

# 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:

**The Solid Waste Management Rule**

\_\_\_\_\_/s/ Julia S. Moore\_\_\_\_\_, on 8/27/2020  
(signature) (date)

Printed Name and Title:

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

Final Proposed Coversheet

1. TITLE OF RULE FILING:

**The Solid Waste Management Rule**

2. PROPOSED NUMBER ASSIGNED BY THE SECRETARY OF STATE

20P-005

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: Dennis Fekert

Agency: ANR

Mailing Address: 1 National Life Dr, 1 Davis, Montpelier,  
VT 05620

Telephone: 802 522 - 0195 Fax: -

E-Mail: dennis.fekert@vermont.gov

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

<https://dec.vermont.gov/waste-management/solid>

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: Kasey Kathan

Agency: ANR

Mailing Address: 1 National Life Dr, 1 Davis, Montpelier,  
VT 05620

Telephone: 802 522 - 0561 Fax: -

E-Mail: kasey.kathan@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:

Final Proposed Coversheet

*(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. chapter 159, 6603(1) and with respect to development soils 10 V.S.A chapter 159, 6604c(d)10

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

10 V.S.A chapter 159 governs waste management in Vermont. 10 V.S.A 6603(1) explicitly states that the Secretary of the Agency of Natural Resources (ANR) shall have the power to adopt, amend, and repeal rules pursuant to 3 V.S.A chapter 25 806 implementing the provisions of chapter 159.

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 NOT RAISED FOR OR AGAINST THE ORIGINAL PROPOSAL.

12. THE AGENCY HAS NOT INCLUDED COPIES OF ALL WRITTEN SUBMISSIONS AND SYNOPSES OF ORAL COMMENTS RECEIVED.

13. THE AGENCY HAS NOT 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):

These Rules contain requirements for solid waste management activities at facilities including transfer stations, recycling facilities, organics processing and landfills. The rules have been restructured and organized for clarity. The proposed revisions include changes to provisions addressing organics management with consideration of Anaerobic Digesters, Organic Recovery Facilities, and Organic Drop-off facilities. Also financial responsibility for landfills and post closure certifications including permit by rule for post closure. Subchapter 13 added a registry for imported class A biosolids, and also to align nutrient

## Final Proposed Coversheet

management standards with Required Agricultural Practices.

Provisions have been added addressing management of development soils. The revisions also propose changes to permitting requirements in accordance with Act 150 (10 V.S.A 170)

### 15. EXPLANATION OF WHY THE RULE IS NECESSARY:

These Rules have been adopted to implement the purposes and policies of title 10 chapter 159 to ensure proper management of solid waste within the State in a manner that is protective of public health and the environment. The proposed revisions to these Rules are necessary to address changes in materials management methods and current practices in solid waste management, the need for additional compliance by the regulated community, changes to financial requirements for landfills. The proposed revisions are also necessary to address requirements in recent statutory changes and to further incorporate written procedures into the rule for consistency and ease of use.

### 16. EXPLANATION OF HOW THE RULE IS NOT ARBITRARY:

These Rules have been adopted to implement the purposes and policies of title 10 chapter 159 in accordance with the powers provided to the Secretary of ANR in 10 V.S.A. § 6603(1). The rules are based on standards and practices developed by other states and the Federal Environmental Protection Agency for the regulation of the solid waste industry nationwide. Additionally, the Rules establish standards and requirements for solid waste management that apply consistently throughout the State and that ensure safe, proper, and sustainable management of solid waste in Vermont.

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

The following are subject to the provisions of these Rules: solid waste management districts, alliances and independent towns; solid waste management companies, haulers, and facility owners and operators; solid waste engineering firms; and organics management entities.

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

**Final Proposed Coversheet**

Proposed changes to financial responsibility requirements may impact landfill facility owners, but are necessary to ensure that public funds are not used for closure or post-closure maintenance and monitoring of the landfill.

However, any economic impacts resulting from these changes are appropriately balanced with the need for protection of human health and the environment, and avoid costs associated with long-term cleanup and ongoing maintenance and monitoring. The post closure certifications becoming permit by rule, will have a positive economic impact by avoiding application costs for owners of closed landfills including municipalities. Further the proposed changes will also result in potential savings for the regulated community by allowing development soils disposal in a categorical facility.

**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: 3/18/2020

Time: 06:00 PM

Street Address: Virtual

Zip Code:

Date: 3/23/2020

Time: 06:00 PM

Street Address: Virtual

Zip Code:

Date:

Time: AM

Street Address:

Zip Code:

Date:

Time: AM

Final Proposed Coversheet

Street Address:

Zip Code:

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

4/21/2020

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

procedures, solid waste, landfill, compost, composting,  
public notice, development soils,  
application,  
financial,  
organics,

# 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.

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1. TITLE OF RULE FILING:

**The Solid Waste Management Rule**

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*):

11P-03 Solid Waste Management Rules, March 15, 2012



**State of Vermont**  
**Agency of Administration**  
109 State Street  
Montpelier, VT 05609-0201  
[www.aoa.vermont.gov](http://www.aoa.vermont.gov)

[phone] 802-828-3322  
[fax] 802-828-3320

*Office of the Secretary*

## **INTERAGENCY COMMITTEE ON ADMINISTRATIVE RULES (ICAR) MINUTES**

**Meeting Date/Location:** January 13, 2020, Pavilion Building, 5<sup>th</sup> floor conference room, 109 State Street, Montpelier, VT 05609

**Members Present:** Chair Brad Ferland, Dirk Anderson, John Kessler, Steve Knudson, Clare O'Shaughnessy and via phone Diane Bothfeld and Matt Langham

**Members Absent:** Ashley Berliner, Jennifer Mojo, and Shayla Livingston

**Minutes By:** Melissa Mazza-Paquette

- 2:00 p.m. meeting called to order, welcome and introductions.
- Review and approval of minutes from the December 9, 2019 meeting.
- No additions/deletions to agenda. Agenda approved as drafted.
- No public comments made.
- Presentation of Proposed Rules on pages 2-5 to follow.
  1. Child Care Licensing Regulations: Center Based Child Care and Preschool Programs, Vermont Agency of Human Services, Department for Children & Families, page 2
  2. General Assistance / Emergency Assistance Rules, Vermont Agency of Human Services, Department for Children & Families, page 3
  3. Solid Waste Management Rules, Agency of Natural Resources, page 4
  4. Rule Governing Testing and Remediation of Lead in the Drinking Water of Schools and Child Care Facilities, Department of Health, page 5
- Next scheduled meeting is February 10, 2020 at 2:00 p.m.
- 3:20 p.m. meeting adjourned.



**Proposed Rule: Solid Waste Management Rules, Agency of Natural Resources  
Presented by Dennis Fekert, Eamon Twohig and Kasey Kathan**

Motion made to accept the rule by Diane Bothfeld, seconded by John Kessler, and passed unanimously with the following recommendations:

1. Be consistent with capitalization of the word “Rules” throughout the rule.
2. Proposed Rule Coversheet, page 2, #6: Clarify what this applies to, followed by the word “and” before the start of the current text on page 3.
3. Proposed Rule Coversheet, page 3, #8: Spell out the Department name for the wording of “Ag”.
4. Proposed Rule Coversheet, page 3, #9: Change “proposes” to “proposed”.
5. Proposed Rule Coversheet, page 4, #10: Define who developed the “standards and practices developed by”.
6. Proposed Rule Coversheet, page 4, #12: Reference statute to clarify the second sentence.
7. Proposed Rule Coversheet, page 5, #14-15: Complete.
8. Proposed Rule Coversheet, page 5, #16: Include ‘solid waste’, ‘landfill’, ‘compost’, composting’.
9. Final Proposed Rule Filing: Remove as it’s not needed for ICAR.
10. Adopted Rule Filing: Remove as it’s not needed for ICAR.
11. Economic Impact Analysis, page 1, #3: Include any estimated costs or benefits. Add farmers and their impact.
12. Economic Impact Analysis, page 2, #5-9: Complete.
13. Environmental Impact Analysis, page 2, #7: Correct spelling for ‘sequestration’.
14. Environmental Impact Analysis, page 2, #9: Complete.
15. Public Input, page 2, #5: Include the agriculture community such as the Vermont Farm Bureau and Rural Vermont.
16. Scientific Information, page 2, #5: Include a website link.
17. Public Input, page 1, #3: Complete.
18. Incorporation by Reference, page 1, #3: Use capitalization with the first words of “waste procedure”.
19. Incorporation by Reference, page 2, #10: Add website link.
20. Incorporation by Reference, page 2, #11: Change to “None” if appropriate.
21. Annotated Text: Be consistent with punctuation throughout the rule (some examples include page 166 (4) (ii) and 170 (a) (1) (A).

# 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.

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### 1. TITLE OF RULE FILING:

**The Solid Waste Management Rule**

### 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:*

Solid Waste Management Districts, Alliances and Independent Towns. Solid Waste Management Companies, Haulers and facility operators. Solid Waste Engineering companies, organics management entities, farmers who own anaerobic digesters. The benefits are more clarity for regulation expectations such as farmers importing solid waste for digestion having a simplified route to importation.

Economic Impact Analysis

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:*

These rules should have no effect or associated costs to schools.

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.*

N/A

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):*

Unless directly engaged in the business of solid waste these rules should not have any impact on small businesses. The proposed rules may have a positive impact on businesses engaged in the solid waste industry by clarifying practices and leveling the playing field, this includes businesses engaged in the organics management field.

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.*

A number of small businesses have emerged along with the food waste ban both in hauling and in composting the material. The Rules offer clarity to the business so that they can operate in an environmentally safe manner.

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:*

No Rules on the subject would lead to nuisance conditions and environmental impacts which could potentially lead to large sums of money to remedy. The clarity afforded by Rule in itself is a positive economic benefit.

Economic Impact Analysis

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

The staff of the Solid Waste Program has worked closely with many owners and operators of solid waste facilities and other entities charged with solid waste management (Towns, Solid Waste Districts, Alliances). We have discussed expense and affordability issues extensively with the affected industry. We believe this analysis covers all major expenses that the rule will mandate.

# 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

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### 1. TITLE OF RULE FILING:

**The Solid Waste Management Rule**

### 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 adoption of rules for the disposal of Development Soils, the statutory ban of organics from the landfill, and the land application of biosolids material should reduce the trucking of these waste materials long distances to the state's only landfill and allow for more local management alternatives.

### 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.):*

The diversion of food processing residuals from Wastewater Treatment Facilities to Anaerobic Digesters preserves wastewater treatment facility capacity, thereby protecting quality of receiving waters. Recycling of organics to the land builds and enhances

## Environmental Impact Analysis

soil quality and water retention capacity for improved flood resiliency.

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

The Rules may have an impact on Agricultural land in that the process to accept solid waste (food residuals) into on-farm anaerobic digesters has been streamlined. The acceptance of food and other residual materials on farms imports nutrients to these properties and is thus contingent on having approved nutrient management plans for the farm fields.

6. **RECREATION:** *EXPLAIN HOW THE RULE IMPACT RECREATION IN THE STATE:*

These rules should not impact recreation.

7. **CLIMATE:** *EXPLAIN HOW THE RULE IMPACTS THE CLIMATE IN THE STATE:*

Diversion of Organic Materials (FOOD RESIDUALS, BIOSOLIDS, ETC) from the landfill results in reduced carbon emissions associated with hauling and landfill gas production. Recycling these wastes to the land builds soils for carbon sequestration.

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

Diverting organic materials (FOOD WASTE, BIOSOLIDS, ETC) from the landfill and recycling them to the land builds soil and recycles essential nutrients such as Phosphorus and Nitrogen when applied within the requirements of a nutrient management plan.

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

We believe this analysis has addressed all relevant environmental issues.

# 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:

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1. TITLE OF RULE FILING:

**The Solid Waste Management Rule**

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:

ICAR recommended a few edits to the APA forms, but they made no recommendations for additional public input. We believe they felt our public input strategy was sufficient.

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

The Solid Waste Program (Program) held an informal public informational meeting in 2017 for the Draft Solid Waste Rules. The meeting primarily for ''Interested Parties'' who were invited to Montpelier for a question and answer session on the proposed rules. Groups that were invited included Solid Waste Haulers, Solid Waste Facility operators, Solid Waste Management Entities such as Districts and Alliances, Solid Waste Engineering firms, and Organics management groups. The meeting was followed by a comment period and the Program issued a responsiveness summary (attached) to the comments received. In August 2019 after an extensive internal review, the Draft Rules were once again shared with a list of interested parties much the same as in 2017. A comment period

## Public Input

ensued and again a responsiveness summary (attached) was issued. The Program offered another opportunity for comment after the ICAR meeting, during the rule making process. The Program held two public informational meetings in the month of March, as both meetings occurred during the period when public gatherings were discouraged the meetings were held via Skype and also included a call in phone number for participants who could not access Skype. The Program received 188 separate comments from 10 unique commenters. The Program developed an extensive responsiveness summary which details responses to comments received and includes a table that details any changes made to the Rule due to those comments.

