-43-1 | Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester |
| U395 | 5952-26-1 | Diethylene glycol, dicarbamate |
| U395 | 5952-26-1 | Ethanol, 2,2'-oxybis-, dicarbamate |
| U404 | 121-44-8 | Ethanamine, N,N-diethyl- |
| U404 | 121-44-8 | Triethylamine |
| U409 | 23564-05-8 | Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester |
| U409 | 23564-05-8 | Thiophanate-methyl |
| U410 | 59669-26-0 | Ethanimidothioic acid, N,N'-[thiobis(methylimino)carbonyloxy]]bis-, dimethyl ester |
| U410 | 59669-26-0 | Thiodicarb |
| U411 | 114-26-1 | Phenol, 2-(1-methylethoxy)-, methylcarbamate |
| U411 | 114-26-1 | Propoxur |
| See F027 | 93-76-5 | Acetic acid, (2,4,5-trichlorophenoxy)- |
| See F027 | 87-86-5 | Pentachlorophenol |
| See F027 | 87-86-5 | Phenol, pentachloro- |
| See F027 | 58-90-2 | Phenol, 2,3,4,6-tetrachloro- |
| See F027 | 95-95-4 | Phenol, 2,4,5-trichloro- |
| See F027 | 88-06-2 | Phenol, 2,4,6-trichloro- |
| See F027 | 93-72-1 | Propanoic acid, 2-(2,4,5-trichlorophenoxy)- |
| See F027 | 93-72-1 | Silvex (2,4,5-TP) |
| See F027 | 93-76-5 | 2,4,5-T |
| See F027 | 58-90-2 | 2,3,4,6-Tetrachlorophenol |
| See F027 | 95-95-4 | 2,4,5-Trichlorophenol |
| See F027 | 88-06-2 | 2,4,6-Trichlorophenol |

¹CAS Number given for parent compound only.

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

APPENDIX IV

Acutely Hazardous Wastes
(Alphabetical by Substance)

The following list of acutely hazardous wastes is referred to in § 7-215.

Note: For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P023 | 107-20-0 | Acetaldehyde, chloro- |
| P002 | 591-08-2 | Acetamide, N-(aminothioxomethyl)- |
| P057 | 640-19-7 | Acetamide, 2-fluoro- |
| P058 | 62-74-8 | Acetic acid, fluoro-, sodium salt |
| P002 | 591-08-2 | 1-Acetyl-2-thiourea |
| P003 | 107-02-8 | Acrolein |
| P070 | 116-06-3 | Aldicarb |
| P203 | 1646-88-4 | Aldicarb sulfone |
| P004 | 309-00-2 | Aldrin |
| P005 | 107-18-6 | Allyl alcohol |
| P006 | 20859-73-8 | Aluminum phosphide (R,T) |
| P007 | 2763-96-4 | 5-(Aminomethyl)-3-isoxazolol |
| P008 | 504-24-5 | 4-Aminopyridine |
| P009 | 131-74-8 | Ammonium picrate (R) |
| P119 | 7803-55-6 | Ammonium vanadate |
| P099 | 506-61-6 | Argentate(1-), bis(cyano-C)-, potassium |
| P010 | 7778-39-4 | Arsenic acid H ₃ AsO ₄ |
| P012 | 1327-53-3 | Arsenic oxide As ₂ O ₃ |
| P011 | 1303-28-2 | Arsenic oxide As ₂ O ₅ |
| P011 | 1303-28-2 | Arsenic pentoxide |
| P012 | 1327-53-3 | Arsenic trioxide |
| P038 | 692-42-2 | Arsine, diethyl- |
| P036 | 696-28-6 | Arsonous dichloride, phenyl- |
| P054 | 151-56-4 | Aziridine |
| P067 | 75-55-8 | Aziridine, 2-methyl- |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P013 | 542-62-1 | Barium cyanide |
| P024 | 106-47-8 | Benzenamine, 4-chloro- |
| P077 | 100-01-6 | Benzenamine, 4-nitro- |
| P028 | 100-44-7 | Benzene, (chloromethyl)- |
| P042 | 51-43-4 | 1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)- |
| P046 | 122-09-8 | Benzencethanamine, alpha,alpha-dimethyl- |
| P014 | 108-98-5 | Benzenethiol |
| P127 | 1563-66-2 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate |
| P188 | 57-64-7 | Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1) |
| P001 | 181-81-2 | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3% |
| P028 | 100-44-7 | Benzyl chloride |
| P015 | 7440-41-7 | Beryllium powder |
| P017 | 598-31-2 | Bromoacetone |
| P018 | 357-57-3 | Brucine |
| P045 | 39196-18-4 | 2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime |
| P021 | 592-01-8 | Calcium cyanide |
| P021 | 592-01-8 | Calcium cyanide Ca(CN) ₂ |
| P189 | 55285-14-8 | Carbamic acid, [(dibutylamino)- thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester |
| P191 | 644-64-4 | Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl-1H-pyrazol-3-yl ester |
| P192 | 119-38-0 | Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester |
| P190 | 1129-41-5 | Carbamic acid, methyl-, 3-methylphenyl ester |
| P127 | 1563-66-2 | Carbofuran |
| P022 | 75-15-0 | Carbon disulfide |
| P095 | 75-44-5 | Carbonic dichloride |
| P189 | 55285-14-8 | Carbosulfan |
| P023 | 107-20-0 | Chloroacetaldehyde |
| P024 | 106-47-8 | p-Chloroaniline |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P026 | 5344-82-1 | 1-(o-Chlorophenyl)thiourea |
| P027 | 542-76-7 | 3-Chloropropionitrile |
| P029 | 544-92-3 | Copper cyanide |
| P029 | 544-92-3 | Copper cyanide Cu(CN) |
| P202 | 64-00-6 | m-Cumenyl methylcarbamate |
| P030 | | Cyanides (soluble cyanide salts), not otherwise specified |
| P031 | 460-19-5 | Cyanogen |
| P033 | 506-77-4 | Cyanogen chloride |
| P033 | 506-77-4 | Cyanogen chloride (CN)Cl |
| P034 | 131-89-5 | 2-Cyclohexyl-4,6-dinitrophenol |
| P016 | 542-88-1 | Dichloromethyl ether |
| P036 | 696-28-6 | Dichlorophenylarsine |
| P037 | 60-57-1 | Dieldrin |
| P038 | 692-42-2 | Diethylarsine |
| P041 | 311-45-5 | Diethyl-p-nitrophenyl phosphate |
| P040 | 297-97-2 | O,O-Diethyl O-pyrazinyl phosphorothioate |
| P043 | 55-91-4 | Diisopropylfluorophosphate (DFP) |
| P004 | 309-00-2 | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)- |
| P060 | 465-73-6 | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)- |
| P037 | 60-57-1 | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2alpha,3beta,6beta,6alpha,7beta, 7alpha)- |
| P051 | 172-20-8 | 2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta, 7alpha)-, & metabolites |
| P044 | 60-51-5 | Dimethoate |
| P046 | 122-09-8 | alpha,alpha-Dimethylphenethylamine |
| P191 | 644-64-4 | Dimetilan |
| P047 | 1534-52-1 | 4,6-Dinitro-o-cresol, & salts |
| P048 | 51-28-5 | 2,4-Dinitrophenol |
| P020 | 88-85-7 | Dinoseb |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P085 | 152-16-9 | Diphosphoramidate, octamethyl- |
| P111 | 107-49-3 | Diphosphoric acid, tetraethyl ester |
| P039 | 298-04-4 | Disulfoton |
| P049 | 541-53-7 | Dithiobiuret |
| P185 | 26419-73-8 | 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)-carbonyl]oxime |
| P050 | 115-29-7 | Endosulfan |
| P088 | 145-73-3 | Endothall |
| P051 | 72-20-8 | Endrin |
| P051 | 72-20-8 | Endrin, & metabolites |
| P042 | 51-43-4 | Epinephrine |
| P031 | 460-19-5 | Ethanedinitrile |
| P194 | 23135-22-0 | Ethanimidothioic acid, 2-(dimethylamino)-N-[[[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester |
| P066 | 16752-77-5 | Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester |
| P101 | 107-12-0 | Ethyl cyanide |
| P054 | 151-56-4 | Ethyleneimine |
| P097 | 52-85-7 | Famphur |
| P056 | 7782-41-4 | Fluorine |
| P057 | 640-19-7 | Fluoroacetamide |
| P058 | 62-74-8 | Fluoroacetic acid, sodium salt |
| P198 | 23422-53-9 | Formetanate hydrochloride |
| P197 | 17702-57-7 | Formparanate |
| P065 | 628-86-4 | Fulminic acid, mercury(2+) salt (R,T) |
| P059 | 76-44-8 | Heptachlor |
| P062 | 757-58-4 | Hexaethyl tetraphosphate |
| P116 | 79-19-6 | Hydrazinecarbothioamide |
| P068 | 60-34-4 | Hydrazine, methyl- |
| P063 | 74-90-8 | Hydrocyanic acid |
| P063 | 74-90-8 | Hydrogen cyanide |
| P096 | 7803-51-2 | Hydrogen phosphide |
| P060 | 465-73-6 | Isodrin |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P192 | 119-38-0 | Isolan |
| P202 | 64-00-6 | 3-Isopropylphenyl N-methylcarbamate |
| P007 | 2763-96-4 | 3(2H)-Isoxazolone, 5-(aminomethyl)- |
| P196 | 15339-36-3 | Manganese, bis(dimethylcarbamo-dithioato-S,S[prime])- |
| P196 | 15339-36-3 | Manganese dimethyldithiocarbamate |
| P092 | 62-38-4 | Mercury, (acetato-O)phenyl- |
| P065 | 628-86-4 | Mercury fulminate (R,T) |
| P082 | 62-75-9 | Methanamine, N-methyl-N-nitroso- |
| P064 | 624-83-9 | Methane, isocyanato- |
| P016 | 542-88-1 | Methane, oxybis[chloro- |
| P112 | 509-14-8 | Methane, tetranitro- (R) |
| P118 | 75-70-7 | Methanethiol, trichloro- |
| P198 | 23422-53-9 | Methanimidamide, N,N-dimethyl-N[prime]- [3-[[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride |
| P197 | 17702-57-7 | Methanimidamide, N,N-dimethyl-N[prime]- [2-methyl-4-[[[(methylamino)carbonyl]oxy]phenyl]- |
| P050 | 115-29-7 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10- hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide |
| P059 | 76-44-8 | 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro- |
| P199 | 2032-65-7 | Methiocarb |
| P066 | 16752-77-5 | Methomyl |
| P068 | 60-34-4 | Methyl hydrazine |
| P064 | 624-83-9 | Methyl isocyanate |
| P069 | 75-86-5 | 2-Methylactonitrile |
| P071 | 298-00-0 | Methyl parathion |
| P190 | 1129-41-5 | Metolcarb |
| P128 | 315-8-4 | Mexacarbate |
| P072 | 86-88-4 | alpha-Naphthylthiourea |
| P073 | 13463-39-3 | Nickel carbonyl |
| P073 | 13463-39-3 | Nickel carbonyl Ni(CO)4, (T-4)- |
| P074 | 557-19-7 | Nickel cyanide |
| P074 | 557-19-7 | Nickel cyanide Ni(CN)2 |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P075 | 154-11-5 | Nicotine, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies). |
| P076 | 10102-43-9 | Nitric oxide |
| P077 | 100-01-6 | p-Nitroaniline |
| P078 | 10102-44-0 | Nitrogen dioxide |
| P076 | 10102-43-9 | Nitrogen oxide NO |
| P078 | 10102-44-0 | Nitrogen oxide NO2 |
| P081 | 55-63-0 | Nitroglycerine (R) |
| P082 | 62-75-9 | N-Nitrosodimethylamine |
| P084 | 4549-40-0 | N-Nitrosomethylvinylamine |
| P085 | 152-16-9 | Octamethylpyrophosphoramidate |
| P087 | 20816-12-0 | Osmium oxide OsO4, (T-4)- |
| P087 | 20816-12-0 | Osmium tetroxide |
| P088 | 145-73-3 | 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid |
| P194 | 23135-22-0 | Oxamyl |
| P089 | 56-38-2 | Parathion |
| P034 | 131-89-5 | Phenol, 2-cyclohexyl-4,6-dinitro- |
| P048 | 51-28-5 | Phenol, 2,4-dinitro- |
| P047 | 1534-52-1 | Phenol, 2-methyl-4,6-dinitro-, & salts |
| P020 | 88-85-7 | Phenol, 2-(1-methylpropyl)-4,6-dinitro- |
| P009 | 131-74-8 | Phenol, 2,4,6-trinitro-, ammonium salt (R) |
| P128 | 315-18-4 | Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester) |
| P199 | 2032-65-7 | Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate |
| P202 | 64-00-6 | Phenol, 3-(1-methylethyl)-, methylcarbamate |
| P201 | 2631-37-0 | Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate |
| P092 | 62-38-4 | Phenylmercury acetate |
| P093 | 103-85-5 | Phenylthiourea |
| P094 | 298-02-2 | Phorate |
| P095 | 75-44-5 | Phosgene |
| P096 | 7803-51-2 | Phosphine |
| P041 | 311-45-5 | Phosphoric acid, diethyl 4-nitrophenyl ester |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P039 | 298-04-4 | Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester |
| P094 | 298-02-2 | Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester |
| P044 | 60-51-5 | Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester |
| P043 | 55-91-4 | Phosphorofluoridic acid, bis(1-methylethyl) ester |
| P089 | 56-38-2 | Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester |
| P040 | 297-97-2 | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester |
| P097 | 52-85-7 | Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester |
| P071 | 298-00-0 | Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester |
| P204 | 57-47-6 | Physostigmine |
| P188 | 57-64-7 | Physostigmine salicylate |
| P110 | 78-00-2 | Plumbane, tetraethyl- |
| P098 | 151-50-8 | Potassium cyanide |
| P098 | 151-50-8 | Potassium cyanide K(CN) |
| P099 | 506-61-6 | Potassium silver cyanide |
| P201 | 2631-37-0 | Promecarb |
| P070 | 116-06-3 | Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime |
| P203 | 1646-88-4 | Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime |
| P101 | 107-12-0 | Propanenitrile |
| P027 | 542-76-7 | Propanenitrile, 3-chloro- |
| P069 | 75-86-5 | Propanenitrile, 2-hydroxy-2-methyl- |
| P081 | 55-63-0 | 1,2,3-Propanetriol, trinitrate (R) |
| P017 | 598-31-2 | 2-Propanone, 1-bromo- |
| P102 | 107-19-7 | Propargyl alcohol |
| P003 | 107-02-8 | 2-Propenal |
| P005 | 107-18-6 | 2-Propen-1-ol |
| P067 | 75-55-8 | 1,2-Propylenimine |
| P102 | 107-19-7 | 2-Propyn-1-ol |
| P008 | 504-24-5 | 4-Pyridinamine |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P075 | '54-11-5 | Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies). |
| P204 | 57-47-6 | Pyrrolo[2,3-b]indol-5-ol,1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-,methylcarbamate (ester), (3aS-cis)- |
| P114 | 12039-52-0 | Selenious acid, dithallium(1+) salt |
| P103 | 630-10-4 | Selenourea |
| P104 | 506-64-9 | Silver cyanide |
| P104 | 506-64-9 | Silver cyanide Ag(CN) |
| P105 | 26628-22-8 | Sodium azide |
| P106 | 143-33-9 | Sodium cyanide |
| P106 | 143-33-9 | Sodium cyanide Na(CN) |
| P108 | '57-24-9 | Strychnidin-10-one, & salts |
| P018 | 357-57-3 | Strychnidin-10-one, 2,3-dimethoxy- |
| P108 | '57-24-9 | Strychnine, & salts |
| P115 | 7446-18-6 | Sulfuric acid, dithallium(1+) salt |
| P109 | 3689-24-5 | Tetraethyldithiopyrophosphate |
| P110 | 78-00-2 | Tetraethyl lead |
| P111 | 107-49-3 | Tetraethyl pyrophosphate |
| P112 | 509-14-8 | Tetranitromethane (R) |
| P062 | 757-58-4 | Tetrphosphoric acid, hexaethyl ester |
| P113 | 1314-32-5 | Thallic oxide |
| P113 | 1314-32-5 | Thallium oxide Tl2O3 |
| P114 | 12039-52-0 | Thallium(I) selenite |
| P115 | 7446-18-6 | Thallium(I) sulfate |
| P109 | 3689-24-5 | Thiodiphosphoric acid, tetraethyl ester |
| P045 | 39196-18-4 | Thiofanox |
| P049 | 541-53-7 | Thioimidodicarbonic diamide [(H2N)C(S)]2NH |
| P014 | 108-98-5 | Thiophenol |
| P116 | 79-19-6 | Thiosemicarbazide |
| P026 | 5344-82-1 | Thiourea, (2-chlorophenyl)- |
| P072 | 86-88-4 | Thiourea, 1-naphthalenyl- |
| P093 | 103-85-5 | Thiourea, phenyl- |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P185 | 26419-73-8 | Tirpate |
| P123 | 8001-35-2 | Toxaphene |
| P118 | 75-70-7 | Trichloromethanethiol |
| P119 | 7803-55-6 | Vanadic acid, ammonium salt |
| P120 | 1314-62-1 | Vanadium oxide V2O5 |
| P120 | 1314-62-1 | Vanadium pentoxide |
| P084 | 4549-40-0 | Vinylamine, N-methyl-N-nitroso- |
| P001 | ¹ 81-81-2 | Warfarin, & salts, when present at concentrations greater than 0.3% |
| P205 | 137-30-4 | Zinc, bis(dimethylcarbamodithioato- S,S[prime])- |
| P121 | 557-21-1 | Zinc cyanide |
| P121 | 557-21-1 | Zinc cyanide Zn(CN)2 |
| P122 | 1314-84-7 | Zinc phosphide Zn3P2, when present at concentrations greater than 10% (R,T) |
| P205 | 137-30-4 | Ziram |

FOOTNOTE: ¹CAS Number given for parent compound only.

Acutely Hazardous Wastes
(Numerical by Hazardous Waste Code)

The following list of acutely hazardous wastes is referred to in § 7-215.

Note: For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P001 | ¹ 81-81-2 | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3% |
| P001 | ¹ 81-81-2 | Warfarin, & salts, when present at concentrations greater than 0.3% |
| P002 | 591-08-2 | Acetamide, -(aminothioxomethyl)- |
| P002 | 591-08-2 | 1-Acetyl-2-thiourea |
| P003 | 107-02-8 | Acrolein |
| P003 | 107-02-8 | 2-Propenal |
| P004 | 309-00-2 | Aldrin |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|---|
| P004 | 309-00-2 | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)- |
| P005 | 107-18-6 | Allyl alcohol |
| P005 | 107-18-6 | 2-Propen-1-ol |
| P006 | 20859-73-8 | Aluminum phosphide (R,T) |
| P007 | 2763-96-4 | 5-(Aminomethyl)-3-isoxazolol |
| P007 | 2763-96-4 | 3(2H)-Isoxazolone, 5-(aminomethyl)- |
| P008 | 504-24-5 | 4-Aminopyridine |
| P008 | 504-24-5 | 4-Pyridinamine |
| P009 | 131-74-8 | Ammonium picrate (R) |
| P009 | 131-74-8 | Phenol, 2,4,6-trinitro-, ammonium salt (R) |
| P010 | 7778-39-4 | Arsenic acid H ₃ AsO ₄ |
| P011 | 1303-28-2 | Arsenic oxide As ₂ O ₃ |
| P011 | 1303-28-2 | Arsenic pentoxide |
| P012 | 1327-53-3 | Arsenic oxide As ₂ O ₃ |
| P012 | 1327-53-3 | Arsenic trioxide |
| P013 | 542-62-1 | Barium cyanide |
| P014 | 108-98-5 | Benzenethiol |
| P014 | 108-98-5 | Thiophenol |
| P015 | 7440-41-7 | Beryllium powder |
| P016 | 542-88-1 | Dichloromethyl ether |
| P016 | 542-88-1 | Methane, oxybis[chloro- |
| P017 | 598-31-2 | Bromoacetone |
| P017 | 598-31-2 | 2-Propanone, 1-bromo- |
| P018 | 357-57-3 | Brucine |
| P018 | 357-57-3 | Strychnidin-10-one, 2,3-dimethoxy- |
| P020 | 88-85-7 | Dinoseb |
| P020 | 88-85-7 | Phenol, 2-(1-methylpropyl)-4,6-dinitro- |
| P021 | 592-01-8 | Calcium cyanide |
| P021 | 592-01-8 | Calcium cyanide Ca(CN) ₂ |
| P022 | 75-15-0 | Carbon disulfide |
| P023 | 107-20-0 | Acetaldehyde, chloro- |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| P023 | 107-20-0 | Chloroacetaldehyde |
| P024 | 106-47-8 | Benzenamine, 4-chloro- |
| P024 | 106-47-8 | p-Chloroaniline |
| P026 | 5344-82-1 | 1-(o-Chlorophenyl)thiourea |
| P026 | 5344-82-1 | Thiourea, (2-chlorophenyl)- |
| P027 | 542-76-7 | 3-Chloropropionitrile |
| P027 | 542-76-7 | Propanenitrile, 3-chloro- |
| P028 | 100-44-7 | Benzene, (chloromethyl)- |
| P028 | 100-44-7 | Benzyl chloride |
| P029 | 544-92-3 | Copper cyanide |
| P029 | 544-92-3 | Copper cyanide Cu(CN) |
| P030 | | Cyanides (soluble cyanide salts), not otherwise specified |
| P031 | 460-19-5 | Cyanogen |
| P031 | 460-19-5 | Ethanedinitrile |
| P033 | 506-77-4 | Cyanogen chloride |
| P033 | 506-77-4 | Cyanogen chloride (CN)Cl |
| P034 | 131-89-5 | 2-Cyclohexyl-4,6-dinitrophenol |
| P034 | 131-89-5 | Phenol, 2-cyclohexyl-4,6-dinitro- |
| P036 | 696-28-6 | Arsonous dichloride, phenyl- |
| P036 | 696-28-6 | Dichlorophenylarsine |
| P037 | 60-57-1 | Dieldrin |
| P037 | 60-57-1 | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2alpha,3beta,6beta,6alpha,7beta, 7alpha)- |
| P038 | 692-42-2 | Arsine, diethyl- |
| P038 | 692-42-2 | Diethylarsine |
| P039 | 298-04-4 | Disulfoton |
| P039 | 298-04-4 | Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester |
| P040 | 297-97-2 | O,O-Diethyl O-pyrazinyl phosphorothioate |
| P040 | 297-97-2 | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester |
| P041 | 311-45-5 | Diethyl-p-nitrophenyl phosphate |
| P041 | 311-45-5 | Phosphoric acid, diethyl 4-nitrophenyl ester |
| P042 | 51-43-4 | 1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)- |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| P042 | 51-43-4 | Epinephrine |
| P043 | 55-91-4 | Diisopropylfluorophosphate (DFP) |
| P043 | 55-91-4 | Phosphorofluoric acid, bis(1-methylethyl) ester |
| P044 | 60-51-5 | Dimethoate |
| P044 | 60-51-5 | Phosphorodithioic acid, O,O-dimethyl S-[2-(methyl amino)-2-oxoethyl] ester |
| P045 | 39196-18-4 | 2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime |
| P045 | 39196-18-4 | Thiofanox |
| P046 | 122-09-8 | Benzencethanamine, alpha,alpha-dimethyl- |
| P046 | 122-09-8 | alpha,alpha-Dimethylphenethylamine |
| P047 | 1534-52-1 | 4,6-Dinitro-o-cresol, & salts |
| P047 | 1534-52-1 | Phenol, 2-methyl-4,6-dinitro-, & salts |
| P048 | 51-28-5 | 2,4-Dinitrophenol |
| P048 | 51-28-5 | Phenol, 2,4-dinitro- |
| P049 | 541-53-7 | Dithiobiuret |
| P049 | 541-53-7 | Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH |
| P050 | 115-29-7 | Endosulfan |
| P050 | 115-29-7 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide |
| P051 | 172-20-8 | 2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta, 7aalpha)-, & metabolites |
| P051 | 72-20-8 | Endrin |
| P051 | 72-20-8 | Endrin, & metabolites |
| P054 | 151-56-4 | Aziridine |
| P054 | 151-56-4 | Ethyleneimine |
| P056 | 7782-41-4 | Fluorine |
| P057 | 640-19-7 | Acetamide, 2-fluoro- |
| P057 | 640-19-7 | Fluoroacetamide |
| P058 | 62-74-8 | Acetic acid, fluoro-, sodium salt |
| P058 | 62-74-8 | Fluoroacetic acid, sodium salt |
| P059 | 76-44-8 | Heptachlor |
| P059 | 76-44-8 | 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|---|
| P060 | 465-73-6 | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)- |
| P060 | 465-73-6 | Isodrin |
| P062 | 757-58-4 | Hexaethyl tetraphosphate |
| P062 | 757-58-4 | Tetraphosphoric acid, hexaethyl ester |
| P063 | 74-90-8 | Hydrocyanic acid |
| P063 | 74-90-8 | Hydrogen cyanide |
| P064 | 624-83-9 | Methane, isocyanato- |
| P064 | 624-83-9 | Methyl isocyanate |
| P065 | 628-86-4 | Fulminic acid, mercury(2 +) salt (R,T) |
| P065 | 628-86-4 | Mercury fulminate (R,T) |
| P066 | 16752-77-5 | Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester |
| P066 | 16752-77-5 | Methomyl |
| P067 | 75-55-8 | Aziridine, 2-methyl- |
| P067 | 75-55-8 | 1,2-Propylenimine |
| P068 | 60-34-4 | Hydrazine, methyl- |
| P068 | 60-34-4 | Methyl hydrazine |
| P069 | 75-86-5 | 2-Methylactonitrile |
| P069 | 75-86-5 | Propanenitrile, 2-hydroxy-2-methyl- |
| P070 | 116-06-3 | Aldicarb |
| P070 | 116-06-3 | Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime |
| P071 | 298-00-0 | Methyl parathion |
| P071 | 298-00-0 | Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester |
| P072 | 86-88-4 | alpha-Naphthylthiourea |
| P072 | 86-88-4 | Thiourea, 1-naphthalenyl- |
| P073 | 13463-39-3 | Nickel carbonyl |
| P073 | 13463-39-3 | Nickel carbonyl Ni(CO) ₄ , (T-4)- |
| P074 | 557-19-7 | Nickel cyanide |
| P074 | 557-19-7 | Nickel cyanide Ni(CN) ₂ |
| P075 | 154-11-5 | Nicotine, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies). |
| P075 | 154-11-5 | Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies). |

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| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| P076 | 10102-43-9 | Nitric oxide |
| P076 | 10102-43-9 | Nitrogen oxide NO |
| P077 | 100-01-6 | Benzenamine, 4-nitro- |
| P077 | 100-01-6 | p-Nitroaniline |
| P078 | 10102-44-0 | Nitrogen dioxide |
| P078 | 10102-44-0 | Nitrogen oxide NO ₂ |
| P081 | 55-63-0 | Nitroglycerine (R) |
| P081 | 55-63-0 | 1,2,3-Propanetriol, trinitrate (R) |
| P082 | 62-75-9 | Methanamine, -methyl-N-nitroso- |
| P082 | 62-75-9 | N-Nitrosodimethylamine |
| P084 | 4549-40-0 | N-Nitrosomethylvinylamine |
| P084 | 4549-40-0 | Vinylamine, -methyl-N-nitroso- |
| P085 | 152-16-9 | Diphosphoramidate, octamethyl- |
| P085 | 152-16-9 | Octamethylpyrophosphoramidate |
| P087 | 20816-12-0 | Osmium oxide OsO ₄ , (T-4)- |
| P087 | 20816-12-0 | Osmium tetroxide |
| P088 | 145-73-3 | Endothall |
| P088 | 145-73-3 | 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid |
| P089 | 56-38-2 | Parathion |
| P089 | 56-38-2 | Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester |
| P092 | 62-38-4 | Mercury, (acetato-O)phenyl- |
| P092 | 62-38-4 | Phenylmercury acetate |
| P093 | 103-85-5 | Phenylthiourea |
| P093 | 103-85-5 | Thiourea, phenyl- |
| P094 | 298-02-2 | Phorate |
| P094 | 298-02-2 | Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester |
| P095 | 75-44-5 | Carbonic dichloride |
| P095 | 75-44-5 | Phosgene |
| P096 | 7803-51-2 | Hydrogen phosphide |
| P096 | 7803-51-2 | Phosphine |
| P097 | 52-85-7 | Famphur |
| P097 | 52-85-7 | Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O- |

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| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|---|
| | | dimethyl ester |
| P098 | 151-50-8 | Potassium cyanide |
| P098 | 151-50-8 | Potassium cyanide K(CN) |
| P099 | 506-61-6 | Argentate(1-), bis(cyano-C)-, potassium |
| P099 | 506-61-6 | Potassium silver cyanide |
| P101 | 107-12-0 | Ethyl cyanide |
| P101 | 107-12-0 | Propanenitrile |
| P102 | 107-19-7 | Propargyl alcohol |
| P102 | 107-19-7 | 2-Propyn-1-ol |
| P103 | 630-10-4 | Selenourea |
| P104 | 506-64-9 | Silver cyanide |
| P104 | 506-64-9 | Silver cyanide Ag(CN) |
| P105 | 26628-22-8 | Sodium azide |
| P106 | 143-33-9 | Sodium cyanide |
| P106 | 143-33-9 | Sodium cyanide Na(CN) |
| P108 | ¹ 157-24-9 | Strychnidin-10-one, & salts |
| P108 | ¹ 157-24-9 | Strychnine, & salts |
| P109 | 3689-24-5 | Tetraethyldithiopyrophosphate |
| P109 | 3689-24-5 | Thiodiphosphoric acid, tetraethyl ester |
| P110 | 78-00-2 | Plumbane, tetraethyl- |
| P110 | 78-00-2 | Tetraethyl lead |
| P111 | 107-49-3 | Diphosphoric acid, tetraethyl ester |
| P111 | 107-49-3 | Tetraethyl pyrophosphate |
| P112 | 509-14-8 | Methane, tetranitro-(R) |
| P112 | 509-14-8 | Tetranitromethane (R) |
| P113 | 1314-32-5 | Thallic oxide |
| P113 | 1314-32-5 | Thallium oxide Tl ₂ O ₃ |
| P114 | 12039-52-0 | Selenious acid, dithallium(1 +) salt |
| P114 | 12039-52-0 | Tetraethyldithiopyrophosphate |
| P115 | 7446-18-6 | Thiodiphosphoric acid, tetraethyl ester |
| P115 | 7446-18-6 | Plumbane, tetraethyl- |
| P116 | 79-19-6 | Tetraethyl lead |

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| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| P116 | 79-19-6 | Thiosemicarbazide |
| P118 | 75-70-7 | Methanethiol, trichloro- |
| P118 | 75-70-7 | Trichloromethanethiol |
| P119 | 7803-55-6 | Ammonium vanadate |
| P119 | 7803-55-6 | Vanadic acid, ammonium salt |
| P120 | 1314-62-1 | Vanadium oxide V ₂ O ₅ |
| P120 | 1314-62-1 | Vanadium pentoxide |
| P121 | 557-21-1 | Zinc cyanide |
| P121 | 557-21-1 | Zinc cyanide Zn(CN) ₂ |
| P122 | 1314-84-7 | Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10% (R,T) |
| P123 | 8001-35-2 | Toxaphene |
| P127 | 1563-66-2 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate. |
| P127 | 1563-66-2 | Carbofuran |
| P128 | 315-8-4 | Mexacarbate |
| P128 | 315-18-4 | Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester) |
| P185 | 26419-73-8 | 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime. |
| P185 | 26419-73-8 | Tirpate |
| P188 | 57-64-7 | Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1) |
| P188 | 57-64-7 | Physostigmine salicylate |
| P189 | 55285-14-8 | Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester |
| P189 | 55285-14-8 | Carbosulfan |
| P190 | 1129-41-5 | Carbamic acid, methyl-, 3-methylphenyl ester |
| P190 | 1129-41-5 | Metolcarb |
| P191 | 644-64-4 | Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester |
| P191 | 644-64-4 | Dimetilan |
| P192 | 119-38-0 | Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester |
| P192 | 119-38-0 | Isolan |
| P194 | 23135-22-0 | Ethanimidthioic acid, 2-(dimethylamino)-N-[[[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester |
| P194 | 23135-22-0 | Oxamyl |

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| <u>Hazardous Waste Code</u> | <u>Chemical Abstracts No.</u> | <u>Substance</u> |
|-----------------------------|-------------------------------|--|
| P196 | 15339-36-3 | Manganese, bis(dimethylcarbamdithioato-S,S')-, |
| P196 | 15339-36-3 | Manganese dimethyldithiocarbamate |
| P197 | 17702-57-7 | Formparanate |
| P197 | 17702-57-7 | Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[[(methylamino)carbonyl]oxy]phenyl]- |
| P198 | 23422-53-9 | Formetanate hydrochloride |
| P198 | 23422-53-9 | Methanimidamide, N,N-dimethyl-N'-[3-[[[(methylamino)carbonyl]oxy]phenyl]-monohydrochloride |
| P199 | 2032-65-7 | Methiocarb |
| P199 | 2032-65-7 | Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate |
| P201 | 2631-37-0 | Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate |
| P201 | 2631-37-0 | Promecarb |
| P202 | 64-00-6 | m-Cumenyl methylcarbamate |
| P202 | 64-00-6 | 3-Isopropylphenyl N-methylcarbamate |
| P202 | 64-00-6 | Phenol, 3-(1-methylethyl)-, methyl carbamate |
| P203 | 1646-88-4 | Aldicarb sulfone |
| P203 | 1646-88-4 | Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime |
| P204 | 57-47-6 | Physostigmine |
| P204 | 57-47-6 | Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)- |
| P205 | 137-30-4 | Zinc, bis(dimethylcarbamdithioato-S,S')-, |
| P205 | 137-30-4 | Ziram |

FOOTNOTE: ¹CAS Number given for parent compound only.

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APPENDIX V- RESERVED

**Instructions for Completing the Uniform Hazardous Waste Manifest
(U.S. EPA Form 8700-22) and Continuation Sheet (U.S. EPA Form 8700-22A)**

- *Read all instructions before completing these forms.*
- *These forms have been designed for use on a 12-pitch (elite) typewriter and are compatible with standard computer printers; a firm point pen may also be used—press down hard.*

Manifest (U.S. EPA Form 8700-22; See page Appendix-9 for an example)

I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of __

Enter the total number of pages used to complete this Manifest (i.e., the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation-related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (e.g., consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

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Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

If applicable, enter the name of the person accepting the waste on behalf of the second transporter. That person must acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

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Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

~~Table I Types of Containers~~

-
-
- ~~BA = Burlap, cloth, paper, or plastic bags.~~
 - ~~GF = Fiber or plastic boxes, cartons, cases.~~
 - ~~CM = Metal boxes, cartons, cases (including roll-offs).~~
 - ~~CW = Wooden boxes, cartons, cases.~~
 - ~~CY = Cylinders.~~
 - ~~DF = Fiberboard or plastic drums, barrels, kegs.~~
 - ~~DM = Metal drums, barrels, kegs.~~
 - ~~DT = Dump truck.~~
 - ~~DW = Wooden drums, barrels, kegs.~~
 - ~~HC = Hopper or gondola cars.~~
 - ~~TC = Tank cars.~~
 - ~~TP = Portable tanks.~~
 - ~~TT = Cargo tanks (tank trucks).~~
-
-

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and do not enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

~~Table II Units of Measure~~

-
-
- ~~G = Gallons (liquids only).~~
 - ~~K = Kilograms.~~

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~~L = Liters (liquids only).
M = Metric Tons (1000 kilograms).
N = Cubic Meters.
P = Pounds.
T = Tons (2000 pounds).
Y = Cubic Yards.~~

~~Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.~~

~~Item 13. Waste Codes~~

~~Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.~~

~~Pursuant to § 7-702(a)(5), a generator of waste subject to an alternative tax rate must use the appropriate tax code listed in Appendix VI in order for the Secretary to recognize the alternative rate.~~

~~Item 14. Special Handling Instructions and Additional Information:~~

- ~~1. Generators may enter any special handling or shipment specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.~~
- ~~2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.~~

~~Item 15. Generator's/Officer's Certifications~~

- ~~1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The~~

~~content of the shipper's certification statement is as follows: "I hereby declare that the contents of~~

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~~this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.~~

- ~~2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.~~

~~Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.~~

~~II. Instructions for International Shipment Block~~

~~Item 16. International Shipments~~

~~For export shipments, the primary exporter must check the export box, and enter the point of exit (city and state) from the United States. For import shipments, the importer must check the import box and enter the point of entry (city and state) into the United States. For exports, the transporter must sign and date the manifest to indicate the day the shipment left the United States. Transporters of hazardous waste shipments must deliver a copy of the manifest to the U.S. Customs when exporting the waste across U.S. borders.~~

~~III. Instructions for Transporters~~

~~Item 17. Transporters' Acknowledgments of Receipt~~

~~Enter the name of the person accepting the waste on behalf of the first transporter. That person must acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt. Only one signature per transportation company is required. Signatures are not required to track the movement of wastes in and out of transfer facilities, unless there is a change of custody between transporters.~~

~~If applicable, enter the name of the person accepting the waste on behalf of the second transporter. That person must acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt.~~

~~Note: Transporters carrying imports, who are acting as importers, may have responsibilities to enter information in the International Shipments Block. Transporters carrying exports may also have responsibilities to enter information in the International Shipments Block. See above instructions for Item 16.~~

~~IV. Instructions for Owners and Operators of Treatment, Storage, and Disposal Facilities~~

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Item 18. Discrepancy

Item 18a. Discrepancy Indication Space

1. ~~The authorized representative of the designated (or alternate) facility's owner or operator must note in this space any discrepancies between the waste described on the Manifest and the waste actually received at the facility. Manifest discrepancies are: significant differences (as defined by § 7-704(g)(2)) between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives, rejected wastes, which may be a full or partial shipment of hazardous waste that the TSDF cannot accept or container residues, which are residues that exceed the quantity limits for "empty" containers set forth in § 7-203(j).~~
2. ~~For rejected loads and residues (§§ 7-704(g)(1)(B) and (C), and § 7-704(g)(4)), check the appropriate box if the shipment is a rejected load (i.e., rejected by the designated and/or alternate facility and is sent to an alternate facility or returned to the generator) or a regulated residue that cannot be removed from a container. Enter the reason for the rejection or the inability to remove the residue and a description of the waste. Also, reference the manifest tracking number for any additional manifests being used to track the rejected waste or residue shipment on the original manifest. Indicate the original manifest tracking number in Item 14, the Special Handling Block and Additional Information Block of the additional manifests.~~
3. ~~Owners or operators of facilities located in unauthorized States (i.e., states in which the U.S. EPA administers the hazardous waste management program) who cannot resolve significant differences in quantity or type within 15 days of receiving the waste must submit to their Regional Administrator a letter with a copy of the Manifest at issue describing the discrepancy and attempts to reconcile it (§ 7-704(g)(3)).~~
4. ~~Owners or operators of facilities located in authorized States (i.e., those States that have received authorization from the U.S. EPA to administer the hazardous waste management program) should contact their State agency for information on where to report discrepancies involving "significant differences" to state officials.~~

Item 18b. Alternate Facility (or Generator) for Receipt of Full Load Rejections

~~Enter the name, address, phone number, and EPA Identification Number of the Alternate Facility which the rejecting TSDF has designated, after consulting with the generator, to receive a fully rejected waste shipment. In the event that a fully rejected shipment is being returned to the generator, the rejecting TSDF may enter the generator's site information in this space. This field is not to be used to forward partially rejected loads or residue waste shipments.~~

Item 18c. Alternate Facility (or Generator) Signature

~~The authorized representative of the alternate facility (or the generator in the event of a returned shipment) must sign and date this field of the form to acknowledge receipt of the fully rejected wastes or residues identified by the initial TSDF.~~

Item 19. Hazardous Waste Report Management Method Codes

~~Enter the most appropriate Management Method code, found in the Hazardous Waste Report (EPA Form~~

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8700-13A/B), for each waste listed in Item 9. The Hazardous Waste Report Management Method code is to be entered by the first treatment, storage, or disposal facility (TSDF) that receives the waste and is the code that best describes the way in which the waste is to be managed when received by the TSDF.

Item 20. Designated Facility Owner or Operator Certification of Receipt (Except As Noted in Item 18a)

Enter the name of the person receiving the waste on behalf of the owner or operator of the facility. That person must acknowledge receipt or rejection of the waste described on the Manifest by signing and entering the date of receipt or rejection where indicated. Since the Facility Certification acknowledges receipt of the waste except as noted in the Discrepancy Space in Item 18a, the certification should be signed for both waste receipt and waste rejection, with the rejection being noted and described in the space provided in Item 18a. Fully rejected wastes may be forwarded or returned using Item 18b after consultation with the generator. Enter the name of the person accepting the waste on behalf of the owner or operator of the alternate facility or the original generator. That person must acknowledge receipt or rejection of the waste described on the Manifest by signing and entering the date they received or rejected the waste in Item 18c. Partially rejected wastes and residues must be re-shipped under a new manifest to be initiated and signed by the rejecting TSDF as offeror of the shipment.

Continuation Sheet (U.S. EPA Form 8700-22A; See page Appendix V-10 for an example)

This form must be used as a continuation sheet to U.S. EPA Form 8700-22 if:

- More than two transporters are to be used to transport the waste; or
- More space is required for the U.S. DOT descriptions and related information in Item 9 of U.S. EPA Form 8700-22.

V. Instructions for Generators

Item 21. Generator's ID Number

Enter the generator's U.S. EPA twelve digit identification number or the State generator identification number if the generator site does not have an EPA identification number.

Item 22. Page —

Enter the page number of this Continuation Sheet.

Item 23. Manifest Tracking Number

Enter the Manifest Tracking number from Item 4 of the Manifest form to which this continuation sheet is attached.

Item 24. Generator's Name —

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Enter the generator's name as it appears in Item 5 on the first page of the Manifest.

Item 25. Transporter—Company Name

~~If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 3 Company Name. Also enter the U.S. EPA twelve digit identification number of the transporter described in Item 25.~~

Item 26. Transporter—Company Name

~~If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 4 Company Name. Each Continuation Sheet can record the names of two additional transporters. Also enter the U.S. EPA twelve digit identification number of the transporter named in Item 26.~~

Item 27. U.S. D.O.T. Description Including Proper Shipping Name, Hazardous Class, and ID Number (UN/NA)

~~For each row enter a sequential number under Item 27b that corresponds to the order of wastes from one continuation sheet to the next, to reflect the total number of wastes being shipped. Refer to instructions for Item 9 of the manifest for the information to be entered.~~

Item 28. Containers (No. And Type)

~~Refer to the instructions for Item 10 of the manifest for information to be entered.~~

Item 29. Total Quantity

~~Refer to the instructions for Item 11 of the manifest form.~~

Item 30. Units of Measure (Weight/Volume)

~~Refer to the instructions for Item 12 of the manifest form.~~

Item 31. Waste Codes

~~Refer to the instructions for Item 13 of the manifest form.~~

Item 32. Special Handling Instructions and Additional Information

~~Refer to the instructions for Item 14 of the manifest form.~~

VI. Instructions for Transporters

Item 33. Transporter—Acknowledgment of Receipt of Materials

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Enter the same number of the Transporter as identified in Item 25. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in Item 25. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

Item 34. Transporter Acknowledgment of Receipt of Materials

Enter the same number of the Transporter as identified in Item 26. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in Item 26. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

VII. Instructions for Owner and Operators of Treatment, Storage, or Disposal Facilities

Item 35. Discrepancy Indication Space

Refer to Item 18. This space may be used to more fully describe information on discrepancies identified in Item 18a of the manifest form.

Item 36. Hazardous Waste Report Management Method Codes

For each field here, enter the sequential number that corresponds to the waste materials described under Item 27, and enter the appropriate process code that describes how the materials will be processed when received. If additional continuation sheets are attached, continue numbering the waste materials and process code fields sequentially, and enter on each sheet the process codes corresponding to the waste materials identified on that sheet.

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Please print or type. (Form designed for use on 8 1/2 x 11 inch typewriter) Form Approved, OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's Name and Mailing Address
 2. Generator's ID Number
 3. Page 1 of 5
 4. Manifest Tracking Number
 5. Emergency Response Phone
 6. Generator's Site Address (if different than mailing address)

7. Generator's Phone
 8. Transporter 1 Company Name
 9. Transporter 2 Company Name
 10. Designated Facility Name and Site Address
 11. Transporter 1 U.S. EPA ID Number
 12. Transporter 2 U.S. EPA ID Number
 13. Designated Facility U.S. EPA ID Number

14. Facility's Phone

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class ID Number, and Packing Group, if any) | 10. Container No. | 11. Net Weight (kg or lb) | 12. Net Vol (m ³ or gal) | 13. Waste Codes |
|--------|--|-------------------|---------------------------|-------------------------------------|-----------------|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |

14. Special Handling Instructions, if any (include instructions)

15. **GENERATOR/SHIPPER'S CERTIFICATION:** The contents of this assignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled in accordance with applicable international and national government regulations. If a unit shipper and I am the Primary Exporter, I certify that the contents of this assignment conform to the requirements of the attached EPA Acknowledgment of Consent. I certify that the waste in this assignment is either Manifested in accordance with 40 CFR 263.10 (if it is a large quantity shipment) or 40 CFR 263.11 (if it is a small quantity shipment) and that the information provided is true and correct.
 Signature: _____ Month: _____ Day: _____ Year: _____

16. International Shipments: Export to U.S. Export from U.S. Port of entry: _____ Date leaving U.S.: _____
 Transporter Signature (if required only): _____

17. Transporter Acknowledgment of Receipt of Materials
 Transporter 1 Printed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____
 Transporter 2 Printed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____

18. Discrepancy: None Quantity Type Volume Partial Rejection Full Rejection
 Manifest Reference Number: _____

19. Alternate Facility (if Generator)
 20. Alternate Facility (if Transporter)
 21. Hazardous Waste Receipt Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

22. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest, except as noted in item 18a.
 Person's Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

Please print or type. (Form designed for use on efile (12-2018) typewritten) Form Approved OMB No. 2050-0038

| | | | | | | |
|---|--|-------------------------|-------------------|------------------------------|-----------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet) | | 21. Generator ID Number | 22. EPA | 23. Manifest Tracking Number | | |
| 24. Generator Name | | | | | | |
| 25. Transporter Company Name | | | 26. EPA ID Number | | | |
| 27. Transporter Company Name | | | 28. EPA ID Number | | | |
| 29a HAZ | 29b US DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 29. Containers | | 30. Total Weight | 31. Waste Codes | |
| | | 32 | Type | 33 | | |
| | | | | | | |
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| | | | | | | |
| 34. Special Handling Instructions and Address Information | | | | | | |
| 35. Transporter Acknowledgment of Receipt of Materials | | | | | | |
| 35a. Transporter Name | | Signature | | Month Day Year | | |
| 36. Transporter Acknowledgment of Receipt of Materials | | | | | | |
| 36a. Transporter Name | | Signature | | Month Day Year | | |
| 37. Discrepancy | | | | | | |
| 38. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | |
| DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED) | | | | | | |

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

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APPENDIX VI

Vermont Tax Codes

Unless one of the following tax codes apply, all manifested shipments of hazardous waste initiated in Vermont will be taxed at the rate specified in **32 VSA § 10103(a)(2)**. These tax codes must be entered into the Waste Codes section of the federal Uniform Hazardous Waste Manifest (Forms 8700-22 and 8700-22A (Rev. 3-05)) for a reduced tax rate or exemption to apply.

SPECIAL TAX RATE CODES:

VX50 Aggregated Waste [32 VSA § 10103(a)(3)]

Hazardous waste destined for any form of management shall be taxed at the rate of 1.0 cent per pound, if all of the following apply:

- (A) it is shipped from a storage or collection facility for which financial responsibility is required and maintained under section 6605 or 6606 of Title 10 or the rules adopted under those sections;
- (B) it is not generated by the owner or operator of the storage or collection facility;
- (C) it has not been previously taxed in Vermont; and
- (D) it has not been held on-site for more than 180 days.

VX51 Recycling Rate [32 VSA § 10103(a)(1)]

Hazardous waste destined to be recycled for a beneficial purpose as defined in section 7-602 of these regulations, except if it meets the criteria for aggregated waste (VX50) above, shall be taxed at the rate of 11 cents per gallon of liquid or 1.4 cents per pound of solid.

TAX EXEMPT CODES:

The following wastes and materials are not subject to the tax imposed at 32 VSA § 10103(a):

VX60 Household Hazardous Waste (HHW) [VHWMR § 7-203(a)]

Household hazardous waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. Household waste does not include hazardous waste generated at home-based businesses.

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VX61 Federal Generators

Wastes generated by the federal government or federal governmental entities. This exemption generally does not apply to federal contractors.

VX62 Environmental Contingency Fund (ECF) [32 VSA § 10103(b)(1)]

Hazardous waste which is generated as a result of any action taken under section 1283 of Title 10 for which disbursements from the environmental contingency fund have been or will be made by the secretary.

VX63 Internal Shipments

Internal shipments within captive storage facilities. Waste from captive storage facilities is taxed when it is shipped to an off-site designated facility.

VX64 Previously Taxed Waste [32 VSA § 10103(b)(6)]

Hazardous waste that has been previously subject to the tax of 32 § VSA 10103, provided: (a) the person shipping the previously taxed waste has not held the waste for more than 180 days, and (b) if the waste has been mixed, the resulting mixture does not change the applicable U.S. Department of Transportation shipping description from that which applied before the waste was mixed.

VX65 Imports from a Foreign Country [32 VSA § 10103(c)(2)]

Any person who initiates a manifest to import hazardous waste into Vermont from a foreign country shall not be required to pay a tax under 32 VSA § 10103(a).

VX66 Redevelopment of Contaminated Properties Program (RCPP) [32 VSA § 10103(b)(7)]

Hazardous waste shipped in implementing a corrective action plan approved under 10 V.S.A. § 6615a, the redevelopment of contaminated properties program, provided that the secretary issues a certificate of completion, as provided under that section.

VX67 Specific Waivers [32 VSA § 10102(a)(2)]

Where the secretary of natural resources has determined, on a case-by-case basis, that this tax should not apply to a particular waste or generator.

Note: The VT99 Code should be used to describe non-hazardous wastes that do not require a unique identity on a manifest for either data tracking or tax purposes.

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APPENDIX VII

Examples of Potentially Incompatible Waste

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his or her wastes so that he or she can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a **Group A** material with a **Group B** material may have the potential consequence as noted.

| Group 1-A | Group 1-B |
|--|---|
| Acetylene sludge | Acid sludge |
| Alkaline caustic liquids | Acid and water |
| Alkaline cleaner | Battery acid |
| Alkaline corrosive liquids | Chemical cleaners |
| Alkaline corrosive battery fluid | Electrolyte, acid |
| Caustic wastewater | Etching acid liquid or solvent |
| Lime wastewater | Pickling liquor and other corrosive acids |
| Lime and water | Spent acid |
| Spent caustic | Spent mixed acid |
| | Spent sulfuric acid |
| Potential consequences: Heat generation; violent reaction. | |

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| Group 2-A | Group 2-B |
|--|-------------------------------|
| Aluminum Beryllium Calcium Lithium Magnesium Potassium Sodium Zinc powder Other reactive metals and metal hydrides | Any waste in Group 1-A or 1-B |

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

| Group 3-A | Group 3-B |
|-----------------------|--|
| Alcohols Water | Any concentrated waste in Groups 1-A or 1-B Calcium Lithium Metal hydrides Potassium SO ₂ Cl ₂ , SOCl ₂ , PCl ₃ , CH ₃ SiCl ₃ Other water-reactive waste |

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

| Group 4-A | Group 4-B |
|---|--|
| Alcohols Aldehydes Halogenated hydrocarbons Nitrated hydrocarbons Unsaturated hydrocarbons Other reactive organic compounds and solvents | Concentrated Group 1-A or 1-B wastes Group 2-A wastes |

Potential consequences: Fire, explosion, or violent reaction.

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| Group 5-A | Group 5-B |
|-------------------------------------|------------------|
| Spent cyanide and sulfide solutions | Group 1-B wastes |

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

| Group 6-A | Group 6-B |
|------------------------|--|
| Chlorates | Acetic acid and other organic acids |
| Chlorine | Concentrated mineral acids |
| Chlorites | Group 2-A wastes |
| Chromic acid | Group 4-A wastes |
| Hyphochlorites | Other flammable and combustible wastes |
| Nitrates | |
| Nitric acid, fuming | |
| Perchlorates | |
| Permanganates | |
| Peroxides | |
| Other strong oxidizers | |

Potential consequences: Fire, explosion, or violent reaction.

Source: "Law, Regulations, and Guidelines for Handling of Hazardous Waste."
California Department of Health, February 1975.

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APPENDIX VIII

Reserved

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APPENDIX IX

Basis for Listing Hazardous Waste

| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------------|---|
| F001 | Tetrachloroethylene, methylene chloride trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons |
| F002 | Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane |
| F003 | N.A. |
| F004 | Cresols and cresylic acid, nitrobenzene |
| F005 | Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane |
| F006 | Cadmium, hexavalent chromium, nickel, cyanide (complexed) |
| F007 | Cyanide (salts) |
| F008 | Cyanide (salts) |
| F009 | Cyanide (salts) |
| F010 | Cyanide (salts) |
| F011 | Cyanide (salts) |
| F012 | Cyanide (complexed) |
| F019 | Hexavalent chromium, cyanide (complexed) |
| F020 | Tetra- and pentachlorodibenzo-p-dioxins; tetra and pentachlorodi-benzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts |
| F021 | Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives |
| F022 | Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans |
| F023 | Tetra-, and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts |

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| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------------|---|
| F024 | Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1-2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetra-chloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene |
| F025 | Chloromethane; Dichloromethane; Trichloromethane; Carbon tetrachloride; Chloroethylene; 1,1-Dichloroethane; 1,2-Dichloroethane; trans-1,2-Dichloroethylene; 1,1-Dichloroethylene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethylene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Tetrachloroethylene; Pentachloroethane; Hexachloroethane; Allyl chloride (3-Chloropropene); Dichloropropane; Dichloropropene; 2-Chloro-1,3-butadiene; Hexachloro-1,3-butadiene; Hexachlorocyclopentadiene; Benzene; Chlorobenzene; Dichlorobenzene; 1,2,4-Trichlorobenzene; Tetrachlorobenzene; Pentachlorobenzene; Hexachlorobenzene; Toluene; Naphthalene |
| F026 | Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans |
| F027 | Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts |
| F028 | Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts |
| F032 | Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)-anthracene, indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo-p-dioxins, tetra-, penta-, hexa-, heptachlorodibenzofurans |
| F034 | Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium. |
| F035 | Arsenic, chromium, lead |
| F037 | Benzene, benzo(a)pyrene, chrysene, lead, chromium |
| F038 | Benzene, benzo(a)pyrene, chrysene, lead, chromium |
| F039 | All constituents for which treatment standards are specified for multi-source leachate (wastewaters and nonwastewaters) under 40 CFR 268.43, Table CCW |

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| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------|---|
| K001 | Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene |
| K002 | Hexavalent chromium, lead |
| K003 | Hexavalent chromium, lead |
| K004 | Hexavalent chromium |
| K005 | Hexavalent chromium, lead |
| K006 | Hexavalent chromium |
| K007 | Cyanide (complexed), hexavalent chromium |
| K008 | Hexavalent chromium |
| K009 | Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid |
| K010 | Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde |
| K011 | Acrylonitrile, acetonitrile, hydrocyanic acid |
| K013 | Hydrocyanic acid, acrylonitrile, acetonitrile |
| K014 | Acetonitrile, acrylamide |
| K015 | Benzyl chloride, chlorobenzene, toluene, benzotrichloride |
| K016 | Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene |
| K017 | Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis (2-chloroethyl) ethers], trichloropropane, dichloropropanols |
| K018 | 1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene |
| K019 | Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride |
| K020 | Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride |
| K021 | Antimony, carbon tetrachloride, chloroform |
| K022 | Phenol, tars (polycyclic aromatic hydrocarbons) |

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| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------|--|
| K023 | Phthalic anhydride, maleic anhydride |
| K024 | Phthalic anhydride, 1,4-naphthoquinone |
| K025 | Meta-dinitrobenzene, 2,4-dinitrotoluene |
| K026 | Paraldehyde, pyridines, 2-picoline |
| K027 | Toluene diisocyanate, toluene-2, 4-diamine |
| K028 | 1,1,1-trichloroethane, vinyl chloride |
| K029 | 1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform |
| K030 | Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride |
| K031 | Arsenic |
| K032 | Hexachlorocyclopentadiene |
| K033 | Hexachlorocyclopentadiene |
| K034 | Hexachlorocyclopentadiene |
| K035 | Creosote, chrysene, naphthalene, fluoranthene benzo(b) fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene |
| K036 | Toluene, phosphorodithioic and phosphorothioic acid esters |
| K037 | Toluene, phosphorodithioic and phosphorothioic acid esters |
| K038 | Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters |
| K039 | Phosphorodithioic and phosphorothioic acid esters |
| K040 | Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters |
| K041 | Toxaphene |
| K042 | Hexachlorobenzene, ortho-dichlorobenzene |
| K043 | 2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol |
| K044 | N.A. |
| K045 | N.A. |
| K046 | Lead |
| K047 | N.A. |
| K048 | Hexavalent chromium, lead |
| K049 | Hexavalent chromium, lead |
| K050 | Hexavalent chromium |
| K051 | Hexavalent chromium, lead |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------------|---|
| K052 | Lead |
| K060 | Cyanide, naphthalene, phenolic compounds, arsenic |
| K061 | Hexavalent chromium, lead, cadmium |
| K062 | Hexavalent chromium, lead |
| K069 | Hexavalent chromium, lead, cadmium |
| K071 | Mercury |
| K073 | Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane |
| K083 | Aniline, diphenylamine, nitrobenzene, phenylenediamine |
| K084 | Arsenic |
| K085 | Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride |
| K086 | Lead, hexavalent chromium |
| K087 | Phenol, naphthalene |
| K088 | Cyanide (complexes) |
| K093 | Phthalic anhydride, maleic anhydride |
| K094 | Phthalic anhydride |
| K095 | 1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane |
| K096 | 1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane |
| K097 | Chlordane, heptachlor |
| K098 | Toxaphene |
| K099 | 2,4-dichlorophenol, 2,4,6-trichlorophenol |
| K100 | Hexavalent chromium, lead, cadmium |
| K101 | Arsenic |
| K102 | Arsenic |
| K103 | Aniline, nitrobenzene, phenylenediamine |
| K104 | Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine |
| K105 | Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol |
| K106 | Mercury |
| K107 | 1,1-Dimethylhydrazine (UDMH) |
| K108 | 1,1-Dimethylhydrazine (UDMH) |
| K109 | 1,1-Dimethylhydrazine (UDMH) |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------------|--|
| K110 | 1,1-Dimethylhydrazine (UDMH) |
| K111 | 2,4-Dinitrotoluene |
| K112 | 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline |
| K113 | 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline |
| K114 | 2,4-Toluenediamine, o-toluidine, p-toluidine |
| K115 | 2,4-Toluenediamine |
| K116 | Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene |
| K117 | Ethylene dibromide |
| K118 | Ethylene dibromide |
| K123 | Ethylene thiourea |
| K124 | Ethylene thiourea |
| K125 | Ethylene thiourea |
| K126 | Ethylene thiourea |
| K131 | Dimethyl sulfate, methyl bromide |
| K132 | Methyl bromide |
| K136 | Ethylene dibromide |
| K141 | Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene |
| K142 | Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene |
| K143 | Benzene, benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene |
| K144 | Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene |
| K145 | Benzene, benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene |
| K147 | Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene |
| K148 | Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene |
| K149 | Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------|---|
| K150 | Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene |
| K151 | Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene |
| K156 | Benomyl, carbaryl, carbendazim, carbofuran, carbosulfan, formaldehyde, methylene chloride, triethylamine |
| K157 | Carbon tetrachloride, formaldehyde, methyl chloride, methylene chloride, pyridine, triethylamine |
| K158 | Benomyl, carbendazim, carbofuran, carbosulfan, chloroform, methylenechloride |
| K159 | Benzene, butylate, eptc, molinate, pebulate, vernolate |
| K161 | Antimony, arsenic, metam-sodium, ziram |
| K169 | Benzene |
| K170 | Benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, 3-methylcholanthrene, 7, 12-dimethylbenz(a)anthracene |
| K171 | Benzene, arsenic |
| K172 | Benzene, arsenic |
| K174 | 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,6,7,8,9-HpCDF), HxCDDs (All Hexachlorodibenzo-p-dioxins), HxCDFs (All Hexachlorodibenzofurans), PeCDDs (All Pentachlorodibenzo-p-dioxins), OCDD (1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin, OCDF (1,2,3,4,6,7,8,9-Octachlorodibenzofuran), PeCDFs (All Pentachlorodibenzofurans), TCDDs (All tetrachlorodi-benzo-p-dioxins), TCDFs (All tetrachlorodibenzofurans) |
| K175 | Mercury |
| K176 | Arsenic, Lead |
| K177 | Antimony |
| K178 | Thallium |
| K181 | Aniline, o-anisidine, 4-chloroaniline, p-cresidine, 2,4-dimethylaniline, 1,2-phenylenediamine, 1,3-phenylenediamine |

FOOTNOTE: N.A. -- Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity, or reactivity.

Clean
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STATE OF VERMONT

Agency of Natural Resources

Hazardous Waste Management Regulations

Effective: DATE 2021



Waste Management & Prevention Division

Department of Environmental Conservation

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<http://dec.vermont.gov/waste-management/hazardous>

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Subchapter 1: GENERAL PROVISIONS

§ 7-101 AUTHORITY

These regulations are promulgated by the Secretary of the Vermont Agency of Natural Resources pursuant to the authority granted by **3 V.S.A. § 2853(5) and 10 V.S.A. chapter 159**.

Note: The term “these regulations,” when used within this document, means chapter 7 of the Vermont Environmental Protection Rules (Hazardous Waste Management Regulations).

§ 7-102 PURPOSE

These regulations are intended to protect public health and the environment by regulating the generation, storage, collection, transport, treatment, disposal, use, reuse, and recycling of hazardous waste, used oil, universal waste, and pharmaceutical waste in Vermont.

§ 7-103 DEFINITIONS

As used in these regulations, all terms not otherwise defined herein shall have the meaning given them in **40 CFR Parts 260 through 266, 268, and 270**. Terms that are used only in **subchapter 8** (used oil management standards), **subchapter 9** (universal waste management standards) or **subchapter 10** (pharmaceutical waste management standards) are defined therein.

“**Active life of a facility**” means the period from the initial receipt of hazardous waste at the facility until the Secretary receives certification of final closure.

“**Acute hazardous waste**” means hazardous wastes that are either listed in **§ 7-210** with the assigned hazard code of (H) or are listed in **§ 7-215**.

“**Aerosol can**” means a non-refillable receptacle containing a gas compressed, liquefied or dissolved under pressure, the sole purpose of which is to expel a liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.

“**Agency**” means the Vermont Agency of Natural Resources.

“**Airbag waste**” means any hazardous waste airbag modules or hazardous waste airbag inflators.

“**Airbag waste collection facility**” means any facility that receives airbag waste from airbag handlers subject to regulation under **§ 7-203(y)**, and accumulates the waste for more than ten days.

“**Airbag waste handler**” means any person, by site, who generates airbag waste that is subject to regulation under **subchapters 1 through 7** of these regulations.

“Boiler” means an enclosed device using controlled flame combustion and either:

- (a) Having the following characteristics:
- (1) Having physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and
 - (2) Being of integral design, in that the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) are physically formed into one manufactured or assembled unit, except that process heaters (units that transfer energy directly to a process stream) and fluidized bed combustion units are not precluded from being boilers solely because they are not of integral design. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not of integral design; however, a unit may be of integral design even though secondary energy recovery equipment (such as economizers or air preheaters) is not physically formed into the same unit as the combustion chamber and the primary energy recovery section; and
 - (3) Maintaining while in operation a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and
 - (4) Exporting and utilizing at least 75 percent of the recovered energy, calculated on an annual basis, not including recovered heat used internally in the same unit, such as the preheating of fuel or combustion air, the driving of induced or forced draft fans or feed-water pumps; or
- (b) The device is one which the Secretary has determined, on a case-by-case basis, to be a boiler, after considering the standards in **40 CFR § 260.32**.

“Carbon regeneration unit” means any enclosed thermal treatment device used to regenerate spent activated carbon.

“CERCLA” means the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.

“Certificate of need” means a certificate issued by the Secretary pursuant to **10 V.S.A. § 6606a** that must be obtained before a person may begin site preparation for or construction of a hazardous waste management facility.

“Certified hazardous waste facility” means a treatment, storage, or disposal facility which is authorized to operate under a federally approved state hazardous waste program, the federal hazardous waste program, or a foreign government.

“College/University” means a private or public, post-secondary, degree-granting, academic institution, that is accredited by an accrediting agency listed annually by the U.S. Department of

Education.

“**Completed copy**” means any copy of the manifest which has been signed by the generator, designated transporter, any continuing transporters, and the designated certified hazardous waste treatment, storage, or disposal facility.

“**Compliance points**” or points of compliance means the locations identified in § 12-603 of the GWPRS.

“**Consignee**” means the ultimate treatment, storage or disposal facility in a receiving country to which the hazardous waste will be sent.

“**Container**” means any portable device in which a material is stored, transported, treated, disposed of or otherwise handled.

“**Containment building**” means a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of **Subpart DD of 40 CFR Parts 264 or 265** (incorporated by reference in subchapter 5).

“**Contaminated wipe**” means:

- (a) A wipe that, after being used in a cleaning or degreasing process:
 - (1) Contains greater than 5% by weight of VT02 petroleum distillates listed in § 7-211;
 - (2) Contains one or more of the F001 through F005 solvents listed in § 7-210 or the corresponding P- or U- listed solvents found in §§ 7-214 and 7-215;
 - (3) Exhibits a hazardous characteristic found in §§ 7-205 through 7-208 when that characteristic results from a solvent listed in §§ 7-210 through 7-215; and/or
 - (4) Exhibits only the hazardous waste characteristic of ignitability found in § 7-205 due to the presence of one or more solvents that are not listed in §§ 7-210 through 7-215.
- (b) Contaminated wipes that contain listed hazardous waste other than VT02 petroleum distillates or the solvents specified in **subsection (a)(2) of this section**, or exhibit the characteristic of toxicity, corrosivity, or reactivity due to contaminants other than solvents, are not eligible for the exemption at § 7-203(w).

“**Control**” over a waste, unless otherwise defined in these regulations, means the possession, ownership or physical control of such waste, including but not limited to the following activities: (a) generation; (b) treatment; (c) storage; (d) transportation; or (e) disposal, whether or not such activity is authorized by law.

“**Debris**” means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However,

the following materials are not debris: Any material for which a specific treatment standard is provided in **40 CFR §§ 268.40 through 268.49**, namely lead acid batteries, cadmium batteries, and radioactive lead solids; Process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by **40 CFR § 268.45** and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

“Designated facility” means:

- (a) A hazardous waste treatment, storage, or disposal facility which:
 - (1) Has received a permit (or interim status) in accordance with the requirements of 40 CFR Parts 270 and 124;
 - (2) Has received a permit (or interim status) from a State authorized in accordance with **40 CFR Part 271**; or
 - (3) Is regulated under **§ 7-606(a)** or **Subpart F of 40 CFR Part 266** (Refer to **§ 7-204(g)** Recyclable Materials Utilized for Precious Metal Recovery); and
 - (4) Has been designated on the manifest by the generator pursuant to **§ 7-702**.
- (b) A generator site designated on the manifest to receive its waste as a return shipment from a facility that has rejected the waste in accordance with **40 CFR § 264.72(f)** or **40 CFR § 265.72(f)** (Refer to **§ 7-704(i)(4)**)
- (c) If a waste is destined to a facility in an authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility must be a facility allowed by the receiving State to accept such waste.

“Destination facility” means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in **§ 7-912(d)(3)**. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

“Discarded” A material is discarded if it is:

- (a) Abandoned by being:
 - (1) Disposed of; or
 - (2) Burned or incinerated; or
 - (3) Accumulated, stored, or treated before or in lieu of being abandoned by being disposed of, burned, or incinerated;
- (b) Recycled, until the recycling process has been completed;

- (c) Considered inherently waste-like as described in **40 CFR § 261.2(d)**;
- (d) Applied to or placed on the land in a manner that constitutes disposal, used to produce products that are applied to or placed on the land, or are otherwise contained in products that are applied to or placed on the land or
- (e) A military munition identified as a solid waste in **40 CFR § 266.202**.

“Discharge” or **“hazardous waste discharge”** means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.

“Disposal” means the discharge, deposit, injection, dumping, spilling, leaking, emitting, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any ground or surface waters.

“Disposal facility” means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure. The term disposal facility does not include a corrective action management unit into which remediation wastes are placed.

“Drip pad” is an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.

“Domestic sewage” means untreated sanitary wastes that pass through a sewer system to a sewage treatment plant.

“Electronic manifest” (or “e-Manifest”) means the electronic format of the hazardous waste manifest that is obtained from EPA’s national e-Manifest system and transmitted electronically to that system, and that is the legal equivalent of EPA Forms 8700-22 (Manifest) and 8700-22A (Continuation Sheet).

“Electronic Manifest System” (or “e-Manifest system”) means EPA’s national information technology system through which the electronic manifest may be obtained, completed, transmitted, and distributed to users of the electronic manifest and to regulatory agencies.

“Elementary neutralization unit” means a device which:

- (a) Is used for neutralizing wastes that are hazardous only because they exhibit the corrosivity characteristic defined in § 7-206, or they are listed in §§ 7-210 through 7-215 only for this reason; and
- (b) Meets the definition of tank, tank system, container, transport vehicle, or vessel.

“Eligible academic entity” means a college or university, or a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.

“Emergency response” means a response action to a situation that may cause immediate and serious threat of harm to human health or the environment.

“Environmental Protection Agency” or **“EPA”** means the United States Environmental Protection Agency.

“EPA Acknowledgement of Consent” means the cable sent to EPA from the U. S. Embassy in a receiving country that acknowledges the written consent of the receiving country to accept the hazardous waste and describes the terms and conditions of the receiving country's consent to the shipment.

“EPA Identification number” means the location specific number assigned by either EPA or the Secretary to each generator, transporter and treatment, storage, or disposal facility.

“EPCRA” means the federal Emergency Planning & Community Right to Know Act of 1986, as amended.

“Episodic Event” means an activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous wastes that exceeds the calendar month quantity limits for the generator's usual category.

“Explosives or munitions emergency” means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

“Explosives or munitions emergency response” means all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at RCRA facilities.

“Explosives or munitions emergency response specialist” means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Explosives or munitions emergency response specialists include Department of Defense (DOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU), and DOD-certified civilian or contractor personnel; and other Federal, State, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

“Facility” means:

- (a) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).
- (b) For the purpose of implementing corrective action under **40 CFR § 264.101** (incorporated by reference under subchapter 5), all contiguous property under the control of the owner or operator seeking certification under subchapter 5 of these regulations. This definition also applies to facilities implementing corrective action under **RCRA § 3008(h)**.

“FIFRA” means the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, 7 U.S.C. § 136 et seq.

“Final closure” means the cessation of hazardous waste management activities and either the closure of all short-term storage areas at a large quantity generator facility in accordance with the requirements of § 7-308(b)(16), or the closure of all hazardous waste management units at a facility in accordance with the facility closure plan and all applicable closure requirements of **subchapter 5** so that hazardous waste management activities permitted under **subchapter 5** are no longer conducted at the facility.

“Generator” means any person, by site, whose act or process produces hazardous waste or whose act first causes hazardous waste to become subject to regulation. This includes any person who imports hazardous waste into Vermont from a foreign country.

“Groundwater enforcement standards” means those standards adopted by § 12-601 of the **Groundwater Protection Rule and Strategy**.

“Groundwater Protection Rule and Strategy” or **“GWPRS”** means chapter 12 of the Vermont Environmental Protection Rules, effective July 6, 2019, as amended.

“Hazardous material” means all petroleum and toxic, corrosive or other chemicals and related sludge included in any of the following:

- (a) Any substance defined in **CERCLA § 101(14)**;

- (b) Petroleum, including crude oil or any fraction thereof;
- (c) Hazardous waste; or
- (d) A chemical substance that, when released, poses a risk to human health or other living organisms and that is listed by the Secretary by rule.

Note: “Hazardous material” does not include herbicides and pesticides when applied consistent with good practice conducted in conformity with federal, state and local laws and regulations and according to manufacturers' instructions. Nothing in this subsection shall affect the authority granted and the limitations imposed by **10 V.S.A. § 6608a**.

“Hazardous waste” means any waste or combination of wastes of a solid, liquid, contained gaseous, or semi-solid form, including but not limited to those which are toxic, corrosive, ignitable, reactive, strong sensitizers, or which generate pressure through decomposition, heat or other means, which in the judgment of the Secretary may cause, or contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, taking into account the toxicity of such waste, its persistence and degradability in nature, and its potential for assimilation, or concentration in tissue, and other factors that may otherwise cause or contribute to adverse acute or chronic effects on the health of persons or other living organisms, or any matter which may have an unusually destructive effect on water quality if discharged to ground or surface waters of the state. All special nuclear, source, or by-product material, as defined by the Atomic Energy Act of 1954, as amended, codified in 42 U. S. C. § 2014, is specifically excluded from this definition.

“Hazardous waste management” means the systematic and comprehensive management of the generation, storage, transport, treatment, including recycling and recovery, or disposal of hazardous waste materials.

“Hazardous waste management unit” is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

“Household waste” means any waste material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas). Business waste generated at a household is not household waste.

“Impervious surface” means a surface that is sufficiently impermeable to any waste material stored thereon to prevent that material from migrating into the surface (e.g., porous concrete) or to the soil, groundwater, or surface water.

“Incinerator” means any enclosed device that:

- (a) Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or
- (b) Meets the definition of infrared incinerator or plasma arc incinerator as defined in **40 CFR § 260.10**.

“Incompatible waste” means a hazardous waste which is unsuitable for:

- (a) Placement in a particular device or facility because it may cause corrosion or decay of containment materials (e. g., container inner liners or tank walls); or
- (b) Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases.

(See **Appendix VII** for examples of potentially incompatible waste.)

“Industrial furnace” means an enclosed device that is an integral component of a manufacturing process, that uses thermal treatment to accomplish recovery of materials or energy, and that is listed as an “industrial furnace” in **40 CFR § 260.10**.

“Investigation and Remediation of Contaminated Properties Rule” means chapter 35 of the Vermont Environmental Protection Rules, effective July 6, 2019, as amended.

“Laboratory” means an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals) are also considered laboratories.

“Land disposal” means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, concrete vault or bunker intended for disposal purposes.

“Landfill” means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

“Large quantity generator” means a generator who generates any of the following amounts in a calendar month:

- (a) Greater than or equal to 1,000 kilograms (2200 lbs) of non-acute hazardous waste; or
- (b) Greater than 1 kilogram (2.2 lbs) of acute hazardous waste listed in § 7-210 or § 7-215; or
- (c) Greater than 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in § 7-210 or § 7-215.

“**Low-level mixed waste (LLMW)**” is a waste that contains both low-level radioactive waste and RCRA hazardous waste.

“**Low-level radioactive waste (LLW)**” is a radioactive waste which contains source, special nuclear, or byproduct material, and which is not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material as defined in section 11e.(2) of the Atomic Energy Act. (See also NRC definition of “waste” at 10 CFR 61.2)

“**Manifest**” means the shipping document EPA Form 8700–22 (including, if necessary, the continuation sheet document EPA Form 8700–22A), or the electronic manifest, originated and signed in accordance with the applicable requirements of 40 CFR Parts 262 through 265.

“**Manifest tracking number**” means the alphanumeric identification number (i.e., a unique three letter suffix preceded by nine numerical digits), which is pre-printed in Item 4 of the Manifest by a registered source.

“**Manufacturing or mining by-product**” is a material that is not one of the primary products of a particular manufacturing or mining operation, is a secondary and incidental product of the particular operation and would not be solely and separately manufactured or mined by the particular manufacturing or mining operation. The term does not include an intermediate manufacturing or mining product which results from one of the steps in a manufacturing or mining process and is typically processed through the next step of the process within a short time.

“**Media**” means environmental media (e.g., soil, groundwater).

“**Military munitions**” means all ammunition products and components produced or used by or for the U.S. Department of Defense or the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include non-nuclear components of

nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.

“Miscellaneous unit” means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under **40 CFR Part 146**, containment building, corrective action management unit, or unit eligible for a research, development, and demonstration certification under **§ 7-511(c)**.

“Mixed waste” means a waste that contains both RCRA hazardous waste and source, special nuclear, or byproduct material subject to the Atomic Energy Act of 1954, as amended.

“No free liquids” as used in **§ 7-203(w)**, means that contaminated wipes may not contain free liquids as determined by **Method 9095B** (Paint Filter Liquids Test), included in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (EPA Publication SW-846), which is incorporated by reference, and that there is no free liquid in the container holding the wipes. No free liquids may also be determined using another standard or test method as defined by the Secretary.

“Non-acute hazardous waste” means all hazardous wastes that are not acute hazardous waste.

“Obsolete pesticide products” means concentrated pesticide products which are unusable due to damage to containers or the pesticide formulation; in damaged containers; pesticide products whose U. S. EPA registration number has been canceled or suspended leaving no valid registered uses on the label; or unwanted registered pesticide compounds which the generator wishes to dispose of.

“On-site” means the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which that person controls and to which the public does not have access, is also considered on-site property.

“Partial closure” means the closure of a short-term storage area at a large quantity generator in accordance with the applicable requirements of **§ 7-308(b)(16)**, or the closure of a hazardous waste management unit at a facility that contains other active hazardous waste management units in accordance with the facility closure plan and all applicable closure requirements of **subchapter 5**. For example, partial closure may include the closure of a short-term storage area at a large quantity generator that continues to generate hazardous waste and may maintain other active short-term storage areas; or the closure of a container storage area, tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other hazardous waste management unit at a facility, while other units of the same facility continue to operate.

“**Person**” means any individual, partnership, company, corporation, association, unincorporated association, joint venture, trust, municipality, the State of Vermont or any agency, department, or subdivision of the state, federal agency, or any other legal or commercial entity.

“**Pesticide**” means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

- (a) Is a new animal drug under the **Federal Food, Drug, and Cosmetic Act (FFDCA) section 201(w)**, or
- (b) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or
- (c) Is an animal feed under **FFDCA section 201(x)** that bears or contains any substances described by **subsection (a) or (b) of this definition**.

“**Pesticidal wastes**” means unwanted pesticides and their dilutions, rinses, and improperly rinsed containers.

“**Pile**” means any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage and that is not a containment building.

“**Planned episodic event**” means an episodic event that the generator planned and prepared for, including regular maintenance, tank cleanouts, short-term projects, and removal of excess chemical inventory

“**Primary exporter**” means any person who is required to originate the manifest for a shipment of hazardous waste in accordance with subchapter 7 when the manifest specifies a treatment, storage, or disposal facility in a receiving country as the facility to which the hazardous waste will be sent and any intermediary arranging for the export.

“**RCRA**” means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, **42 U.S.C. § 6901 et seq.**, as amended.

“**RCRA hazardous waste**” means hazardous waste regulated under Subtitle C of RCRA; it does not include other wastes regulated as hazardous waste by the State of Vermont that are not regulated under Subtitle C of RCRA.

“**Reclaimed**” means that a hazardous waste is processed to recover the hazardous component of the waste as a usable product, or that it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

“**Receiving country**” means any foreign country to which hazardous waste is sent for the purpose of treatment, storage, or disposal (except short-term storage incidental to transportation).

“**Registration**” means, for the purposes of § 7-304(e) and 10 V.S.A. § 6608(f), notifying the Secretary of hazardous waste activity using the Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) referenced in § 7-104(a), and paying the annual fee specified in 3 V.S.A. § 2822.

“**Release**” means any intentional or unintentional action or omission resulting in the spilling, leaking, pumping, pouring, emitting, emptying, dumping, or disposing of hazardous materials into the surface or groundwaters, or onto the lands in the State, or into waters outside the jurisdiction of the State when damage may result to the public health, lands, waters or natural resources within the jurisdiction of the State.

“**Representative sample**” means a sample of a universe or whole (e.g., waste pile, lagoon, ground water) which can be expected to exhibit the average properties of the universe or whole.

“**Restricted use pesticides**” means pesticides that meet the criteria of 40 CFR § 152.170 and are identified by the designation “Restricted Use” on the product label. Restricted use pesticides are not available for purchase or use by the general public.

“**Scrap metal**” means bits and pieces of metal parts (e. g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e. g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.

“**Secretary**” means the Secretary of the Agency of Natural Resources or his or her duly authorized representative. When implementing the provisions of 10 V. S. A. §§ 6608a relating to economic poisons, the term shall also include the Secretary of the Vermont Agency of Agriculture, Food & Markets. When implementing the provisions of 10 V.S.A. § 6608b relating to low-level radioactive wastes mixed with hazardous waste, the term shall also include the Commissioner of the Vermont Department of Health.

“**Short-term storage area**” means any on-site hazardous waste storage area with hazardous waste stored in units that are subject to either § 7-307 (for small quantity generators) or § 7-308 (for large quantity generators). A short-term storage area at an eligible academic entity that chooses to operate under 40 CFR §§ 262.200 through 262.216 (Subpart K) is also subject to 40 CFR § 262.211 when storing unwanted material and/or hazardous waste. The term “short-term storage area” shall have the same meaning as “central accumulation area” as used in 40 CFR Subpart K.

“**Sludge**” means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

“**Sludge dryer**” means any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb of sludge treated on a wet-weight basis.

“**Small quantity generator**” means a generator who generates the following amounts in a

calendar month:

- (a) Greater than 100 kilograms (220 lbs) but less than 1,000 kilograms (2200 lbs) of non-acute hazardous waste; and
- (b) Less than or equal to 1 kilogram (2.2 lbs) of acute hazardous waste listed in § 7-210 or § 7-215; and
- (c) Less than or equal to 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in § 7-210 or § 7-215.

“Soil” means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles as classified by the U.S. Natural Resources Conservation Service, or a mixture of such materials with liquids, sludges or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited hazardous waste with soil that changes its treatment classification (i.e., from waste to contaminated soil) is not allowed under the dilution prohibition in **40 CFR § 268.3**.

“Solid waste” means any discarded garbage, refuse, septage, sludge from a waste treatment plant, water supply plant, or pollution control facility and other discarded material including solid, liquid, semi-solid, or contained gaseous materials resulting from industrial, commercial, mining, or agricultural operations and from community activities but does not include animal manure and absorbent bedding used for soil enrichment or solid or dissolved materials in industrial discharges which are point sources subject to permits pursuant to **10 V.S.A. chapter 47**.

“Sorbent” means a material that is used to soak up free liquids by either adsorption or absorption, or both.

“Sorb” means to either adsorb or absorb, or both.

“Staging” means the temporary placement of off-site generated recyclable materials within a recycling facility for a period of time no longer than three (3) days.

“Storage” means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere. Storage may be conducted by either generators or designated facilities. Hazardous waste that is being staged at a recycling facility for no more than three (3) days is not considered to be in storage.

“Sump” means any pit or reservoir that meets the definition of tank and those troughs/trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities; except that as used in the landfill, surface impoundment, and waste pile rules, “sump” means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal

from the system.

“Surface impoundment” means a natural topographic depression, artificial excavation, or dike arrangement, including a pit, pond, or lagoon, whether or not it has a permeable bottom or sides allowing seepage of its contents, which is:

- (a) Used primarily for the storage, treatment, or disposal of hazardous waste in liquid, semi-solid, or solid form; and
- (b) Constructed on, below, or partially in the ground.

“Tank” means a stationary device, designed to contain an accumulation of hazardous waste, which is constructed primarily of non-earthen materials (e. g., wood, concrete, steel, plastic) that provide structural support.

“Tank system” means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

“Transfer facility” means any transportation related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

“Transport” or **“transportation”** means the movement of wastes by air, rail, highway, or water.

“Treatment” means any method, technique, or process, including neutralization, designed to change the physical, chemical or biological character or composition of any hazardous or solid waste, so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste safer for transport, amenable for recovery, amenable for storage, or reduced in volume, or for hazardous wastes, so as to render such waste non-hazardous.

“TSCA” means the Toxic Substances Control Act of 1976, 15 U.S.C. 2601, et seq, as amended.

“Universal waste” means any of the following hazardous wastes that are subject to the universal waste requirements of **subchapter 9**:

- (a) Batteries as described in § 7-902;
- (b) Pesticides as described in § 7-903;
- (c) Thermostats as described in § 7-904;
- (d) PCB-containing fluorescent light ballasts as described in § 7-905;
- (e) Lamps as described in § 7-906;

- (f) Mercury-containing devices as described in § 7-907;
- (g) Cathode ray tubes (CRTs) as described in § 7-908;
- (h) Postconsumer paint as described in § 7-909; and
- (i) Aerosol cans as described in § 7-910.

“Unplanned episodic event” means an episodic event that the generator did not plan or reasonably did not expect to occur, including production process upsets, product recalls, accidental spills, or “acts of nature,” such as tornado, hurricane, or flood.

“Used” or “reused” means that a hazardous waste is either:

- (a) Employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a hazardous waste will not satisfy this condition if distinct components of the waste are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or
- (b) Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

“Used oil” means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities. Used oil does not include materials refined from crude oil that are fuels (e.g., gasoline, jet fuel and diesel fuel), or materials refined from crude oil that are used as cleaning agents or solvents (e.g., naphtha or mineral spirits); these materials are subject to regulation under **subchapters 1 through 7**, as applicable.

“User of the electronic manifest system” means a hazardous waste generator; a hazardous waste transporter; an owner or operator of a hazardous waste treatment, storage, recycling, or disposal facility; or any other person that:

- (a) Is required to use a manifest to comply with:
 - (1) Any federal or state requirement to track the shipment, transportation, and receipt of hazardous waste or other waste material that is shipped from the site of generation to an off-site designated facility for treatment, storage, recycling, or disposal; or
 - (2) Any federal or state requirement to track the shipment, transportation, and receipt of rejected wastes or regulated container residues that are shipped from a designated facility to an alternative facility, or returned to the generator; and

- (b) Elects to use the system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system; or
- (c) Elects to use the paper manifest form and submits to the system for data processing purposes a paper copy of the manifest (or data from such a paper copy), in accordance with § 7-704(c)(5). These paper copies are submitted for data exchange purposes only and are not the official copies of record for legal purposes.

Vermont Groundwater Protection Rule and Strategy or GWPRS means chapter 12 of the Vermont Environmental Protection Rules, effective July 6, 2019, as amended.

“Very small quantity generator” means a generator who generates less than or equal to the following amounts in a calendar month:

- (a) 100 kilograms (220 lbs) of non-acute hazardous waste; and
- (b) 1 kilogram (2.2 lbs) of acute hazardous waste listed in § 7-210 or § 7-215; and
- (c) 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in § 7-210 or § 7-215.

“Waste” means a material that is discarded or is being accumulated, stored, or physically, chemically or biologically treated prior to being discarded or has served its original intended use and is normally discarded or is a manufacturing or mining by-product and is normally discarded.

“Wastewater evaporation unit” means a tank or tank system that:

- (a) Heats wastewater to intentionally evaporate water to reduce the volume of the wastewater;
- (b) Receives and treats or stores an influent wastewater that is a hazardous waste as described in § 7-202(a), or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as described in § 7-202(a), or treats or stores a wastewater treatment sludge which is a hazardous waste as described in § 7-202(a); and
- (c) Is not used to dispose of hazardous waste.

Wastewater evaporation unit does not mean a sludge dryer.

“Wastewater treatment unit” means a device which:

- (a) Is part of a wastewater treatment facility that is subject to regulation under either §§ 402 or 307(b) of the Clean Water Act;
- (b) Receives and treats or stores an influent wastewater that is a hazardous waste as

described in § 7-202(a), or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as described in § 7-202(a), or treats or stores a wastewater treatment sludge which is a hazardous waste as described in § 7-202(a);

- (c) Meets the definition of tank or tank system; and
- (d) Is not a wastewater evaporation unit.

“Wipe” means a woven or non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.

§ 7-104 NOTIFICATION REQUIREMENTS

- (a) Except for persons who have been issued a temporary identification number pursuant to **subsection (d) of this section**, any person who generates or transports hazardous waste or who owns or operates a transfer facility or a facility for the treatment, storage, use, disposal, or recycling of hazardous waste shall notify the Secretary of such activity. In addition, persons managing waste under the provisions of the used oil management standards of **subchapter 8**, the universal waste management standards of **subchapter 9**, or the pharmaceutical waste management standards of **subchapter 10**, shall notify the Secretary of such activity as required under those subchapters. Notification shall be made by accurately and completely filling out the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) in accordance with the form’s instructions.
- (b) Notification is required upon transferal of ownership of an entity that was required to notify the Secretary under **subsection (a) of this section**.
- (c) Persons subject to the requirements of this section shall maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) filed with the Secretary.
- (d) The Secretary may issue a temporary identification number to persons who have generated hazardous waste only from an episodic event and do not otherwise generate hazardous waste.

§ 7-105 EMERGENCY AND CORRECTIVE ACTIONS

- (a) Emergency actions.

In the event of a release of a hazardous material (including discharges of hazardous waste), the person in control of such material shall:

- (1) Take all appropriate immediate actions to protect human health and the environment including, but not limited to, emergency containment measures and notification as

described below; and

- (2) Take any further clean-up actions as may be required and approved by federal, state, or local officials, or corrective actions as specified under **subsection (f) of this section** so that the released material and related contaminated materials no longer present a hazard to human health or the environment.
- (b) Immediate reporting. Pursuant to **10 V.S.A. § 6617**, any person who has knowledge of an actual or suspected release of hazardous material and who may be subject to liability for a release as detailed under **10 V.S.A. § 6615** shall immediately report any release that:
- (1) Exceeds 2 gallons;
 - (2) Is less than or equal to 2 gallons and poses a potential or actual threat to human health or the environment;
 - (3) Equals or exceeds its corresponding reportable quantity under CERCLA as specified under **40 CFR § 302.4**; or
 - (4) Is of non-aqueous phase liquid (NAPL) petroleum, or a material detected in environmental media in an amount that exceeds an environmental media standard, pursuant to the criteria specified under §§ **35-102(b)(4) and (5)** of the Vermont **Investigation and Remediation of Contaminated Properties Rule**, as amended.

Note: Reporting under **subsection (b) of this section** shall be directed as follows:

- Monday through Friday, 7:45 a.m. to 4:30 p.m., to the Waste Management & Prevention Division at **(802) 828-1138**.
- At all other times including State holidays to the Department of Public Safety, Division of Emergency Management at **(800) 641-5005**.

Note: Under the Federal Water Pollution Control Act, certain spills of “oil” and/or “hazardous substances” are prohibited and must be reported pursuant to the requirements of **40 CFR Part 110 / Discharge of Oil**. Certain spills of hazardous substances must also be reported pursuant to CERCLA. In both cases, the National Response Center must be notified at (800) 424-8802. Finally, in addition to federal and state spill reporting, EPCRA requires that spills are also reported to local authorities.

- (c) Written follow-up report. If requested by the Secretary, a written report shall be submitted to the Secretary within ten (10) days following any release subject to **subsection (b) of this section**. The report shall be sent to: Vermont Department of Environmental Conservation, Waste Management & Prevention Division, 1 National Life Drive – Davis 1, Montpelier, VT 05620-3704.

- (d) Releases during transportation.
 - (1) If a release occurs during transportation, the transporter shall:
 - (A) Report release to the Secretary in accordance with **subsection (b) of this section**;
 - (B) Notify the National Response Center at (800) 424-8802 or (202) 426-2675, if required by **49 CFR § 171.15**; and
 - (C) Report in writing to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590, if required by **49 CFR § 171.16**; and
 - (2) A water (bulk shipment) transporter who has discharged hazardous wastes must give the same notice as required by **33 CFR § 153.203** for oil and hazardous substances.
- (e) Management of wastes, clean-up debris and residues.
 - (1) If a release occurs and the Secretary determines that immediate removal of waste material is necessary to protect human health or the environment, the Secretary may authorize its removal by unpermitted transporters without the preparation of a manifest. Such hazardous waste may be transported to a site authorized by the Secretary under the emergency certification provisions of **§ 7-503** to temporarily accept hazardous waste generated during an emergency clean-up of a release.
 - (2) In the case of an explosives or munitions emergency response, if a Federal, State, Tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA identification numbers or hold Vermont hazardous waste transportation permits and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.
 - (3) All clean-up debris and residues that are hazardous waste shall be stored in leak-proof containers that are covered so as to prevent contact of the waste with precipitation or run-on from precipitation.
 - (4) All clean-up debris and residues that are hazardous waste shall be sent to:
 - (A) A designated facility;
 - (B) A person authorized by the Secretary to use such waste if the waste has been

delisted pursuant to § 7-218;

- (C) Some other location specified and authorized by the Secretary to receive clean-up debris and residues if the waste has been delisted pursuant to § 7-218; or
 - (D) For Vermont-listed hazardous waste, in addition to the options provided under **subsections (4)(A) through (C) of this section**, to a facility, that is not a designated facility, located in a state other than Vermont provided the facility can receive such waste under applicable state and local laws, regulations and ordinances.
- (f) Corrective action
- (1) In addition to any emergency response required pursuant to **subsection (a) of this section**, the Secretary may require that the person or persons responsible pursuant to **10 V.S.A. § 6615** take all necessary actions to investigate and remediate the release or discharge in accordance with **10 V.S.A. chapter 159** and the **Vermont Investigation and Remediation of Contaminated Properties Rule**. Additionally, the Secretary may require that the person or persons responsible for a release or discharge comply with the requirements of **40 CFR Part 264, Subpart F and § 12-607 (Corrective Actions) of the Vermont Groundwater Protection Rule and Strategy**.
 - (2) A used or fired military munition is a waste and is subject to corrective action authorities pursuant to **10 V.S.A. § 6615**, and **subsection (f)(1) of this section** if the munition lands off-range and is not promptly rendered safe or retrieved. Any imminent and substantial threats associated with any remaining material must be addressed. If remedial action is infeasible, the operator of the range must maintain a record of the event for as long as any threat remains. The record must include the type of munition and its location (to the extent the location is known).
- (g) Compliance points. In the event of a release, compliance points for regulated activities shall be established pursuant to the **Vermont Groundwater Protection Rule and Strategy**.

§ 7-106 LAND DISPOSAL RESTRICTIONS

- (a) Certain hazardous wastes shall not be disposed of in or on the land. **40 CFR Part 268**, which is hereby incorporated by reference, except for **40 CFR §§ 268.5, 268.6, and 268.42(b)**, identifies those wastes which shall not be land disposed and describes the limited circumstances under which an otherwise prohibited waste may continue to be land disposed. The authority for implementing the CFR sections not incorporated by reference remains with the EPA.
- (b) In addition to the prohibitions of **40 CFR Part 268**, the Secretary may restrict the land

disposal of any hazardous waste in the State of Vermont which:

- (1) May present an undue risk to human health or the environment, immediately or over a period of time;
 - (2) Are prohibited under **Subchapter 4 of the Vermont Groundwater Protection Rule and Strategy** of chapter 12 of the Vermont Environmental Protection Rules, as amended; or
 - (3) May adversely affect public trust uses of groundwater as defined in **Subchapter 3 of the Groundwater Protection Rule and Strategy** (Chapter 12 of the Vermont Environmental Protection Rules), as amended.
- (c) Dilution of hazardous waste subject to the land disposal restrictions of 40 CFR Part 268 is prohibited pursuant to **40 CFR § 268.3**.

§ 7-107 GROUNDWATER PROTECTION

- (a) Compliance; findings.
 - (1) Whereas, the **Vermont Groundwater Protection Rule and Strategy (GWPRS)** requires that these regulations include certain requirements, as necessary, to ensure that activities regulated by these regulations comply with requirements of the **GWPRS**;
 - (2) Whereas, **10 V.S.A. § 6616 and § 7-302(c) of these regulations** prohibit the discharge or release of a hazardous waste to groundwater;
 - (3) Whereas, these regulations ensure that activities conducted in compliance with these regulations will not result in a discharge or withdrawal of groundwater;
 - (4) Whereas, any person who violates these regulations and discharges a hazardous waste into groundwater is required to immediately report that discharge and investigate and remediate the discharge pursuant to these regulations and the **Vermont Investigation and Remediation of Contaminated Properties Rule**, as amended;
 - (5) Therefore, compliance with these regulations will not result in an exceedance of groundwater enforcement standards at points of compliance or otherwise adversely affect public trust uses of groundwater in the State.
 - (6) Notwithstanding the provisions of this subsection, the Secretary may require any person subject to these regulations to demonstrate compliance with the **GWPRS**.
- (b) Management of groundwater. Notwithstanding any other provisions of these regulations, activities designated as high potential risk activities and moderate potential risk activities

by the **GWPRS** shall be managed in accordance with **Subchapter 4 of the GWPRS**.

§ 7-108 SIGNATORIES TO CERTIFICATION APPLICATIONS AND REPORTS

- (a) Certification applications and information required by **subsection (b) of this section** shall be signed as follows:
 - (1) For a corporation, by a responsible corporate officer. A responsible corporate officer means:
 - (A) A president, secretary, treasurer or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - (B) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having a gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
 - (3) For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes:
 - (A) The chief executive officer of the agency; or
 - (B) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- (b) All reports required by certifications, and at the discretion of the Secretary other information requested or required by the Secretary, shall be signed by a person described in **subsection (a) of this section** or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in **subsection (a) of this section**;
 - (2) The authorization specifies either an individual or a position having responsibility for overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

- (3) The written authorization is submitted to the Secretary.
- (c) If an authorization described in **subsection (b) of this section** is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirement of **subsection (b) of this section** must be submitted to the Secretary prior to or together with any documents signed by an authorized representative.
- (d) Certification. Any person signing a document pursuant to either **subsection (a) or (b) of this section** shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
- (e) The certification described in **subsection (d) of this section** need not appear on a manifest completed in accordance with subchapter 7 of these regulations.

§ 7-109 INCORPORATIONS BY REFERENCE

- (a) When reference is made to CFR titles, their parts, subparts, or sections, the reference is to titles of the Code of Federal Regulations as they existed on July 1, 2020, except that references to the ASTM test methods under § 7-205(a)(1), are to the test methods in SW-846 Test Methods 1010B or 1020C identified in the “Modernizing Ignitable Liquids Determinations” amendments made on July 7, 2020, at **85 FR 40594** through **40608**.
- (b) The following federal regulations are incorporated by reference:
 - (1) **40 CFR §§ 266.100 through 266.107 and 266.109 through 266.112** for hazardous waste that is burned or processed in a boiler or industrial furnace (as defined in § 7-103). Any person in control of hazardous waste subject to this subsection also shall comply with all applicable provisions of the Vermont Air Pollution Control Regulations. The Secretary may, on a case-by-case basis, grant a variance from classification as a boiler. The standards and criteria used for this variance and the procedures followed shall be no less stringent than those in **40 CFR §§ 260.32 and 260.33**.
 - (2) The Mixed Waste Rule of **40 CFR §§ 266.210 through 266.360 (Subpart N)** except:

- (A) When the terms “we” or “us” are used within incorporated material, those terms mean the Secretary.
 - (B) When incorporated materials reference “261.3” the reference shall mean **subchapter 2** of these regulations.
 - (C) When incorporated materials reference “Parts 260 – 270” as a phrase, it means **subchapters 1 through 7** of these regulations.
- (3) The **40 CFR § 262.21** requirements for manifest tracking numbers, manifest printing, and obtaining manifests.
 - (4) The Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities of **40 CFR §§ 262.200 through 262.216 (Subpart K)** except:
 - (A) When the term “EPA Regional Administrator” is used within incorporated material, that term means the Secretary.
 - (B) The Laboratory Management Plan, and all substantive amendments to the procedures required by **40 CFR § 262.214(a)** and **subsection (C) of this section**, shall be reviewed and approved by the Secretary prior to being incorporated into the plan.

Note: If there is a question if a change to a Laboratory Management Plan is substantive, a representative of the Eligible Academic Entity should contact the Secretary for clarification.
 - (C) The Laboratory Management Plan shall, in addition to the elements required by **40 CFR § 262.214(a)**, include procedures for:
 - (i) Inspecting at a specified frequency all laboratories covered by the requirements of the Laboratory Management Plan to assess conformance with the requirements of the Laboratory Management Plan. Results of such inspections must be retained for at least three years or, if inspections are scheduled more than three years apart, until the results of the next scheduled lab inspection have been documented; and
 - (ii) The identification of Laboratory Management Plan non-compliance, and the assignment of responsibility, timelines and corrective actions to prevent their reoccurrence.
 - (D) Each academic entity shall maintain up-to-date records that identify those laboratories covered by the requirements of the Laboratory Management Plan.
 - (5) The **40 CFR §§ 262.80 through 262.89 (Subpart H)** requirements for

Transboundary Movements of Hazardous Waste for Recovery and Disposal.

§ 7-110 SEVERABILITY

The provisions of these regulations are severable. If any provision of these regulations is invalid or if any application of these regulations to any person or circumstance is invalid, the invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.

§ 7-111 VARIANCES

A person may apply to the Secretary for, and the Secretary may grant, a variance from these regulations in accordance with 10 V.S.A. § 6613.

Subchapter 2: IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

§ 7-201 PURPOSE, SCOPE, APPLICABILITY

This subchapter identifies or otherwise describes those wastes subject to regulation as hazardous wastes under this chapter and assigns EPA or Vermont “hazardous waste codes” to them. It establishes procedures for determining whether a waste is hazardous waste and petitioning the addition or removal of a waste to or from the lists of hazardous wastes identified in this subchapter. It also identifies or references sampling, analytical and testing methods and procedures to be used for the purpose of establishing whether or not a waste is hazardous.

§ 7-202 HAZARDOUS WASTE DETERMINATION

- (a) “Hazardous Waste” means any waste or combination of wastes which meets the definition in § 7-103, including but not limited to:
- (1) Any waste which exhibits one or more of the characteristics described in §§ 7-205 through 7-208; except waste that is regulated because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-208, when the waste no longer exhibits any characteristic. However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of **40 CFR Part 268**, even if they no longer exhibit a characteristic at the point of land disposal. Moreover, a waste that exhibits the characteristic of toxicity that has been land disposed shall never cease to be a hazardous waste;
 - (2) Any waste which is listed in §§ 7-210 through 7-215 except waste that is listed solely because it exhibits one or more of the characteristics of ignitability as defined under § 7-205, corrosivity as defined under § 7-206, or reactivity as defined under § 7-207 is not a hazardous waste, if the waste no longer exhibits any characteristic of hazardous waste identified in §§ 7-205 through 7-208 of these regulations. However, wastes excluded under this section are subject to the requirements of **40 CFR Part 268** (as applicable), even if they no longer exhibit a characteristic at the point of land disposal;
 - (3) Any mixture of a solid waste and a hazardous waste except as exempted in § 7-203(k);
 - (4) Any waste generated from the treatment, storage, disposal, or use of a hazardous waste (i.e., sludge, spill residue, ash, emission control dust, leachate, and precipitation runoff which comes in contact with the waste itself) except:
 - (A) A material that is reclaimed from a waste and that is used beneficially is not a waste and hence not a hazardous waste under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal;

and

- (B) Any waste generated from the treatment, storage, or disposal of hazardous waste that is listed in §§ 7-210 through 7-215 solely because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-207, is not a hazardous waste if the waste no longer exhibits any characteristic of hazardous waste. However, wastes that exhibit a characteristic at the point of generation are subject to the requirements of 40 CFR Part 268, even if they no longer exhibit a characteristic at the point of land disposal;
 - (5) Any waste derived from a waste listed in §§ 7-210 through 7-215;
 - (6) Any waste generated from the discharge or release of a material which exhibits a characteristic described in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215;
 - (7) Any residues from a container or from the inner liner of a container which held a material which exhibits a characteristic described in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215, except as exempted in § 7-203(j);
 - (8) Rebuttable presumption for used oil. Used oil containing more than 1000 ppm total halogens shall be presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in §§ 7-210 through 7-215. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix II).
- (b) A person who generates a waste shall make an accurate determination as to whether that waste is a hazardous waste by using the following procedure:
- (1) The hazardous waste determination for each waste shall be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the classification of the waste may change.
 - (2) A person shall determine if the waste is excluded from regulation under § 7-203 or § 7-204.
 - (3) If the waste is not excluded from regulation, the person shall use knowledge of the waste to determine if the waste meets any of the listing descriptions under §§ 7-210 through 7-215. Acceptable knowledge that may be used in making an accurate determination as to whether the waste is listed may include waste origin, composition, the process producing the waste, feedstock, and other reliable and relevant information. If the waste is listed, the person may file a delisting petition under § 7-217 to demonstrate to the Secretary or EPA Administrator that the waste from this

particular site or operation is not a hazardous waste.

- (4) The person shall also determine whether the waste exhibits one or more of the hazardous waste characteristics identified in §§ 7-205 through 7-208 by following the procedures in **subsection (4)(A) or (B) of this section**, or a combination of both.
 - (A) The person shall apply knowledge of the hazard characteristic of the waste in light of the materials or the processes used to generate the waste. Acceptable knowledge may include process knowledge (e.g., information about chemical feedstocks and other inputs to the production process); knowledge of products, by-products, and intermediates produced by the manufacturing process; chemical or physical characterization of wastes; information on the chemical and physical properties of the chemicals used or produced by the process or otherwise contained in the waste; testing that illustrates the properties of the waste; or other reliable and relevant information about the properties of the waste or its constituents. A test other than a test method set forth under §§ 7-205 through 7-208, or an equivalent test method approved by the Administrator of EPA under **40 CFR § 260.21**, may be used as part of a person's knowledge to determine whether a solid waste exhibits a characteristic of hazardous waste. However, such tests shall not, by themselves, provide definitive results. Persons testing their waste shall obtain a representative sample of the waste for the testing, as defined in § 7-103.
 - (B) When available knowledge is inadequate to make an accurate determination, the person shall test the waste according to the applicable methods set forth under §§ 7-205 through 7-208 or according to an equivalent method approved by the Administrator of EPA under **40 CFR 260.21** and in accordance with the following:
 - (i) Persons testing their waste shall obtain a representative sample of the waste for the testing, as defined in § 7-103.
 - (ii) Where a test method is specified under §§ 7-205 through 7-208, the results of the regulatory test, when properly performed, are definitive for determining the regulatory status of the waste.

Note: Waste that is listed as Vermont regulated hazardous waste under § 7-211 must be evaluated to determine whether or not it exhibits a hazardous waste characteristic.

- (5) If the waste is determined to be hazardous, the generator shall refer to **40 CFR Part 268** (incorporated by reference through § 7-106 of these regulations), and **subchapters 1, 3, 5, 6, 7, 8, 9 and 10** for other possible exclusions or restrictions pertaining to management of the specific waste.
- (6) The person shall maintain records supporting its hazardous waste determinations, including records that identify whether a waste is a hazardous waste, as described in **subsection (a) of this section**. Records shall be maintained for at least three years

from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. These records must comprise the generator's knowledge of the waste and support the generator's determination, as described at **subsections (b)(3) and (b)(4) of this section**. The records shall include the following types of information: The results of any tests, sampling, waste analyses, or other determinations made in accordance with this section; records documenting the tests, sampling, and analytical methods used to demonstrate the validity and relevance of such tests; records consulted in order to determine the process by which the waste was generated, the composition of the waste, and the properties of the waste; and records which explain the knowledge basis for the generator's determination, as described at **subsection (4)(A) of this section**. The periods of record retention referred to in this section shall be extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as required by the Secretary.

- (c) If the waste is determined to be hazardous, generators shall identify all applicable EPA and Vermont hazardous waste codes assigned to wastes identified in **§§ 7-205 through 7-208 and § 7-210 through 7-215**. Prior to shipping the waste off site, the generator also shall mark its containers with all applicable EPA and Vermont hazardous waste codes according to **§ 7-309(b)(1)**. If a waste is identified by both EPA and Vermont hazardous waste codes and descriptions, the EPA hazardous waste code and description shall be used for the purposes of these regulations.
- (d) **Military munitions**
- (1) A military munition is a waste, therefore subject to a hazardous waste determination, if unexploded ordinance and contaminants are buried or disposed of on-range and the burial or disposal is not a result of product use.
 - (2) An unused military munition is a waste, and subject to a hazardous waste determination, when any of the following occurs:
 - (A) The munition is abandoned by being disposed of, burned, detonated (except during intended use as specified in **§ 7-203(z)(1)**), incinerated, or treated prior to disposal;
 - (B) The munition is removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, or incinerated, or treated prior to disposal;
 - (C) The munition is deteriorated or damaged (e.g., the integrity of the munition is compromised by cracks, leaks, or other damage) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes; or
 - (D) The munition has been declared a waste by an authorized military official.
 - (3) A used or fired military munition is a waste, and subject to a hazardous waste

determination:

- (A) When transported off range or from the site of use, where the site of use is not a range, for the purposes of storage, reclamation, treatment, disposal, or treatment prior to disposal; or
- (B) If recovered, collected, and then disposed of by burial, or landfilling either on or off a range.

§ 7-203 CONDITIONAL EXEMPTIONS

The following wastes are exempted from the provisions of these regulations only if all conditions for exemption are met:

- (a) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. Persons managing household wastes that are of the same type as the universal wastes described by §§ 7-902 through 7-910 may, at their option, manage them under the requirements of **subchapter 9**. Persons who commingle the household wastes together with universal waste regulated under **subchapter 9** must manage the commingled waste under the requirements of that subchapter.
- (b) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment, except as prohibited by § 7-1006, in accordance with the provisions of a permit issued under **10 V.S.A. chapter 47**.
- (c) Fly ash waste, bottom ash waste, slag waste and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, except residue derived from the burning or processing of hazardous waste in a boiler or industrial furnace as provided by **40 CFR § 266.112** (incorporated by reference through § 7-109(b)(1) of these regulations).
- (d) Mining overburden returned to the mine site.
- (e) Waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock and overburden from the mining of uranium ore), except residue derived from the burning or processing of hazardous waste in a boiler or industrial furnace as provided by **40 CFR § 266.112** (incorporated by reference through § 7-109(b)(1) of these regulations). For purposes of this section, beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water and/or carbon dioxide; roasting, autoclaving, and/or chlorination in preparation for leaching (except where the roasting [and/or autoclaving and/or chlorination]/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic

separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in situ leaching. For the purposes of this section, waste from the processing of ores and minerals includes only those listed by **40 CFR § 261.4(b)(7)(ii)** as generated.

- (f) Hazardous waste containing radioactive waste (“mixed waste”) when it meets the eligibility criteria and conditions of **40 CFR Part 266, Subpart N** (incorporated by reference through § 7-109(b)(2) of these regulations).
- (g) In the case of any waste consisting of, containing, or derived from any waste or any product or constituent listed in §§ 7-210 through 7-215 of this subchapter, when it has been determined by the Secretary that the waste is not hazardous pursuant to the delisting procedures of § 7-217 or § 7-218.
- (h) A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste treatment manufacturing unit until it exits the unit in which it was generated provided:
 - (1) The unit is not a surface impoundment; and
 - (2) The hazardous waste remains in the unit for less than ninety (90) days after the unit ceases to be operated for manufacturing, storage, or transportation of a product or raw material.
- (i) Samples as follows:
 - (1) Except as provided in subsection (2) and (4) of this section, samples collected for the sole purpose of testing to determine their properties, characteristics or composition when:
 - (A) The sample is being transported to a laboratory for the purpose of testing;
 - (B) The sample is being transported back to the sample collector after testing;
 - (C) The sample is being stored by the sample collector before transport to a laboratory for testing;
 - (D) The sample is being stored in a laboratory before testing;
 - (E) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or
 - (F) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

- (2) In order to qualify for the exemption in **subsections (1)(A) and (B) of this section**, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:
 - (A) Comply with U. S. Department of Transportation (DOT), U. S. Postal Service (USPS) and any other applicable shipping requirements; or
 - (B) Comply with the following requirements if the sample collector determines that DOT, USPS or other shipping requirements do not apply to the shipment of the sample:
 - (i) Assure that the following accompanies the sample:
 - (aa) The sample collector's name, mailing address and telephone number;
 - (bb) The laboratory's name, mailing address and telephone number;
 - (cc) The quantity of the sample;
 - (dd) The date of shipment; and
 - (ee) A description of the sample.
 - (ii) Package the sample so that it does not leak, spill, or vaporize from its packaging.
- (3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in **subsection (1) of this section**.
- (4) In order to qualify for the exemption in **subsections (1)(A) and (B) of this section**, the mass of a sample that will be exported to a foreign laboratory or that will be imported to a U.S. laboratory from a foreign source must additionally not exceed 25 kg.
- (5) Treatability study samples as provided in **40 CFR §§ 261.4(e) and (f)**.
- (j) Containers and inner liners from containers of hazardous waste provided that the containers and inner liners are empty. Containers and inner liners are empty under the following conditions:
 - (1) For those containers or inner liners which have held hazardous waste, when all material has been removed using the practices commonly employed to remove materials from that type of container, and
 - (A) No more than one inch of residue remains on the bottom of the container or inner

liner; and

- (B) No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 119 gallons in size; or
 - (C) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119 gallons in size.
- (2) For those containers that held a hazardous waste that is a compressed gas, when the pressure in the container approaches atmospheric pressure.
 - (3) For those containers or inner liners which have held acutely hazardous waste, pesticidal waste, or obsolete pesticide products:
 - (A) When the container or inner liner has been triple-rinsed with a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;
 - (B) When the container or inner liner is cleaned by a method which the generator has demonstrated to achieve equivalent removal; or
 - (C) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.
 - (4) For containers of hazardous waste pharmaceuticals, when such containers are managed in accordance with the requirements of § 7-1008 for determining when they are considered empty.
- (k) Mixtures of solid waste and hazardous waste provided that:
- (1) The hazardous waste in the mixture is listed in §§ 7-210 through 7-215 solely because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-207, and the resultant mixture no longer exhibits any characteristic. However, wastes that exhibit a characteristic at the point of generation are subject to the requirements of 40 CFR Part 268, even if they no longer exhibit a characteristic at the point of land disposal.
 - (2) The hazardous waste in the mixture is listed in §§ 7-210 through 7-215 solely because it exhibits one or more of the characteristics of hazardous waste identified in §§ 7-205 through 7-207, and the solid waste is excluded from regulation under § 7-203(e), and the resultant mixture no longer exhibits any hazardous waste characteristic for which the hazardous waste in the mixture was listed. However, wastes that exhibit a characteristic at the point of generation are subject to the requirements of 40 CFR Part 268, even if they no longer exhibit a characteristic at

the point of land disposal.

- (3) The hazardous waste in the mixture is listed in §§ 7-210 through 7-215 and the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either § 402 or § 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater) as specified in 40 CFR § 261.3(a)(2)(iv).
- (4) Nonwastewater mixtures are still subject to the requirements of 40 CFR Part 268 (incorporated by reference by § 7-106 of these regulations), even if they no longer exhibit a characteristic at the point of land disposal.

Note: Dilution of hazardous waste subject to the land disposal restrictions of 40 CFR Part 268 is prohibited pursuant to 40 CFR § 268.3 (incorporated by reference through § 7-106 of these regulations).

- (l) Water-miscible metal cutting and grinding fluid waste that does not exhibit a characteristic of hazardous waste as defined in §§ 7-205 through 7-208 provided:
 - (1) It is recycled or-treated on-site (e.g., centrifugation, evaporation of aqueous component, filtration and ultrafiltration) in accordance with § 7-502(o) or sent off-site for treatment; and

Note: Evaporation equipment must be operated in accordance with Vermont's Air Pollution Control Regulations.
 - (2) Containers and/or tanks holding water-miscible metal cutting and grinding fluid are:
 - (A) Marked with words that identify the contents;
 - (B) Kept closed except to add or remove spent material;
 - (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration);
 - (D) Stored on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow; and
 - (3) If the waste is subject to freezing and expansion, mechanical or physical means are employed to prevent freezing; and
 - (4) Any residue resulting from on-site recycling or treatment is managed either as used oil in accordance with the requirements of subchapter 8, or in accordance with applicable hazardous waste management requirements of subchapters 1 through 7; and

- (5) Any water resulting from on-site treatment that is authorized to be discharged in accordance with **10 V.S.A. chapter 47** (including for injection wells, direct discharges); and
- (6) Any water-miscible metal cutting and grinding fluid waste sent off-site for treatment are offered for transport only to a transporter permitted according to the requirements of **subchapter 4**.
- (m) Wood ash subject to regulation as hazardous waste only because it exhibits the characteristic of corrosivity described in **§ 7-206(a)(3)** provided the ash is stored in a location that is either:
 - (1) Protected from precipitation; or
 - (2) Secure from public access (e.g., fenced) and has a sign posted warning of the corrosive hazard of wet wood ash.
- (n) Used oil that meets the criteria of the VT02 hazardous waste code and/or exhibits a hazardous waste characteristic, is not subject to the requirements of **subchapters 3 through 7** of these regulations, but is subject to the Used Oil Management Standards of **subchapter 8**.

Note: Pursuant to **10 V.S.A. § 6621a**, no person shall knowingly dispose of used oil in a landfill.

- (o) Non-terne plated used oil filters that are not mixed with wastes listed in **§§ 7-210 through 7-215** if:
 - (1) These oil filters have been gravity drained using one of the following methods:
 - (A) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;
 - (B) Hot-draining and crushing;
 - (C) Hot-draining and dismantling; or
 - (D) Any other equivalent hot-draining method that will remove used oil; or
 - (E) Draining and crushing using a mechanical, pneumatic, or hydraulic device designed for the purpose of crushing oil filters and effectively removing the oil; and
 - (2) All drained oils are collected and managed subject to these regulations.

Note: The Agency recommends that drained oil filters be recycled as scrap metal.

- (p) Petroleum contaminated soil provided:
- (1) The soil does not exhibit a characteristic of hazardous waste as defined in §§ 7-205 through 7-208, with the exception that soil subject to the corrective action requirements of 40 CFR Part 280 is not subject to regulation as hazardous waste solely for the hazardous waste codes of D018 through D043 of §7-208; and
 - (2) The soil does not contain waste listed in §§ 7-210 through 7-215, with the exception that soil may contain waste identified by the VT02 hazardous waste code; and
 - (3) The soil is evaluated to establish the type and concentration of the contaminant(s) present in accordance with the Vermont **Investigation and Remediation of Contaminated Properties Rule**, as amended; and
- Note:** Field screening and laboratory analysis or testing must be conducted by an independent professional consulting firm or laboratory using a method or methods that are either identified under § 7-219 of these regulations or that are otherwise approved by the Secretary.
- (4) The soil is managed (e.g., stockpiled, treated, transported, or disposed) in accordance with the Vermont **Investigation and Remediation of Contaminated Properties Rule**, as amended.
- (q) Industrial discharges in compliance with 10 V.S.A. chapter 47. This exemption applies only to the actual point source discharge. It does not exclude wastewaters while they are being collected, stored, or treated before discharge nor does it exclude sludges that are generated by industrial wastewater treatment.
- (r) Pesticidal wastes that are both generated and disposed of by the same farmer provided:
- (1) The emptied pesticide container is triple-rinsed in accordance with the provisions of § 7-203(j); and
 - (2) The pesticide residues are disposed of on the farmer's own farm in a manner consistent with the disposal instructions on the pesticide label.
- (s) The wastes listed below are exempt from regulation under subchapters 1 through 7 of these regulations except as specified in subchapter 9 of these regulations. The following wastes are subject to regulation as universal wastes under subchapter 9:
- (1) Batteries as described in § 7-902;
 - (2) Pesticides as described in § 7-903;
 - (3) Thermostats as described in § 7-904;

- (4) PCB-containing fluorescent light ballasts as described in § 7-905;
 - (5) Lamps as described in § 7-906;
 - (6) Mercury-containing devices as described in § 7-907;
 - (7) Cathode ray tubes (CRTs) as described in § 7-908;
 - (8) Postconsumer paint as described in § 7-909; and
 - (9) Aerosol cans as described in § 7-910.
- (t) PCB-containing dielectric fluid and, with the exception of fluorescent light ballasts, electric equipment containing such fluid authorized for use and regulated under **40 CFR Part 761** of the Toxic Substances Control Act and that are hazardous only because they either meet the criteria of the VT01 hazardous waste identification code or fail the test for the Toxicity Characteristic (hazardous waste codes D018 through D043 only). This exemption is not applicable to waste contaminated with PCB-containing dielectric fluid.
- (u) The following materials provided they do not exhibit a characteristic identified in §§ 7-205 through 7-208:
- (1) Hazardous debris as defined in **40 CFR Part 268** (Land Disposal Restrictions incorporated by reference through § 7-106) that has been treated using one of the required extraction or destruction technologies specified in **Table 1 of 40 CFR § 268.45**; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or
 - (2) Debris as defined in **40 CFR Part 268** (Land Disposal Restrictions incorporated by reference through § 7-106) that the Secretary, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.
- (v) Waste which consists of discarded arsenical-treated wood or wood products which fails the test for the toxicity characteristic for hazardous waste codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.
- (w) Contaminated wipes, as defined in § 7-103, that are to be sent off-site for cleaning and reuse, provided that:
- (1) The contaminated wipes, when being accumulated and stored, and through the point in time when being transported off-site, are contained in non-leaking containers that are:

- (A) Marked “Excluded Contaminated Wipes”; and
 - (B) Able to contain free liquids, should free liquids occur.
- (2) During accumulation, containers are kept closed except when it is necessary to add or remove contaminated wipes. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the container rim.
 - (3) When a container becomes full or when contaminated wipes are no longer being accumulated, through the point in time when the container is transported off-site, the container is kept sealed with the lid properly and securely affixed to the container and all openings closed sufficiently to prevent leaks and emissions:
 - (4) The contaminated wipes are accumulated by the generator for no more than 180 days from the start date of accumulation for each container prior to being sent for cleaning;
 - (5) At the point when being transported off-site for cleaning, the contaminated wipes contain no free liquids as defined in § 7-103.
 - (6) Free liquids removed from the contaminated wipes or from the container holding the wipes must be managed according to the applicable requirements of **subchapters 1 through 8** of these regulations;
 - (7) Generators maintain at their site documentation that:
 - (A) Identifies the name and address of the laundry or dry cleaner that is receiving the contaminated wipes;
 - (B) Verifies the 180-day accumulation time limit requirement of **subsection (4) of this section** is being met;
 - (C) Provides a description of the process the generator is using to ensure the contaminated wipes contain no free liquids at the point of being transported off-site for laundering or dry cleaning;
 - (8) The contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under **sections 301 and 402 or section 307 of the Clean Water Act**.
- (x) Reusable absorbent material, contaminated with used oil or petroleum distillate, that does not exhibit a hazardous waste characteristic provided that:
- (1) The contaminated absorbent material is processed and reused on-site, any residual material that results from processing is managed in accordance with these regulations, and any contaminated water resulting from on-site processing is discharged in accordance with **10 V.S.A. chapter 47** (for indirect injection well, and direct discharges) and **chapter 48** (for groundwater protection); and

- (2) Prior to being processed, the absorbent material is accumulated and stored on-site in containers that are:
 - (A) Marked with words that identify the contents;
 - (B) Kept closed except to add or remove spent material;
 - (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration); and
 - (D) Stored on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow.

- (y) Airbag waste
 - (1) Airbag waste at the airbag waste handler or during transport to an airbag waste collection facility or designated facility is not subject to regulation under **subchapters 1 through 7** of these regulations provided that:
 - (A) The airbag waste is accumulated in a quantity of no more than 250 airbag modules or airbag inflators, for no longer than 180 days;
 - (B) The airbag waste is packaged in a container designed to address the risk posed by the airbag waste and marked “Airbag Waste-Do Not Reuse”;
 - (C) The airbag waste is sent directly to either:
 - (i) An airbag waste collection facility in the United States under the control of a vehicle manufacturer or their authorized representative, or under the control of an authorized party administering a remedy program in response to a recall under the National Highway Traffic Safety Administration, or
 - (ii) A designated facility as defined in § 7-103;
 - (D) The transport of the airbag waste complies with all applicable U.S. Department of Transportation regulations in **49 CFR Parts 171 through 180** during transit;
 - (E) The airbag waste handler maintains at the handler facility for no less than three (3) years records of all off-site shipments of airbag waste and all confirmations of receipt from the receiving facility. For each shipment, these records must, at a minimum, contain the name of the transporter and date of the shipment; name and address of receiving facility; and the type and quantity of airbag waste (i.e., airbag modules or airbag inflators) in the shipment. Confirmations of receipt must include the name and address of the receiving facility; the type and quantity of the airbag waste (i.e., airbag modules and airbag inflators) received; and the date which it was received. Shipping records and confirmations of receipt must be made

available for inspection and may be satisfied by routine business records (e.g., electronic or paper financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt).

- (2) Once the airbag waste arrives at an airbag waste collection facility or designated facility, it becomes subject to all applicable hazardous waste regulations, and the facility receiving airbag waste is considered the hazardous waste generator for the purposes of the hazardous waste regulations and must comply with the applicable requirements of **subchapter 3**.
 - (3) Reuse in vehicles of defective airbag modules or defective airbag inflators subject to a recall under the National Highway Traffic Safety Administration is prohibited.
- (z) A military munition when:
- (1) Used for its intended purpose, including:
 - (A) Use for training military personnel or explosives and munitions emergency response specialists;
 - (B) Use in research, development, testing, or evaluation of military munitions, weapons, or weapon systems; or
 - (C) Recovery, collection, and on-range destruction of unexploded ordinance and munitions fragments during range clearance activities at active or inactive ranges.
 - (2) An unused military munition, or component of that munition, is being repaired, reused, recycled, reclaimed, disassembled, reconfigured or otherwise subjected to materials recovery activities, unless those activities include use constituting disposal or burning for energy recovery.
- (aa) Consumer products that are available to the general public in the marketplace which were treated with perfluorooctanoic acid, perfluorooctanesulfonic acid or a material containing perfluorooctanoic acid or perfluorooctanesulfonic acid.
- (bb) Remediation wastes from an environmental response action that contain perfluorooctanoic acid, perfluorooctanesulfonic acid or a material containing perfluorooctanoic acid or perfluorooctanesulfonic acid and when those remediation wastes disposed in accordance with a corrective action plan or disposal plan approved by the Secretary.
- (cc) Sludges from wastewater treatment facilities, collected leachate from solid waste management facilities, and residuals from the treatment of drinking water that contain perfluorooctanoic acid, perfluorooctanesulfonic acid or a material containing perfluorooctanoic acid or perfluorooctanesulfonic acid and when those remediation wastes are disposed in accordance with a corrective action plan or disposal plan approved

by the Secretary.

§ 7-204 RECYCLING EXEMPTIONS

The following wastes are exempted from the provisions of these regulations only if they are recycled as specified and all conditions for exemption are met:

Note: Refer to **subchapter 6** for standards applicable to hazardous waste recycling activities not exempted under this section.

- (a) (1) Hazardous wastes, other than the wastes described in subsections (a)(2) of this section, that are recycled on-site in accordance with the applicable requirements of **subchapter 6**.
- (2) The following materials are not exempt from the provisions of these regulations, even if they are recycled according to **subchapter 6**:
 - (A) Except as provided in **§ 7-204(k)**, materials used in a manner constituting disposal, or used to produce products that are applied to the land; or
 - (B) Except as provided in **§ 7-204(l)**, materials burned for energy recovery, used to produce a fuel, or contained in fuels; or
 - (C) Materials accumulated speculatively as defined in **40 CFR § 261.1(c)(8)**; or
 - (D) Inherently waste-like materials listed in **40 CFR §§ 261.2(d)(1) and (d)(2)**.
- (b) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose provided those solutions are managed prior to reuse according to the requirements of **40 CFR § 261.4(a)(9)(iii)**.
- (c) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood provided those wastewaters are managed prior to reuse according to the requirements of **40 CFR § 261.4(a)(9)(iii)**.
- (d) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.
- (e) Scrap metal that is recycled.
- (f) Spent lead-acid batteries that are reclaimed or regenerated, provided:

- (1) Persons who generate or collect spent lead-acid batteries, regenerate spent lead-acid batteries, or store spent lead-acid batteries but do not reclaim them (other than spent lead-acid batteries that are to be regenerated) store such batteries under cover on an impervious surface;
 - (2) Transport of spent lead-acid batteries is done in compliance with **49 CFR Parts 171 through 177**;
 - (3) Persons who generate, collect, transport, store, or regenerate lead-acid batteries for reclamation purposes are subject to regulation only as specified in the table included under **40 CFR § 266.80(a)**; and
 - (4) Persons who store spent lead-acid batteries before reclaiming them, but do not reclaim them through regeneration are subject to regulations only as specified under **40 CFR § 266.80(b)**.
- (g) Recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these metals provided:
- (1) Persons who generate, transport, store or recycle these recyclable materials comply with **40 CFR Part 266, Subpart F**.
 - (2) Any generator or facility accumulating or storing these recyclable materials from which precious metals are reclaimed comply with any additional standards and requirements specified by the Secretary as necessary to protect human health and the environment. In making such determination, the Secretary shall use the standards and procedures specified in **40 CFR §§ 260.40 and 260.41**.
- (h) Intact or shredded circuit boards being recycled provided that they are:
- (1) Stored in containers sufficient to prevent a release to the environment prior to recovery; and
 - (2) Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.
- (i) Spent ethylene glycol or water-based ethylene glycol solutions (e.g., antifreeze) that are subject to regulation as hazardous waste for meeting only the criteria of the VT08 hazardous waste code provided that:
- (1) The spent ethylene glycol or water-based ethylene glycol solution is recycled for reuse (e.g., filtered) and/or treated for reuse (e.g., filtered, additives added); and
 - (2) Containers and/or tanks used to hold spent ethylene glycol or water-based ethylene glycol solution are:

- (A) Marked with words that identify the contents;
 - (B) Kept closed except to add or remove spent material;
 - (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration):
 - (D) Stored on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow; and
- (3) If the spent ethylene glycol or water-based ethylene glycol solution is subject to freezing and expansion, mechanical or physical means are employed to prevent freezing; and
 - (4) Any residue resulting from on-site recycling and/or treatment that is hazardous waste is managed as hazardous waste.
- (j) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.
 - (k) Commercial chemical products that are applied to the land provided that land application is their ordinary manner of use.
 - (l) Commercial chemical products that are themselves fuels (e.g., gasoline, aviation fuel, diesel fuel) provided:
 - (1) The commercial chemical product is burned for energy recovery, or is mixed or reclaimed to produce a fuel;
 - (2) The commercial chemical product is not mixed with non-fuel hazardous waste;
 - (3) The generator maintains a written record of any commercial chemical product shipped off-site that includes:
 - (A) The type and amount of material shipped;
 - (B) The date of generation;
 - (C) The date of shipment; and
 - (D) The name, address and phone number of the receiving facility;
 - (4) Prior to shipment off-site, the commercial chemical product is accumulated and stored in containers and/or tanks that are:
 - (A) Marked to identify the date the container or tank becomes full and with words that

- identify the contents as a usable fuel product;
- (B) Kept closed except when adding or removing material;
 - (C) In good condition (i.e., no severe rusting, apparent structural defects or deterioration);
 - (D) Kept on an impervious surface, and if stored out-of-doors, within a structure that sheds rain and snow; and
 - (E) Handled and stored in a manner that minimizes the possibility of fire, explosion or a release or discharge to air, soil, groundwater, or surface water;
- (5) If the commercial chemical product is subject to freezing and expansion, mechanical or physical means are employed to prevent freezing; and
- (6) The commercial chemical product is shipped within 180 days from the date the container or tank becomes full to: a facility that burns the product for energy recovery, or mixes or reclaims the product to produce a fuel; a designated facility; or an aggregation facility that meets the following:
- (A) The owner of the facility has requested and received approval from the Secretary, using a form provided by the Secretary, to operate an aggregation facility. Any aggregation facility already in operations on the effective date of these regulations shall comply with the requirements of this section within 90 days of the effective date of these regulations.
 - (B) Commercial chemical product is not stored at the aggregation facility for more than 30 days.
 - (C) All commercial chemical product stored at the aggregation facility is shipped to: a facility that burns the product for energy recovery, or mixes or reclaims the product to produce a fuel; or a designated facility.
 - (D) All commercial chemical product stored at the aggregation facility meets the following requirements:
 - (i) Containers must be kept closed except when adding or removing material, be marked with words that identify the contents as a usable fuel product, and be stored:
 - (aa) In a manner to prevent leakage or rupture;
 - (bb) Upon an impervious surface;
 - (cc) Such that the required marking is visible;

- (dd) With sufficient aisle space between rows of containers to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation. In no circumstance shall the aisle space be less than twenty-four (24) inches wide;
 - (ee) In an area with secondary containment capable of holding 110% of the capacity of the largest container to be placed in temporary storage, or 10% of the total design capacity of the storage area, whichever is greater;
 - (ff) Only with wastes or other materials that are compatible with the commercial chemical product;
 - (gg) Within a structure that sheds rain and snow; and
 - (hh) If the commercial chemical product is subject to freezing and expansion, in an area where mechanical or physical means are employed to prevent freezing.
- (ii) Where applicable, underground storage tanks (USTs) holding commercial chemical product shall be:
- (aa) Permitted, operated, and maintained in accordance with the Vermont Underground Storage Tank Regulations; and
 - (bb) Equipped with fill pipes that are marked or labeled to clearly identify the contents of the UST as a usable fuel product.
- (iii) Where applicable, above-ground storage tanks (including unregistered tank trailers) holding a commercial chemical product shall be:
- (aa) Installed and operated in accordance with Vermont Department of Labor Standards;
 - (bb) Clearly marked with words that identify the contents as a usable fuel product;
 - (cc) Managed in such a manner as to prevent rupture of the tank and to ensure that no release occurs; and
 - (dd) If located out-of-doors, equipped with secondary containment as specified in **40 CFR §§ 279.45(e) and (f)**.
- (E) The owner or operator of the aggregation facility maintains a written operating log that identifies the date that commercial chemical product is received, the amount received, the location from where it was received, the date of shipment off-site, the

amount shipped off site, and the location where it was sent.

- (F) The owner of the aggregation facility complies with the preparedness, prevention, and emergency procedure requirements of § 7-308(b)(13).
- (G) The owner of the aggregation facility has certified, using the form submitted to the Secretary pursuant to **subsection (6)(A) of this section**, that he or she will comply with the closure requirements of § 7-308(b)(16).

§ 7-205 CHARACTERISTIC OF IGNITABILITY

- (a) A waste is an ignitable hazardous waste if a representative sample of the waste has any of the following properties:
 - (1) It is a liquid, other than a solution containing less than 24 percent alcohol by volume and at least 50 percent water by weight, that has a flash point less than 60 °C (140 °F), as determined by using one of the following ASTM standards: ASTM D93-79, D93-80, D3278-78, D8174-18, or D8175-18 as specified in SW-846 Test Methods 1010B or 1020C (incorporated by reference, see § 7-109(a));
 - (2) It is not a liquid and is capable under standard temperature and pressure of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard, or it is a solid-phase material and is determined to be an “ignitable solid” using the SW-846 Method 1030 test method;
 - (3) It is an ignitable compressed gas as defined in **40 CFR § 261.21(a)(3)(i)** and shall be characterized as ignitable as determined by the test methods described in **40 CFR § 261.21(a)(3)(ii)**; or
 - (4) It is an oxidizer. An oxidizer for the purposes of this subchapter is a substance such as chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter. An organic compound containing the bivalent -O-O- structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals must be classed as an organic peroxide unless:
 - (A) The material meets the definition of a Division 1.1, 1.2, or 1.3 explosive, as defined in **40 CFR § 261.23(a)(8)**, in which case it must be classed as an explosive;
 - (B) The material is forbidden to be offered for transportation according to **49 CFR 172.101 and 49 CFR 173.21**;
 - (C) It is determined that the predominant hazard of the material containing an organic

peroxide is other than that of an organic peroxide; or

(D) According to data on file with the Pipeline and Hazardous Materials Safety Administration in the U.S. Department of Transportation, it has been determined that the material does not present a hazard in transportation.

(b) A waste that exhibits the characteristic of ignitability has the EPA hazardous waste code of D001.

§ 7-206 CHARACTERISTIC OF CORROSIVITY

(a) A waste is a corrosive hazardous waste if a representative sample of the waste has any of the following properties:

(1) It is an aqueous solution which has a pH of less than or equal to 2 or greater than or equal to 12.5 as determined by a pH meter using Method 9040C in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see § 7-219(d)); or

(2) It is a liquid and corrodes steel (type SAE 1020) at a rate greater than 0.250 inch per year at a test temperature of 55°C (130°F) as determined by Method 1110A in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see § 7-219(d)); or

(3) It is a solid phase material at standard temperature and pressure which when mixed 50% by weight with distilled water yields a pH less than or equal to 2 or greater than or equal to 12.5 as determined by a pH meter using Method 9045 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see § 7-219(d)).

(b) A waste that exhibits the characteristic of corrosivity because it meets the criteria of **subsection (a)(1) or (a)(2) of this section** has the EPA hazardous waste code of D002. A waste that exhibits the characteristic of corrosivity because it meets the criteria of **subsection (a)(3) of this section** has the hazardous waste code of VT20.

§ 7-207 CHARACTERISTIC OF REACTIVITY

(a) A waste is a reactive hazardous waste if a representative sample of the waste has any of the following properties:

(1) It is normally unstable and readily undergoes violent change without detonating;

(2) It reacts violently with water;

- (3) It forms potentially explosive mixtures with water;
 - (4) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or to the environment;
 - (5) It is a cyanide or sulfide bearing waste which, when exposed to a pH condition between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or to the environment;
 - (6) It is capable of detonation or an explosive reaction if it is subjected to a strong initiating source or if heated under confinement;
 - (7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure;
 - (8) It is a forbidden explosive as defined in **49 CFR § 173.54**, or is a Division 1.1, 1.2 or 1.3 explosive as defined in **49 CFR §§ 173.50 and 173.53**.
- (b) A waste that exhibits the characteristic of reactivity has the EPA hazardous waste code of D003.

§ 7-208 CHARACTERISTIC OF TOXICITY

- (a) A waste is a hazardous waste if, using the Toxicity Characteristic Leaching Procedure (TCLP), test Method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference, see § 7-219(d)), the extract from a representative sample of the waste contains any of the contaminants listed in **Table 1** at the concentration equal to or greater than the respective value given in that Table. Where the waste contains less than 0.5% filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purposes of this section.
- (b) A waste that exhibits the characteristic of toxicity has all applicable EPA hazardous waste codes specified in **Table 1** which correspond to any of the toxic contaminants listed in **Table 1** that cause it to be hazardous.

Table 1
MAXIMUM CONCENTRATION OF CONTAMINANTS
FOR THE CHARACTERISTIC OF TOXICITY

| Hazardous Waste Code | Contaminant | CAS Number | Regulatory Level (mg/L) |
|----------------------|---|------------|-------------------------|
| D004 | Arsenic | 7440-38-2 | 5.0 |
| D005 | Barium | 7440-39-3 | 100.0 |
| D006 | Cadmium | 7440-43-9 | 1.0 |
| D007 | Chromium | 7440-47-3 | 5.0 |
| D008 | Lead | 7439-92-1 | 5.0 |
| D009 | Mercury | 7439-97-6 | 0.2 |
| D010 | Selenium | 7782-49-2 | 1.0 |
| D011 | Silver | 7440-22-4 | 5.0 |
| D012 | Endrin(1,2,3,4,10,10-Hexachloro-1,7-epoxy-1,4,4a,5,6,7,8 8a-octahydro-1,4-endo, endo-5,8-dimethano-naphthalene) | 72-20-8 | 0.02 |
| D013 | Lindane (1,2,3,4,5,6-Hexachlorocyclohexane, gamma isomer) | 58-89-9 | 0.4 |
| D014 | Methoxychlor (1,1,1-Trichloro-2,2-bis[p-methoxyphenyl] ethane) | 72-43-5 | 10.0 |
| D015 | Toxaphene (C ₁₀ H ₁₀ Cl ₈ , Technical chlorinated camphene, 67 to 69 percent chlorine) | 8001-35-2 | 0.5 |
| D016 | 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | 10.0 |
| D017 | 2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid) | 93-72-1 | 1.0 |
| D018 | Benzene | 71-43-2 | 0.5 |
| D019 | Carbon tetrachloride | 56-23-5 | 0.5 |
| D020 | Chlordane | 57-74-9 | 0.03 |
| D021 | Chlorobenzene | 108-90-7 | 100.0 |
| D022 | Chloroform | 67-66-3 | 6.0 |
| D023 | o-Cresol | 95-48-7 | 200.0 ¹ |
| D024 | m-Cresol | 108-39-4 | 200.0 ¹ |
| D025 | p-Cresol | 106-44-5 | 200.0 ¹ |
| D026 | Cresol | | 200.0 ¹ |
| D027 | 1,4-Dichlorobenzene | 106-46-7 | 7.5 |
| D028 | 1,2-Dichloroethane | 107-06-2 | 0.5 |

¹ If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

| Hazardous Waste Code | Contaminant | CAS Number | Regulatory Level (mg/L) |
|----------------------|------------------------------|------------|-------------------------|
| D029 | 1,1-Dichloroethylene | 75-35-4 | 0.7 |
| D030 | 2,4-Dinitrotoluene | 121-14-2 | 0.13 ² |
| D031 | Heptachlor (and its epoxide) | 76-44-8 | 0.008 |
| D032 | Hexachlorobenzene | 118-74-1 | 0.13 ² |
| D033 | Hexachlorobutadiene | 87-68-3 | 0.5 |
| D034 | Hexachloroethane | 67-72-1 | 3.0 |
| D035 | Methyl ethyl ketone | 78-93-3 | 200.0 |
| D036 | Nitrobenzene | 98-95-3 | 2.0 |
| D037 | Pentachlorophenol | 87-86-5 | 100.0 |
| D038 | Pyridine | 110-86-1 | 5.0 ² |
| D039 | Tetrachloroethylene | 127-18-4 | 0.7 |
| D040 | Trichloroethylene | 79-01-6 | 0.5 |
| D041 | 2,4,5-Trichlorophenol | 95-95-4 | 400.0 |
| D042 | 2,4,6-Trichlorophenol | 88-06-2 | 2.0 |
| D043 | Vinyl Chloride | 75-01-4 | 0.2 |

Note: "CAS" Number means Chemical Abstract Service Number.

§ 7-209 LISTS OF HAZARDOUS WASTES

- (a) Reserved.
- (b) The following hazardous wastes listed in § 7-210 are subject to the exclusion limits for acutely hazardous wastes established in § 7-306(a): hazardous waste codes F020, F021, F022, F023, F026, and F027.
- (c) The wastes listed in §§ 7-210, 7-211, 7-212, 7-214 and 7-215 are identified as toxicity characteristic waste (E), toxic waste (T), reactive waste (R), corrosive waste (C), ignitable waste (I), acutely hazardous waste (H), or a combination thereof.

² Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

§ 7-210 HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES

The following wastes are listed hazardous wastes from non-specific sources:

| Hazardous Waste Code | Hazardous Wastes from Non-Specific Sources | Hazard |
|----------------------|---|--------|
| Generic F001 | The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (T) |
| F002 | The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (T) |
| F003 | The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (I)* |
| F004 | The following spent non-halogenated solvents: Cresols and cresylic acid and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (T) |
| F005 | The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (I,T) |
| F006 | Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating of carbon steel; and (6) chemical etching and milling of aluminum. | (T) |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Hazardous Wastes from Non-Specific Sources | Hazard |
|----------------------|--|--------|
| F007 | Spent cyanide plating bath solutions from electroplating operations. | (R,T) |
| F008 | Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process. | (R,T) |
| F009 | Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process. | (R,T) |
| F010 | Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process. | (R,T) |
| F011 | Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations. | (R,T) |
| F012 | Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process. | (T) |
| F019 | Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. | (T) |
| F020 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol). | (H) |
| F021 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives. | (H) |
| F022 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions. | (H) |
| F023 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol). | (H) |
| F024 | Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in Appendix I). | (T) |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Hazardous Wastes from Non-Specific Sources | Hazard |
|----------------------|--|--------|
| F025 | Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. | (T) |
| F026 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, or hexachlorobenzene under alkaline conditions. | (H) |
| F027 | Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component). | (H) |
| F028 | Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F023, F026, and F027. | (T) |
| F032 | Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with 40 CFR § 261.35 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. | (T) |
| F034 | Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. | (T) |
| F035 | Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. | (T) |

DRAFT VERMONT HAZARDOUS WASTE MANAGEMENT REGULATIONS

| Hazardous Waste Code | Hazardous Wastes from Non-Specific Sources | Hazard |
|----------------------|--|--------|
| F037 | Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in 40 CFR § 261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. (Refer to 40 CFR § 261.31(b) for listing specific definitions.) | (T) |
| F038 | Petroleum refinery secondary (emulsified) oil/water/solids separation sludge-Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in dissolved air flotation (DAF) units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in 40 CFR § 261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing. (Refer to 40 CFR § 261.31(b) for listing specific definitions.) | (T) |
| F039 | Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under Subpart D of 40 CFR Part 261 (Leachate resulting from the disposal of one or more of the following EPA hazardous wastes and no other hazardous wastes retains its EPA hazardous waste code(s): F020, F021, F022, F026, F027, and/or F028.). | (T) |

*(I, T) should be used to specify mixtures that are ignitable and contain toxic constituents.

§ 7-211 VERMONT LISTED HAZARDOUS WASTES

The following wastes are listed in Vermont as hazardous wastes:

Note: A waste that exhibits a hazardous waste characteristic or that is federally listed must be identified by its EPA hazardous waste code (refer to § 7-202(c)).

| Hazardous Waste Code | Vermont Listed Hazardous Waste | Hazard |
|----------------------|---|-------------|
| VT01 | <p>Wastes containing polychlorinated biphenyls (PCB) in concentrations equal or greater than 50 parts per million.</p> <p>Note: Certain waste PCB-containing dielectric fluids, and electric equipment containing such fluid are exempted under § 7-203(t); PCB-containing fluorescent light ballasts managed in accordance with the universal waste management standards of subchapter 9 are exempted under § 7-203(s).</p> | (T) |
| VT02 | <p>Waste containing greater than 5% by weight of petroleum distillates with melting points of less than 100°F, including but not limited to kerosene, fuel oil, hydraulic oils, lubricating oils, penetrating oils, tramp oils, quenching oils, and crankcase and automotive oils.</p> <p>Note: Wastes with a flashpoint less than 140°F are classified as D001 (ignitable).</p> <p>Note: Exemptions are provided for: used oil under § 7-203(n); oil filters under § 7-203(o); and petroleum contaminated soil under § 7-203(p).</p> | (I,T) |
| VT03 | <p>Waste water-miscible metal cutting and grinding fluid.</p> <p>Note: Certain recycled or treated water-miscible metal cutting and grinding fluid wastes are exempted under § 7-203(l).</p> | (T) |
| VT06 | <p>Pesticidal wastes of products classified under FIFRA as restricted use pesticides not specifically listed in subchapter 2.</p> <p>Note: Certain pesticides managed in accordance with the universal waste management standards of subchapter 9 are exempted under § 7-203(s).</p> | (T) |
| VT08 | <p>Waste ethylene glycol and solutions containing greater than 700 parts per million of ethylene glycol (e.g., coolants, antifreeze).</p> <p>Note: Spent ethylene glycol and water-based ethylene glycol solutions that are recycled for reuse are exempted under § 7-204(i).</p> | (T) |
| VT11 | <p>Wastes determined to be hazardous pursuant to § 7-216.</p> | (I,T,C,R,H) |
| VT20 | <p>A solid material that when mixed with an equal weight of distilled water causes the liquid fraction of the mixture to exhibit the properties of the corrosivity characteristic as specified in § 7-206(a)(3).</p> | (C,R) |

| Hazardous Waste Code | Vermont Listed Hazardous Waste | Hazard |
|----------------------|---|--------|
| VT21 | Liquid wastes containing perfluorooctanoic acid (PFOA) in concentrations equal to or greater than 20 parts per trillion (ppt). For PFOA and PFOS, the standard of 20 ppt applies to the sum of the two substances (e.g. if the PFOA concentration is 15 ppt and the PFOS concentration is 6 ppt then there is an exceedance of the standard). | (T) |
| VT22 | Liquid wastes containing perfluorooctanesulfonic acid (PFOS) in concentrations equal to or greater than 20 parts per trillion (ppt). For PFOA and PFOS, the standard of 20 ppt applies to the sum of the two substances (e.g. if the PFOA concentration is 15 ppt and the PFOS concentration is 6 ppt then there is an exceedance of the standard). | (T) |
| VT99 | Non-hazardous waste. Note: This hazardous waste code is to be used only for non-hazardous waste shipped using a hazardous waste manifest. | N/A |

§ 7-212 HAZARDOUS WASTES FROM SPECIFIC SOURCES

Hazardous wastes from specific sources are listed in **Appendix I**.