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

The Solid Waste Management Entities such as Districts, Alliances, and Independent Towns. Other state departments and agencies such as Department of Health, Agency of Agriculture Food and Markets, Solid Waste Management Haulers and facility operators. Engineering Firms and material specific organizations such as N.E. Biosolids, Compost Association of Vermont, Stericycle Inc. Northeast Recycling Coalition, Rural Vermont and the general public.

## 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:

**The Solid Waste Management Rule**

2. ADOPTING AGENCY:

Agency of Natural Resources

3. BRIEF EXPLANATION OF SCIENTIFIC INFORMATION:

The changes proposed in this rule include clarifications of existing standards. Updates to standards for regulated compounds are based upon Vermont Department of Health risk assessments.

4. CITATION OF SOURCE DOCUMENTATION OF SCIENTIFIC INFORMATION:

The scientific basis for the federally required portions of this rule is from scientific studies conducted by the U.S. Environmental Protection Agency and from widely accepted industry and engineering standards. Standards for regulated compounds are based upon US EPA risk assessments and, in some cases, strengthened by Vermont Department of Health risk assessments.

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

## Scientific Information

Copies of the scientific material are available from the Solid Waste Management Program, Waste Management & Prevention Division, Department of Environmental Conservation, 1 National Life Drive - Davis 1, Montpelier VT, 05620-3704. Phone: 802-522-0195. e-mail: dennis.fekert@vermont.gov.

<https://dec.vermont.gov/waste-management/solid>

## 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.

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#### 1. TITLE OF RULE FILING:

**The Solid Waste Management Rule**

#### 2. ADOPTING AGENCY:

Agency of Natural Resources

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

Procedures which are referenced by the rules are SPLP (Synthetic Precipitation Leaching Procedure), and TCLP (Toxicity Characterization Leaching Procedure) which are analytical methods to measure the amount that a given material would be expected to leach contaminants. The Wood Ash Procedure explains the proper management of wood ash as does the short paper fiber procedure.

The Regulated Medical Waste Procedure is a comprehensive guide to handling and managing regulated medical waste. The approved feedstocks for small composting operations is a descriptive list of the acceptable feedstocks for this size composting facility.

#### 4. FORMAL CITATION OF MATERIALS INCORPORATED BY REFERENCE:

EPA SW-846 Synthetic Precipitation Leaching Procedure

### Incorporation By Reference

(SPLP), Toxicity Characterization Leaching Procedure (TCLP), Agency's 2009 "Comprehensive Wood Ash Management Procedure, Comprehensive Short Paper Fiber Management Procedure, Procedure Addressing Regulated Medical Waste Definitions and the Handling and Treatment of Regulated Medical Waste, Approved feedstocks for small facilities registered to operate under acceptable composting practices

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

Copies of all incorporated materials are available for examination on the Agency website and at the offices of the Solid Waste Program, Waste Management & Prevention Division, Department of Environmental Conservation, 1 National Life Drive - Davis 1, Montpelier VT, 05620-3704. Phone 802-522-0195, e-mail: dennis.fekert@vermont.gov.  
<https://dec.vermont.gov/waste-management/solid>

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):*

N/A

Run Spell Check

**Responsiveness Summary to 2020 Comment Period on Draft Solid Waste Management Rules**

This responsiveness summary was developed to reply to comments from two public meetings, the meetings occurred on Wednesday, March 18, 2020 and on Monday, March 23, 2020. Due to the Covid-19 constraints on public meetings the meetings were conducted virtually using Skype and by providing a teleconference number for call ins. The public comment period was to end on April 7, 2020 but was extended by request for two weeks until April 21, 2020. The Solid Waste Program received written comments from 10 entities which totaled 185 individual comments.

All received comments have been organized, by section within their respective subchapters. Original comments are in black text, while the Secretary’s responses are provided after the comment in blue text.

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## Subchapter 1 – Purpose

### § 6-104 Fees

- 1) If municipalities are exempt from fees, municipal ownership of facilities should be the relevant factor, not facility operator. *Please consider removing “Facilities operated by a private entity are required to pay relevant fees” and relying on the language in (c).*

Response: The Program disagrees that municipal ownership is the sole factor in determining fee payment. § 6-104(c) identifies the considerations in determining if a private applicant, operating as a contracted service provider, is able to be considered for the fee exemption. No changes have been made.

## Subchapter 2 – General Definitions and Acronyms

### § 6-201 Definitions

- 2) “Adjoining Residences and Landowners”; The definition has stripped out adjoining residences, despite the definitional title. Not all Vermonters can afford to own real estate, many rent, particularly those at the lower end of the income spectrum. The changes proposed would deny these residents who reside directly adjacent to solid waste facilities such as landfills and large transfer stations public notice as they are simply tenants and not landowners. This change is inappropriate and smacks as an environmental justice issue. *Please keep current definition or amend the definition proposed to include adjoining residents as the original definition intended.*

Response: The intent is to notify all adjacent landowners consistent with the requirements of 10 V.S.A 170 and the standard Notification Procedures that have been adopted by the Department. The Environmental Notice Bulletin (ENB) will contact all persons who properly subscribe to the ENB, providing the opportunity for notification for any interested party, regardless of property ownership. The Department of Environmental Conservation encourages all Vermonters to subscribe the ENB. The Solid Waste Program will develop a policy to ensure that residents also receive notification.

- 3) “Architectural Waste”; Please consider narrowing the definition to clean drywall from construction, as discarded drywall from demolition cannot be recycled.

Response: The Program agrees with the comment; however, the definition is directly from statute, these rules will remain consistent with that statute. However, the Program has developed a policy stating that the interpretation of architectural waste drywall is new and clean, with demolition drywall only being diverted as achievable.

- 4) “Asbestos Waste”; Consider the addition of definitions of Friable Asbestos Waste and Non-Friable Asbestos Waste to distinguish between the two categories within the existing definition of Asbestos Waste.

Response: Friable asbestos is mentioned in the Rules 6-1006 (8) re: waste control plans, therefore a definition is appropriate. The following definition has been added:

*“Friable asbestos” means any asbestos containing material that can be crushed, crumbled, pulverized or turned to powder with the ordinary force of a human hand.*

- 5) “Closure” and “Clean Wood”; Correct formatting issue at the top of page 11 to separate out the definition of “Clean wood”; it is currently embedded in the definition of closure.

Response: This has been corrected.

- 6) “Composting” means the controlled **aerobic** biological decomposition of organic matter through active management to produce a stable humus-rich material compost (as that term is defined in 10 V.S.A. §6602 and subchapter 11 of these Rules). **Comment:** Adding “aerobic” brings this in line with **§ 6-1102 Organic Specific Definitions (e)** “Compost” means the product of composting; consisting of a group of organic residues or a

mixture of organic residues and soil that have been piled, moistened, and allowed to undergo aerobic biological decomposition. means a stable humus-like material produced by the controlled biological decomposition of organic matter through active management, but shall not mean sewage, septage, or materials derived from sewage or septage.

Response: The Program agrees and has changed the definition to read:

*“Composting” means the controlled aerobic biological decomposition of organic matter through active management to produce ~~a stable humus rich material~~ compost (as that term is defined in 10 V.S.A. §6602 and subchapter 11 of these Rules).*

- 7) “Construction and Demolition Debris”; Please consider removing furniture and mattresses from this definition. The discarding of furniture and mattresses occurs aside from construction and demolition. Consider adding a definition for “Bulky Waste” for these items.

Response: The Program has had construction and demolition (C&D) debris operators ask if furniture or mattresses had to be pulled out of C&D loads as they were not previously included within the definition. The program does not require exclusion of these materials from C&D loads if they occur incidentally to a C&D project, and so they have been added to the definition to provide this clarity. The term Bulky Waste is not used in the rules so does not need to be defined. The definition has been changed for additional clarity based on this comment and now reads:

*Construction and Demolition Waste” or “C&D” means waste derived from the construction or demolition of buildings, roadways or structures, including, but not limited to, clean wood, treated or painted wood, plaster sheetrock, drywall, roofing paper and shingles, insulation, glass, ~~stone-soil~~, flooring materials, brick, masonry, mortar; and stone, soil, metal, furniture, and mattresses that are present incidental to building demolition. This definition includes architectural waste. This definition does not include asbestos waste, regulated hazardous waste, hazardous waste generated by households, or hazardous waste from conditionally exempt generators.*

- 8) “Food residual”: ...does not mean or meat-related products when the food residuals are composted by a resident onsite." *Does this prohibit home and community composters from using an appropriate system, such as an in-vessel (e.g., Jora), which is fully enclosed and wildlife resistant. These systems also reach PFRP temperatures when managed properly. Or, Green Cones, while not composters, these do effectively process meats and are promoted as an organics management tool for smaller scale compost systems.*

Response: This language does not prohibit residents that want to compost their food residuals at home from composting meat or bones. If backyard composters have a system that is capable of composting meat and bones and wish to include those materials, they are free to do so, but they are not required to. Note: for consistency this is the exact definition of food residuals from statute (10 V.S.A. § 6602(31)).

- 9) “Organics” means any carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and non-recyclable paper products. Some facilities, such as WSWMD and Green Mt. Compost also accept kitty litter from residents. Manures, particularly chicken, rabbit, goat, and even other livestock manures and bedding are promoted for composting all systems – from home and community to commercial/industrial. *If the definition includes manure (livestock, not pet), the types of acceptable manures should be stated in order not to add confusion. Moreover, it might be beneficial to include an additional separate definition of manure and bedding.*

Response: The Program understands and agrees with the commenter’s point that there are many materials outside this definition that qualify as “organic”. The intent of all listed definitions is to provide necessary context for how each term will be used within the Solid Waste Management Rules. There are many organic materials that make fantastic composting feedstocks, however they are not required to be managed by haulers, transfer stations, etc. as a solid waste (i.e. human & pet feces, livestock manures), and therefore they have been left out of this

definition as applicable to the activities regulated by these rules. We've clarified through the below definition revision that this term applies only to organic materials that meet the definition of solid waste.

*"Organics Solid Waste" means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics.*

- 10) "Discrete Disposal Facilities" – this term along with its definition has been struck from the Rule in your draft. This term is struck throughout the document and replaced with "landfill". While the change to the using the term "landfill" is a good clarification, it is important to now add a definition for "Landfill" upfront in the definitions section. I will let you define it, but it does need to be defined.

Response: Agreed, a definition for landfill would be beneficial. The following has been added and is derived from the statutory definition:

*"Landfill" means a land disposal facility employing an engineered method of disposing of solid waste on land in a manner that minimizes environmental hazards by spreading the solid waste in thin layers, compacting the solid waste to the smallest practical volume, and applying and compacting cover material at the end of each operating day.*

- 11) "Diversion" – this is a totally new definition. It is inconsistent with statute in that it states in relevant part: "Diversion" means the management of solid wastes through methods other than disposal. Diversion includes recycling, composting, reuse and anaerobic energy production." For a material to become a solid waste, the material must first be "discarded". To reuse a material for a different application than it was originally used for occurs prior to it being discarded and becoming a regulated solid waste. Please remove the word reuse from this definition as characterizing a material that is being reused as a solid waste is inconsistent with Vermont law.

Response: The program disagrees that the concept of material reuse being considered a diversion activity conflicts with statute. Diversion is used in several places throughout the solid waste statute, including within 10 V.S.A. § 6604, where the statewide solid waste management plan is required to promote "the reuse and closed-loop recycling of waste" (§6604(a)(1)(C)). The 2014 and 2019 Vermont Materials Management Plans defined "diversion rate" as "the measurement of the amount of waste diverted (by composting, reusing, and recycling materials), divided by the sum of waste diverted and waste disposed (at disposal facilities, landfills and incinerators)". Therefore, the definition included within these proposed rules is in line with the purpose and intent of both statute and the statewide materials management plan. Diversion will remain a solid waste term, used to cover the wide array of beneficial uses, like recycling and including reuse, for wastes that have been discarded by their original owner.

- 12) "Diversion"; The use of approved alternative daily cover materials at landfills replaces the use of clean soil as cover, in the same manner as the reuse of potential waste materials in any other construction project. Despite being used within the footprint of the landfill, alternative daily cover materials are not used for disposal, and should meet the definition of diversion. Please consider removing the exclusion for alternative daily cover at landfills in this definition.

Response: The proper use of the material outside of a landfill would meet the definition of Diversion. If the material is destined for disposal in the landfill and can be used as an alternative daily cover, the material may be used but the use within the landfill footprint does not qualify as a diverted material. The definition has not been changed.

- 13) "Drinking Water Source"; Consider striking "used or". The definition of a drinking water source should depend on whether the source is permitted for use as drinking water, not whether someone is choosing to use it without a permit.