§ 7-213 HAZARDOUS CONSTITUENT WASTES

Wastes containing any of the hazardous constituents listed in **Appendix II** are hazardous wastes when:

- (a) The waste is not excluded from regulation under § 7-203 or § 7-204; and
- (b) The Secretary concludes, following the listing procedures in § 7-216, that the waste meets the definition of hazardous waste in § 7-103.

§ 7-214 HAZARDOUS WASTES WHICH ARE DISCARDED COMMERCIAL CHEMICAL PRODUCTS

The following materials or items are hazardous waste if and when they are discarded or intended to be discarded, when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use, when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel. The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in **subsections (a) through (d) of this section**, are identified as toxic wastes (T) unless otherwise designated.

- (a) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix III**;

Note: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in..." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in **Appendix III**. Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in **Appendix III**, such waste will be listed in either § 7-210 or § 7-212 or will be identified as a hazardous waste by the characteristics set forth in §§ 7-205 through 7-208.

- (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix III**;

- (c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix III**, unless the container is empty as defined in § 7-203(j).

Note: Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, re-use, recycling or reclamation, the Secretary considers the residue to be intended for discard, and thus, a hazardous waste. An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.

- (d) Any residue or contaminated soil, water or other debris resulting from the clean-up of a release or discharge into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix III**, or any residue or contaminated soil, water or other debris resulting from the clean-up of a release or discharge into or on any land or water of any off-specification chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix III**.

Note: The primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability), and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.

§ 7-215 ACUTELY HAZARDOUS WASTES

The following materials or items are acutely hazardous wastes if and when they are discarded or intended to be discarded, when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use, when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of the original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel. The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in **subsections (a) through (d) of this section**, are identified as acute hazardous wastes (H).

- (a) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix IV**;

Note: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . ." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in **Appendix IV**. Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in **Appendix IV**, such waste will be listed in either **§ 7-210 or § 7-212** or will be identified as a hazardous waste by the characteristics set forth in **§§ 7-205 through 7-208**.

- (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix IV**.
- (c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in **Appendix IV**, unless the container is empty as defined in **§ 7-203(j) or § 7-1008**.

Note: Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, re-use, recycling or reclamation, the Secretary considers the residue to be intended for discard, and thus, a hazardous waste. An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.

- (d) Any residue or contaminated soil, water or other debris resulting from the clean-up of a release or discharge into or on any land or water of any commercial chemical product or

manufacturing chemical intermediate having the generic name listed in **Appendix IV**, or any residue or contaminated soil, water or other debris resulting from the cleanup of a release or discharge into or on any land or water of any off-specification chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in **Appendix IV**.

Note: The primary hazardous properties of these materials are indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound is only listed for toxicity.

§ 7-216 LISTING OF A HAZARDOUS WASTE

- (a) Any person requesting the addition of a generic class of wastes to the lists at §§ 7-210 through 7-215, shall file a petition for rulemaking with the Secretary. Prior to adopting a rule listing a generic class of wastes as a hazardous waste, the Secretary shall consider the following factors:
- (1) The toxicity of the waste;
 - (2) The waste's persistence and degradability in the environment;
 - (3) The waste's potential to concentrate or bioaccumulate in tissue;
 - (4) The waste's potential to cause or contribute to adverse acute or chronic effects on the health of persons or other living organisms; and
 - (5) The waste's potential to have an unusually destructive effect on water quality if discharged to ground or surface water.
- (b) For generators whose waste is not listed as a hazardous waste, the Secretary, upon petition or on his or her own motion, may, on a case-by-case basis, make the determination that a waste generated by a particular generator or treated, stored or disposed of by a particular facility, meets the definition of hazardous waste at § 7-103.
- (1) Upon making the determination that a particular waste is hazardous, the Secretary shall notify the waste generator of this determination by certified letter. The letter shall include a fact sheet which briefly sets forth the principal facts and significant factual, methodological, and policy questions concerning the hazard determination.
 - (2) Within 30 days following receipt of a hazard determination, the generator may request a hearing before the Secretary to contest that determination. The request for hearing shall state the technical and legal questions at issue and shall contain the necessary documents to support the request.
 - (3) If no request for hearing is filed within 30 days, the generator shall be deemed to have

accepted the hazard determination for the waste in question.

- (c) When making a determination under **subsection (b) of this section**, the Secretary shall examine and consider the following factors:
- (1) The nature of the hazard presented by the waste;
 - (2) The amount and concentration of all hazardous constituents in the waste;
 - (3) The potential of all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents to migrate from the waste into the environment;
 - (4) The persistence of all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents;
 - (5) The degree to which all hazardous constituents in the waste or any toxic degradation product of such hazardous constituents bioaccumulate in ecosystems;
 - (6) The plausible types of improper management to which the waste could be subjected;
 - (7) The quantity of waste involved;
 - (8) The nature and severity of the damage to human health and the environment that has occurred as a result of the improper management of the type of waste involved;
 - (9) Actions taken by other governmental agencies or regulatory programs based on the hazard to human health or the environment posed by the waste or any hazardous constituent in the waste; and
 - (10) Such other factors as may be appropriate.
- (d) Prior to making any determination under **subsection (b) of this section**, the Secretary shall give notice to the Commissioner of Health and the Commissioner of Labor and may then receive advice and information on the health effects of such determination.

§ 7-217 DELISTING OF A HAZARDOUS WASTE

- (a) Generators may petition the Secretary to classify their waste as non-hazardous, if they generate either a waste listed at §§ 7-210 through 7-215 or a mixture which contains a waste listed at §§ 7-210 through 7-215.
- (b) The Secretary, upon petition or his or her own motion, may make the determination that a waste which is generated by a particular generator or treated, stored, or disposed of by a particular facility does not meet the definition of hazardous waste at § 7-103 subject to

the restrictions listed below.

- (c) Any person seeking to exclude a waste at a particular generating facility from lists in **Subpart D of 40 CFR Part 261** may petition for a regulatory amendment under **40 CFR § 260.20 and § 260.22**. The Administrator of EPA shall retain the authority to exclude such wastes. Delisting determinations made by the EPA Administrator shall take effect in Vermont upon issuance of a “concurrence” letter sent by the Secretary to the EPA Administrator.
- (d) For any waste listed at **§§ 7-210 through 7-215** of this subchapter and not listed by EPA as a hazardous waste, the petition to delist shall be made on the delisting form entitled “**Petition Procedures for the Listing and Delisting of Hazardous Waste,**” provided by the Secretary.
- (e) After receipt of a petition under this section, the Secretary may request any additional information which may be reasonably required to evaluate the petition.
- (f) The Secretary shall evaluate each delisting petition using the procedures described in **§ 7-216(b)**.
- (g) When making a determination under this section, the Secretary shall examine and consider the factors in **§ 7-216(c)**.
- (h) Except as provided in **§ 7-218**, prior to making any determination under this section, the Secretary shall give notice to the Commissioner of Health and the Commissioner of Labor and may then receive advice and information on the health effects of such determination.

§ 7-218 DELISTING OF SPILL CLEAN-UP DEBRIS AND RESIDUES

The Secretary may delist clean-up debris and residues which are not regulated by EPA as hazardous wastes resulting from an emergency action in **§ 7-105**, after considering the factors in **§ 7-216(c)**, without consulting the Commissioners of Health and Labor.

§ 7-219 SAMPLING, ANALYTICAL AND TESTING METHODOLOGIES

- (a) The appropriate analytical and test methods to determine whether a representative sample exhibits a hazardous waste characteristic are specified in **§§ 7-205 through 7-208**.
- (b) The appropriate analytical procedures to determine whether a representative sample contains a given toxic constituent are specified in chapter two ("Choosing the Correct Procedure") of EPA Publication SW-846 ("Test Methods for Evaluating Solid Waste Physical/Chemical Methods"), as incorporated by reference in **subsection (d) of this section**. Prior to final sampling and analysis method selection, the individual should

consult the specific section or method described in SW-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.

(c) Representative Sampling Methods

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Samples collected using the sampling protocols listed in **Appendix I to 40 CFR Part 261**, for sampling waste with properties similar to the indicated materials, will be considered by the Agency to be representative of the waste.

(d) When used in 40 CFR Parts 260 through 270 or in these regulations, the publications listed in **40 CFR § 260.11** are hereby incorporated by reference.

(e) Any person seeking to add a sampling, analytical or test method to the methods referenced by this section shall petition the Administrator of EPA in accordance with **40 CFR §§ 260.20 and 260.21**.

Subchapter 3: HAZARDOUS WASTE GENERATOR STANDARDS

§ 7-301 APPLICABILITY, PURPOSE, SCOPE

- (a) The requirements of this subchapter apply to all hazardous waste generators and:
- (1) Any owner or operator of a treatment, storage or disposal facility who initiates a shipment of hazardous waste from such facility;
 - (2) Any owner or operator of a facility, or a generator, that accepts hazardous waste from very small quantity generators;
 - (3) Any transporter of hazardous waste who:
 - (A) Transports hazardous waste into the United States from abroad; or
 - (B) Mixes hazardous waste of different DOT shipping descriptions by placing them into a single container; and
 - (4) Any other person that is required to meet hazardous waste generator standards as specified elsewhere in these regulations.
- (b) Hazardous waste generators shall determine their generator category in accordance with § 7-305. Very small quantity generators, small quantity generators and large quantity generators of hazardous waste shall comply with the requirements applicable to their generator category as specified under §§ 7-306 through 7-308.
- Note:** A very small quantity generator may choose to comply with more stringent requirements applicable to small or large quantity generators, and a small quantity generator may choose to comply with more stringent requirements applicable to large quantity generators.
- (c) A generator that stores hazardous waste is subject to the applicable requirements of **Subchapter 5**, unless it is one of the following:
- (1) A very small quantity generator that meets the requirements of § 7-306;
 - (2) A small quantity generator that meets the requirements of § 7-307; or
 - (3) A large quantity generator that meets the requirements of § 7-308.
- (d) Persons responding to an explosives or munitions emergency.
- (1) Persons are not required to comply with the standards of this subchapter provided that they are responding to an explosives or munitions emergency:

- (A) That presents an immediate threat to human health, safety, property, or the environment from the known or suspected presence of military munitions, or other explosive materials or devices, as determined by an explosive or munitions emergency response specialist; or
 - (B) When a federal, state or local official, acting within the scope of official responsibilities, or an emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official may authorize the removal of the waste by transporters that do not have EPA identification numbers, and not subject to the manifest requirements of **subchapter 7** of these regulations.
- (2) When a military response specialist responds to an emergency pursuant to **subsection (d)(1)(B) of this section** the specialist's organizational unit shall retain records for three years that identify the dates of the response, the persons responding, the type and description of material addressed, and that material's disposition.
 - (3) **40 CFR § 266.205** identifies when the storage requirements, including the generator storage requirements of this subchapter, apply to the storage of hazardous waste military munitions. The treatment and disposal of hazardous waste military munitions are subject to the applicable provisions of **subchapters 1 through 7** of these regulations.
- (e) All reverse distributors (as defined in § 7-1001) are subject to the requirements of **subchapter 10** for the management of hazardous waste pharmaceuticals in lieu of this subchapter.
 - (f) Each healthcare facility (as defined in § 7-1001) must determine whether it is subject to **subchapter 10** for the management of hazardous waste pharmaceuticals, based on the total hazardous waste it generates per calendar month (including both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste). Very small quantity, small quantity and large quantity generators are subject to subchapter 10 as follows:
 - (1) A healthcare facility that is either a small quantity generator or a large quantity generator is subject to **subchapter 10** for the management of hazardous waste pharmaceuticals in lieu of this part subchapter.
 - (2) A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, remains subject to § 7-306 and is not subject to **subchapter 10**, except for §§ 7-1006 and 7-1008 and the optional provisions of § 7-1005.
 - (g) Any person who exports or imports hazardous wastes must comply with § 7-304(b) and the requirements for Transboundary Movements of Hazardous Waste for Recovery and Disposal (incorporated by reference through § 7-109(b)(5) of these regulations).

§ 7-302 PROHIBITIONS

The following activities are prohibited:

- (a) Disposal of hazardous waste by evaporation.
- (b) Dilution of hazardous waste subject to the land disposal restrictions of **40 CFR Part 268** is prohibited pursuant to **40 CFR § 268.3** (incorporated by reference through **§ 7-106** of these regulations).
- (c) The release of hazardous material into the surface or groundwater, or onto the land of the state is prohibited pursuant to **10 V.S.A. § 6616**.
- (d) The placement of hazardous waste in any landfill located in Vermont.
- (e) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill. Prior to disposal in a hazardous waste landfill, liquids must meet additional requirements as specified in **40 CFR §§ 264.314 and 265.314**.

§ 7-303 HAZARDOUS WASTE DETERMINATION

Any person who generates a waste shall determine if that waste is a hazardous waste in accordance with **§ 7-202**.

§ 7-304 NOTIFICATION, EPA IDENTIFICATION NUMBERS AND REGISTRATION

- (a) No generator shall treat, recycle, store, dispose of, transport, or offer for transportation, hazardous waste without having obtained a permanent EPA identification number by notifying the Secretary using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) in accordance with **§ 7-104**. As specified under **§ 7-104**, the Secretary may issue a temporary identification number to persons who have generated hazardous waste only from an episodic event.
- (b) In accordance with **§ 7-104**, a generator shall maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) on file with the Secretary that accurately describes current waste activity and waste generation. In addition:
 - (1) A small quantity generator shall re-notify the Secretary starting in 2021 and every four years thereafter using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12). This re-notification shall be submitted by September 1st of each year in which re-notifications are required.
 - (2) A large quantity generator shall re-notify the Secretary by March 1 of each even-

numbered year thereafter using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12). A large quantity generator may submit this re-notification as part of its Biennial Report required under § 7-708(a).

- (c) A recognized trader shall not arrange for import or export of hazardous waste without having received an EPA identification number from the Secretary.
- (d) When completing a manifest, a generator shall use the EPA identification number that is assigned to the generator site at the time of shipment.
- (e) All generators of hazardous waste shall register with the Secretary, renew the registration annually, and pay the hazardous waste generator registration fee specified in 3 V.S.A. § 2822. Initial registration shall be made by submitting a completed **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12)(see § 7- 104(a)). Annual renewal of the registration shall be accomplished by payment of the registration fee.

§ 7-305 GENERATOR CATEGORY DETERMINATION

A generator's category is based on the amount of hazardous waste generated each month and may change from month to month. This section sets forth procedures to determine whether a generator is a very small quantity generator, a small quantity generator, or a large quantity generator for a particular month, as defined in § 7-103.

- (a) Generators of either acute hazardous waste or non-acute hazardous waste. A generator who either generates acute hazardous waste or non-acute hazardous waste in a calendar month shall determine its generator category for that month by doing the following:
 - (1) Counting the total amount of hazardous waste generated in the calendar month;
 - (2) Subtracting from the total any amounts of waste exempt from counting as described in **subsections (c) and (d) of this section**; and
 - (3) Determining the resulting generator category for the hazardous waste generated using **Table 1 of this section**.
- (b) A generator who generates both acute hazardous waste and non-acute hazardous waste in the same calendar month shall determine its generator category for that month by doing the following:
 - (1) Counting separately the total amount of acute hazardous waste and the total amount of non-acute hazardous waste generated in the calendar month;
 - (2) Subtracting from each total any amounts of waste exempt from counting as described in **subsections (c) and (d) of this section**;

- (3) Determining separately the resulting generator categories for the quantities of acute and non-acute hazardous waste generated using **Table 1 of this section**; and
- (4) Comparing the resulting generator categories from **subsection (b)(3) of this section** and applying the more stringent generator category to the accumulation and management of both non-acute hazardous waste and acute hazardous waste generated for that month.

Table 1. Generator Categories Based on Quantity of Waste Generated in a Calendar Month

| Quantity of acute hazardous waste generated in a calendar month | Quantity of non-acute hazardous waste generated in a calendar month | Quantity of residues from a cleanup of acute hazardous waste generated in a calendar month | Generator category |
|---|---|--|-------------------------------|
| > 1 kg (2.2 pounds) | Any amount | Any amount | Large quantity generator |
| Any amount | ≥ 1,000 kg (2,200 pounds) | Any amount | Large quantity generator |
| Any amount | Any amount | > 100 kg (220 pounds) | Large quantity generator |
| ≤ 1 kg (2.2 pounds) | > 100 kg (220 pounds) and < 1,000 kg (2,200 pounds) | ≤ 100 kg (220 pounds) | Small quantity generator |
| ≤ 1 kg (2.2 pounds) | ≤ 100 kg (220 pounds) | ≤ 100 kg (220 pounds) | Very small quantity generator |

- (c) A generator who generates Vermont listed hazardous waste may average the amount of such waste generated over the six month period elapsed immediately prior to making its generator status determination. The generator shall add that average amount to the amount of other non-acute hazardous waste generated in the calendar month when determining its generator category.
- (d) In determining the quantity of hazardous waste generated, a person shall count all hazardous wastes except:
 - (1) Wastes exempted from regulation under §§ 7-203 and 7-204;
 - (2) Hazardous waste when it is removed from on-site short-term storage so long as the hazardous waste was previously counted once;
 - (3) Hazardous waste spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been previously counted once;

- (4) Hazardous waste produced by on-site treatment, including reclamation, of hazardous waste, so long as the hazardous waste that is treated was previously counted once;
- (5) Used oil managed in accordance with the standards set forth under **subchapter 8** of these regulations;
- (6) Wastes managed in accordance with the universal waste standards set forth under **subchapter 9** of these regulations;

Note: As provided for by § 7-203(s), wastes managed according to the standards of subchapter 9 are exempt from regulation under subchapters 1 through 7 except as specified in subchapter 9.

- (7) Hazardous waste that is an unused commercial chemical product (listed in §§ 7-210 through 7-215 or exhibiting one or more characteristics described in §§ 7-205 through 7-208) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to 40 CFR § 262.213. For purposes of this provision, the term eligible academic entity shall have the meaning as defined in § 7-103;
 - (8) Hazardous waste that is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in § 7-103;
 - (9) Hazardous waste that is managed as part of an episodic event in compliance with § 7-312; or
 - (10) Hazardous waste that is a hazardous waste pharmaceutical, as defined in § 7-1001, that is subject to or managed in accordance with **subchapter 10** or is a hazardous waste pharmaceutical that is also a Drug Enforcement Administration controlled substance and is conditionally exempt under § 7-1007.
- (e) A generator is regulated as a very small quantity generator, small quantity generator, or large quantity generator based upon the types and quantities of hazardous waste produced or handled, and shall comply with the requirements applicable to its generator category.

§ 7-306 VERY SMALL QUANTITY GENERATOR

- (a) A generator is a very small quantity generator if that person generates less than:
 - (1) 220 pounds (100 kilograms) of hazardous waste in a calendar month; and
 - (2) 2.2 pounds (1 kilogram) of acutely hazardous waste in a calendar month; and
 - (3) 220 pounds (100 kilograms) of any residue or contaminated soil, waste, or other

debris resulting from the cleanup of a discharge of any acutely hazardous waste in a calendar month; and

has accumulated less than 2,200 pounds (1000 kilograms) of hazardous waste, 2.2 pounds (one kilogram) of acutely hazardous waste, or 220 pounds (100 kilograms) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste at any time.

- (b) If a very small quantity generator generates or accumulates hazardous wastes in amounts exceeding the limits specified in **subsection (a) of this section**, that generator shall become a small quantity generator or a large quantity generator as determined under § 7-305.
- (c) A very small quantity generator is exempt from the requirements of these regulations except as provided for in **subsections (c)(1) through (4) of this section**:
 - (1) A very small quantity generator must:
 - (A) Except for laboratories owned by an eligible academic entity as allowed under **subsection (d) of this section**, determine if waste generated is hazardous waste and keep records supporting hazardous waste determinations in accordance with the requirement of § 7-303;
 - (B) Maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) and obtain an EPA identification number in accordance with §7-304;
 - (C) Comply with the annual generator registration and fee requirements of § 7-304(e);
 - (D) Comply with the generator category determination requirements of § 7-305;
 - (E) Conduct hazardous waste management operations in a manner that minimizes the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, groundwater, or surface water, which could threaten human health or the environment.
 - (F) Manage containers holding hazardous wastes in accordance with the container management standards of §§ 7-311(f)(2) through (4), and as follows:
 - (i) A container must be in good condition and chemically compatible with any waste stored therein;
 - (ii) A container must remain closed except to add or remove waste; and
 - (iii) Containers must be marked with the words "Hazardous Waste" and other words that identify the contents;

- (G) Store wastes in an area that meets the design standards of §§ 7-311(a)(1) through (3);
 - (H) Manage tanks holding hazardous waste in accordance with the tank management requirements of 40 CFR § 265.201;
 - (I) In the event of a release of hazardous material, comply with the applicable emergency action requirements of § 7-105.
- (2) A very small quantity generator shall manage his or her own hazardous waste by ensuring delivery of such waste only to:
- (A) An off-site hazardous waste treatment, storage or disposal facility which if located in the United States is permitted under 40 CFR Part 270, is in interim status under 40 CFR Parts 270 and 265, or is authorized to manage hazardous waste by a state with a hazardous waste management program approved under 40 CFR Part 271;
 - (B) A certified solid waste management facility allowed to accept such waste under the terms of its certification;
- Note:** Waste that is identified as hazardous waste under these regulations, including that generated by very small quantity generators, is prohibited from disposal in all Vermont certified discrete disposal facilities (landfills).
- Note:** Hazardous waste may be sent by Vermont very small quantity generators to municipal solid waste landfills or to non-municipal non-hazardous waste landfills in other states only as authorized by 40 CFR §§262.14(a)(5)(iv) and (v).
- (C) A facility that beneficially uses or reuses or legitimately recycles or reclaims its waste or treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation;
 - (D) An off-site small or large quantity generator located in Vermont that is under the control of the same person that is in control of the very small quantity generator site provided:
 - (i) The off-site generator meets the small quantity generator standards of § 7-307 or the large quantity generator standards of § 7-308, as appropriate;
 - (ii) The off-site generator has notified the Secretary that it is accepting hazardous waste from the very small quantity generator using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12);
 - (iii) The hazardous waste delivered to the off-site generator counts toward the generator category of the off-site generator; and

- (iv) The very small quantity generator marks its container(s) of hazardous waste with the words “Hazardous Waste” and an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at **49 CFR Part 172 subpart E** (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at **29 CFR 1910.1200**; or a chemical hazard label consistent with the National Fire Protection Association code 704).

“Control,” for the purposes of this subsection, means the power to direct policies of the generator whether by ownership of stock, voting rights, or otherwise, except that contractors who operate on behalf of a different person as defined in § 7-103 shall not be deemed to “control” such generators.

- (E) A collection event authorized by the Secretary to accept very small quantity generator waste;
- (F) For wastes designated as universal waste, a universal waste handler or destination facility in accordance with the standards set forth in **subchapter 9**;
- (G) For airbag waste, an airbag waste collection facility or a designated facility subject to the requirements of § 7-203(y); or
- (H) A facility that otherwise treats, stores, or disposes of the waste provided the very small quantity generator has submitted a written request for an alternative handling method to the Secretary and received written approval from the Secretary stating that he or she has determined that the proposed handling method will not have an adverse impact on human health and the environment.
- (I) For pharmaceutical waste:
 - (i) A reverse distributor (as defined in § 7-1001), if the hazardous waste pharmaceutical is a potentially creditable hazardous waste pharmaceutical generated by a healthcare facility (as defined in § 7-1001).
 - (ii) A healthcare facility (as defined in § 7-1001) that meets the conditions in §§ 7-1003(l) and 7-1004(b), as applicable, to accept non-creditable hazardous waste pharmaceuticals and potentially creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator.
- (3) A very small quantity generator may transport his or her own hazardous waste to a facility or an event described under § 7-306(c)(2) without complying with the transporter permitting requirements of **subchapter 4** provided he or she complies with the requirements of § 7-105 (in the event of a release), with all applicable federal

Department of Transportation (DOT) regulations, the regulations of states he or she transports waste through or delivers waste to, and any applicable Vermont Agency of Transportation regulations. A manifest is not required for such transport.

- (4) If a very small quantity generator chooses to utilize a manifest, he or she must comply with all applicable manifest instructions.
- (d) Laboratories owned by an eligible academic entity that chooses to be subject to the requirements of **40 CFR §§ 262.200 through 262.216 (Subpart K)** are not subject to the requirements of **subsection (c)(1)(A) of this section**.
- (e) A very small quantity generator experiencing an episodic event may generate and accumulate hazardous waste in accordance with **§ 7-312**.

§ 7-307 SMALL QUANTITY GENERATOR

- (a) A small quantity generator may accumulate hazardous waste on-site without a permit or interim status, and without complying with the requirements of subchapter 5 if that person meets the requirements of **subsection (c) of this section** and generates:
 - (1) Greater than or equal to 220 pounds (100 kilograms) but less than 2,200 pounds (1,000 kilograms) of hazardous waste in a calendar month;
 - (2) Less than 2.2 pounds (1 kilogram) of acutely hazardous waste in a calendar month;
 - (3) Less than 220 pounds (100 kilograms) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste in a calendar month; and
 - (4) The quantity of hazardous waste accumulated on-site never exceeds 13,200 pounds (6,000 kilograms).
- (b) If any person generates or accumulates hazardous wastes in amounts exceeding the limits specified in this section, that person becomes a large quantity generator and is subject to the requirements of **§ 7-308**.
- (c) A small quantity generator must:
 - (1) Except for laboratories owned by an eligible academic entity as allowed under **subsection (d) of this section**, determine if any waste generated is a hazardous waste and keep records supporting hazardous waste determinations in accordance with the requirement of **§ 7-303**;
 - (2) Store hazardous waste on-site no longer than 180 days from the date when the waste is first placed in short-term storage unless an extension of the short-term storage time

limit is granted pursuant to § 7-311(c).

Note: Hazardous waste may not otherwise be stored on-site for a period of time greater than 180 days without first obtaining certification under **subchapter 5**.

- (3) Maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) and obtain an EPA identification number in accordance with § 7-304;
- (4) Comply with the **40 CFR Part 268** Land Disposal Restrictions (incorporated by reference through § 7-106 of these regulations);
- (5) Comply with the annual generator registration and fee requirements of § 7-304(e);
- (6) Comply with the generator category determination requirements of § 7-305;
- (7) Comply with the general management standards of § 7-309;
- (8) Except for laboratories owned by an eligible academic entity as allowed under **subsection (d) of this section**, accumulate hazardous waste in accordance with § 7-310;
- (9) Comply with the short-term storage area standards of § 7-311;
- (10) Comply with the requirements for Transboundary Movements of Hazardous Waste for Recovery and Disposal (incorporated by reference through § 7-109(b)(5) of these regulations);
- (11) Comply with the exception reporting requirements of § 7-707;
- (12) Comply with additional reporting, if required, under § 7-709;
- (13) Comply with the following emergency preparedness requirements for those areas of the facility where hazardous waste is generated and managed:
 - (A) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the generator facility within a short period of time) with the responsibility for coordinating all applicable emergency response measures specified in **subsection (D) of this section**. This employee is the emergency coordinator.
 - (B) Post the following information next to telephones or in areas directly involved in the generation and short-term storage of hazardous waste:
 - (i) The name and emergency telephone numbers of the emergency coordinator(s);
 - (ii) Location of fire extinguishers and spill control material, and, if present, fire

alarm; and

- (iii) The telephone number of the fire department, unless the facility has a direct alarm.
- (C) Ensure that all employees are thoroughly familiar with evacuation signals and routes, and proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.
- (D) The emergency coordinator must respond to any emergencies that arise. The applicable responses are as follows:
- (i) In the event of a fire, call the fire department or, if appropriate, attempt to extinguish it using a fire extinguisher;
 - (ii) In the event of a release of hazardous material, comply with the applicable emergency action requirements of § 7-105;
 - (iii) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include:
 - (aa) Name, address, and EPA identification number of the generator;
 - (bb) Date, time, and type of incident (e.g., spill or fire);
 - (cc) Quantity and type of hazardous waste involved in the incident;
 - (dd) Extent of injuries, if any; and
 - (ee) Estimated quantity and disposition of recovered materials, if any.
- (d) Laboratories owned by an eligible academic entity that chooses to be subject to the requirements of **40 CFR §§ 262.200 through 262.216 (Subpart K)** are not subject to the requirements of **subsections (c)(1) and (c)(8) of this section**.
- (e) A small quantity generator experiencing an episodic event may generate and accumulate hazardous waste in accordance with § 7-312.
- (f) A small quantity generators may accumulate on-site hazardous waste received from very small quantity generators under control of the same person (as defined in § 7-103), without a storage permit or interim status and without complying with the requirements of **subchapter 5**, and the notification requirements of § 7-104, provided that they comply with the following conditions.

“Control,” for the purposes of this section, means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate generator facilities on behalf of a different person shall not be deemed to “control” such generators.

- (1) The small quantity generator shall notify the Secretary in writing at least thirty (30) days prior to receiving the first shipment from a very small quantity generator(s); and
 - (A) Identify on the form the name(s) and site address(es) for the very small quantity generator(s) as well as the name and business telephone number for a contact person for the very small quantity generator(s); and
 - (B) Submits an updated **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) within 30 days after a change in the name or site address for the very small quantity generator.
- (2) The small quantity generator shall maintain records of shipments for three years from the date the hazardous waste was received from the very small quantity generator. These records must identify the name, site address, and contact information for the very small quantity generator and include a description of the hazardous waste received, including the quantity and the date the waste was received.
- (3) The small quantity generator shall comply with the requirements identified in this section for all hazardous waste received from a very small quantity generator. For purposes of the labeling and marking regulations in § 7-311(f), the small quantity generator must label the container or unit with the date the hazardous waste was received from the very small quantity generator. If the small quantity generator is consolidating incoming hazardous waste from a very small quantity generator with either its own hazardous waste or with hazardous waste from other very small quantity generators, the small quantity generator must label each container or unit with the earliest date any hazardous waste in the container was stored on site (i.e., placed in a short-term storage area).

§ 7-308 LARGE QUANTITY GENERATOR

- (a) A large quantity generator may accumulate hazardous waste on-site without a permit or interim status, and without complying with the requirements of subchapter 5 if that person meets the requirements of **subsection (b) of this section** and generates:
 - (1) That person generates 2,200 pounds (1,000 kilograms) or more of hazardous waste in a calendar month; or
 - (2) That person generates 2.2 pounds (1 kilogram) or more of acutely hazardous waste in a calendar month; or

- (3) That person generates 220 pounds (100 kilograms) or more of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste in a calendar month; or
 - (4) The quantity of hazardous waste accumulated on-site exceeds 13,200 pounds (6,000 kilograms) at any one time; or
 - (5) The quantity of acutely hazardous waste accumulated on-site equals or exceeds 2.2 pounds (1 kilograms) at any one time; or
 - (6) The quantity of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a discharge of any acutely hazardous waste, accumulated on-site equals or exceeds 220 pounds (100 kilograms) at any one time.
- (b) A large quantity generator must:
- (1) Except for laboratories owned by an eligible academic entity as allowed under **subsection (c) of this section**, determine if any waste generated is a hazardous waste and keep records supporting hazardous waste determinations in accordance with the requirement of § 7-303;
 - (2) Store hazardous waste on-site no longer than 90 days, or 180 days for wastewater treatment sludges from electroplating operations that meet the listing description for the hazardous waste code F006 and that are managed in accordance with the provisions of **40 CFR §§ 262.17(c) through (e)**, from the date when the waste is first placed in short-term storage unless an extension of the short-term storage time limit is granted pursuant to § 7-311(c).

Note: Hazardous waste may not be stored on-site for a period of time that exceeds any of the above timeframes without first obtaining certification under **subchapter 5**.
 - (3) Maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) and obtain an EPA identification number in accordance with § 7-304;
 - (4) Comply with the **40 CFR Part 268** Land Disposal Restrictions incorporated by reference through § 7-106 of these regulations;
 - (5) Comply with the annual generator registration and fee requirements of § 7-304(e);
 - (6) Comply with the generator category determination requirements of § 7-305;
 - (7) Comply with the general management standards of § 7-309;
 - (8) Except for laboratories owned by an eligible academic entity as allowed under **subsection (c) of this section**, accumulate hazardous waste in accordance with § 7-

310;

- (9) Comply with the short-term storage area standards of § 7-311;
- (10) Comply with the requirements for Transboundary Movements of Hazardous Waste for Recovery and Disposal (incorporated by reference through § 7-109(b)(5) of these regulations);
- (11) Comply with the exception reporting requirements of § 7-707;
- (12) Comply with the biennial reporting requirements of §§ 7-708(a) and (c);
- (13) Comply with additional reporting, if required, under § 7-709;
- (14) Comply with the following preparedness, prevention, and emergency procedure requirements:
 - (A) A large quantity generator must have a contingency plan for the facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, ground water, or surface water. The plan must be carried out immediately whenever there is a fire, explosion or discharge of hazardous waste or hazardous waste constituents which could threaten human health or the environment. The contingency plan must contain:
 - (i) A description of the actions facility personnel must take to comply with §§ 7-308(b)(14)(A) and 7-308(b)(14)(E) in response to fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, groundwater, or surface water at the facility.
 - (ii) If the generator has already prepared a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 CFR Part 112, or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements in this subchapter. The generator may develop one contingency plan that meets all regulatory standards.

Note: EPA recommends that the plan be based on the National Response Team's Integrated Contingency Plan Guidance ("One Plan").
 - (iii) Arrangements agreed to with the local police departments, fire department, local hospitals, emergency response contractors, state and local emergency response teams, or, if applicable, the Local Emergency Planning Committee, to coordinate emergency services pursuant to § 7-309(a)(4).
 - (iv) An up-to-date list of names and emergency telephone numbers of all persons

qualified to act as emergency coordinator. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. In situations where the generator facility has an emergency coordinator continuously on duty because it operates 24 hours per day, every day of the year, the plan may list the staffed position (e.g., operations manager, shift coordinator, shift operations supervisor) as well as an emergency telephone number that can be guaranteed to be answered at all times.

- (v) An up-to-date list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. In addition, the plan must include the location, and a physical description of each item on the list, and a brief outline of its capabilities.
- (vi) An evacuation plan for generator personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

(B) A large quantity generator must maintain copies of the contingency plan and all revisions to the plan at its facility and comply with the following:

- (i) Submit a copy of the contingency plan and all revisions to all local emergency responders (i.e., police departments, fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services). This document may also be submitted to the Local Emergency Planning Committee, as appropriate.

(ii) A large quantity generator that first becomes subject to these provisions after May 30, 2017 or a large quantity generator that is otherwise amending its contingency plan must at that time submit a quick reference guide of the contingency plan to the local emergency responders identified at **subsection (i) of this section** or, as appropriate, the Local Emergency Planning Committee. The quick reference guide must include the following elements:

- (aa) The types/names of hazardous wastes in layman's terms and the associated hazard associated with each hazardous waste present at any one time (e.g., toxic paint wastes, spent ignitable solvent, corrosive acid);
- (bb) The estimated maximum amount of each hazardous waste that may be present at any one time;
- (cc) The identification of any hazardous wastes where exposure would require

unique or special treatment by medical or hospital staff;

- (dd) A map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes;
 - (ee) A street map of the facility in relation to surrounding businesses, schools and residential areas to understand how best to get to the facility and also evacuate citizens and workers;
 - (ff) The locations of water supply (e.g., fire hydrant and its flow rate);
 - (gg) The identification of on-site notification systems (e.g., a fire alarm that rings off site, smoke alarms); and
 - (hh) The name of the emergency coordinator(s) and 7/24-hour emergency telephone number(s) or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator.
- (iii) Update, if necessary, their quick reference guides, whenever the contingency plan is amended and submit these documents to the local emergency responders identified at **subsection (i) of this section** or, as appropriate, the Local Emergency Planning Committee.
- (C) The contingency plan must be reviewed and immediately amended by the large quantity generator whenever:
- (i) Applicable regulations are revised;
 - (ii) The plan fails in an emergency;
 - (iii) The generator facility changes (i.e., in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;
 - (iv) The list of emergency coordinators changes; or
 - (v) The list of emergency equipment changes.
- (D) At all times, there must be at least one employee either on the generator's premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures and implementing the necessary emergency procedures outlined in **subsection (b)(14)(E) of this section**. Although responsibilities may vary depending on factors such as type and variety of hazardous waste(s) handled

by the facility, as well as type and complexity of the facility, this emergency coordinator must be thoroughly familiar with all aspects of the generator's contingency plan, all operations and activities at the facility, the location and characteristics of hazardous waste handled, the location of all records within the facility, and the facility's layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

(E) Emergency Procedures

- (i) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his or her designee when the emergency coordinator is on call) must do the following immediately:
 - (aa) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and
 - (bb) Notify appropriate state or local agencies with designated response roles if their help is needed;
- (ii) Whenever there is a release, fire, or explosion, the emergency coordinator shall perform the following concurrently:
 - (aa) Immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of the facility records or manifests and, if necessary, by chemical analysis.;
 - (bb) Assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).
- (iii) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, the emergency coordinator must report the findings as follows:
 - (aa) If the assessment indicates that evacuation of local areas may be advisable, the emergency coordinator must immediately notify appropriate local authorities. The emergency coordinator must be available to help appropriate officials decide whether local areas should be evacuated; and
 - (bb) The emergency coordinator must immediately notify either the government official designated as the on-scene coordinator for that

geographical area, or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:

Name and telephone number of reporter;

Name and address of the generator;

Time and type of incident (e.g., release, fire);

Name and quantity of material(s) involved, to the extent known;

The extent of injuries, if any; and

The possible hazards to human health, or the environment, outside the facility.

- (iv) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur, or spread to other hazardous waste at the generator's facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released hazardous waste, and removing or isolating containers;
- (v) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate;
- (vi) Immediately after an emergency, the emergency coordinator must provide for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire or explosion at the facility. Unless the generator can demonstrate that the recovered material is not a hazardous waste, then it is a newly generated hazardous waste that must be managed in accordance with all the applicable requirements of these regulations.
- (vii) Ensure that in the affected area(s) of the facility, no hazardous waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed and all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
- (viii) The generator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the generator must submit a written report on the incident to the Secretary.

The report must include:

- (aa) Name, address and telephone number of the generator;
- (bb) Date, time and type of incident (e.g., fire, explosion);
- (cc) Name and quantity of material(s) involved;
- (dd) The extent of injuries, if any;
- (ee) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- (ff) Estimated quantity and disposition of recovered material that resulted from the incident.

(15) Personnel Training

(A) Maintain a training program for facility personnel as described below:

- (i) Facility personnel must successfully complete a program of classroom instruction, online training (e.g., computer-based or electronic), or on-the-job training that teaches them to perform their duties in a way that ensures compliance with these regulations. The large quantity generator must ensure that this program includes all the elements described in the document required under subsection **(b)(15)(D)(iii)** of this section.
- (ii) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
- (iii) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems, including, where applicable:
 - (aa) Waste handling procedures;
 - (bb) Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment;
 - (cc) Key parameters for automatic waste feed cutoff systems;
 - (dd) Communications or alarm systems;

- (ee) Response to fires or explosions;
 - (ff) Response to groundwater contamination incidents; and
 - (gg) Shutdown of operations.
- (iv) For facility employees that receive emergency response training pursuant to Occupational Safety and Health Administration regulations **29 CFR 1910.120(p)(8) and 1910.120(q)**, the large quantity generator is not required to provide separate emergency response training pursuant to this section, provided that the overall facility training meets all requirements of this section.
- (B) Facility personnel must successfully complete the program required in **subsection (b)(15)(A) of this section** within six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees must not work in unsupervised positions until they have completed the training requirements of **subsection (b)(15)(A) of this section**.
- (C) At least once each calendar year, facility personnel must take part in a review of the initial training required under **subsection (b)(15)(A) of this section**.
- (D) The large quantity generator must maintain the following documents and records at the facility:
- (i) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
 - (ii) A written job description for each position listed under **subsection (b)(15)(D)(i) of this section**. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications and duties of facility personnel assigned to each position;
 - (iii) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under **subsection (b)(15)(D)(i) of this section**;
 - (iv) Records that document that the training or job experience, required under **subsections (b)(15)(A) through (C) of this section**, has been given to and completed by facility personnel; and

Note: Documentation of training is required for at least one employee per satellite accumulation area.

- (v) Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.
- (16) In the event of a release of hazardous material, comply with the applicable emergency action requirements of § 7-105.
- (17) Closure

When closing a short-term storage area (e.g., container storage area, tank, drip pad, containment building) at the facility (i.e., partial closure), and when closing the generator facility (i.e., final closure), a large quantity generator must implement closure in accordance with the following conditions, as applicable:

- (A) Closure performance standard. A large quantity generator must close the short-term storage area(s) and the generator facility in a manner that:
 - (i) Minimizes the need for further maintenance by controlling, minimizing or eliminating, to the extent necessary to protect human health and the environment, the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the groundwater or surface waters or to the atmosphere; and
 - (ii) Removes or decontaminates all contaminated equipment, structures and soil and any remaining hazardous waste residues from short-term storage areas including containment system components (e.g., pads, liners, etc.), contaminated soils and subsoils, bases, and structures and equipment contaminated with waste.
 - (iii) If the generator demonstrates that any contaminated soils and wastes cannot be practicably removed or decontaminated as required in **subsection (A)(ii) of this section**, then the short-term storage area is considered to be a landfill and the generator must close the area and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (**40 CFR § 265.310**). In addition, for the purposes of closure, post-closure, and financial responsibility, such a area is then considered to be a landfill, and the generator must meet all of the requirements for landfills specified in **subchapter 5 of these regulations and subparts G and H of 40 CFR part 265**.
- (B) Pre-closure notification form.
 - (i) Partial closure. At least 30 days prior to commencement of partial closure

activities, a large quantity generator must submit a completed **Pre-closure Notification Form** to the Secretary. The form shall be signed in accordance with signatory requirements of § 7-108 of these regulations.

- (ii) Final closure. At least 60 days prior to the commencement of final closure activities, a large quantity generator must submit a completed **Pre-closure Notification Form** to the Secretary. The form shall be signed in accordance with signatory requirements of § 7-108 of these regulations. On a case-by-case basis, the Secretary may approve a written request from a large quantity generator to submit a Pre-closure Notification Form less than 90 days prior to the commencement of final closure.
- (C) Closure plan. Based on the information provided in the **Pre-closure Notification Form**, or otherwise on a case-by-case basis, the Secretary may require a large quantity generator to submit a closure plan for review and approval by the Secretary. A closure plan shall be signed in accordance with signatory requirements of § 7-108 of these regulations and demonstrate how a large quantity generator will complete closure of the short-term storage area(s) or the facility by:
- (i) Identifying all portions of the facility that will be subject to closure, including, if applicable:
 - (aa) Short-term storage area(s);
 - (bb) Equipment and structures to be removed and/or decontaminated during closure; and
 - (cc) Locations at the facility where discharges of hazardous waste or releases of hazardous materials are likely to be encountered during closure (e.g., soil beneath an indoor short-term storage area located on a cracked concrete slab);
 - (ii) Providing a schedule for all closure activities; and
 - (iii) Describing:
 - (aa) How each portion of the facility identified pursuant to **subsection (C)(i) of this section** will be closed in accordance with this section;
 - (bb) The methods for removing, transporting, treating, storing or disposing of all hazardous wastes including any hazardous waste generated in the process of closure;
 - (cc) The criteria for determining the extent of decontamination necessary to satisfy the closure performance standard of **subsection (A) of this section**

- (e.g., visual observation, analytical testing);
 - (dd) The procedures for removing and/or decontaminating the portions of the facility undergoing closure;
 - (ee) The sampling and analytical testing methods to evaluate effectiveness of decontamination procedures, and the methods for sampling and testing surrounding soils as appropriate; and
 - (ff) Any other activities necessary to ensure compliance with the closure performance standard of **subsection (A) of this section**.
- (D) Closure requirements. Closure shall be performed in accordance with the following requirements, as applicable:
- (i) All short-term storage areas subject to closure, and the facility (if subject to closure) shall be closed in accordance with the closure performance standard of **subsection (A) of this section**;
 - (ii) If a closure plan is required by the Secretary, closure activities shall be conducted in accordance with the closure plan as approved by the Secretary;
 - (iii) All containers, tanks, liners, bases, materials, equipment, structures, soils, and debris contaminated with hazardous waste or hazardous waste residues shall be decontaminated or disposed of at a designated facility;
 - (iv) All tank systems shall be closed in accordance with the requirements of **40 CFR §§ 265.197**;
 - (v) All hazardous waste, including any hazardous waste generated in the process of closure, shall be managed in accordance with these regulations;
 - (vi) All hazardous waste shall be removed to a designated facility in accordance with short-term storage timeframes and prior to the completion of closure; and
 - (vii) Actual or suspected releases of hazardous materials or discharges of hazardous wastes shall be reported and managed in accordance with **§ 7-105 (Emergency and Corrective Actions)** of these regulations.
- (E) Notification and certification of closure completion.
- (i) Within 90 days of completion of closure, submit a revised **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) to the Secretary that the closure performance standard of **subsection (A) of this section** has been met. If the large quantity generator cannot meet the closure performance standard of **subsection (A) of this section**, notify the Secretary using the

Hazardous Waste Handler Site Identification Form (EPA Form 8700-12) that it will close as a landfill under **40 CFR § 265.310** in the case of a container, tank or containment building unit(s), or for a facility with drip pads, notify using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) that it will close under the standards of **40 CFR § 265.445(b)**.

- (ii) On a case-by-case basis, the Secretary may also require certification by an independent professional engineer licensed in Vermont that closure has been completed in accordance with the requirements of this section. Such certification shall be signed in accordance with the requirements of **§ 7-108 of these regulations**.
- (F) Any generator identified as a large quantity generator (i.e., submitted a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12)) for at least a continuous one-year period within the five-year period prior to closure is subject to the requirements of this section regardless of their generator category at the time of closure.
- (c) Laboratories owned by an eligible academic entity that chooses to be subject to the requirements of **40 CFR §§ 262.200 through 262.216 (Subpart K)** are not subject to the requirements of **subsections (b)(1) and (b)(8) of this section**.
- (d) A large quantity generators may accumulate on-site hazardous waste received from very small quantity generators under control of the same person (as defined in **§ 7-103**), without a storage permit or interim status and without complying with the requirements of **subchapter 5**, and the notification requirements of **§ 7-104**, provided that they comply with the following conditions.

“Control,” for the purposes of this section, means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate generator facilities on behalf of a different person shall not be deemed to “control” such generators.

- (1) The large quantity generator shall notify the Secretary at least thirty (30) days prior to receiving the first shipment from a very small quantity generator(s) using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12); and
 - (A) Identify on the form the name(s) and site address(es) for the very small quantity generator(s) as well as the name and business telephone number for a contact person for the very small quantity generator(s); and
 - (B) Submits an updated **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) within 30 days after a change in the name or site address for the very small quantity generator.
- (2) The large quantity generator shall maintain records of shipments for three years from

the date the hazardous waste was received from the very small quantity generator. These records must identify the name, site address, and contact information for the very small quantity generator and include a description of the hazardous waste received, including the quantity and the date the waste was received.

- (3) The large quantity generator shall comply with the requirements identified in this section for all hazardous waste received from a very small quantity generator. For purposes of the labeling and marking regulations in § 7-311(f), the large quantity generator must label the container or unit with the date the hazardous waste was received from the very small quantity generator. If the large quantity generator is consolidating incoming hazardous waste from a very small quantity generator with either its own hazardous waste or with hazardous waste from other very small quantity generators, the large quantity generator must label each container or unit with the earliest date any hazardous waste in the container was stored on site (i.e., placed in a short-term storage area).

§ 7-309 GENERAL MANAGEMENT STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS

(a) Preparedness and Prevention

Small and large quantity generator facilities must be maintained and operated to minimize the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, groundwater, or surface water which could threaten human health or the environment.

(1) Required equipment

All areas where hazardous waste is either generated or accumulated must be equipped with the following items (unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below or the actual waste generation or accumulation area does not lend itself for safety reasons to have a particular kind of equipment specified below):

- (A) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;
- (B) A device, such as a cellular telephone or hand-held two-way radio, immediately available at the scene of operations, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;
- (C) Portable fire extinguishers, fire control equipment (including special extinguishing equipment such as that using foam, inert gas or dry chemicals), spill control and decontamination equipment; and

- (D) Water at adequate volume and pressure to supply water hose streams or foam producing equipment, or automatic sprinklers or water spray systems.

Note: Small and large quantity generators may determine the most appropriate locations to locate equipment necessary to prepare for and respond to emergencies.

- (2) Testing and maintenance of equipment
 - All communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.
- (3) Access to communications or alarm system
 - (A) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access (i.e., direct and unimpeded access) to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under **subsection (a)(1) of this section**.
 - (B) In the event there is just one employee on the premises while the facility is operating, that employee must have immediate access (i.e., direct and unimpeded access) to a device, such as a cellular telephone (immediately available at the scene of operation) capable of summoning external emergency assistance, unless such a device is not required under **subsection (a)(1) of this section**.
- (4) Arrangements with local authorities
 - (A) Small and large quantity generators must attempt to make arrangements with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility. Arrangements may be made with the Local Emergency Planning Committee, if it is determined to be the appropriate organization with which to make arrangements.
 - (i) A small or large quantity generator attempting to make arrangements with its local fire department must determine the potential need for the services of the local police department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals.
 - (ii) As part of this coordination, the small or large quantity generator shall attempt to make arrangements, as necessary, to familiarize the above organizations with the layout of the facility, the properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes as well as the types of injuries or illnesses that could result from fires, explosions, or releases at the facility.

- (iii) Where more than one police or fire department might respond to an emergency, the small or large quantity generator shall attempt to make arrangements designating primary emergency authority to a specific fire or police department, and arrangements with any others to provide support to the primary emergency authority.
- (B) Small and large quantity generators shall maintain records documenting the arrangements with the local fire department as well as any other organization necessary to respond to an emergency. This documentation must include documentation in the operating record that either confirms such arrangements actively exist or, in cases where no arrangements exist, confirms that attempts to make such arrangements were made.
- (C) A facility possessing 24-hour response capabilities may seek a waiver from the authority having jurisdiction (AHJ) over the fire code within the facility's state or locality as far as needing to make arrangements with the local fire department as well as any other organization necessary to respond to an emergency, provided that the waiver is documented in the operating record.
- (5) Small and large quantity generators must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.
- (b) Offering Hazardous Waste for Transportation
 - (1) Before transporting hazardous waste or offering hazardous waste for transportation off-site, small and large quantity generators must:
 - (A) Package the waste in accordance with the applicable Department of Transportation regulations under **49 CFR Parts 173, 178, and 179**;
 - (B) Mark and label each package in accordance with the applicable Department of Transportation regulations on hazardous materials under **49 CFR Part 172**.
 - (C) For each container of 119 gallons or less used in such transportation, mark with the following words and information in accordance with the requirements of **49 CFR § 172.304**:
 - (i) **HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal**. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.
 - (ii) Generator's Name and Address _____.
 - (iii) Generator's EPA Identification Number _____.

- (iv) Manifest Tracking Number_____.
 - (v) EPA Hazardous Waste Code(s)_____.
- (D) A generator may use a nationally recognized electronic system, such as bar coding, to identify the EPA Hazardous Waste Code(s), as required by **subsections (1)(C)(v) and (1)(E) of this section.**
 - (E) Lab packs that will be incinerated in compliance with **40 CFR §268.42(c)** are not required to be marked with EPA Hazardous Waste Code(s), however such lab packs shall be marked with the following codes, where applicable: D004, D005, D006, D007, D008, D010, and D011.
 - (F) Placard or offer the initial transporter the appropriate placards according to federal Department of Transportation regulations for hazardous materials under **49 CFR Part 172, Subpart F.**
- (2) Small and large quantity generators shall not offer hazardous waste, as defined in 40 CFR Part 261, to:
 - (A) Transporters or to treatment, storage, recycling, or disposal facilities that have not received an EPA identification number; or
 - (B) Transporters that do not possess a permit to transport hazardous waste in Vermont.
 - (3) For any Vermont-listed hazardous waste, a small or large quantity generator shall not offer such waste to a transporter that does not possess a permit to transport hazardous waste in Vermont unless the Secretary has provided prior written authorization to do so after determining that the practice will not pose a threat to human health or the environment.
 - (4) Small and large quantity generators shall not transport, offer for transport, or otherwise cause its hazardous waste, as defined in 40 CFR Part 261, to be sent to a facility that is not a designated facility, or not otherwise authorized by the Secretary to receive the generator's hazardous waste.
 - (5) Small and large quantity generators shall not transport or offer for transport Vermont-listed hazardous waste to a facility that is not either:
 - (A) A designated facility; or
 - (B) A facility that is not a designated facility located in a state other than Vermont, provided the facility is authorized to receive such waste under applicable state and local laws, regulations and ordinances.
 - (6) Except as provided in **subsection (b)(7) of this section**, small and large quantity

generators shall not transport or offer for transport a hazardous waste for off-site treatment, storage, recycling, disposal or use without completing the generator's portion of the hazardous waste manifest in accordance with the applicable requirements of **subchapter 7**, unless exempted from these requirements under § **7-608** (Recycle/Reuse).

Note: Outside of Vermont, the hazardous waste manifest may not serve to replace the shipping papers required by the U. S. Department of Transportation under **Subpart C of 49 CFR Part 172**, if the waste being shipped is Vermont-listed hazardous waste.

- (7) In lieu of using a manifest, small or large quantity generators shipping Vermont-listed hazardous waste to a facility other than a designated facility, as provided for under **subsection (b)(5)(B) of this section**, shall comply with the following:
 - (A) Maintain a record on-site of each shipment as follows:
 - (i) The record for each shipment must include the following information:
 - (aa) The name, address, and telephone number of the facility to which the waste was sent;
 - (bb) The name, address, and EPA identification number of the transporter that picked up the waste;
 - (cc) The type and quantity of waste shipped; and
 - (dd) The date of shipment.
 - (ii) The record for each shipment must be retained for three years.
 - (B) Submit to the Secretary, within 10 days of the date of shipment, a copy of the DOT shipping papers required by the U. S. Department of Transportation under **Subpart C of 49 CFR Part 172** and the following information if it is not already addressed in the shipping papers:
 - (i) The name, address, and EPA identification number of the generator;
 - (ii) The type and quantity of waste shipped;
 - (iii) The Vermont hazardous waste identification code(s) for the waste shipped;
 - (iv) The name, address, and telephone number of the facility to which the waste was sent; and
 - (v) The treatment method to be used by the facility to which the waste was sent.

- (8) A small or large quantity generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of § 7-704(i) may accumulate the returned waste on-site in accordance with §§ 7-307(c)(4), (9), and (13) or §§ 7-308(b)(4), (9), (14), (15) and (16), depending on the amount of hazardous waste on-site in that calendar month. Upon receipt of the returned shipment, the small or large quantity generator must:
- (A) Sign **Item 18c** of the manifest, if the transporter returned the shipment using the original manifest; or
 - (B) Sign **Item 20** of the manifest, if the transporter returned the shipment using a new manifest.

§ 7-310 ACCUMULATION OF HAZARDOUS WASTE

(a) **Satellite Accumulation of Hazardous Waste**

- (1) Small and large quantity generators may accumulate as much as one cubic yard of non-liquid Vermont-listed hazardous waste, one quart of liquid acute hazardous waste, 2.2 pounds (1 kg) of solid acute hazardous waste, or 55 gallons of any other hazardous waste in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without obtaining certification as a storage facility provided that:
 - (A) The container is made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be accumulated, so that the ability of the container to contain the waste is not impaired.
 - (B) The container is in good condition. If a container holding hazardous waste is not in good condition, or if it begins to leak, the generator must immediately transfer the hazardous waste from this container to a container that is in good condition and does not leak, or immediately transfer and manage the waste in a short-term storage area operated in compliance with § 7-311.
 - (C) The container is located within a structure that sheds rain and snow and upon an impervious surface.
 - (D) The container holding the waste remains closed except:
 - (i) When adding, removing, or consolidating waste; or
 - (ii) When temporary venting of a container is necessary for the proper operation

of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

- (E) The container is marked or labeled with the following:
 - (i) The words "Hazardous Waste" and
 - (ii) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at **49 CFR part 172 subpart E** (labeling) or **subpart F** (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at **29 CFR 1910.1200**; or a chemical hazard label consistent with the National Fire Protection Association code 704).
- (F) The container is managed in accordance with the container management requirements of **§§ 7-311(b)(3) and 7-311(f)(4)**.
- (G) When either acute hazardous waste or non-acute hazardous waste has accumulated in excess of the amounts listed in **subsection (a) of this section**, or a container holding a lesser amount of such waste becomes full, the generator shall:
 - (i) Mark the date on the container or container label; and
 - (ii) Within three consecutive calendar days of the date marked on the container or container label, move the container to a short-term storage area or an off-site designated facility.
- (H) During the three consecutive calendar days identified in **subsection (G)(ii) of this section**, for the period of time the container remains in the satellite accumulation area, the generator shall continue to comply with the **§§ 7-311(b)(3) and 7-311(f)(4)** container management requirements. Once placed in a short-term storage area, the container shall be managed in accordance with all applicable requirements of **§ 7-311**.
- (2) Satellite accumulation areas operated by:
 - (A) Small quantity generators must meet the preparedness and prevention requirements of **§§ 7-307(c)(13) and 7-309(a)**.
 - (B) Large quantity generators must meet the preparedness, prevention and emergency procedure requirements of **§§ 7-308(b)(14) and 7-309(a)**.
- (b) Accumulation of Hazardous Waste in a Short-Term Storage Area

Small and large quantity generators may accumulate as much as one cubic yard of non-liquid Vermont-listed hazardous waste, one quart of liquid acute hazardous waste, 2.2 pounds (1 kg) of solid acute hazardous waste, or 55 gallons of any other hazardous waste in containers in a short-term storage area without obtaining certification as a storage facility provided that:

- (1) The waste is brought directly from the point of generation to the short-term storage area by the end of each work shift (not to exceed 12 hours) under the following conditions:
 - (A) The waste has been collected in a shift accumulation container that is:
 - (i) Chemically compatible with any accumulated waste;
 - (ii) In good condition;
 - (iii) Kept closed except to add or remove waste; and
 - (iv) Marked or labeled with the words “hazardous waste” and other words that identify the contents of the container;
 - (B) The waste is brought directly to the short-term storage area by a trained employee; and
 - (C) No more than one shift accumulation container is in use per process line wastestream;
- (2) Any accumulation container maintained in the short-term storage area is:
 - (A) Managed in accordance with the short-term storage requirements of § 7-311 with the exception that the container need not be marked with the date that the container was first used to accumulate hazardous waste;
 - (B) Marked to indicate that it is an accumulation container, and provide information to describe the point of waste generation; and
 - (C) Marked to identify the date when one cubic yard of non-liquid Vermont-listed hazardous waste, one quart of acutely hazardous waste, or 55 gallons of any other hazardous waste has been accumulated in the container, or when a container of smaller capacity becomes full.
- (c) Only one accumulation container per process line wastestream may be used at any one time. That is, a particular process line wastestream may be accumulated under the provisions of either **subsection (a) of this section** or **subsection (b) of this section**, but not both.

§ 7-311 SHORT-TERM STORAGE AREA STANDARDS FOR SMALL AND LARGE QUANTITY GENERATORS

(a) Short-Term Storage Area Design Standards

- (1) Generators must accumulate and store hazardous waste upon an impervious surface except for spill clean-up debris that is generated in response to an emergency action completed pursuant to § 7-105.
- (2) Hazardous waste containers may be placed out-of-doors only if they are within a structure that sheds rain and snow.
- (3) Hazardous wastes subject to freezing and expansion may not be stored in containers or aboveground tanks unless mechanical or physical means are employed to prevent freezing.
- (4) The spill and fire control equipment required under §§ 7-309(a)(1)(A) and (C) shall be available in the immediate vicinity of each short-term storage area.

(b) Short-Term Storage Area Operating Standards

- (1) Containers or tanks holding hazardous wastes that are incompatible with hazardous wastes held in other containers or tanks must not be stored in the same enclosure, building or structure unless they are segregated in a manner that prevents the wastes from coming into contact with one another under any circumstances (such as spillage or simultaneous leakage).
- (2) Containers of hazardous waste must be stored such that the hazardous waste labeling is visible.
- (3) Aisle space between rows of containers must be sufficient to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation. In no circumstance shall the aisle space be less than twenty-four (24) inches wide.

Note: Some local, state, and federal fire and safety codes and/or regulations require up to 36" of aisle space for the storage of flammable and combustible liquids.

(c) Short-Term Storage Time Limit Extensions

A small or large quantity generator may be granted up to a thirty (30) day extension of the short-term storage time limits specified in §§ 7-307(c)(2) and 7-308(b)(2), at the discretion of the Secretary, if hazardous waste must remain on-site due to unforeseen temporary and uncontrollable circumstances.

(d) Inventory and Inspection

(1) Inventory. Small and large quantity generators shall maintain, at a location apart from the short-term storage area, a list of all hazardous waste currently in storage. For generators storing hazardous waste in containers, the list shall identify each container being stored and the type of hazardous waste held by each container. Any hazardous waste being accumulated within a short-term storage area must be included on the list of hazardous waste in storage.

(2) Inspection

(A) With the exception of generators who accumulate hazardous waste in a short-term storage area pursuant to 7-310(b), small and large quantity generators shall at a minimum conduct weekly inspections of each short-term storage area. The inspections shall be recorded in a log that is kept at the facility for at least three years. The log shall contain a checklist of the items to be inspected which shall include:

- (i) Visual inspection of the short-term storage area for rusting, bulging, or leaking containers or tanks;
- (ii) Inspection of all safety and emergency equipment required under § 7-311(a)(4);
- (iii) Inspection of adequate aisle space (minimum of 24 inches as specified in § 7-311(b)(3)) between rows of containers;
- (iv) Description of discrepancies or problem areas encountered in the inspection and the corrective actions taken; and
- (v) The signature or initials of the inspector and the date of the inspection.

Note: Weekly inspections shall be conducted at least every seven (7) days.

(B) Small and large quantity generators who accumulate hazardous waste in short-term storage areas pursuant to 7-310(b) shall conduct daily inspections during regular business days of each short-term storage area. The inspections shall be recorded in a log that is kept at the facility for at least three years. The log shall contain a checklist of the items listed in subsections (A)(i) through (v) of this section.

Note: Regular business days are days when personnel are normally scheduled to be on site.

(e) Security

- (1) Small and large quantity generators must post a sign at each short-term hazardous waste storage area, which must be visible from at least 25 feet with the legend, "Danger-Hazardous Waste Storage Area-Authorized Personnel Only". The legend must be written in both English and French in facilities located in counties bordering the Canadian province of Quebec. Existing signs with a similar legend may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the storage area, and that entry into the storage area can be dangerous.
- (2) Small and large quantity generators storing ignitable waste (flash point less than 140°F) must also post a sign at each short-term hazardous waste storage area, which must be visible from 25 feet with the legend, "No Smoking". The legend must be written in both English and French in facilities located in counties bordering the Canadian province of Quebec.

(f) Use and Management of Containers

- (1) Containers used for the short-term storage of hazardous wastes shall be marked from the time they are first used to accumulate or store waste in a short-term storage area. Such marking shall be clearly visible for inspection on each container and include:
 - (A) The words "Hazardous Waste";
 - (B) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at **49 CFR Part 172 subpart E** (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at **29 CFR 1910.1200**; or a chemical hazard label consistent with the **National Fire Protection Association code 704**); and;
 - (C) With the exception of accumulation containers managed in a short-term storage area in accordance with **§ 7-310(b)**, the date upon which the period of short-term storage begins.

Note: Containers used to store waste that is in the process of having a hazardous waste determination made, and for which the hazardous waste identification code(s) are not known, do not need to be marked to include the hazardous waste identification code(s). The hazardous waste identification code(s) must be marked on the container once the hazardous waste determination has been completed for the waste.

(2) Condition of containers

If a container holding hazardous waste is not in good condition (e.g., damaged, bulging, leaking, or otherwise unsafe), or if it begins to leak, the owner or operator must immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that complies with the requirements of this section.

(3) Compatibility of waste with container

The owner or operator must use a container made of or lined with materials that will not react with and are otherwise compatible with the hazardous waste to be held, so that the ability of the container to contain the waste is not impaired.

(4) Management of containers

(A) A container holding hazardous waste must always be closed during storage except when it is necessary to add or remove waste;

(B) A container holding hazardous waste must not be opened, handled or stored in a manner that may rupture the container or cause it to leak;

(C) Incompatible wastes

(i) Incompatible wastes, or incompatible wastes and materials must not be placed in the same container. Examples of incompatible wastes are provided in **Appendix VII**.

(ii) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material; and

(iii) A container holding a hazardous waste that is incompatible with any waste or other materials accumulated or stored nearby in other containers, piles, open tanks or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

(5) Emissions from containers

A large quantity generator storing hazardous waste in containers must comply with the applicable requirements of **40 CFR Part 265 Subparts AA, BB, and CC**.

(6) Containers holding ignitable or reactive waste

A large quantity generator accumulating or storing ignitable or reactive waste in containers must comply with the following:

- (A) Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line unless a written approval is obtained from the authority having jurisdiction over the local fire code allowing hazardous waste accumulation or short-term storage to occur within this restricted area. A record of the written approval must be maintained as long as ignitable or reactive hazardous waste is accumulated or stored in this area.
 - (B) The large quantity generator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to the following: Open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the large quantity generator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.
- (g) Use and Management of Tanks
- (1) Small and large quantity generators using tanks for the short-term storage of hazardous wastes shall:
 - (A) Mark or label its tanks with:
 - (i) The words "Hazardous Waste"; and
 - (ii) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at **49 CFR Part 172 subpart E** (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at **29 CFR § 1910.1200**; or a chemical hazard label consistent with the **National Fire Protection Association code 704**);
 - (B) Demonstrate compliance with short-term storage time limits as follows:
 - (i) Small quantity generators shall use inventory logs, monitoring equipment, or other records to demonstrate that hazardous waste has been emptied within 180 days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 180 days of first entering;
 - (ii) Large quantity generators shall use inventory logs, monitoring equipment or other records to demonstrate that hazardous waste has been emptied within 90

days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 90 days of first entering; and

- (C) Keep inventory logs or records with the above information on site and readily available for inspection
- (2) A small quantity generator storing hazardous wastes in tanks must comply with the general operating standards of **40 CFR § 262.16(b)(3)**.
- (3) A large quantity generator storing hazardous wastes in tanks must comply with:
 - (A) All secondary containment, monitoring, tank testing and other requirements of **40 CFR §§ 265.190 through 265.199, except §265.197(c)**; and
 - (B) **40 CFR Part 265 Subparts AA, BB and CC.**
- (h) Use and Management of Drip Pads and Containment Buildings

Small and large quantity generators placing hazardous wastes on drip pads or in containment buildings must comply with the requirements of **§§ 262.16(b)(4) and (5), and 262.17(a)(3) and (4)** as applicable.

§ 7-312 MANAGING HAZARDOUS WASTE FROM AN EPISODIC EVENT

- (a) A very small quantity generator or small quantity generator may maintain its existing generator category for hazardous waste generated during an episodic event provided that the generator complies with the following requirements:
 - (1) The very small quantity generator or small quantity generator is limited to one episodic event per calendar year, unless a petition is granted under **subsection (b) of this section**;
 - (2) The very small quantity generator or small quantity generator must notify the Secretary no later than thirty (30) calendar days prior to initiating a planned episodic event using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12). In the event of an unplanned episodic event, the generator must notify the Secretary within 72 hours of the unplanned event via phone, email, or fax, and subsequently submit a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12). The generator shall include the start date and end date of the episodic event and the reason(s) for the event, types and estimated quantities of hazardous wastes expected to be generated as a result of the episodic event, and identify a facility contact and emergency coordinator with 24-hour telephone access to discuss the notification submittal or respond to an emergency;

- (3) The very small quantity generator or small quantity generator must have an EPA identification number or obtain an EPA identification number using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12);
- (4) Very small quantity generators and small quantity generators are prohibited from storing hazardous wastes generated from an episodic event waste on drip pads and in containment buildings. When storing hazardous waste generated from an episodic event in containers and tanks, the following requirements apply:
 - (A) Hazardous waste must be managed in a manner that minimizes the possibility of a fire, explosion, or release of hazardous waste or hazardous waste constituents to the air, soil, or water.
 - (B) Containers
 - (i) Very small quantity generators and small quantity generators storing episodic hazardous waste in containers must mark or label its containers with the following:
 - (aa) The words “Episodic Hazardous Waste”; and
 - (bb) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at **49 CFR Part 172 subpart E** (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at **29 CFR 1910.1200**; or a chemical hazard label consistent with the **National Fire Protection Association code 704**); and
 - (cc) The date upon which the episodic event began, clearly visible for inspection on each container.
 - (ii) Very small quantity generators and small quantity generators must ensure that containers are in good condition, compatible with the hazardous waste stored therein, and kept closed except to add or remove waste in accordance with §§ **7-311(f)(2) through (4)**.
 - (iii) Small quantity generators storing episodic hazardous waste in containers must meet the inspection requirements of § **7-311(d)(2)**.
 - (C) Tanks
 - (i) Very small quantity generators and small quantity generators storing episodic hazardous waste in tanks must mark or label its tank with the following:

- (aa) The words “Episodic Hazardous Waste”; and
 - (bb) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at **49 CFR Part 172 subpart E** (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at **29 CFR 1910.1200**; or a chemical hazard label consistent with the **National Fire Protection Association code 704**);
 - (ii) Very small quantity generators and small quantity generators storing episodic hazardous waste in tanks must use inventory logs, monitoring equipment or other records to identify the date upon which each period of accumulation begins and ends; and
 - (iii) Very small quantity generators and small quantity generators storing episodic hazardous waste in tanks must keep inventory logs or records with the above information on site and available for inspection.
 - (iv) Very small quantity generators storing episodic hazardous waste in tanks must ensure that such tanks are in good condition and compatible with the hazardous waste stored therein. Tanks must have procedures in place to prevent the overflow (e.g., be equipped with a means to stop inflow with systems such as a waste feed cutoff system or bypass system to a standby tank when hazardous waste is continuously fed into the tank). Tanks must be inspected at least once each operating day to ensure all applicable discharge control equipment, such as waste feed cutoff systems, bypass systems, and drainage systems are in good working order and to ensure the tank is operated according to its design by reviewing the data gathered from monitoring equipment such as pressure and temperature gauges from the inspection.
 - (v) Small quantity generators storing episodic hazardous waste in tanks must comply with the requirements of **§ 7-311(g)(2)**.
- (5) Within sixty (60) calendar days from the start of the episodic event:
- (A) A very small quantity generator must send its hazardous waste generated from the episodic event to a designated facility. The very small quantity generator must comply with the hazardous waste manifest requirements of **§ 7-702** when it sends its episodic event hazardous waste off site to a designated facility.
 - (B) A small quantity generator must either treat hazardous waste generated from an episodic event on-site in accordance with the conditions of **§ 7-502(o)**, or manifest

and ship such hazardous waste off site to a designated facility.

- (6) Very small quantity generators and small quantity generators must maintain the following records for three (3) years from the end date of the episodic event:
 - (A) Beginning and end dates of the episodic event;
 - (B) A description of the episodic event;
 - (C) A description of the types and quantities of hazardous wastes generated during the event;
 - (D) A description of how the hazardous waste was managed as well as the name of the designated facility that received the hazardous waste;
 - (E) Name(s) of hazardous waste transporters; and
 - (F) An approval letter from the Secretary if the generator petitioned to conduct one additional episodic event per calendar year.
- (b) Petition to manage one additional episodic event per calendar year.
 - (1) A generator may petition the Secretary for a second episodic event in a calendar year without impacting its generator category under the following conditions:
 - (A) If a very small quantity generator or small quantity generator has already held a planned episodic event in a calendar year, the generator may petition the Secretary for an additional unplanned episodic event in that calendar year within 72 hours of the unplanned event.
 - (B) If a very small quantity generator or small quantity generator has already held an unplanned episodic event in a calendar year, the generator may petition the Secretary for an additional planned episodic event in that calendar year.
 - (2) The petition must include the following:
 - (A) The reason(s) why an additional episodic event is needed and the nature of the episodic event;
 - (B) The estimated amount of hazardous waste to be managed from the event;
 - (C) How the hazardous waste is to be managed;
 - (D) The estimated length of time needed to complete management of the hazardous waste generated from the episodic event (not to exceed 60 days); and

- (E) Information regarding the previous episodic event managed by the generator, including the nature of the event, whether it was a planned or unplanned event, and how the generator complied with the conditions.
- (3) The petition must be made to the Secretary in writing, either on paper or electronically.
- (4) The generator must retain written approval in its records for three (3) years from the date the episodic event ended.

§ 7-313 ADDITIONAL REQUIREMENTS

On a case-by-case basis, any person subject to this subchapter may be required to meet additional requirements when the Secretary determines that such actions are necessary to protect human health or the environment.

Subchapter 4: REQUIREMENTS FOR TRANSPORTERS OF HAZARDOUS WASTE

§ 7-401 PURPOSE, SCOPE, APPLICABILITY

- (a) This subchapter establishes requirements for persons transporting hazardous waste within or through Vermont.
- (b) This subchapter applies to:
 - (1) Transportation of hazardous waste accepted from:
 - (A) Very small quantity generators when the total amount accepted from all such generators in any shipment (i.e., combined in any single load in transport) exceeds the accumulation amounts allowed under in § 7-306(a);
 - (B) Any small or large quantity generator; or
 - (C) Any owner or operator of a facility;
 - (2) Transportation of recyclable hazardous wastes unless exempted from some or all provisions under § 7-608;
 - (3) Transportation of used oil as specified under § 7-811; and
 - (4) Any owner or operator of a transfer facility.
- (c) This subchapter does not apply to:
 - (1) Transportation of hazardous waste and used oil by generators within the site where the hazardous waste or used oil is generated;
 - (2) Transportation of hazardous waste within the site of a certified treatment, storage or disposal facility by the owner or operator of the facility;
 - (3) Self-transportation of hazardous waste by very small quantity generators, in accordance with § 7-306(c)(3);
 - (4) Transportation of used oil by do-it-yourselfers, and used oil generators self-transporting up to 55 gallons of used oil, in accordance with § 7-807(d);
 - (5) Transportation of universal waste conducted in accordance with the universal waste management standards of **subchapter 9**;
 - (6) Transportation during an emergency response to a release, in accordance with § 7-105(e)(1); and

- (7) Transportation during an explosives or munitions emergency response, conducted in accordance with §§ 7-105(e)(2) and 7-502(p).
- (d) Standards applicable to transportation of military munitions are specified under **40 CFR § 266.203**.
- (e) A transporter of hazardous waste shall comply with all applicable requirements of **49 CFR Parts 171 through 180**.

§ 7-402 APPLICABILITY OF OTHER SUBCHAPTERS

- (a) A transporter of hazardous waste must comply with the generator requirements of **subchapter 3** if he or she:
 - (1) Transports hazardous waste into the United States from abroad; or
 - (2) Mixes hazardous waste of different DOT shipping descriptions by placing them into a single container.
- (b) A transporter of hazardous waste that is being imported from or exported to any other country for purposes of recovery or disposal is subject to the applicable requirements of **Subpart H of 40 CFR Part 262**, including, but not limited to, **40 CFR § 262.83(d) and § 262.84(d)** for movement documents.
- (c) A transporter of hazardous waste shall comply with the applicable manifest, export and import, and reporting requirements of **subchapter 7**.
- (d) In the event of a release or discharge of hazardous waste during transport, a transporter shall comply with the emergency action requirements of **§ 7-105**.

§ 7-403 RESERVED

§ 7-404 TRANSFER FACILITY STANDARDS

- (a) Any transporter who owns or operates a transfer facility located in Vermont must:
 - (1) Obtain an EPA identification number for the facility and maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) in accordance with **§ 7-104**.

Note: Written approval of the Secretary will not be granted for a transfer facility until a complete **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) is submitted for the facility.

- (2) Ensure that all shipments of hazardous waste to the transfer facility comply with the applicable manifest requirements of **subchapter 7**.
 - (3) Hold hazardous waste at the transfer facility for a period of ten (10) days or less.
 - (4) Ensure that all hazardous waste managed at the transfer facility is packaged, labeled, and marked in accordance with **49 CFR Parts 172, 173, 178, and 179**.
 - (5) When consolidating the contents of two or more containers with the same hazardous waste into a new container, or when combining and consolidating two different hazardous wastes that are compatible with each other, the transporter must mark its containers of 119 gallons or less with the following information:
 - (A) The words “Hazardous Waste” and
 - (B) The applicable EPA hazardous waste code(s) in **subchapter 2**, or in compliance with **§ 7-309(b)(1)**.
 - (6) Comply with the personnel training requirement of **§ 7-308(b)(15)**.
- (b) A transporter who stores manifested shipments of hazardous waste in containers meeting the packaging requirements of **§ 7-309(b)(1)(A)** at a transfer facility for a period of ten (10) days or less is not subject to regulation under **subchapter 5** or **40 CFR Part 268** with respect to the storage of those wastes.
- (c) If containers of hazardous waste are off-loaded from a transport vehicle for temporary storage (10 days or less) at a transfer facility, the transporter must ensure that:
- (1) Prior to commencing container off-loading operations for the first time at a transfer facility, the owner or operator submits a written request to, and receives written approval from, the Secretary to conduct such operations. The request for approval shall describe how the requirements of this subsection will be met;
- Note:** If the Secretary determines that the operations of a transfer facility are taking place in a manner that circumvents the requirements of this section the Secretary may require changes to the facility operations or require the activity cease.
- (2) The containers remain closed and be stored:
 - (A) In a manner to prevent leakage or rupture;
 - (B) Upon an impervious surface;
 - (C) In a manner where the hazardous waste labeling is visible;

- (D) With a minimum of 24-inch wide aisle space between rows of containers to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation;
 - (E) In an area with secondary containment capable of holding 110% of the capacity of the largest container to be placed in temporary storage, or 10% of the total design capacity of the storage area, whichever is greater;
 - (F) Within a structure that sheds rain and snow;
 - (G) If the waste is subject to freezing and expansion, in an area where mechanical or physical means are employed to prevent freezing; and
 - (H) If wastes are incompatible with any waste or other materials stored nearby in other containers, in separate enclosures, buildings or structures unless the wastes are separated by means of a dike, berm, wall, or other device capable of preventing the wastes from coming in contact with one another under any circumstances (such as spillage or simultaneous leakage).
- (3) The owner or operator of the transfer facility maintains a written operating log that tracks all hazardous waste managed at the transfer facility by date of receipt, date of shipment off-site, and manifest tracking number, if applicable;
 - (4) The owner or operator of the transfer facility maintains a written contingency plan for the facility as described in § 7-308(b)(14)(A);
 - (5) The owner or operator of the transfer facility complies with the closure requirements of § 7-308(b)(17); and
 - (6) The owner or operator of the transfer facility maintains a written closure cost estimate, in current dollars, of the cost of closing the facility in accordance with the standards of § 7-309(c) and 40 CFR § 265.142. This estimate must be adjusted annually for inflation, changes in operations, and changes in site conditions. The estimate must represent a worst-case scenario for closure. Proof of financial responsibility adequate to cover all costs of closure must be maintained until closure is complete. The financial responsibility mechanism must comply with the requirements of 40 CFR § 265.143. Proof of financial responsibility must be submitted by April 30th of each year.

§ 7-405 PROHIBITIONS

No transporter subject to this subchapter shall:

- (a) Remove hazardous waste from the container in which it was placed once it has been manifested and moved from the site of generation until it is accepted at the designated

facility except:

- (1) Under the emergency provisions of § 7-105; or
 - (2) For wastes of like DOT shipping descriptions, at a transfer facility with written consent of the generator.
- (b) Transport or accept for transport hazardous wastes which are unlabeled or which are in damaged, bulging, leaking, unsuitable or otherwise unsafe containers; or
 - (c) Transport or accept for transport hazardous wastes which are incompatible with each other such that a danger to public health or safety or the environment could result from their being transported together.
 - (d) Accept hazardous waste from a small or large quantity generator unless it is accompanied by a manifest signed in accordance with the provisions of § 7-702. In the case of exports:
 - (1) A transporter may not accept such waste from a primary exporter or other person if the transporter knows or has reason to know the shipment does not conform to the EPA Acknowledgment of Consent; and
 - (2) A transporter may not accept such waste from a primary exporter or other person unless, in addition to a manifest signed in accordance with the provisions of § 7-702, such waste is also accompanied by an EPA Acknowledgment of Consent which, except for shipment by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)).
 - (e) Dilute any hazardous waste subject to the land disposal restrictions of **40 CFR Part 268**, as prohibited under **40 CFR § 268.3** (incorporated by reference through § 7-106 of these regulations).
 - (f) Release hazardous material into the surface or groundwater, or onto the land of the state in violation of **10 V.S.A. § 6616**.

§ 7-406 WASTE TRANSPORTATION PERMIT

- (a) With the exception of those persons and activities specified under § 7-401(c), no person shall transport any hazardous waste or used oil within Vermont without first obtaining a permit to do so from the Secretary, as required under **10 V.S.A. § 6607a**.
- (b) Any transporter who is required to obtain a permit shall complete, sign, and submit a **Vermont Waste Transporter Vehicle Report Form** and a **Supplemental Application for Hazardous Waste Transporters** to the Secretary.

(c) Disclosure statement

- (1) With the exception of those persons exempted under **10 V.S.A. § 6605f(k)**, any transporter who is required to obtain a permit under this section shall, pursuant to the requirements of **10 V.S.A. § 6605f**, complete, sign, and submit to the Secretary at the time of application a **Business Disclosure Statement**, and a **Personal History Disclosure** statement for each person identified in the **Business Disclosure Statement** as a sole proprietor or key employee. In the event of any change in ownership, a disclosure statement must be submitted pursuant to the requirements of **10 V.S.A. § 6605f(e)**. The disclosure statements must be filed with the Agency at least 90 days before the proposed change in ownership.
- (2) Any person who has received a transporter permit under this section shall file an **Annual Statement** within 30 days prior to the month and day of issuance of that permit disclosing any changes in facts that would render the disclosure statement filed in connection with that permit inaccurate in any way, or stating that no such changes have occurred in the period of time covered by the annual statement. The annual statement shall be under oath or affirmation.

(d) Any transporter who is required to obtain a permit under this section shall:

- (1) Maintain an up-to-date **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) filed with the Secretary as required in **§ 7-104**;
- (2) Obtain an EPA identification number either from the Secretary by applying on the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12), or from the state in which the transporter's base of operations is located;
- (3) Maintain liability insurance for sudden accidental occurrences as specified in **§ 7-410**; and
- (4) Conduct a personnel training program for all employees handling either hazardous waste or used oil as specified in **§ 7-409**.

(e) Waste transportation permits shall have a duration of five years.

§ 7-407 MODIFICATION, SUSPENSION, REVOCATION, OR DENIAL OF A PERMIT

- (a) The Secretary may modify any transporter permit upon his or her own motion or upon the receipt of a written request for modification that contains facts and reasons supporting the request. If the Secretary determines that modification is appropriate, only the conditions subject to modification are reopened. Cause for modification of a transporter's permit is:
 - (1) Material alterations to the transporter's activities which occurred after issuance of the permit to the transporter which justify the application of permit conditions that are

different or absent from the existing permit;

- (2) The receipt of information concerning the transporter which was not available when the permit was issued; or
 - (3) A change in the standards or regulations on which the permit was based, by promulgation of amended standards or regulations or by judicial decision after the permit was issued;
- (b) The Secretary may suspend or revoke any transporter permit or deny any application for a transporter permit upon his or her own motion or upon receipt of a written request for suspension, revocation, or denial which contains facts and reasons supporting the request. Cause for suspension, revocation or denial is:
- (1) Non-compliance by the transporter with the requirements of **10 V.S.A., chapter 159**, these regulations, the regulations promulgated by the Vermont Agency of Transportation for the transportation of hazardous wastes, or any term or condition of a permit, order, or assurance;
 - (2) Failure by the transporter to disclose all relevant facts during the permit application process that were known at that time;
 - (3) A determination by the Secretary that:
 - (A) Any of the grounds for denial of a permit under **10 V.S.A. § 6605f(a)** either existed at the time of application or have arisen since that time; or
 - (B) The holder of the permit, or the applicant for the permit, knowingly omitted or falsified information required to be disclosed under **§ 7-406(c)**.
 - (4) Misrepresentation of any relevant fact at any time;
 - (5) A felony conviction of the transporter in any jurisdiction when the conviction concerns violations of hazardous waste statutes or regulations; or
 - (6) A determination by the Secretary that the transporter's activities constitute a serious threat to human health or the environment and that such threat can only be regulated to acceptable levels by suspension, revocation or denial of the permit.
- (c) The Secretary shall provide written notice of modification, suspension, revocation, or denial, including the reasons for such actions, to the transporter involved. Any transporter who receives such notification shall have thirty days from the receipt of the notice to submit a written request for a hearing to the Secretary. If requested, the Secretary shall provide an opportunity for a hearing. The submission of a request for a hearing does not stay the effective date of the Secretary's decision.

- (d) An appeal may be taken from a final decision on the approval or denial of a request for the modification of a permit.

§ 7-408 ACCEPTING SHIPMENTS OF HAZARDOUS WASTE

A transporter may accept hazardous waste only from the following:

- (a) A generator who has an EPA identification number issued by the Secretary;
- (b) Another transporter who at the time has a valid transporter permit from the Secretary;

§ 7-409 PERSONNEL TRAINING

- (a) Permitted hazardous waste and used oil transporters must provide employee training to all persons who in the course of employment directly affect hazardous waste transportation safety. The training program shall be consistent with DOT employee training requirements of **49 CFR § 172.700**. Such training, at a minimum, shall include:
 - (1) For hazardous waste transporters:
 - (A) DOT's labeling, packing, placarding and shipping requirements as set forth in **49 CFR Parts 171 through 179** and all other applicable DOT regulations;
 - (B) Familiarity with and use of the most recent edition of the North American Emergency Response Guidebook for hazardous materials published by the DOT;
 - (2) For hazardous waste and used oil transporters:
 - (A) Safe vehicle operations to avoid creating hazards to public health, safety, or welfare or the environment;
 - (B) Safe handling of hazardous waste and used oil; and
 - (C) Emergency handling procedures in the event of a release or discharge of hazardous waste or used oil during transportation.
- (b) For each person required to be trained pursuant to **subsection (a) of this section**, a record of current training inclusive of the preceding three (3) years shall be kept on file by the transporter while these individuals are employed by the transporter, and for 90 days after these individuals cease being employed by the transporter. This period shall be extended automatically for the duration of any unresolved enforcement action, or as ordered by the Secretary. These records shall include the following:
 - (1) Name of employee;

- (2) Date of most recent training;
- (3) Description of training materials;
- (4) Name and address of person providing training; and
- (5) Certification that the employee has been trained and tested.

Note: It is recommended that each person required to be trained pursuant to **subsection (a) of this section** have knowledge of the Vermont Hazardous Waste Management Regulations, in particular: **subchapter 4** (requirements for transporters of hazardous waste), **§ 7-105** (emergency and corrective actions), **§ 7-211** (Vermont listed hazardous wastes), and **subchapter 7** (manifest, reporting and recordkeeping requirements).

§ 7-410 LIABILITY INSURANCE REQUIREMENTS

- (a) All permitted hazardous waste transporters shall carry liability insurance, as required by U.S. DOT regulations, for sudden and accidental occurrences, exclusive of legal defense costs, for claims arising out of bodily injury and property damage from the hazardous waste transport operations of the transporter. Such insurance policy shall carry an approved DOT endorsement (Form MCS 90 - DOT) covering liability for accidents, including environmental restoration, bodily injury, and property damage.
- (b) The insurance policy shall be maintained in full force at all times during the term of the permit.

§ 7-411 EMERGENCY PREPAREDNESS

No transporter shall transport hazardous waste in Vermont without being in possession of the following on each vehicle:

- (a) Telephone numbers of:
 - (1) The generator of the waste being transported; and
 - (2) The Vermont Agency of Natural Resources and the telephone numbers specified in **§ 7-105**.
- (b) A copy of the most recent edition of the North American Emergency Response Guidebook for hazardous materials published by DOT.
- (c) All of the following equipment in good operating condition:

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- (1) A first aid kit with eyewash;
- (2) An Underwriters' Laboratory listed explosion proof flashlight; and
- (3) A fire extinguisher of appropriate size and type for the vehicle and wastes carried.

Subchapter 5: REQUIREMENTS FOR HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

§ 7-501 PURPOSE, SCOPE, APPLICABILITY

- (a) This subchapter establishes requirements for the design, construction, operation, and maintenance of hazardous waste treatment, storage, and disposal facilities. This subchapter also describes the procedures for certification of hazardous waste facilities.
- (b) The requirements of this subchapter apply to owners and operators of hazardous waste facilities including all facilities which treat, store, or dispose of hazardous wastes referred to in **40 CFR Part 268** (incorporated by reference through § 7-106).
- (c) The requirements of this subchapter apply to any person who accepts, treats, stores, or disposes of hazardous waste unless the person or activity is exempted under § 7-502.
- (d) **40 CFR § 266.205** identifies when storage requirements, as incorporated by reference through § 7-504(e)(1), apply to the storage of hazardous waste military munitions. The treatment and disposal of hazardous waste military munitions are subject to the applicable provisions of **subchapters 1 through 7 of these regulations**.

§ 7-502 EXEMPTIONS

The following facilities and activities are exempted from the provisions of this subchapter:

- (a) A resource recovery facility managing municipal solid waste provided:
 - (1) The facility receives and burns only household waste, and solid waste from commercial or industrial sources which does not contain hazardous wastes; and
 - (2) The facility does not accept hazardous wastes, and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.
- (b) A totally enclosed treatment facility. A totally enclosed treatment facility is a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of hazardous waste or any constituent thereof into the environment during treatment.
- (c) The owner or operator of an elementary neutralization unit or wastewater treatment unit as defined in § 7-103 provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in **40 CFR § 268.40**, Table Treatment Standards for Hazardous Wastes), or reactive (D003) waste, to

remove the characteristic before land disposal, the owner/operator must comply with the general requirements for ignitable, reactive, or incompatible wastes set out in **40 CFR § 264.17(b)**.

- (d) Any person engaged in treatment or containment activities performed during and as a result of an emergency response to a release of hazardous material, provided that the person:
 - (1) Complies with all applicable provisions of **§ 7-105**; and
 - (2) Obtains certification under this subchapter when he or she continues or initiates treatment or containment activities after the emergency response is over.
- (e) The treatment of hazardous waste by mixing absorbent material with containerized hazardous waste provided:
 - (1) The mixing occurs when the waste is first placed in the container; and
 - (2) The person treating the waste complies with **40 CFR §§ 264.17(b), 264.171, and 264.172**.
- (f) A solid waste management facility that accepts hazardous waste only from very small quantity generators provided the facility is certified by the Secretary to accept such waste.
- (g) Generators who store hazardous waste on-site in compliance with the requirements of **§§ 7-306, 7-307, 7-308 and 7-310**.
- (h) Farmers who dispose of hazardous waste pesticides from their own use as provided in **§ 7-203(r)** of these regulations.
- (i) Transporters storing manifested shipments of hazardous waste at a transfer facility for a period of ten days or less and in accordance with **§ 7-404**.
- (j) Universal waste handlers and universal waste transporters managing the wastes listed below. Universal waste handlers and universal waste transporters are subject to regulation under **subchapter 9** of these regulations.
 - (1) Batteries as described in **§ 7-902**;
 - (2) Pesticides as described in **§ 7-903**;
 - (3) Thermostats as described in **§ 7-904**;
 - (4) PCB-containing fluorescent light ballasts as described in **§ 7-905**;
 - (5) Lamps as described in **§ 7-906**;

- (6) Mercury-containing devices as described in § 7-907;
 - (7) Cathode ray tubes (CRTs) as described in § 7-908;
 - (8) Postconsumer paint as described in § 7-909; and
 - (9) Aerosol cans as described in § 7-910.
- (k) Facilities that recycle hazardous waste in accordance with the standards of **subchapter 6** and as follows:
- (1) Facilities that recycle hazardous waste on-site provided:
 - (A) Any hazardous waste being recycled is generated on-site;
 - (B) The hazardous waste to be recycled is not held in short-term storage for longer than the amount of time allowed under **subchapter 3** of these regulations for the facility's generator category; and
 - (C) The facility owner or operator complies with the applicable requirements of § 7-502(o).
 - (2) Facilities that recycle hazardous waste received from off-site provided the hazardous waste is not stored prior to being recycled. Hazardous waste that is being staged at a recycling facility is not considered to be in storage.

Note: Recycling facilities that store hazardous waste prior to recycling that waste, or that otherwise treats, stores or disposes of hazardous waste are subject to certification under this subchapter.

Note: Owners or operators of facilities that treat mercury-containing lamps using drum-top crushing equipment are subject to certification under the requirements of this subchapter. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather than a recycling activity.

- (l) Reverse distributors accumulating potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals, as defined in § 7-1001. Reverse distributors are subject to regulation under **Subchapter 10** of these regulations in lieu of this part for the accumulation of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.
- (m) Oil-water separators provided:
- (1) The waste oil-water mixture to be separated is identified only by the VT02 hazardous waste code; and

- (2) Any contaminated water resulting from the separation process is discharged in accordance with **10 V.S.A. chapter 47** (for indirect injection well, and direct discharges) **and chapter 48** (for groundwater protection); and
- (3) The oily residue resulting from the separation process is managed either as hazardous waste or in accordance with the used oil management standards of **subchapter 8**.
- (n) Facilities conducting site investigation and/or corrective action pursuant to **§ 7-105(f)** of these regulations may be exempted by the Secretary from the permitting (but not the substantive) requirements of this subchapter, to the extent allowed under federal regulations incorporated by reference in this chapter.
- (o) Treatment of hazardous waste in containers or tanks by generators provided:
 - (1) The generator submits the following information **in writing** to the Secretary for written approval:
 - (A) The facility name, EPA identification number, generator category classification, mailing address, street address, telephone number, contact person, legal owner or operator;
 - (B) A detailed description of the treatment process(es) to be used including process design drawings, plans or process flow diagrams;
 - (C) An estimate of the frequency that treatment will occur;
 - (D) The type(s) and estimated quantity of hazardous waste to be treated including a detailed description of the process(es) generating the waste; and
 - (E) A detailed description of how all treatment products and by-products will be managed following treatment.

Note: The Secretary reserves the right, upon receiving written notification of treatment by a generator, to require that treatment-specific requirements be met.

- (2) The Secretary is notified in writing if the information required under **subsection (o)(1) of this section** changes significantly.
- (3) The hazardous waste being treated is generated and treated on-site.
- (4) During treatment and during any storage prior to treatment, hazardous waste is:
 - (A) Counted for the purpose of determining generator category under **§ 7-305**; and
 - (B) Managed in accordance with the applicable requirements of **subchapter 3**.

- (5) The generator determines if treatment by-products are hazardous waste in accordance with § 7-303.
- (6) The generator maintains records for three years documenting:
 - (A) Copies of the written information submitted to the Secretary pursuant to **subsection (1) of this section**, and the written approval received from the Secretary.
 - (B) The type(s) and quantity of waste treated;
 - (C) The method(s) of treatment used; and
 - (D) The date(s) that treatment occurred.
- (7) All hazardous waste generated from the treatment is managed in accordance with the applicable standards of **subchapter 3**.
- (8) If a generator is treating wastewater using a wastewater evaporation unit, the generator must:
 - (A) Ensure that treatment in the evaporation unit shall result in the concentration of hazardous waste constituents for proper recycling or disposal, and not allow evaporation of the hazardous waste constituents into the air. Air emissions of hazardous constituents shall be controlled through compliance with all applicable air emission control requirements under the **Clean Air Act, U.S. Code, Title 42, c. 85** as administered by USEPA, the emission thresholds established under § 5-261 (control of hazardous air contaminants) of the **Vermont Air Pollution Control Regulations** and, for large quantity generators, with the air emission control requirements in **40 CFR Part 265, subparts AA, BB and CC** as applicable; and
 - (B) Ensure that operation of the evaporation unit or placement of hazardous waste within the unit does not:
 - (i) Result in the generation of extreme heat or pressure, fire or explosion, or violent reaction;
 - (ii) Produce uncontrolled toxic mists, fumes, or gases in sufficient quantities to threaten human health;
 - (iii) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion; or
 - (iv) Damage the structural integrity of the unit, or cause the unit or any of its ancillary equipment to rupture, leak, abnormally corrode, or otherwise fail before the end of its intended life.

- (C) Ensure that oily residue resulting from the evaporation of water from hazardous waste identified only by the VT02 or VT03 hazardous waste codes is managed as either hazardous waste or in accordance with the Used Oil Management Standards of **subchapter 8**.

Note: Disposal of hazardous waste by evaporation is prohibited pursuant to § 7-302(a).

- (9) If a generator is managing and treating waste or contaminated soil in tanks or containers to meet Land Disposal Restriction treatment standards found at **40 CFR § 268.40**, the generator develops and follows a written waste analysis plan in accordance with the requirements of **40 CFR § 268.7(a)(5)**.
- (10) The generator does not treat hazardous waste using thermal treatment processes.

Note: Distillation and use of a wastewater evaporation unit pursuant to **subsection (8) of this section** are not considered thermal treatment processes.

- (11) The generator does not treat mercury-containing wastes or devices (e.g., fluorescent lamps, thermostats).
- (12) Treatment does not result in any adverse impact to human health or the environment.

Note: Owners or operators of facilities that treat mercury-containing lamps using drum-top crushing equipment are subject to certification under the requirements of this subchapter. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather than a recycling activity.

- (p) A person engaged in treatment or containment activities during immediate response to an immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in § 7-103 of these regulations. An owner or operator of a facility otherwise regulated by this subchapter must comply with all applicable requirements of **40 CFR Part 264 subparts C and D**. In the case of emergency responses involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.
- (q) A facility that meets either small or large quantity generator standards and that accepts hazardous waste from a very small quantity generator pursuant to § 7-306(c)(2)(D).

§ 7-503 EMERGENCY CERTIFICATION

- (a) Notwithstanding any other section of these regulations, in the event the Secretary finds an

imminent and substantial endangerment to human health or the environment, the Secretary may issue a temporary emergency certification to an uncertified facility to allow the treatment, storage, or disposal of hazardous waste or to a certified facility to allow treatment, storage, or disposal of a hazardous waste not covered by an effective certification.

- (b) This emergency certification:
- (1) May be oral or written. If oral, it shall be followed in five days by a written emergency certification;
 - (2) Shall not exceed 90 days in duration;
 - (3) Shall clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage, or disposal;
 - (4) May be terminated by the Secretary at any time without process if he or she determines that termination is appropriate to protect human health and the environment;
 - (5) Shall be accompanied by a public notice published under **40 CFR § 124.10(b)** including:
 - (A) Name and address of the office granting the emergency authorization;
 - (B) Name and location of the facility;
 - (C) A brief description of the waste involved;
 - (D) A brief description of the action authorized and reasons for authorizing it; and
 - (E) The duration of the emergency certificate.
 - (6) Shall incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of these regulations.

§ 7-504 GENERAL FACILITY CERTIFICATION STANDARDS

- (a) Except for the facilities and activities excluded under **§ 7-502**, certification from the Secretary is required to treat, store, dispose, or accept any hazardous waste as identified or listed under **subchapter 2** of these regulations.

Note: The terms “treatment”, “storage”, “disposal”, and “hazardous waste” are defined in **§ 7-103**.

(b) Certificate of Need

- (1) Except as provided for in **subsection (b)(2) of this section**, no person shall begin site preparation for or construction of a hazardous waste management facility for the purpose of treatment or disposal of hazardous waste, without first obtaining a certificate of need pursuant to the requirements of **10 V.S.A. § 6606a**.
- (2) The certificate of need requirement does not apply to:
 - (A) The replacement of an existing facility at the original site with an equivalent facility in the usual course of business; or
 - (B) A hazardous waste management facility that is operated only by or on behalf of the owner of the facility for the treatment or disposal of hazardous waste generated in Vermont by the owner of the facility. Such facility shall be located on a site of generation.
- (3) To determine that a proposed facility is needed for the general good of the state, the Secretary must find that:
 - (A) The proposed facility is consistent with any applicable provisions of the state hazardous waste management plan, if such plan has been adopted by the Secretary, or, if such plan has not been adopted by the Secretary, the proposed facility is consistent with the general goals and priorities of **10 V.S.A. chapter 159** as determined by the Secretary; and
 - (B) The proposed facility location:
 - (i) Is suitable for the type and amount of hazardous waste intended for treatment or disposal at the facility; and
 - (ii) Is accessible by transportation routes that minimize the threat to the public health and safety and to the environment; and
 - (iii) Reasonably accommodates the plans and preferences of the proposed host municipality, as expressed by local government entities; and
 - (C) The need for the facility is demonstrated by the need to assure the environmentally sound treatment or disposal of hazardous waste generated within Vermont, recognizing the effects of any state hazardous waste plan and:
 - (i) The further need to meet Vermont's obligations under an interstate agreement or regional compact; or
 - (ii) The lack of adequate current or projected treatment or disposal capacity within the region to handle the hazardous waste generated by Vermont

generators which is proposed for the facility.

(c) Disclosure Statement

- (1) With the exception of those persons exempted under **10 V.S.A. § 6605f(k)**, any person who is required to obtain a certification under this subchapter shall, pursuant to the requirements of **10 V.S.A. § 6605f**, complete, sign, and submit to the Secretary at the time of application a **Business Disclosure Statement**, and a **Personal History Disclosure** statement for each person identified in the **Business Disclosure Statement** as a sole proprietor or key employee. In the event of any change in ownership, a disclosure statement must be submitted pursuant to the requirements of **10 V.S.A. § 6605f(e)**. The disclosure statements must be filed with the Agency at least 90 days before the proposed change in ownership
- (2) Any person who has received a certification under this subchapter shall file an **Annual Statement** within 30 days prior to the month and day of issuance of that permit disclosing any changes in facts that would render the disclosure statement filed in connection with that permit inaccurate in any way, or stating that no such changes have occurred in the period of time covered by the annual statement. The annual statement shall be under oath or affirmation.

(d) No person shall initiate construction of a hazardous waste treatment, storage, or disposal facility without first applying for and receiving certification for such facility in accordance with §§ **7-505 and 7-506** of these regulations. In addition, any hazardous waste treatment, storage or disposal facility that was in existence on November 19, 1980, or any facility that treats, stores or disposes of a material that has been newly defined or listed as a Vermont or federal hazardous waste, must apply for interim certification in accordance with § **7-510** of these regulations.

(e) Every hazardous waste treatment, storage, or disposal facility issued a certification under the provisions of this subchapter shall, at a minimum, be designed, constructed, operated, and maintained in accordance with all applicable requirements of:

- (1) **40 CFR Part 264**;
- (2) **40 CFR Part 266**;
- (3) The land disposal restrictions (40 CFR Part 268) incorporated by reference under § **7-106**;
- (4) The large quantity generator standards of § **7-308** except § **7-308(b)(12)**;
- (5) The biennial reporting requirements of §§ **7-708(b) and (c)**; and
- (6) All applicable sections of the Vermont Environmental Protection Rules, Chapters 1 through 19.

- (f) Certification is required during the active life (including the closure period) of all hazardous waste management units. Owners and operators of landfills, surface impoundments, land treatment units, and waste pile units must have post-closure permits (i.e., certification) as specified in **40 CFR § 270.1(c)**.
- (g) Certification shall be for a period not to exceed ten (10) years. Each certification for a land disposal facility shall be reviewed by the Secretary five years after the date of certification issuance or reissuance and shall be modified, if necessary, as provided in § **7-507**.
- (h) Continuation of Expiring Certificates
 - (1) If the certificate holder has submitted an administratively complete application to renew certification at least 180 calendar days prior to expiration of the effective certification and the Secretary, through no fault of the certificate holder, does not issue a new certificate with an effective date prior to the expiration date of the previous certificate, the conditions of the expired certificate continue in force until the effective date of a new certificate.
 - (2) Certificates continued under this section remain fully effective and enforceable.
 - (3) When the certificate holder is not in compliance with the conditions of the expired or expiring certification, the Secretary may do any or all of the following:
 - (A) Initiate an enforcement action based on the certificate that has been continued;
 - (B) Issue a notice of intent to deny the new request for certification. If the certification is denied, the activities authorized by the continued certificate would have to cease or become subject to an enforcement action;
 - (C) Issue a new certification with appropriate conditions; or
 - (D) Take other actions authorized by these regulations.
- (i) A certification may be transferred by the permittee to a new owner or operator under the provisions of **40 CFR § 270.40**.
- (j) For the purposes of construing **40 CFR Parts 260 through 270**, a person who receives certification (i.e., the certificate holder) under this chapter shall also be known as the permittee.
- (k) In lieu of the negative assurance required by **40 CFR § 264.143(f)(3)(iii)(B)**, the Secretary shall accept a certified public accountant's report describing the procedures performed and related findings, including whether or not there were discrepancies found in the comparison.

§ 7-505 APPLICATION FOR INITIAL AND RENEWAL CERTIFICATION

- (a) Any person who is required to obtain or renew certification under **§ 7-504** shall sign and submit an application for certification to the Secretary. When a facility is owned by one person but is operated by another person, it is the operator's duty to obtain certification except that the owner must also sign any documents submitted for the purpose of applying for certification.
- (b) At the time of application, the applicant must:
 - (1) If seeking initial certification for a hazardous waste treatment or disposal facility, have already obtained a certificate of need pursuant to the requirements of **10 V.S.A. § 6606a** (refer to **§ 7-504(b)**);
 - (2) Submit a disclosure statement pursuant to **§ 7-504(c)**;
 - (3) Have complied with the pre-application public meeting and notice requirements of **40 CFR § 124.31**.
- (c) An application for certification may be submitted in narrative form. Each application for certification must be signed in accordance with **§ 7-108**, and must contain all applicable information required under **40 CFR §§ 270.10(j), 270.13 (Part A) and 270.14 through 270.28 (Part B)**.
- (d) In addition to the requirements of **subsection (c) of this section**, each application for a hazardous waste land treatment or disposal facility shall include, but not be limited to, the following information:
 - (1) A description of the provisions for hydrogeological studies, monitoring analysis, and protection of groundwater and surface waters;
 - (2) A description of the provisions for post-closure monitoring and maintenance of the facility; and
 - (3) A description of the actions taken by the facility to assure financial responsibility for the post-closure care monitoring period and civil liability arising from non-sudden incidents at the facility.
- (e) Technical data that are required to be submitted in an application, including design drawings, specifications and engineering studies, shall be certified by a professional engineer registered in Vermont.
- (f) The Secretary shall not issue a draft certification until the applicant has fully complied to the Secretary's satisfaction with the specific application requirements for the type of facility involved, unless the only information not submitted is the information required for exposure assessments for surface impoundments or landfills.

- (g) Applicants shall keep records of all data used to complete certification applications and any supplemental information submitted to the Secretary for a period of at least three (3) years from the date the application is signed.

§ 7-506 PROCEDURE FOR CERTIFICATION

- (a) Upon completing review of each application for certification under § 7-505, the Secretary shall either issue a draft certificate or deny certification. The Secretary shall prepare a written justification for any certification that has been denied and give public notice of the decision to deny.
- (b) Each draft and final certificate shall contain:
 - (1) All standards, conditions, and requirements that the Secretary has determined to be the best control technology for the specific facility involved. At a minimum, best control technology shall be the design, construction, operation and maintenance requirements referenced in § 7-504(e);
 - (2) All standards, conditions, and requirements that the Secretary has determined necessary to protect human health and the environment, including the “conditions applicable to all permits” specified under 40 CFR § 270.30; and
 - (3) When appropriate, a schedule of compliance leading to compliance with the Waste Management Act and these regulations. Any schedule of compliance shall meet the provisions of 40 CFR § 270.33.
- (c) As necessary, the Secretary shall consult with the Commissioner of the Vermont Department of Health and the Commissioner of the Vermont Department of Labor to avoid conflicts of the standards and conditions of any draft certification with requirements that may be imposed under 18 V.S.A. chapter 28 or any other applicable state safety or health regulation.
- (d) A fact sheet shall be compiled for every draft certificate prepared by the Secretary. The fact sheet shall briefly set forth the significant factual, legal, methodological, and policy questions considered in preparing the draft certificate. In addition, the fact sheet shall include the information described in 40 CFR § 124.8(b).
- (e) For preparing a draft certificate, the record shall consist of: the application, if required, and any supporting data furnished by the applicant; the draft certificate or notice of intent to deny the application or to revoke the certificate; the fact sheet; all documents cited in the fact sheet; and other documents contained in the supporting file for the draft certificate.

- (f) **Public Notice**
 - (1) The Secretary shall provide notice that a draft certificate has been prepared for a hazardous waste facility, of the opportunity for public comment on such draft certificate, and of the informational public hearing which shall be held for such draft certificate.
 - (2) Notice shall be provided by advertisement in major local newspapers of general circulation, broadcast over local radio station and by mailing a copy of a written notice to those persons listed in **40 CFR § 124.10**, who shall be included on the facility mailing list. The applicant shall reimburse the Secretary for all costs incurred under this subsection.
 - (3) At a minimum, for each draft certificate, the applicable public notice and public comment requirements of **40 CFR §§ 124.10 and 124.32** shall be met.
 - (4) The Secretary may assess the need, on a case-by-case basis, for an information repository, and may require that such a repository be maintained by the applicant, in accordance with the requirements of **40 CFR § 124.33**.
- (g) Copies of the fact sheet, draft certificate and written notice shall be sent to the applicant, the town in which the facility is located or proposed to be located, any other Agency or subdivision thereof which has issued or may be requested to issue a permit or certificate for the facility, the U.S. Environmental Protection Agency, and any other appropriate government authorities. Copies of the fact sheet, draft certificate and notice shall also be made available to any other interested party.
- (h) Prior to the issuance of each final certificate, the Secretary shall consider all comments raised during the public comment period and prepare a response to comments which specifies:
 - (1) The content of all significant comments;
 - (2) The Secretary's response to those comments;
 - (3) Any changes that will be made to the draft certificate; and
 - (4) The reasons for those changes.
- (i) An appeal may be taken from a final decision on the issuance or denial of a certificate.

§ 7-507 MODIFICATION OF CERTIFICATIONS

- (a) Based upon information received (e.g., findings of a facility inspection, or information submitted by the certificate holder), the Secretary may determine whether one or more of

the causes listed in **subsection (e) of this section** to modify a certification exist. If cause exists, the Secretary may modify the certification accordingly, and may request an updated application if necessary.

- (b) When a certification is modified, only the conditions subject to modification shall be reopened.
- (c) Suitability of the facility location shall not be considered at the time of modification unless new information or standards indicate that a threat to human health or the environment exists which was unknown at the time when the certification was issued.
- (d) If cause does not exist under this section, the Secretary shall not modify the certification, unless the modification is at the request of the certificate holder.
- (e) The following are causes for modification of a certification:
 - (1) There are material and substantial alterations or additions to the certified facility or activity which occurred after the certification was issued which justify the application of certification conditions that are different from or absent in the existing certification.
 - (2) Information is received by the Secretary that was not available at the time that the certification was issued (other than revised regulations, guidance, or test methods) and would have justified the application of different certification conditions at the time of issuance.
 - (3) The standards or regulations on which the certification was based have been changed by statute, through promulgation of new or amended standards or regulations, or by judicial decision, after the certification was issued.
 - (4) The Secretary determines good cause exists for modification of a certification, such as an act of God, strike, flood, or materials shortage or other events over which the certificate holder has little or no control and for which there is no reasonably available remedy.
 - (5) Cause exists for revocation under § 7-509, and the Secretary determines that modification of the certification is appropriate.
 - (6) The Secretary has received notification (as required in the certification) of a proposed transfer of the certification.
- (f) Modification Procedures
 - (1) If a modification is requested by the permittee, the Secretary shall approve or deny the request according to the procedures of **40 CFR § 270.42**.

- (2) For all modifications sought on the motion of the Secretary, a draft certification shall be prepared, and the procedures and requirements of § 7-506 shall be met.
- (3) If a modification is requested to transfer a facility to a new owner or operator, the Secretary shall review the request according to the procedures of 40 CFR § 270.40.
- (g) An appeal may be taken from a final decision on the approval or denial of a request for the modification of a certificate.

§ 7-508 REVOCATION AND REISSUANCE OF CERTIFICATIONS

- (a) Based upon information received (e.g., findings of a facility inspection, or information submitted by the certificate holder), the Secretary may determine whether one or more of the causes listed in **subsection (e) of this section** to revoke and reissue a certification exist. If cause exists, the Secretary may revoke and reissue the certification accordingly, and may request an updated application if necessary.
- (b) If a certification is revoked and reissued, the entire certification is reopened and subject to revision and the certification is reissued for a new term. (See 40 CFR § 124.5(c)(2))
- (c) Suitability of the facility location shall not be considered at the time of revocation and reissuance unless new information or standards indicate that a threat to human health or the environment exists which was unknown or which did not exist at the time when the certification was issued.
- (d) If cause does not exist under this section, the Secretary shall not revoke and reissue a certification, except at the request of the certificate holder.
- (e) The following are causes for revocation and reissuance of a certification:
 - (1) Cause exists for termination under § 7-509, and the Secretary determines that revocation and reissuance of the certification is appropriate.
 - (2) The Secretary has received notification (as required in the certification) of a proposed transfer of the certification. When revocation and reissuance is used to transfer a certification to a new owner or operator, the requirements of 40 CFR § 270.41 shall be met.
- (f) The causes for modification listed under §§ 7-507(e)(1) through (4) may be causes for revocation and reissuance of a certification when the certificate holder requests or agrees.

§ 7-509 VOLUNTARY AND INVOLUNTARY TERMINATION OF CERTIFICATIONS

- (a) Voluntary Termination of Certifications

The Secretary may terminate a certification upon request of the certificate holder provided the certificate holder:

- (1) Notifies the Secretary in writing of his or her intent to close the facility;
 - (2) Closes the facility in accordance with the facility closure plan;
 - (3) Requests and receives a determination by the Secretary that the facility has been successfully closed; and
 - (4) Notifies persons included on the facility mailing list.
- (b) Involuntary Termination of Certifications
- (1) The following are causes for terminating a certification during its term, or for denying an application to renew certification:
 - (A) Noncompliance by the certificate holder with any condition of the certification;
 - (B) Failure by the certificate holder to disclose fully all relevant facts in the application or during the certification process;
 - (C) Misrepresentation by the certificate holder of any relevant facts at any time; or
 - (D) A determination by the Secretary that the certified activity endangers human health or the environment and can only be regulated to acceptable levels by termination of the certification.
 - (2) The Secretary shall follow the applicable procedures of **40 CFR § 124.5 and 3 V.S.A. § 814** when terminating any certification under this section.
 - (3) The Secretary may, pursuant to the procedures of this subchapter, deny an application for renewal of certification either in its entirety or as to the active life of a hazardous waste management facility or unit only.

§ 7-510 INTERIM STATUS CERTIFICATION

- (a) The purpose of this section is to establish minimum standards that define the acceptable management of hazardous waste during the period of interim status and until certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled.
- (b) The standards of **40 CFR Part 265, Subpart S of 40 CFR Part 264**, and this section apply to owners and operators of facilities that treat, store or dispose of hazardous waste

who have fully complied with the requirements for interim status under § 3005(e) of RCRA and 40 CFR § 270.10 until either certification is made under this subchapter or until applicable Part 265 closure and post-closure responsibilities are fulfilled, and to those owners and operators of facilities in existence on November 19, 1980 who have failed to provide timely notification as required by RCRA § 3010(a) and/or failed to file an application for certification as required by subsections (g) and (h) of this section. These standards apply to all treatment, storage and disposal of hazardous waste at these facilities after the effective date of these regulations, except as specifically provided for in this subchapter or subchapter 2.

- (c) All hazardous waste facilities which were in operation or under construction as of November 19, 1980, which have been in operation or under construction since that date, or which are currently operating or under construction without certification shall, at a minimum, be designed, constructed, operated and maintained in accordance with all applicable requirements of:
 - (1) 40 CFR Part 265;
 - (2) 40 CFR Part 266;
 - (3) The land disposal restrictions (40 CFR Part 268) incorporated by reference under § 7-106; and
 - (4) All applicable sections of the Vermont Environmental Protection Rules, chapters 1 through 19.
- (d) In order for a facility to qualify for interim status, the owner or operator must submit a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12), an application for interim certification that meets the requirements of subsection (g) of this section, and must otherwise meet the requirements of 40 CFR §§ 270.70 through 270.73.
- (e) The following hazardous wastes must not be managed at facilities subject to regulation under this section: EPA hazardous waste codes F020, F021, F022, F023, F026, or F027.
- (f) The requirements of this section apply to owners and operators of all facilities which treat, store or dispose of hazardous waste subject to the land disposal restrictions of 40 CFR Part 268 incorporated by reference under § 7-106.
- (g) Owners and operators of hazardous waste management facilities in existence on November 19, 1980 must submit an application for certification or interim certification as required by 40 CFR § 270.10(e). Any person applying for interim certification under this section shall submit a document, signed in accordance with § 7-108, that provides the information required by 40 CFR § 270.13. This document shall be submitted in accordance with the requirements of 40 CFR § 270.10(e).

- (h) (1) If any owner or operator of a hazardous waste management facility has filed for interim status certification and has not yet filed for certification, the owner or operator shall file an amended interim status application:
 - (A) With the Secretary no later than the effective date of regulatory provisions listing or designating wastes as hazardous in the state in addition to those already listed or designated hazardous by the Agency, if the facility is treating, storing or disposing of any of those newly listed or designated wastes; or
 - (B) As necessary to comply with provisions of **40 CFR § 270.72** for changes during interim status.
- (2) The owner or operator of a facility who fails to comply with the updating requirements of this section does not receive interim status as to the wastes not covered by a duly filed interim status application.
- (i) In lieu of the negative assurance required by **40 CFR § 265.143(e)(3)(iii)(B)**, the Secretary shall accept a certified public accountant's report describing the procedures performed and related findings, including whether or not there were discrepancies found in the comparison.

§ 7-511 SPECIAL CERTIFICATION

- (a) The Secretary may issue a certificate for a hazardous waste incinerator in accordance with **40 CFR § 270.62**.
- (b) The Secretary may issue a certificate for using field tests or laboratory analyses for a land treatment demonstration in accordance with **40 CFR § 270.63**.
- (c) The Secretary may issue a research, development, and demonstration certificate for any hazardous waste treatment facility which proposes to utilize an innovative and experimental hazardous waste treatment technology or process for which certification standards for such experimental activity have not been promulgated under **40 CFR Part 264 or 266**. Any such certificate shall include such terms and conditions as will assure protection of human health and the environment. Such certificates shall meet the requirements of **40 CFR § 270.65**.
- (d) The Secretary may issue a certificate for hazardous waste boilers and industrial furnaces in accordance with **40 CFR § 270.66**.

§ 7-512 ADDITIONAL REQUIREMENTS

On a case-by-case basis, any person subject to this subchapter may be required to meet additional requirements when the Secretary determines that such actions are necessary to protect human

health or the environment.

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Subchapter 6: STANDARDS FOR HAZARDOUS WASTES THAT ARE RECYCLED

§ 7-601 PURPOSE, SCOPE, APPLICABILITY

This subchapter defines “hazardous waste recycling,” establishes management standards for facilities that recycle hazardous waste, and provides a mechanism for the Secretary to, on a case-by-case basis, exempt a waste that is recycled or reused from part or all of these regulations.

§ 7-602 DEFINITION OF HAZARDOUS WASTE RECYCLING

Hazardous waste is recycled if it is used, reused, or reclaimed as follows:

- (a) A hazardous waste is used or reused if it is:
 - (1) Used or reused as an ingredient in an industrial process to make a product, provided the waste is not first being processed or reclaimed; or
 - (2) Used or reused as an effective substitute for a commercial product, provided the waste is not first being processed or reclaimed; or
 - (3) Returned to the original process from which the waste is generated, without first being reclaimed or land disposed. The waste must be returned as a substitute for a feedstock material. In cases where the original process to which the material is returned is a secondary process, the waste must be managed such that there is no placement on the land.

Note: Certain hazardous wastes that are recycled by being used or reused as described by **subsection (a)** of this section are exempted from regulation as hazardous waste under § 7-204(a)(1).

- (b) A hazardous waste is reclaimed if it is processed to recover the hazardous component of the waste as a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

§ 7-603 OTHER SECTIONS OF THESE REGULATIONS APPLICABLE TO HAZARDOUS WASTE RECYCLING

- (a) Definitions for the terms: “designated facility,” “discarded,” “reclaimed,” “staging,” and “used or reused” are provided in § 7-103.
- (b) Exemptions for certain hazardous wastes that are recycled are provided in § 7-204.
- (c) **Subsections (3) and (4) of § 7-305(d)** specify how on-site recycled waste is counted

toward generator category.

- (d) Exemptions for certain recycling activities, from **subchapter 5** certification requirements, are provided in **§ 7-502(k)**.

§ 7-604 GENERAL STANDARDS APPLICABLE TO ALL HAZARDOUS WASTE RECYCLING ACTIVITIES

- (a) Any residual material resulting from a recycling process must be evaluated in accordance with **§ 7-303** to determine whether it is subject to regulation as hazardous waste.
- (b) Any facility that treats hazardous waste without recycling it, or that treats hazardous waste prior to recycling it, is subject to regulation under subchapter 5.

Note: Generators that treat hazardous waste in containers or tanks, and comply with **§ 7-502(o)**, are exempt from regulation under subchapter 5.

- (c) Owners or operators of facilities otherwise subject to subchapter 5 certification requirements are subject to the requirements of **Subparts AA, BB and CC of 40 CFR Part 264 or 265** for hazardous waste management units that recycle hazardous wastes.
- (d) Hazardous waste that is exported or imported for purpose of recovery is subject to the requirements of **40 CFR Part 262, Subpart H**.

§ 7-605 HAZARDOUS WASTE RECYCLING BY GENERATORS

- (a) Hazardous waste that is recycled on-site by the generator of the waste, must be managed in accordance with:
 - (1) The requirements of **§ 7-502(o)**;
 - (2) The requirements of **§ 7-604**; and
 - (3) All applicable standards of **subchapter 3** (i.e., standards applicable to very small quantity, small quantity, or large quantity generators) until such time that the recycling process is complete.
- (b) Generators that recycle their own hazardous waste on-site according to **subsection (a) of this section** are not subject to certification under **subchapter 5** (refer to **§ 7-502(k)**) for the recycling process.
- (c) Generators shipping hazardous waste off-site for recycling shall ship such waste to:
 - (1) A designated facility;

- (2) A facility approved by the Secretary under a recycle/reuse exemption issued according to the requirements of § 7-608; or
- (3) For Vermont-listed hazardous waste, to a facility that is not a designated facility, located in a state other than Vermont provided the facility can receive such waste under applicable state and local laws, regulations and ordinances.

§ 7-606 HAZARDOUS WASTE RECYCLING AT OFF-SITE FACILITIES

(a) Owners or operators of facilities that receive recyclable materials, stage such materials for no more than three consecutive calendar days, and recycle them without storing them before they are recycled are subject to:

- (1) The requirements of § 7-604;
- (2) The large quantity generator requirements of § 7-308; and
- (3) Financial Assurance

Prior to staging any material, demonstrate financial assurance for closure of the facility by:

- (A) Maintaining a closure cost estimate that meets the requirements of 40 CFR § 265.142, and that has been approved by the Secretary; and
- (B) Establishing financial assurance in accordance 40 CFR § 265.143.

(b) Owners or operators of facilities that store recyclable materials before they are recycled are subject to § 7-604 and all applicable provisions of subchapters 1, 2, 3, 5 and 7 of these regulations.

§ 7-607 RECYCLABLE MATERIALS USED IN A MANNER CONSTITUTING DISPOSAL

Any recyclable materials that are applied to or placed on the land before or after mixing or combination with any other substance(s) shall be managed in accordance with 40 CFR §§ 266.20 through 266.23. These materials are referred to as "materials used in a manner that constitutes disposal."

§ 7-608 RECYCLE/REUSE EXEMPTIONS FOR RECYCLABLE HAZARDOUS WASTES AND/OR RECYCLING ACTIVITIES

(a) The Secretary may, on a case by case basis, exempt from part or all of the regulations, a waste generated by a particular generator, transported by a particular transporter, or

treated or stored by a particular facility if the waste is legitimately recycled provided that:

- (1) The recycled material is:
 - (A) Vermont regulated waste listed under § 7-211 of these regulations; or
 - (B) Recycled material described by 40 CFR § 260.30; or
 - (C) Material that is reclaimed and noted with a “ – “ in column 3 of Table 1 in 40 § CFR 261.2(c).
 - (2) The procedural and durational requirements and the criteria and standards used by the Secretary in exempting waste under this section shall be no less stringent than those specified in 40 CFR §§ 260.30, 260.31, and 260.33;
 - (3) The standards and requirements which apply to these wastes can be no less stringent than those outlined in 40 § CFR 261.6 and Part 266, if the waste in question is one addressed by these sections of 40 CFR; and
 - (4) The recycling, reclamation, or reuse of the waste does not present an actual or potential threat to human health or the environment.
- (b) Any person seeking an exemption under this section shall apply to the Secretary using the **Exemption Procedures for the Recycle and Reuse of Hazardous Waste Form**.
 - (c) Any generator or facility whose waste is exempted under this section shall comply with those additional management standards and requirements that the Secretary, after an examination of the factors listed in § 7-216(c), deems necessary to protect human health and the environment.
 - (d) Recycle/Reuse exemptions shall be issued for a period not to exceed five (5) years.
 - (e) If the holder of a Recycle/Reuse exemption has submitted an administratively complete application to renew the exemption at least 30 calendar days prior to expiration of the effective exemption and the Secretary, through no fault of the Recycle/Reuse exemption holder, does not issue a new exemption with an effective date prior to the expiration date of the previous exemption, the conditions of the expired exemption continue in force until either:
 - (1) The effective date of a new exemption (should the Secretary approve the application); or
 - (2) If the Secretary denies the application to renew, the last day for seeking appeal of the denial, or a later date fixed by order of the reviewing court.

- (f) Any Recycle/Reuse exemption without a durational requirement shall expire on July 1, 2013.

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Subchapter 7: MANIFEST AND REPORTING REQUIREMENTS

§ 7-701 PURPOSE, SCOPE, APPLICABILITY

- (a) This subchapter establishes requirements for the use of manifests by hazardous waste generators, transporters, and treatment, storage and disposal facilities to track the movement of hazardous waste from the point of generation to any intermediate points and finally to its ultimate point of disposition. This subchapter also establishes requirements for reporting by generators, transporters and treatment, storage, and disposal facilities. Other reporting requirements for treatment, storage, and disposal facilities are specified in subchapter 5.
- (b) Applicability of electronic manifest system and user fee requirements to facilities receiving state-only regulated waste shipments.
 - (1) For purposes of this subchapter, “state-only regulated waste” means:
 - (A) A non-RCRA waste that a state regulates more broadly under its state regulatory program, or
 - (B) A RCRA hazardous waste that is federally exempt from manifest requirements, but not exempt from manifest requirements under Vermont law.
 - (2) In any case in which a state requires a manifest to be used under state law to track the shipment and transportation of a state-only regulated waste to a receiving facility, the facility receiving such a waste shipment for management shall:
 - (A) Comply with the provisions of § 7-704; and
 - (B) Pay the appropriate per manifest fee to EPA for each manifest submitted to the e-Manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in **40 CFR §§ 264.1300 through 264.1316**.
- (c) Availability of information; confidentiality of information
 - (1) After August 6, 2014, no claim of business confidentiality may be asserted by any person with respect to information entered on a Hazardous Waste Manifest (EPA Form 8700-22), a Hazardous Waste Manifest Continuation Sheet (EPA Form 8700-22A), or an electronic manifest format that may be prepared and used in accordance with **40 CFR § 262.20(a)(3)**.
 - (2) EPA will make any electronic manifest that is prepared and used in accordance with **40 CFR § 262.20(a)(3)**, or any paper manifest that is submitted to the system under **40 CFR §§ 264.71(a)(6) or 265.71(a)(6)** available to the public under this section

when the electronic or paper manifest is a complete and final document. Electronic manifests and paper manifests submitted to the system are considered by EPA to be complete and final documents and publicly available information after 90 days have passed since the delivery to the designated facility of the hazardous waste shipment identified in the manifest.

§ 7-702 MANIFEST REQUIREMENTS APPLICABLE TO GENERATORS

- (a) (1) Unless otherwise specified in these regulations, a small or large quantity generator who transports or offers for transport a hazardous waste for offsite treatment, storage, or disposal, or a treatment, storage, and disposal facility who offers for transport a rejected hazardous waste load, must prepare a manifest on EPA Form 8700–22, and, if necessary, EPA Form 8700–22A.
- (2) In lieu of using the manifest form specified in **subsection (a)(1) of this section**, a person required to prepare a manifest may prepare and use an electronic manifest, provided that the person complies with the requirements of:
 - (A) **40 CFR § 262.24** for use of electronic manifests.
 - (B) **40 CFR § 262.25** for electronic manifest signatures, and
 - (C) **40 CFR § 3.10** for the reporting of electronic documents to EPA.
- (3) Paper manifests may be obtained from any source that is registered with the U.S. EPA as a supplier of manifests (e.g., states, waste handlers, and/or commercial forms printers).
- (4) Any person initiating a shipment of hazardous waste in Vermont, who is required to file a manifest, or other similar report pursuant to 10 V.S.A. chapter 159 or these regulations, shall pay a tax based on the quantity of hazardous waste reported on such manifest or such other report pursuant to **32 V.S.A. chapter 237**. When completing a manifest, a generator of waste subject to an alternative tax rate must use the appropriate tax code listed in **Appendix VI** in order for the Secretary to recognize the alternative rate.
- (b) Any generator who transports or offers for transport hazardous waste to a designated facility using a manifest shall:
 - (1) When completing the manifest, use the EPA identification number that is assigned to the generator site at the time of shipment.
 - (2) Ensure that all hazardous waste codes used on the manifest to identify a hazardous waste are the same codes identified for that waste pursuant to **7-202(c)**.
 - (3) Designate on the manifest one facility that is permitted to handle the waste described

on the manifest. A generator may also designate one alternate facility which is permitted to handle the waste in the event an emergency prevents delivery of the waste to the primary designated facility.

- (4) Sign the manifest certification by hand. Certify to one of the following statements in Item 15 of the manifest:
 - (A) “I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment;” or
 - (B) “I am a small quantity generator. I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.”
- (5) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest.
- (6) Retain one copy of the manifest in accordance with **subsection (b)(5) of this section** and give the transporter the remaining copies.
- (7) Retain a copy of each manifest signed in accordance with **subsections (4) and (5) of this section** for at least three (3) years from the date of initial shipment or until the generator receives a signed copy from the designated facility that received the waste. The signed copy from the designated facility must be retained as a record for at least three years from the date the waste was accepted by the initial transporter. All retained copies must be legible.
- (8) For shipments of hazardous waste within the United States solely by water (bulk shipments only), send three copies of the manifest dated and signed in accordance with this section to:
 - (A) The owner or operator of the designated facility; or
 - (B) The last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.
- (9) For rail shipments of hazardous waste within the United States which originate at the site of generation, send at least three copies of the manifest dated and signed in accordance with this section to:
 - (A) The next non-rail transporter; if any; or
 - (B) The designated facility if transported solely by rail; or

- (C) The last rail transporter to handle the waste in the United States if exported by rail.
- (10) If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, immediately either designate another facility or instruct the transporter to return the waste.
- (11) Wait for confirmation of the shipment by the return of a completed copy of the manifest from the designated facility. All completed copies not returned by the designated facility within 35 days, or not returned by the foreign consignee within 60 days of the initial shipment, must be investigated and reported as provided in § 7-707.
- (12) For shipments of hazardous waste made to a designated facility in an EPA-authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, assure that the designated facility agrees to sign and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility.
- (13) For rejected shipments of hazardous waste or container residues contained in non-empty containers that are returned to the generator by the designated facility (following the procedures of 40 CFR §§ 264.72(f) or 265.72(f)), the generator must:
 - (A) Sign either:
 - (i) Item 20 of the new manifest if a new manifest is used for the returned shipment; or
 - (ii) Item 18c of the original manifest if the original manifest is used for the returned shipment;
 - (B) Provide the transporter a copy of the manifest;
 - (C) Within 30 days of delivery of the rejected shipment or container residues contained in non-empty containers, send a copy of the manifest to the designated facility that returned the shipment to the generator; and
 - (D) Retain at the generator's site a copy of each manifest for at least three years from the date of delivery.
- (c) The manifest requirements of this section do not apply to:
 - (1) Hazardous waste produced by small quantity generators (generators of greater than 220 pounds (100 kilograms) but less than 2,200 pounds (1,000 kilograms) in a calendar month) where:
 - (A) The waste is reclaimed under a contractual agreement pursuant to which:

- (i) The type of waste and frequency of shipments are specified in the agreement; and
 - (ii) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and
- (B) The generator maintains a copy of the reclamation agreement in his or her files for a period of at least three (3) years after termination or expiration of the agreement.
- (2) The transport of hazardous waste on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way. Nevertheless, the generator or transporter must comply with the requirements of § 7-105 in the event of a discharge of hazardous waste or release of hazardous material on a public or private right-of-way.
- (3) Hazardous waste produced by very small quantity generators.

§ 7-703 MANIFEST REQUIREMENTS FOR TRANSPORTERS

- (a) Unless otherwise specified in these regulations, a transporter may not accept hazardous waste from a generator unless the transporter is also provided with a manifest form (EPA Form 8700-22, and if necessary, EPA Form 8700-22A) signed in accordance with the requirements of § 7-702(b)(4) through (6), or is provided with an electronic manifest that is obtained, completed, transmitted, and signed with a valid and enforceable electronic signature in accordance with § 7-702(a)(2)(B).
- (b) For exports of hazardous waste subject to the requirements of **Subpart H of 40 CFR Part 262 (Transboundary Movements of Hazardous Waste for Recovery Within OECD)**, a transporter may not accept hazardous waste without a manifest signed by the generator in accordance with this section, as appropriate, and for exports occurring under the terms of a consent issued by EPA on or after December 31, 2016, a movement document that includes all information required by **40 CFR § 262.83(d)**.
- (c) Use of the Electronic Manifest System
 - (1) Electronic manifests that are obtained, completed, and transmitted in accordance with § 7-702(a)(2), and used in accordance with this section in lieu of EPA Forms 8700-22 and 8700-22A, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, carry, provide, give, use, or retain a manifest.
 - (A) Any requirement in these regulations to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining

a valid and enforceable electronic signature within the meaning of § 7-702(a)(2)(B).

- (B) Any requirement in these regulations to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person by submission to the system.
 - (C) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment, except that to the extent that the Hazardous Materials regulation on shipping papers for carriage by public highway requires transporters of hazardous materials to carry a paper document to comply with **49 CFR § 177.817**, a hazardous waste transporter must carry one printed copy of the electronic manifest on the transport vehicle.
 - (D) Any requirement in these regulations for a transporter to keep or retain a copy of a manifest is satisfied by the retention of an electronic manifest in the transporter's account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector.
 - (E) No transporter may be held liable for the inability to produce an electronic manifest for inspection under this section if that transporter can demonstrate that the inability to produce the electronic manifest is exclusively due to a technical difficulty with the EPA system for which the transporter bears no responsibility.
- (2) A transporter may participate in the electronic manifest system either by accessing the electronic manifest system from the transporter's own electronic equipment, or by accessing the electronic manifest system from the equipment provided by a participating generator, by another transporter, or by a designated facility.
 - (3) Electronic manifest signatures shall meet the criteria described in **40 CFR § 262.25**.
 - (4) If after a manifest has been originated electronically and signed electronically by the initial transporter, and the electronic manifest system should become unavailable for any reason, then:
 - (A) The transporter in possession of the hazardous waste when the electronic manifest becomes unavailable shall reproduce sufficient copies of the printed manifest that is carried on the transport vehicle pursuant to § 7-703(c)(1)(C), or obtain and complete another paper manifest for this purpose. The transporter shall reproduce sufficient copies to provide the transporter and all subsequent waste handlers with a copy for their files, plus two additional copies that will be delivered to the designated facility with the hazardous waste.
 - (B) On each printed copy, the transporter shall include a notation in the Special

Handling and Additional Description space (Item 14) that the paper manifest is a replacement manifest for a manifest originated in the electronic manifest system, shall include (if not pre-printed on the replacement manifest) the manifest tracking number of the electronic manifest that is replaced by the paper manifest, and shall also include a brief explanation why the electronic manifest was not available for completing the tracking of the shipment electronically.

- (C) A transporter signing a replacement manifest to acknowledge receipt of the hazardous waste must ensure that each paper copy is individually signed and that a legible handwritten signature appears on each copy.
 - (D) From the point at which the electronic manifest is no longer available for tracking the waste shipment, the paper replacement manifest copies shall be carried, signed, retained as records, and given to a subsequent transporter or to the designated facility, following the instructions, procedures, and requirements that apply to the use of all other paper manifests.
- (5) If a transporter using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the transporter shall sign the electronic manifest electronically and also sign with an ink signature the transporter acknowledgement of receipt of materials on the printed copy of the manifest that is carried on the vehicle in accordance with § 7-703(c)(1)(C). This printed copy bearing the generator's and transporter's ink signatures shall also be presented by the transporter to the designated facility to sign in ink to indicate the receipt of the waste materials or to indicate discrepancies. After the owner/operator of the designated facility has signed this printed manifest copy with its ink signature, the printed manifest copy shall be delivered to the designated facility with the waste materials.
- (6) After facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) named on the manifest. Transporters may participate electronically in the post-receipt data corrections process by following the process described in § 7-704(d)(7), which applies to corrections made to either paper or electronic manifest records.
- (d) Before transporting the hazardous waste, the transporter must sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter must return a signed copy to the generator before leaving the generator's property.
 - (e) The transporter must ensure that the manifest accompanies the hazardous waste. In the case of exports occurring under the terms of a consent issued by EPA to the exporter on or after December 31, 2016, the transporter must ensure that a movement document that includes all information required by 40 CFR 262.83(d) also accompanies the hazardous waste. In the case of imports occurring under the terms of a consent issued by EPA to the

country of export or the importer on or after December 31, 2016, the transporter must ensure that a movement document that includes all information required by **40 CFR 262.84(d)** also accompanies the hazardous waste.

- (f) A transporter who delivers a hazardous waste to another transporter or to the designated facility must:
 - (1) Obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest; and
 - (2) Retain one copy of the manifest in accordance with **§ 7-703(1)**; and
 - (3) Give the remaining copies of the manifest to the accepting transporter or designated facility.
- (g) A transporter transporting hazardous waste from a small quantity generator who generates greater than or equal to 220 pounds (100 kilograms) but less than 2,200 pounds (1,000 kilograms) of hazardous waste in a calendar month need not comply with the requirements of **§ 7-703** when:
 - (1) The waste is being transported pursuant to a reclamation agreement as provided in **§ 7-702(c)(1)**; and
 - (2) The transporter records on a log or shipping paper, the following information for each shipment:
 - (A) The name, address and EPA identification number of the generator of the waste;
 - (B) The quantity of waste accepted;
 - (C) All DOT-required shipping information;
 - (D) The date the waste is accepted; and
 - (3) The records required under **subsection (2) of this section** accompany the waste shipment to the reclamation facility; and
 - (4) The transporter retains a copy of the reclamation agreement and the records required under **subsection (g)(2) of this section** for a period of at least three (3) years after termination or expiration of the agreement.
- (h) A water (bulk shipment) transporter need not comply with **§§ 7-703(e), (f) and (i)** provided the transporter complies with **40 CFR § 263.20(e)**.
- (i) For shipments involving rail transportation, the requirements of **§§ 7-703(e), (f) and (h)** do not apply provided the shipment complies with **40 CFR § 263.20(f)**.

- (j) Transporters who transport hazardous waste out of the United States must:
 - (1) Sign and date the manifest in the International Shipments block to indicate the date that the shipment left the United States;
 - (2) Retain one copy in accordance with § 7-703(1)(4);
 - (3) Return a signed copy of the manifest to the generator; and
 - (4) For paper manifests only:
 - (A) Send a copy of the manifest to the e-Manifest system in accordance with the allowable methods specified in § 7-704(c)(5); and
 - (B) For shipments initiated prior to the AES filing compliance date, when instructed by the exporter to do so, give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.
- (k) Compliance with the manifest
 - (1) Except as provided in **subsection (2) of this section**, the transporter must deliver the entire quantity of hazardous waste which he or she has accepted from a generator or a transporter to:
 - (A) The designated facility listed on the manifest; or
 - (B) The alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery; or
 - (C) The next designated transporter; or
 - (D) The place outside the United States designated by the generator.
 - (2) Hazardous waste not delivered in accordance with **subsection (1) of this section**
 - (A) If the hazardous waste cannot be delivered in accordance with **subsection (1)(A), (B), or (D) of this section** because of an emergency condition other than rejection of the waste by the designated facility or alternate designated facility, then the transporter must contact the generator for further instructions and must revise the manifest according to the generator's instructions.
 - (B) If the hazardous waste is not delivered to the next designated transporter in accordance with **subsection (1)(C) of this section**, and the current transporter is without contractual authorization from the generator to act as the generator's agent with respect to transporter additions or substitutions, then the current transporter must contact the generator for further instructions prior to making any revisions to

the transporter designations on the manifest. The current transporter may thereafter make such revisions if:

- (i) The hazardous waste is not delivered in accordance with **subsection (1)(C)** of this section because of an emergency condition; or
 - (ii) The current transporter proposes to change the transporter(s) designated on the manifest by the generator, or to add a new transporter during transportation, to respond to an emergency, or for purposes of transportation efficiency, convenience, or safety; and
 - (iii) The generator authorizes the revision.
- (C) If the hazardous waste is not delivered to the next designated transporter in accordance with **subsection (1)(C)** of this section, and the current transporter has authorization from the generator to act as the generator's agent, then the current transporter may change the transporter(s) designated on the manifest, or add a new transporter, during transportation without the generator's prior, explicit approval, provided that:
- (i) The current transporter is authorized by a contractual provision that provides explicit agency authority for the transporter to make such transporter changes on behalf of the generator;
 - (ii) The transporter enters in Item 14 of each manifest for which such a change is made, the following statement of its agency authority: "Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf;" and
 - (iii) The change in designated transporters is necessary to respond to an emergency, or for purposes of transportation efficiency, convenience, or safety.
- (D) The grant by a generator of authority to a transporter to act as the agent of the generator with respect to changes to transporter designations under **subsection (2)(C) of this section** does not affect the generator's liability or responsibility for complying with any applicable requirement under this chapter, or grant any additional authority to the transporter to act on behalf of the generator.
- (3) If hazardous waste is rejected by the designated facility while the transporter is on the facility's premises, then the transporter must obtain the following:
- (A) For a partial load rejection or for regulated quantities of container residues, a copy of the original manifest that includes the facility's date and signature, and the Manifest Tracking Number of the new manifest that will accompany the shipment, and a description of the partial rejection or container residue in the discrepancy

block of the original manifest. The transporter must retain a copy of this manifest in accordance with § 7-703(I), and give the remaining copies of the original manifest to the rejecting designated facility. If the transporter is forwarding the rejected part of the shipment or a regulated container residue to an alternate facility or returning it to the generator, the transporter must obtain a new manifest to accompany the shipment, and the new manifest must include all of the information required in 40 CFR §§ 264.72(e)(1) through (6) or (f)(1) through (6) or 40 CFR §§ 265.72(e)(1) through (6) or (f)(1) through (6).

- (B) For a full load rejection that will be taken back by the transporter, a copy of the original manifest that includes the rejecting facility's signature and date attesting to the rejection, the description of the rejection in the discrepancy block of the manifest, and the name, address, phone number, and Identification Number for the alternate facility or generator to whom the shipment must be delivered. The transporter must retain a copy of the manifest in accordance with § 7-703(I), and give a copy of the manifest containing this information to the rejecting designated facility. If the original manifest is not used, then the transporter must obtain a new manifest for the shipment and comply with 40 CFR §§ 264.72(e)(1) through (6) or 40 CFR §§ 265.72(e)(1) through (6).

(I) Recordkeeping

- (1) A transporter of hazardous waste must keep a copy of the manifest signed by the generator, himself, and the next designated transporter or the owner or operator of the designated facility for a period of three years from the date the hazardous waste was accepted by the initial transporter.
- (2) For shipments delivered to the designated facility by water (bulk shipment), each water (bulk shipment) transporter must retain a copy of the shipping paper containing all the information required in 40 CFR § 263.20(e)(2) for a period of three years from the date the hazardous waste was accepted by the initial transporter.
- (3) For shipments of hazardous waste by rail within the United States:
 - (A) The initial rail transporter must keep a copy of the manifest and shipping paper with all the information required in 40 CFR § 263.20(f)(2) for a period of three years from the date the hazardous waste was accepted by the initial transporter; and
 - (B) The final rail transporter must keep a copy of the signed manifest (or the shipping paper if signed by the designated facility in lieu of the manifest) for a period of three years from the date the hazardous waste was accepted by the initial transporter.

Note: Intermediate rail transporters are not required to keep records pursuant to these regulations.

- (4) A transporter who transports hazardous waste out of the United States must keep a copy of the manifest, indicating that the hazardous waste left the United States, for a period of three years from the date the hazardous waste was accepted by the initial transporter.