Response: There are unpermitted drinking water sources that are currently in use providing potable water. In addition to those that are unpermitted, but should hold a permit, there are some that predate the Department's permitting process and these historical sources require protection as well. The language has not been changed.

- 14) "Final Grades"; Please consider replacing "prior to" with "at" within the definition.

Response: The Program disagrees with the removal of "prior to" from this sentence. Final grades are the slopes prior to closure. However, the Program agrees that this definition is problematic in consideration of the process of overfilling to allow for settlement prior to achieving final grades. The Program is amending this definition to address the fact that the slopes at final grade may not necessarily be the maximum slopes over the lifetime of the landfill. The definition now reads:

*"Final Grades" means the ~~maximum~~ authorized slopes and in-place volume of waste and cover materials achieved prior to final closure.*

- 15) "Food Residuals"; Clarify what constitutes as "on site" in reference to meat and bones by residents. Consider changing on-site to "back yard composting".

Response: The term "on site" as used in the above referenced definition – "Food residual" does not mean meat and meat-related products when the food residuals are composted by a resident on site refers to material generated by a resident and managed on the same property. That language is taken from the definition of food residuals in 10 V.S.A. § 6602(31), and the Program would like to maintain the same wording for consistency. No changes have been made.

- 16) "Food residual" means source separated and uncontaminated material that is derived from processing or discarding of food and that is recyclable in a manner consistent with 10 V.S.A. § 6605k. Food residual includes pre-consumer and postconsumer food scraps. "Food residual" does not include meat and meat-related products when these materials are composted by a resident on site. **Question:** Is the highlighted text being called out because meat and eat-related products are can still be landfilled, under the Universal Recycling Law? I imagine that this is not restricting residents from composting meat and meat-related products (in backyard systems), should they choose? Some of the compost tumblers CAV promotes reach PFRP temps, and residents are in fact composting meat and bones in them. Green Cones are also promoted for residential disposal of these materials. Note that this definition also appears in **§ 6-1102 Organic Specific Definitions; item (p)**.

Response: This language does not prohibit residents who choose to compost their food residuals at home from composting meat or bones. If backyard composters have a system that is capable of composting meat and bones and wish to include those materials, they are free to do so, but they are not required to. Note: for consistency, this language is taken directly from the definition of food residuals from statute (10 V.S.A. § 6602(31)).

- 17) "Hazardous Materials"; The definition as written does not appear to incorporate any exclusions, such as for household materials.

Response: Household hazardous materials are hazardous materials. However, they are individually defined and have been provided with exemptions by the Rule. The inclusion of these exemptions within the definition would not provide greater clarity to these rules and no changes have been made.

- 18) VAAFM requests that the inclusion of the following definition: "Required Agricultural Practices Rule (RAPs)" means the Vermont Required Agricultural Practices Rule adopted pursuant to 6 V.S.A. § 4810.

Response: The Program will add language to the definitions and RAPs to the acronym listing. The addition will read:

*“Required Agricultural Practices Rule” or “RAPs” means the Vermont Required Agricultural Practices Rule adopted pursuant to 6 V.S.A. § 4810.*

- 19) “Nuisance”; To be more consistent with how nuisance has previously been defined in Vermont, we suggest the following revised definition: “Nuisance” means anything that is injurious to human health or is indecent or offensive to the senses and occurs as the result of the storage, transport, processing, or disposal of solid wastes. Constitutes the unreasonable and substantial interference with the comfortable enjoyment of life or property and affects any considerable number of persons at the same time.

Response: The Program disagrees with the proposed additional language. A nuisance is difficult to validate, but the addition of unreasonable and substantial to consideration of interfering with comfortable enjoyment of life or property does not offer improvement, and to some degree weakens the standard. The addition of unreasonable or substantial presumes a baseline level of acceptable interference before a nuisance condition is attained, which is not the intent of the nuisance standard.

- 20) “Organics” means any carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics. **Comment:** Although not called out specifically, I assume that manures fall under the highlighted part of this definition.

Response: Correct, manures that fall under the definition of solid waste are included in this definition. We’ve clarified, through the definition revision below, that this term applies only to organic materials that meet the definition of solid waste.

*“Organics Solid Waste” means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics.*

- 21) “Organics” – this proposed term is used inconsistently throughout the draft Rule document. The second sentence of this very definition interchanges the term “organic materials” for “Organics”. The term Organics is really slang for Organic Materials and doesn’t belong in a regulation as a regulatory term. I would suggest changing the term from “Organics” to “Organic Materials” both here and throughout the document. In the alternative (although I believe street slang should not be used in a Rule), you at very least could change the term being defined to ““Organics” or “Organic Material””, which would allow for two terms to be interchanged throughout the Rule document as occurs in the current draft Rule.

Response: The Program agrees that “organics” should be replaced with “organic solid waste”. We’re proposing the following definition revision.

*“Organics Solid Waste” means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics.*

- 22) “Organic Drop-Off” means a registered facility that is not located on a certified solid waste facility and is approved for the collection of food residuals. **Comment:** My understanding of this is that an “Organic Drop-Off” site requires subsequent transport of collected organics to a site, and does not include collection of organics **at** a composting site. An example of this would be a community composting site, where people drop off organics for later integration into the composting system. In this case, the collections area is part of – and not separate from – the site. In contrast, if a business wanted to allow their employees to bring food scraps from home to the

businesses organics tote (or dumpster), they would need to register their business with ANR as an “Organic Drop-Off” site. Is this correct?

Response: Correct, this definition is only applicable to transfer activities. A location that receives food residuals and composts them would either qualify for an exemption from the composting certification requirements, or obtain the necessary registration or certification subject to Subchapter 11.

For additional clarity, and in consideration of comments 23 and 24 below, the definition has been revised to read:

*“Food Residual Drop-Off” means a registered facility that is not located ~~on~~ at a certified solid waste facility and is approved only for the collection of food residuals.*

- 23) “Organic Drop-Off”. Typo / inconsistency. As provided above, change term to (preferably) read as “Organic Materials Drop-Off” or (less-preferred) “Organics Drop-Off”.

Response: Noted, and revised to the following, as per comment 22 above:

*“Food Residual Drop-Off” means a registered facility that is not located ~~on~~ at a certified solid waste facility and is approved only for the collection of food residuals.*

- 24) “Organic Drop-off”; Consider replacing “on” with “at” at certified waste facility.

Response: Agreed, and in consideration of comments 22 and 23 above, this definition has been revised to read:

*“Food Residual Drop-Off” means a registered facility that is not located ~~on~~ at a certified solid waste facility and is approved only for the collection of food residuals.*

- 25) “Organics Recovery Facility” or “ORF” means a facility where organic materials are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester.

*We assume this definition is for collection of materials at sites for anaerobic digestion processing. If this is the case it should be further clarified as to how it differs from an “Organic Drop-Off.”*

Response: This was a common comment. The Program is proposing to change the terms to help add clarity. Additionally, the activity type criteria in Subchapter 12 (summarized below) further explain the differences in these two activities.

§ 6-1202(a) Organics Food Residual Drop-Off Facilities. Facilities that accept solely food residuals at a volume of less than 144 gallons per week shall register with the Secretary pursuant to § 6-1206 of this subchapter.

§ 6-1202(c) Organics Solid Waste Recovery Facilities (ORF). Facilities that aggregate food residuals and process them into a slurried form for delivery to an organics management facility. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester. The facilities must obtain a certification pursuant to subchapter 9.

- 26) “Organics Recovery Facility” or “ORF” means a facility where organic materials are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester. **Question:** How are these different that “Organic Drop-Off”?

Response: See response to #25 above.

- 27) “Organics Recovery Facility” or “ORF”. The proposed new definition states in relevant part: “Organics Recovery Facility” or “ORF” means a facility where organic materials are collected, treated, and or stored in preparation for ....” This facility would actually be the recipient of “discarded” organic materials. For regulatory clarity and consistency with statute, please amend the proposed definition as follows: “Organics Recovery Facility” or “ORF” means a facility where **discarded** organic materials are collected, treated, and or stored in preparation for ....”

Response: Agreed, however, rather than adding the term discarded to this definition, we are changing the term and definition to indicate that it’s an organic solid waste recovery facility. By definition a solid waste is discarded.

*“Organics Solid Waste Recovery Facility” or “ORF” means a facility where organic ~~materials~~ solid wastes are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester.*

### Subchapter 3 – Applicability, Exemptions, and Prohibitions

#### § 6-302 Exemptions

- 28) (a) (11); Glycerol exemption: Please consider the addition of municipal anaerobic digesters to this list.

Response: Agreed, municipal digesters will be added to the exemption.

- 29) (a)(16)(L); Heavily-bedded **horse** manure (carbon to nitrogen ratio of 22-50:1); **Comment:** Suggest striking the word “horse”. Other types of bedded manure may meet the specified C:N of 22-50:1.

Response: This list is for approved high carbon bulking agents permitted to be used at small compost facilities. The idea is that the list is clear and concise, and no other conditions that apply. Other well-bedded manures may at times meet this carbon to nitrogen ratio, but it would be variable and would have to be verified on a case-by-case basis, so it’s not appropriate to include on this exemption list. Small facilities can still compost other manures if they choose, just not as a recognized high-carbon bulking agent.

- 30) (a)(15)(B)(iv) Processed Glass Aggregate Drainage Applications; Consider the addition of “(III) Leachate and landfill gas collection structures within landfills” to the approved list of Exemptions for Drainage Applications.

Response: The Program agrees that the use of Processed Glass Aggregate may be appropriate for some drainage applications within landfills. However, rather than provide a comprehensive exemption for this practice within the Rules, the Program will approve the use of these materials on a case by case basis as they are incorporated into submitted and approved design and operational plans for a permitted facility.

#### § 6-303 Waiver of Technical Standards

- 31) The inclusion of these conditions (A), (B) and (C) opens the door to allowing political whims of any Presidential or Governmental administration to undermine the protection of the public and environmental health that must be the primary concern of these SWM Rules. For example, vis a vis (A), the current President has turned back the Clean Air and Clean Water Acts, enacted by the previous administration in an effort to combat release of toxins into our nation’s air and water by industry. If this clause 6-303 is not struck, for example, it would be permissible for the conditions imposed by the District Environmental Commission in August, 2019 on NEWSVT, banning the disposal of toxic leachate into Lake Memphremagog, to be overturned based on the current President’s whim. In the language of (B), what burden of proof would be required that would allow the Secretary to “waive technical and siting requirements of these Rules”? The State of Vermont must commit to the highest and most stringent scientific standards for the protection of Vermont’s environment and people, regardless of what standards the Federal government imposes, unless they be more stringent than those currently imposed by the State of Vermont.

Response: §6-303 provides ability to waive technical and siting standards in two specific scenarios. The first described by §6-303(A) provides this waiver only for federal or state removal or remedial action plans. Both these federal and state remedial action plans are approved through a process that includes public participation, this waiver is not for operating solid waste facilities. Additionally, the waiver for these removal or remedial action plans can only be achieved if no adverse effect can be determined. For the example provided within the comment, a landfill that is operational would not be eligible for this waiver. This waiver provides the flexibility for remedial clean-up actions to occur when meeting the full requirements of these rules may impair the remedy itself or make it technically unfeasible. The second instance in which a waiver of technical or siting standards may be granted is defined by §6-303(B), which is when a specific variance has been granted. As outlined by these rules, this process would include public comment and a demonstration of need, public benefit and continued environmental and public health and safety protections. No changes have been made.

#### § 6-304 Prohibitions

- 32) Item (1) may be item (a) by the numbering on the rest of the page.

Response: This formatting issue has been corrected in the clean-copy version of these draft rules.

- 33) (e); as presented and without a definition for commercial septage appears in conflict with permitted land application sites. Please consider the addition of “permitted” where appropriate for treated septage, etc. or define commercial septage.

Response: The Program agrees that without definition, this prohibition is unclear. To lend clarity a definition for domestic septage has been added and it reads:

“Domestic septage” means either liquid or solid material removed from a septic tank or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater, or a mixture of commercial or industrial and domestic wastes, portable toilet waste, holding tank waste, cesspool waste, waste from Type III marine sanitation devices, or grease removed from a grease trap..

- 34) My general comment is one of disappointment that the Secretary ANR still allows the burning of structures for the purpose of training firefighters. Having been a firefighter and as a town selectboard member, I am very much aware that the burning of structures in this day and age is unnecessary for the purposes of firefighter training and in fact disallowed under current health and safety standards as well as by insurers of municipalities and fire companies. Structures are now filled with artificial smoke for training. The only reason to burn a structure, most containing lead paint and other hazardous air contaminant sources when burned, is to provide an inexpensive, but environmentally unsound disposal alternative to landfilling a demolished structure. Burning such structures occurs without notice to neighbors and results in nearby residents (including elderly, women in their reproductive years and children) inhaling volatilized lead and other hazardous air contaminants, contaminants that contaminate nearby properties, organic farm fields and vegetable gardens. I worked on changing this policy in 2004 and we were close to eliminating it, but due to a single manager, such change was stopped. This, despite statements from fire department officials around the state supporting this change. Please consider working with your colleagues at the ANR Air Quality & Climate Division to see this unnecessary and unhealthy practice ended.

Response: The Solid Waste Program cannot prohibit an activity which is allowed by another Division within the DEC. The Air Pollution Control Division (APCD) would appreciate evidence from 2004 that there was considerable support from fire departments in making this change. APCD encourages fire departments to complete trainings at the Pittsford facility but most Departments state they don't have the budget for it. APCD has also taken considerable actions over the past five years to limit the use of this program as a 'cheap disposal' option. This includes attending the structure burns personally, ensuring all Vermont Department of Health requirements have been met and pressuring the fire departments to find alternatives. This has led to a large

decrease in the frequency of this activity, with a higher level of responsibility involved. To remain consistent with the regulation by APCD, the Solid Waste management rules remain unchanged.

#### Subchapter 4 – Waste Management Plans

##### § 6-402 Solid Waste Implementation Plans; General Requirements

- 35) The Striking of State Material Management Plan, to be replaced with Solid Waste Implementation Plans, based upon Municipal entities, strikes the heart out of The Declaration of Purpose, Section 6-102 which is retained: “These rules establish procedures and standards to protect public health and the environment by ensuring the safe, proper, and sustainable management of solid waste in Vermont.” The former State Material Management Plan states: Pursuant to VSA 10-6604 the Secretary shall publish and adopt a Waste Management Plan that sets forth a comprehensive statewide strategy for the management of solid waste.” This is worthy, should be highlighted, and retained. The fact that the Secretary and Agency has to our knowledge not published and adopted such a state-wide Waste Management Plan in recent years, makes it no less worthy: a goal meriting retention. The new Section 402, as proposed, makes no attempt to define a statewide waste management plan, but immediately substitutes Solid Waste Management Plans based upon municipal entities or an association of municipal entities without an overall or statewide guide. The result is disjointed, incremental, and void of statewide waste management goals and objectives, which would serve the overall public interest. Such reversal of roles reaches absurdity when in the case of Coventry, the power of a single municipality who sees itself benefiting economically (at the expense of its environment and municipal neighbors), allows former landfill staff and/or existing staff to write its required Statewide Municipal Implementation Plan (SWIP), thereby driving much of the State’s former role in plans for the State’s only permitted landfill. We recommend retention of language referring to a State Material Management Plan in Section 6-402, as well as retention of original language in the final two paragraphs of 6-402. *Example: A. Pursuant to 24 V.S.A. §2202a(c)(2), each regional planning commission is required to shall work cooperatively with municipalities within the region to prepare a solid waste implementation plan for adoption by all of the municipalities within the region which are not members of a solid waste district. The plan must conform to the state solid waste management plan and describe in detail how the region will achieve the priorities established by 10 V.S.A. §6604(a)(1). Each solid waste district is required to adopt a solid waste implementation plan that conforms to the State waste management plan, describes in detail how the district will achieve the priorities established in 10 V.S.A. §6604(a)(1), and is in conformance with any regional plan adopted pursuant to 24 V.S.A., chapter 117.*

Response: There is still an obligation for the state to publish and adopt a state material management plan through 10 VSA § 6604. The deletion of this language from the Solid Waste Management Rules does not impact that statutory requirement. The removal intended to clarify that statute guides the requirements that the Secretary must adopt while the Rules regulate other entities. The Rules provide the standards for these other entities (municipalities, solid waste management districts or alliances) to demonstrate conformance with the statewide management plan. The statewide material management plan was most recently adopted in November 2019 through the rule-making process. The solid waste management entities must get approval from the state by demonstrating conformance with that state plan, through the process described by these rules.

- 36) (a); “A municipality shall be a member of a district or alliance, or shall be an independent town, collectively these municipalities are referred to as Solid Waste Management Entities (SWME).” This sentence structure and the odd use of the term “shall” should be changed. I would suggest the following change to the first sentence to read as follows: “Municipalities participating as member towns to a solid waste management district or alliance, or acting as independent towns in the performance of their solid waste management responsibilities are referred to as Solid Waste Management Entities (SWME).”

Response: The program agrees that the sentence structure could use improvement but is retaining the use of the word 'shall'. The sentence now reads:

*Municipalities shall participate as member towns to a solid waste management district or alliance or act as independent towns in performance of their solid waste management responsibilities. Collectively these municipalities are referred to as Solid Waste Management Entities (SWME).*

- 37) (b)(2); typo: " describe siting **critierial...**" should read as "describe siting **criteria...**"

Response: This has been corrected.

- 38) (b)(4); typo: Should read as: "describe how proposed facilities will be reviewed for **inclusion including**-within the SWIP"

Response: This has been corrected.

- 39) (b)(6); Revise as follows: "**Include** copies of any solid waste related ordinances ~~with the SWIP~~"

Response: This has been corrected.

- 40) (b)(7) ~~**demonstrate a demonstration of**~~ conformance with any applicable regional plan. ~~S~~such a demonstration can be in the form of a letter from the applicable regional planning commission, copies of pertinent sections of the regional plan, or other documentation that **demonstrates proves** conformance.

Response: This has been corrected.

#### § 6-403 Review of Solid Waste Implementation Plans

- 41) (a); the deletion of any reference to the role of regional planning commissions in the Secretary's evaluation of SWIP's is unconscionable. Likewise, and ironically, the Secretary's role is considerably weakened by the striking of her or his authority to "evaluate the (SWIP) plan for conformance with the State Solid Waste Management Plan." Retention of original language is requested.

Response: Regional planning commissions are not being excluded by the deletion of the language in this section. Rather, these rules are adopting the use of the term Solid Waste Management Entity (SWME), which includes municipal entities such as regional planning commissions. Similarly, conformance with the statewide material management plan (MMP) is still required by §6-403(b) and §6-403(c). The removal of the language in §6-403(a) was to provide separation and clarity regarding the two different requirements of when Solid Waste Implementation Plans need to be reviewed (section a) and how they will be reviewed (sections b and c).

- 42) (f), (g), and (h); should be retained, not annulled. For example:

- (f) *The Secretary shall approve the solid waste implementation plan of a municipality, solid waste alliance, or solid waste management district upon a determination that the plan conforms to the state solid waste management plan*
- (g) *In determining conformance of a submitted solid waste implementation plan with the State plan, the Secretary must find that all planning activities and items required by the State solid waste management plan have been adequately addressed or considered in the plan.*
- (h) *Prior to approving the solid waste implementation plan of a municipality, solid waste alliance, or solid waste district, the Secretary must also find that the public has had an appropriate opportunity to participate in the plan's development. This finding shall be based on a demonstration of early and continual efforts by the municipality or district to notify and involve interested and potentially affected members of the public in the decisions being contemplated through the*

*planning process.*

Response: The significant changes to these sections has been made to improve clarity regarding the process of Solid Waste Implementation Plan (SWIP) review. However, each of these items struck from this section have been incorporated into other requirements within appropriate sections (review, determination etc.). The demonstration of conformance with the statewide material management plan (MMP) (the former item (f)) is determined as part of the pre-approval process (§6-403(c)). The current MMP has revised planning activities (former item (g)) to be required performance standards to be reviewed as part of the demonstration of conformance (§6-403(c)). The requirement for facilitating public participation and review during the plan development (former item (h)) is now required per §6-403(d) but has been rewritten to reflect statutory requirements and performance standards of the MMP.

### **Subchapter 5 – General Application Submittal Requirements**

#### *§ 6-503 Certification Types*

- 43) (a); End of line 2, “notices” should be “notice”

Response: This has been corrected.

- 44) (a)(4); Strike this entire sentence. Provisional certifications can no longer be issued under the current chapter of law. This provision should be removed in the next rewrite of Chapter 159 as it only applies to unlined landfills that were operational January 1, 1990 and all such certified facilities were required to cease operations on July 1, 1992. In point of fact, this law was written to allow the Brattleboro landfill to get recertified despite its groundwater pollution issues until the Windham SW District could get its lined landfill build, which as we know now, was never built.

Response: This is correct and the reference to provisional certification has been struck.

- 45) (c)(2); Change first word to either “Organic Materials” or “Organics”, depending on what you decide to do with the “Organics” definition as discussed above.

Response: Agreed. §6-503(c)(2) now reads:

~~Organic~~ Food residual drop-off facility registration under § 6-1202(a);

#### *§ 6-504 Full Certification Application; Interim Certification Submissions*

- 46) (e)(12); The section on the Operator training plan appears to be combined with previous section on fee considerations.

Response: This has been corrected.

- 47) (e)(22); amend to include “adjoining **residents**” as previously discussed.

Response: See response to comment #2.

- 48) (e)(24); Please reconsider this stripping of public notice to town selectboards (legislative body), residents and landowners. Shrink the radius if need be, but cutting out towns and facility neighbors to facility public notices is really bad public policy, particularly when it involves large facilities with considerable community impacts such as large transfer stations, landfills and materials recovery facilities.

Response: The Rules as drafted do still require public notice of applications to towns and adjoining landowners for full certifications.

The language within § 6-504(e)(24) is proposed for removal but has been replaced with the public notice requirements of 10 V.S.A. Chapter 170: Department of Environmental Conservation; Standard Procedures, adopted in 2015. 10 V.S.A. Chapter 170 adopted a standard public notice process for all of the department, and these proposed revisions formally incorporates these requirements into the Solid Waste Management Rules.

Under this revised process, adjoining landowners are notified (§6-504(e)(22)) at the point of an application being submitted with directions on how to access the Departments digital Environmental Notice Bulletin (ENB). All subsequent noticing requirements (to town officials and subscribers to the notice system), including posting of documents then occurs by the Program through the ENB platform, the requirement to submit the notice as part of an application is no longer applicable. No changes have been made.

- 49) (f)(2)(G); please amend as follows: “An affidavit providing the names of adjoining residents and landowners...”

Response: See response to comment #2.

- 50) (g); please amend as follows: “Upon (prior or concurrently with) submission of an application to the Secretary, the applicant shall provide written notice of the application to all adjoining residents and property owners.”

Response: See response to comment #2.

- 51) (e)23; While the Secretary does and should have broad authority for the ultimate approval of the applications for solid waste management facilities, the requirement that the application needs to include “any other information that the Secretary may require” is not appropriate, given legal, proprietary, and appropriateness considerations. Please consider the deletion of this language.

Response: This submittal requirement has been amended to better reflect that any additional information requested by the Secretary would have to be necessary in order to make a determination regarding protection of the environment, or public health and safety. This does place some constraints on what the Secretary is able to request as part of an application process, while retaining the Secretary’s ability to obtain necessary information. This requirement now reads:

*Any other information that the Secretary may require as deemed necessary to protect human health, safety, and the environment.*

- 52) (f), original Application for Interim Certification, we note, is written more clearly, economically, and effectively in protecting the public interest than the language for Full Certification. Example: (14)- (20)

- (14) A closure plan that satisfies the applicable criteria of § 6-907; § 6-1007, § 6-1111, § 6-1208 or § 6-1309 of these Rules, as required for the facility type. The closure plans must include, at least:
  - (A) A description of the steps necessary to close the facility;
  - (B) A listing of labor, materials, and testing necessary to close the facility;
  - (C) An estimate of the expected year of closure;
- (15) A schedule for final closure including, at a minimum, the total time required to close the facility and the time required for the various steps or phases in the closure process;
- (16) A cost estimate for facility closure that satisfies the requirements of § 6-1004;
- (17) A description of the methods for compliance with the closure requirements; and
- (18) Any remedial action necessary prior to closure, if required by the Secretary pursuant to § 6-311.
- (19) A post-closure plan that satisfies the criteria of § 6-1008 of these Rules.
- (20) A closure and post-closure plan along with cost estimates, unless the application is exempt as described in Subchapter 10. and
- (24) A plan for effective public notice of the application. Such a plan shall include:

- i. Provisions for a notice to the general public by advertisement in at least two newspapers of general circulation in the area of the proposed facility. One shall be a regional weekly paper when available.
- ii. A listing of the names and mailing addresses of persons and entities that the applicant is required to notice as follows:
  - (i) The legislative body
  - (ii) All facilities except those specified in subsection (h)(1)(B)(ii), (iii) and (iv) of this section, all residences and landowners within one-half mile radius of the property boundary of the facility or the nearest 100 residences and landowners, whichever is the lesser number;
  - (iii) Diffuse disposal facilities, all residences and landowners within 500 feet of the proposed diffuse disposal area, and to all adjoining residences and landowners;
  - (iv) For sludge and septage storage and treatment facilities which are located at a wastewater treatment plant, except for those facilities treating the material to achieve PFRP (Process to Further Reduce Pathogens), all adjoining residences and landowners within 1000 feet of the facility; and
  - (v) For all facilities, except diffuse disposal facilities, whose applications are determined to be minor by the Secretary, all adjoining residence and landowners.
  - (vi) State agency or subdivision
  - (vii) Regional planning commission

Response: The rules for interim certifications are from statute 10 V.S.A. 6605b, the Program disagrees that interim certifications are more effective in protecting the public interest than a full certification, and that each of these items, as appropriate, is required within the application for a full certification. No changes have been made.