§ 7-704 MANIFEST REQUIREMENTS FOR DESIGNATED FACILITIES

- (a) If a facility receives hazardous waste accompanied by a manifest, the owner, operator or his/her agent must sign and date the manifest as indicated in **subsection (b) of this section** to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy space.
- (b) In any case in which the state in which waste is generated, or the state in which waste will be transported to a designated facility, requires that the waste be regulated as a hazardous waste or otherwise be tracked through a hazardous waste manifest, the designated facility that receives the waste shall, regardless of the state in which the facility is located:
- (1) Complete the facility portion of the applicable manifest;
 - (2) Sign and date the facility certification;
 - (3) Submit to the e-Manifest system a final copy of the manifest for data processing purposes; and
 - (4) Pay the appropriate per manifest fee to EPA for each manifest submitted to the e-Manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in **40 CFR §§ 264.1300 through 264.1316**.
- (c) If the facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or his agent must:
- (1) Perform an inspection upon receipt of each shipment of hazardous waste, comparing the description appearing on the manifest and the waste actually received, noting any discrepancies, as defined in **subsection (i) of this section** on each copy of the manifest. Any discrepancies shall be noted on each copy of the manifest and immediately reported to the Secretary as provided by **subsection (i) of this section**;
 - (2) Sign and date, by hand, each copy of the manifest to certify that the hazardous waste covered by the manifest was received;
 - (3) Immediately give the transporter at least one copy of the manifest;

- (4) Within 30 days of delivery, send a copy (Page 2) of the manifest to the generator;
- (5) Paper manifest submission requirements are:
 - (A) Beginning on June 30, 2018, send the top copy (Page 1) of any paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing, or in lieu of submitting the paper copy to EPA, the owner or operator may transmit to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or both a data file and image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Submissions of copies to the e-Manifest system shall be made at the mailing address or electronic mail/submission address specified at the e-Manifest program website's directory of services. Beginning on June 30, 2021, EPA will not accept mailed paper manifests from facilities for processing in e-Manifest.
 - (B) Beginning on June 30, 2021, the requirement to submit the top copy (Page 1) of the paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing may be met by the owner or operator only by transmitting to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or by transmitting to the EPA system both a data file and the image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Submissions of copies to the e-Manifest system shall be made to the electronic mail/submission address specified at the e-Manifest program website's directory of services; and
- (6) Retain at the facility a copy of each manifest for at least three years from the date of delivery.
- (d) Use of the Electronic Manifest System
 - (1) Electronic manifests that are obtained, completed, and transmitted in accordance with § 7-702(a)(2), and used in accordance with this section in lieu of the paper manifest form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest.
 - (A) Any requirement in these regulations for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of 40 CFR § 262.25.
 - (B) Any requirement in these regulations to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person.
 - (C) Any requirement in these regulations for a manifest to accompany a hazardous

waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment.

- (D) Any requirement in these regulations for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in its account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector.
 - (E) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under this section if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the owner or operator bears no responsibility.
- (2) An owner or operator may participate in the electronic manifest system either by accessing the electronic manifest system from the owner's or operator's electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the owner's or operator's site by the transporter who delivers the waste shipment to the facility.
 - (3) If a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, the following procedures apply to the delivery of the hazardous waste by the final transporter:
 - (A) Upon delivery of the hazardous waste to the designated facility, the owner or operator must sign and date each copy of the paper replacement manifest by hand in Item 20 (Designated Facility Certification of Receipt) and note any discrepancies in Item 18 (Discrepancy Indication Space) of the paper replacement manifest.
 - (B) The owner or operator of the facility must give back to the final transporter one copy of the paper replacement manifest,
 - (C) Within 30 days of delivery of the waste to the designated facility, the owner or operator of the facility must send one signed and dated copy of the paper replacement manifest to the generator, and send an additional signed and dated copy of the paper replacement manifest to the electronic manifest system, and
 - (D) The owner or operator of the facility must retain at the facility one copy of the paper replacement manifest for at least three years from the date of delivery.
 - (4) If an owner or operator using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature

method, then the owner or operator shall also sign with an ink signature the facility's certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing its ink signature on this printed copy, the owner or operator shall retain this original copy among its records for at least 3 years from the date of delivery of the waste.

- (5) Imposition of user fee for manifest submissions.
 - (A) As prescribed in **40 CFR § 264.1311**, and determined in **40 CFR § 264.1312**, an owner or operator who is a user of the electronic manifest system shall be assessed a user fee by EPA for the submission and processing of each electronic and paper manifest. EPA shall update the schedule of user fees and publish them to the user community, as provided in **40 CFR § 264.1313**.
 - (B) An owner or operator subject to user fees under this section shall make user fee payments in accordance with the requirements of **40 CFR § 264.1314**, subject to the informal fee dispute resolution process of **40 CFR § 264.1316**, and subject to the sanctions for delinquent payments under **40 CFR § 264.1315**.
- (6) Electronic manifest signatures shall meet the criteria described in **40 CFR § 262.25** of this chapter.
- (7) After facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) shown on the manifest.
 - (A) Interested persons must make all corrections to manifest data by electronic submission, either by directly entering corrected data to the web based service provided in e-Manifest for such corrections, or by an upload of a data file containing data corrections relating to one or more previously submitted manifests.
 - (B) Each correction submission must include the following information:
 - (i) The Manifest Tracking Number and date of receipt by the facility of the original manifest(s) for which data are being corrected;
 - (ii) The item number(s) of the original manifest that is the subject of the submitted correction(s); and
 - (iii) For each item number with corrected data, the data previously entered and the corresponding data as corrected by the correction submission.
 - (C) Each correction submission shall include a statement that the person submitting the corrections certifies that to the best of his or her knowledge or belief, the corrections that are included in the submission will cause the information reported about the previously received hazardous wastes to be true, accurate, and complete:

- (i) The certification statement must be executed with a valid electronic signature; and
 - (ii) A batch upload of data corrections may be submitted under one certification statement.
- (D) Upon receipt by the system of any correction submission, other interested persons shown on the manifest will be provided electronic notice of the submitter's corrections.
- (E) Other interested persons shown on the manifest may respond to the submitter's corrections with comments to the submitter, or by submitting another correction to the system, certified by the respondent as specified in **subsection (d)(7)(C) of this section**, and with notice of the corrections to other interested persons shown on the manifest.
- (e) The owner or operator of a facility receiving hazardous waste subject to **40 CFR Part 262, subpart H** from a foreign source must:
- (1) Additionally list the relevant consent number from consent documentation supplied by EPA to the facility for each waste listed on the manifest, matched to the relevant list number for the waste from block 9b. If additional space is needed, the owner or operator should use a Continuation Sheet(s) (EPA Form 8700-22A); and
 - (2) Send a copy of the manifest within thirty (30) days of delivery to EPA using the addresses listed in **40 CFR § 262.82(e)** until the facility can submit such a copy to the e-Manifest system in accordance with **subsection (c)(5) of this section**.
- (f) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator's certification, and signatures), the owner or operator, or his agent, shall comply with **40 CFR § 264.71(b)** or **40 CFR § 265.71(b)**, as applicable.
- (g) As per **40 CFR § 262.84(d)(2)(xv)**, within three (3) working days of the receipt of a shipment subject to **40 CFR Part 262, Subpart H**, the owner or operator of a facility must provide a copy of the movement document bearing all required signatures to the foreign exporter; to the competent authorities of the countries of export and transit that control the shipment as an export and transit of hazardous waste respectively; and on or after the electronic import-export reporting compliance date, to EPA electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system. The original copy of the movement document must be maintained at the facility for at least three (3) years from the date of signature. The owner or operator of a facility may satisfy this recordkeeping requirement by retaining electronically submitted documents in the facility's account on EPA's Waste Import Export Tracking System (WIETS), or its successor system, provided that copies are readily available for viewing and production if

requested by any EPA or authorized state inspector. No owner or operator of a facility may be held liable for the inability to produce the documents for inspection under this section if the owner or operator of a facility can demonstrate that the inability to produce the document is due exclusively to technical difficulty with EPA's Waste Import Export Tracking System (WIETS), or its successor system, for which the owner or operator of a facility bears no responsibility.

- (h) A facility must determine whether the consignment state for a shipment regulates any additional wastes (beyond those regulated by Vermont) as hazardous wastes under its state hazardous waste program. Facilities must also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.
- (i) Manifest discrepancies
 - (1) Manifest discrepancies are:
 - (A) Significant differences (as defined by **subsection (i)(2) of this section**) between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives;
 - (B) Rejected wastes, which may be a full or partial shipment of hazardous waste that the designated facility cannot accept; or
 - (C) Container residues, which are residues that exceed the quantity limits for "empty containers" set forth in **§ 7-203(j)**.
 - (2) Significant differences in quantity are: For bulk waste, variations greater than 10 percent in weight; for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. Significant differences in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.
 - (3) Upon discovering a significant difference in quantity or type, the facility owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Secretary a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.
 - (4) For any rejected wastes, or container residues described in **subsection (i)(1)(C) of this section**, the facility shall comply with the applicable requirements of **40 CFR §§ 264.72(d) through (g)** and **40 CFR §§ 265.72(d) through (g)**.
- (j) If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-

site source without an accompanying manifest, or without an accompanying shipping paper as described by **40 CFR §263.20(e)** for water (bulk shipment) transporters, and if the waste is not excluded from the manifest requirement, then the owner or operator must prepare and submit a letter to the Secretary within 15 days after receiving the waste. The unmanifested waste report must contain the following information:

- (1) The EPA identification number, name and address of the facility;
- (2) The date the facility received the waste;
- (3) The EPA identification number, name and address of the generator and the transporter, if available;
- (4) A description and the quantity of each unmanifested hazardous waste the facility received;
- (5) The method of treatment, storage, or disposal for each hazardous waste;
- (6) The certification signed by the owner or operator of the facility or his authorized representative; and,
- (7) A brief explanation of why the waste was unmanifested, if known.

§ 7-705 RESERVED

§ 7-706 RESERVED

§ 7-707 EXCEPTION REPORTING

(a) Each generator who does not receive a completed copy of the manifest

- (1) from the designated facility within 35 days, or
- (2) from the foreign consignee within 60 days,

of the initial shipment must take all actions necessary to locate the shipment and manifest, including contacting the designated transporter and designated facility.

(b) Each generator who does not receive a completed copy of the manifest from the designated facility within 45 days of the initial shipment must immediately submit an exception report to the Secretary. The report must include a legible copy of the manifest and a cover letter signed by the generator or his or her authorized representative explaining the efforts taken to locate the waste and results of those efforts.

- (c) Each generator who submits an exception report under **subsection (b) of this section** shall keep a copy of each submitted report for at least three (3) years from the due date of the report.
- (d) For rejected shipments of hazardous waste or container residues contained in non-empty containers that are forwarded to an alternate facility by a designated facility using a new manifest (following the procedures of **40 CFR §§ 264.72(e)(1) through (6) or 40 CFR §§ 265.72(e)(1) through (6)**), the generator must comply with the requirements of **subsection (a) or (b) of this section**, as applicable, for the shipment forwarding the material from the designated facility to the alternate facility instead of for the shipment from the generator to the designated facility. For purposes of **subsections (a) or (b) of this section** for a shipment forwarding such waste to an alternate facility by a designated facility:
 - (1) The copy of the manifest received by the generator must have the handwritten signature of the owner or operator of the alternate facility in place of the signature of the owner or operator of the designated facility. and
 - (2) The 35/45/60-day timeframes begin the date the waste was accepted by the initial transporter forwarding the hazardous waste shipment from the designated facility to the alternate facility.

§ 7-708 BIENNIAL REPORTING

- (a) Biennial report for large quantity generators:
 - (1) A generator who is a large quantity generator for at least one month of an odd-numbered year (reporting year) who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States must complete and submit **EPA Form 8700-13 A/B** to the Secretary by March 1 of the following even-numbered year and must cover generator activities during the previous year.
 - (2) Any generator who is a large quantity generator for at least one month of an odd-numbered year (reporting year) who treats, stores, or disposes of hazardous waste on site must complete and submit **EPA Form 8700-13 A/B** to the Regional Administrator by March 1 of the following even-numbered year covering those wastes in accordance with the provisions of 40 CFR Parts 264, 265, 266, 267 and 270. This requirement also applies to large quantity generators that receive hazardous waste from very small quantity generators pursuant to **§ 7-308(d)**.
 - (3) Exports of hazardous waste to foreign countries are not required to be reported on the Biennial Report form. A separate annual report requirement is set forth at **40 CFR § 262.83(g)** for hazardous waste exporters.
- (b) The owner or operator of each designated facility must complete and submit **EPA Form**

8700-13 A/B to the Secretary by March 1 of the following even numbered year and must cover activities during the previous year.

- (c) Every large quantity generator and designated facility shall keep a copy of each biennial report for at least three (3) years from the due date of the report.

§ 7-709 ADDITIONAL REPORTING

The Secretary may require any generator, transporter or facility to submit such additional information as he or she deems necessary to implement these regulations.

§ 7-710 RECORD RETENTION

All record retention periods specified in this subchapter shall be automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Secretary, or as requested by the EPA Administrator in the case of records required for hazardous waste exports.

Subchapter 8: USED OIL MANAGEMENT STANDARDS

§ 7-801 PURPOSE AND APPLICABILITY

This subchapter identifies those materials that may (and those that may not) be managed as used oil, and establishes standards for their handling, storage, transport, aggregation, collection, and burning as used oil fuel. This subchapter presumes that used oil is reused, processed or burned for energy recovery. Since used oil that meets fuel burning specifications has value without prior processing; this subchapter distinguishes used oil fuel from used oil by allowing used oil fuel to be managed according to abbreviated standards. Used oil that is to be disposed of cannot be managed under this subchapter and must be evaluated to determine if it is subject to regulation as hazardous waste. Unless being managed as a hazardous waste, all used oil is subject to regulation under this subchapter.

The following rules incorporate provisions and exemptions from other environmental protection rules promulgated under the authority of 10 V.S.A. chapters 59 and 159.

§ 7-802 DEFINITIONS

Terms defined in § 7-103 of these regulations or in **40 CFR Parts 260 through 270 and Part 279** have the same meaning when used in this subchapter. For the purposes of this subchapter, the terms listed below are defined as follows:

"Burner" means a person who burns used oil fuel for energy recovery.

"Do-it-yourselfer used oil" means used oil that is derived from households, such as used oil generated by individuals through the maintenance of their personal vehicles.

"Do-it-yourselfer used oil generator" or **"do-it-yourselfer"** means an individual who generates "do-it-yourselfer used oil".

"Marketer" means any person, with the exception of do-it-yourselfers, who conducts either of the following activities:

- (a) Directs a shipment of off-specification used oil from their facility to a used oil burner; or
- (b) With the exception of used oil generators, and transporters who transport used oil received only from generators, any person who first claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in **Table 1 of § 7-812(c)**.

"Off-specification used oil" is used oil that exceeds any maximum allowable level or that does not meet any minimum allowable level listed in **Table 1 of § 7-812(c)**.

"Processing" means chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived product. Processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oils to meet the used oil fuel specification, filtration, simple distillation, chemical or physical separation and re-refining.

"Re-refining distillation bottoms" means the heavy fraction produced by vacuum distillation of filtered and dehydrated used oil. The composition of still bottoms varies with column operation and feedstock.

"Small fuel burning equipment" means fuel burning equipment with a maximum operating heat input equal to or less than 500,000 BTU per hour.

"Specification used oil" is any used oil that does not exceed any maximum allowable level, and meets the minimum allowable levels listed in **Table 1 of § 7-812(c)**.

"Used Oil" means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities. Used oil does not include materials refined from crude oil that are fuels (e.g., gasoline, jet fuel and diesel fuel), or materials refined from crude oil that are used as cleaning agents or solvents (e.g., naphtha or mineral spirits); these materials are subject to regulation under **subchapters 1 through 7**, as applicable.

"Used Oil Aggregation Point" means any site or facility that accepts, aggregates, and/or stores used oil collected only from other used oil generation sites owned or operated by the owner or operator of the aggregation point, from which used oil is transported to the aggregation point in shipments of no more than 55 gallons. Used oil aggregation points may also accept do-it-yourselfer generated used oil.

"Used Oil Collection Facility" means any facility or site that accepts/aggregates and stores used oil collected from used oil generators who bring used oil to the collection facility in shipments of no more than 55 gallons. Used oil collection facilities may also accept used oil from do-it-yourselfers.

"Used Oil Fuel" means used oil shown to meet the **Table 1** specifications in accordance with **§ 7-812(c)** and that is burned for energy recovery.

"Used Oil Generator" means any person, by site, whose act or process produces used oil that is not "do-it-yourselfer used oil" or whose act first causes used oil to become subject to regulation.

"Used Oil Handler" means any person subject to **§§ 7-807 through 7-813** of this subchapter.

"Used Oil Processor" means a facility that processes used oil.

"Used Oil Transfer Facility" means any transportation related facility including loading docks, parking areas, storage areas and other areas where shipments of used oil are held for more than

24 hours and not longer than 35 days during the normal course of transportation. Transfer facilities that store used oil for more than 35 days are subject to the used oil processor requirements of § 7-813.

"Used Oil Transporter" means any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities.

"Vaporizing Used-Oil Burning Equipment" means any equipment which generates heat by the introduction of fuel onto a heated device to produce vapors which are then burned for heat recovery.

§ 7-803 PROHIBITIONS


The following uses or activities are prohibited:

- (a) The mixing of hazardous wastes with used oil, with the exception that used oil may be mixed with waste that is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resultant mixture does not exhibit the characteristic of ignitability;
- (b) The use of any used oil for road oiling or dust suppression;
- (c) Burning off-specification used oil in small fuel burning equipment;
- (d) Burning used oil for firefighter training;
- (e) Burning used oil for energy recovery in any food product processing unless approved by the Secretary in writing;
- (f) The sale or use of vaporizing used oil burning equipment;
- (g) Management of used oil in anything other than containers or tanks as specified under § 7-806 unless the units are subject to regulation under **subchapter 5** of these regulations;
- (h) Pursuant to 10 V.S.A. § 6621a, the knowing disposal of used oil in a solid waste landfill; and
- (i) Pursuant to 10 V.S.A. § 6616, the release of hazardous material (including used oil) into the surface or groundwater, or onto the land of the state.

§ 7-804 EXEMPTIONS

- (a) Do-it-yourselfers who produce used oil (specification or off-specification) are exempt

from the provisions of this subchapter. Once do-it-yourselfer used oil is accepted by a used oil aggregation point, collection facility, marketer, burner, or processor, the used oil is subject to regulation under this subchapter.

- (b) Used oil generated from normal shipboard operations, aboard vessels at sea, lake, or river or at port, is considered to be generated at the time it is transported ashore and is not subject to the requirements of this subchapter until the time it is transported ashore. The owner or operator of the vessel and the person(s) removing or accepting used oil from the vessel are co-generators of the used oil and are both responsible for managing the oil in compliance with the requirements of this subchapter once the used oil is transported ashore. The co-generators may decide among them which party will fulfill the requirements of this subchapter.
- (c) Farmers who, in a calendar year, generate an average of 25 gallons per month or less of used oil from vehicles or machinery used on the farm are not subject to the requirements of this subchapter.
- (d) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products are not subject to the requirements of this subchapter.
- (e) Wastewater, the discharge of which is subject to regulation under either **§ 402 or § 307(b) of the Clean Water Act** (including wastewaters at facilities which have eliminated the discharge of wastewater), contaminated with de minimis quantities of used oil is not subject to the requirements of this subchapter. For purposes of this paragraph, "de minimis" quantities of used oils are defined as small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment, during normal operations, or small amounts of oil lost to the wastewater treatment system during washing or draining operations. This exception will not apply if the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases, and will not apply to used oil recovered from wastewaters.
- (f)  Used oil that is to be burned for energy recovery (i.e., "used oil fuel") in small fuel burning equipment is exempt from the provisions of this subchapter provided:
 - (1) The requirements of **§ 7-812(a)** are met, and the used oil has been shown to meet the **Table 1** specifications in accordance with **§§ 7-812(c)(1) through (3)**;
 - (2) The person making that showing complies with any applicable marketer requirements of **§ 7-809**; and
 - (3) The used oil is managed in accordance with the general used oil management standards of **§ 7-806**.

§ 7-805 USED OIL DETERMINATION

This section identifies those materials that may be managed as used oil or used oil fuel under this subchapter. It also identifies certain materials that cannot be managed as used oil and indicates whether they may be subject to regulation as hazardous waste.

- (a) Used oil drained, separated, or removed from materials containing or otherwise contaminated with used oil may be managed as used oil under this subchapter.
- (b) Materials containing or otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible such that no visible signs of free-flowing oil remain in or on the material are not used oil, and are subject to the hazardous waste determination requirement of § 7-303.

Note: These materials may be subject to regulation as hazardous waste if the criteria for the VT02 hazardous waste code listed under § 7-211 are met and/or they exhibit a hazardous characteristic.

- (c) Mixtures of used oil and fuels or other fuel products are subject to regulation as used oil under this subchapter.
- (d) Used oil that contains PCBs at any concentration less than 50 parts per million may be managed as used oil under this subchapter unless, because of dilution, it is regulated under **40 CFR Part 761** as a used oil containing PCBs at 50 parts per million or greater. Used oil containing PCBs at concentrations equal to or greater than 50 parts per million is subject to regulation both as hazardous waste under § 7-211/VT01 (unless it is exempt pursuant to § 7-203(t)), and under **40 CFR Part 761**. No person may avoid these provisions by diluting used oil containing PCBs, unless otherwise specifically provided for in this subchapter or **40 CFR Part 761**. PCB-containing used oil subject to the requirements of this subchapter may also be subject to the prohibitions and requirements found at **40 CFR Part 761, including 40 CFR §§ 761.20(d) and (e)**.
- (e) Materials derived from used oil.
 - (1) Materials that are reclaimed from used oil that are used beneficially and are not burned for energy recovery or used in a manner constituting disposal (e.g., re-refined lubricants) are:
 - (A) Not used oil and thus are not subject to this subchapter, and
 - (B) Not hazardous wastes and thus are not subject to the remainder of these regulations.
 - (2) Materials produced from used oil that are burned for energy recovery (e.g., used oil fuels) are subject to regulation as used oil under this subchapter.

- (3) Except as provided in § 7-804(d), materials derived from used oil that are disposed of or used in a manner constituting disposal are not used oil, and are subject to the hazardous waste determination requirement of § 7-303 and to management as a hazardous waste when applicable.
- (f) Rebuttable presumption
 - (1) Used oil containing more than 1,000 parts per million total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in §§ 7-210 through 7-215 of these regulations. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix II of these regulations). The rebuttable presumption does not apply to:
 - (A) Metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in § 7-807(e), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.
 - (B) Used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.
 - (2) Any person choosing to rebut a presumption that used oil is hazardous waste because it contains more than 1,000 parts per million total halogens must maintain written records demonstrating that the used oil does not contain hazardous waste.

§ 7-806 GENERAL USED OIL MANAGEMENT STANDARDS

With the exception of do-it-yourselfers, the following requirements and standards apply to all used oil handlers:

- (a) Used oil shall be stored only in containers or tanks as specified by subsections (b) through (d) of this section.
- (b) Containers holding used oil shall be managed as follows:
 - (1) Containers shall be kept closed at all times, except when adding or removing used oil;
 - (2) A container holding used oil must not be opened, handled or stored in a manner which may rupture the container or cause a release. If a container begins to leak, the used oil must immediately be transferred from the leaking container to a container that is in good condition, or the used oil shall be managed in some other way that

complies with the requirements of this section;

- (3) A container holding used oil must be made of or lined with materials which will not react with and are otherwise compatible with used oil;
 - (4) Containers holding used oil must be in good condition (no severe rusting, apparent structural defects or deterioration);
 - (5) Containers holding used oil must be labeled or marked with the words "Used Oil" or "Used Oil Fuel," as appropriate, such that the label or marking is visible;
 - (6) Containers holding used oil must be stored on an impervious surface;
 - (7) A container holding used oil may be stored out-of-doors only if the container is placed within a structure that sheds rain and snow; and
 - (8) A container holding a mixture of used oil and water shall be placed within a structure that protects the container from freezing.
- (c) Underground storage tanks (USTs) holding used oil shall be managed as follows:
- (1) An UST holding used oil must be permitted, operated, and maintained in accordance with the Vermont Underground Storage Tank Rules;
 - (2) Fill pipes used to transfer used oil into an UST must be marked or labeled to clearly indicate used oil storage; and
 - (3) Any residue removed from within an UST system being used (or that was last used) to hold used oil, that is generated as a result of normal operation, maintenance or closure of the UST and that cannot be managed as used oil under this subchapter, must be evaluated to determine if it is a hazardous waste and managed as a hazardous waste when applicable.
- (d) Above-ground storage tanks (including unregistered tank trailers) holding used oil shall be:
- (1) Installed and operated in accordance with Vermont Aboveground Tank Rules.
 - (2) Clearly marked with the words "Used Oil" or "Used Oil Fuel," as appropriate.
 - (3) Managed in such a manner as to prevent rupture of the tank and to ensure that no release occurs. If a tank begins to leak, the owner or operator must immediately either transfer the used oil from that tank to another tank or to containers that are in good condition, or manage the used oil in some other way that complies with the requirements of this section.

- (4) If located out-of-doors, equipped with secondary containment as specified in **40 CFR §§ 279.45(e) and (f)**.

(e) Response to a Release of Used Oil

- (1) Upon detection of a release of used oil to the environment that is not subject to the requirements of **40 CFR Part 280 Subpart F** (Release Response and Corrective Action for UST Systems Containing Petroleum or Hazardous Substances), a used oil handler must perform the following cleanup steps:
 - (A) Stop the release;
 - (B) Contain the released used oil;
 - (C) Clean up and manage properly the released used oil and other materials so that they no longer present a hazard to human health or the environment; and
 - (D) If necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

Note: Clean-up materials may be subject to regulation as hazardous waste if the criteria for the VT02 hazardous waste code listed under **§ 7-211** are met and/or they exhibit a hazardous characteristic.

- (2) A release of two (2) gallons or more of used oil to the lands or surface waters of the state shall be immediately reported to the Secretary by the person or persons exercising control of such oil in accordance with the requirements of **§ 7-105(b)**.
- (3) If requested by the Secretary, a written report shall be submitted to the Secretary within ten (10) days following any release subject to **subsection (e)(2) of this section**. The report shall be sent to: The Vermont Department of Environmental Conservation, Waste Management & Prevention Division, 1 National Life Drive – Davis 1, Montpelier, VT 05620-3704.

Note: Under the Federal Water Pollution Control Act, certain discharges of “oil” are prohibited and must be reported pursuant to the requirements of **40 CFR Part 110 / Discharge of Oil**.

- (f) Used oil handlers are subject to all applicable Spill Prevention, Control and Countermeasure requirements of **40 CFR Part 112**.

(g) Disposal of Used Oil

The following requirements apply to used oils that cannot be processed or burned for energy recovery and therefore must be disposed of:

- (1) Used oils that cannot be recycled under this subchapter must be evaluated in

accordance with the hazardous waste determination requirement of § 7-303 and managed as a hazardous waste when applicable.

- (2) Used oils that cannot be processed or burned for energy recovery under this subchapter and that are not hazardous wastes must be disposed in accordance with Vermont's Solid Waste Management Regulations.

Note: "Waste oil" is banned from landfill disposal under 10 V.S.A. § 6621a. For the purposes of this note, "waste oil" means "used oil" (i.e., used oil is banned from landfill disposal).

§ 7-807 STANDARDS FOR USED OIL GENERATORS

- (a) This section applies to all used oil generators as defined under § 7-802 of this subchapter.
- (b) Used oil generators shall comply with the general standards set forth under § 7-806, and the following, as applicable:
 - (1) The marketer standards set forth under § 7-809; and
 - (2) The standards for burning used oil for energy recovery set forth under § 7-812.
- (c) Except as provided in subsections (d) and (e) of this section, used oil generators must ensure that their used oil is transported only by transporters who are permitted according to the requirements of § 7-811(b)(2).
- (d) A used oil generator may transport used oil that is either generated at the used oil generator's site or collected from household do-it-yourselfers to a used oil collection facility or an aggregation point without complying with the transporter requirements of § 7-811, provided that:
 - (1) The used oil is transported in a vehicle owned by the used oil generator or a vehicle owned by an employee of the used oil generator;
 - (2) Containers used to transport used oil must meet the standards set forth under § 7-806(b), and the applicable Department of Transportation regulations of 49 CFR Parts 173, and 178;
 - (3) No more than 55 gallons of used oil is transported at any time; and
 - (4) The used oil is transported to either a used oil collection facility or to an aggregation point as defined under § 7-802.

(e) Tolling arrangements

A used oil generator may arrange for used oil to be transported by a transporter without an EPA identification number if the used oil is reclaimed under a contractual agreement pursuant to which reclaimed oil is returned by the processor to the generator for use as a lubricant, cutting oil, or coolant. The contract (known as a "tolling arrangement") must indicate:

- (1) The type of used oil and the frequency of shipments;
 - (2) That the vehicle used to transport the used oil to the processing/re-refining facility and to deliver recycled used oil back to the generator is owned and operated by the used oil processor/re-refiner; and
 - (3) That reclaimed oil will be returned to the generator.
- (f) Used oil generators who transport more than 55 gallons of used oil at one time must comply with the transporter requirements of § 7-811.
- (g) Except as provided in **subsections (g)(1)(A) through (E) of this section**, used oil generators who process used oil shall comply with the requirements of § 7-813.
- (1) Used oil generators who perform the following activities are not processors provided that the used oil is generated on-site and is not being sent off-site to a burner of on- or off-specification used oil fuel:
 - (A) Filtering, cleaning, or otherwise reconditioning used oil before returning it for reuse by the used oil generator;
 - (B) Separating used oil from wastewater generated on-site, to make the wastewater acceptable for discharge or reuse pursuant to § 402 or § 307(b) of the Clean Water Act or other applicable Federal or state regulations governing the management or discharge of wastewaters;
 - (C) Using oil mist collectors to remove small droplets of used oil from in-plant air to make plant air suitable for continued recirculation;
 - (D) Draining or otherwise removing used oil from materials containing or otherwise contaminated with used oil, in order to remove excessive oil to the extent possible pursuant to § 7-805; or
 - (E) Filtering, separating or otherwise reconditioning used oil before burning it in small fuel burning equipment pursuant to § 7-812.
- (h) Used oil generators who provide used oil or used oil fuel to an off-site facility shall retain records which document the amount of used oil or used oil fuel provided, the date of each

shipment, and the name, address, and telephone number of the facility to which the used oil or used oil fuel was provided for a period of three years.

§ 7-808 STANDARDS FOR USED OIL AGGREGATION POINTS

- (a) This section applies to owners or operators of used oil aggregation points as defined under § 7-802 of this subchapter.
- (b) Owners or operators of used oil aggregation points shall comply with the generator standards set forth under § 7-807 of this subchapter.

§ 7-809 STANDARDS FOR USED OIL FUEL MARKETERS

- (a) This section applies to marketers as defined under § 7-802.
- (b) Persons who market used oil fuel shall notify the Secretary of such activity and obtain an EPA identification number using a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) pursuant to the requirements of § 7-104.
- (c) Marketers initiating or accepting a shipment of used oil fuel must maintain the following records for a minimum of three years:
 - (1) Copies of all test results applicable to the shipment of used oil fuel, and/or documentation of total halogen field screening results as required under § 7-812(c); and
 - (2) An operating log for all shipments of used oil fuel that includes the following information:
 - (A) The name, EPA identification number, and address of the facility to which used oil fuel is sent or from which used oil fuel is received;
 - (B) The quantity of used oil fuel shipped or received;
 - (C) The date of shipment or delivery; and
 - (D) The name, EPA identification number, and address of the transporter.
 - (3) The certification required by **subsection (f)(2) of this section**.
- (d) A marketer who stores used oil fuel shall manage his or her facility in accordance with the general standards set forth under § 7-806.
- (e) Marketers shall comply with the following, as applicable:

- (1) The used oil generator standards set forth under § 7-807;
 - (2) The used oil collection facility standards set forth under § 7-810;
 - (3) The used oil transporter standards set forth under § 7-811;
 - (4) The standards for burning used oil fuel for energy recovery set forth under § 7-812;
and
 - (5) The used oil processor standards set forth under § 7-813.
- (f) Off-specification used oil
- (1) A marketer may initiate a shipment of off-specification used oil only to a used oil burner that meets the requirements of § 7-812(d).
 - (2) Before a marketer directs the first shipment of off-specification used oil to a burner, the marketer must obtain a one-time written and signed notice from the burner certifying that:
 - (A) The burner has notified EPA stating the location and general description of used oil management activities; and
 - (B) The burner will burn the off-specification used oil only in an industrial furnace or boiler identified in 40 CFR § 279.61(a).

§ 7-810 STANDARDS FOR USED OIL COLLECTION FACILITIES

- (a) This section applies to owners or operators of used oil collection facilities as defined under § 7-802 of this subchapter.
- (b) Persons who own or operate a used oil collection facility shall notify the Secretary of such activity and obtain an EPA identification number using a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) pursuant to the requirements of § 7-104 of these regulations.
- (c) The owner or operator of a used oil collection facility shall manage such facility in accordance with the general standards set forth under § 7-806, and the following, as applicable:
 - (1) The generator standards set forth under § 7-807;
 - (2) The marketer standards set forth under § 7-809;

- (3) The standards for burning used oil for energy recovery set forth under § 7-812; and
 - (4) The processor standards set forth under § 7-813.
- (d) Used oil collection facilities shall be equipped with a fire extinguisher or other fire-control equipment, and spill control equipment to assure containment of used oil in the event of a release.

§ 7-811 STANDARDS FOR USED OIL TRANSPORTERS

- (a) This section applies to used oil transporters as defined under § 7-802 of this subchapter.
- (b) With the exception of persons transporting used oil on-site, do-it-yourselfers, used oil generators self-transporting up to 55 gallons of used oil according to the provisions of § 7-807(d), persons transporting used oil fuel, and persons transporting used oil pursuant to tolling agreements that meet the requirements of § 7-807(e), persons transporting used oil shall comply with the following:
 - (1) Notify the Secretary of such activity and obtain an EPA identification number using a **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) pursuant to the requirements of §§ 7-104 and 7-406(d)(1) and (2).
 - (2) Obtain a permit from the Secretary according to the requirements of **subchapter 4** of these regulations.
 - (3) Used oil transporters who operate transfer facilities shall comply with the requirements of **40 CFR § 279.45** (Used Oil Storage at Transfer Facilities).
 - (4) Comply with all applicable requirements under the U.S. Department of Transportation regulations in **49 CFR Parts 171 through 180**. Persons transporting used oil that meets the definition of a hazardous material in **49 CFR § 171.8** must comply with all applicable regulations in **49 CFR Parts 171 through 180**.
 - (5) Rebuttable presumption for used oil
 - (A) To ensure that used oil is not a hazardous waste under the rebuttable presumption of § 7-805(f), the used oil transporter shall determine whether the total halogen content of used oil being transported or stored at a transfer facility is above or below 1,000 parts per million. The transporter must make this determination by:
 - (i) Testing the used oil; or
 - (ii) Applying knowledge of the halogen content of the used oil in light of the materials or processes used.

(B) Records of testing conducted or information used to comply with **subsection (b)(5)(A) of this section** must be maintained by the transporter for at least 3 years.

(6) In addition to the above, used oil transporters are subject to the following, as applicable:

(A) The general standards set forth under § 7-806;

(B) The generator standards set forth under § 7-807;

(C) The marketer standards set forth under § 7-809;

(D) The standards for burning used oil for energy recovery set forth under § 7-812; and

(E) The processor standards set forth under § 7-813.

Note: Subsection (b) of this section applies to the transportation of collected do-it-yourselfer used oil from regulated used oil generators, collection facilities, aggregation points, or other facilities where do-it-yourselfer used oil is collected.

(c) Used oil transporters may consolidate or aggregate loads of used oil for the purposes of transportation but, with the following exceptions, may not process used oil unless the processor standards set forth under § 7-813 are met.

(1) Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but that are not designed to produce (or make more amenable for production of) used oil derived products or used oil fuel.

(2) Transporters may remove used oil from oil bearing electrical transformers and turbines and filter that used oil prior to returning it to its original use.

(d) Transporters who generate residues from the storage or transport of used oil must manage the residues as specified in § 7-805.

(e) Transporters who import used oil from abroad or export used oil outside of the United States are subject to the requirements of this section from the time the used oil enters and until the time it exits Vermont.

(f) Unless trucks previously used to transport hazardous waste are emptied as described in § 7-203(j) of these regulations prior to transporting used oil, the used oil is considered to have been mixed with the hazardous waste and must be managed as hazardous waste.

(g) A used oil transporter shall deliver used oil to:

(1) Another used oil transporter, provided that the transporter is permitted as specified by

- subsection (b)(2) of this section**, and has obtained an EPA identification number; or
- (2) A used oil collection facility that has obtained an EPA identification number, in shipments of no more than 55 gallons; or
 - (3) A used oil burner or processing facility which has been assigned an EPA identification number.
- (h) Used oil transporters shall maintain, for a period of three years, an operating log that documents the following information for each used oil shipment made:
- (1) The name, address, and EPA identification number (if one is required) of the used oil generator, collection facility, transporter, or processor who provided the used oil for transport;
 - (2) The quantity of used oil accepted;
 - (3) The date that the transporter accepts a shipment of used oil for transport, and the name and signature of the person representing the used oil generator, transporter, or processor who offered the used oil for transport;
 - (4) The name, address, and EPA identification number (if one is required) of the used oil collection facility, transporter, burner, or processor to which the used oil was delivered;
 - (5) The quantity of used oil delivered; and
 - (6) The date of delivery and the name and signature of the person representing the used oil collection facility, transporter, burner, or processor who received the used oil.
- (i) **Response to Releases of Used Oil during Transport**
- (1) In the event of a release of used oil during transport, a used oil transporter shall comply with the release response requirements of **§ 7-806(e)**.
 - (2) If a discharge of used oil occurs during transportation and an official (State or local government or a Federal Agency) acting within the scope of official responsibilities determines that immediate removal of the used oil is necessary to protect human health or the environment, that official may authorize the removal of the used oil by transporters who do not have EPA identification numbers.
 - (3) An air, rail, highway, or water transporter who has discharged used oil must:
 - (A) Give notice, if required by **49 CFR § 171.15** to the National Response Center (800-424-8802 or 202-426-2675); and

- (B) Report in writing as required by **49 CFR § 171.16** to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, DC 20590.
- (4) A water transporter who has discharged used oil must give notice as required by **33 CFR § 153.203**.
- (j) A used oil transporter shall report to the Secretary as required by **§ 7-406(d)(5)**.

§ 7-812 STANDARDS FOR BURNING USED OIL FUEL FOR ENERGY RECOVERY

- (a) Any person burning used oil fuel for energy recovery in small fuel burning equipment is subject to the following:
 - (1) The types of used oil which may be burned as fuel in small fuel burning equipment is limited to:
 - (A) Used motor vehicle crankcase oil, transmission fluid, hydraulic oil or machine gearbox oil that meets the specifications listed in **Table 1** of this section;
 - (B) Mixtures of virgin fuel oil and specification used motor vehicle crankcase oil, transmission fluid, hydraulic oil or machine gearbox oil; and
 - (C) Types of specification used oil other than those listed in **subsections (a)(1)(A) and (B) of this section** that have been approved by the Secretary. Approval shall be granted on a case-by-case basis following the review by the Secretary of relevant material safety data information, if available, and a narrative description of the process generating the used oil.
 - (2) Specification used oil fuel from the following sources may be burned in small fuel burning equipment:
 - (A) On-site;
 - (B) Do-it-yourselfers;
 - (C) An off-site facility that is owned or operated by the burner;
 - (D) An off-site facility that is not owned or operated by the burner provided the burner retains records for a period of three years which document the amount of used oil fuel accepted; the name, address, and telephone number of the facility from which the used oil fuel was accepted; and the specification testing results for the used oil fuel.
 - (3) The combustion gases from burning used oil fuel in small fuel burning equipment

must be vented to ambient air.

- (4) The owner or operator of any facility that burns used oil fuel in small fuel burning equipment shall maintain records for a period of three years documenting that the used oil fuel has been evaluated in accordance with **subsection (c) of this section**.
- (b) Any person burning or proposing to burn used oil fuel in fuel burning equipment other than small fuel burning equipment shall:
- (1) Comply with §§ 5-221(2), as applicable, of the Vermont Air Pollution Control Regulations; and
 - (2) Maintain records for a period of three years documenting:
 - (A) The amount of used oil fuel burned on-site; and
 - (B) That the used oil fuel has been evaluated in accordance with **subsection (c) of this section**.
- (c) Used Oil Fuel Specifications
- (1) Used oil fuel that is marketed or burned for energy recovery must be evaluated to determine if it meets the specifications listed in **Table 1** of this section as follows:
 - (A) Used oil generators that burn their own used oil on-site, or that burn off-site generated used oil received in shipments of less than or equal to 55 gallons, in small fuel burning equipment, must initially test the used oil from each source for total halogens. If there is reason to believe that any of the remaining **Table 1** specifications would not be met by a volume of used oil, the used oil generator must test the used oil for any suspected constituents or properties.
 - (B) Any used oil fuel delivered to burners in shipments greater than 55 gallons, must be initially tested to establish that all of the **Table 1** specifications are met.

Note: Field screening test kits may be used to determine if the allowable level for total halogens specified in **Table 1** is met.
 - (2) Used oil fuel from a specific source must be re-tested if there is reason to believe that the quality of the used oil, or the process that generates the used oil, has changed such that the **Table 1** specifications would not be met.

Note: “ppm” means “parts per million”, by weight on a water free basis.

TABLE 1 - USED OIL FUEL SPECIFICATIONS

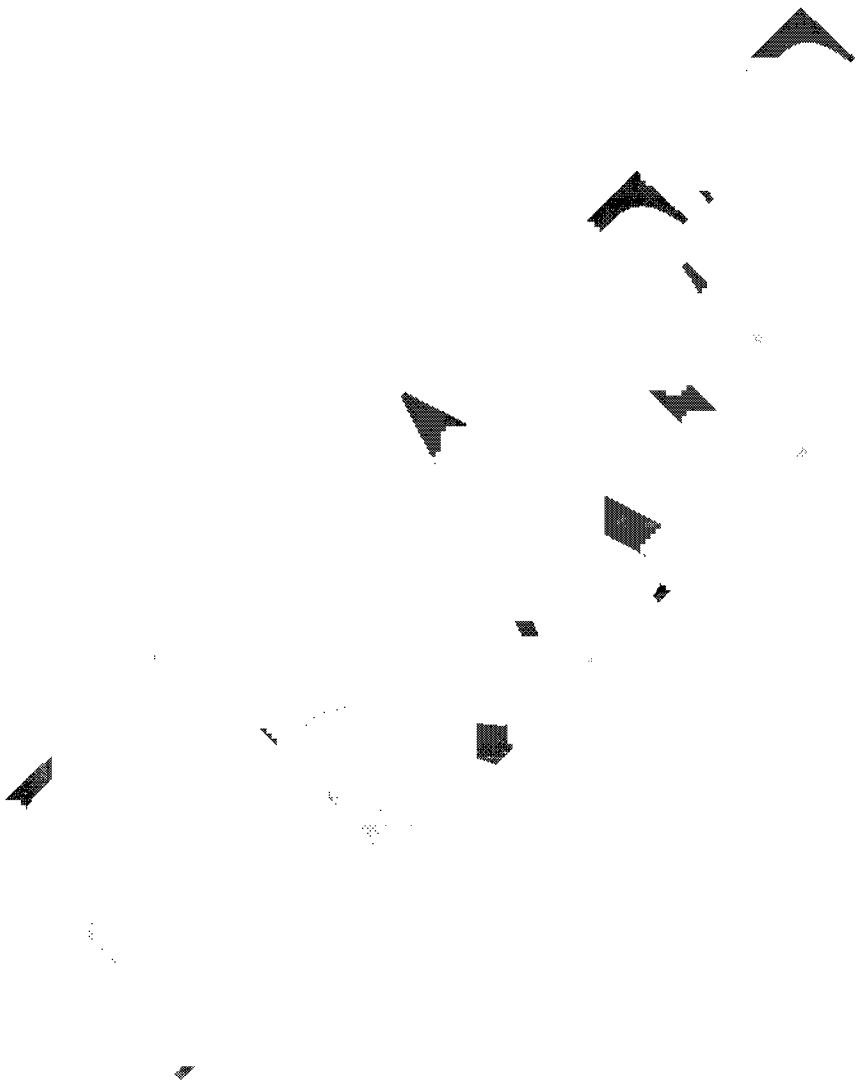
| Constituent/Property | Allowable Level |
|----------------------------------|-------------------------------|
| Arsenic | 5 ppm maximum |
| Cadmium | 2 ppm maximum |
| Chromium | 10 ppm maximum |
| Lead | 100 ppm maximum |
| Flash Point | 100° F minimum |
| Total Halogens | 1000 ppm maximum ¹ |
| Polychlorinated biphenyls (PCBs) | < 2 ppm maximum |
| Net Heat of Combustion | 8000 BTU/lb minimum |

- (3) As specified in § 7-804(f), once used oil fuel that meets the requirements of § 7-812(a) has been shown to meet the **Table 1** specifications in accordance with **subsections (1) through (3) of this section**, and the person making that showing complies with the applicable marketer requirements of § 7-809, the used oil fuel is only subject to the general used oil management standards of § 7-806.
- (4) Used oil that does not meet the specifications identified by **Table 1** (i.e., off-specification used oil) must be managed as follows:
 - (A) As hazardous waste (identified by at least the VT02 hazardous waste code listed under § 7-211); or
 - (B) As used oil processed in a manner other than being burned for energy recovery; or
 - (C) In accordance with **subsection (d) of this section**.
- (d) Any person burning off-specification used oil must comply with **40 CFR Part 279, Subpart G** (Standards for Used Oil Burners Who Burn Off-Specification Used Oil for Energy Recovery), and **§§ 5-221(2), as applicable, of the Vermont Air Pollution Control Regulations**.

¹ Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste as specified under § 7-805(f).

§ 7-813 STANDARDS FOR USED OIL PROCESSORS

A used oil processor (as defined in § 7-802) must comply with **40 CFR Part 279 Subpart F** (Standards for Used Oil Processors and Re-Refiners).



Subchapter 9: UNIVERSAL WASTE MANAGEMENT STANDARDS

§ 7-901 PURPOSE, SCOPE AND APPLICABILITY

- (a) This subchapter establishes alternative management standards for certain batteries, pesticides, thermostats, PCB-containing fluorescent light ballasts, lamps, mercury-containing devices, cathode ray tubes, postconsumer paint, and aerosol cans that would otherwise have to be managed as hazardous waste. As allowed by § 7-203(s), these “universal” hazardous wastes can be managed under the streamlined provisions of this subchapter in lieu of the hazardous waste management requirements set forth under **subchapters 1 through 7**. Specifically, this subchapter establishes standards for small and large quantity handlers, universal waste transporters, and destination facilities; it also provides a petition mechanism for amending these regulations to add a hazardous waste to the category of universal wastes.
- (b) Persons managing the household wastes that are exempt under § 7-203(a) and are also of the same type as the universal wastes described by §§ 7-902 through 7-910 may, at their option, manage them under the requirements of this subchapter. Persons who commingle the household wastes together with universal waste regulated under this subchapter must manage the commingled waste under the requirements of this subchapter.

§ 7-902 APPLICABILITY TO BATTERIES

With the exception of spent lead-acid batteries exempted under § 7-204(f) of these regulations, persons managing batteries, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208), including spent lead acid batteries that are not managed according to the provisions of § 7-204(f), may comply with the requirements of **40 CFR Part 273** in lieu of managing those batteries as hazardous wastes under **subchapters 1 through 7** of these regulations.

§ 7-903 APPLICABILITY TO PESTICIDES

- (a) With the exception of the pesticides listed in **subsection (b) of this section**, the requirements of this subchapter apply to persons managing pesticides, as defined in § 7-911, that are hazardous waste, and that meet one or more of the following conditions:
 - (1) Recalled pesticides that are stocks of a suspended and canceled pesticide that are part of a voluntary or mandatory recall under **FIFRA § 19(b)**, including, but not limited to those owned by the registrant responsible for conducting the recall.
 - (2) Recalled pesticides that are stocks of a suspended or canceled pesticide, or a pesticide that is not in compliance with FIFRA, that are part of a voluntary recall by the registrant.

- (3) Stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.
- (b) The requirements of this subchapter do not apply to persons managing the following pesticides:
 - (1) Pesticides described in **subsection (a) of this section** that are managed by farmers in compliance with § 7-203(r);
 - (2) Pesticides not meeting one or more of the conditions of **subsection (a) of this section**. These pesticides must be managed in compliance with the hazardous waste regulations set forth under **subchapters 1 through 7**, except that aerosol cans as defined in § 7-911 that contain pesticides may be managed as aerosol can universal waste under § 7-912(d)(9); and
 - (3) Pesticides that do not meet the criteria for waste generation in **subsection (c) of this section**.
- (c) Generation of waste pesticides
 - (1) A recalled pesticide described in **subsections (a)(1) and (a)(2) of this section** becomes a waste on the first date on which both the generator of the recalled pesticide agrees to participate in the recall, and the person conducting the recall decides to discard the pesticide (e.g., burn the pesticide for energy recovery).

Note: A recalled pesticide is not waste if the person conducting the recall has made a decision to use a management option that causes the pesticide to be exempt from regulation under § 7-204(a). This pesticide, including a recalled pesticide that is exported to a foreign destination for use or reuse, remains subject to the requirements of FIFRA.
 - (2) An unused pesticide product described in **subsection (a)(3) of this section** becomes a waste on the date the generator decides to discard it.

§ 7-904 APPLICABILITY TO MERCURY THERMOSTATS

- (a) The requirements of this subchapter apply to persons managing thermostats, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused thermostats become waste on the date the handler decides to discard them.

§ 7-905 APPLICABILITY TO PCB-CONTAINING FLUORESCENT LIGHT BALLASTS

- (a) The requirements of this subchapter apply to persons managing intact and non-leaking fluorescent light ballasts with small capacitors that contain PCBs (the terms “fluorescent light ballast”, “PCB”, and “small capacitor” are defined in § 7-911), and that are hazardous waste due to meeting the criteria of only the VT01 hazardous waste code identified in § 7-211 of these regulations.
- (b) Both used and unused PCB-containing fluorescent light ballasts become waste on the date the handler decides to discard them.

Note: Various PCB-containing devices (including leaking waste fluorescent light ballasts of any size) and the disposal of the potting material in ballasts with a concentration of PCBs over 50 parts per million are subject to federal regulation under TSCA (40 CFR Part 761).

§ 7-906 APPLICABILITY TO LAMPS

- (a) The requirements of this subchapter apply to persons managing lamps, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused lamps become waste on the date the handler decides to discard them.

§ 7-907 APPLICABILITY TO MERCURY-CONTAINING DEVICES

- (a) The requirements of this subchapter apply to persons managing mercury-containing devices, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused mercury-containing devices become waste on the date the handler decides to discard them.

§ 7-908 APPLICABILITY TO CATHODE RAY TUBES (CRTs)

- (a) The requirements of this subchapter apply to persons managing CRTs, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) Both used and unused CRTs become waste on the date the handler decides to discard them.

- (c) CRTs that have been collected, but still must be evaluated for reuse or repair (i.e., considered a commodity) are not waste provided:
 - (1) The CRTs are managed to prevent breakage and cosmetic damage;
 - (2) The CRTs remain intact;
 - (3) The CRTs are stored within a structure or transportation unit such that the CRTs are protected from precipitation; and
 - (4) The person in control of the CRTs plans to evaluate the CRTs for reuse or repair on-site, or send the CRTs off-site for such evaluation.
- (d) CRTs that have been evaluated under **subsection (c)** of this section become waste on the date the handler determines that they cannot be reused or repaired.

§ 7-909 APPLICABILITY TO POSTCONSUMER PAINT

- (a) The requirements of this subchapter apply to persons managing postconsumer paints, as defined in § 7-911, that are hazardous waste (due to exhibiting one or more of the hazardous waste characteristics identified by §§ 7-205 through 7-208).
- (b) The requirements of this subchapter apply to postconsumer paint that is collected as part of a stewardship plan approved under 10 V.S.A. § 6680.
- (c) Both used and unused postconsumer paints become waste on the date the handler decides to discard them.

§ 7-910 APPLICABILITY TO AEROSOL CANS

- (a) The requirements of this subchapter apply to persons managing aerosol cans, as defined in § 7-911, except those listed in subsection (b) of this section.
- (b) The requirements of this subchapter do not apply to persons managing the following types of aerosol cans:
 - (1) Aerosol cans that are not yet waste. **Subsection (c) of this section** describes when an aerosol can becomes a waste;
 - (2) Aerosol cans that are not hazardous waste. An aerosol can is a hazardous waste if the aerosol can exhibits one or more of the characteristics identified by §§ 7-205 through 7-208 or the aerosol can contains a substance that is listed in §§ 7-210 through 7-215; and

- (3) Aerosol cans that meet the standard for empty containers under § 7-203(j).
- (c) Generation of waste aerosol cans.
 - (1) A used aerosol can becomes a waste on the date it is discarded.
 - (2) An unused aerosol can becomes a waste on the date the handler decides to discard it.

§ 7-911 DEFINITIONS

Terms defined in § 7-103 of these regulations or in 40 CFR Parts 260 through 270 have the same meaning when used in this subchapter.

“Aerosol can” means a non-refillable receptacle containing a gas compressed, liquefied or dissolved under pressure, the sole purpose of which is to expel a liquid, paste, or powder and fitted with a self-closing release device allowing the contents to be ejected by the gas.

“Architectural paint” means interior and exterior architectural coatings, including interior or exterior water- and oil-based coatings, primers, sealers, or wood coatings, that are sold in containers of five gallons or less. "Architectural paint" does not mean industrial coatings, original equipment coatings, or specialty coatings.

"Battery" means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

"Cathode ray tube" or "CRT" means a vacuum tube, composed primarily of glass, which is the video display component of a television, computer monitor, or other electronic display device.

"Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in § 7-912(d)(3). A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

"FIFRA" means the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, 7 U.S.C. §§ 136 et seq..

“Fluorescent light ballast” means a device that electrically controls fluorescent light fixtures (i.e., provides starting voltage and stabilizes electrical current) and that includes a capacitor containing 0.1 kg or less of dielectric material.

“Lamp” means the bulb or tube portion of an electric lighting device specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the

electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

"**Large quantity handler**" means a universal waste handler who accumulates 5,000 kilograms (11,000 pounds) or more total of universal waste other than CRTs (batteries, pesticides, thermostats, ballasts, lamps, mercury-containing devices, post-consumer paint, or aerosol cans, calculated collectively), or who accumulates 36,288 kilograms (40 tons) or more of CRTs, at any time. This designation as a large quantity handler is retained through the end of the calendar year in which either 5,000 kilograms (11,000 pounds) or more total of universal waste other than CRTs, or 40 tons or more of CRTs, is accumulated.

"**Mercury-containing device**" means a device or part of a device (excluding batteries, thermostats, and lamps) that contains elemental mercury necessary for its operation.

"**PCB**" or "**polychlorinated biphenyl**" means any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance.

"**Pesticide**" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

- (a) Is a new animal drug under the **Federal Food, Drug, and Cosmetic Act (FFDCA) section 201(w)**; or
- (b) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug; or
- (c) Is an animal feed under **FFDCA section 201(x)** that bears or contains any substances described by **subsections (a) or (b) of this definition**.

"**Postconsumer paint**" means architectural paint and its containers not used and no longer wanted by a purchaser.

"**Small quantity handler**" means a universal waste handler who does not accumulate 5,000 kilograms (11,000 pounds) or more total of universal waste other than CRTs (batteries, pesticides, thermostats, ballasts, lamps, mercury-containing devices, postconsumer paint, or aerosol cans, calculated collectively), and who does not accumulate 36,288 kilograms (40 tons) or more of CRTs, at any time.

"**Thermostat**" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of § 7-912(d)(3)(B).

"**TSCA**" means the Toxic Substances Control Act, 15 U.S.C. 2601 et seq.

"**Universal waste**" means any of the following hazardous wastes that are subject to the universal waste requirements of this subchapter:

- (a) Batteries as described in § 7-902;
- (b) Pesticides as described in § 7-903;
- (c) Thermostats as described in § 7-904;
- (d) PCB-containing fluorescent light ballasts as described in § 7-905;
- (e) Lamps as described in § 7-906;
- (f) Mercury-containing devices as described in § 7-907;
- (g) Cathode ray tubes (CRTs) as described in § 7-908;
- (h) Postconsumer paint as described in § 7-909; and
- (i) Aerosol cans as described in § 7-910.

"**Universal waste handler**":

- (a) Means:
 - (1) A generator (as defined in § 7-103) of universal waste; or
 - (2) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.
- (b) Does not mean:
 - (1) A person who treats, except under the provisions of § 7-912(d)(3), disposes of, or recycles (except under the provisions of § 7-912(d)(9)) universal waste; or
 - (2) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

"**Universal waste transfer facility**" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

"**Universal waste transporter**" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

§ 7-912 STANDARDS FOR SMALL AND LARGE QUANTITY HANDLERS OF UNIVERSAL WASTE

(a) Applicability

This section applies to small and large quantity handlers of universal waste as defined above.

(b) Prohibitions

Small and large quantity handlers of universal waste are:

- (1) Prohibited from disposing of universal waste; and
- (2) Prohibited from diluting or treating universal waste, except by responding to releases as provided in **subsection (h) of this section**; or by managing specific wastes as provided in **subsection (d) of this section**.

Note: Intentional breaking or crushing of mercury-containing lamps is banned under this treatment prohibition.

Note: Owners or operators of facilities that treat mercury-containing lamps using drum-top crushing equipment are subject to certification under the requirements of **subchapter 5**. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather than a recycling activity.

(c) Notification

- (1) A small quantity handler is not required to notify the Secretary of universal waste handling activities.
- (2) A large quantity handler must notify the Secretary as follows:
 - (A) Except as provided in **subsection (c)(2)(B) of this section**, a large quantity handler must have sent written notification of universal waste management to the Secretary, and received an EPA Identification Number, before meeting or exceeding the 5,000 kilogram storage limit.
 - (B) A large quantity handler who manages recalled universal waste pesticides as described in §§ 7-903(a)(1) and (a)(2) and who has sent notification to EPA as required by **40 CFR Part 165** is not required to notify for those recalled universal waste pesticides under this section.
- (3) A notification submitted by a large quantity handler must include:
 - (A) The large quantity handler's name and mailing address;

- (B) The name and business telephone number of the person at the large quantity handler's site who should be contacted regarding universal waste management activities;
- (C) The address or physical location of the universal waste management activities;
- (D) A list of all of the types of universal waste managed by the large quantity handler;
- (E) A statement indicating that the large quantity handler is either accumulating 5,000 kilograms or more of universal waste other than CRTs, or 36,288 kilograms (40 tons) or more of CRTs, at one time and the types of universal waste the handler is accumulating above this quantity.

Note: The **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) specified under § 7-104 may be used to provide notification of universal waste management to the Secretary.

(d) Waste management

(1) [Reserved]

(2) Universal waste pesticides

- (A) Both small and large quantity handlers must manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides must be contained in one or more of the following:
 - (i) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or
 - (ii) A container that does not meet the requirements of **subsection (d)(2)(A)(i) of this section**, provided that the unacceptable container is overpacked in a container that does meet the **subsection (d)(2)(A)(i)** requirements; or
 - (iii) A tank that meets the requirements of **40 CFR Part 265 subpart J**, except for **40 CFR §§ 265.197(c), 265.200, and 265.201**; or
 - (iv) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (B) Store containers of universal waste pesticides within a structure such that the containers are protected from precipitation.

(3) Universal waste thermostats

Both small and large quantity handlers must manage universal waste thermostats in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Package universal waste thermostats in containers that are structurally sound, adequate to prevent breakage, and compatible with the contents of the thermostats. Such containers must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.
- (B) Store containers of universal waste thermostats within a structure such that the containers are protected from precipitation.
- (C) A small or large quantity handler may remove mercury-containing ampules from universal waste thermostats, provided the handler:
 - (i) Removes the ampules in a manner designed to prevent breakage of the ampules;
 - (ii) Removes ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);
 - (iii) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules from the containment device to a container that is subject to all applicable requirement of **subchapters 1 through 7 of these regulations**;
 - (iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that is subject to all applicable requirement of **subchapters 1 through 7 of these regulations**;
 - (v) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;
 - (vi) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;
 - (vii) Stores removed ampules in closed, non-leaking containers that are in good condition;
 - (viii) Stores containers of removed ampules within a structure such that the containers are protected from precipitation; and

- (ix) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation.
 - (D) A small or large quantity handler who removes mercury-containing ampules from thermostats must determine whether the following exhibit a characteristic of hazardous waste identified in §§ 7-205 through 7-208:
 - (i) Mercury or clean-up residues resulting from spills or leaks; and/or
 - (ii) Other waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units).
 - (E) Any mercury, residue, and/or other waste listed in **subsection (d)(3)(D) of this section** that exhibits a characteristic of hazardous waste must be managed in compliance with all applicable requirements of **subchapters 1 through 7**. The handler is considered the generator of the mercury, residues, and/or other waste and must comply with the applicable requirements of **subchapter 3**.
- (4) Universal waste PCB-containing fluorescent light ballasts
- Small and large quantity handlers must:
- (A) Manage universal waste PCB-containing fluorescent light ballasts in a way that prevents releases of any universal waste or component of a universal waste to the environment.
 - (B) Immediately contain and transfer any universal waste PCB-containing fluorescent light ballasts that show evidence of leakage or damage to a container that meets the requirements of §§ 7-311(f)(2) through (4).

Note: Fluorescent light ballasts which contain PCBs in a small capacitor that is either not intact or that is leaking, or that contain PCBs in the potting material, are subject to regulation under TSCA (i.e., **40 CFR Part 761**).
 - (C) Store universal waste PCB-containing fluorescent light ballasts within a structure such that the ballasts are protected from precipitation.
- (5) Universal waste lamps
- (A) Both small and large quantity handlers must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment. Small and large quantity handlers must:
 - (i) Package universal waste lamps in containers that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers must remain closed and must lack evidence of leakage,

spillage or damage that could cause leakage under reasonably foreseeable conditions.

- (ii) Store containers of universal waste lamps within a structure such that the containers are protected from precipitation.
- (iii) Seal full containers with tape.
- (iv) Stack containers of lamps no higher than five (5) feet.
- (v) Immediately contain and transfer any universal waste lamps that show evidence of damage, and all residue and other waste from broken lamps to a container that meets the requirements of §§ 7-311(f)(2) through (4).

Note: Intentional breaking or crushing of mercury-containing lamps is prohibited under § 7-912(b)(2).

Note: Owners or operators of facilities that treat mercury-containing lamps using drum-top crushing equipment are subject to certification under the requirements of **subchapter 5**. Drum-top crushing of mercury-containing lamps is considered a treatment activity rather than a recycling activity.

- (B) A small or large quantity handler must determine whether residue and/or other waste from broken lamps collected pursuant to **subsection (d)(5)(A)(v) of this section** exhibits a characteristic of hazardous waste identified in §§ 7-205 through 7-208.
- (C) Any residue and/or other waste that exhibits a characteristic of hazardous waste must be managed in compliance with all applicable requirements of **subchapters 1 through 7**. The handler is considered the generator of the residues, and/or other waste and must comply with the applicable requirements of **subchapter 3**.

(6) Universal waste mercury-containing devices

Both small and large quantity handlers must manage universal waste mercury-containing devices in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Package universal waste mercury-containing devices in containers that are structurally sound, adequate to prevent breakage, and compatible with the contents of the devices. Such containers must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.
- (B) Store containers of universal waste mercury-containing devices within a structure such that the containers are protected from precipitation.

- (C) A small or large quantity handler may remove mercury-containing ampules from universal waste mercury-containing devices, provided the handler adheres to the practices for removing mercury containing ampules from universal waste thermostats set forth in **subsections (d)(3)(C) through (E) of this section**.
- (D) Any residue and/or other waste that exhibits a characteristic of hazardous waste must be managed in compliance with all applicable requirements of **subchapters 1 through 7** of these regulations. The handler is considered the generator of the mercury, residues, and/or other waste and must comply with the applicable requirements of **subchapter 3**.

(7) Universal waste cathode ray tubes (CRTs)

Both small and large quantity handlers must manage universal waste CRTs in a way that prevents breakage, or releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Package universal waste CRTs in a manner adequate to prevent breakage during transportation, and when necessary during storage and handling. Such packaging must lack evidence of damage that could cause breakage under reasonably foreseeable conditions;
- (B) Store universal waste CRTs within a structure or transportation unit such that the CRTs are protected from precipitation; and
- (C) Place any universal waste CRT that shows evidence of breakage, leakage, spillage, or damage that could cause the release of glass particles under reasonably foreseeable conditions in a container. Any such container shall be closed, structurally sound, and compatible with the cathode ray tube(s) and shall be capable of preventing leakage, spillage or releases of broken cathode ray tubes, glass particles or other hazardous constituents from such broken tubes to the environment.

(8) Postconsumer paint

Both small and large quantity handlers must manage universal waste postconsumer paint in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Universal waste postconsumer paint shall be managed in containers that remain closed, structurally sound, and compatible with the postconsumer paint. Such containers must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (B) Any container of universal waste postconsumer paint that does not meet the requirements of **subsection (A) of this section** shall be overpacked in a container

that meets the requirements of **subsection (A) of this section**.

- (C) Store containers of universal waste postconsumer paint within a structure such that the containers are protected from precipitation.

(9) Aerosol cans

Both small and large quantity handlers must manage universal waste aerosol cans in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (A) Universal waste aerosol cans must be accumulated in a container that is structurally sound, compatible with the contents of the aerosol cans, lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and is protected from sources of heat.
- (B) Universal waste aerosol cans that show evidence of leakage must be packaged in a separate closed container or overpacked with absorbents, or immediately punctured and drained in accordance with the requirements of **subsection (D) of this section**.
- (C) Small and large quantity handlers of universal waste may conduct the following activities as long as each individual aerosol can is not breached and remains intact:
 - (i) Sorting aerosol cans by type;
 - (ii) ~~Mixing intact~~ cans in one container; and
 - (iii) Removing actuators to reduce the risk of accidental release, and
- (D) A small or large quantity handler of universal waste who punctures and drains their aerosol cans must recycle the empty punctured aerosol cans and meet the following requirements while puncturing and draining universal waste aerosol cans:
 - (i) Conduct puncturing and draining activities using a device specifically designed to safely puncture aerosol cans and effectively contain the residual contents and any emissions thereof.
 - (ii) Establish and follow a written procedure detailing how to safely puncture and drain the universal waste aerosol can (including proper assembly, operation and maintenance of the unit, segregation of incompatible wastes, and proper waste management practices to prevent fires or releases); maintain a copy of the manufacturer's specification and instruction on site; and ensure employees operating the device are trained in the proper procedures.

- (iii) Ensure that puncturing of the can is done in a manner designed to prevent fires and to prevent the release of any component of universal waste to the environment. This manner includes, but is not limited to, locating the equipment on a solid, flat surface in a well-ventilated area.
- (iv) Immediately transfer the contents from the waste aerosol can or puncturing device, if applicable, to a container or tank that meets the applicable requirements of §§ 7-306, 7-307, 7-308, or 7-310.
- (v) Conduct a hazardous waste determination on the contents of the emptied aerosol can per § 7-303. Any hazardous waste generated as a result of puncturing and draining the aerosol can is subject to all applicable requirements of **subchapters 1 through 7**. The handler is considered the generator of the hazardous waste and is subject to the applicable requirements of **subchapter 3**.
- (vi) If the contents are determined to be nonhazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state, or local solid waste regulations.
- (vii) A written procedure must be in place in the event of a spill or leak and a spill clean-up kit must be provided. All spills or leaks of the contents of the aerosol cans must be cleaned up promptly.

(e) Labeling and marking

Small and large quantity handlers must label and mark universal waste to identify its type as specified below:

- (1) [Reserved]
- (2) A container, (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in §§ 7-903(a)(1) and (2) are contained must be labeled and marked clearly with:
 - (A) The label that was on or accompanied the product as sold or distributed; and
 - (B) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."
- (3) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in § 7-903(a)(3) are contained must be labeled and marked clearly with:
 - (A) A label as follows:
 - (i) The label that was on the product when purchased, if still legible;

- (ii) If using the labels described in **subsection (i) of this section** is not feasible, the appropriate label as required under the Department of Transportation regulation **49 CFR Part 172**;
 - (iii) If using the labels described in **subsections (i) and (ii) of this section** are not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a state; and
- (B) The words "Universal Waste-Pesticide(s)" or "Waste-Pesticide(s)."
- (4) Containers holding universal waste thermostats must be labeled or marked clearly with one of the following phrases: "Universal Waste-Mercury Thermostat(s)," or "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."
 - (5) Universal waste PCB-containing fluorescent light ballasts (i.e., each ballast), or a container in which the ballasts are contained, must be labeled or marked clearly with one of the following phrases: "Universal Waste-PCB Ballast(s)," or "Waste PCB Ballast(s)," or "Used PCB Ballast(s)."
 - (6) Containers holding universal waste lamps must be labeled or marked clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."
 - (7) Containers holding universal waste mercury-containing devices must be labeled or marked clearly with one of the following phrases: "Universal Waste-Mercury Device(s)," or "Waste Mercury Device(s)," or "Used Mercury Device(s)."
 - (8) Universal waste cathode ray tubes (i.e., each CRT), or packages or containers holding universal waste cathode ray tubes, must be labeled or marked clearly with one of the following phrases: "Universal Waste-Cathode Ray Tube(s)," or "Waste Cathode Ray Tube(s)," or "Used Cathode Ray Tube(s)" or "Universal Waste-CRT(s)," or "Waste CRT(s)," or "Used CRT(s)."
 - (9) Containers holding universal waste postconsumer paint must be labeled or marked clearly with one of the following phrases: "Universal Waste-Paint," or "Waste Paint," or "Used Paint."
 - (10) Universal waste aerosol cans (i.e., each aerosol can), or a container in which the aerosol cans are contained, must be labeled or marked clearly with any of the following phrases: "Universal Waste—Aerosol Can(s)," "Waste Aerosol Can(s)," or "Used Aerosol Can(s)".
- (f) Accumulation time limits
- (1) A small or large quantity handler may not accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another

handler, unless the requirements of **subsection (f)(2) of this section** are met.

- (2) A small or large quantity handler may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.
- (3) A small or large quantity handler who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:
 - (A) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;
 - (B) Marking or labeling each individual item of universal waste (e.g., each thermostat, ballast or lamp) with the date it became a waste or was received;
 - (C) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;
 - (D) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;
 - (E) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or
 - (F) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

(g) Employee training

Both small and large quantity handlers must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relative to their responsibilities during normal facility operations and emergencies.

(h) Response to releases

- (1) Both small and large quantity handlers must respond to and manage a discharge or release of a universal waste in accordance with the requirements and procedures of §

7-105.

- (2) Both small and large quantity handlers must determine whether any material resulting from the discharge or release is hazardous waste, and if so, must manage the hazardous waste in compliance with all applicable requirements of **subchapters 1 through 7** of these regulations. The handler is considered the generator of the material resulting from the discharge or release, and must comply with the applicable requirements of **subchapter 3**.
- (i) Off-site shipments
 - (1) Both small and large quantity handlers of universal waste are prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.
 - (2) If a small or large quantity handler self-transportes universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of **§ 7-913** while transporting the universal waste.
 - (3) If a universal waste being offered for off-site transportation meets the definition of a hazardous material under **49 CFR Parts 171 through 180**, the small or large quantity handler must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under **49 CFR Parts 172 through 180**;
 - (4) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.
 - (5) If a small or large quantity handler sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:
 - (A) Receive the waste back when notified that the shipment has been rejected, or
 - (B) Agree with the receiving handler on a destination facility to which the shipment will be sent.
 - (6) Small and large quantity handlers may reject a shipment containing universal waste, or a portion of a shipment containing universal waste received from another handler. If a handler rejects a shipment or a portion of a shipment, the handler must contact the originating handler to provide notification of the rejection and to discuss reshipment of the load. The handler must:
 - (A) Send the shipment back to the originating handler, or

- (B) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.
- (7) If a small or large quantity handler receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the Secretary of that shipment, and provide the name, address, and phone number of the originating shipper.
- (j) Tracking universal waste shipments
 - (1) A small quantity handler is not required to keep records of shipments of universal waste.
 - (2) A large quantity handler is subject to the following tracking requirements:
 - (A) Receipt of shipments

A large quantity handler must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, movement document or other shipping document. The record for each shipment of universal waste received must include the following information:

 - (i) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent;
 - (ii) The quantity of each type of universal waste received;
 - (iii) The date of receipt of the shipment of universal waste.
 - (B) Shipments off-site

A large quantity handler must keep a record of each shipment of universal waste sent from the handler to other facilities. The record may take the form of a log, invoice, manifest, bill of lading, movement document or other shipping document. The record for each shipment of universal waste sent must include the following information:

 - (i) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;
 - (ii) The quantity of each type of universal waste sent;
 - (iii) The date the shipment of universal waste left the facility.

(C) Record retention

- (i) A large quantity handler must retain the records described in **subsection (j)(2)(A) of this section** for at least three years from the date of receipt of a shipment of universal waste.
- (ii) A large quantity handler must retain the records described in **subsection (j)(2)(B) of this section** for at least three years from the date a shipment of universal waste left the facility.

(k) Exports

(1) Both small and large quantity handlers who send universal waste to a foreign destination are subject to the requirements of **40 CFR Part 262, Subpart H**.

(2) Cathode ray tubes (CRTs)

(A) Exporters of universal waste cathode ray tubes must comply with the export requirements of **40 CFR § 261.39(a)(5)** and the export notification and recordkeeping requirements of **40 CFR § 261.41**.

(B) Availability of information; confidentiality of information

(i) After June 26, 2018, no claim of business confidentiality may be asserted by any person with respect to information contained in cathode ray tube export documents prepared, used and submitted under **40 CFR §§261.39(a)(5) and 261.41(a)**, and with respect to information contained in hazardous waste export, import, and transit documents prepared, used and submitted under **40 CFR §§262.82, 262.83, 262.84, 263.20, 264.12, 264.71, 265.12, 265.71, and 267.71**, whether submitted electronically into EPA's Waste Import Export Tracking System or in paper format.

(ii) EPA will make any cathode ray tube export documents prepared, used and submitted under **40 CFR §§261.39(a)(5) and 261.41(a)**, and any hazardous waste export, import, and transit documents prepared, used and submitted under **40 CFR §§262.82, 262.83, 262.84, 263.20, 264.12, 264.71, 265.12, 265.71, and 267.71** available to the public under this section when these electronic or paper documents are considered by EPA to be final documents. These submitted electronic and paper documents related to hazardous waste exports, imports and transits and cathode ray tube exports are considered by EPA to be final documents on March 1 of the calendar year after the related cathode ray tube exports or hazardous waste exports, imports, or transits occur.

§ 7-913 STANDARDS FOR UNIVERSAL WASTE TRANSPORTERS

(a) Applicability

This section applies to universal waste transporters (as defined in § 7-911).

(b) Prohibitions

A universal waste transporter is:

- (1) Prohibited from disposing of universal waste; and
- (2) Prohibited from diluting or treating universal waste, except by responding to releases as provided in § 7-913(e).

(c) Waste management

- (1) A universal waste transporter must comply with all applicable U.S. Department of Transportation regulations in **49 CFR Part 171 through 180** for transport of any universal waste that meets the definition of hazardous material in **49 CFR § 171.8**. For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the hazardous waste manifest requirements of the U.S. Environmental Protection Agency specified in **40 CFR Part 262**. Because universal waste does not require a hazardous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.
- (2) Some universal waste materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in **49 CFR § 173.2**. As universal waste shipments do not require a manifest under **40 CFR Part 262**, they may not be described by the DOT proper shipping name "hazardous waste, (l) or (s), n.o.s.", nor may the hazardous material's proper shipping name be modified by adding the word "waste".
- (3) Universal waste transporters are subject to the solid waste permit requirements of **10 V.S.A § 6607a**.

(d) Storage time limits

- (1) A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.
- (2) If a universal waste transporter stores universal waste for more than ten days, the transporter becomes a universal waste handler and must comply with the applicable requirements of § 7-912 of this subchapter while storing the universal waste.

(e) Response to releases

- (1) A universal waste transporter must immediately contain all releases of universal wastes and other residues from universal wastes.
- (2) A universal waste transporter must determine whether any material resulting from the release is hazardous waste, and if so, it is subject to all applicable requirements of **subchapters 1 through 7**. If the waste is determined to be a hazardous waste, the transporter must manage such waste in accordance with the applicable generator requirements of **subchapter 3**.

(f) Off-site shipments

- (1) A universal waste transporter is prohibited from transporting universal waste to a place other than a universal waste handler, a destination facility, or a foreign destination.
- (2) If the universal waste being shipped off-site meets the Department of Transportation's definition of a hazardous material under **49 CFR § 171.8**, the shipment must be properly described on a shipping paper in accordance with the applicable Department of Transportation regulations under **49 CFR Part 172**.

(g) Exports

A universal waste transporter transporting a shipment of universal waste to a foreign destination is subject to the requirements of **40 CFR Part 262, Subpart H**.

§ 7-914 STANDARDS FOR DESTINATION FACILITIES

(a) Applicability

- (1) The owner or operator of a destination facility (**as defined in § 7-911**) is subject to all applicable requirements of **subchapters 1, 2, 3, 5, 6 and 7**.
- (2) The owner or operator of a destination facility that recycles a particular universal waste without storing that universal waste before it is recycled must comply with the applicable requirements of **subchapter 6**.

(b) Off-site shipments.

- (1) The owner or operator of a destination facility is prohibited from sending or taking universal waste to a place other than a universal waste handler, another destination facility or a foreign destination.
- (2) The owner or operator of a destination facility may reject a shipment containing

universal waste, or a portion of a shipment containing universal waste. If the owner or operator of the destination facility rejects a shipment or a portion of a shipment, the owner must contact the shipper to provide notification of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility must:

- (A) Send the shipment back to the original shipper, or
 - (B) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.
- (3) If the owner or operator of a destination facility receives a shipment containing hazardous waste that is not a universal waste, the owner or operator of the destination facility must immediately notify the Secretary of that shipment, and provide the name, address, and phone number of the shipper.
- (c) Tracking universal waste shipments
- (1) The owner or operator of a destination facility must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, movement document or other shipping document. The record for each shipment of universal waste received must include the following information:
 - (A) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent;
 - (B) The quantity of each type of universal waste received; and
 - (C) The date of receipt of the shipment of universal waste.
 - (2) The owner or operator of a destination facility must retain the records described in **subsection (c)(1) of this section** for at least three years from the date of receipt of a shipment of universal waste.

§ 7-915 IMPORT REQUIREMENTS

Persons managing universal waste that is imported from a foreign country into the United States are subject to the requirements of **40 CFR Part 262 Subpart H** and the applicable requirements of this section, immediately after the waste enters the United States, as indicated in **subsections (a) through (c) of this section**:

- (a) A universal waste transporter is subject to the universal waste transporter requirements of **§ 7-913**.
- (b) A universal waste handler is subject to the small or large quantity handler requirements of

§ 7-912, as applicable.

- (c) An owner or operator of a destination facility is subject to the destination facility requirements of § 7-914.

§ 7-916 PETITIONS TO INCLUDE OTHER WASTES AS UNIVERSAL WASTES UNDER THIS SUBCHAPTER

(a) General

- (1) Except as provided in **subsection (a)(4) of this section**, any person seeking to add a hazardous waste or a category of hazardous waste to this subchapter may petition the Secretary for a regulatory amendment under this section.
- (2) To be successful, the petitioner must demonstrate to the satisfaction of the Secretary that regulation of the waste or category of waste under the provisions of this subchapter is: appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the hazardous waste program. The petition must address as many of the factors listed in **subsection (b) of this section** as are appropriate for the waste or waste category addressed in the petition.
- (3) The Secretary will evaluate petitions using the factors listed in **subsection (b) of this section**. The decision of whether or not to amend this subchapter will be based on the weight of evidence showing that regulation under this subchapter is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.
- (4) Hazardous waste pharmaceuticals are regulated under **subchapter 10** of these regulations and may not be added as a category of hazardous waste for management under this **subchapter**.

(b) Factors for petitions to include other wastes as universal wastes

- (1) The waste or category of waste, as generated by a wide variety of generators, is listed in **§§ 7-210 through 7-215**, or (if not listed) a proportion of the waste stream exhibits one or more characteristics of hazardous waste identified in **§§ 7-205 through 7-208**. (When a characteristic waste is added to the universal waste regulations of this subchapter by using a generic name to identify the waste category, the definition of universal waste in **§§ 7-103 and 7-911** will be amended to include only the hazardous waste portion of the waste category.) Thus, only the portion of the waste stream that does exhibit one or more characteristics (i.e., is hazardous waste) is subject to the universal waste regulations of this subchapter;
- (2) The waste or category of waste is not exclusive to a specific industry or group of

industries, and is commonly generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, office complexes, very small quantity generators, small businesses, government organizations, as well as large industrial facilities);

- (3) The waste or category of waste is generated by a large number of generators (e.g., more than 1,000 nationally) and is frequently generated in relatively small quantities by each generator;
- (4) Systems to be used for collecting the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste;
- (5) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes, and specific management standards proposed or referenced by the petitioner (e.g., waste management requirements appropriate to be added to §§ 7-912(d), and 7-913(c); and/or applicable U.S. Department of Transportation requirements) would be protective of human health and the environment during accumulation and transport;
- (6) Regulation of the waste or category of waste under this subchapter will increase the likelihood that the waste will be diverted from non-hazardous waste management systems (e.g., the municipal waste stream, non-hazardous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with **subchapters 1 through 7**.
- (7) Regulation of the waste or category of waste under this subchapter will improve implementation of and compliance with the hazardous waste regulatory program; and/or
- (8) Such other factors as may be appropriate.

Subchapter 10: HAZARDOUS WASTE PHARMACEUTICALS**§ 7-1001 DEFINITIONS**

The following definitions apply to this subchapter:

“Evaluated hazardous waste pharmaceutical” means a prescription hazardous waste pharmaceutical that has been evaluated by a reverse distributor in accordance with **40 CFR § 266.510(a)(3)** and will not be sent to another reverse distributor for further evaluation or verification of manufacture credit.

“Hazardous waste pharmaceutical” means a pharmaceutical that is a waste, as defined in § 7-103, and exhibits one or more characteristics identified in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215. A pharmaceutical is not a waste, as defined in § 7-103, and therefore not a hazardous waste pharmaceutical, if it is legitimately used/reused (e.g., lawfully donated for its intended purpose) or reclaimed. An over-the-counter pharmaceutical, dietary supplement, or homeopathic drug is not a waste, as defined in § 7-103, and therefore not a hazardous waste pharmaceutical, if it has a reasonable expectation of being legitimately used/reused (e.g., lawfully redistributed for its intended purpose) or reclaimed.

“Healthcare facility” means any person that is lawfully authorized to:

- (a) Provide preventative, diagnostic, therapeutic, rehabilitative, maintenance or palliative care, and counseling, service, assessment or procedure with respect to the physical or mental condition, or functional status, of a human or animal or that affects the structure or function of the human or animal body; or
- (b) Distribute, sell, or dispense pharmaceuticals, including over-the-counter pharmaceuticals, dietary supplements, homeopathic drugs, or prescription pharmaceuticals. This definition includes, but is not limited to, wholesale distributors, third-party logistics providers that serve as forward distributors, military medical logistics facilities, hospitals, psychiatric hospitals, ambulatory surgical centers, health clinics, physicians' offices, optical and dental providers, chiropractors, long-term care facilities, ambulance services, pharmacies, long-term care pharmacies, mail-order pharmacies, retailers of pharmaceuticals, veterinary clinics, and veterinary hospitals. This definition does not include pharmaceutical manufacturers, reverse distributors, or reverse logistics centers.

“Household waste pharmaceutical” means a pharmaceutical that is a waste, as defined in § 7-103, but is excluded from being a hazardous waste under § 7-203(a).

“Long-term care facility” means a licensed entity that provides assistance with activities of daily living, including managing and administering pharmaceuticals to one or more individuals at the facility. This definition includes, but is not limited to, hospice facilities, nursing facilities, skilled nursing facilities, and the nursing and skilled nursing care portions of continuing care retirement communities. Not included within the scope of this definition are group homes,

independent living communities, assisted living facilities, and the independent and assisted living portions of continuing care retirement communities.

“Non-creditable hazardous waste pharmaceutical” means a prescription hazardous waste pharmaceutical that does not have a reasonable expectation to be eligible for manufacturer credit or a nonprescription hazardous waste pharmaceutical that does not have a reasonable expectation to be legitimately used/reused or reclaimed. This includes but is not limited to, investigational drugs, free samples of pharmaceuticals received by healthcare facilities, residues of pharmaceuticals remaining in empty containers, contaminated personal protective equipment, floor sweepings, and clean-up material from the spills of pharmaceuticals.

“Non-hazardous waste pharmaceutical” means a pharmaceutical that is a waste, as defined in § 7-103, and is not listed in §§ 7-210 through 7-215, and does not exhibit a characteristic identified in §§ 7-205 through 7-208.

“Non-pharmaceutical hazardous waste” means a waste, as defined in § 7-103, that is listed in §§ 7-210 through 7-215, or exhibits one or more characteristics identified in §§ 7-205 through 7-208, but is not a pharmaceutical, as defined in this section.

“Pharmaceutical” means any drug or dietary supplement for use by humans or other animals; any electronic nicotine delivery system (e.g., electronic cigarette or vaping pen); or any liquid nicotine (e-liquid) packaged for retail sale for use in electronic nicotine delivery systems (e.g., pre-filled cartridges or vials). This definition includes, but is not limited to, dietary supplements, as defined by the Federal Food, Drug and Cosmetic Act; prescription drugs, as defined by 21 CFR § 203.3(y); over-the-counter drugs; homeopathic drugs; compounded drugs; investigational new drugs; pharmaceuticals remaining in non-empty containers; personal protective equipment contaminated with pharmaceuticals; and clean-up material from spills of pharmaceuticals. This definition does not include dental amalgam or sharps.

“Potentially creditable hazardous waste pharmaceutical” means a prescription hazardous waste pharmaceutical that has a reasonable expectation to receive manufacturer credit and is:

- (a) In original manufacturer packaging (except pharmaceuticals that were subject to a recall);
- (b) Undispensed; and
- (c) Unexpired or less than one year past expiration date. The term does not include evaluated hazardous waste pharmaceuticals or nonprescription pharmaceuticals including, but not limited to, over-the-counter drugs, homeopathic drugs, and dietary supplements.

“Reverse distributor” means any person that receives and accumulates prescription pharmaceuticals that are potentially creditable hazardous waste pharmaceuticals for the purpose of facilitating or verifying manufacturer credit. Any person, including forward distributors, third-party logistics providers, and pharmaceutical manufacturers, that processes prescription pharmaceuticals for the facilitation or verification of manufacturer credit is considered a reverse distributor.

§ 7-1002 APPLICABILITY

- (a) A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, remains subject to § 7-306 and is not subject to this subchapter, except for §§ 7-1006 and 7-1008 and the optional provisions of § 7-1005.
- (b) A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, has the option of complying with § 7-1002(d) for the management of its hazardous waste pharmaceuticals as an alternative to complying with § 7-306 and the optional provisions of § 7-1005.
- (c) A healthcare facility or reverse distributor remains subject to all applicable hazardous waste regulations with respect to the management of its non-pharmaceutical hazardous waste.
- (d) With the exception of healthcare facilities identified in **subsection (a) of this section**, a healthcare facility is subject to the following in lieu of **subchapters 3 through 5**:
 - (1) **Sections 7-1003 and 7-1006 through 7-1009 of this subchapter** with respect to the management of:
 - (A) Non-creditable hazardous waste pharmaceuticals, and
 - (B) Potentially creditable hazardous waste pharmaceuticals if they are not destined for a reverse distributor.
 - (2) **Sections 7-1003(a), 7-1004, 7-1006 through 7-1008, and 7-1010 of this subchapter** with respect to the management of potentially creditable hazardous waste pharmaceuticals that are prescription pharmaceuticals and are destined for a reverse distributor.
- (e) A reverse distributor is subject to **§§ 7-1006 through 7-1011 of this subchapter** in lieu of **subchapters 3 through 5** with respect to the management of hazardous waste pharmaceuticals.
- (f) Hazardous waste pharmaceuticals generated or managed by entities other than healthcare facilities and reverse distributors (e.g., pharmaceutical manufacturers and reverse logistics centers) are not subject to this subchapter. Other generators are subject to **Subchapter 3** for the generation and accumulation of hazardous wastes, including hazardous waste pharmaceuticals.
- (g) The following are not subject to **Subchapters 1 through 9**, except as specified:
 - (1) Pharmaceuticals that are not waste, as defined in § 7-103, because they are

legitimately used/reused (e.g., lawfully donated for their intended purpose) or reclaimed.

- (2) Over-the-counter pharmaceuticals, dietary supplements, or homeopathic drugs that are not wastes, as defined in § 7-103, because they have a reasonable expectation of being legitimately used/reused (e.g., lawfully redistributed for their intended purpose) or reclaimed.
- (3) Pharmaceuticals being managed in accordance with a recall strategy that has been approved by the Food and Drug Administration in accordance with **21 CFR part 7 subpart C**. This subchapter does apply to the management of the recalled hazardous waste pharmaceuticals after the Food and Drug Administration approves the destruction of the recalled items.
- (4) Pharmaceuticals being managed in accordance with a recall corrective action plan that has been accepted by the Consumer Product Safety Commission in accordance with **16 CFR part 1115**. This subchapter does apply to the management of the recalled hazardous waste pharmaceuticals after the Consumer Product Safety Commission approves the destruction of the recalled items.
- (5) Pharmaceuticals stored according to a preservation order, or during an investigation or judicial proceeding until after the preservation order, investigation, or judicial proceeding has concluded and/or a decision is made to discard the pharmaceuticals.
- (6) Investigational new drugs for which an investigational new drug application is in effect in accordance with the Food and Drug Administration's regulations in **21 CFR part 312**. This subchapter does apply to the management of the investigational new drug after the decision is made to discard the investigational new drug or the Food and Drug Administration approves the destruction of the investigational new drug, if the investigational new drug is a hazardous waste.
- (7) Household waste pharmaceuticals, including those that have been collected by an authorized collector (as defined by the Drug Enforcement Administration), provided the authorized collector complies with the conditional exemption in §§ 7-1007(a)(2) and 7-1007(b).

§ 7-1003 STANDARDS FOR HEALTHCARE FACILITIES MANAGING NON-CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS

- (a) Notification and withdrawal from this subchapter for healthcare facilities managing hazardous waste pharmaceuticals:
 - (1) Notification. A healthcare facility must notify the Secretary, using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12), that it is a healthcare facility operating under this subchapter. A healthcare facility is not

required to fill out Box 10.B. (Waste Codes for Federally Regulated Hazardous Waste) of the Site Identification Form with respect to its hazardous waste pharmaceuticals. A healthcare facility must submit a separate notification (Site Identification Form) for each site or EPA identification number.

- (A) A healthcare facility that already has an EPA identification number must notify the Secretary, using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12), that it is a healthcare facility as part of its next Biennial Report, if it is required to submit one; or if not required to submit a Biennial Report, within 60 days of the effective date of this subchapter, or within 60 days of becoming subject to this subchapter.
 - (B) A healthcare facility that does not have an EPA identification number must obtain one by notifying the Secretary, using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12), that it is a healthcare facility as part of its next Biennial Report, if it is required to submit one; or if not required to submit a Biennial Report, within 60 days of the effective date of this subchapter, or within 60 days of becoming subject to this subchapter.
 - (C) A healthcare facility must keep a copy of its notification on file for as long as the healthcare facility is subject to this subchapter.
- (2) **Withdrawal.** A healthcare facility that operated under this subchapter but is no longer subject to this subchapter, because it is a very small quantity generator under § 7-306, and elects to withdraw from this subchapter, must notify the Secretary using the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) that it is no longer operating under this subchapter. A healthcare facility is not required to fill out Box 10.B. (Waste Codes for Federally Regulated Hazardous Waste) of the Site Identification Form with respect to its hazardous waste pharmaceuticals. A healthcare facility must submit a separate notification (Site Identification Form) for each EPA identification number.
- (A) A healthcare facility must submit the **Hazardous Waste Handler Site Identification Form** (EPA Form 8700-12) notifying that it is withdrawing from this subchapter before it begins operating under § 7-306.
 - (B) A healthcare facility must keep a copy of its withdrawal on file for three years from the date of signature on the notification of its withdrawal.
- (b) A healthcare facility must ensure that all personnel that manage non-creditable hazardous waste pharmaceuticals are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.
 - (c) A healthcare facility that generates a waste that is a non-creditable pharmaceutical must determine whether that pharmaceutical is a hazardous waste pharmaceutical (i.e., it

exhibits a characteristic identified in §§ 7-205 through 7-208 or is listed in §§ 7-210 through 7-215) in order to determine whether the waste is subject to this subchapter. A healthcare facility may choose to manage its non-hazardous waste pharmaceuticals as non-creditable hazardous waste pharmaceuticals under this subchapter.

- (d) Standards for containers used to accumulate non-creditable hazardous waste pharmaceuticals at healthcare facilities.
 - (1) A healthcare facility must place non-creditable hazardous waste pharmaceuticals in a container that is structurally sound, compatible with its contents, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
 - (2) A healthcare facility that manages ignitable or reactive non-creditable hazardous waste pharmaceuticals, or that mixes or commingles incompatible non-creditable hazardous waste pharmaceuticals must manage the container so that it does not have the potential to:
 - (A) Generate extreme heat or pressure, fire or explosion, or violent reaction;
 - (B) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;
 - (C) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
 - (D) Damage the structural integrity of the container of non-creditable hazardous waste pharmaceuticals; or
 - (E) Through other like means threaten human health or the environment.
 - (3) A healthcare facility must keep containers of non-creditable hazardous waste pharmaceuticals closed and secured in a manner that prevents unauthorized access to its contents.
 - (4) A healthcare facility may accumulate non-creditable hazardous waste pharmaceuticals and non-hazardous non-creditable waste pharmaceuticals in the same container, except that non-creditable hazardous waste pharmaceuticals prohibited from being combusted because of the dilution prohibition of 40 CFR § 268.3(c) must be accumulated in separate containers and labeled with all applicable hazardous waste codes.
- (e) A healthcare facility must label or clearly mark each container of non-creditable hazardous waste pharmaceuticals with the phrase “Hazardous Waste Pharmaceuticals.”
- (f) Maximum accumulation time for non-creditable hazardous waste pharmaceuticals at

healthcare facilities.

- (1) A healthcare facility may accumulate non-creditable hazardous waste pharmaceuticals on site for one year or less without a permit or having interim status.
- (2) A healthcare facility that accumulates non-creditable hazardous waste pharmaceuticals on-site must demonstrate the length of time that the non-creditable hazardous waste pharmaceuticals have been accumulating, starting from the date it first becomes a waste. A healthcare facility may make this demonstration by any of the following methods:
 - (A) Marking or labeling the container of non-creditable hazardous waste pharmaceuticals with the date that the non-creditable hazardous waste pharmaceuticals became a waste;
 - (B) Maintaining an inventory system that identifies the date the non-creditable hazardous waste pharmaceuticals being accumulated first became a waste;
 - (C) Placing the non-creditable hazardous waste pharmaceuticals in a specific area and identifying the earliest date that any of the non-creditable hazardous waste pharmaceuticals in the area became a waste.
- (g) The non-creditable hazardous waste pharmaceuticals generated by a healthcare facility are subject to the land disposal restrictions of **40 CFR Part 268**. A healthcare facility that generates non-creditable hazardous waste pharmaceuticals must comply with the land disposal restrictions in accordance with **40 CFR § 268.7(a)** requirements, except that it is not required to identify the hazardous waste codes on the land disposal restrictions notification.
- (h) A healthcare facility that sends a shipment of non-creditable hazardous waste pharmaceuticals to a designated facility with the understanding that the designated facility can accept and manage the waste, and later receives that shipment back as a rejected load in accordance with the manifest discrepancy provisions of **40 CFR § 264.72 or 40 CFR § 265.72** may accumulate the returned non-creditable hazardous waste pharmaceuticals on site for up to an additional 90 days provided the rejected or returned shipment is managed in accordance with **subsections (d) and (e) of this section**. Upon receipt of the returned shipment, the healthcare facility must:
 - (1) Sign either:
 - (A) Item 18c of the original manifest, if the original manifest was used for the returned shipment; or
 - (B) Item 20 of the new manifest, if a new manifest was used for the returned shipment;
 - (2) Provide the transporter a copy of the manifest;

- (3) Within 30 days of receipt of the rejected shipment, send a copy of the manifest to the designated facility that returned the shipment to the healthcare facility; and
 - (4) Within 90 days of receipt of the rejected shipment, transport or offer for transport the returned shipment in accordance with the shipping standards of § 7-1009(a).
- (i) Reporting by healthcare facilities for non-creditable hazardous waste pharmaceuticals.
- (1) Biennial reporting by healthcare facilities. Healthcare facilities are not subject to biennial reporting requirements under § 7-708(a), with respect to non-creditable hazardous waste pharmaceuticals managed under this subchapter.
 - (2) Exception reporting by healthcare facilities for a missing copy of the manifest:
 - (A) For shipments from a healthcare facility to a designated facility.

If a healthcare facility does not receive a copy of the manifest with the signature of the owner or operator of the designated facility within 60 days of the date the non-creditable hazardous waste pharmaceuticals were accepted by the initial transporter, the healthcare facility must submit:

 - (i) A legible copy of the original manifest, indicating that the healthcare facility has not received confirmation of delivery, to the Secretary; and
 - (ii) A handwritten or typed note on the manifest itself, or on an attached sheet of paper, stating that the return copy was not received and explaining the efforts taken to locate the non-creditable hazardous waste pharmaceuticals and the results of those efforts.
 - (B) For shipments rejected by the designated facility and shipped to an alternate facility.

If a healthcare facility does not receive a copy of the manifest for a rejected shipment of the non-creditable hazardous waste pharmaceuticals that is forwarded by the designated facility to an alternate facility (using appropriate manifest procedures), with the signature of the owner or operator of the alternate facility, within 60 days of the date the non-creditable hazardous waste was accepted by the initial transporter forwarding the shipment of non-creditable hazardous waste pharmaceuticals from the designated facility to the alternate facility, the healthcare facility must submit:

 - (i) A legible copy of the original manifest, indicating that the healthcare facility has not received confirmation of delivery, to the Secretary; and
 - (ii) A handwritten or typed note on the manifest itself, or on an attached sheet of paper, stating that the return copy was not received and explaining the efforts

taken to locate the non-creditable hazardous waste pharmaceuticals and the results of those efforts.

- (3) Additional reports. The Secretary may require healthcare facilities to furnish additional reports concerning the quantities and disposition of non-creditable hazardous waste pharmaceuticals.
- (j) Recordkeeping by healthcare facilities for non-creditable hazardous waste pharmaceuticals.
 - (1) A healthcare facility must keep a copy of each manifest signed in accordance with §§ 7-702(b)(2) through (5) for three years or until it receives a signed copy from the designated facility which received the non-creditable hazardous waste pharmaceuticals. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter.
 - (2) A healthcare facility must keep a copy of each exception report for a period of at least three years from the date of the report.
 - (3) A healthcare facility must keep records of any test results, waste analyses, or other determinations made to support its hazardous waste determination(s) consistent with § 7-202(b)(6), for at least three years from the date the waste was last sent to on-site or off-site treatment, storage or disposal. A healthcare facility that manages all of its non-creditable non-hazardous waste pharmaceuticals as non-creditable hazardous waste pharmaceuticals is not required to keep documentation of hazardous waste determinations.
 - (4) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the Secretary.
 - (5) All records must be readily available upon request by an inspector.
- (k) A healthcare facility must immediately contain all spills of non-creditable hazardous waste pharmaceuticals and manage the spill clean-up materials as non-creditable hazardous waste pharmaceuticals in accordance with the requirements of this subchapter.
- (l) A healthcare facility may accept non-creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator under § 7-306, without a permit or without having interim status, provided the receiving healthcare facility:
 - (1) Is under the control of the same person (as defined in § 7-103) as the very small quantity generator healthcare facility that is sending the non-creditable hazardous waste pharmaceuticals off-site (“control,” for the purposes of this section, means the power to direct the policies of the healthcare facility, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate healthcare

facilities on behalf of a different person as defined in § 7-103 of this chapter shall not be deemed to “control” such healthcare facilities) or has a contractual or other documented business relationship whereby the receiving healthcare facility supplies pharmaceuticals to the very small quantity generator healthcare facility;

- (2) Is operating under this subchapter for the management of its non-creditable hazardous waste pharmaceuticals;
- (3) Manages the non-creditable hazardous waste pharmaceuticals that it receives from off site in compliance with this subchapter; and
- (4) Keeps records of the non-creditable hazardous waste pharmaceuticals shipments it receives from off site for three years from the date that the shipment is received.

§ 7-1004 STANDARDS FOR HEALTHCARE FACILITIES MANAGING POTENTIALLY CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS

- (a) A healthcare facility that generates a waste that is a potentially creditable pharmaceutical must determine whether the potentially creditable pharmaceutical is a potentially creditable hazardous waste pharmaceutical (i.e., it is listed in §§ 7-210 through 7-215 or exhibits a characteristic identified in §§ 7-205 through 7-208). A healthcare facility may choose to manage its potentially creditable non-hazardous waste pharmaceuticals as potentially creditable hazardous waste pharmaceuticals under this subchapter.
- (b) A healthcare facility may accept potentially creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator under § 7-306, without a permit or without having interim status, provided the receiving healthcare facility:
 - (1) Is under the control of the same person, as defined in § 7-103, as the very small quantity generator healthcare facility that is sending the potentially creditable hazardous waste pharmaceuticals off site, or has a contractual or other documented business relationship whereby the receiving healthcare facility supplies pharmaceuticals to the very small quantity generator healthcare facility;
 - (2) Is operating under this subchapter for the management of its potentially creditable hazardous waste pharmaceuticals;
 - (3) Manages the potentially creditable hazardous waste pharmaceuticals that it receives from off site in compliance with this subchapter; and
 - (4) Keeps records of the potentially creditable hazardous waste pharmaceuticals shipments it receives from off site for three years from the date that the shipment is received.
- (c) Healthcare facilities are prohibited from sending hazardous wastes other than potentially

creditable hazardous waste pharmaceuticals to a reverse distributor.

- (d) Healthcare facilities are not subject to biennial reporting requirements under § 7-708(a) with respect to potentially creditable hazardous waste pharmaceuticals managed under this subchapter.
- (e) Recordkeeping by healthcare facilities
 - (1) A healthcare facility that initiates a shipment of potentially creditable hazardous waste pharmaceuticals to a reverse distributor must keep the following records (paper or electronic) for each shipment of potentially creditable hazardous waste pharmaceuticals for three years from the date of shipment:
 - (A) The confirmation of delivery; and
 - (B) The shipping papers prepared in accordance with 49 CFR Part 172 subpart C, if applicable.
 - (2) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the Secretary.
 - (3) All records must be readily available upon request by an inspector.
- (f) A healthcare facility must immediately contain all spills of potentially creditable hazardous waste pharmaceuticals and manage the spill clean-up materials as non-creditable hazardous waste pharmaceuticals in accordance with this subchapter.

§ 7-1005 HEALTHCARE FACILITIES THAT ARE VERY SMALL QUANTITY GENERATORS FOR BOTH HAZARDOUS WASTE PHARMACEUTICALS AND NON-PHARMACEUTICAL HAZARDOUS WASTE

- (a) A healthcare facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste may send its potentially creditable hazardous waste pharmaceuticals to a reverse distributor.
- (b) A healthcare facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste may send its hazardous waste pharmaceuticals off-site to another healthcare facility, provided:
 - (1) The receiving healthcare facility meets the conditions in § 7-1003(l) and § 7-1004(b), as applicable; or
 - (2) The very small quantity generator healthcare facility meets the conditions in § 7-306(c)(2)(d) and the receiving large quantity generator meets the conditions in § 7-308(d).

- (c) A long-term care facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste may dispose of its hazardous waste pharmaceuticals (excluding contaminated personal protective equipment or clean-up materials) in an on-site collection receptacle of an authorized collector (as defined by the Drug Enforcement Administration) that is registered with the Drug Enforcement Administration provided the contents are collected, stored, transported, destroyed and disposed of in compliance with all applicable Drug Enforcement Administration regulations for controlled substances.
- (d) A long-term care facility with 20 beds or fewer is presumed to be a very small quantity generator subject to § 7-306 for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste and not subject to this subchapter, except for §§ 7-1006 and 7-1008 and the other optional provisions of this section. The Secretary has the responsibility to demonstrate that a long-term care facility with 20 beds or fewer generates quantities of hazardous waste that are in excess of the very small quantity generator limits as defined in § 7-103. A long-term care facility with more than 20 beds that operates as a very small quantity generator under § 7-306 must demonstrate that it generates quantities of hazardous waste that are within the very small quantity generator limits as defined by § 7-103.

§ 7-1006 PROHIBITION OF SEWERING HAZARDOUS WASTE PHARMACEUTICALS

All healthcare facilities (including very small quantity generators operating under § 7-306 in lieu of this subchapter) and reverse distributors are prohibited from discharging hazardous waste pharmaceuticals to a sewer system that passes through to a publicly-owned treatment works. Healthcare facilities and reverse distributors remain subject to the prohibitions in 40 CFR 403.5(b)(1).

§ 7-1007 CONDITIONAL EXEMPTIONS FOR HAZARDOUS WASTE PHARMACEUTICALS THAT ARE ALSO CONTROLLED SUBSTANCES AND HOUSEHOLD WASTE PHARMACEUTICALS COLLECTED IN A TAKE-BACK EVENT OR PROGRAM

- (a) Provided the conditions of subsection (b) of this section are met, the following are exempt from 40 CFR Parts 262 through 273:
 - (1) Hazardous waste pharmaceuticals that are also listed on a schedule of controlled substances by the Drug Enforcement Administration in 21 CFR Part 1308, and
 - (2) Household waste pharmaceuticals that are collected in a take-back event or program, including those that are collected by an authorized collector (as defined by the Drug Enforcement Administration) registered with the Drug Enforcement Administration that commingles the household waste pharmaceuticals with controlled substances from an ultimate user (as defined by the Drug Enforcement Administration).

- (b) Conditions for exemption. The hazardous waste pharmaceuticals must be:
- (1) Managed in compliance with the sewer prohibition of § 7-1006; and
 - (2) Collected, stored, transported, and disposed of in compliance with all applicable Drug Enforcement Administration regulations for controlled substances; and
 - (3) Destroyed by a method that Drug Enforcement Administration has publicly deemed in writing to meet their non-retrievable standard of destruction or combusted at one of the following:
 - (A) A permitted large municipal waste combustor, subject to **40 CFR Part 62 subpart FFF** or applicable state plan for existing large municipal waste combustors, or **40 CFR Part 60 subparts Eb** for new large municipal waste combustors; or
 - (B) A permitted small municipal waste combustor, subject to **40 CFR Part 62 subpart JJJ** or applicable state plan for existing small municipal waste combustors, or **40 CFR Part 60 subparts AAAA** for new small municipal waste combustors; or
 - (C) A permitted hospital, medical and infectious waste incinerator, subject to **40 CFR Part 62 subpart HHH** or applicable state plan for existing hospital, medical and infectious waste incinerators, or **40 CFR Part 60 subpart Ec** for new hospital, medical and infectious waste incinerators.
 - (D) A permitted commercial and industrial solid waste incinerator, subject to **40 CFR Part 62 subpart III** or applicable state plan for existing commercial and industrial solid waste incinerators, or **40 CFR Part 60 subpart CCCC** for new commercial and industrial solid waste incinerators.
 - (E) A permitted hazardous waste combustor subject to **40 CFR Part 63 subpart EEE**.

§ 7-1008 RESIDUES OF HAZARDOUS WASTE PHARMACEUTICALS IN EMPTY CONTAINERS

- (a) A stock bottle, dispensing bottle, vial, or ampule (not to exceed 1 liter or 10,000 pills); or a unit-dose container (e.g., a unit-dose packet, cup, wrapper, blister pack, or delivery device) is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals have been removed from the stock bottle, dispensing bottle, vial, ampule, or the unit-dose container using the practices commonly employed to remove materials from that type of container.
- (b) A syringe is considered empty and the residues are not regulated as hazardous waste under this subchapter provided the contents have been removed by fully depressing the plunger of the syringe. If a syringe is not empty, the syringe must be placed with its remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a non-creditable hazardous waste pharmaceutical under this subchapter

and any applicable federal, state, and local requirements for sharps containers and medical waste.

- (c) An IV bag is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals in the IV bag have been fully administered to a patient. If an IV bag is not empty, the IV bag must be placed with its remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a non-creditable hazardous waste pharmaceutical under this subchapter, unless the IV bag held non-acute hazardous waste pharmaceuticals and is empty as defined in § 7-203(j)(1).
- (d) Hazardous waste pharmaceuticals remaining in all other types of unused, partially administered, or fully administered containers must be managed as non-creditable hazardous waste pharmaceuticals under this subchapter, unless the container held non-acute hazardous waste pharmaceuticals and is empty as defined in § 7-203(j)(1) or (2). This includes, but is not limited to, residues in inhalers, aerosol cans, nebulizers, tubes of ointments, gels, or creams.

§ 7-1009 SHIPPING NON-CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS FROM A HEALTHCARE FACILITY OR EVALUATED HAZARDOUS WASTE PHARMACEUTICALS FROM A REVERSE DISTRIBUTOR

- (a) A healthcare facility must ship non-creditable hazardous waste pharmaceuticals and a reverse distributor must ship evaluated hazardous waste pharmaceuticals off-site to a designated facility (such as a permitted or interim status treatment, storage, or disposal facility) in compliance with:
 - (1) The following pre-transport requirements, before transporting or offering for transport off-site:
 - (A) **Packaging.** Package the waste in accordance with the applicable Department of Transportation regulations on hazardous materials under **49 CFR Parts 173, 178, and 180.**
 - (B) **Labeling.** Label each package in accordance with the applicable Department of Transportation regulations on hazardous materials under **49 CFR Part 172 subpart E.**
 - (C) **Marking**
 - (i) Mark each package of hazardous waste pharmaceuticals in accordance with the applicable Department of Transportation (DOT) regulations on hazardous materials under **49 CFR Part 172 subpart D;**
 - (ii) Mark each container of 119 gallons or less used in such transportation with the following words and information in accordance with the requirements of

49 CFR § 172.304:

HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Healthcare Facility's or Reverse distributor's Name and Address

Healthcare Facility's or Reverse distributor's EPA Identification Number

Manifest Tracking Number

- (iii) Lab packs that will be incinerated in compliance with **40 CFR § 268.42(c)** are not required to be marked with EPA Hazardous Waste Code(s), except D004, D005, D006, D007, D008, D010, and D011, where applicable. A nationally recognized electronic system, such as bar coding or radio frequency identification, may be used to identify the EPA Hazardous Waste Code(s).
- (D) Placarding. Placard or offer the initial transporter the appropriate placards according to Department of Transportation regulations for hazardous materials under **49 CFR Part 172 subpart F**.
- (2) The manifest requirements of § 7-702, except that:
 - (A) A healthcare facility shipping non-creditable hazardous waste pharmaceuticals is not required to list all applicable hazardous waste codes in Item 13 of EPA Form 8700-22.
 - (B) A healthcare facility shipping non-creditable hazardous waste pharmaceuticals must write the word "PHRM" in Item 13 of EPA Form 8700-22.
- (b) A healthcare facility or reverse distributor that exports non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals is subject to **40 CFR Part 262 subpart H**.
- (c) Any person that imports non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals is subject to **40 CFR Part 262 subpart H**. A healthcare facility or reverse distributor may not accept imported non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals unless they have a permit or interim status that allows them to accept hazardous waste from off site.

§ 7-1010 SHIPPING POTENTIALLY CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS FROM A HEALTHCARE FACILITY OR A REVERSE DISTRIBUTOR TO A REVERSE DISTRIBUTOR

- (a) A healthcare facility or a reverse distributor who transports or offers for transport potentially creditable hazardous waste pharmaceuticals off-site to a reverse distributor

must comply with all applicable U.S. Department of Transportation regulations in **49 CFR Part 171 through 180** for any potentially creditable hazardous waste pharmaceutical that meets the definition of hazardous material in **49 CFR § 171.8**. For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR Part 262. Because a potentially creditable hazardous waste pharmaceutical does not require a manifest, it is not considered hazardous waste under the Department of Transportation regulations.

- (b) Upon receipt of each shipment of potentially creditable hazardous waste pharmaceuticals, the receiving reverse distributor must provide confirmation (paper or electronic) to the healthcare facility or reverse distributor that initiated the shipment that the shipment of potentially creditable hazardous waste pharmaceuticals has arrived at its destination and is under the custody and control of the reverse distributor.
- (c) If a healthcare facility or reverse distributor initiates a shipment of potentially creditable hazardous waste pharmaceuticals to a reverse distributor and does not receive delivery confirmation within 35 calendar days from the date that the shipment of potentially creditable hazardous waste pharmaceuticals was sent, the healthcare facility or reverse distributor that initiated the shipment must contact the carrier and the intended recipient (i.e., the reverse distributor) promptly to report that the delivery confirmation was not received and to determine the status of the potentially creditable hazardous waste pharmaceuticals.
- (d) A healthcare facility or reverse distributor that sends potentially creditable hazardous waste pharmaceuticals to a foreign destination must comply with the applicable sections of **40 CFR Part 262 subpart H**, except the manifesting requirement of **40 CFR § 262.83(c)**, in addition to subsections (a) through (c) of this section.
- (e) Any person that imports potentially creditable hazardous waste pharmaceuticals into the United States is subject to **subsections (a) through (c) of this section** in lieu of **40 CFR Part 262 subpart H**. Immediately after the potentially creditable hazardous waste pharmaceuticals enter the United States, they are subject to all applicable requirements of this subchapter.

§ 7-1011 STANDARDS FOR THE MANAGEMENT OF POTENTIALLY CREDITABLE HAZARDOUS WASTE PHARMACEUTICALS AND EVALUATED HAZARDOUS WASTE PHARMACEUTICALS AT REVERSE DISTRIBUTORS

A reverse distributor may accept potentially creditable hazardous waste pharmaceuticals from off site and accumulate potentially creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals on site without a hazardous waste permit or without having interim status, provided that it complies with the requirements of **40 CFR § 266.510**.

APPENDIX I

Hazardous Wastes from Specific Sources

The following wastes are referred to in § 7-212 and are hazardous wastes from specific sources.

| Industry | Hazardous Waste | Hazard Code |
|----------------------------|---|-------------|
| EPA Hazardous Waste Code | | |
| Wood preservation: | | |
| K001 | Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol. | (T) |
| Inorganic pigments: | | |
| K002 | Wastewater treatment sludge from the production of chrome yellow and orange pigments. | (T) |
| K003 | Wastewater treatment sludge from the production of molybdate orange pigments. | (T) |
| K004 | Wastewater treatment sludge from the production of zinc yellow pigments. | (T) |
| K005 | Wastewater treatment sludge from the production of chrome green pigments. | (T) |
| K006 | Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated). | (T) |
| K007 | Wastewater treatment sludge from the production of iron blue pigments. | (T) |
| K008 | Oven residue from the production of chrome oxide green pigments. | (T) |
| Organic chemicals: | | |
| K009 | Distillation bottoms from the production of acetaldehyde from ethylene. | (T) |
| K010 | Distillation side cuts from the production of acetaldehyde from ethylene. | (T) |
| K011 | Bottom stream from the wastewater stripper in the production of acrylonitrile. | (R, T) |
| K013 | Bottom stream from the acetonitrile column in the production of acrylonitrile. | (R, T) |
| K014 | Bottoms from the acetonitrile purification column in the production of acrylonitrile. | (T) |
| K015 | Still bottoms from the distillation of benzyl chloride. | (T) |
| K016 | Heavy ends or distillation residues from the production of carbon tetrachloride. | (T) |
| K017 | Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin. | (T) |
| K018 | Heavy ends from the fractionation column in ethyl chloride production. | (T) |

| Industry | Hazardous Waste | Hazard Code |
|--------------------------|---|-------------|
| EPA Hazardous Waste Code | | |
| K019 | Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production. | (T) |
| K020 | Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production. | (T) |
| K021 | Aqueous spent antimony catalyst waste from fluoromethanes production. | (T) |
| K022 | Distillation bottom tars from the production of phenol/acetone from cumene. | (T) |
| K023 | Distillation light ends from the production of phthalic anhydride from naphthalene. | (T) |
| K024 | Distillation bottoms from the production of phthalic anhydride from naphthalene. | (T) |
| K025 | Distillation bottoms from the production of nitrobenzene by the nitration of benzene. | (T) |
| K026 | Stripping still tails from the production of methylethylpyridines. | (T) |
| K027 | Centrifuge and distillation residues from toluene diisocyanate production. | (R, T) |
| K028 | Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane. | (T) |
| K029 | Waste from the product steam stripper in the production of 1,1,1-trichloroethane. | (T) |
| K030 | Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene. | (T) |
| K083 | Distillation bottoms from aniline production. | (T) |
| K085 | Distillation or fractionation column bottoms from the production of chlorobenzenes. | (T) |
| K093 | Distillation light ends from the production of phthalic anhydride from ortho-xylene. | (T) |
| K094 | Distillation bottoms from the production of phthalic anhydride from ortho-xylene. | (T) |
| K095 | Distillation bottoms from the production of 1,1,1-trichloroethane. | (T) |
| K096 | Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane. | (T) |
| K103 | Process residues from aniline extraction from the production of aniline. | (T) |
| K104 | Combined wastewater streams generated from nitrobenzene/aniline production. | (T) |
| K105 | Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes. | (T) |
| K107 | Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. | (C,T) |

| Industry | | |
|--------------------------|---|-------------|
| EPA Hazardous Waste Code | Hazardous Waste | Hazard Code |
| K108 | Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. | (I,T) |
| K109 | Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. | (T) |
| K110 | Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. | (T) |
| K111 | Product washwaters from the production of dinitrotoluene via nitration of toluene. | (C,T) |
| K112 | Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene. | (T) |
| K113 | Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. | (T) |
| K114 | Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. | (T) |
| K115 | Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene. | (T) |
| K116 | Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine. | (T) |
| K117 | Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene. | (T) |
| K118 | Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. | (T) |
| K136 | Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene. | (T) |
| K149 | Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.) | (T) |
| K150 | Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. | (T) |
| K151 | Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. | (T) |
| K156 | Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.) | (T) |

| Industry | | |
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| EPA Hazardous Waste Code | Hazardous Waste | Hazard Code |
| K157 | Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.). | (T) |
| K158 | Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.). | (T) |
| K159 | Organics from the treatment of thiocarbamate wastes. | (T) |
| K161 | Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.). | (R, T) |
| K174 | Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) they are disposed of in a subtitle C or non-hazardous landfill licensed or permitted by the state or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Respondents in any action brought to enforce the requirements of subtitle C must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met. | (T) |
| K175 | Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process. | (T) |

| Industry | | |
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| EPA Hazardous Waste Code | Hazardous Waste | Hazard Code |
| K181 | Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in 40 CFR § 261.32(c) that are equal to or greater than the corresponding 40 CFR § 261.32(c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are: (i) disposed in a Subtitle D landfill unit subject to the design criteria in 40 CFR § 258.40, (ii) disposed in a Subtitle C landfill unit subject to either 40 CFR § 264.301 or § 265.301, (iii) disposed in other Subtitle D landfill units that meet the design criteria in 40 CFR § 258.40, § 264.301, or § 265.301, or (iv) treated in a combustion unit that is permitted under Subtitle C, or an onsite combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in 40 CFR § 261.32(b)(1). 40 CFR § 261.32(d) describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as hazardous under 40 CFR §§ 261.21-261.24 and 40 CFR 261.31-261.33 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met. | (T) |
| Inorganic chemicals: | | |
| K071 | Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used. | (T) |
| K073 | Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production. | (T) |
| K106 | Wastewater treatment sludge from the mercury cell process in chlorine production. | (T) |
| K176 | Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide). | (E) |
| K177 | Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide). | (T) |
| K178 | Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process. | (T) |
| Pesticides: | | |
| K031 | By-product salts generated in the production of MSMA and cacodylic acid. | (T) |
| K032 | Wastewater treatment sludge from the production of chlordane. | (T) |
| K033 | Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. | (T) |
| K034 | Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. | (T) |
| K035 | Wastewater treatment sludges generated in the production of creosote. | (T) |

| Industry | Hazardous Waste | Hazard Code |
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| EPA Hazardous Waste Code | | |
| K036 | Still bottoms from toluene reclamation distillation in the production of disulfoton. | (T) |
| K037 | Wastewater treatment sludges from the production of disulfoton. | (T) |
| K038 | Wastewater from the washing and stripping of phorate production. | (T) |
| K039 | Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. | (T) |
| K040 | Wastewater treatment sludge from the production of phorate. | (T) |
| K041 | Wastewater treatment sludge from the production of toxaphene. | (T) |
| K042 | Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T. | (T) |
| K043 | 2,6-Dichlorophenol waste from the production of 2,4-D. | (T) |
| K097 | Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. | (T) |
| K098 | Untreated process wastewater from the production of toxaphene. | (T) |
| K099 | Untreated wastewater from the production of 2,4-D. | (T) |
| K123 | Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt. | (T) |
| K124 | Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts. | (C, T) |
| K125 | Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts. | (T) |
| K126 | Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts. | (T) |
| K131 | Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide. | (C,T) |
| K132 | Spent absorbent and wastewater separator solids from the production of methyl bromide. | (T) |
| Explosives: | | |
| K044 | Wastewater treatment sludges from the manufacturing and processing of explosives. | (R) |
| K045 | Spent carbon from the treatment of wastewater containing explosives. | (R) |
| K046 | Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds. | (T) |
| K047 | Pink/red water from TNT operations. | (R) |
| Petroleum refining: | | |

| Industry | Hazardous Waste | Hazard Code |
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| EPA Hazardous Waste Code | | |
| K048 | Dissolved air flotation (DAF) float from the petroleum refining industry. | (T) |
| K049 | Slop oil emulsion solids from the petroleum refining industry. | (T) |
| K050 | Heat exchanger bundle cleaning sludge from the petroleum refining industry. | (T) |
| K051 | API separator sludge from the petroleum refining industry. | (T) |
| K052 | Tank bottoms (leaded) from the petroleum refining industry. | (T) |
| K169 | Crude oil storage tank sediment from petroleum refining operations. | (T) |
| K170 | Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations. | (T) |
| K171 | Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). | (I, T) |
| K172 | Spent Hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). | (I, T) |
| Iron and steel: | | |
| K061 | Emission control dust/sludge from the primary production of steel in electric furnaces. | (T) |
| K062 | Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332). | (C,T) |
| Primary aluminum: | | |
| K088 | Spent potliners from primary aluminum reduction. | (T) |
| Secondary lead: | | |
| K069 | Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the Federal Register). | (T) |
| K100 | Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. | (T) |
| Veterinary pharmaceuticals: | | |
| K084 | Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. | (T) |
| K101 | Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. | (T) |

| Industry | | |
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| EPA Hazardous Waste Code | Hazardous Waste | Hazard Code |
| K102 | Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds. | (T) |
| Ink formulation: | | |
| K086 | Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead. | (T) |
| Coking: | | |
| K060 | Ammonia still lime sludge from coking operations. | (T) |
| K087 | Decanter tank tar sludge from coking operations. | (T) |
| K141 | Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations). | (T) |
| K142 | Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal. | (T) |
| K143 | Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal. | (T) |
| K144 | Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal. | (T) |
| K145 | Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal. | (T) |
| K147 | Tar storage tank residues from coal tar refining. | (T) |
| K148 | Residues from coal tar distillation, including but not limited to, still bottoms. | (T) |

APPENDIX II

Hazardous Constituents

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|------------------------------|---|-------------------------------|-----------------------------|
| A2213 | Ethanimidothioic acid, 2- (dimethylamino) -N-hydroxy-2-oxo-, methyl ester | 30558-43-1 | U394 |
| Acetonitrile | Same | 75-05-8 | U003 |
| Acetophenone | Ethanone, 1-phenyl- | 98-86-2 | U004 |
| 2-Acetylaminefluarone | Acetamide, N-9H-fluoren-2-yl- | 53-96-3 | U005 |
| Acetyl chloride | Same | 75-36-5 | U006 |
| 1-Acetyl-2-thiourea | Acetamide, N-(aminothioxomethyl)- | 591-08-2 | P002 |
| Acrolein | 2-Propenal | 107-02-8 | P003 |
| Acrylamide | 2-Propenamide | 79-06-1 | U007 |
| Acrylonitrile | 2-Propenenitrile | 107-13-1 | U009 |
| Aflatoxins | Same | 1402-68-2 | |
| Aldicarb | Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime | 116-06-3 | P070 |
| Aldicarb sulfone | Propanal, 2-methyl-2-(methylsulfonyl) -, O- [(methylamino) carbonyl] oxime | 1646-88-4 | P203 |
| Aldrin | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)- | 309-00-2 | P004 |
| Allyl alcohol | 2-Propen-1-ol | 107-18-6 | P005 |
| Allyl chloride | 1-Propane, 3-chloro | 107-05-1 | |
| Aluminum phosphide | Same | 20859-73-8 | P006 |
| 4-Aminobiphenyl | [1,1'-Biphenyl]-4-amine | 92-67-1 | |
| 5-(Aminomethyl)-3-isoxazolol | 3(2H)-Isoxazolone, 5-(aminomethyl)- | 2763-96-4 | P007 |
| 4-Aminopyridine | 4-Pyridinamine | 504-24-5 | P008 |
| Amitrole | 1H-1,2,4-Triazol-3-amine | 61-82-5 | U011 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|--|------------------------|----------------------|
| Ammonium vanadate | Vanadic acid, ammonium salt | 7803-55-6 | P119 |
| Aniline | Benzenamine | 62-53-3 | U012 |
| o-Anisidine (2-methoxyaniline) | Benzenamine, 2-Methoxy- | 90-04-0 | |
| Antimony | Same | 7440-36-0 | |
| Antimony compounds, N.O.S. ¹ | | | |
| Aramite | Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester | 140-57-8 | |
| Arsenic | Same | 7440-38-2 | |
| Arsenic compounds, N.O.S. ¹ | | | |
| Arsenic acid | Arsenic acid H ₃ AsO ₄ | 7778-39-4 | P010 |
| Arsenic pentoxide | Arsenic oxide As ₂ O ₅ | 1303-28-2 | P011 |
| Arsenic trioxide | Arsenic oxide As ₂ O ₃ | 1327-53-3 | P012 |
| Auramine | Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl | 492-80-8 | U014 |
| Azaserine | L-Serine, diazoacetate (ester) | 115-02-6 | U015 |
| Barban | Carbamic acid, (3-chlorophenyl) -, 4-chloro-2-butynyl ester | 101-27-9 | U280 |
| Barium | Same | 7440-39-3 | |
| Barium compounds, N.O.S. ¹ | | | |
| Barium cyanide | Same | 542-62-1 | P013 |
| Bendiocarb | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate | 22781-23-3 | U278 |
| Bendiocarb phenol | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, | 22961-82-6 | U364 |
| Benomyl | Carbamic acid, [1- [(butylamino) carbonyl]- 1H-benzimidazol-2-yl] -, methyl ester | 17804-35-2 | U271 |
| Benz[c]acridine | Same | 225-51-4 | U016 |
| Benz[a]anthracene | Same | 56-55-3 | U ^c |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|---|------------------------|----------------------|
| Benzal chloride | Benzene, (dichloromethyl)- | 98-87-3 | U017 |
| Benzene | Same | 71-43-2 | U019 |
| Benzearsonic acid | Arsonic acid, phenyl- | 98-05-5 | |
| Benzidine | [1,1'-Biphenyl]-4,4'-diamine | 92-87-5 | U021 |
| Benzo[b]fluoranthene | Benz[e]acephenanthrylene | 205-99-2 | |
| Benzo[j]fluoranthene | Same | 205-82-3 | |
| Benzo(k)fluoranthene | Same | 207-08-9 | |
| Benzo[a]pyrene | Same | 50-32-8 | U022 |
| p-Benzoquinone | 2,5-Cyclohexadiene-1,4-dione | 106-51-4 | U197 |
| Benzotrichloride | Benzene, (trichloromethyl)- | 98-07-7 | U023 |
| Benzyl chloride | Benzene, (chloromethyl)- | 100-44-7 | P028 |
| Beryllium powder | Same | 7440-41-7 | P015 |
| Beryllium compounds, N.O.S. ¹ | | | |
| Bis(pentamethylene)-thiuram tetrasulfide | Piperidine, 1,1[prime]-(tetrathiodicarbonothioyl)-bis- | 120-54-7 | |
| Bromoacetone | 2-Propanone, 1-bromo- | 598-31-2 | P017 |
| Bromoform | Methane, tribromo- | 75-25-2 | U225 |
| 4-Bromophenyl phenyl ether | Benzene, 1-bromo-4-phenoxy- | 101-55-3 | U030 |
| Brucine | Strychnidin-10-one, 2,3-dimethoxy- | 357-57-3 | P018 |
| Butyl benzyl phthalate | 1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester | 85-68-7 | |
| Butylate | Carbamothioic acid, bis(2-methylpropyl)-, S-ethyl ester | 2008-41-5 | |
| Cacodylic acid | Arsinic acid, dimethyl- | 75-60-5 | U136 |
| Cadmium | Same | 7440-43-9 | |
| Cadmium compounds, N.O.S. ¹ | | | |
| Calcium chromate | Chromic acid H ₂ CrO ₄ , calcium salt | 13765-19-0 | U032 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|---|------------------------|----------------------|
| Calcium cyanide | Calcium cyanide Ca(CN) ₂ | 592-01-8 | P021 |
| Carbaryl | 1-Naphthalenol, methylcarbamate | 63-25-2 | U279 |
| Carbendazim | Carbamic acid, 1H-benzimidazol-2-yl, methyl ester | 10605-21-7 | U372 |
| Carbofuran | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate | 1563-66-2 | P127 |
| Carbofuran phenol | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- | 1563-38-8 | U367 |
| Carbon disulfide | Same | 75-15-0 | P022 |
| Carbon oxyfluoride | Carbonic difluoride | 353-50-4 | U033 |
| Carbon tetrachloride | Methane, tetrachloro- | 56-23-5 | U211 |
| Carbosulfan | Carbamic acid, [(dibutylamino) thio] methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester | 55285-14-8 | P189 |
| Chloral | Acetaldehyde, trichloro- | 75-87-6 | U034 |
| Chlorambucil | Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]- | 305-03-3 | U035 |
| Chlordane | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- | 57-74-9 | U036 |
| Chlordane (alpha and gamma isomers) | | | U036 |
| Chlorinated benzenes, N.O.S. ¹ | | | |
| Chlorinated ethane, N.O.S. ¹ | | | |
| Chlorinated fluorocarbons, N.O.S. ¹ | | | |
| Chlorinated naphthalene, N.O.S. ¹ | | | |
| Chlorinated phenol, N.O.S. ¹ | | | |
| Chlornaphazin | Naphthalenamine, N,N'-bis(2-chloroethyl)- | 494-03-1 | U026 |
| Chloroacetaldehyde | Acetaldehyde, chloro- | 107-20-0 | P023 |
| Chloroalkyl ethers, N.O.S. ¹ | | | |
| p-Chloroaniline | Benzenamine, 4-chloro- | 106-47-8 | P024 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|---|------------------------|----------------------|
| Chlorobenzene | Benzene, chloro- | 108-90-7 | U037 |
| Chlorobenzilate | Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester | 510-15-6 | U038 |
| p-Chloro-m-cresol | Phenol, 4-chloro-3-methyl- | 59-50-7 | U039 |
| 2-Chloroethyl vinyl ether | Ethene, (2-chloroethoxy)- | 110-75-8 | U042 |
| Chloroform | Methane, trichloro- | 67-66-3 | U044 |
| Chloromethyl methyl ether | Methane, chloromethoxy- | 107-30-2 | U046 |
| beta-Chloronaphthalene | Naphthalene, 2-chloro- | 91-58-7 | U047 |
| o-Chlorophenol | Phenol, 2-chloro- | 95-57-8 | U048 |
| 1-(o-Chlorophenyl)thiourea | Thiourea, (2-chlorophenyl)- | 5344-82-1 | P026 |
| Chloroprene | 1,3-Butadiene, 2-chloro- | 126-99-8 | |
| 3-Chloropropionitrile | Propanenitrile, 3-chloro- | 542-76-7 | P027 |
| Chromium | Same | 7440-47-3 | |
| Chromium compounds, N.O.S. ¹ | | | |
| Chrysene | Same | 218-01-9 | U050 |
| Citrus red No. 2 | 2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]- | 6358-53-8 | |
| Coal tar creosote | Same | 8007-45-2 | |
| Copper cyanide | Copper cyanide CuCN | 544-92-3 | P029 |
| Copper dimethyldithiocarbamate | Copper, bis (dimethylcarbamodithioato-S,S')-, | 137-29-1 | |
| Creosote | Same | | U051 |
| p-Cresidine | 2-Methoxy-5-methylbenzenamine | 120-71-8 | |
| Cresol (Cresylic acid) | Phenol, methyl- | 1319-77-3 | U052 |
| Crotonaldehyde | 2-Butenal | 4170-30-3 | U053 |
| m-Cumenyl methylcarbamate | Phenol, 3-(methylethyl)-, methyl carbamate | 64-00-6 | P202 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|--|------------------------|----------------------|
| Cyanides (soluble salts and complexes) N.O.S. ¹ | | | P030 |
| Cyanogen | Ethanedinitrile | 460-19-5 | P031 |
| Cyanogen bromide | Cyanogen bromide (CN)Br | 506-68-3 | U246 |
| Cyanogen chloride | Cyanogen chloride (CN)Cl | 506-77-4 | P033 |
| Cycasin | beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl | 14901-08-7 | |
| Cycloate | Carbamothioic acid, cyclohexylethyl-, S-ethyl ester | 1134-23-2 | |
| 2-Cyclohexyl-4,6-dinitrophenol | Phenol, 2-cyclohexyl-4,6-dinitro- | 131-89-5 | P034 |
| Cyclophosphamide | 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide | 50-18-0 | U058 |
| 2,4-D | Acetic acid, (2,4-dichlorophenoxy)- | 94-75-7 | U240 |
| 2,4-D, salts, esters | | | U240 |
| Daunomycin | 5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxohexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)- | 20830-81-3 | U059 |
| Dazomet | 2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl | 533-74-4 | |
| DDD | Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro- | 72-54-8 | U060 |
| DDE | Benzene, 1,1'-(dichloroethenylidene)bis[4-chloro- | 72-55-9 | |
| DDT | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- | 50-29-3 | U061 |
| Diallate | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester | 2303-16-4 | U062 |
| Dibenz[a,h]acridine | Same | 226-36-8 | |
| Dibenz[a,j]acridine | Same | 224-42-0 | |
| Dibenz[a,h]anthracene | Same | 53-70-3 | U063 |
| 7H-Dibenzo[c,g]carbazole | Same | 194-59-2 | |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---------------------------------------|---|------------------------|----------------------|
| Dibenzo[a,e]pyrene | Naphtho[1,2,3,4-def]chrysene | 192-65-4 | |
| Dibenzo[a,h]pyrene | Dibenzo[b,def]chrysene | 189-64-0 | |
| Dibenzo[a,i]pyrene | Benzo[rst]pentaphene | 189-55-9 | U064 |
| 1,2-Dibromo-3-chloropropane | Propane, 1,2-dibromo-3-chloro- | 96-12-8 | U066 |
| Dibutyl phthalate | 1,2-Benzenedicarboxylic acid, dibutyl ester | 84-74-2 | U069 |
| o-Dichlorobenzene | Benzene, 1,2-dichloro- | 95-50-1 | U070 |
| m-Dichlorobenzene | Benzene, 1,3-dichloro- | 541-73-1 | U071 |
| p-Dichlorobenzene | Benzene, 1,4-dichloro- | 106-46-7 | U072 |
| Dichlorobenzene, N.O.S. ¹ | Benzene, dichloro- | 25321-22-6 | |
| 3,3'-Dichlorobenzidine | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro- | 91-94-1 | U073 |
| 1,4-Dichloro-2-butene | 2-Butene, 1,4-dichloro- | 764-41-0 | U074 |
| Dichlorodifluoromethane | Methane, dichlorodifluoro- | 75-71-8 | U075 |
| Dichloroethylene, N.O.S. ¹ | Dichloroethylene | 25323-30-2 | |
| 1,1-Dichloroethylene | Ethene, 1,1-dichloro- | 75-35-4 | U078 |
| 1,2-Dichloroethylene | Ethene, 1,2-dichloro-, (E)- | 156-60-5 | U079 |
| Dichloroethyl ether | Ethane, 1,1'-oxybis[2-chloro- | 111-44-4 | U025 |
| Dichloroisopropyl ether | Propane, 2,2'-oxybis[2-chloro- | 108-60-1 | U027 |
| Dichloromethoxy ethane | Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro- | 111-91-1 | U024 |
| Dichloromethyl ether | Methane, oxybis[chloro- | 542-88-1 | P016 |
| 2,4-Dichlorophenol | Phenol, 2,4-dichloro- | 120-83-2 | U081 |
| 2,6-Dichlorophenol | Phenol, 2,6-dichloro- | 87-65-0 | U082 |
| Dichlorophenylarsine | Arsonous dichloride, phenyl- | 696-28-6 | P036 |
| Dichloropropane, N.O.S. ¹ | Propane, dichloro- | 26638-19-7 | |
| Dichloropropanol, N.O.S. ¹ | Propanol, dichloro- | 26545-73-3 | |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|--|------------------------|----------------------|
| Dichloropropene, N.O.S. ¹ | 1-Propene, dichloro- | 26952-23-8 | |
| 1,3-Dichloropropene | 1-Propene, 1,3-dichloro- | 542-75-6 | U084 |
| Dieldrin | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)- | 60-57-1 | P037 |
| 1,2:3,4-Diepoxbutane | 2,2'-Bioxirane | 1464-53-5 | U085 |
| Diethylarsine | Arsine, diethyl- | 692-42-2 | P038 |
| Diethylene glycol, dicarbamate | Ethanol, 2,2'-oxybis-, dicarbamate | 5952-26-1 | U395 |
| 1,4-Diethyleneoxide | 1,4-Dioxane | 123-91-1 | U108 |
| Diethylhexyl phthalate | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester | 117-81-7 | U028 |
| N,N'-Diethylhydrazine | Hydrazine, 1,2-diethyl- | 1615-80-1 | U086 |
| O,O-Diethyl S-methyl dithiophosphate | Phosphorodithioic acid, O,O-diethyl S-methyl ester | 3288-58-2 | U087 |
| Diethyl-p-nitrophenyl phosphate | Phosphoric acid, diethyl 4-nitrophenyl ester | 311-45-5 | P041 |
| Diethyl phthalate | 1,2-Benzenedicarboxylic acid, diethyl ester | 84-66-2 | U088 |
| O,O-Diethyl O-pyrazinyl phosphorothioate | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester | 297-97-2 | P040 |
| Diethylstilbesterol | Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)- | 56-53-1 | U089 |
| Dihydrosafrole | 1,3-Benzodioxole, 5-propyl- | 94-58-6 | U090 |
| Diisopropylfluorophosphate (DFP) | Phosphorofluoridic acid, bis(1-methylethyl) ester | 55-91-4 | P043 |
| Dimethoate | Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester | 60-51-5 | P044 |
| 3,3'-Dimethoxybenzidine | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy- | 119-90-4 | U091 |
| p-Dimethylaminoazobenzene | Benzenamine, N,N-dimethyl-4-(phenylazo)- | 60-11-7 | U093 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|---|------------------------|----------------------|
| 2,4-Dimethylaniline (2,4-xylidine) | Benzenamine, 2,4-dimethyl- | 95-68-1 | |
| 7,12-Dimethylbenz[a]anthracene | Benz[a]anthracene, 7,12-dimethyl- | 57-97-6 | U094 |
| 3,3'-Dimethylbenzidine | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl- | 119-93-7 | U095 |
| Dimethylcarbamoyl chloride | Carbamic chloride, dimethyl- | 79-44-7 | U097 |
| 1,1-Dimethylhydrazine | Hydrazine, 1,1-dimethyl- | 57-14-7 | U098 |
| 1,2-Dimethylhydrazine | Hydrazine, 1,2-dimethyl- | 540-73-8 | U099 |
| alpha,alpha-Dimethylphenethylamine | Benzeneethanamine, alpha,alpha-dimethyl- | 122-09-8 | P046 |
| 2,4-Dimethylphenol | Phenol, 2,4-dimethyl- | 105-67-9 | U101 |
| Dimethyl phthalate | 1,2-Benzenedicarboxylic acid, dimethyl ester | 131-11-3 | U102 |
| Dimethyl sulfate | Sulfuric acid, dimethyl ester | 77-78-1 | U103 |
| Dimetilan | Carbamic acid, dimethyl-, 1-[(dimethylamino) carbonyl]-5-methyl-1H-pyrazol-3-yl ester | 644-64-4 | P191 |
| Dinitrobenzene, N.O.S. ¹ | Benzene, dinitro- | 25154-54-5 | |
| 4,6-Dinitro-o-cresol | Phenol, 2-methyl-4,6-dinitro- | 534-52-1 | P047 |
| 4,6-Dinitro-o-cresol salts | | | P047 |
| 2,4-Dinitrophenol | Phenol, 2,4-dinitro- | 51-28-5 | P048 |
| 2,4-Dinitrotoluene | Benzene, 1-methyl-2,4-dinitro- | 121-14-2 | U105 |
| 2,6-Dinitrotoluene | Benzene, 2-methyl-1,3-dinitro- | 606-20-2 | U106 |
| Dinoseb | Phenol, 2-(1-methylpropyl)-4,6-dinitro- | 88-85-7 | P020 |
| Di-n-octyl phthalate | 1,2-Benzenedicarboxylic acid, dioctyl ester | 117-84-0 | U017 |
| Diphenylamine | Benzenamine, N-phenyl- | 122-39-4 | |
| 1,2-Diphenylhydrazine | Hydrazine, 1,2-diphenyl- | 122-66-7 | U109 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|--|------------------------|----------------------|
| Di-n-propylnitrosamine | 1-Propanamine, N-nitroso-N-propyl- | 621-64-7 | U111 |
| Disulfiram | Thioperoxydicarbonic diamide, tetraethyl | 97-77-8 | |
| Disulfoton | Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester | 298-04-4 | P039 |
| Dithiobiuret | Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH | 541-53-7 | P049 |
| Endosulfan | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide | 115-29-7 | P050 |
| Endothall | 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid | 145-73-3 | P088 |
| Endrin | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2beta,3alpha,6alpha,6beta,7beta,7aalpha)- | 72-20-8 | P051 |
| Endrin metabolites | | | P051 |
| Epichlorohydrin | Oxirane, (chloromethyl)- | 106-89-8 | U041 |
| Epinephrine | 1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)- | 51-43-4 | P042 |
| EPTC | Carbamodithioic acid, dipropyl-, S-ethyl ester | 759-94-4 | |
| Ethyl carbamate (urethane) | Carbamic acid, ethyl ester | 51-79-6 | U238 |
| Ethyl cyanide | Propanenitrile | 107-12-0 | P101 |
| Ethyl Ziram | Zinc, bis(diethylcarbamodithioato-S,S')- | 14324-55-1 | |
| Ethylenebisdithiocarbamic acid | Carbamodithioic acid, 1,2-ethanediylbis- | 111-54-6 | U114 |
| Ethylenebisdithiocarbamic acid, salts and esters | | | U114 |
| Ethylene dibromide | Ethane, 1,2-dibromo- | 106-93-4 | U067 |
| Ethylene dichloride | Ethane, 1,2-dichloro- | 107-06-2 | U077 |
| Ethylene glycol monoethyl ether | Ethanol, 2-ethoxy- | 110-80-5 | U359 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|-----------------------------------|--|------------------------|----------------------|
| Ethyleneimine | Aziridine | 151-56-4 | P054 |
| Ethylene oxide | Oxirane | 75-21-8 | U115 |
| Ethylenethiourea | 2-Imidazolidinethione | 96-45-7 | U116 |
| Ethylidene dichloride | Ethane, 1,1-dichloro- | 75-34-3 | U076 |
| Ethyl methacrylate | 2-Propenoic acid, 2-methyl-, ethyl ester | 97-63-2 | U118 |
| Ethyl methanesulfonate | Methanesulfonic acid, ethyl ester | 62-50-0 | U119 |
| Famphur | Phosphorothioic acid, O-[4- [(dimethylamino)sulfonyl]phenyl] O,O- dimethyl ester | 52-85-7 | P097 |
| Ferbam | Iron, tris(dimethylcarbamodithioato-S,S')-, | 14484-64-1 | |
| Fluoranthene | Same | 206-44-0 | U120 |
| Fluorine | Same | 7782-41-4 | P056 |
| Fluoroacetamide | Acetamide, 2-fluoro- | 640-19-7 | P057 |
| Fluoroacetic acid, sodium salt | Acetic acid, fluoro-, sodium salt | 62-74-8 | P058 |
| Formaldehyde | Same | 50-00-0 | U122 |
| Formetanate hydrochloride | Methanimidamide, N,N-dimethyl-N[prime]-[3-[[[(methylamino) carbonyl]oxy]phenyl]-, monohydrochloride | 23422-53-9 | P198 |
| Formic acid | Same | 64-18-6 | U123 |
| Formparanate | Methanimidamide, N,N-dimethyl-N[prime]-[2-methyl-4- [[[(methylamino) carbonyl]oxy]phenyl]- | 17702-57-7 | P197 |
| Glycidylaldehyde | Oxiranecarboxyaldehyde | 765-34-4 | U126 |
| Halomethanes, N.O.S. ¹ | | | |
| Heptachlor | 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- | 76-44-8 | P059 |
| Heptachlor epoxide | 2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexa- hydro-, (1aalpha,1bbeta,2aalpha,5aalpha, 5abeta,6beta,6aalpha)- | 1024-57-3 | |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|---|------------------------|----------------------|
| Heptachlor epoxide (alpha, beta, and gamma isomers) | | | |
| Heptachlorodibenzofurans | | | |
| Heptachlorodibenzo-p-dioxins | | | |
| Hexachlorobenzene | Benzene, hexachloro- | 118-74-1 | U127 |
| Hexachlorobutadiene | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- | 87-68-3 | U128 |
| Hexachlorocyclopentadiene | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- | 77-47-4 | U130 |
| Hexachlorodibenzo-p-dioxins | | | |
| Hexachlorodibenzofurans | | | |
| Hexachloroethane | Ethane, hexachloro- | 67-72-1 | U131 |
| Hexachlorophene | Phenol, 2,2'-methylenebis[3,4,6-trichloro- | 70-30-4 | U132 |
| Hexachloropropene | 1-Propene, 1,1,2,3,3,3-hexachloro- | 1888-71-7 | U243 |
| Hexaethyl tetraphosphate | Tetraphosphoric acid, hexaethyl ester | 757-58-4 | P062 |
| Hydrazine | Same | 302-01-2 | U133 |
| Hydrogen cyanide | Hydrocyanic acid | 74-90-8 | P063 |
| Hydrogen fluoride | Hydrofluoric acid | 7664-39-3 | U134 |
| Hydrogen sulfide | Hydrogen sulfide H ₂ S | 7783-06-4 | U135 |
| Indeno[1,2,3-cd]pyrene | Same | 193-39-5 | U137 |
| 3-Iodo-2-propynyl n-butylcarbamate | Carbamic acid, butyl-, 3-iodo-2-propynyl ester | 55406-53-6 | |
| Isobutyl alcohol | 1-Propanol, 2-methyl- | 78-83-1 | U140 |
| Isodrin | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro,(1alpha,4alpha,4abeta,5beta,8beta,-8abeta) - | 465-73-6 | P060 |
| Isolan | Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester | 119-38-0 | P192 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|---|------------------------|----------------------|
| Isosafrole | 1,3-Benzodioxole, 5-(1-propenyl)- | 120-58-1 | U141 |
| Kepone | 1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro- | 143-50-0 | U142 |
| Lasiocarpine | 2-Butenoic acid, 2-methyl-,7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]- | 303-34-4 | U143 |
| Lead | Same | 7439-92-1 | |
| Lead compounds, N.O.S. ¹ | | | |
| Lead acetate | Acetic acid, lead(2+) salt | 301-04-2 | U144 |
| Lead phosphate | Phosphoric acid, lead(2+) salt (2:3) | 7446-27-7 | U145 |
| Lead subacetate | Lead, bis(acetato-O)tetrahydroxytri- | 1335-32-6 | U146 |
| Lindane | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- | 58-89-9 | U129 |
| Maleic anhydride | 2,5-Furandione | 108-31-6 | U147 |
| Maleic hydrazide | 3,6-Pyridazinedione, 1,2-dihydro- | 123-33-1 | U148 |
| Malononitrile | Propanedinitrile | 109-77-3 | U149 |
| Manganese dimethyldithiocarbamate | Manganese, bis(dimethylcarbamo-dithioato-S,S[prime])- | 15339-36-3 | P196 |
| Melphalan | L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]- | 148-82-3 | U150 |
| Mercury | Same | 7439-97-6 | U151 |
| Mercury compounds, N.O.S. ¹ | | | |
| Mercury fulminate | Fulminic acid, mercury(2+) salt | 628-86-4 | P065 |
| Metam Sodium | Carbamodithioic acid, methyl-,monosodium salt | 137-42-8 | |
| Methacrylonitrile | 2-Propenenitrile, 2-methyl- | 126-98-7 | U152 |
| Methapyrilene | 1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- | 91-80-5 | U155 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|-------------------------------------|---|------------------------|----------------------|
| Methiocarb | Phenol, (3,5-dimethyl-4- (methylthio)-, methylcarbamate | 2032-65-7 | P199 |
| Methomyl | Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester | 16752-77-5 | P066 |
| Methoxychlor | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy- | 72-43-5 | U247 |
| Methyl bromide | Methane, bromo- | 74-83-9 | U029 |
| Methyl chloride | Methane, chloro- | 74-87-3 | U045 |
| Methyl chlorocarbonate | Carbonochloridic acid, methyl ester | 79-22-1 | U156 |
| Methyl chloroform | Ethane, 1,1,1-trichloro- | 71-55-6 | U226 |
| 3-Methylcholanthrene | Benz[j]aceanthrylene, 1,2-dihydro-3-methyl- | 56-49-5 | U157 |
| 4,4'-Methylenebis (2-chloroaniline) | Benzenamine, 4,4'-methylenebis[2-chloro- | 101-14-4 | U158 |
| Methylene bromide | Methane, dibromo- | 74-95-3 | U068 |
| Methylene chloride | Methane, dichloro- | 75-09-2 | U080 |
| Methyl ethyl ketone (MEK) | 2-Butanone | 78-93-3 | U159 |
| Methyl ethyl ketone peroxide | 2-Butanone, peroxide | 1338-23-4 | U160 |
| Methyl hydrazine | Hydrazine, methyl- | 60-34-4 | P068 |
| Methyl iodide | Methane, iodo- | 74-88-4 | U138 |
| Methyl isocyanate | Methane, isocyanato- | 624-83-9 | P064 |
| 2-Methylacetonitrile | Propanenitrile, 2-hydroxy-2-methyl- | 75-86-5 | P069 |
| Methyl methacrylate | 2-Propenoic acid, 2-methyl-, methyl ester | 80-62-6 | U162 |
| Methyl methanesulfonate | Methanesulfonic acid, methyl ester | 66-27-3 | |
| Methyl parathion | Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester | 298-00-0 | P071 |
| Methylthiouracil | 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo- | 56-04-2 | U164 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---------------------------------------|--|------------------------|----------------------|
| Metolcarb | Carbamic acid, methyl-, 3-methylphenyl ester | 1129-41-5 | P190 |
| Mexacarbate | Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester) | 315-18-4 | P128 |
| Mitomycin C | Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[aminocarbonyloxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha,8beta,8aalpha,8balpha)]- | 50-07-7 | U010 |
| MNNG | Guanidine, N-methyl-N'-nitro-N-nitroso- | 70-25-7 | U163 |
| Molinate | 1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester | 2212-67-1 | |
| Mustard gas | Ethane, 1,1'-thiobis[2-chloro- | 505-60-2 | |
| Naphthalene | Same | 91-20-3 | U165 |
| 1,4-Naphthoquinone | 1,4-Naphthalenedione | 130-15-4 | U166 |
| alpha-Naphthylamine | 1-Naphthalenamine | 134-32-7 | U167 |
| beta-Naphthylamine | 2-Naphthalenamine | 91-59-8 | U168 |
| alpha-Naphthylthiourea | Thiourea, 1-naphthalenyl- | 86-88-4 | P072 |
| Nickel | Same | 7440-02-0 | |
| Nickel compounds, N.O.S. ¹ | | | |
| Nickel carbonyl | Nickel carbonyl Ni(CO) ₄ , (T-4)- | 13463-39-3 | P073 |
| Nickel cyanide | Nickel cyanide Ni(CN) ₂ | 557-19-7 | P074 |
| Nicotine | Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- | 54-11-5 | P075 |
| Nicotine salts | | | P075 |
| Nitric oxide | Nitrogen oxide NO | 10102-43-9 | P076 |
| p-Nitroaniline | Benzenamine, 4-nitro- | 100-01-6 | P077 |
| Nitrobenzene | Benzene, nitro- | 98-95-3 | U169 |
| Nitrogen dioxide | Nitrogen oxide NO ₂ | 10102-44-0 | P078 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|---|------------------------|----------------------|
| Nitrogen mustard | Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl- | 51-75-2 | |
| Nitrogen mustard, hydro-chloride salt | | | |
| Nitrogen mustard N-oxide | Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide | 126-85-2 | |
| Nitrogen mustard, N-oxide, hydrochloride salt | | | |
| Nitroglycerin | 1,2,3-Propanetriol, trinitrate | 55-63-0 | P081 |
| p-Nitrophenol | Phenol, 4-nitro- | 100-02-7 | U170 |
| 2-Nitropropane | Propane, 2-nitro- | 79-46-9 | U171 |
| Nitrosamines, N.O.S. ¹ | | 35576-91-1 | |
| N-Nitrosodi-n-butylamine | 1-Butanamine, N-butyl-N-nitroso- | 924-16-3 | U172 |
| N-Nitrosodiethanolamine | Ethanol, 2,2'-(nitrosoimino)bis- | 1116-54-7 | U173 |
| N-Nitrosodiethylamine | Ethanamine, N-ethyl-N-nitroso- | 55-18-5 | U174 |
| N-Nitrosodimethylamine | Methanamine, N-methyl-N-nitroso- | 62-75-9 | P082 |
| N-Nitroso-N-ethylurea | Urea, N-ethyl-N-nitroso- | 759-73-9 | U176 |
| N-Nitrosomethylethylamine | Ethanamine, N-methyl-N-nitroso- | 10595-95-6 | |
| N-Nitroso-N-methylurea | Urea, N-methyl-N-nitroso- | 684-93-5 | U177 |
| N-Nitroso-N-methylurethane | Carbamic acid, methylnitroso-, ethyl ester | 615-53-2 | U178 |
| N-Nitrosomethylvinylamine | Vinylamine, N-methyl-N-nitroso- | 4549-40-0 | P084 |
| N-Nitrosomorpholine | Morpholine, 4-nitroso- | 59-89-2 | |
| N-Nitrosornicotine | Pyridine, 3-(1-nitroso-2-pyrrolidiny)-, (S)- | 16543-55-8 | |
| N-Nitrosopiperidine | Piperidine, 1-nitroso- | 100-75-4 | U179 |
| N-Nitrosopyrrolidine | Pyrrolidine, 1-nitroso- | 930-55-2 | U180 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|-----------------------------------|--|------------------------|----------------------|
| N-Nitrososarcosine | Glycine, N-methyl-N-nitroso- | 13256-22-9 | |
| 5-Nitro-o-toluidine | Benzenamine, 2-methyl-5-nitro- | 99-55-8 | U181 |
| Octachlorodibenzo-p-dioxin (OCDD) | 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin | 3268-87-9 | |
| Octachlorodibenzofuran (OCDF) | 1,2,3,4,6,7,8,9-Octachlorodibenofuran | 39001-02-0 | |
| Octamethylpyrophosphoramidate | Diphosphoramidate, octamethyl- | 152-16-9 | P085 |
| Osmium tetroxide | Osmium oxide OsO ₄ , (T-4)- | 20816-12-0 | P087 |
| Oxamyl | Ethanimidothioic acid, 2- (dimethylamino)-N- [[[methylamino]carbonyl]oxy]-2-oxo-, methyl ester | 23135-22-0 | P194 |
| Paraldehyde | 1,3,5-Trioxane, 2,4,6-trimethyl- | 123-63-7 | U182 |
| Parathion | Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester | 56-38-2 | P089 |
| Pebulate | Carbamothioic acid, butylethyl-, S-propyl ester | 1114-71-2 | |
| Pentachlorobenzene | Benzene, pentachloro- | 608-93-5 | U183 |
| Pentachlorodibenzo-p-dioxins | | | |
| Pentachlorodibenzofurans | | | |
| Pentachloroethane | Ethane, pentachloro- | 76-01-7 | U184 |
| Pentachloronitrobenzene (PCNB) | Benzene, pentachloronitro- | 82-68-8 | U185 |
| Pentachlorophenol | Phenol, pentachloro- | 87-86-5 | See F027 |
| Phenacetin | Acetamide, N-(4-ethoxyphenyl)- | 62-44-2 | U187 |
| Phenol | Same | 108-95-2 | U188 |
| 1,2-Phenylenediamine | 1,2-Benzenediamine | 95-54-5 | |
| 1,3-Phenylenediamine | 1,3-Benzenediamine | 108-45-2 | |
| Phenylenediamine | Benzenediamine | 25265-76-3 | |
| Phenylmercury acetate | Mercury, (acetato-O)phenyl- | 62-38-4 | P092 |
| Phenylthiourea | Thiourea, phenyl- | 103-85-5 | P093 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|--|------------------------|----------------------|
| Phosgene | Carbonic dichloride | 75-44-5 | P095 |
| Phosphine | Same | 7803-51-2 | P096 |
| Phorate | Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester | 298-02-2 | P094 |
| Phthalic acid esters, N.O.S. ¹ | | | |
| Phthalic anhydride | 1,3-Isobenzofurandione | 85-44-9 | U190 |
| Physostigmine | Pyrrolo[2,3-b]indol-5-01, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)- | 57-47-6 | P204 |
| Physostigmine salicylate | Benzoic acid, 2-hydroxy-, compd. with (3aS-cis) -1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5-yl methylcarbamate ester (1:1) | 57-64-7 | P188 |
| 2-Picoline | Pyridine, 2-methyl- | 109-06-8 | U191 |
| Polychlorinated biphenyls, N.O.S. ¹ | | | |
| Potassium cyanide | Potassium cyanide K(CN) | 151-50-8 | P098 |
| Potassium dimethyldithiocarbamate | Carbamodithioic acid, dimethyl, potassium salt | 128-03-0 | |
| Potassium n-hydroxymethyl-n-methyl-dithiocarbamate | Carbamodithioic acid, (hydroxymethyl)methyl-,monopotassium salt | 51026-28-9 | |
| Potassium n-methyldithiocarbamate | Carbamodithioic acid, methyl-monopotassium salt | 137-41-7 | |
| Potassium pentachlorophenate | Pentachlorophenol, potassium salt | 7778736 | None |
| Potassium silver cyanide | Argentate(1-), bis(cyano-C)-, potassium | 506-61-6 | P099 |
| Promecarb | Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate | 2631-37-0 | P201 |
| Pronamide | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)- | 23950-58-5 | U192 |
| 1,3-Propane sultone | 1,2-Oxathiolane, 2,2-dioxide | 1120-71-4 | U193 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|--|------------------------|----------------------|
| n-Propylamine | 1-Propanamine | 107-10-8 | U194 |
| Propargyl alcohol | 2-Propyn-1-ol | 107-19-7 | P102 |
| Propham | Carbamic acid, phenyl-, 1-methylethyl ester | 122-42-9 | U373 |
| Propoxur | Phenol, 2-(1-methylethoxy)-, methylcarbamate | 114-26-1 | U411 |
| Propylene dichloride | Propane, 1,2-dichloro- | 78-87-5 | U083 |
| 1,2-Propylenimine | Aziridine, 2-methyl- | 75-55-8 | P067 |
| Propylthiouracil | 4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo- | 51-52-5 | |
| Prosulfocarb | Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester | 52888-80-9 | U387 |
| Pyridine | Same | 110-86-1 | U196 |
| Reserpine | Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-smethyl ester, (3beta,16beta,17alpha,18beta,20alpha)- | 50-55-5 | U200 |
| Resorcinol | 1,3-Benzenediol | 108-46-3 | U201 |
| Safrole | 1,3-Benzodioxole, 5-(2-propenyl)- | 94-59-7 | U203 |
| Selenium | Same | 7782-49-2 | |
| Selenium compounds, N.O.S. ¹ | | | |
| Selenium dioxide | Selenious acid | 7783-00-8 | U204 |
| Selenium sulfide | Selenium sulfide SeS ₂ | 7488-56-4 | U205 |
| Selenium, tetrakis(dimethyl-dithiocarbamate) | Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid | 144-34-3 | |
| Selenourea | Same | 630-10-4 | P103 |
| Silver | Same | 7440-22-4 | |
| Silver compounds, N.O.S. ¹ | | | |
| Silver cyanide | Silver cyanide Ag(CN) | 506-64-9 | P104 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|--|------------------------|----------------------|
| Silvex (2,4,5-TP) | Propanoic acid, 2-(2,4,5-trichlorophenoxy)- | 93-72-1 | See F027 |
| Sodium cyanide | Sodium cyanide Na(CN) | 143-33-9 | P106 |
| Sodium dibutyldithiocarbamate | Carbamodithioic acid, dibutyl, sodium salt | 136-30-1 | |
| Sodium diethyldithiocarbamate | Carbamodithioic acid, diethyl-,sodium salt | 148-18-5 | |
| Sodium dimethyldithiocarbamate | Carbamodithioic acid, dimethyl-,sodium salt | 128-04-1 | |
| Sodium pentachlorophenate | Pentachlorophenol, sodium salt | 131522 | None |
| Streptozotocin | D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)carbonyl]amino]- | 18883-66-4 | U206 |
| Strychnine | Strychnidin-10-one | 57-24-9 | P108 |
| Strychnine salts | | | P108 |
| Sulfallate | Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester | 95-06-7 | |
| TCDD | Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- | 1746-01-6 | |
| Tetrabutylthiuram disulfide | Thioperoxydicarbonic diamide, tetrabutyl | 1634-02-2 | |
| 1,2,4,5-Tetrachlorobenzene | Benzene, 1,2,4,5-tetrachloro- | 95-94-3 | U207 |
| Tetrachlorodibenzo-p-dioxins | | | |
| Tetrachlorodibenzofurans | | | |
| Tetrachloroethane, N.O.S. ¹ | Ethane, tetrachloro-, N.O.S. | 25322-20-7 | |
| 1,1,1,2-Tetrachloroethane | Ethane, 1,1,1,2-tetrachloro- | 630-20-6 | U208 |
| 1,1,2,2-Tetrachloroethane | Ethane, 1,1,2,2-tetrachloro- | 79-34-5 | U209 |
| Tetrachloroethylene | Ethene, tetrachloro- | 127-18-4 | U210 |
| 2,3,4,6-Tetrachlorophenol | Phenol, 2,3,4,6-tetrachloro- | 58-90-2 | See F027 |
| 2,3,4,6-tetrachlorophenol, potassium salt | same | 53535276 | None |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---|--|------------------------|----------------------|
| 2,3,4,6-tetrachlorophenol, sodium salt | same | 25567559 | None |
| Tetraethyldithiopyrophosphate | Thiodiphosphoric acid, tetraethyl ester | 3689-24-5 | P109 |
| Tetraethyl lead | Plumbane, tetraethyl- | 78-00-2 | P110 |
| Tetraethyl pyrophosphate | Diphosphoric acid, tetraethyl ester | 107-49-3 | P111 |
| Tetramethylthiuram monosulfide | Bis(dimethylthiocarbonyl) sulfide | 97-74-5 | |
| Tetranitromethane | Methane, tetranitro- | 509-14-8 | P112 |
| Thallium | Same | 7440-28-0 | |
| Thallium compounds, N.O.S. ¹ | | | |
| Thallic oxide | Thallium oxide Tl ₂ O ₃ | 1314-32-5 | P113 |
| Thallium(I) acetate | Acetic acid, thallium(1+) salt | 563-68-8 | U214 |
| Thallium(I) carbonate | Carbonic acid, dithallium(1+) salt | 6533-73-9 | U215 |
| Thallium(I) chloride | Thallium chloride TlCl | 7791-12-0 | U216 |
| Thallium(I) nitrate | Nitric acid, thallium(1+) salt | 10102-45-1 | U217 |
| Thallium selenite | Selenious acid, dithallium(1+) salt | 12039-52-0 | P114 |
| Thallium(I) sulfate | Sulfuric acid, dithallium(1+) salt | 7446-18-6 | P115 |
| Thioacetamide | Ethanethioamide | 62-55-5 | U218 |
| Thiodicarb | Ethanimidothioic acid, N,N'- [(methylimino) carbonyloxy]] bis-, dimethyl ester | 59669-26-0 | U410 |
| Thiofanox | 2-Butanone, 3,3-dimethyl-1-(methylthio)-, 0-[(methylamino)carbonyl] oxime | 39196-18-4 | P045 |
| Thiomethanol | Methanethiol | 74-93-1 | U153 |
| Thiophanate-methyl | Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)] bis-, dimethyl ester | 23564-05-8 | U409 |
| Thiophenol | Benzenethiol | 108-98-5 | P014 |
| Thiosemicarbazide | Hydrazinecarbothioamide | 79-19-6 | P116 |
| Thiourea | Same | 62-56-6 | U219 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|---------------------------------------|--|------------------------|----------------------|
| Thiram | Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl- | 137-26-8 | U244 |
| Tirpate | 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl] oxime | 26419-73-8 | P185 |
| Toluene | Benzene, methyl- | 108-88-3 | U220 |
| Toluenediamine | Benzenediamine, ar-methyl- | 25376-45-8 | U221 |
| Toluene-2,4-diamine | 1,3-Benzenediamine, 4-methyl- | 95-80-7 | |
| Toluene-2,6-diamine | 1,3-Benzenediamine, 2-methyl- | 823-40-5 | |
| Toluene-3,4-diamine | 1,2-Benzenediamine, 4-methyl- | 496-72-0 | |
| Toluene diisocyanate | Benzene, 1,3-diisocyanatomethyl- | 26471-62-5 | U223 |
| o-Toluidine | Benzenamine, 2-methyl- | 95-53-4 | U328 |
| o-Toluidine hydrochloride | Benzenamine, 2-methyl-, hydrochloride | 636-21-5 | U222 |
| p-Toluidine | Benzenamine, 4-methyl- | 106-49-0 | U353 |
| Toxaphene | Same | 8001-35-2 | P123 |
| Triallate | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester | 2303-17-5 | U389 |
| 1,2,4-Trichlorobenzene | Benzene, 1,2,4-trichloro- | 120-82-1 | |
| 1,1,2-Trichloroethane | Ethane, 1,1,2-trichloro- | 79-00-5 | U227 |
| Trichloroethylene | Ethene, trichloro- | 79-01-6 | U228 |
| Trichloromethanethiol | Methanethiol, trichloro- | 75-70-7 | P118 |
| Trichloromonofluoromethane | Methane, trichlorofluoro- | 75-69-4 | U121 |
| 2,4,5-Trichlorophenol | Phenol, 2,4,5-trichloro- | 95-95-4 | See F027 |
| 2,4,6-Trichlorophenol | Phenol, 2,4,6-trichloro- | 88-06-2 | See F027 |
| 2,4,5-T | Acetic acid, (2,4,5-trichlorophenoxy)- | 93-76-5 | See F027 |
| Trichloropropane, N.O.S. ¹ | | 25735-29-9 | |
| 1,2,3-Trichloropropane | Propane, 1,2,3-trichloro- | 96-18-4 | |
| Triethylamine | Ethanamine, N,N-diethyl- | 121-44-8 | U404 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--|---|------------------------|----------------------|
| O,O,O-Triethyl phosphorothioate | Phosphorothioic acid, O,O,O-triethyl ester | 126-68-1 | |
| 1,3,5-Trinitrobenzene | Benzene, 1,3,5-trinitro- | 99-35-4 | U234 |
| Tris(1-aziridinyl)phosphine sulfide | Aziridine, 1,1',1''-phosphinothioylidynetris- | 52-24-4 | |
| Tris(2,3-dibromopropyl) phosphate | 1-Propanol, 2,3-dibromo-, phosphate (3:1) | 126-72-7 | U235 |
| Trypan blue | 2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'diyl)bis(azo)]-bis[5-amino-4-hydroxy-, tetrasodium salt | 72-57-1 | U236 |
| Uracil mustard | 2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]- | 66-75-1 | U237 |
| Vanadium pentoxide | Vanadium oxide V2O5 | 1314-62-1 | P120 |
| Vernolate | Carbamothioic acid, dipropyl-,S-propyl ester | 1929-77-7 | |
| Vinyl chloride | Ethene, chloro- | 75-01-4 | U043 |
| Warfarin | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3% | 81-81-2 | U248 |
| Warfarin | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations greater than 0.3% | 81-81-2 | P001 |
| Warfarin salts, when present at concentrations less than 0.3% | | | U248 |
| Warfarin salts, when present at concentrations greater than 0.3% | | | P001 |
| Zinc cyanide | Zinc cyanide Zn(CN)2 | 557-21-1 | P121 |
| Zinc phosphide | Zinc phosphide Zn3P2, when present at concentrations greater than 10% | 1314-84-7 | P122 |
| Zinc phosphide | Zinc phosphide Zn3P2, when present at concentrations of 10% or less | 1314-84-7 | U249 |