#### § 6-505 Minor Application Submissions

- 53) (a)(2)(J); The letter from the solid waste management entity should only be necessary for the construction of a new facility, not a change in the operations. Consider limiting this requirement to only new solid waste management facilities.

Response: Per V.S.A. 6605 (c): *The Secretary shall not issue a certification for a new facility or renewal for an existing facility, except for a sludge or septage land application project, unless it is included in an implementation plan adopted pursuant to 24 V.S.A. § 2202a, for the area in which the facility is located.*

As an example, if a permitted facility makes a substantive change in operations, say from a transfer station to a compost operation and the local solid waste entity requires that facility to be re-included in their SWIP, the Secretary would require the submission of a letter to document this conformance. This submittal requirement will be retained.

- 54) (a)(2)(N); While the Secretary does and should have broad authority for the ultimate approval of the applications for solid waste management facilities, the requirement that the application needs to include “any other information that the Secretary may require” is not appropriate, given legal, proprietary, and appropriateness considerations. Please consider the deletion of this language.

Response: The intent of this requirement is to allow the Secretary to obtain additional information necessary to make a determination regarding protection of the environment, or public health and safety. This does place some constraints on what the Secretary is able to request as part of an application process, while retaining the Secretary’s ability to obtain necessary information as part of the review process. (a)(2)(N) is being removed from the Rule, because this requirement is duplicative of (a)(2)(M), which reflects this ability to obtain additional, but relevant information.

#### § 6-507 Application for Variance from Solid Waste Rules

- 55) (c)(3) Variances; Please list explicit public benefits and public costs of a waste facility and examples of how they are quantified. Cost Benefit analysis without quantification lacks merit. Moreover, effective cost benefit analysis requires quantitative comparison between alternative investments. Variance approval should be justified.

Response: The Program agrees that, in some cases, a public cost benefit analysis would be appropriate for the consideration of a variance issuance. However, the Program disagrees that such a request should be prescribed by Rule. Rather, if an applicant does not provide this information independently in the preparation of the application, the Secretary could request it during the review of the application and explicitly state what would be required at that point. The situation could exist whereas the variance request will be denied, and a cost benefit analysis would have no impact on that determination. If a particular type of variance were to become more commonly requested, or questions regarding variance documentation were to be frequent, the Program would have the ability to develop a policy outlining the particular components that should be included within a cost benefit analysis and when a cost benefit analysis would be required. A policy would provide the appropriate level of guidance for applicants, while maintaining the potential for a broad range of variance application types that may occur per the Rule.

- 56) (c)(5); Information demonstrating that the grant of a variance will not enable the applicant to generate, transport, treat, store or dispose of hazardous waste in a manner less stringent than that required by the provisions of Subtitle C of the Resource Conservation and Recovery Act of 1972, as amended, and the regulations promulgated under that Act; *Please explain the relevance in 2020 of evaluating a variance request for less stringency to The RCRA of 1972. This 48-year-old standard, in an age of PFAS contamination (never mentioned in rules), we have to believe are the words of the waste industry. It is a “gimme”. A higher, more relevant standard or standards should be substituted.*

Response: The Resource Conservation and Recovery Act was signed into law on October 21, 1976, and has been amended three times, as needed, in 1984, 1992, and 1996. The variance requires that the applicant demonstrate that the proposed activity will NOT be less stringent than these RCRA requirements, which sets the minimum bar that an applicant must achieve. The updated standards that applicants must achieve are established by state Rule. In applying for a variance an applicant must specify and justify their request for variation from these updated standards established in Rule. This requirement only establishes the minimum federal standards that an applicant must attain and may not obtain a variance from, it does not prescribe the only standards that must be achieved.

- 57) (d); please amend as follows: “The applicant shall provide notice of application to all adjoining residents and property owners through the U.S. mail...”

Response: See response to comment #2.

## Subchapter 6 – Application Review and Certification Issuance

### § 6-601 Full Certification (Type 2) Review Process

- 58) (a); Please consider removing “by the” within § 6-601(a).

Response: This has been corrected.

- 59) (b)(1); Please consider removing “The applicant shall provide this notice by U.S. Mail.” within § 6-601(b)(1). This reference appears to be repetitive.

Response: This has been corrected and now reads:

*The applicant shall provide notice, through the U.S. Mail, to adjoining property owners on a form developed by the Secretary. The notice shall be provided at the same time that the application is submitted to the Secretary, and*

*the applicant shall provide a signed certification to the Secretary that all adjoining property owners have been notified in accordance with this requirement.*

- 60) (b)(3); Please consider adding “within 1 week” immediately after the word “writing” within the first sentence of § 6-601(b)(3). This would provide applicants courtesy notice to promptly address incompleteness.

Response: The Program agrees that there should be a timeline for the administrative review process. However, given the time associated with processing an application following its receipt, this notification requirement has been amended to provide notice to applicants of administrative completeness within 15 days. This now reads:

*(3) If the Secretary determines that the application is not administratively complete, the Secretary shall notify the applicant in writing of such a decision. This notification shall be completed within 15 days of receipt of the application and shall identify each deficiency in the application that resulted in the Secretary’s decision.*

- 61) (c); Please consider replacing “any person” with “50 or more people having signed a petition”.

Response: 10 V.S.A. Chapter 170 adopted a standard procedure for the public notice process and the requirement for the Secretary to hold a public meeting whenever any person files a written request is established by that statute. The Solid Waste Management Rules cannot be less stringent than the statute and so no changes have been made.

- 62) (c); Please consider replacing “shall” with “may” and consider ending the sentence after “meeting” and remove “within 14 days of the notice to the ENB.” A signed petition has more justification and reduces the risk of a single person not having technical standing stopping or significantly slowing down a necessary permitting process. As written, a single person not located within the state of Vermont could require the implementation of the public informational meeting. We further edited to include giving the Secretary some discretion on public hearing merit/need. If a hearing were to occur, the notice period is addressed elsewhere.

Response: See response to comment 61.

#### *§ 6-602 Minor Certification (Type 4) Review Process*

- 63) (e); –typo – amend as follows: “Additional notice. At any time during the review of an application, the Secretary may require that a permit application being reviewed under the procedures....”

Response: This has been corrected.

#### *§ 6-605 Variance Review Process*

- 64) Please consider adding “and may be combined within an otherwise full certification process”. This would allow applicants to provide a full certification application with one submittal and possibly lessen review time along with allowing the permitting process to be as efficient as possible considering Secretary resources as well as the resources of applicants.

Response: By retaining the variance application process as a separate process that occurs prior to submission of the facility application, the Program is preventing unnecessary preparation by applications and review by the Program of components of a facility design or operation that are not relevant to the rule for which the variance is being requested. If a variance is determined to be appropriate then the preparation of the full application would be appropriate, but if the variance were determined to be unable to be issued, then the current process would prevent the use of applicant resources for preparation of materials that do not need to be reviewed.

*§6-606 Suspension and Revocation of Certifications and Registrations*

- 65) (a); There may be situations where the Secretary would not want to, or it may be inappropriate to, revoke a facility certification or registration in its entirety. For instance, if there was a rogue landfill operator and it became necessary to pursue the revocation of the facility's operational authority, but not the other certification requirements such as closure requirements, leachate management requirements, capping requirements, financial responsibility requirements, etc. As such, it would be important to include language that provided for revocation of certain certification or registration provisions with revoking the entire authorization. To that end, I would suggest that 6-606(a) be revised as follows: " Authority. The Secretary may suspend or revoke, in whole or in part, a certification or registration issued under this subchapter ..."

Response: Agreed, §6-606(a) now reads:

*Authority. The Secretary may suspend or revoke, in whole or in part, a certification or registration issued under this subchapter...*

- 66) (a); Please consider removing "or upon receipt of a written petition for suspension or revocation." from § 6-606(a). A "written petition" is not well defined. The operation of solid waste facility could easily be forced to cease operating based on allegations submitted in the form of a petition from an activist group. This rule gives far too much authority to individuals, groups or other organizations that do not possess a technical or scientific background. Suspension or Revocation of a Solid Waste Operating Certification should only originate from the Secretary. Please consider removing § 6-606(b) entirely for the reasons stated above.

Response: §6-606(c) provides the basis for suspension or revocation decision and it would be a determination that of any of those identified criteria were applicable that would drive the Secretary's determination, which would include review of technical information by Agency staff. Defining the requirements of a petition for suspension and revocation is limiting, as the Secretary would consider any communications from the public or interested parties in making a determination as to whether there were a basis for suspension or revocation of a facility certification. The inclusion of a petition process for making a determination regarding suspension or revocation is not common in Department Rules and is not a necessary component for the Secretary to make this determination. The requirements for a written petition and reference to the petition process have been removed from these Rules.

- 67) (g); Party Status; We recommend the following sentence be added: "*In addition to persons whose property is affected, any municipality, county, regional commission or incorporated environmental, health, or educational entity located within the watershed, within or without of Vermont, shall be considered to have party status.*" We recognize this expands the typical definition of party status beyond that of affected property owners. However, in the case of a landfill having regional, if not statewide, consequences to air, water, roads, and communities, we feel it important that an Agency representing the broad public interest, works to expand rights to participate in cases of public hearings and/or appeal. If legal precedent causes pause, err on the side of the broader public's right to participate, with the Courts sorting out differences if necessary.

Response: The rule, as written, allows the Secretary to determine party status for any person, which includes entity groups, who is or whose property is directly affected by the facility that the Secretary is holding the hearing for consideration of suspension or revocation. Party status determined by this condition would only be for the participation in a hearing, the Secretary has provided a notice of suspension or revocation. At this point in the process the Secretary has already made determination that there is an actual or imminent and substantial threat of harm to the public health, public safety, or to the environment. Such a determination would also frame the Secretary's understanding of who is impacted by the facility and therefore would guide the determinations regarding party status. No changes to rule have been made as the language, as written, is inclusive of all entities identified within the comment.

## Subchapter 7 – General Siting, Design, and Operating Standards

### § 6-702 Prohibited Areas

- 68) (a); After the clause “Facilities are prohibited from being sited”, add words “or expanded or permit times extended” in the following designated areas: .... We agree strongly in the enumeration of designated areas in which a landfill cannot be sited. In cases where a landfill is already sited in a prohibited area, or multiple-prohibited areas, such as the Casella Coventry landfill, due to grandfathering-in, or past failure to evaluate for siting, such incumbency shall not be used to justify additional expansion or extension of existing permit times, in such designated prohibition areas. We request insertion of language to capture this objective.

Response: A facility that does not meet the requirements of Rules that are in place at the time of application would not be approved for construction or operation without obtaining a variance through that established process. These Rules do require review of siting requirements for facility expansions; however, this is done with consideration of any previously issued variances for that facility.

- 69) (a)(2-4); In addition, we object strongly to the respective “escape” clauses beginning with the words, “unless allowed ...” Such clauses in the three prohibited subsections should be removed. Likewise, we object strongly to the identical “escape” sentences in Sections 6-701 (a), (8), (9), and (11). Beginning with the words, “This criteria does not apply....” It is ludicrous to sanction expansion, or extension of existing permit times, beyond permits already given in prohibited zones, on the basis of irrelevant legalese “beyond the previously certified waste management boundary.” An historical property survey boundary does not an ecological zone or boundary make. Such irrelevant rationale appears to guarantee future permit approval to an incumbent waste operator who happens to own extensive acreage when that incumbent operator later applies for an expansion of landfill acreage and/or permit time extension. An historical survey property boundary normally has nothing to do with ecological differences and limitations for waste disposal and storage.

Response: Implementation of the Vermont Wetland Rules serves to identify and protect wetlands along with the functions and values they provide. Review under these Rules serves to determine whether a proposed project can or cannot proceed given anticipated impacts to wetlands. If such a determination has not or cannot be made, the facility would continue to be prohibited by these Rules in order to provide protection of these systems. However, if such a determination can be made and a Wetlands Permit or Conditional Use Determination has been issued, the protections will be provided.

The language regarding the limitation on previously certified facilities that are not expanding being exempt from the siting prohibitions for floodways, river corridors or Outstanding Resource waters only applies to storage, transfer or recycling facilities, it does not apply to disposal facilities.