| Common Name | Chemical Abstracts Name | Chemical Abstracts No. | Hazardous Waste Code |
|--------------------|--|-------------------------------|-----------------------------|
| Ziram | Zinc, bis(dimethylcarbamo-dithioato-S,S')-, (T-4)- | 137-30-4 | P205 |

FOOTNOTE: ¹The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.

APPENDIX III

Hazardous wastes which are Discarded Commercial Chemical Products or Off-Specification Batches of Commercial Chemical Products or Spill Residues of Either (Alphabetical by Substance)

The following hazardous wastes are referred to in § 7-214.

Note: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U394 | 30558-43-1 | A2213 |
| U001 | 75-07-0 | Acetaldehyde (I) |
| U034 | 75-87-6 | Acetaldehyde, trichloro- |
| U187 | 62-44-2 | Acetamide, N-(4-ethoxyphenyl)- |
| U005 | 53-96-3 | Acetamide, N-9H-fluoren-2-yl- |
| U240 | ¹ 94-75-7 | Acetic acid, (2,4-dichlorophenoxy)-, salts & esters |
| U112 | 141-78-6 | Acetic acid ethyl ester (I) |
| U144 | 301-04-2 | Acetic acid, lead(2+) salt |
| U214 | 563-68-8 | Acetic acid, thallium(1+) salt |
| see F027 | 93-76-5 | Acetic acid, (2,4,5-trichlorophenoxy)- |
| U002 | 67-64-1 | Acetone (I) |
| U003 | 75-05-8 | Acetonitrile (I,T) |
| U004 | 98-86-2 | Acetophenone |
| U005 | 53-96-3 | 2-Acetylaminofluorene |
| U006 | 75-36-5 | Acetyl chloride (C,R,T) |
| U007 | 79-06-1 | Acrylamide |
| U008 | 79-10-7 | Acrylic acid (I) |
| U009 | 107-13-1 | Acrylonitrile |
| U011 | 61-82-5 | Amitrole |
| U012 | 62-53-3 | Aniline (I,T) |
| U136 | 75-60-5 | Arsinic acid, dimethyl- |
| U014 | 492-80-8 | Auramine |
| U015 | 115-02-6 | Azaserine |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U010 | 50-07-7 | Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[aminocarbonyloxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta,8aalpha,8balpha)]- |
| U280 | 101-27-9 | Barban |
| U278 | 22781-23-3 | Bendiocarb |
| U364 | 22961-82-6 | Bendiocarb phenol |
| U271 | 17804-35-2 | Benomyl |
| U157 | 56-49-5 | Benz[j]aceanthrylene, 1,2-dihydro-3-methyl- |
| U016 | 225-51-4 | Benz[c]acridine |
| U017 | 98-87-3 | Benzal chloride |
| U192 | 23950-58-5 | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)- |
| U018 | 56-55-3 | Benz[a]anthracene |
| U094 | 57-97-6 | Benz[a]anthracene, 7,12-dimethyl- |
| U012 | 62-53-3 | Benzenamine (I,T) |
| U014 | 492-80-8 | Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl- |
| U049 | 3165-93-3 | Benzenamine, 4-chloro-2-methyl-, hydrochloride |
| U093 | 60-11-7 | Benzenamine, N,N-dimethyl-4-(phenylazo)- |
| U328 | 95-53-4 | Benzenamine, 2-methyl- |
| U353 | 106-49-0 | Benzenamine, 4-methyl- |
| U158 | 101-14-4 | Benzenamine, 4,4'-methylenebis[2-chloro- |
| U222 | 636-21-5 | Benzenamine, 2-methyl-, hydrochloride |
| U181 | 99-55-8 | Benzenamine, 2-methyl-5-nitro- |
| U019 | 71-43-2 | Benzene (I,T) |
| U038 | 510-15-6 | Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester |
| U030 | 101-55-3 | Benzene, 1-bromo-4-phenoxy- |
| U035 | 305-03-3 | Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]- |
| U037 | 108-90-7 | Benzene, chloro- |
| U221 | 25376-45-8 | Benzenediamine, ar-methyl- |
| U028 | 117-81-7 | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester |
| U069 | 84-74-2 | 1,2-Benzenedicarboxylic acid, dibutyl ester |
| U088 | 84-66-2 | 1,2-Benzenedicarboxylic acid, diethyl ester |
| U102 | 131-11-3 | 1,2-Benzenedicarboxylic acid, dimethyl ester |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U107 | 117-84-0 | 1,2-Benzenedicarboxylic acid, dioctyl ester |
| U070 | 95-50-1 | Benzene, 1,2-dichloro- |
| U071 | 541-73-1 | Benzene, 1,3-dichloro- |
| U072 | 106-46-7 | Benzene, 1,4-dichloro- |
| U060 | 72-54-8 | Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro- |
| U017 | 98-87-3 | Benzene, (dichloromethyl)- |
| U223 | 26471-62-5 | Benzene, 1,3-diisocyanatomethyl- (R,T) |
| U239 | 1330-20-7 | Benzene, dimethyl- (I) |
| U201 | 108-46-3 | 1,3-Benzenediol |
| U127 | 118-74-1 | Benzene, hexachloro- |
| U056 | 110-82-7 | Benzene, hexahydro- (I) |
| U220 | 108-88-3 | Benzene, methyl- |
| U105 | 121-14-2 | Benzene, 1-methyl-2,4-dinitro- |
| U106 | 606-20-2 | Benzene, 2-methyl-1,3-dinitro- |
| U055 | 98-82-8 | Benzene, (1-methylethyl)- (I) |
| U169 | 98-95-3 | Benzene, nitro- |
| U183 | 608-93-5 | Benzene, pentachloro- |
| U185 | 82-68-8 | Benzene, pentachloronitro- |
| U020 | 98-09-9 | Benzenesulfonic acid chloride (C,R) |
| U020 | 98-09-9 | Benzenesulfonyl chloride (C,R) |
| U207 | 95-94-3 | Benzene, 1,2,4,5-tetrachloro- |
| U061 | 50-29-3 | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- |
| U247 | 72-43-5 | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy- |
| U023 | 98-07-7 | Benzene, (trichloromethyl)- |
| U234 | 99-35-4 | Benzene, 1,3,5-trinitro- |
| U021 | 92-87-5 | Benzidine |
| U202 | 181-07-2 | 1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts |
| U278 | 22781-23-3 | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-,methyl carbamate |
| U364 | 22961-82-6 | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, |
| U203 | 94-59-7 | 1,3-Benzodioxole, 5-(2-propenyl)- |
| U141 | 120-58-1 | 1,3-Benzodioxole, 5-(1-propenyl)- |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U367 | 1563-38-8 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- |
| U090 | 94-58-6 | 1,3-Benzodioxole, 5-propyl- |
| U064 | 189-55-9 | Benzo[rs]t]pentaphene |
| U248 | 181-81-2 | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less |
| U022 | 50-32-8 | Benzo[a]pyrene |
| U197 | 106-51-4 | p-Benzoquinone |
| U023 | 98-07-7 | Benzotrichloride (C,R,T) |
| U085 | 1464-53-5 | 2,2'-Bioxirane |
| U021 | 92-87-5 | [1,1'-Biphenyl]-4,4'-diamine |
| U073 | 91-94-1 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro- |
| U091 | 119-90-4 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy- |
| U095 | 119-93-7 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl- |
| U225 | 75-25-2 | Bromoform |
| U030 | 101-55-3 | 4-Bromophenyl phenyl ether |
| U128 | 87-68-3 | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- |
| U172 | 924-16-3 | 1-Butanamine, N-butyl-N-nitroso- |
| U031 | 71-36-3 | 1-Butanol (I) |
| U159 | 78-93-3 | 2-Butanone (I,T) |
| U160 | 1338-23-4 | 2-Butanone, peroxide (R,T) |
| U053 | 4170-30-3 | 2-Butenal |
| U074 | 764-41-0 | 2-Butene, 1,4-dichloro- (I,T) |
| U143 | 303-34-4 | 2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]- |
| U031 | 71-36-3 | n-Butyl alcohol (I) |
| U136 | 75-60-5 | Cacodylic acid |
| U032 | 13765-19-0 | Calcium chromate |
| U372 | 10605-21-7 | Carbamic acid, 1H-benzimidazol-2-yl, methyl ester |
| U271 | 17804-35-2 | Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester |
| U280 | 101-27-9 | Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester |
| U238 | 51-79-6 | Carbamic acid, ethyl ester |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U178 | 615-53-2 | Carbamic acid, methylnitroso-, ethyl ester |
| U373 | 122-42-9 | Carbamic acid, phenyl-, 1-methylethyl ester |
| U409 | 23564-05-8 | Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-, dimethyl ester |
| U097 | 79-44-7 | Carbamic chloride, dimethyl- |
| U389 | 2303-17-5 | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester |
| U387 | 52888-80-9 | Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester |
| U114 | 111-54-6 | Carbamodithioic acid, 1,2-ethanediybis-, salts & esters |
| U062 | 2303-16-4 | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester |
| U279 | 63-25-2 | Carbaryl |
| U372 | 10605-21-7 | Carbendazim |
| U367 | 1563-38-8 | Carbofuran phenol |
| U215 | 6533-73-9 | Carbonic acid, dithallium(1+) salt |
| U033 | 353-50-4 | Carbonic difluoride |
| U156 | 79-22-1 | Carbonochloridic acid, methyl ester (I,T) |
| U033 | 353-50-4 | Carbon oxyfluoride (R,T) |
| U211 | 56-23-5 | Carbon tetrachloride |
| U034 | 75-87-6 | Chloral |
| U035 | 305-03-3 | Chlorambucil |
| U036 | 57-74-9 | Chlordane, alpha & gamma isomers |
| U026 | 494-03-1 | Chlornaphazin |
| U037 | 108-90-7 | Chlorobenzene |
| U038 | 510-15-6 | Chlorobenzilate |
| U039 | 59-50-7 | p-Chloro-m-cresol |
| U042 | 110-75-8 | 2-Chloroethyl vinyl ether |
| U044 | 67-66-3 | Chloroform |
| U046 | 107-30-2 | Chloromethyl methyl ether |
| U047 | 91-58-7 | beta-Chloronaphthalene |
| U048 | 95-57-8 | o-Chlorophenol |
| U049 | 3165-93-3 | 4-Chloro-o-toluidine, hydrochloride |
| U032 | 13765-19-0 | Chromic acid H ₂ CrO ₄ , calcium salt |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U050 | 218-01-9 | Chrysene |
| U051 | | Creosote |
| U052 | 1319-77-3 | Cresol (Cresylic acid) |
| U053 | 4170-30-3 | Crotonaldehyde |
| U055 | 98-82-8 | Cumene (I) |
| U246 | 506-68-3 | Cyanogen bromide (CN)Br |
| U197 | 106-51-4 | 2,5-Cyclohexadiene-1,4-dione |
| U056 | 110-82-7 | Cyclohexane (I) |
| U129 | 58-89-9 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- |
| U057 | 108-94-1 | Cyclohexanone (I) |
| U130 | 77-47-4 | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- |
| U058 | 50-18-0 | Cyclophosphamide |
| U240 | 194-75-7 | 2,4-D, salts & esters |
| U059 | 20830-81-3 | Daunomycin |
| U060 | 72-54-8 | DDD |
| U061 | 50-29-3 | DDT |
| U062 | 2303-16-4 | Diallate |
| U063 | 53-70-3 | Dibenz[a,h]anthracene |
| U064 | 189-55-9 | Dibenzo[a,i]pyrene |
| U066 | 96-12-8 | 1,2-Dibromo-3-chloropropane |
| U069 | 84-74-2 | Dibutyl phthalate |
| U070 | 95-50-1 | o-Dichlorobenzene |
| U071 | 541-73-1 | m-Dichlorobenzene |
| U072 | 106-46-7 | p-Dichlorobenzene |
| U073 | 91-94-1 | 3,3'-Dichlorobenzidine |
| U074 | 764-41-0 | 1,4-Dichloro-2-butene (I,T) |
| U075 | 75-71-8 | Dichlorodifluoromethane |
| U078 | 75-35-4 | 1,1-Dichloroethylene |
| U079 | 156-60-5 | 1,2-Dichloroethylene |
| U025 | 111-44-4 | Dichloroethyl ether |
| U027 | 108-60-1 | Dichloroisopropyl ether |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|---|
| U024 | 111-91-1 | Dichloromethoxy ethane |
| U081 | 120-83-2 | 2,4-Dichlorophenol |
| U082 | 87-65-0 | 2,6-Dichlorophenol |
| U084 | 542-75-6 | 1,3-Dichloropropene |
| U085 | 1464-53-5 | 1,2:3,4-Diepoxybutane (I,T) |
| U108 | 123-91-1 | 1,4-Diethyleneoxide |
| U028 | 117-81-7 | Diethylhexyl phthalate |
| U395 | 5952-26-1 | Diethylene glycol, dicarbamate |
| U086 | 1615-80-1 | N,N'-Diethylhydrazine |
| U087 | 3288-58-2 | O,O-Diethyl S-methyl dithiophosphate |
| U088 | 84-66-2 | Diethyl phthalate |
| U089 | 56-53-1 | Diethylstilbesterol |
| U090 | 94-58-6 | Dihydrosafrole |
| U091 | 119-90-4 | 3,3'-Dimethoxybenzidine |
| U092 | 124-40-3 | Dimethylamine (I) |
| U093 | 60-11-7 | p-Dimethylaminoazobenzene |
| U094 | 57-97-6 | 7,12-Dimethylbenz[a]anthracene |
| U095 | 119-93-7 | 3,3'-Dimethylbenzidine |
| U096 | 80-15-9 | alpha,alpha-Dimethylbenzylhydroperoxide (R) |
| U097 | 79-44-7 | Dimethylcarbamoyl chloride |
| U098 | 57-14-7 | 1,1-Dimethylhydrazine |
| U099 | 540-73-8 | 1,2-Dimethylhydrazine |
| U101 | 105-67-9 | 2,4-Dimethylphenol |
| U102 | 131-11-3 | Dimethyl phthalate |
| U103 | 77-78-1 | Dimethyl sulfate |
| U105 | 121-14-2 | 2,4-Dinitrotoluene |
| U106 | 606-20-2 | 2,6-Dinitrotoluene |
| U107 | 117-84-0 | Di-n-octyl phthalate |
| U108 | 123-91-1 | 1,4-Dioxane |
| U109 | 122-66-7 | 1,2-Diphenylhydrazine |
| U110 | 142-84-7 | Dipropylamine (I) |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U111 | 621-64-7 | Di-n-propylnitrosamine |
| U041 | 106-89-8 | Epichlorohydrin |
| U001 | 75-07-0 | Ethanal (I) |
| U404 | 121-44-8 | Ethanamine, N,N-diethyl- |
| U174 | 55-18-5 | Ethanamine, N-ethyl-N-nitroso- |
| U155 | 91-80-5 | 1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- |
| U067 | 106-93-4 | Ethane, 1,2-dibromo- |
| U076 | 75-34-3 | Ethane, 1,1-dichloro- |
| U077 | 107-06-2 | Ethane, 1,2-dichloro- |
| U131 | 67-72-1 | Ethane, hexachloro- |
| U024 | 111-91-1 | Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro- |
| U117 | 60-29-7 | Ethane, 1,1'-oxybis-(I) |
| U025 | 111-44-4 | Ethane, 1,1'-oxybis[2-chloro- |
| U184 | 76-01-7 | Ethane, pentachloro- |
| U208 | 630-20-6 | Ethane, 1,1,1,2-tetrachloro- |
| U209 | 79-34-5 | Ethane, 1,1,2,2-tetrachloro- |
| U218 | 62-55-5 | Ethanethioamide |
| U226 | 71-55-6 | Ethane, 1,1,1-trichloro- |
| U227 | 79-00-5 | Ethane, 1,1,2-trichloro- |
| U410 | 59669-26-0 | Ethanimidothioic acid, N,N'- [thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester |
| U394 | 30558-43-1 | Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-,methyl ester |
| U359 | 110-80-5 | Ethanol, 2-ethoxy- |
| U173 | 1116-54-7 | Ethanol, 2,2'-(nitrosoimino)bis- |
| U395 | 5952-26-1 | Ethanol, 2,2[prime]-oxybis-, dicarbamate |
| U004 | 98-86-2 | Ethanone, 1-phenyl- |
| U043 | 75-01-4 | Ethene, chloro- |
| U042 | 110-75-8 | Ethene, (2-chloroethoxy)- |
| U078 | 75-35-4 | Ethene, 1,1-dichloro- |
| U079 | 156-60-5 | Ethene, 1,2-dichloro-, (E)- |
| U210 | 127-18-4 | Ethene, tetrachloro- |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U228 | 79-01-6 | Ethene, trichloro- |
| U112 | 141-78-6 | Ethyl acetate (I) |
| U113 | 140-88-5 | Ethyl acrylate (I) |
| U238 | 51-79-6 | Ethyl carbamate (urethane) |
| U117 | 60-29-7 | Ethyl ether (I) |
| U114 | ¹ 111-54-6 | Ethylenebisdithiocarbamic acid, salts & esters |
| U067 | 106-93-4 | Ethylene dibromide |
| U077 | 107-06-2 | Ethylene dichloride |
| U359 | 110-80-5 | Ethylene glycol monoethyl ether |
| U115 | 75-21-8 | Ethylene oxide (I,T) |
| U116 | 96-45-7 | Ethylenethiourea |
| U076 | 75-34-3 | Ethylidene dichloride |
| U118 | 97-63-2 | Ethyl methacrylate |
| U119 | 62-50-0 | Ethyl methanesulfonate |
| U120 | 206-44-0 | Fluoranthene |
| U122 | 50-00-0 | Formaldehyde |
| U123 | 64-18-6 | Formic acid (C,T) |
| U124 | 110-00-9 | Furan (I) |
| U125 | 98-01-1 | 2-Furancarboxaldehyde (I) |
| U147 | 108-31-6 | 2,5-Furandione |
| U213 | 109-99-9 | Furan, tetrahydro-(I) |
| U125 | 98-01-1 | Furfural (I) |
| U124 | 110-00-9 | Furfuran (I) |
| U206 | 18883-66-4 | Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D- |
| U206 | 18883-66-4 | D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)- carbonyl]amino]- |
| U126 | 765-34-4 | Glycidylaldehyde |
| U163 | 70-25-7 | Guanidine, N-methyl-N'-nitro-N-nitroso- |
| U127 | 118-74-1 | Hexachlorobenzene |
| U128 | 87-68-3 | Hexachlorobutadiene |
| U130 | 77-47-4 | Hexachlorocyclopentadiene |
| U131 | 67-72-1 | Hexachloroethane |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|--|
| U132 | 70-30-4 | Hexachlorophene |
| U243 | 1888-71-7 | Hexachloropropene |
| U133 | 302-01-2 | Hydrazine (R,T) |
| U086 | 1615-80-1 | Hydrazine, 1,2-diethyl- |
| U098 | 57-14-7 | Hydrazine, 1,1-dimethyl- |
| U099 | 540-73-8 | Hydrazine, 1,2-dimethyl- |
| U109 | 122-66-7 | Hydrazine, 1,2-diphenyl- |
| U134 | 7664-39-3 | Hydrofluoric acid (C,T) |
| U134 | 7664-39-3 | Hydrogen fluoride (C,T) |
| U135 | 7783-06-4 | Hydrogen sulfide |
| U135 | 7783-06-4 | Hydrogen sulfide H ₂ S |
| U096 | 80-15-9 | Hydroperoxide, 1-methyl-1-phenylethyl- (R) |
| U116 | 96-45-7 | 2-Imidazolidinethione |
| U137 | 193-39-5 | Indeno[1,2,3-cd]pyrene |
| U190 | 85-44-9 | 1,3-Isobenzofurandione |
| U140 | 78-83-1 | Isobutyl alcohol (I,T) |
| U141 | 120-58-1 | Isosafrole |
| U142 | 143-50-0 | Kepone |
| U143 | 303-34-4 | Lasiocarpine |
| U144 | 301-04-2 | Lead acetate |
| U146 | 1335-32-6 | Lead, bis(acetato-O)tetrahydroxytri- |
| U145 | 7446-27-7 | Lead phosphate |
| U146 | 1335-32-6 | Lead subacetate |
| U129 | 58-89-9 | Lindane |
| U163 | 70-25-7 | MNNG |
| U147 | 108-31-6 | Maleic anhydride |
| U148 | 123-33-1 | Maleic hydrazide |
| U149 | 109-77-3 | Malononitrile |
| U150 | 148-82-3 | Melphalan |
| U151 | 7439-97-6 | Mercury |
| U152 | 126-98-7 | Methacrylonitrile (I, T) |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U092 | 124-40-3 | Methanamine, N-methyl- (I) |
| U029 | 74-83-9 | Methane, bromo- |
| U045 | 74-87-3 | Methane, chloro- (I, T) |
| U046 | 107-30-2 | Methane, chloromethoxy- |
| U068 | 74-95-3 | Methane, dibromo- |
| U080 | 75-09-2 | Methane, dichloro- |
| U075 | 75-71-8 | Methane, dichlorodifluoro- |
| U138 | 74-88-4 | Methane, iodo- |
| U119 | 62-50-0 | Methanesulfonic acid, ethyl ester |
| U211 | 56-23-5 | Methane, tetrachloro- |
| U153 | 74-93-1 | Methanethiol (I, T) |
| U225 | 75-25-2 | Methane, tribromo- |
| U044 | 67-66-3 | Methane, trichloro- |
| U121 | 75-69-4 | Methane, trichlorofluoro- |
| U036 | 57-74-9 | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- |
| U154 | 67-56-1 | Methanol (I) |
| U155 | 91-80-5 | Methapyrilene |
| U142 | 143-50-0 | 1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro- |
| U247 | 72-43-5 | Methoxychlor |
| U154 | 67-56-1 | Methyl alcohol (I) |
| U029 | 74-83-9 | Methyl bromide |
| U186 | 504-60-9 | 1-Methylbutadiene (I) |
| U045 | 74-87-3 | Methyl chloride (I,T) |
| U156 | 79-22-1 | Methyl chlorocarbonate (I,T) |
| U226 | 71-55-6 | Methyl chloroform |
| U157 | 56-49-5 | 3-Methylcholanthrene |
| U158 | 101-14-4 | 4,4'-Methylenebis(2-chloroaniline) |
| U068 | 74-95-3 | Methylene bromide |
| U080 | 75-09-2 | Methylene chloride |
| U159 | 78-93-3 | Methyl ethyl ketone (MEK) (I,T) |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U160 | 1338-23-4 | Methyl ethyl ketone peroxide (R,T) |
| U138 | 74-88-4 | Methyl iodide |
| U161 | 108-10-1 | Methyl isobutyl ketone (I) |
| U162 | 80-62-6 | Methyl methacrylate (I,T) |
| U161 | 108-10-1 | 4-Methyl-2-pentanone (I) |
| U164 | 56-04-2 | Methylthiouracil |
| U010 | 50-07-7 | Mitomycin C |
| U059 | 20830-81-3 | 5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)- |
| U167 | 134-32-7 | 1-Naphthalenamine |
| U168 | 91-59-8 | 2-Naphthalenamine |
| U026 | 494-03-1 | Naphthalenamine, N,N'-bis(2-chloroethyl)- |
| U165 | 91-20-3 | Naphthalene |
| U047 | 91-58-7 | Naphthalene, 2-chloro- |
| U166 | 130-15-4 | 1,4-Naphthalenedione |
| U236 | 72-57-1 | 2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'- dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt |
| U279 | 63-25-2 | 1-Naphthalenol, methylcarbamate |
| U166 | 130-15-4 | 1,4-Naphthoquinone |
| U167 | 134-32-7 | alpha-Naphthylamine |
| U168 | 91-59-8 | beta-Naphthylamine |
| U217 | 10102-45-1 | Nitric acid, thallium(1+) salt |
| U169 | 98-95-3 | Nitrobenzene (I,T) |
| U170 | 100-02-7 | p-Nitrophenol |
| U171 | 79-46-9 | 2-Nitropropane (I,T) |
| U172 | 924-16-3 | N-Nitrosodi-n-butylamine |
| U173 | 1116-54-7 | N-Nitrosodiethanolamine |
| U174 | 55-18-5 | N-Nitrosodiethylamine |
| U176 | 759-73-9 | N-Nitroso-N-ethylurea |
| U177 | 684-93-5 | N-Nitroso-N-methylurea |
| U178 | 615-53-2 | N-Nitroso-N-methylurethane |
| U179 | 100-75-4 | N-Nitrosopiperidine |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U180 | 930-55-2 | N-Nitrosopyrrolidine |
| U181 | 99-55-8 | 5-Nitro-o-toluidine |
| U193 | 1120-71-4 | 1,2-Oxathiolane, 2,2-dioxide |
| U058 | 50-18-0 | 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide |
| U115 | 75-21-8 | Oxirane (I,T) |
| U126 | 765-34-4 | Oxiranecarboxyaldehyde |
| U041 | 106-89-8 | Oxirane, (chloromethyl)- |
| U182 | 123-63-7 | Paraldehyde |
| U183 | 608-93-5 | Pentachlorobenzene |
| U184 | 76-01-7 | Pentachloroethane |
| U185 | 82-68-8 | Pentachloronitrobenzene (PCNB) |
| See F027 | 87-86-5 | Pentachlorophenol |
| U161 | 108-10-1 | Pentanol, 4-methyl- |
| U186 | 504-60-9 | 1,3-Pentadiene (I) |
| U187 | 62-44-2 | Phenacetin |
| U188 | 108-95-2 | Phenol |
| U048 | 95-57-8 | Phenol, 2-chloro- |
| U039 | 59-50-7 | Phenol, 4-chloro-3-methyl- |
| U081 | 120-83-2 | Phenol, 2,4-dichloro- |
| U082 | 87-65-0 | Phenol, 2,6-dichloro- |
| U089 | 56-53-1 | Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)- |
| U101 | 105-67-9 | Phenol, 2,4-dimethyl- |
| U052 | 1319-77-3 | Phenol, methyl- |
| U132 | 70-30-4 | Phenol, 2,2'-methylenebis[3,4,6-trichloro- |
| U411 | 114-26-1 | Phenol, 2-(1-methylethoxy)-, methylcarbamate |
| U170 | 100-02-7 | Phenol, 4-nitro- |
| See F027 | 87-86-5 | Phenol, pentachloro- |
| See F027 | 58-90-2 | Phenol, 2,3,4,6-tetrachloro- |
| See F027 | 95-95-4 | Phenol, 2,4,5-trichloro- |
| See F027 | 88-06-2 | Phenol, 2,4,6-trichloro- |
| U150 | 148-82-3 | L-Phenylalanine, 4-[bis(2-chloroethyl)amino]- |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U145 | 7446-27-7 | Phosphoric acid, lead(2+) salt (2:3) |
| U087 | 3288-58-2 | Phosphorodithioic acid, O,O-diethyl S-methyl ester |
| U189 | 1314-80-3 | Phosphorus sulfide (R) |
| U190 | 85-44-9 | Phthalic anhydride |
| U191 | 109-06-8 | 2-Picoline |
| U179 | 100-75-4 | Piperidine, 1-nitroso- |
| U192 | 23950-58-5 | Pronamide |
| U194 | 107-10-8 | 1-Propanamine (I,T) |
| U111 | 621-64-7 | 1-Propanamine, N-nitroso-N-propyl- |
| U110 | 142-84-7 | 1-Propanamine, N-propyl- (I) |
| U066 | 96-12-8 | Propane, 1,2-dibromo-3-chloro- |
| U083 | 78-87-5 | Propane, 1,2-dichloro- |
| U149 | 109-77-3 | Propanedinitrile |
| U171 | 79-46-9 | Propane, 2-nitro- (I,T) |
| U027 | 108-60-1 | Propane, 2,2'-oxybis[2-chloro- |
| U193 | 1120-71-4 | 1,3-Propane sultone |
| See F027 | 93-72-1 | Propanoic acid, 2-(2,4,5-trichlorophenoxy)- |
| U235 | 126-72-7 | 1-Propanol, 2,3-dibromo-, phosphate (3:1) |
| U140 | 78-83-1 | 1-Propanol, 2-methyl- (I,T) |
| U002 | 67-64-1 | 2-Propanone (I) |
| U007 | 79-06-1 | 2-Propenamide |
| U084 | 542-75-6 | 1-Propene, 1,3-dichloro- |
| U243 | 1888-71-7 | 1-Propene, 1,1,2,3,3,3-hexachloro- |
| U009 | 107-13-1 | 2-Propenenitrile |
| U152 | 126-98-7 | 2-Propenenitrile, 2-methyl- (I,T) |
| U008 | 79-10-7 | 2-Propenoic acid (I) |
| U113 | 140-88-5 | 2-Propenoic acid, ethyl ester (I) |
| U118 | 97-63-2 | 2-Propenoic acid, 2-methyl-, ethyl ester |
| U162 | 80-62-6 | 2-Propenoic acid, 2-methyl-, methyl ester (I,T) |
| U373 | 122-42-9 | Propham |
| U411 | 114-26-1 | Propoxur |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|---|
| U387 | 52888-80-9 | Prosulfocarb |
| U194 | 107-10-8 | n-Propylamine (I,T) |
| U083 | 78-87-5 | Propylene dichloride |
| U148 | 123-33-1 | 3,6-Pyridazinedione, 1,2-dihydro- |
| U196 | 110-86-1 | Pyridine |
| U191 | 109-06-8 | Pyridine, 2-methyl- |
| U237 | 66-75-1 | 2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]- |
| U164 | 56-04-2 | 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thio- |
| U180 | 930-55-2 | Pyrrolidine, 1-nitroso- |
| U200 | 50-55-5 | Reserpine |
| U201 | 108-46-3 | Resorcinol |
| U203 | 94-59-7 | Safrole |
| U204 | 7783-00-8 | Selenious acid |
| U204 | 7783-00-8 | Selenium dioxide |
| U205 | 7488-56-4 | Selenium sulfide |
| U205 | 7488-56-4 | Selenium sulfide SeS ₂ (R,T) |
| U015 | 115-02-6 | L-Serine, diazoacetate (ester) |
| See F027 | 93-72-1 | Silvex (2,4,5-TP) |
| U206 | 18883-66-4 | Streptozotocin |
| U103 | 77-78-1 | Sulfuric acid, dimethyl ester |
| U189 | 1314-80-3 | Sulfur phosphide (R) |
| See F027 | 93-76-5 | 2,4,5-T |
| U207 | 95-94-3 | 1,2,4,5-Tetrachlorobenzene |
| U208 | 630-20-6 | 1,1,1,2-Tetrachloroethane |
| U209 | 79-34-5 | 1,1,2,2-Tetrachloroethane |
| U210 | 127-18-4 | Tetrachloroethylene |
| See F027 | 58-90-2 | 2,3,4,6-Tetrachlorophenol |
| U213 | 109-99-9 | Tetrahydrofuran (I) |
| U214 | 563-68-8 | Thallium(I) acetate |
| U215 | 6533-73-9 | Thallium(I) carbonate |
| U216 | 7791-12-0 | Thallium(I) chloride |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U216 | 7791-12-0 | Thallium chloride TlCl |
| U217 | 10102-45-1 | Thallium(I) nitrate |
| U218 | 62-55-5 | Thioacetamide |
| U410 | 59669-26-0 | Thiodicarb |
| U153 | 74-93-1 | Thiomethanol (I,T) |
| U244 | 137-26-8 | Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl- |
| U409 | 23564-05-8 | Thiophanate-methyl |
| U219 | 62-56-6 | Thiourea |
| U244 | 137-26-8 | Thiram |
| U220 | 108-88-3 | Toluene |
| U221 | 25376-45-8 | Toluenediamine |
| U223 | 26471-62-5 | Toluene diisocyanate (R,T) |
| U328 | 95-53-4 | o-Toluidine |
| U353 | 106-49-0 | p-Toluidine |
| U222 | 636-21-5 | o-Toluidine hydrochloride |
| U389 | 2303-17-5 | Triallate |
| U011 | 61-82-5 | 1H-1,2,4-Triazol-3-amine |
| U227 | 79-00-5 | 1,1,2-Trichloroethane |
| U228 | 79-01-6 | Trichloroethylene |
| U121 | 75-69-4 | Trichloromonofluoromethane |
| See F027 | 95-95-4 | 2,4,5-Trichlorophenol |
| See F027 | 88-06-2 | 2,4,6-Trichlorophenol |
| U404 | 121-44-8 | Triethylamine |
| U234 | 99-35-4 | 1,3,5-Trinitrobenzene (R,T) |
| U182 | 123-63-7 | 1,3,5-Trioxane, 2,4,6-trimethyl- |
| U235 | 126-72-7 | Tris(2,3-dibromopropyl) phosphate |
| U236 | 72-57-1 | Trypan blue |
| U237 | 66-75-1 | Uracil mustard |
| U176 | 759-73-9 | Urea, N-ethyl-N-nitroso- |
| U177 | 684-93-5 | Urea, N-methyl-N-nitroso- |
| U043 | 75-01-4 | Vinyl chloride |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U248 | ¹ 81-81-2 | Warfarin, & salts, when present at concentrations of 0.3% or less |
| U239 | 1330-20-7 | Xylene (I) |
| U200 | 50-55-5 | Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)- |
| U249 | 1314-84-7 | Zinc phosphide Zn ₃ P ₂ , when present at concentrations of 10% or less |

FOOTNOTE: ¹CAS Number given for parent compound only.

Hazardous wastes which are Discarded Commercial Chemical Products or Off-Specification Batches of Commercial Chemical Products or Spill Residues of Either
(Numerical by Hazardous Waste Code)

The following hazardous wastes are referred to in § 7-214.

Note: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|------------------------------|
| U001 | 75-07-0 | Acetaldehyde (I) |
| U001 | 75-07-0 | Ethanal (I) |
| U002 | 67-64-1 | Acetone (I) |
| U002 | 67-64-1 | 2-Propanone (I) |
| U003 | 75-05-8 | Acetonitrile (I,T) |
| U004 | 98-86-2 | Acetophenone |
| U004 | 98-86-2 | Ethanone, 1-phenyl- |
| U005 | 53-96-3 | Acetamide, -9H-fluoren-2-yl- |
| U005 | 53-96-3 | 2-Acetylaminofluorene |
| U006 | 75-36-5 | Acetyl chloride (C,R,T) |
| U007 | 79-06-1 | Acrylamide |
| U007 | 79-06-1 | 2-Propenamide |
| U008 | 79-10-7 | Acrylic acid (I) |
| U008 | 79-10-7 | 2-Propenoic acid (I) |
| U009 | 107-13-1 | Acrylonitrile |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U009 | 107-13-1 | 2-Propenenitrile |
| U010 | 50-07-7 | Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[aminocarbonyl]oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta, 8aalpha, 8balph)]- |
| U010 | 50-07-7 | Mitomycin C |
| U011 | 61-82-5 | Amitrole |
| U011 | 61-82-5 | 1H-1,2,4-Triazol-3-amine |
| U012 | 62-53-3 | Aniline (I,T) |
| U012 | 62-53-3 | Benzenamine (I,T) |
| U014 | 492-80-8 | Auramine |
| U014 | 492-80-8 | Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl- |
| U015 | 115-02-6 | Azaserine |
| U015 | 115-02-6 | L-Serine, diazoacetate (ester) |
| U016 | 225-51-4 | Benz[c]acridine |
| U017 | 98-87-3 | Benzal chloride |
| U017 | 98-87-3 | Benzene, (dichloromethyl)- |
| U018 | 56-55-3 | Benz[a]anthracene |
| U019 | 71-43-2 | Benzene (I,T) |
| U020 | 98-09-9 | Benzenesulfonic acid chloride (C,R) |
| U020 | 98-09-9 | Benzenesulfonyl chloride (C,R) |
| U021 | 92-87-5 | Benzidine |
| U021 | 92-87-5 | [1,1'-Biphenyl]-4,4'-diamine |
| U022 | 50-32-8 | Benzo[a]pyrene |
| U023 | 98-07-7 | Benzene, (trichloromethyl)- |
| U023 | 98-07-7 | Benzotrichloride (C,R,T) |
| U024 | 111-91-1 | Dichloromethoxy ethane |
| U024 | 111-91-1 | Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro- |
| U025 | 111-44-4 | Dichloroethyl ether |
| U025 | 111-44-4 | Ethane, 1,1'-oxybis[2-chloro- |
| U026 | 494-03-1 | Chlornaphazin |
| U026 | 494-03-1 | Naphthalenamine, N,N'-bis(2-chloroethyl)- |
| U027 | 108-60-1 | Dichloroisopropyl ether |
| U027 | 108-60-1 | Propane, 2,2'-oxybis[2-chloro- |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|---|
| U028 | 117-81-7 | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester |
| U028 | 117-81-7 | Diethylhexyl phthalate |
| U029 | 74-83-9 | Methane, bromo- |
| U029 | 74-83-9 | Methyl bromide |
| U030 | 101-55-3 | Benzene, 1-bromo-4-phenoxy- |
| U030 | 101-55-3 | 4-Bromophenyl phenyl ether |
| U031 | 71-36-3 | 1-Butanol (I) |
| U031 | 71-36-3 | n-Butyl alcohol (I) |
| U032 | 13765-19-0 | Calcium chromate |
| U032 | 13765-19-0 | Chromic acid H ₂ CrO ₄ , calcium salt |
| U033 | 353-50-4 | Carbonic difluoride |
| U033 | 353-50-4 | Carbon oxyfluoride (R,T) |
| U034 | 75-87-6 | Acetaldehyde, trichloro- |
| U034 | 75-87-6 | Chloral |
| U035 | 305-03-3 | Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]- |
| U035 | 305-03-3 | Chlorambucil |
| U036 | 57-74-9 | Chlordane, alpha & gamma isomers |
| U036 | 57-74-9 | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- |
| U037 | 108-90-7 | Benzene, chloro- |
| U037 | 108-90-7 | Chlorobenzene |
| U038 | 510-15-6 | Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester |
| U038 | 510-15-6 | Chlorobenzilate |
| U039 | 59-50-7 | p-Chloro-m-cresol |
| U039 | 59-50-7 | Phenol, 4-chloro-3-methyl- |
| U041 | 106-89-8 | Epichlorohydrin |
| U041 | 106-89-8 | Oxirane, (chloromethyl)- |
| U042 | 110-75-8 | 2-Chloroethyl vinyl ether |
| U042 | 110-75-8 | Ethene, (2-chloroethoxy)- |
| U043 | 75-01-4 | Ethene, chloro- |
| U043 | 75-01-4 | Vinyl chloride |
| U044 | 67-66-3 | Chloroform |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U044 | 67-66-3 | Methane, trichloro- |
| U045 | 74-87-3 | Methane, chloro- (I,T) |
| U045 | 74-87-3 | Methyl chloride (I,T) |
| U046 | 107-30-2 | Chloromethyl methyl ether |
| U046 | 107-30-2 | Methane, chloromethoxy- |
| U047 | 91-58-7 | beta-Chloronaphthalene |
| U047 | 91-58-7 | Naphthalene, 2-chloro- |
| U048 | 95-57-8 | o-Chlorophenol |
| U048 | 95-57-8 | Phenol, 2-chloro- |
| U049 | 3165-93-3 | Benzenamine, 4-chloro-2-methyl-, hydrochloride |
| U049 | 3165-93-3 | 4-Chloro-o-toluidine, hydrochloride |
| U050 | 218-01-9 | Chrysene |
| U051 | | Creosote |
| U052 | 1319-77-3 | Cresol (Cresylic acid) |
| U052 | 1319-77-3 | Phenol, methyl- |
| U053 | 4170-30-3 | 2-Butenal |
| U053 | 4170-30-3 | Crotonaldehyde |
| U055 | 98-82-8 | Benzene, (1-methylethyl)-(I) |
| U055 | 98-82-8 | Cumene (I) |
| U056 | 110-82-7 | Benzene, hexahydro-(I) |
| U056 | 110-82-7 | Cyclohexane (I) |
| U057 | 108-94-1 | Cyclohexanone (I) |
| U058 | 50-18-0 | Cyclophosphamide |
| U058 | 50-18-0 | 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide |
| U059 | 20830-81-3 | *Daunomycin |
| U059 | 20830-81-3 | 5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl]oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)- |
| U060 | 72-54-8 | Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro- |
| U060 | 72-54-8 | DDD |
| U061 | 50-29-3 | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro- |
| U061 | 50-29-3 | DDT |
| U062 | 2303-16-4 | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-di chloro-2-propenyl) |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| | | ester |
| U062 | 2303-16-4 | Diallate |
| U063 | 53-70-3 | Dibenz[a,h]anthracene |
| U064 | 189-55-9 | Benzo[<i>rst</i>]pentaphene |
| U064 | 189-55-9 | Dibenzo[a,i]pyrene |
| U066 | 96-12-8 | 1,2-Dibromo-3-chloropropane |
| U066 | 96-12-8 | Propane, 1,2-dibromo-3-chloro- |
| U067 | 106-93-4 | Ethane, 1,2-dibromo- |
| U067 | 106-93-4 | Ethylene dibromide |
| U068 | 74-95-3 | Methane, dibromo- |
| U068 | 74-95-3 | Methylene bromide |
| U069 | 84-74-2 | 1,2-Benzenedicarboxylic acid, dibutyl ester |
| U069 | 84-74-2 | Dibutyl phthalate |
| U070 | 95-50-1 | Benzene, 1,2-dichloro- |
| U070 | 95-50-1 | <i>o</i> -Dichlorobenzene |
| U071 | 541-73-1 | Benzene, 1,3-dichloro- |
| U071 | 541-73-1 | <i>m</i> -Dichlorobenzene |
| U072 | 106-46-7 | Benzene, 1,4-dichloro- |
| U072 | 106-46-7 | <i>p</i> -Dichlorobenzene |
| U073 | 91-94-1 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro- |
| U073 | 91-94-1 | 3,3'-Dichlorobenzidine |
| U074 | 764-41-0 | 2-Butene, 1,4-dichloro-(I,T) |
| U074 | 764-41-0 | 1,4-Dichloro-2-butene (I,T) |
| U075 | 75-71-8 | Dichlorodifluoromethane |
| U075 | 75-71-8 | Methane, dichlorodifluoro- |
| U076 | 75-34-3 | Ethane, 1,1-dichloro- |
| U076 | 75-34-3 | Ethylidene dichloride |
| U077 | 107-06-2 | Ethane, 1,2-dichloro- |
| U077 | 107-06-2 | Ethylene dichloride |
| U078 | 75-35-4 | 1,1-Dichloroethylene |
| U078 | 75-35-4 | Ethene, 1,1-dichloro- |
| U079 | 156-60-5 | 1,2-Dichloroethylene |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|---|
| U079 | 156-60-5 | Ethene, 1,2-dichloro-, (E)- |
| U080 | 75-09-2 | Methane, dichloro- |
| U080 | 75-09-2 | Methylene chloride |
| U081 | 120-83-2 | 2,4-Dichlorophenol |
| U081 | 120-83-2 | Phenol, 2,4-dichloro- |
| U082 | 87-65-0 | 2,6-Dichlorophenol |
| U082 | 87-65-0 | Phenol, 2,6-dichloro- |
| U083 | 78-87-5 | Propane, 1,2-dichloro- |
| U083 | 78-87-5 | Propylene dichloride |
| U084 | 542-75-6 | 1,3-Dichloropropene |
| U084 | 542-75-6 | 1-Propene, 1,3-dichloro- |
| U085 | 1464-53-5 | 2,2'-Bioxirane |
| U085 | 1464-53-5 | 1,2:3,4-Diepoxybutane (I,T) |
| U086 | 1615-80-1 | N,N'-Diethylhydrazine |
| U086 | 1615-80-1 | Hydrazine, 1,2-diethyl- |
| U087 | 3288-58-2 | O,O-Diethyl S-methyl dithiophosphate |
| U087 | 3288-58-2 | Phosphorodithioic acid, O,O-diethyl S-methyl ester |
| U088 | 84-66-2 | 1,2-Benzenedicarboxylic acid, diethyl ester |
| U088 | 84-66-2 | Diethyl phthalate |
| U089 | 56-53-1 | Diethylstilbesterol |
| U089 | 56-53-1 | Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)- |
| U090 | 94-58-6 | 1,3-Benzodioxole, 5-propyl- |
| U090 | 94-58-6 | Dihydrosáfrole |
| U091 | 119-90-4 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy- |
| U091 | 119-90-4 | 3,3'-Dimethoxybenzidine |
| U092 | 124-40-3 | Dimethylamine (I) |
| U092 | 124-40-3 | Methanamine, -methyl-(I) |
| U093 | 60-11-7 | Benzenamine, N,N-dimethyl-4-(phenylazo)- |
| U093 | 60-11-7 | p-Dimethylaminoazobenzene |
| U094 | 57-97-6 | Benz[a]anthracene, 7,12-dimethyl- |
| U094 | 57-97-6 | 7,12-Dimethylbenz[a]anthracene |
| U095 | 119-93-7 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl- |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|--|
| U095 | 119-93-7 | 3,3'-Dimethylbenzidine |
| U096 | 80-15-9 | alpha,alpha-Dimethylbenzylhydroperoxide (R) |
| U096 | 80-15-9 | Hydroperoxide, 1-methyl-1-phenylethyl-(R) |
| U097 | 79-44-7 | Carbamic chloride, dimethyl- |
| U097 | 79-44-7 | Dimethylcarbamoyl chloride |
| U098 | 57-14-7 | 1,1-Dimethylhydrazine |
| U098 | 57-14-7 | Hydrazine, 1,1-dimethyl- |
| U099 | 540-73-8 | 1,2-Dimethylhydrazine |
| U099 | 540-73-8 | Hydrazine, 1,2-dimethyl- |
| U101 | 105-67-9 | 2,4-Dimethylphenol |
| U101 | 105-67-9 | Phenol, 2,4-dimethyl- |
| U102 | 131-11-3 | 1,2-Benzenedicarboxylic acid, dimethyl ester |
| U102 | 131-11-3 | Dimethyl phthalate |
| U103 | 77-78-1 | Dimethyl sulfate |
| U103 | 77-78-1 | Sulfuric acid, dimethyl ester |
| U105 | 121-14-2 | Benzene, 1-methyl-2,4-dinitro- |
| U105 | 121-14-2 | 2,4-Dinitrotoluene |
| U106 | 606-20-2 | Benzene, 2-methyl-1,3-dinitro- |
| U106 | 606-20-2 | 2,6-Dinitrotoluene |
| U107 | 117-84-0 | 1,2-Benzenedicarboxylic acid, dioctyl ester |
| U107 | 117-84-0 | Di-n-octyl phthalate |
| U108 | 123-91-1 | 1,4-Diethyleneoxide |
| U108 | 123-91-1 | 1,4-Dioxane |
| U109 | 122-66-7 | 1,2-Diphenylhydrazine |
| U109 | 122-66-7 | Hydrazine, 1,2-diphenyl- |
| U110 | 142-84-7 | Dipropylamine (I) |
| U110 | 142-84-7 | 1-Propanamine, N-propyl-(I) |
| U111 | 621-64-7 | Di-n-propylnitrosamine |
| U111 | 621-64-7 | 1-Propanamine, N-nitroso-N-propyl- |
| U112 | 141-78-6 | Acetic acid ethyl ester (I) |
| U112 | 141-78-6 | Ethyl acetate (I) |
| U113 | 140-88-5 | Ethyl acrylate (I) |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|--|
| U113 | 140-88-5 | 2-Propenoic acid, ethyl ester (I) |
| U114 | ¹ 111-54-6 | Carbamodithioic acid, 1,2-ethanediybis-, salts & esters |
| U114 | ¹ 111-54-6 | Ethylenebisdithiocarbamic acid, salts & esters |
| U115 | 75-21-8 | Ethylene oxide (I,T) |
| U115 | 75-21-8 | Oxirane (I,T) |
| U116 | 96-45-7 | Ethylenethiourea |
| U116 | 96-45-7 | 2-Imidazolidinethione |
| U117 | 60-29-7 | Ethane, 1,1'-oxybis-(I) |
| U117 | 60-29-7 | Ethyl ether (I) |
| U118 | 97-63-2 | Ethyl methacrylate |
| U118 | 97-63-2 | 2-Propenoic acid, 2-methyl-, ethyl ester |
| U119 | 62-50-0 | Ethyl methanesulfonate |
| U119 | 62-50-0 | Methanesulfonic acid, ethyl ester |
| U120 | 206-44-0 | Fluoranthene |
| U121 | 75-69-4 | Methane, trichlorofluoro- |
| U121 | 75-69-4 | Trichloromonofluoromethane |
| U122 | 50-00-0 | Formaldehyde |
| U123 | 64-18-6 | Formic acid (C,T) |
| U124 | 110-00-9 | Furan (I) |
| U124 | 110-00-9 | Furfuran (I) |
| U125 | 98-01-1 | 2-Furancarboxaldehyde (I) |
| U125 | 98-01-1 | Furfural (I) |
| U126 | 765-34-4 | Glycidylaldehyde |
| U126 | 765-34-4 | Oxiranecarboxyaldehyde |
| U127 | 118-74-1 | Benzene, hexachloro- |
| U127 | 118-74-1 | Hexachlorobenzene |
| U128 | 87-68-3 | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- |
| U128 | 87-68-3 | Hexachlorobutadiene |
| U129 | 58-89-9 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- |
| U129 | 58-89-9 | Lindane |
| U130 | 77-47-4 | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- |
| U130 | 77-47-4 | Hexachlorocyclopentadiene |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U131 | 67-72-1 | Ethane, hexachloro- |
| U131 | 67-72-1 | Hexachloroethane |
| U132 | 70-30-4 | Hexachlorophene |
| U132 | 70-30-4 | Phenol, 2,2'-methylenebis[3,4,6-trichloro- |
| U133 | 302-01-2 | Hydrazine (R,T) |
| U134 | 7664-39-3 | Hydrofluoric acid (C,T) |
| U134 | 7664-39-3 | Hydrogen fluoride (C,T) |
| U135 | 7783-06-4 | Hydrogen sulfide |
| U135 | 7783-06-4 | Hydrogen sulfide H ₂ S |
| U136 | 75-60-5 | Arsinic acid, dimethyl- |
| U136 | 75-60-5 | Cacodylic acid |
| U137 | 193-39-5 | Indeno[1,2,3-cd]pyrene |
| U138 | 74-88-4 | Methane, iodo- |
| U138 | 74-88-4 | Methyl iodide |
| U140 | 78-83-1 | Isobutyl alcohol (I,T) |
| U140 | 78-83-1 | 1-Propanol, 2-methyl- (I,T) |
| U141 | 120-58-1 | 1,3-Benzodioxole, 5-(1-propenyl)- |
| U141 | 120-58-1 | Isosafrole |
| U142 | 143-50-0 | Keponè |
| U142 | 143-50-0 | 1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5a,5b,6-decachlorooctahydro- |
| U143 | 303-34-4 | 2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]- |
| U143 | 303-34-4 | Easiocarpine |
| U144 | 301-04-2 | Acetic acid, lead(2 +) salt |
| U144 | 301-04-2 | Lead acetate |
| U145 | 7446-27-7 | Lead phosphate |
| U145 | 7446-27-7 | Phosphoric acid, lead(2 +) salt (2:3) |
| U146 | 1335-32-6 | Lead, bis(acetato-O)tetrahydroxytri- |
| U146 | 1335-32-6 | Lead subacetate |
| U147 | 108-31-6 | 2,5-Furandione |
| U147 | 108-31-6 | Maleic anhydride |
| U148 | 123-33-1 | Maleic hydrazide |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|--|
| U148 | 123-33-1 | 3,6-Pyridazinedione, 1,2-dihydro- |
| U149 | 109-77-3 | Malononitrile |
| U149 | 109-77-3 | Propanedinitrile |
| U150 | 148-82-3 | Melphalan |
| U150 | 148-82-3 | L-Phenylalanine, 4-[bis(2-chloroethyl)amino]- |
| U151 | 7439-97-6 | Mercury |
| U152 | 126-98-7 | Methacrylonitrile (I,T) |
| U152 | 126-98-7 | 2-Propenenitrile, 2-methyl- (I,T) |
| U153 | 74-93-1 | Methanethiol (I,T) |
| U153 | 74-93-1 | Thiomethanol (I,T) |
| U154 | 67-56-1 | Methanol (I) |
| U154 | 67-56-1 | Methyl alcohol (I) |
| U155 | 91-80-5 | 1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- |
| U155 | 91-80-5 | Methapyrilene |
| U156 | 79-22-1 | Carbonochloridic acid, methyl ester (I,T) |
| U156 | 79-22-1 | Methyl chlorocarbonate (I,T) |
| U157 | 56-49-5 | Benz[j]aceanthrylene, 1,2-dihydro-3-methyl- |
| U157 | 56-49-5 | 3-Methylcholanthrene |
| U158 | 101-14-4 | Benzenamine, 4,4'-methylenebis[2-chloro- |
| U158 | 101-14-4 | 4,4'-Methylenebis(2-chloroaniline) |
| U159 | 78-93-3 | 2-Butanone (I,T) |
| U159 | 78-93-3 | Methyl ethyl ketone (MEK) (I,T) |
| U160 | 1338-23-4 | 2-Butanone, peroxide (R,T) |
| U160 | 1338-23-4 | Methyl ethyl ketone peroxide (R,T) |
| U161 | 108-10-1 | Methyl isobutyl ketone (I) |
| U161 | 108-10-1 | 4-Methyl-2-pentanone (I) |
| U161 | 108-10-1 | Pentanol, 4-methyl- |
| U162 | 80-62-6 | Methyl methacrylate (I,T) |
| U162 | 80-62-6 | 2-Propenoic acid, 2-methyl-, methyl ester (I,T) |
| U163 | 70-25-7 | Guanidine, -methyl-N'-nitro-N-nitroso- |
| U163 | 70-25-7 | MNNG |
| U164 | 56-04-2 | Methylthiouracil |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| U164 | 56-04-2 | 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo- |
| U165 | 91-20-3 | Naphthalene |
| U166 | 130-15-4 | 1,4-Naphthalenedione |
| U166 | 130-15-4 | 1,4-Naphthoquinone |
| U167 | 134-32-7 | 1-Naphthalenamine |
| U167 | 134-32-7 | alpha-Naphthylamine |
| U168 | 91-59-8 | 2-Naphthalenamine |
| U168 | 91-59-8 | beta-Naphthylamine |
| U169 | 98-95-3 | Benzene, nitro- |
| U169 | 98-95-3 | Nitrobenzene (I,T) |
| U170 | 100-02-7 | p-Nitrophenol |
| U170 | 100-02-7 | Phenol, 4-nitro- |
| U171 | 79-46-9 | 2-Nitropropane (I,T) |
| U171 | 79-46-9 | Propane, 2-nitro- (I,T) |
| U172 | 924-16-3 | 1-Butanamine, N-butyl-N-nitroso- |
| U172 | 924-16-3 | N-Nitrosodi-n-butylamine |
| U173 | 1116-54-7 | Ethanol, 2,2'-(nitrosoimino)bis- |
| U173 | 1116-54-7 | N-Nitrosodiethanolamine |
| U174 | 55-18-5 | Ethanamine, -ethyl-N-nitroso- |
| U174 | 55-18-5 | N-Nitrosodiethylamine |
| U176 | 759-73-9 | N-Nitroso-N-ethylurea |
| U176 | 759-73-9 | Urea, N-ethyl-N-nitroso- |
| U177 | 684-93-5 | N-Nitroso-N-methylurea |
| U177 | 684-93-5 | Urea, N-methyl-N-nitroso- |
| U178 | 615-53-2 | Carbamic acid, methylnitroso-, ethyl ester |
| U178 | 615-53-2 | N-Nitroso-N-methylurethane |
| U179 | 100-75-4 | N-Nitrosopiperidine |
| U179 | 100-75-4 | Piperidine, 1-nitroso- |
| U180 | 930-55-2 | N-Nitrosopyrrolidine |
| U180 | 930-55-2 | Pyrrolidine, 1-nitroso- |
| U181 | 99-55-8 | Benzenamine, 2-methyl-5-nitro- |
| U181 | 99-55-8 | 5-Nitro-o-toluidine |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U182 | 123-63-7 | 1,3,5-Trioxane, 2,4,6-trimethyl- |
| U182 | 123-63-7 | Paraldehyde |
| U183 | 608-93-5 | Benzene, pentachloro- |
| U183 | 608-93-5 | Pentachlorobenzene |
| U184 | 76-01-7 | Ethane, pentachloro- |
| U184 | 76-01-7 | Pentachloroethane |
| U185 | 82-68-8 | Benzene, pentachloronitro- |
| U185 | 82-68-8 | Pentachloronitrobenzene (PCNB) |
| U186 | 504-60-9 | 1-Methylbutadiene (I) |
| U186 | 504-60-9 | 1,3-Pentadiene (I) |
| U187 | 62-44-2 | Acetamide, -(4-ethoxyphenyl)- |
| U187 | 62-44-2 | Phenacetin |
| U188 | 108-95-2 | Phenol |
| U189 | 1314-80-3 | Phosphorus sulfide (R) |
| U189 | 1314-80-3 | Sulfur phosphide (R) |
| U190 | 85-44-9 | 1,3-Isobenzofurandione |
| U190 | 85-44-9 | Phthalic anhydride |
| U191 | 109-06-8 | 2-Picoline |
| U191 | 109-06-8 | Pyridine, 2-methyl- |
| U192 | 23950-58-5 | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)- |
| U192 | 23950-58-5 | Pronamide |
| U193 | 1120-71-4 | 1,2-Oxathiolane, 2,2-dioxide |
| U193 | 1120-71-4 | 1,3-Propane sultone |
| U194 | 107-10-8 | 1-Propanamine (I,T) |
| U194 | 107-10-8 | n-Propylamine (I,T) |
| U196 | 110-86-1 | Pyridine |
| U197 | 106-51-4 | p-Benzoquinone |
| U197 | 106-51-4 | 2,5-Cyclohexadiene-1,4-dione |
| U200 | 50-55-5 | Reserpine |
| U200 | 50-55-5 | Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)- |
| U201 | 108-46-3 | 1,3-Benzenediol |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| U201 | 108-46-3 | Resorcinol |
| U203 | 94-59-7 | 1,3-Benzodioxole, 5-(2-propenyl)- |
| U203 | 94-59-7 | Safrole |
| U204 | 7783-00-8 | Selenious acid |
| U204 | 7783-00-8 | Selenium dioxide |
| U205 | 7488-56-4 | Selenium sulfide |
| U205 | 7488-56-4 | Selenium sulfide SeS ₂ (R,T) |
| U206 | 18883-66-4 | Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D- |
| U206 | 18883-66-4 | D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)-carbonyl]amino]- |
| U206 | 18883-66-4 | Streptozotocin |
| U207 | 95-94-3 | Benzene, 1,2,4,5-tetrachloro- |
| U207 | 95-94-3 | 1,2,4,5-Tetrachlorobenzene |
| U208 | 630-20-6 | Ethane, 1,1,1,2-tetrachloro- |
| U208 | 630-20-6 | 1,1,1,2-Tetrachloroethane |
| U209 | 79-34-5 | Ethane, 1,1,2,2-tetrachloro- |
| U209 | 79-34-5 | 1,1,2,2-Tetrachloroethane |
| U210 | 127-18-4 | Ethene, tetrachloro- |
| U210 | 127-18-4 | Tetrachloroethylene |
| U211 | 56-23-5 | Carbon tetrachloride |
| U211 | 56-23-5 | Methane, tetrachloro- |
| U213 | 109-99-9 | Furan, tetrahydro-(I) |
| U213 | 109-99-9 | Tetrahydrofuran (I) |
| U214 | 563-68-8 | Acetic acid, thallium(1 +) salt |
| U214 | 563-68-8 | Thallium(I) acetate |
| U215 | 6533-73-9 | Carbonic acid, dithallium(1 +) salt |
| U215 | 6533-73-9 | Thallium(I) carbonate |
| U216 | 7791-12-0 | Thallium(I) chloride |
| U216 | 7791-12-0 | Thallium chloride TlCl |
| U217 | 10102-45-1 | Nitric acid, thallium(1 +) salt |
| U217 | 10102-45-1 | Thallium(I) nitrate |
| U218 | 62-55-5 | Ethanethioamide |
| U218 | 62-55-5 | Thioacetamide |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|---|
| U219 | 62-56-6 | Thiourea |
| U220 | 108-88-3 | Benzene, methyl- |
| U220 | 108-88-3 | Toluene |
| U221 | 25376-45-8 | Benzenediamine, ar-methyl- |
| U221 | 25376-45-8 | Toluenediamine |
| U222 | 636-21-5 | Benzenamine, 2-methyl-, hydrochloride |
| U222 | 636-21-5 | o-Toluidine hydrochloride |
| U223 | 26471-62-5 | Benzene, 1,3-diisocyanatomethyl- (R,T) |
| U223 | 26471-62-5 | Toluene diisocyanate (R,T) |
| U225 | 75-25-2 | Bromoform |
| U225 | 75-25-2 | Methane, tribromo- |
| U226 | 71-55-6 | Ethane, 1,1,1-trichloro- |
| U226 | 71-55-6 | Methyl chloroform |
| U226 | 71-55-6 | 1,1,1-Trichloroethane |
| U227 | 79-00-5 | Ethane, 1,1,2-trichloro- |
| U227 | 79-00-5 | 1,1,2-Trichloroethane |
| U228 | 79-01-6 | Ethene, trichloro- |
| U228 | 79-01-6 | Trichloroethylene |
| U234 | 99-35-4 | Benzene, 1,3,5-trinitro- |
| U234 | 99-35-4 | 1,3,5-Trinitrobenzene (R,T) |
| U235 | 126-72-7 | 1-Propanol, 2,3-dibromo-, phosphate (3:1) |
| U235 | 126-72-7 | Tris(2,3-dibromopropyl) phosphate |
| U236 | 72-57-1 | 2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt |
| U236 | 72-57-1 | Trypan blue |
| U237 | 66-75-1 | 2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]- |
| U237 | 66-75-1 | Uracil mustard |
| U238 | 51-79-6 | Carbamic acid, ethyl ester |
| U238 | 51-79-6 | Ethyl carbamate (urethane) |
| U239 | 1330-20-7 | Benzene, dimethyl- (I,T) |
| U239 | 1330-20-7 | Xylene (I) |
| U240 | ¹ 94-75-7 | Acetic acid, (2,4-dichlorophenoxy)-, salts & esters |
| U240 | ¹ 94-75-7 | 2,4-D, salts & esters |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|---|
| U243 | 1888-71-7 | Hexachloropropene |
| U243 | 1888-71-7 | 1-Propene, 1,1,2,3,3,3-hexachloro- |
| U244 | 137-26-8 | Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl- |
| U244 | 137-26-8 | Thiram |
| U246 | 506-68-3 | Cyanogen bromide (CN)Br |
| U247 | 72-43-5 | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4- methoxy- |
| U247 | 72-43-5 | Methoxychlor |
| U248 | ¹ 81-81-2 | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less |
| U248 | ¹ 81-81-2 | Warfarin, & salts, when present at concentrations of 0.3% or less |
| U249 | 1314-84-7 | Zinc phosphide Zn ₃ P ₂ , when present at concentrations of 10% or less |
| U271 | 17804-35-2 | Benomyl |
| U271 | 17804-35-2 | Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester |
| U278 | 22781-23-3 | Bendiocarb |
| U278 | 22781-23-3 | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate |
| U279 | 63-25-2 | Carbaryl |
| U279 | 63-25-2 | 1-Naphthalenol, methylcarbamate |
| U280 | 101-27-9 | Barban |
| U280 | 101-27-9 | Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester |
| U328 | 95-53-4 | Benzenamine, 2-methyl- |
| U328 | 95-53-4 | o-Toluidine |
| U353 | 106-49-0 | Benzenamine, 4-methyl- |
| U353 | 106-49-0 | p-Toluidine |
| U359 | 110-80-5 | Ethanol, 2-ethoxy- |
| U359 | 110-80-5 | Ethylene glycol monoethyl ether |
| U364 | 22961-82-6 | Bendiocarb phenol |
| U364 | 22961-82-6 | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, |
| U367 | 1563-38-8 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- |
| U367 | 1563-38-8 | Carbofuran phenol |
| U372 | 10605-21-7 | Carbamic acid, 1H-benzimidazol-2-yl, methyl ester |
| U372 | 10605-21-7 | Carbendazim |
| U373 | 122-42-9 | Carbamic acid, phenyl-, 1-methylethyl ester |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|---|
| U373 | 122-42-9 | Propham |
| U387 | 52888-80-9 | Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester |
| U387 | 52888-80-9 | Prosulfocarb |
| U389 | 2303-17-5 | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester |
| U389 | 2303-17-5 | Triallate |
| U394 | 30558-43-1 | A2213 |
| U394 | 30558-43-1 | Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester |
| U395 | 5952-26-1 | Diethylene glycol, dicarbamate |
| U395 | 5952-26-1 | Ethanol, 2,2'-oxybis-, dicarbamate |
| U404 | 121-44-8 | Ethanamine, N,N-diethyl- |
| U404 | 121-44-8 | Triethylamine |
| U409 | 23564-05-8 | Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-, dimethyl ester |
| U409 | 23564-05-8 | Thiophanate-methyl |
| U410 | 59669-26-0 | Ethanimidothioic acid, N,N'-[thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester |
| U410 | 59669-26-0 | Thiodicarb |
| U411 | 114-26-1 | Phenol, 2-(1-methylethoxy)-, methylcarbamate |
| U411 | 114-26-1 | Propoxur |
| See F027 | 93-76-5 | Acetic acid, (2,4,5-trichlorophenoxy)- |
| See F027 | 87-86-5 | Pentachlorophenol |
| See F027 | 87-86-5 | Phenol, pentachloro- |
| See F027 | 58-90-2 | Phenol, 2,3,4,6-tetrachloro- |
| See F027 | 95-95-4 | Phenol, 2,4,5-trichloro- |
| See F027 | 88-06-2 | Phenol, 2,4,6-trichloro- |
| See F027 | 93-72-1 | Propanoic acid, 2-(2,4,5-trichlorophenoxy)- |
| See F027 | 93-72-1 | Silvex (2,4,5-TP) |
| See F027 | 93-76-5 | 2,4,5-T |
| See F027 | 58-90-2 | 2,3,4,6-Tetrachlorophenol |
| See F027 | 95-95-4 | 2,4,5-Trichlorophenol |
| See F027 | 88-06-2 | 2,4,6-Trichlorophenol |