### § 6-703 Siting Standards

- 70) (a); Please consider removing § 6-703(a) entirely. As explicitly referenced in (a), § 6-703(b) provides an adequate scientific standard for facility siting. Section (a) is far too ambiguous and may allow a person or group with unsubstantiated health and safety concerns to undermine an otherwise practical and reasonable process.

Response: As written, §6-703(a) is made up of two categories of factors to determine compliance – the facility must meet the conditions of (b) but also must “be located such that an emission or discharge from the facility will not unduly harm the public health and safety”. This allows for two independent determinations under (a). Relying solely on conditions in (b) would eliminate the ability to determine compliance under a more general “public health and safety” standard. No changes have been made.

- 71) Table A; Consider the following edit: Minimum distance from waste management boundary to drinking water source ~~not owned by the applicant~~.

Response: A solid waste facility may have a drinking water source on their property and they control whether it's used as potable or not and so take on that liability. The language will be retained, no changes have been made.

- 72) Table A; Consistent with changes further down in the draft rule, amend the last Category in the first column to read: "Minimum distance from waste management boundary to residences, schools, daycare facilities, hospitals, and nursing homes, ~~not owned by the applicant~~."

Response: This has been corrected

- 73) Table A; Footnote 1; typo on first line near end, should read as: "...non-EQ biosolids, and stabilized domestic septage..."

Response: This has been corrected

- 74) Table A; note your replacement of your "discrete disposal facility" term with landfill in Footnotes 2,3 & 8 (the addition of landfill in Footnotes 5 & 8 need to be underlined by the way), again without a definition upfront.

Response: See response to comment #10, a definition of landfill has been provided. The use of the term landfill within footnotes 5 and 8 is established in the 2012 version of the Solid Waste Management Rules and as such has not been identified as new language within this rule revision. No additional changes necessary.

#### § 6-704 Site Characterization and Facility Design

- 75) (a); Please consider removing "General" and replace "design" with "operation" within the first sentence of § 6-704(a).

Response: The section titles are intended to provide clarity for the user of these rules as to which facilities and activities each section of the rule applies. The identification of these being general operating standards for all activities will remain. Although this section is explicitly addressing design considerations, the Secretary agrees that Facility Management Plans address both operation and design, and as such this sentence has been amended to address the comment, and provide clarification, to read:

*General. The basis of design and operational plans for all facility components shall be addressed in a facility management plan (FMP.)*

- 76) (c); We believe a (C) needs to be added prior to "Any other information relevant to proper operation of the facility."

Response: Agreed, this has been corrected.

- 77) (f); Please consider revising the two typographical errors in § 6-704(f).

Response: These have been corrected.

- 78) (g); Please consider adding "surface grade," after "hydrogeology", and adding "potential for" prior to "air pollution" and removing "control and" in § 6-704(g).

Response: Agreed, these have been corrected.

#### § 6-705 Operational Standards

- 79) (a); Please consider removing "Applicability" from § 6-705(a).

Response: For rule consistency, the title of applicability will remain, no changes have been made.

- 80) (b); Please consider removing “Operational standards; general.” from § 6-705(b). In addition, consider removing “ensure that activities conducted as a facility comply at all times with” with “operate the facility to”. It is not practical or reasonable to describe operations as absolute.

Response: The section titles are intended to provide clarity for the user of these rules as to which facilities and activities each section of the rule applies. The identification of these being general operating standards for all activities will remain. The Secretary disagrees that the conditions within this requirement are unattainable or impractical to achieve. These conditions require the maintenance of standard operating conditions, such as maintaining trained staff, adhering to the Solid Waste Management Rules and implementing facility operation plans, as appropriate, practicable actions are identified within these conditions. No changes are being made to this requirement, however, for sentence clarity and to reduce redundancy, the sentence has been amended to read:

*(b) Operational standards; general. Each owner and operator shall ensure that activities conducted ~~as~~ at a facility comply ~~at all times~~ with the following standards, as applicable to the facility type.*

- 81) Please consider removing “Clearly” and “and easily read” in the first sentence of § 6-705(b)(7). We believe “Visible” covers the requirement and lessons interpretation of the requirement.

Response: No changes have been made, the existing language clearly defines the Secretary’s expectations regarding signage.

- 82) (b) (2); Operational Standards. This subsection appears to have been stricken without replacement. Please explain and correct if a replacement sentence is found elsewhere. We request retention of this original sentence, together with addition of a second sentence: “A qualified third-party Clerk of the Works, paid for by ANR, will be hired for on-site monitoring and review of the entire new or expanded landfill construction process with weekly reports filed to the Solid Waste Division, ANR.”

Response: This subchapter was intended to provide the minimum operating conditions for all solid waste facilities. The requirement for a professional engineer certification was not appropriate for all facilities types, and as such this requirement for landfills facilities was moved to §6-1005 (c)(1). The Secretary disagrees with the additional language requested by the comment. The Secretary relies on the professional accreditation program. The presence of a professional engineer onsite during construction and their completion of all quality assurance and quality control documents provides sufficient assurance in addition to Program staff presence onsite, participation in construction meetings and review of documents.

#### § 6-706 Reporting

- 83) (c); The striking of the word “emission” in the original document leaves open the possibility that a gaseous emission may go unreported. The word “discharge” may more likely refer to a leachate breakout. There is no harm in making this distinction between gaseous emissions and liquid discharges.

Response: The definition of discharge includes air emissions, no changes have been made.

- 84) (c)(2)(A); Report of Discharge; Please specify a 24-hour phone number or web portal reporting requirements. Differing ANR DEC reporting requirements may be in conflict with reporting criteria presented here.

Response: Agreed, the spill response number has been added to this Rule and this section now reads:

.....reported within 24 hours to the State of Vermont 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. Additional notification shall be made to the local health officer, and appropriate emergency response authorities of the affected municipality(ies).

- 85) (c) (2) (B); Similarly, the striking of the word “spill” may allow for such an event to go unreported, as in the spill of thousands of gallons of leachate being transported to Montpelier WWTF for disposal in 2019. We urge that the word “spill” be retained.

Response: The definition of discharge includes spills, no changes have been made.

#### § 6-707 Record Keeping

- 86) (b)(2); The requirement for landfills to maintain all records until the completion of post-closure care is not practicable. Consider modifying the recordkeeping requirement to ten years.

Response: Historic documents are particularly important during the post-closure care period. Changes in land use, identified problems with cap materials and other scenarios regularly require review of historic documents that are in exceedance of 10 years in age. Given digital storage capacities for archiving and accessing documents, it is not an undue burden to maintain these records throughout the post-closure care period.

#### § 6-708 Corrective Action

- 87) (a) and (a) (2); As above, inclusion of the words “emission” and “spill” would ensure a comprehensive corrective action plan in any situation.

Response: See responses to comments 82 and 83 above. The definition of discharge is inclusive of both any emissions and spills, no changes have been made.

- 88) (a) (5); We request this language be reinstated in the unfortunate event that a hazardous emission, discharge or spill should occur so egregious in nature that cessation of operations, certification suspension or revocation proceedings may be required to protect the health and safety of the public and environment.

Response: This language was retained within rule and moved to §6-708(e). This language move was made to clarify that items within §6-708(a) were actions a facility owner/operator is required to take, while §6-708(e), now containing the language of concern for this comment, defines actions that will occur if the Secretary makes a determination that cessation is required.

### **Subchapter 8 – Financial Responsibility, Capability and Estimates**

#### § 6-802 Financial Responsibility

- 89) (e); The rule allowing the Secretary to obtain exclusive access to financial assurance mechanisms without consent for even a partial failure of closure / post-closure requirements is overbroad and not language that financial institutions would agree to. Section (g) already allows the financial assurance to be drawn for closure or post-closure. Consider deleting section (e).

Response: The language within Rule is consistent with the financial assurance provisions in RCRA and is substantially identical to a financial assurance mechanism within other states solid waste management rules. Owner/operators are able to obtain financial assurance mechanisms that comply with this requirement and this does not represent an undue burden. No changes have been made.

- 90) (e); The requirement to maintain a full 30 years of post-closure financial assurance during the entire post-closure period is not reasonable. Understanding the concern that post-closure period could be longer than 30 years, please consider replacing this requirement with an ability for the facility to prepare and submit a revised post-closure estimate and demonstration on an annual basis. As the annual demonstration shows progress in meeting the criteria in 6-1009, the level of post-closure financial assurance could be reduced or maintained as appropriate.

Response: The Program essentially agrees, and this is reflected within the Rule language. The 30 years of funding can be reduced, as appropriate, and based off of the submittal and approval of revised post-closure plans. Any reduction in the post-closure activities will be reflected as a reduction in the post-closure funding. These reductions will be justified by the performance of the facility. The Program will require the maintenance of 30 years of the annual amount at all times until custodial care can be achieved.

#### *§ 6-805 Post-Closure Cost Estimate*

- 91) (d); Please consider adding the word “final” immediately prior to “capping system” in the first sentence. This makes it clear which capping system is referenced relative to the 30-year post closure period start.

Response: Agreed, this addition has been made. The requirement now reads:

*For the purposes of post-closure cost estimates, the post-closure period for landfills shall be at least 30-years from the date that installation of the final capping system is completed, or the date of the last most recent estimate submitted.*

#### *§ 6-806 Revision to Closure and Post Closure Cost Estimates*

- 92) Recent data on the toxicity of landfill leachate, including PFAS and other CECs, suggest that the leachate will continue to be produced for many decades into the future even after the facility is closed, requiring collection, (adequate treatment technology) and disposal that does not threaten the public health and safety of that of the environment, how will this be ensured in the language of these Rules?

Response: §6-806(b) covers adjustments to the post closure estimate based on changes to the facility post closure plan. Additional sampling and ongoing monitoring requirements, would be reflected in updates to the post-closure plan and post-closure cost estimates, including instances where the Secretary requires consideration of new contaminants of emerging concern.

### **Subchapter 9 – Storage, Transfer, Recycling and Treatment Facilities**

#### *§ 6-904 Storage, Transfer, Recycling and Processing Facilities*

- 93) (a)(1); Please consider the typo or omission in § 6-904(a)(1) after the first comma.

Response: This typo has been corrected.

- 94) (i); Again, recommend changing “Organics” to “Organic Materials” Recovery Facilities

Response: See the response to comment 20, organics has been converted to organic solid waste.

#### *§ 6-905 Storage, Transfer, Recycling and Processing Facilities Operating Standards*

- 95) (c)(1); The phrase “practicable steps” needs to be defined. At a minimum, reference must be made to a requirement of a statistically significant number of inspections, -announced and unannounced- to be made weekly of incoming truck container loads of solid waste. This “practicable step” is woefully inadequate and unenforced presently.

Response: The phrase “practicable” steps is acceptable. The facility is subject to enforcement actions if found not to be operating consistent with the Rules. Storage, Transfer, Recycling and Processing facilities are intimate type facilities with a lot of direct contact between the employees and the materials they are accepting. Additional statistical sampling is not necessary to be placed into the rules.

- 96) (c)(1); The current “practicable” step of one inspection per week of incoming truckloads of waste is woefully inadequate, given the approximate 500 truckloads per week entering the landfill now. We request higher standards be set to ensure source separation (and elimination) of highest polluting waste materials occurs (e.g. sheetrock-odors; carpeting/upholstered furniture/PFAS).

Response: This rule is addressing the Storage, Transfer, Recycling and Processing facilities and the active management of waste to prevent hazardous waste or landfill banned wastes from being included within the disposal waste stream is adequate. The components of an individual facilities operations that would fulfill the requirements of this rule would be described within the facilities Facility Management Plan (FMP) and would be dependent on the size and type of operations of that facility. The comment appears to be a comment for landfills would similarly be addressed in an individual facility management plan (required by 6-1006(b)(8)) rather than rule, as inspections will depend on facility type and operations. No changes have been made.

- 97) (c) (2); This is a general feel-good aspirational statement, not based in reality of landfill leachate leakage exceedances in groundwater, including PFAS; storm-water run-off violations; and air quality violations, (odors leaving premises, and methane emissions un-captured.) If you are honest, enforce this statement; if not, delete it.

Response: These rules are addressing Storage, Transfer, Recycling and Processing facilities and is pertaining to preventing odors, litter, and animal scavenging on site and is enforced for these facilities. This citation does not apply to disposal facilities.

- 98) (c)(4); Recommend changing “Organics” to “Organic Materials”.

Response: See the response to comment 20. organics has been converted to organic solid waste.

- 99) (d)(1); rewrite as follows; “Except as specifically provided within this section, all solid waste shall be processed under a roof during routine operations or stored in containers when stored outside the processing/transfer building to prevent discharge of contaminants and reduce the risk of odors, litter release and building fires.” We interpreted this condition to specifically target waste storage on site after normal operating hours and adjusted accordingly based on our experience.