¹CAS Number given for parent compound only.

APPENDIX IV

Acutely Hazardous Wastes (Alphabetical by Substance)

The following list of acutely hazardous wastes is referred to in § 7-215.

Note: For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P023 | 107-20-0 | Acetaldehyde, chloro- |
| P002 | 591-08-2 | Acetamide, N-(aminothioxomethyl)- |
| P057 | 640-19-7 | Acetamide, 2-fluoro- |
| P058 | 62-74-8 | Acetic acid, fluoro-, sodium salt |
| P002 | 591-08-2 | 1-Acetyl-2-thiourea |
| P003 | 107-02-8 | Acrolein |
| P070 | 116-06-3 | Aldicarb |
| P203 | 1646-88-4 | Aldicarb sulfone |
| P004 | 309-00-2 | Aldrin |
| P005 | 107-18-6 | Allyl alcohol |
| P006 | 20859-73-8 | Aluminum phosphide (R,T) |
| P007 | 2763-96-4 | 5-(Aminomethyl)-3-isoxazolol |
| P008 | 504-24-5 | 4-Aminopyridine |
| P009 | 131-74-8 | Ammonium picrate (R) |
| P119 | 7803-55-6 | Ammonium vanadate |
| P099 | 506-61-6 | Argentate(1-), bis(cyano-C)-, potassium |
| P010 | 7778-39-4 | Arsenic acid H ₃ AsO ₄ |
| P012 | 1327-53-3 | Arsenic oxide As ₂ O ₃ |
| P011 | 1303-28-2 | Arsenic oxide As ₂ O ₅ |
| P011 | 1303-28-2 | Arsenic pentoxide |
| P012 | 1327-53-3 | Arsenic trioxide |
| P038 | 692-42-2 | Arsine, diethyl- |
| P036 | 696-28-6 | Arsonous dichloride, phenyl- |
| P054 | 151-56-4 | Aziridine |
| P067 | 75-55-8 | Aziridine, 2-methyl- |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P013 | 542-62-1 | Barium cyanide |
| P024 | 106-47-8 | Benzenamine, 4-chloro- |
| P077 | 100-01-6 | Benzenamine, 4-nitro- |
| P028 | 100-44-7 | Benzene, (chloromethyl)- |
| P042 | 51-43-4 | 1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)- |
| P046 | 122-09-8 | Benzenethanamine, alpha,alpha-dimethyl- |
| P014 | 108-98-5 | Benzenethiol |
| P127 | 1563-66-2 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate |
| P188 | 57-64-7 | Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1) |
| P001 | 181-81-2 | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3% |
| P028 | 100-44-7 | Benzyl chloride |
| P015 | 7440-41-7 | Beryllium powder |
| P017 | 598-31-2 | Bromoacetone |
| P018 | 357-57-3 | Brucine |
| P045 | 39196-18-4 | 2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime |
| P021 | 592-01-8 | Calcium cyanide |
| P021 | 592-01-8 | Calcium cyanide Ca(CN) ₂ |
| P189 | 55285-14-8 | Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester |
| P191 | 644-64-4 | Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester |
| P192 | 119-38-0 | Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester |
| P190 | 1129-41-5 | Carbamic acid, methyl-, 3-methylphenyl ester |
| P127 | 1563-66-2 | Carbofuran |
| P022 | 75-15-0 | Carbon disulfide |
| P095 | 75-44-5 | Carbonic dichloride |
| P189 | 55285-14-8 | Carbosulfan |
| P023 | 107-20-0 | Chloroacetaldehyde |
| P024 | 106-47-8 | p-Chloroaniline |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P026 | 5344-82-1 | 1-(o-Chlorophenyl)thiourea |
| P027 | 542-76-7 | 3-Chloropropionitrile |
| P029 | 544-92-3 | Copper cyanide |
| P029 | 544-92-3 | Copper cyanide Cu(CN) |
| P202 | 64-00-6 | m-Cumenyl methylcarbamate |
| P030 | | Cyanides (soluble cyanide salts), not otherwise specified |
| P031 | 460-19-5 | Cyanogen |
| P033 | 506-77-4 | Cyanogen chloride |
| P033 | 506-77-4 | Cyanogen chloride (CN)Cl |
| P034 | 131-89-5 | 2-Cyclohexyl-4,6-dinitrophenol |
| P016 | 542-88-1 | Dichloromethyl ether |
| P036 | 696-28-6 | Dichlorophenylarsine |
| P037 | 60-57-1 | Dieldrin |
| P038 | 692-42-2 | Diethylarsine |
| P041 | 311-45-5 | Diethyl-p-nitrophenyl phosphate |
| P040 | 297-97-2 | O,O-Diethyl O-pyrazinyl phosphorothioate |
| P043 | 55-91-4 | Diisopropylfluorophosphate (DFP) |
| P004 | 309-00-2 | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4beta,5alpha,8alpha,8beta)- |
| P060 | 465-73-6 | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4beta,5beta,8beta,8beta)- |
| P037 | 60-57-1 | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2alpha,3beta,6beta,6alpha,7beta, 7alpha)- |
| P051 | 172-20-8 | 2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1alpha,2beta,2beta,3alpha,6alpha,6beta,7beta, 7alpha)-, & metabolites |
| P044 | 60-51-5 | Dimethoate |
| P046 | 122-09-8 | alpha,alpha-Dimethylphenethylamine |
| P191 | 644-64-4 | Dimetilan |
| P047 | 1534-52-1 | 4,6-Dinitro-o-cresol, & salts |
| P048 | 51-28-5 | 2,4-Dinitrophenol |
| P020 | 88-85-7 | Dinoseb |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|-----------------------------|-------------------------------|--|
| P085 | 152-16-9 | Diphosphoramidate, octamethyl- |
| P111 | 107-49-3 | Diphosphoric acid, tetraethyl ester |
| P039 | 298-04-4 | Disulfoton |
| P049 | 541-53-7 | Dithiobiuret |
| P185 | 26419-73-8 | 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)-carbonyl]oxime |
| P050 | 115-29-7 | Endosulfan |
| P088 | 145-73-3 | Endothall |
| P051 | 72-20-8 | Endrin |
| P051 | 72-20-8 | Endrin, & metabolites |
| P042 | 51-43-4 | Epinephrine |
| P031 | 460-19-5 | Ethanedinitrile |
| P194 | 23135-22-0 | Ethanimidothioic acid, 2-(dimethylamino)-N-[[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester |
| P066 | 16752-77-5 | Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester |
| P101 | 107-12-0 | Ethyl cyanide |
| P054 | 151-56-4 | Ethyleneimine |
| P097 | 52-85-7 | Famphur |
| P056 | 7782-41-4 | Fluorine |
| P057 | 640-19-7 | Fluoroacetamide |
| P058 | 62-74-8 | Fluoroacetic acid, sodium salt |
| P198 | 23422-53-9 | Formetanate hydrochloride |
| P197 | 17702-57-7 | Formparanate |
| P065 | 628-86-4 | Fulminic acid, mercury(2+) salt (R,T) |
| P059 | 76-44-8 | Heptachlor |
| P062 | 757-58-4 | Hexaethyl tetraphosphate |
| P116 | 79-19-6 | Hydrazinecarbothioamide |
| P068 | 60-34-4 | Hydrazine, methyl- |
| P063 | 74-90-8 | Hydrocyanic acid |
| P063 | 74-90-8 | Hydrogen cyanide |
| P096 | 7803-51-2 | Hydrogen phosphide |
| P060 | 465-73-6 | Isodrin |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P192 | 119-38-0 | Isolan |
| P202 | 64-00-6 | 3-Isopropylphenyl N-methylcarbamate |
| P007 | 2763-96-4 | 3(2H)-Isoxazolone, 5-(aminomethyl)- |
| P196 | 15339-36-3 | Manganese, bis(dimethylcarbamodithioato-S,S[prime])- |
| P196 | 15339-36-3 | Manganese dimethyldithiocarbamate |
| P092 | 62-38-4 | Mercury, (acetato-O)phenyl- |
| P065 | 628-86-4 | Mercury fulminate (R,T) |
| P082 | 62-75-9 | Methanamine, N-methyl-N-nitroso- |
| P064 | 624-83-9 | Methane, isocyanato- |
| P016 | 542-88-1 | Methane, oxybis[chloro- |
| P112 | 509-14-8 | Methane, tetranitro- (R) |
| P118 | 75-70-7 | Methanethiol, trichloro- |
| P198 | 23422-53-9 | Methanimidamide, N,N-dimethyl-N[prime]- [3-[[[(methylamino)carbonyl]oxy]phenyl]-, monohydrochloride |
| P197 | 17702-57-7 | Methanimidamide, N,N-dimethyl-N[prime]- [2-methyl-4-[[[(methylamino)carbonyl]oxy]phenyl]- |
| P050 | 115-29-7 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10- hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide |
| P059 | 76-44-8 | 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro- |
| P199 | 2032-65-7 | Methiocarb |
| P066 | 16752-77-5 | Methomyl |
| P068 | 60-34-4 | Methyl hydrazine |
| P064 | 624-83-9 | Methyl isocyanate |
| P069 | 75-86-5 | 2-Methylactonitrile |
| P071 | 298-00-0 | Methyl parathion |
| P190 | 1129-41-5 | Metolcarb |
| P128 | 315-8-4 | Mexacarbate |
| P072 | 86-88-4 | alpha-Naphthylthiourea |
| P073 | 13463-39-3 | Nickel carbonyl |
| P073 | 13463-39-3 | Nickel carbonyl Ni(CO) ₄ , (T-4)- |
| P074 | 557-19-7 | Nickel cyanide |
| P074 | 557-19-7 | Nickel cyanide Ni(CN) ₂ |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P075 | 154-11-5 | Nicotine, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies). |
| P076 | 10102-43-9 | Nitric oxide |
| P077 | 100-01-6 | p-Nitroaniline |
| P078 | 10102-44-0 | Nitrogen dioxide |
| P076 | 10102-43-9 | Nitrogen oxide NO |
| P078 | 10102-44-0 | Nitrogen oxide NO2 |
| P081 | 55-63-0 | Nitroglycerine (R) |
| P082 | 62-75-9 | N-Nitrosodimethylamine |
| P084 | 4549-40-0 | N-Nitrosomethylvinylamine |
| P085 | 152-16-9 | Octamethylpyrophosphoramidate |
| P087 | 20816-12-0 | Osmium oxide OsO ₄ , (T-4)- |
| P087 | 20816-12-0 | Osmium tetroxide |
| P088 | 145-73-3 | 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid |
| P194 | 23135-22-0 | Oxamyl |
| P089 | 56-38-2 | Parathion |
| P034 | 131-89-5 | Phenol, 2-cyclohexyl-4,6-dinitro- |
| P048 | 51-28-5 | Phenol, 2,4-dinitro- |
| P047 | 1534-52-1 | Phenol, 2-methyl-4,6-dinitro-, & salts |
| P020 | 88-85-7 | Phenol, 2-(1-methylpropyl)-4,6-dinitro- |
| P009 | 131-74-8 | Phenol, 2,4,6-trinitro-, ammonium salt (R) |
| P128 | 315-18-4 | Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester) |
| P199 | 2032-65-7 | Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate |
| P202 | 64-00-6 | Phenol, 3-(1-methylethyl)-, methylcarbamate |
| P201 | 2631-37-0 | Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate |
| P092 | 62-38-4 | Phenylmercury acetate |
| P093 | 103-85-5 | Phenylthiourea |
| P094 | 298-02-2 | Phorate |
| P095 | 75-44-5 | Phosgene |
| P096 | 7803-51-2 | Phosphine |
| P041 | 311-45-5 | Phosphoric acid, diethyl 4-nitrophenyl ester |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P039 | 298-04-4 | Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester |
| P094 | 298-02-2 | Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester |
| P044 | 60-51-5 | Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester |
| P043 | 55-91-4 | Phosphorofluoridic acid, bis(1-methylethyl) ester |
| P089 | 56-38-2 | Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester |
| P040 | 297-97-2 | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester |
| P097 | 52-85-7 | Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester |
| P071 | 298-00-0 | Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester |
| P204 | 57-47-6 | Physostigmine |
| P188 | 57-64-7 | Physostigmine salicylate |
| P110 | 78-00-2 | Plumbane, tetraethyl- |
| P098 | 151-50-8 | Potassium cyanide |
| P098 | 151-50-8 | Potassium cyanide K(CN) |
| P099 | 506-61-6 | Potassium silver cyanide |
| P201 | 2631-37-0 | Promecarb |
| P070 | 116-06-3 | Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime |
| P203 | 1646-88-4 | Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime |
| P101 | 107-12-0 | Propanenitrile |
| P027 | 542-76-7 | Propanenitrile, 3-chloro- |
| P069 | 75-86-5 | Propanenitrile, 2-hydroxy-2-methyl- |
| P081 | 55-63-0 | 1,2,3-Propanetriol, trinitrate (R) |
| P017 | 598-31-2 | 2-Propanone, 1-bromo- |
| P102 | 107-19-7 | Propargyl alcohol |
| P003 | 107-02-8 | 2-Propenal |
| P005 | 107-18-6 | 2-Propen-1-ol |
| P067 | 75-55-8 | 1,2-Propylenimine |
| P102 | 107-19-7 | 2-Propyn-1-ol |
| P008 | 504-24-5 | 4-Pyridinamine |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P075 | 154-11-5 | Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies). |
| P204 | 57-47-6 | Pyrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)- |
| P114 | 12039-52-0 | Selenious acid, dithallium(1+) salt |
| P103 | 630-10-4 | Selenourea |
| P104 | 506-64-9 | Silver cyanide |
| P104 | 506-64-9 | Silver cyanide Ag(CN) |
| P105 | 26628-22-8 | Sodium azide |
| P106 | 143-33-9 | Sodium cyanide |
| P106 | 143-33-9 | Sodium cyanide Na(CN) |
| P108 | 157-24-9 | Strychnidin-10-one, & salts |
| P018 | 357-57-3 | Strychnidin-10-one, 2,3-dimethoxy- |
| P108 | 157-24-9 | Strychnine, & salts |
| P115 | 7446-18-6 | Sulfuric acid, dithallium(1+) salt |
| P109 | 3689-24-5 | Tetraethyldithiopyrophosphate |
| P110 | 78-00-2 | Tetraethyl lead |
| P111 | 107-49-3 | Tetraethyl pyrophosphate |
| P112 | 509-14-8 | Tetranitromethane (R) |
| P062 | 757-58-4 | Tetraphosphoric acid, hexaethyl ester |
| P113 | 1314-32-5 | Thallic oxide |
| P113 | 1314-32-5 | Thallium oxide Tl ₂ O ₃ |
| P114 | 12039-52-0 | Thallium(I) selenite |
| P115 | 7446-18-6 | Thallium(I) sulfate |
| P109 | 3689-24-5 | Thiodiphosphoric acid, tetraethyl ester |
| P045 | 39196-18-4 | Thiofanox |
| P049 | 541-53-7 | Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH |
| P014 | 108-98-5 | Thiophenol |
| P116 | 79-19-6 | Thiosemicarbazide |
| P026 | 5344-82-1 | Thiourea, (2-chlorophenyl)- |
| P072 | 86-88-4 | Thiourea, 1-naphthalenyl- |
| P093 | 103-85-5 | Thiourea, phenyl- |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P185 | 26419-73-8 | Tirpate |
| P123 | 8001-35-2 | Toxaphene |
| P118 | 75-70-7 | Trichloromethanethiol |
| P119 | 7803-55-6 | Vanadic acid, ammonium salt |
| P120 | 1314-62-1 | Vanadium oxide V ₂ O ₅ |
| P120 | 1314-62-1 | Vanadium pentoxide |
| P084 | 4549-40-0 | Vinylamine, N-methyl-N-nitroso- |
| P001 | ¹ 81-81-2 | Warfarin, & salts, when present at concentrations greater than 0.3% |
| P205 | 137-30-4 | Zinc, bis(dimethylcarbamodithioato- S,S[prime])- |
| P121 | 557-21-1 | Zinc cyanide |
| P121 | 557-21-1 | Zinc cyanide Zn(CN) ₂ |
| P122 | 1314-84-7 | Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10% (R,T) |
| P205 | 137-30-4 | Ziram |

FOOTNOTE: ¹CAS Number given for parent compound only.

Acutely Hazardous Wastes
(Numerical by Hazardous Waste Code)

The following list of acutely hazardous wastes is referred to in § 7-215.

Note: For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P001 | ¹ 81-81-2 | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3% |
| P001 | ¹ 81-81-2 | Warfarin, & salts, when present at concentrations greater than 0.3% |
| P002 | 591-08-2 | Acetamide, -(aminothioxomethyl)- |
| P002 | 591-08-2 | 1-Acetyl-2-thiourea |
| P003 | 107-02-8 | Acrolein |
| P003 | 107-02-8 | 2-Propenal |
| P004 | 309-00-2 | Aldrin |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P004 | 309-00-2 | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)- |
| P005 | 107-18-6 | Allyl alcohol |
| P005 | 107-18-6 | 2-Propen-1-ol |
| P006 | 20859-73-8 | Aluminum phosphide (R,T) |
| P007 | 2763-96-4 | 5-(Aminomethyl)-3-isoxazolol |
| P007 | 2763-96-4 | 3(2H)-Isoxazolone, 5-(aminomethyl)- |
| P008 | 504-24-5 | 4-Aminopyridine |
| P008 | 504-24-5 | 4-Pyridinamine |
| P009 | 131-74-8 | Ammonium picrate (R) |
| P009 | 131-74-8 | Phenol, 2,4,6-trinitro-, ammonium salt (R) |
| P010 | 7778-39-4 | Arsenic acid H ₃ AsO ₄ |
| P011 | 1303-28-2 | Arsenic oxide As ₂ O ₅ |
| P011 | 1303-28-2 | Arsenic pentoxide |
| P012 | 1327-53-3 | Arsenic oxide As ₂ O ₃ |
| P012 | 1327-53-3 | Arsenic trioxide |
| P013 | 542-62-1 | Barium cyanide |
| P014 | 108-98-5 | Benzenethiol |
| P014 | 108-98-5 | Thiophenol |
| P015 | 7440-41-7 | Beryllium powder |
| P016 | 542-88-1 | Dichloromethyl ether |
| P016 | 542-88-1 | Methane, oxybis[chloro- |
| P017 | 598-31-2 | Bromoacetone |
| P017 | 598-31-2 | 2-Propanone, 1-bromo- |
| P018 | 357-57-3 | Brucine |
| P018 | 357-57-3 | Strychnidin-10-one, 2,3-dimethoxy- |
| P020 | 88-85-7 | Dinoseb |
| P020 | 88-85-7 | Phenol, 2-(1-methylpropyl)-4,6-dinitro- |
| P021 | 592-01-8 | Calcium cyanide |
| P021 | 592-01-8 | Calcium cyanide Ca(CN) ₂ |
| P022 | 75-15-0 | Carbon disulfide |
| P023 | 107-20-0 | Acetaldehyde, chloro- |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P023 | 107-20-0 | Chloroacetaldehyde |
| P024 | 106-47-8 | Benzenamine, 4-chloro- |
| P024 | 106-47-8 | p-Chloroaniline |
| P026 | 5344-82-1 | 1-(o-Chlorophenyl)thiourea |
| P026 | 5344-82-1 | Thiourea, (2-chlorophenyl)- |
| P027 | 542-76-7 | 3-Chloropropionitrile |
| P027 | 542-76-7 | Propanenitrile, 3-chloro- |
| P028 | 100-44-7 | Benzene, (chloromethyl)- |
| P028 | 100-44-7 | Benzyl chloride |
| P029 | 544-92-3 | Copper cyanide |
| P029 | 544-92-3 | Copper cyanide Cu(CN) |
| P030 | | Cyanides (soluble cyanide salts), not otherwise specified |
| P031 | 460-19-5 | Cyanogen |
| P031 | 460-19-5 | Ethanedinitrile |
| P033 | 506-77-4 | Cyanogen chloride |
| P033 | 506-77-4 | Cyanogen chloride (CN)Cl |
| P034 | 131-89-5 | 2-Cyclohexyl-4,6-dinitrophenol |
| P034 | 131-89-5 | Phenol, 2-cyclohexyl-4,6-dinitro- |
| P036 | 696-28-6 | Arsonous dichloride, phenyl- |
| P036 | 696-28-6 | Dichlorophenylarsine |
| P037 | 60-57-1 | Dieldrin |
| P037 | 60-57-1 | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta, 7aalpha)- |
| P038 | 692-42-2 | Arsine, diethyl- |
| P038 | 692-42-2 | Diethylarsine |
| P039 | 298-04-4 | Disulfoton |
| P039 | 298-04-4 | Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester |
| P040 | 297-97-2 | O,O-Diethyl O-pyrazinyl phosphorothioate |
| P040 | 297-97-2 | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester |
| P041 | 311-45-5 | Diethyl-p-nitrophenyl phosphate |
| P041 | 311-45-5 | Phosphoric acid, diethyl 4-nitrophenyl ester |
| P042 | 51-43-4 | 1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)- |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P042 | 51-43-4 | Epinephrine |
| P043 | 55-91-4 | Diisopropylfluorophosphate (DFP) |
| P043 | 55-91-4 | Phosphorofluoridic acid, bis(1-methylethyl) ester |
| P044 | 60-51-5 | Dimethoate |
| P044 | 60-51-5 | Phosphorodithioic acid, O,O-dimethyl S-[2-(methyl amino)-2-oxoethyl] ester |
| P045 | 39196-18-4 | 2-Butanone, 3,3-dimethyl-1-(methylthio)-. O-[(methylamino)carbonyl] oxime |
| P045 | 39196-18-4 | Thiofanox |
| P046 | 122-09-8 | Benzeneethanamine, alpha,alpha-dimethyl- |
| P046 | 122-09-8 | alpha,alpha-Dimethylphenethylamine |
| P047 | 1534-52-1 | 4,6-Dinitro-o-cresol, & salts |
| P047 | 1534-52-1 | Phenol, 2-methyl-4,6-dinitro-, & salts |
| P048 | 51-28-5 | 2,4-Dinitrophenol |
| P048 | 51-28-5 | Phenol, 2,4-dinitro- |
| P049 | 541-53-7 | Dithiobiuret |
| P049 | 541-53-7 | Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH |
| P050 | 115-29-7 | Endosulfan |
| P050 | 115-29-7 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide |
| P051 | 172-20-8 | 2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta, 7aalpha)-, & metabolites |
| P051 | 72-20-8 | Endrin |
| P051 | 72-20-8 | Endrin, & metabolites |
| P054 | 151-56-4 | Aziridine |
| P054 | 151-56-4 | Ethyleneimine |
| P056 | 7782-41-4 | Fluorine |
| P057 | 640-19-7 | Acetamide, 2-fluoro- |
| P057 | 640-19-7 | Fluoroacetamide |
| P058 | 62-74-8 | Acetic acid, fluoro-, sodium salt |
| P058 | 62-74-8 | Fluoroacetic acid, sodium salt |
| P059 | 76-44-8 | Heptachlor |
| P059 | 76-44-8 | 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| P060 | 465-73-6 | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)- |
| P060 | 465-73-6 | Isodrin |
| P062 | 757-58-4 | Hexaethyl tetraphosphate |
| P062 | 757-58-4 | Tetraphosphoric acid, hexaethyl ester |
| P063 | 74-90-8 | Hydrocyanic acid |
| P063 | 74-90-8 | Hydrogen cyanide |
| P064 | 624-83-9 | Methane, isocyanato- |
| P064 | 624-83-9 | Methyl isocyanate |
| P065 | 628-86-4 | Fulminic acid, mercury(2+) salt (R,T) |
| P065 | 628-86-4 | Mercury fulminate (R,T) |
| P066 | 16752-77-5 | Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester |
| P066 | 16752-77-5 | Methomyl |
| P067 | 75-55-8 | Aziridine, 2-methyl- |
| P067 | 75-55-8 | 1,2-Propylenimine |
| P068 | 60-34-4 | Hydrazine, methyl- |
| P068 | 60-34-4 | Methyl hydrazine |
| P069 | 75-86-5 | 2-Methylactonitrile |
| P069 | 75-86-5 | Propanenitrile, 2-hydroxy-2-methyl- |
| P070 | 116-06-3 | Aldicarb |
| P070 | 116-06-3 | Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime |
| P071 | 298-00-0 | Methyl parathion |
| P071 | 298-00-0 | Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester |
| P072 | 86-88-4 | alpha-Naphthylthiourea |
| P072 | 86-88-4 | Thiourea, 1-naphthalenyl- |
| P073 | 13463-39-3 | Nickel carbonyl |
| P073 | 13463-39-3 | Nickel carbonyl Ni(CO) ₄ , (T-4)- |
| P074 | 557-19-7 | Nickel cyanide |
| P074 | 557-19-7 | Nickel cyanide Ni(CN) ₂ |
| P075 | 154-11-5 | Nicotine, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies). |
| P075 | 154-11-5 | Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts (this listing does not include patches, gums and lozenges that are FDA-approved over-the-counter nicotine replacement therapies). |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P076 | 10102-43-9 | Nitric oxide |
| P076 | 10102-43-9 | Nitrogen oxide NO |
| P077 | 100-01-6 | Benzenamine, 4-nitro- |
| P077 | 100-01-6 | p-Nitroaniline |
| P078 | 10102-44-0 | Nitrogen dioxide |
| P078 | 10102-44-0 | Nitrogen oxide NO ₂ |
| P081 | 55-63-0 | Nitroglycerine (R) |
| P081 | 55-63-0 | 1,2,3-Propanetriol, trinitrate (R) |
| P082 | 62-75-9 | Methanamine, -methyl-N-nitroso- |
| P082 | 62-75-9 | N-Nitrosodimethylamine |
| P084 | 4549-40-0 | N-Nitrosomethylvinylamine |
| P084 | 4549-40-0 | Vinylamine, -methyl-N-nitroso- |
| P085 | 152-16-9 | Diphosphoramidate, octamethyl- |
| P085 | 152-16-9 | Octamethylpyrophosphoramidate |
| P087 | 20816-12-0 | Osmium oxide OsO ₄ , (T-4)- |
| P087 | 20816-12-0 | Osmium tetroxide |
| P088 | 145-73-3 | Endothall |
| P088 | 145-73-3 | 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid |
| P089 | 56-38-2 | Parathion |
| P089 | 56-38-2 | Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester |
| P092 | 62-38-4 | Mercury, (acetato-O)phenyl- |
| P092 | 62-38-4 | Phenylmercury acetate |
| P093 | 103-85-5 | Phenylthiourea |
| P093 | 103-85-5 | Thiourea, phenyl- |
| P094 | 298-02-2 | Phorate |
| P094 | 298-02-2 | Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester |
| P095 | 75-44-5 | Carbonic dichloride |
| P095 | 75-44-5 | Phosgene |
| P096 | 7803-51-2 | Hydrogen phosphide |
| P096 | 7803-51-2 | Phosphine |
| P097 | 52-85-7 | Famphur |
| P097 | 52-85-7 | Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O- |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|---|
| | | dimethyl ester |
| P098 | 151-50-8 | Potassium cyanide |
| P098 | 151-50-8 | Potassium cyanide K(CN) |
| P099 | 506-61-6 | Argentate(1-), bis(cyano-C)-, potassium |
| P099 | 506-61-6 | Potassium silver cyanide |
| P101 | 107-12-0 | Ethyl cyanide |
| P101 | 107-12-0 | Propanenitrile |
| P102 | 107-19-7 | Propargyl alcohol |
| P102 | 107-19-7 | 2-Propyn-1-ol |
| P103 | 630-10-4 | Selenourea |
| P104 | 506-64-9 | Silver cyanide |
| P104 | 506-64-9 | Silver cyanide Ag(CN) |
| P105 | 26628-22-8 | Sodium azide |
| P106 | 143-33-9 | Sodium cyanide |
| P106 | 143-33-9 | Sodium cyanide Na(CN) |
| P108 | ¹ 157-24-9 | Strychnidin-10-one, & salts |
| P108 | ¹ 157-24-9 | Strychnine, & salts |
| P109 | 3689-24-5 | Tetraethyldithiopyrophosphate |
| P109 | 3689-24-5 | Thiodiphosphoric acid, tetraethyl ester |
| P110 | 78-00-2 | Plumbane, tetraethyl- |
| P110 | 78-00-2 | Tetraethyl lead |
| P111 | 107-49-3 | Diphosphoric acid, tetraethyl ester |
| P111 | 107-49-3 | Tetraethyl pyrophosphate |
| P112 | 509-14-8 | Methane, tetranitro-(R) |
| P112 | 509-14-8 | Tetranitromethane (R) |
| P113 | 1314-32-5 | Thallic oxide |
| P113 | 1314-32-5 | Thallium oxide Tl ₂ O ₃ |
| P114 | 12039-52-0 | Selenious acid, dithallium(1 +) salt |
| P114 | 12039-52-0 | Tetraethyldithiopyrophosphate |
| P115 | 7446-18-6 | Thiodiphosphoric acid, tetraethyl ester |
| P115 | 7446-18-6 | Plumbane, tetraethyl- |
| P116 | 79-19-6 | Tetraethyl lead |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P116 | 79-19-6 | Thiosemicarbazide |
| P118 | 75-70-7 | Methanethiol, trichloro- |
| P118 | 75-70-7 | Trichloromethanethiol |
| P119 | 7803-55-6 | Ammonium vanadate |
| P119 | 7803-55-6 | Vanadic acid, ammonium salt |
| P120 | 1314-62-1 | Vanadium oxide V ₂ O ₅ |
| P120 | 1314-62-1 | Vanadium pentoxide |
| P121 | 557-21-1 | Zinc cyanide |
| P121 | 557-21-1 | Zinc cyanide Zn(CN) ₂ |
| P122 | 1314-84-7 | Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10% (R,T) |
| P123 | 8001-35-2 | Toxaphene |
| P127 | 1563-66-2 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate. |
| P127 | 1563-66-2 | Carbofuran |
| P128 | 315-8-4 | Mexacarbate |
| P128 | 315-18-4 | Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester) |
| P185 | 26419-73-8 | 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime. |
| P185 | 26419-73-8 | Tirpate |
| P188 | 57-64-7 | Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1) |
| P188 | 57-64-7 | Physostigmine salicylate |
| P189 | 55285-14-8 | Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester |
| P189 | 55285-14-8 | Carbosulfan |
| P190 | 1129-41-5 | Carbamic acid, methyl-, 3-methylphenyl ester |
| P190 | 1129-41-5 | Métolcarb |
| P191 | 644-64-4 | Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester |
| P191 | 644-64-4 | Dimetilan |
| P192 | 119-38-0 | Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester |
| P192 | 119-38-0 | Isolan |
| P194 | 23135-22-0 | Ethanimidthioic acid, 2-(dimethylamino)-N-[[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester |
| P194 | 23135-22-0 | Oxamyl |

| Hazardous Waste Code | Chemical Abstracts No. | Substance |
|----------------------|------------------------|--|
| P196 | 15339-36-3 | Manganese, bis(dimethylcarbamodithioato-S,S')-, |
| P196 | 15339-36-3 | Manganese dimethyldithiocarbamate |
| P197 | 17702-57-7 | Formparanate |
| P197 | 17702-57-7 | Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[[(methylamino)carbonyl]oxy]phenyl]- |
| P198 | 23422-53-9 | Formetanate hydrochloride |
| P198 | 23422-53-9 | Methanimidamide, N,N-dimethyl-N'-[3-[[[(methylamino)-carbonyl]oxy]phenyl]-monohydrochloride |
| P199 | 2032-65-7 | Methiocarb |
| P199 | 2032-65-7 | Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate |
| P201 | 2631-37-0 | Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate |
| P201 | 2631-37-0 | Promecarb |
| P202 | 64-00-6 | m-Cumenyl methylcarbamate |
| P202 | 64-00-6 | 3-Isopropylphenyl N-methylcarbamate |
| P202 | 64-00-6 | Phenol, 3-(1-methylethyl)-, methyl carbamate |
| P203 | 1646-88-4 | Aldicarb sulfone |
| P203 | 1646-88-4 | Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime |
| P204 | 57-47-6 | Physostigmine |
| P204 | 57-47-6 | Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)- |
| P205 | 137-30-4 | Zinc, bis(dimethylcarbamodithioato-S,S')-, |
| P205 | 137-30-4 | Ziram |

FOOTNOTE: ¹CAS Number given for parent compound only.

APPENDIX V- RESERVED

RESERVED

APPENDIX VI

Vermont Tax Codes

Unless one of the following tax codes apply, all manifested shipments of hazardous waste initiated in Vermont will be taxed at the rate specified in **32 VSA § 10103(a)(2)**. These tax codes must be entered into the Waste Codes section of the federal Uniform Hazardous Waste Manifest (Forms 8700-22 and 8700-22A (Rev. 3-05)) for a reduced tax rate or exemption to apply.

SPECIAL TAX RATE CODES:

VX50 Aggregated Waste [32 VSA § 10103(a)(3)]

Hazardous waste destined for any form of management shall be taxed at the rate of 1.0 cent per pound, if all of the following apply:

- (A) it is shipped from a storage or collection facility for which financial responsibility is required and maintained under section 6605 or 6606 of Title 10 or the rules adopted under those sections;
- (B) it is not generated by the owner or operator of the storage or collection facility;
- (C) it has not been previously taxed in Vermont; and
- (D) it has not been held on-site for more than 180 days.

VX51 Recycling Rate [32 VSA § 10103(a)(1)]

Hazardous waste destined to be recycled for a beneficial purpose as defined in section 7-602 of these regulations, except if it meets the criteria for aggregated waste (VX50) above, shall be taxed at the rate of 11 cents per gallon of liquid or 1.4 cents per pound of solid.

TAX EXEMPT CODES:

The following wastes and materials are not subject to the tax imposed at 32 VSA § 10103(a):

VX60 Household Hazardous Waste (HHW) [VHWMR § 7-203(a)]

Household hazardous waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. Household waste does not include hazardous waste generated at home-based businesses.

VX61 Federal Generators

Wastes generated by the federal government or federal governmental entities. This exemption generally does not apply to federal contractors.

VX62 Environmental Contingency Fund (ECF) [32 VSA § 10103(b)(1)]

Hazardous waste which is generated as a result of any action taken under section 1283 of Title 10 for which disbursements from the environmental contingency fund have been or will be made by the secretary.

VX63 Internal Shipments

Internal shipments within captive storage facilities. Waste from captive storage facilities is taxed when it is shipped to an off-site designated facility.

VX64 Previously Taxed Waste [32 VSA § 10103(b)(6)]

Hazardous waste that has been previously subject to the tax of 32 § VSA 10103, provided: (a) the person shipping the previously taxed waste has not held the waste for more than 180 days, and (b) if the waste has been mixed, the resulting mixture does not change the applicable U.S. Department of Transportation shipping description from that which applied before the waste was mixed.

VX65 Imports from a Foreign Country [32 VSA § 10103(c)(2)]

Any person who initiates a manifest to import hazardous waste into Vermont from a foreign country shall not be required to pay a tax under 32 VSA § 10103(a).

VX66 Redevelopment of Contaminated Properties Program (RCPP) [32 VSA § 10103(b)(7)]

Hazardous waste shipped in implementing a corrective action plan approved under 10 V.S.A. § 6615a, the redevelopment of contaminated properties program, provided that the secretary issues a certificate of completion, as provided under that section.

VX67 Specific Waivers [32 VSA § 10102(a)(2)]

Where the secretary of natural resources has determined, on a case-by-case basis, that this tax should not apply to a particular waste or generator.

Note: The VT99 Code should be used to describe non-hazardous wastes that do not require a unique identity on a manifest for either data tracking or tax purposes.

APPENDIX VII

Examples of Potentially Incompatible Waste

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his or her wastes so that he or she can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a **Group A** material with a **Group B** material may have the potential consequence as noted.

| Group 1-A | Group 1-B |
|--|---|
| Acetylene sludge | Acid sludge |
| Alkaline caustic liquids | Acid and water |
| Alkaline cleaner | Battery acid |
| Alkaline corrosive liquids | Chemical cleaners |
| Alkaline corrosive battery fluid | Electrolyte, acid |
| Caustic wastewater | Etching acid liquid or solvent |
| Lime wastewater | Pickling liquor and other corrosive acids |
| Lime and water | Spent acid |
| Spent caustic | Spent mixed acid |
| | Spent sulfuric acid |
| Potential consequences: Heat generation; violent reaction. | |

| Group 2-A | Group 2-B |
|--|-------------------------------|
| Aluminum Beryllium Calcium Lithium Magnesium Potassium Sodium Zinc powder Other reactive metals and metal hydrides | Any waste in Group 1-A or 1-B |

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

| Group 3-A | Group 3-B |
|-----------------------|--|
| Alcohols Water | Any concentrated waste in Groups 1-A or 1-B Calcium Lithium Metal hydrides Potassium SO ₂ Cl ₂ , SOCl ₂ , PCl ₃ , CH ₃ SiCl ₃ Other water-reactive waste |

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

| Group 4-A | Group 4-B |
|---|--|
| Alcohols Aldehydes Halogenated hydrocarbons Nitrated hydrocarbons Unsaturated hydrocarbons Other reactive organic compounds and solvents | Concentrated Group 1-A or 1-B wastes Group 2-A wastes |

Potential consequences: Fire, explosion, or violent reaction.

| Group 5-A | Group 5-B |
|-------------------------------------|------------------|
| Spent cyanide and sulfide solutions | Group 1-B wastes |

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

| Group 6-A | Group 6-B |
|------------------------|--|
| Chlorates | Acetic acid and other organic acids |
| Chlorine | Concentrated mineral acids |
| Chlorites | Group 2-A wastes |
| Chromic acid | Group 4-A wastes |
| Hyphochlorites | Other flammable and combustible wastes |
| Nitrates | |
| Nitric acid, fuming | |
| Perchlorates | |
| Permanganates | |
| Peroxides | |
| Other strong oxidizers | |

Potential consequences: Fire, explosion, or violent reaction.

Source: "Law, Regulations, and Guidelines for Handling of Hazardous Waste."
California Department of Health, February 1975.

APPENDIX VIII

Reserved

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APPENDIX IX

Basis for Listing Hazardous Waste

| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------------|---|
| F001 | Tetrachloroethylene, methylene chloride trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons |
| F002 | Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane |
| F003 | N.A. |
| F004 | Cresols and cresylic acid, nitrobenzene |
| F005 | Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane |
| F006 | Cadmium, hexavalent chromium, nickel, cyanide (complexed) |
| F007 | Cyanide (salts) |
| F008 | Cyanide (salts) |
| F009 | Cyanide (salts) |
| F010 | Cyanide (salts) |
| F011 | Cyanide (salts) |
| F012 | Cyanide (complexed) |
| F019 | Hexavalent chromium, cyanide (complexed) |
| F020 | Tetra- and pentachlorodibenzo-p-dioxins; tetra and pentachlorodi-benzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts |
| F021 | Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives |
| F022 | Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans |
| F023 | Tetra-, and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts |

| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------------|---|
| F024 | Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetra-chloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene |
| F025 | Chloromethane; Dichloromethane; Trichloromethane; Carbon tetrachloride; Chloroethylene; 1,1-Dichloroethane; 1,2-Dichloroethane; trans-1,2-Dichloroethylene; 1,1-Dichloroethylene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethylene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Tetrachloroethylene; Pentachloroethane; Hexachloroethane; Allyl chloride (3-Chloropropene); Dichloropropane; Dichloropropene; 2-Chloro-1,3-butadiene; Hexachloro-1,3-butadiene; Hexachlorocyclopentadiene; Benzene; Chlorobenzene; Dichlorobenzene; 1,2,4-Trichlorobenzene; Tetrachlorobenzene; Pentachlorobenzene; Hexachlorobenzene; Toluene; Naphthalene |
| F026 | Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans |
| F027 | Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts |
| F028 | Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts |
| F032 | Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)-anthracene, indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo-p-dioxins, tetra-, penta-, hexa-, heptachlorodibenzofurans |
| F034 | Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium. |
| F035 | Arsenic, chromium, lead |
| F037 | Benzene, benzo(a)pyrene, chrysene, lead, chromium |
| F038 | Benzene, benzo(a)pyrene, chrysene, lead, chromium |
| F039 | All constituents for which treatment standards are specified for multi-source leachate (wastewaters and nonwastewaters) under 40 CFR 268.43, Table CCW |

| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------|---|
| K001 | Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene |
| K002 | Hexavalent chromium, lead |
| K003 | Hexavalent chromium, lead |
| K004 | Hexavalent chromium |
| K005 | Hexavalent chromium, lead |
| K006 | Hexavalent chromium |
| K007 | Cyanide (complexed), hexavalent chromium |
| K008 | Hexavalent chromium |
| K009 | Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid |
| K010 | Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde |
| K011 | Acrylonitrile, acetonitrile, hydrocyanic acid |
| K013 | Hydrocyanic acid, acrylonitrile, acetonitrile |
| K014 | Acetonitrile, acrylamide |
| K015 | Benzyl chloride, chlorobenzene, toluene, benzotrichloride |
| K016 | Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene |
| K017 | Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis (2-chloroethyl) ethers], trichloropropane, dichloropropanols |
| K018 | 1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene |
| K019 | Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride |
| K020 | Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride |
| K021 | Antimony, carbon tetrachloride, chloroform |
| K022 | Phenol, tars (polycyclic aromatic hydrocarbons) |

| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------|--|
| K023 | Phthalic anhydride, maleic anhydride |
| K024 | Phthalic anhydride, 1,4-naphthoquinone |
| K025 | Meta-dinitrobenzene, 2,4-dinitrotoluene |
| K026 | Paraldehyde, pyridines, 2-picoline |
| K027 | Toluene diisocyanate, toluene-2, 4-diamine |
| K028 | 1,1,1-trichloroethane, vinyl chloride |
| K029 | 1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform |
| K030 | Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride |
| K031 | Arsenic |
| K032 | Hexachlorocyclopentadiene |
| K033 | Hexachlorocyclopentadiene |
| K034 | Hexachlorocyclopentadiene |
| K035 | Creosote, chrysene, naphthalene, fluoranthene benzo(b) fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene |
| K036 | Toluene, phosphorodithioic and phosphorothioic acid esters |
| K037 | Toluene, phosphorodithioic and phosphorothioic acid esters |
| K038 | Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters |
| K039 | Phosphorodithioic and phosphorothioic acid esters |
| K040 | Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters |
| K041 | Toxaphene |
| K042 | Hexachlorobenzene, ortho-dichlorobenzene |
| K043 | 2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol |
| K044 | N.A. |
| K045 | N.A. |
| K046 | Lead |
| K047 | N.A. |
| K048 | Hexavalent chromium, lead |
| K049 | Hexavalent chromium, lead |
| K050 | Hexavalent chromium |
| K051 | Hexavalent chromium, lead |

| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------|---|
| K052 | Lead |
| K060 | Cyanide, naphthalene, phenolic compounds, arsenic |
| K061 | Hexavalent chromium, lead, cadmium |
| K062 | Hexavalent chromium, lead |
| K069 | Hexavalent chromium, lead, cadmium |
| K071 | Mercury |
| K073 | Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane |
| K083 | Aniline, diphenylamine, nitrobenzene, phenylenediamine |
| K084 | Arsenic |
| K085 | Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride |
| K086 | Lead, hexavalent chromium |
| K087 | Phenol, naphthalene |
| K088 | Cyanide (complexes) |
| K093 | Phthalic anhydride, maleic anhydride |
| K094 | Phthalic anhydride |
| K095 | 1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane |
| K096 | 1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane |
| K097 | Chlordane, heptachlor |
| K098 | Toxaphene |
| K099 | 2,4-dichlorophenol, 2,4,6-trichlorophenol |
| K100 | Hexavalent chromium, lead, cadmium |
| K101 | Arsenic |
| K102 | Arsenic |
| K103 | Aniline, nitrobenzene, phenylenediamine |
| K104 | Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine |
| K105 | Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol |
| K106 | Mercury |
| K107 | 1,1-Dimethylhydrazine (UDMH) |
| K108 | 1,1-Dimethylhydrazine (UDMH) |
| K109 | 1,1-Dimethylhydrazine (UDMH) |

| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------|--|
| K110 | 1,1-Dimethylhydrazine (UDMH) |
| K111 | 2,4-Dinitrotoluene |
| K112 | 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline |
| K113 | 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline |
| K114 | 2,4-Toluenediamine, o-toluidine, p-toluidine |
| K115 | 2,4-Toluenediamine |
| K116 | Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene |
| K117 | Ethylene dibromide |
| K118 | Ethylene dibromide |
| K123 | Ethylene thiourea |
| K124 | Ethylene thiourea |
| K125 | Ethylene thiourea |
| K126 | Ethylene thiourea |
| K131 | Dimethyl sulfate, methyl bromide |
| K132 | Methyl bromide |
| K136 | Ethylene dibromide |
| K141 | Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene |
| K142 | Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene |
| K143 | Benzene, benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene |
| K144 | Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene |
| K145 | Benzene, benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene |
| K147 | Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene |
| K148 | Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene |
| K149 | Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene |

| EPA Hazardous Waste Code | Hazardous constituents for which listed |
|--------------------------|--|
| K150 | Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene |
| K151 | Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene |
| K156 | Benomyl, carbaryl, carbendazim, carbofuran, carbosulfan, formaldehyde, methylene chloride, triethylamine |
| K157 | Carbon tetrachloride, formaldehyde, methyl chloride, methylene chloride, pyridine, triethylamine |
| K158 | Benomyl, carbendazim, carbofuran, carbosulfan, chloroform, methylenechloride |
| K159 | Benzene, butylate, eptc, molinate, pebulate, vernolate |
| K161 | Antimony, arsenic, metam-sodium, ziram |
| K169 | Benzene |
| K170 | Benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, 3-methylcholanthrene, 7, 12-dimethylbenz(a)anthracene |
| K171 | Benzene, arsenic |
| K172 | Benzene, arsenic |
| K174 | 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,6,7,8,9-HpCDF), HxCDDs (All Hexachlorodibenzo-p-dioxins), HxCDFs (All Hexachlorodibenzofurans), PeCDDs (All Pentachlorodibenzo-p-dioxins), OCDD (1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin), OCDF (1,2,3,4,6,7,8,9-Octachlorodibenzofuran), PeCDFs (All Pentachlorodibenzofurans), TCDDs (All tetrachlorodi-benzo-p-dioxins), TCDFs (All tetrachlorodibenzofurans) |
| K175 | Mercury |
| K176 | Arsenic, Lead |
| K177 | Antimony |
| K178 | Thallium |
| K181 | Aniline, o-anisidine, 4-chloroaniline, p-cresidine, 2,4-dimethylaniline, 1,2-phenylenediamine, 1,3-phenylenediamine |

FOOTNOTE: N.A. -- Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity, or reactivity.

VERMONT **GENERAL ASSEMBLY**

The Vermont Statutes Online

Title 10 : Conservation And Development

Chapter 159 : Waste Management

Subchapter 001 : General Provisions

(Cite as: 10 V.S.A. § 6603)

§ 6603. Secretary; powers

In addition to any other powers conferred on him or her by law, the Secretary shall have the power to:

(1) Adopt, amend, and repeal rules pursuant to 3 V.S.A. chapter 25 implementing the provisions of this chapter.

(2) Issue compliance orders as may be necessary to effectuate the purposes of this chapter and enforce the same by all appropriate administrative and judicial proceedings.

(3) Encourage local units of government to manage solid waste problems within their respective jurisdictions or by contract on a cooperative regional or interstate basis.

(4) Provide technical assistance to municipalities.

(5) Contract in the name of the State for the service of independent contractors under bond, or with an agency or department of the State, or a municipality, to perform services or to provide facilities necessary for the implementation of the State plan, including the transportation and disposition of solid waste.

(6) Accept, receive, and administer grants or other funds or gifts from public and private agencies, including the federal government, for the purpose of carrying out any of the functions of this chapter. This would include the ability to convey such grants or other funds to municipalities or other instruments of State or local government.

(7) Prepare a report that proposes methods and programs for the collection and disposal of household quantities of hazardous waste. The report shall compare the advantages and disadvantages of alternate programs and their costs. The Secretary shall undertake a voluntary pilot project to determine the feasibility and effectiveness of such a program when in the Secretary's opinion such can be undertaken without undue risk to the public health and welfare. Such pilot program may address one or more forms of hazardous waste.

(8) Provide financial assistance to municipalities.

(9) Manage the hazardous wastes generated, transported, treated, stored, or

disposed in the State by administering a regulatory and management program that, at a minimum, meets the requirements of subtitle C of the Resource Conservation and Recovery Act of 1976 and amendments thereto, codified as 42 U.S.C. Chapter 82, subchapter 3, and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

(10) Require a facility permitted under section 6605 of this title or a transporter permitted under section 6607 of this title to explain its rate structure for different categories of waste to ensure that the rate structure is transparent to residential consumers. (Added 1977, No. 106, § 1; amended 1983, No. 148 (Adj. Sess.), § 2; 1989, No. 30, § 2, eff. April 27, 1989; 2011, No. 148 (Adj. Sess.), § 3.)

VERMONT **GENERAL ASSEMBLY**

The Vermont Statutes Online

Title 10 : Conservation And Development

Chapter 159 : Waste Management

Subchapter 001 : General Provisions

(Cite as: 10 V.S.A. § 6607)

§ 6607. Transportation of hazardous wastes

(a) In accordance with the Administrative Procedure Act, the Agency of Transportation, in consultation with the Secretary, shall issue rules for the transportation of hazardous wastes. Such rules shall be consistent with applicable rules issued by the U.S. Department of Transportation, and consistent with any rules and standards of this chapter.

(b) The provisions of this section shall apply equally to those persons transporting hazardous wastes generated by others and to those transporting hazardous wastes they have generated themselves, or combinations thereof, as well as persons transporting hazardous wastes through the State of Vermont.

(c) For purposes of their transportation, the following, in waste or usable form, shall not be considered hazardous wastes, but shall be handled as solid waste: mercury-added consumer products, pesticides, paint (whether water based or oil based), paint thinner, paint remover, stains, and varnishes. This exclusion shall not apply with respect to hazardous wastes that are regulated under federal law. (Added 1977, No. 106, § 1; amended 1991, No. 75, § 1; 1991, No. 210 (Adj. Sess.), § 3; 1993, No. 157 (Adj. Sess.), § 5; 1995, No. 141 (Adj. Sess.), § 7, eff. April 30, 1996; 1997, No. 151 (Adj. Sess.), § 1.)

VERMONT **GENERAL ASSEMBLY**

The Vermont Statutes Online

Title 10 : Conservation And Development

Chapter 159 : Waste Management

Subchapter 001 : General Provisions

(Cite as: 10 V.S.A. § 6608a)

§ 6608a. Economic poisons

(a) The Secretary of Agriculture, Food and Markets shall be responsible for and have the authority to implement and enforce those statutes enacted by the General Assembly, including sections 6610a and 6612 of this title, and those rules concerning the generation, transportation, treatment, storage, and disposal of economic poisons that are adopted by the Secretary of Natural Resources in order to operate a hazardous waste management program that is equivalent to the federal program under Subtitle C of the Resource Conservation and Recovery Act of 1976 as subsequently amended and codified in 42 U.S.C. chapter 82, subchapter 3. Procedures and funding for the interdepartmental implementation of a waste economic poison management program shall be established between the Secretary of Natural Resources and the Secretary of Agriculture, Food and Markets.

(b) The Secretary of Natural Resources shall not adopt rules concerning the management of waste economic poisons that are more stringent than the statutory and regulatory requirements under Subtitle C of the Resource Conservation and Recovery Act of 1976 without the concurrence of the Secretary of Agriculture, Food and Markets.

(c) Nothing in this section is intended to interfere with the Secretary of Agriculture, Food and Markets' authority relating to insecticides, fungicides, and rodenticides under 6 V.S.A. chapter 81 and relating to pesticides under 6 V.S.A. chapter 87 or shall prohibit the Secretary of Agriculture, Food and Markets from adopting rules concerning the management of waste economic poisons that are more stringent than the statutory and regulatory requirements under Subtitle C of the Resource Conservation and Recovery Act of 1976. Nothing in this section is intended to interfere with the Agency of Transportation's authority under section 6607 of this title. (Added 1977, No. 106, § 1; amended 1983, No. 148 (Adj. Sess.), § 4; 2015, No. 23, § 100; 2015, No. 97 (Adj. Sess.), § 35; 2017, No. 113 (Adj. Sess.), § 47a.)



Proposed Rules Postings

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Deadline For Public Comment

Deadline: Aug 20, 2021

The deadline for public comment has expired. Contact the agency or primary contact person listed below for assistance.

Rule Details

| | |
|------------------|---|
| Rule Number: | 21P022 |
| Title: | Vermont Hazardous Waste Management Regulations. |
| Type: | Standard |
| Status: | Final Proposed |
| Agency: | Agency of Natural Resources |
| Legal Authority: | 10 V.S.A. §§ 6603(9), 6607, and 6608a. |
| Summary: | Vermont has maintained Hazardous Waste Management Regulations since 1980. This rule, which has been revised routinely since 1980 to remain equivalent to the federal RCRA subtitle C hazardous waste regulations, provides a regulatory framework for managing hazardous waste by |

identifying wastes subject to regulation as hazardous and establishing management standards for businesses that generate, transport, treat, store or dispose of them. In general, the rule is being revised to incorporate required new federal rules, clarify existing requirements, and address non-federal deficiencies identified in the current version (e.g., limiting the scope of the VT06 listing for pesticides, clarifying generator closure requirements, correcting typos). Changes include: adoption of the federal Generator Improvement, Electronic Manifest, and Hazardous Waste Pharmaceutical rules; revisions to hazardous waste import/export requirements; addition of new universal wastes; and revision of the used oil management standards.

Persons Affected:

Affected parties include: hazardous waste generators (e.g., auto repair shops, manufacturing facilities, laboratories, metal working facilities, universities, medical facilities, waste management facilities); permitted transporters; permitted hazardous waste treatment, storage and disposal facilities; the solid waste management districts; environmental contractors and consultants; the U.S. Environmental Protection Agency (EPA); the Vermont Department of Health; the Vermont Agency of Agriculture, Food & Markets; the Vermont Agency of Transportation; and various divisions and programs within the Department of Environmental Conservation.

Economic Impact:

Overall, in comparison to current state and federal hazardous waste regulations, we do not expect the proposed rule to result in additional economic impact on most affected parties. Any minor economic that does result from implementation of the proposed rule will likely be offset by savings that will result from added flexibility leaving it neutral. The anticipated economic impact upon Agency and DEC staff is, in general, minimal; the new eManifest rule will provide an economic benefit to the Agency by eliminating the need for a manifest data entry position. Many of the new federal rules provide flexibility to small businesses and will likely have a positive economic impact (e.g., episodic generation, pharmaceutical waste rules, new universal waste listings).

Posting date:

Jul 07,2021

Hearing Information

Information for Hearing # 1

Hearing date: 08-10-2021 6:00 PM

Location: Pavilion Auditorium

Address: 109 State Street

City: Montpelier

State: VT

Zip: 05609

Hearing Notes:

Contact Information

Information for Primary Contact

PRIMARY CONTACT PERSON - A PERSON WHO IS ABLE TO ANSWER QUESTIONS ABOUT THE CONTENT OF THE RULE.

Level: Primary

Name: Anna Bourakovsky

Agency: Agency of Natural Resources

Address: 1 National Life Diver, Davis 1

City: Montpelier

State: VT

Zip: 05620-3704

Telephone: 802-477-2981

Fax:

Email: anna.bourakovsky@vermont.gov

Website: <https://dec.vermont.gov/waste-management/hazardous/regulations>

Address:

Information for Secondary Contact

SECONDARY CONTACT PERSON - A SPECIFIC PERSON FROM WHOM COPIES OF FILINGS MAY BE REQUESTED OR WHO MAY ANSWER QUESTIONS ABOUT FORMS SUBMITTED FOR FILING IF DIFFERENT FROM THE PRIMARY CONTACT PERSON.

Level: Secondary

Name: Jordan Gonda

Agency: Agency of Natural Resources

Address: 1 National Life Diver, Davis 1

City: Montpelier

State: VT

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Email: jordan.gonda@vermont.gov

Keyword Information

Keywords:

hazardous waste

manifest

generator

universal waste

used oil



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| | The Islander (islander@vermontislander.com) | Tel: 802-372-5600 FAX: 802-372-3025 |
| | Vermont Lawyer (hunter.press.vermont@gmail.com) | Attn: Will Hunter |

FROM: APA Coordinator, VSARA

Date of Fax: July 6, 2021

RE: The "Proposed State Rules " ad copy to run on

July 15, 2021

PAGES INCLUDING THIS COVER MEMO:

3

***NOTE* 8-pt font in body. 12-pt font max. for headings - single space body. Please include dashed lines where they appear in ad copy. Otherwise minimize the use of white space. Exceptions require written approval.**

If you have questions, or if the printing schedule of your paper is disrupted by holiday etc. please contact VSARA at 802-828-3700, or E-Mail sos.statutoryfilings@vermont.gov, Thanks.

PROPOSED STATE RULES

By law, public notice of proposed rules must be given by publication in newspapers of record. The purpose of these notices is to give the public a chance to respond to the proposals. The public notices for administrative rules are now also available online at <https://secure.vermont.gov/SOS/rules/> . The law requires an agency to hold a public hearing on a proposed rule, if requested to do so in writing by 25 persons or an association having at least 25 members.

To make special arrangements for individuals with disabilities or special needs please call or write the contact person listed below as soon as possible.

To obtain further information concerning any scheduled hearing(s), obtain copies of proposed rule(s) or submit comments regarding proposed rule(s), please call or write the contact person listed below. You may also submit comments in writing to the Legislative Committee on Administrative Rules, State House, Montpelier, Vermont 05602 (802-828-2231).

Interim Rules for Clinical Pharmacy.

Vermont Proposed Rule: 21E09

AGENCY: Secretary of State, Office of Professional Regulation

CONCISE SUMMARY: This rule provides regulatory structure for the implementation of certain clinical pharmacy services set out in 26 V.S.A. § 2023.

FOR FURTHER INFORMATION, CONTACT: Gabriel Gilman, Office of Professional Regulation, 89 Main Street - 3rd Floor, Montpelier, VT 05620-3402 Tel: 802-828-2492 Email: gabriel.gilman@vermont.gov URL: <https://sos.vermont.gov/pharmacy/statutes-rules-resources/>.

FOR COPIES: Jennifer Rotblatt, Office of Professional Regulation, 89 Main Street - 3rd Floor, Montpelier, VT 05620-3402 Tel: 802-828-2191 Email: jennifer.rotblatt@vermont.gov

Allocation and Apportionment of Vermont Net Income By Corporations.

Vermont Proposed Rule: 21P021

AGENCY: Agency of Administration, Department of Taxes

CONCISE SUMMARY: The 1998 Regulation has been superseded by statute in some respects. The amendments adjust the apportionment formula to be consistent with current law, and adjust the apportionment method for services and intangibles to accommodate statutory changes. Other changes provide specific definitions and examples, and provide clarity to the Department's interpretation of the tax on corporations.

FOR FURTHER INFORMATION, CONTACT: Will Baker, Department of Taxes, PO Box 429, Montpelier VT 05602 Tel: 802-828-2506 Fax: 802-828-5875 Email: will.baker@vermont.gov URL: <https://tax.vermont.gov>.

FOR COPIES: Rebecca Sameroff, Administration - Department of Taxes, PO Box 429 Montpelier VT 05602 Tel: 802-828-3763 Fax: 802-828-5875 Email: rebecca.sameroff@vermont.gov.

Vermont Hazardous Waste Management Regulations.

Vermont Proposed Rule: 21P022

AGENCY: Agency of Natural Resources

CONCISE SUMMARY: Vermont has maintained Hazardous Waste Management Regulations since 1980. This rule, which has been revised routinely since 1980 to remain equivalent to the federal RCRA subtitle C hazardous waste regulations, provides a regulatory framework for managing hazardous waste by identifying wastes subject to regulation as hazardous and establishing management standards for businesses that generate, transport, treat, store or dispose of them. In general, the rule is being revised to incorporate required new federal rules, clarify existing requirements, and address non-federal deficiencies identified in the current version (e.g., limiting the scope of the VT06 listing for pesticides, clarifying generator closure requirements, correcting typos). Changes include: adoption of the federal Generator Improvement, Electronic Manifest, and Hazardous Waste Pharmaceutical rules; revisions to hazardous waste import/export requirements; addition of new universal wastes; and revision of the used oil management standards.

FOR FURTHER INFORMATION, CONTACT: Anna Bourakovsky, Agency of Natural Resources, 1 National Life Drive, Davis 1, Montpelier VT 05620-3704 Tel: 802-477-2981 Email: anna.bourakovsky@vermont.gov URL: <https://dec.vermont.gov/waste-management/hazardous/regulations>.

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