Response: The Program agrees with the intent of the proposed changes, but has amended the proposed changes to decouple storage (d)(1) from operational processes (new language (d)(2)) and to address both large and small facility operations. These conditions now read:

*(d) Solid Waste; additional standards.*

*(1) Except as specifically provided in this section, all solid waste shall be stored in containers, except during active management. The facility and storage containers shall be managed to prevent a discharge of contaminants from the containers.*

*(2) All materials removed from containers for management during routine operations shall be managed under a roof and in a defined operational area to prevent a discharge of contaminants.*

- 100) (e)(1); Please consider removing adding the words “or other” with “under” and remove the word “box” within § 6-905(e)(1).

Response: Agreed, this has been changed to read:

*Materials to be recycled, contaminated recyclable materials, and process residue which may be dispersed by wind shall be stored inside buildings, under roofed structures, in enclosed trailers, or in other closed containers which are covered except when the facility is operating.*

101) There appears to be a typo or omission within § 6-905(g)(1).

Response: This has been corrected.

102) (m)(1); typo, should read as: “Untreated wood, concrete, bricks, mortar, or asphalt, ~~scrap metals~~, and appliances and furniture are exempt from the containerization requirements of §6-905(d)(1) and may be stored uncovered at the facility.”

Response: These typos have been corrected.

#### *§ 6-906 Storage, Treatment, Recycling, and Processing Facilities Applications*

103) There appears to be a typo or omission within § 6-906(b).

Response: This typo has been corrected.

104) VAAFM requests that a provision be included in this section, in addition to the FMP requirement, that would require Organic Recovery Facilities (ORFs) meeting the definition of a farm under the RAP definition, to indicate adequate storage capability either through a NRCS 590 Nutrient Management Plan (where applicable ) and/or an associated VAAFM issued permit or certification prior to material being transported to the respective facility.

Response: ORFs typically process solid waste and transport to another location. Nutrient management uniquely applies to digesters that land apply digestate. All permitted solid waste anaerobic digesters will need to address the management and storage of liquid and solid digestate at the time of application. The commenters concern is sufficiently covered in Subchapter 12. No changes proposed.

### **Subchapter 10 –Disposal Facilities**

#### *§ 6-1001 Applicability*

105) There appears to be a typo or omission within § 6-1001(b)

Response: This typo has been corrected.

#### *§ 6-1003 Additional Disposal Facility Siting Prohibitions*

106) Please consider removing § 6-1003(a)(3)(E) entirely. This is not a reasonable standard for any solid waste facility in Vermont and cannot be achieved.

Response: The Program does not agree and although it is a difficult standard to achieve it is the goal of these Rules to prevent off-site emissions.

#### *§ 6-1004 Additional Disposal Facility Design Standards*

107) (a); Please consider removing “so as to preclude hazards to the public health and safety, reduce impacts on the environment and reduce the likelihood of nuisance conditions.” within § 6-1004(a). The second half of this

standard can be interpreted in multiple ways and does not align with a reasonable standard. The first section of the sentence covers the standard and enforcement needs only to focus on “reliable” as an action definition. There appears to be a typo or an omission in the first line of the sentence.

Response: The language proposed for removal by this comment provides the goal of the design standard. As this is a design rather than an operational standard, retaining the language on the goal of the design is appropriate. No changes have been made.

- 108) (c); Please also consider removing “to surface water, groundwater, or the air.” within § 6-1004(c). The second half of this description is unnecessarily repetitive to the first half of the sentence.

Response: Agreed, § 1004(c) has been changed to read:

*Facilities shall be designed to protect surface water, groundwater and the air, by detecting through monitoring where appropriate, the emission or discharge of contaminants from the facility.*

- 109) (h); Please also consider removing “and appropriate provisions for leachate treatment. The secretary may waive the liner, leachate collection system and leachate treatment requirements for landfills or portions of landfills that are designated solely to receive particular waste components that are designated by the Secretary as not a potential source of leachate that is harmful to public health and safety or the environment or capable of the creation of nuisance conditions. Landfills accepting municipal solid waste shall not be granted a liner waiver.” within § 6-1004(h). The second half of the first sentence is vague and provides no clarity on “provision” within § 6-1004(h). Please consider either removing this requirement or better define it. Please consider adding “and” between the words “leachate that” and adding the word “not” between “is harmful” and adding “are not” between the words “or capable” within the second sentence within § 6-1004(h).

Response: Appropriate provisions for leachate treatment, will indeed depend on the landfill type, waste materials managed and the landfill design, as such it is not prescribed within these rules but Provisions refers to a plan for the collected leachate, be that an agreement with a wastewater treatment plant or multiple plants or on-site treatment. The second sentence will read:

*The Secretary may waive the liner, gas collection requirements, leachate collection system and leachate treatment requirements for landfills or portions of landfills that are designated solely to receive particular waste components that are designated by the Secretary as not a potential source of leachate or landfill gas and that is not harmful to public health and safety or the environment or are not capable of the creation of nuisance conditions.*

- 110) Please also consider removing § 6-1004(d) in its entirety. With the development of an expansion area covering (potentially) many acres that could create a reducing condition and potentially impact existing monitoring or remediation systems. That expansion would otherwise be robust, constructed and operated appropriately and not have a direct contribution on an existing monitoring/remediation system. Any impact may also not create an exceedance of a groundwater standard yet could increase certain conditions in particular to those naturally occurring metals such as Iron, Manganese and Arsenic that we see in the soils and groundwater around the NEWSVT landfill. Certainly, we agree with independent monitoring to the greatest extent practical and agree with a modeling (or other) planning tool.

Response: The Secretary cannot permit activities that will result in an exceedance of the groundwater enforcement standards at points of compliance (Groundwater Protection Rules and Strategy §12-604). This permitting prohibition does not consider the presence or absence of existing contamination, while the provisions of §6-1004(d) does allow the Program to assess potential impact. The creation of reducing conditions, due to the presence of a permitted activity, does have the potential to adversely affect public trust uses by causing exceedances of regulated compounds for which there is a groundwater enforcement standard, such as manganese and arsenic. In considering an expansion, the potential impact to groundwater must be considered both independently and in conjunction with any existing contamination. The Groundwater Protection Rule and

Strategy does recognize the presence of naturally occurring contaminants within Vermont's unimpacted groundwater. It is allowable for background concentrations of naturally occurring contaminants to be determined and defined for individual facilities. This would allow a facility to demonstrate whether the impact of a facility was contributing to increases in these naturally occurring contaminants or if the exceedances were due solely to the natural occurrence and unrelated to facility operations or presence. No changes have been made.

- 111) (h)(1); Replace phrase "may be approved" with phrase "must be prohibited". There is no justification for approving landfill expansion while pollution violations to groundwater exist; and until they are mitigated and eliminated.

Response: The Secretary cannot permit activities that will result in an exceedance of the groundwater enforcement standards at points of compliance (Groundwater Protection Rules and Strategy §12-604). This permitting prohibition does not consider the presence or absence of existing contamination, while the provisions of §6-1004(d) does allow the Program to assess potential impact and permit an activity that will not worsen the existing contamination or remediation. No changes have been made.

- 112) (h)(2- 4); These conditions are unnecessary and should be removed when the above language change occurs.

Response: As (h)(1) has not been amended, per Comment 110, these items will remain.

- 113) (i)(3)(c); Please consider removing "and" between the words "odor and infiltration" and add a comma. Please also consider removing "and" between the words "control and accommodating" and add a comma. Please consider adding ", reducing erosion and leachate production." after "settlement."

Response: Agreed, this has been corrected to read:

*Interim Cap. This component shall be designed to provide extended duration control of landfill odors, infiltration of precipitation into the waste mass, enhancing gas collection and control, accommodating waste settlement, and reducing erosion and leachate production.*

- 114) (k)(1)(A); Please consider removing "and gas condensate" within § 6-1004(k)(1)(A). Gas condensate may be removed by other systems.

Response: The Program disagrees with the removal of this requirement. Gas condensate may be captured by other systems, but the requirement is to manage it as leachate and as such the Secretary considers gas condensate conveyance systems as part of the leachate collection system. No changes have been made.

- 115) (k)(1)(b); Please consider subdividing § 6-1004(k)(1)(B) and keeping the first sentence as § 6-1004(k)(1)(B). Take "Prevent migration of leachate beyond the containment system and off of the landfill site." And make this sentence its own sub criteria (C).

Response: Agreed. This has been corrected as proposed by the comment.

- 116) (j)(1)(C); Please consider adding "or a planned or unplanned contingency storage event" and removing the period after "event."

Response: The Program agrees that additional language is needed within this requirement to address scenarios other than the storm events that do occasionally require temporary storage of leachate on the liner; however, the Program would like to be notified and provide approval of such events prior to their occurrence. To address this and provide greater clarity to this requirement, it now reads:

*(C) Restrict leachate depth to 30 cm or less over the liner system, except within the leachate sump area, under typical operating conditions.*

*(D) The LCRS shall restore leachate depth to less than 30 cm within five days following a 25-yr/24-hour or greater storm event, or other approved contingency storage events.*

- 117) (j)(1)(D); Please consider removing “accurately and” from § 6-1004(j)(1)(D). Industrial flowmeters can have an accuracy rating of up to 90%.

Response: The wording will remain, accuracy is an important component of measuring and recording, though the Program does agree that there are limits to the technology available that put constraints on that accuracy.

- 118) (j)(1)(E); Please consider replacing “leachate collection” with “detection” within § 6-1004(j)(1)(F).

Response: For consistency with other sections of this Rule, the leachate collection system will remain named as such, with the acknowledgement that detection is also a purpose of the collection system.

- 119) (j)(6)(C); Please consider replacing “leak detection” with “leaks” within § 6-1004(j)(6)(c).

Response: Agreed, this has been corrected.

- 120) (k)(2); Please consider revising this section to make “The facility shall maintain.....” its own subcriteria within § 6-1004(k)(2).

Response: This typo has been corrected.

- 121) (l)(3); Please consider removing “shall maintain” with “may utilize” within § 6-1004(l)(3).

Response: Agreed, the use of interim cap is an option that landfills may utilize between daily cover and final cover to allow reuse of an area following settlement of the waste mass. This now reads:

*The facility may utilize an interim cap. Interim caps shall consist of a flexible membrane liner or minimum.... –*

- 122) (k)(6); Please consider removing “Operational units shall be designed for a life not to exceed 10 years unless otherwise approved by the Secretary.”

Response: The Program disagrees, the maintenance of 10-year plans supports sequential capping throughout the lifetime of the facility and makes permitting occur within a reasonable permitting timeframe. No changes have been made.

- 123) (k)(6); The cost to design, permit and construct is an enormous expense and should not be restricted to an arbitrary acreage. If a development area meets siting criteria, that entire area should be eligible for a permit. In addition, permits for landfills are renewed every 10 years and compliance and design review can be reevaluated by the Secretary at that time.

Response: The word acreage does not appear in the rules and certification are not limited to acreage size considerations. Certifications are issued on a 10-year basis, it is the practice of the Program to restrict review to development that can be reasonably expected to occur during that 10-year period. No changes have been made.

- 124) (l)(1)(B); Please consider replacing “prevent” with “limit” within the first sentence of § 6-1004(l)(1)(B). In addition, please consider removing “and related odors or nuisance conditions, or other hazards to public health and safety.” This is not a standard that is practical, “nuisance conditions” and “other hazards” are not measurable and therefore are not a reasonable standard.

Response: The goal of any design, operation or maintenance plan should be to prevent nuisance conditions or hazards. Although these are not measurable standards, they do serve as the performance standards against which plans can be evaluated. No changes have been made.

- 125) (l)(4); (Please consider replacing “a minimum of ten (10) inches of water column of” with “effective” within § 6-1004(l)(4). Less than ten inches of water column could be an effective pressure at a given extraction point. As long as the gas collection system is under vacuum and not allowing gas to escape beyond that required within the Vermont Air Pollution Control Division (VTAPCD) Permit issued to the facility, this requirement seems unnecessary.

Response: The Program acknowledges that there may be operating conditions that would support the operation of a given gas extraction point at less than 10 inches of water column. The requirement is a design standard, not an operating standard, as such no changes have been made.

- 126) (l)(6); Please consider removing § 6-1004(l)(6) in its entirety. All these requirements are those regulated by the VTAPCD, layered regulation proves to be very difficult to comply with and inefficient.

Response: The VTAPCD regulations do not take effect until a landfill reaches a certain size, these rules are written for all landfill facilities including those below the VTAPCD thresholds. Although this may create layered regulations for landfills that fall under the jurisdiction of both Programs, there are no conflicting regulations. No changes have been made.

- 127) (n); It is our position that any unlined municipal solid waste landfill not already closed should receive a flexible membrane cap at time of closure. Please consider deleting section § 6-1004(n).

Response: There are no longer any unlined municipal solid waste landfills operating in Vermont. Per §6-1004(h), the Secretary may waive the requirement for a liner system for “landfills or portions of landfills that are designated solely to receive particular waste components”. This would not apply to any future municipal solid waste landfills; however, these standards need to remain in Rule to provide alternative capping options for potential monofill, or other inert material landfills that the Secretary determines a geomembrane cap is not necessary.

- 128) (i)(2)(C); clarification, recommend as follows: “Primary Liner. This component shall be designed to prevent leachate migration through the liner into the Leak Detection Drainage Layer or outside of the designed lined landfill cell area.”

Response: The Program agrees with this point of clarification, but to avoid redundancy has amended this regulation to now read:

*(C) Primary Liner. This component shall be designed to prevent leachate migration into the Leak Detection Drainage Layer or outside of the designed lined landfill area.*

- 129) (i)(3), A., Daily Cover. Under the earlier section, Definitions, the word Diversion is defined. It does not permit diversion of other waste materials, such as dry or semi dry sludge to be diverted for use as daily cover, as has been a practice in the past. A statement on third party monitoring is needed.

Response: Sludge can currently be approved as alternative daily cover, it is not approved as daily cover. The approval process for the use of sludge in this manner does require a review by Program staff and a demonstration that it can effectively achieve the performance standards of daily cover without negatively impacting odors or producing conditions hazardous to public health and safety. By definition, diversion does not include use of materials for alternative daily cover at landfills.

- 130) (i)(4)(A); Hydraulic Barrier Layer. A statement is needed as to how this requirement, implemented over the existing and expanded Coventry landfill, total area of 129 acres, under impermeable cover, squares with ANR

research and requirements in development to review and ensure that residential and commercial surfaces over 3 acres shall be permeable, or semi-permeable in order to mitigate storm water run-off into a surface waters. This continuous 129-acre impermeable surface area will be the largest such construction in Vermont. This section is deficient without acreage -limiting rule language.

Response: In addition to permitting under the Solid Waste Management Rules, landfills would also be subject to applicable operation and construction stormwater permits. The Solid Waste Management Rules define the materials and construction of the cap in order to provide long-term protection of the waste mass, the stormwater management rules provide the treatment options and operational practices necessary to prevent runoff into surface waters from this impermeable surface. No changes have been made.

- 131) (1); Pertaining to the leachate underdrain, a statement needs to be included requiring collection and storage of all leachate from underdrain as well as periodic testing for PFAS. To our knowledge, this has not been required in the past and only recently been undertaken. PFAS was detected in the underdrain leachate in that instance.

Response: The underdrain system is designed for the collection and discharge of groundwater beneath the landfill liner, with its primary purpose being to maintain the separation between the liner system and the seasonal high groundwater table, per the Solid Waste Management Rules. The liquids discharged are not leachate. To demonstrate compliance with §6-1003(b)(5), these underdrains are, and have been since installation, monitored regularly to assess if there is any contamination to the groundwater discharge, this contamination could be due to leakage through the landfill liner systems, but also could be due to historic land uses at the facility. These systems are designed such that the discharge can be collected and appropriately managed if it is determined to be necessary. PFAS, like any contaminant of emerging concern, was not part of this routine monitoring until detection capacity and technical knowledge advanced to a degree that determined it was a concern and it was capable of being detected. At that point it was added to the monitoring protocol. Monitoring and management of the underdrain discharge is prescribed by the facility certifications and will depend on the materials being managed at an individual facility, the land use at the facility, and feasibility of analysis. This monitoring Program can be updated by the Secretary, as necessary. No changes have been made to this Rule.

- 132) (l)(1)(A); Insert period after word “gas”. Final word “collected” is unnecessary and nullifying to the purpose. It is waste industry language and implies that it would be permissible to allow any gas to go uncollected.

Response: It is understood that not all landfill gas is collected, due to limitations imposed by necessary operational conditions; however, the system needs to be designed to effectively manage what is collected. Rules are established to ensure that the gas collection system is designed to be efficient as reasonably feasible. The efficiency of the gas system to collect the gas generated by the disposed is imposed by §6-1004(l). No changes have been made to this rule.

- 133) (l)(1)(B); the word “all” should be inserted after word “control” in middle of the single sentence for the same reason as above.

Response: See response to Comment 132 above. The Program acknowledges that not all landfill gas is collected, but they system needs to be designed to manage all that can be effectively collected.

- 134) (l); NOTE: After Item No.6, we request consideration of the addition of a new Item 7 having to do with the need for Apparatus installation designed to monitor surface emissions (SEM), - if that apparatus does not yet exist – for measurement of un-captured methane gas emissions to the environment. Such SEM reporting should be transmitted to ANR offices in real time, 24/7.

Response: The monitoring of surface emissions from landfills occurs under both the Vermont Air Pollution Control Regulations, Solid Waste Management certifications and federal regulations. The requirements contained within these Rules is consistent with other state level requirements and more stringent than the federal requirements of quarterly surface emissions monitoring. To this Programs knowledge real time monitoring of landfill surface

emissions is not currently available for continuous monitoring and reporting purposes. The Program does review new technologies and evaluate their potential use as they become commercially available. At this time, given current technologies and data management capabilities, the acquisition of more data would not provide any greater insight to the success or failure of the landfill gas collection system. The current level of monitoring, in conjunction with other performance measures is appropriate and no changes to Rule have been made.

- 135) (l)(4); Add a second sentence: A second, stand-by back-up vacuum pump-generator of equal size and capacity is required in event of failure or maintenance closure of the primary vacuum pump.

Response: All permitted solid waste facilities are required to maintain a contingency plan which is submitted for approval with the application materials. This contingency plan, per §6-704(b), will include the actions that will occur in the advent of the failure of facility design features, which includes equipment. Typically, this contingency plan does place constraints on the timeline that a facility must have access to essential equipment that must be maintained on a facility such that the facility can attain the performance measures defined within these rules. A landfills contingency plan would accordingly address access to equipment necessary to maintain the landfill gas collection system.

- 136) (m); Lined Landfill. Sub-paragraphs in this section appear to weaken storm water run-off controls rather than strengthen. Case in point is subsection 7. which eliminates the 6" minimum earthen material layer to simply a vegetative support layer that consists of earthen material capable of sustaining negative plant growth. This is laughable for it green-lights the landfill operator to seed-down over a ½" earthen base, which is literally capable of supporting germination and growth but which is absolutely susceptible to summer burn-out, wash-out in strong storms, and leachate "brown" blow-outs.

Response: As the Program would need to approve any final capping system, this language was originally removed to provide greater flexibility for the approval of innovative capping approaches and new technologies. However, for standard caps, the Program does agree that 6 inches of a vegetative support layer is preferable. As the Secretary may approve alternative final cover designs per §6-1004(m)(8), the language regarding the minimum earthen material layers has been reinserted. Ultimately any final capping system would have to attain the necessary performance criteria. If vegetation was not being supported and issues like erosion were consistently problematic, that would be considered a failure of the cover system and corrective actions would have to be taken during the closure and into the post-closure period.

#### §6-1005 Additional Disposal Facility Operating Standards

- 137) (c)(6); Please consider replacing "but" with "and" within § 6-1005(c)(6).

Response: Agreed and corrected.

- 138) (d)(1)(F); Consider replacing "hazardous materials" with "hazardous wastes by toxicity"

Response: Agreed, this now reads:

*(F) Sludges shall not exhibit the hazardous waste characteristic of toxicity as determined using the Toxicity Characterization Leaching Procedure (TCLP) ; and*

- 139) (d)(2)(C)(iii); Please consider removing this in its entirety. It is the responsibility of the abatement contractor to be sure that loads are packaged in accordance with the Vermont Department of Health regulations. The landfill can confirm receipt and properly dispose, confirming how it was packaged should not be required at the disposal site for health and safety reasons.

Response: The landfill has a responsibility of ensuring that the loads are properly packaged. If a load arrives and it is not properly packaged it should be rejected prior to disposal in order to protect worker health and safety. No changes have been made to this rule.

- 140) (d)(4)(B); Please consider adding “Unless otherwise approved by the Secretary,” at the beginning of rule § 6-1005(d)(4)(B).

Response: No changes have been made to the rule in response to this comment, the Program does not agree with the disposal of bulk or non-containerized liquid wastes at a landfill facility and would not approve such practice.

- 141) (f)(3); Please consider revising § 6-1005(f)(3) to read; “Sample and analyze the primary leachate and secondary detection liquid as outlined in the approved FMP and provide the results to the Secretary within 5 days of receipt of the final laboratory report.”

Response: Agreed and corrected as proposed.

- 142) (g)(2); Please consider removing § 6-1005(g)(2). Like the above referenced request, the VTAPCD regulates the surface emission monitoring requirements, so this becomes another layered regulation.

Response: The VTAPCD only requires the SEM to large landfills with a design capacity in excess of 2.5 million megagrams. VTAPCD has no requirement for smaller landfills until they reach that design threshold (design, not actual refuse in place). When a landfill reaches the criteria for VTAPCD regulation one SEM plan may be submitted to both Programs, this is layered regulation, but the two regulatory programs are not in conflict and it is not an undue burden on permittees. No changes have been made.

- 143) (d)(4)(A)(iii); Under Liquid Household Disposal at Landfills, the question is asked, "Why is liquid household waste permitted to be placed in a landfill?" If this is new wording, is it a mistake? We recommend the statement be removed, or at a minimum, the phrase, “other than septage” be added after the word “waste”.

Response: This section of the Rule is addressing containers containing liquids, not bulk disposal of liquids. Septage would not be containerized and would fall under the bulk disposal of §6-1005(B). No changes have been made.

- 144) (f); Response to Leakage Rate Exceedance. As important as this standard is, it is toothless if not monitored by a third party or by ANR regulatory personnel. The owner-operator of a landfill should not be entrusted to self-monitor and report on something of this consequence.

Response: The facility is required to report as required by their certification. That reporting provides the Secretary with the opportunity for review. Failure to report and act on a leakage rate exceedance would be in violation of these Rules and the facility certification, which serves as a motivation for the owner/operator to take these actions.

- 145) (g); All SEM reporting, including for fugitive and uncaptured methane gasses should be transmitted in real time, 24/7, to ANR offices.

Response: See response to Comment 132.

- 146) Subsection (h). Mining Waste: All references to permitted volumes of mining and/or fracking waste, produced in Vermont or Imported to Vermont to the landfill should be deleted in these rules. Such Mining Waste, Vermont-produced or imported into the State, including (radio-active) fracking waste and liquids should be categorically prohibited in any landfill.

Response: The definition of mining waste is broader than just fracking waste. In state activities, such as the processing of granite for monuments etc. or the processing of marble to produce a calcium carbonate product, do

currently occur and produce materials requiring disposal. The mining waste regulations provide the oversight of these disposal operations.

The practice of “Fracking” is not permitted in the State of Vermont, because of this ban, fracking waste would have to come from out-of-state and would require a special waste approval prior to disposal. Per these solid waste management rules, that approval would not be given to radioactive waste, hazardous waste or liquid waste materials.

- 147) (d)(1)(f); pertaining to sludge disposal and the procedure that would indicate “such materials are not hazardous”, in that sludge is now known to contain CECs, including PFAS, which would add to the load of toxins in leachate and in stormwater runoff in the event sludge is used as landfill cover.

Response: Per §6-1005(d)(1)(A) Sludges shall only be *disposed* at municipal solid waste landfills. This rule prohibits the use of sludge as landfill daily cover. As the comment indicated, any sludge being reviewed for approval as alternative daily cover, and sludges being disposed at a Vermont landfill are subject to Toxicity Characterization Leachate Procedure (TCLP) analysis to determine that the materials are not hazardous. As CECs are added into regulatory programs, they can be added to that analytic protocol. No changes to Rule are necessary to incorporate CECs into the analytical protocol.

#### §6-1006 Additional Application Requirements.

- 148) (a); After “disposal facility”, add “or the addition/expansion/ or extension of permit period time of a disposal facility, shall include ...”

Response: Expansions of existing facilities or significant changes in construction design or operations do require permitting per Subchapter 5. Subchapter 5 defines which types of activities are subject to each of the application types, this section is only intended to identify additional submittals required for these specifically identified solid waste facilities types.

- 149) (b); After “new landfill facility”, add the phrase “and/or the addition/ expansion of an existing permitted landfill, or extension of permit period of time for an existing permitted landfill, shall include the following...”

Response: See response to comment 148.

- 150) (c); Mining Waste: We feel all five sections should be deleted. Two sentences should follow the heading and read as follows: Mining wastes are prohibited in a landfill. No mining waste, including solid or liquid waste from (radio-active) fracking operations, should be permitted to be diverted from sources of origin, within or without of Vermont, then transferred for disposal to a Vermont permitted landfill.

Response: As per comment 146 above; The definition of mining waste is broader than just fracking waste. In state activities, such as the processing of granite for monuments etc. or the processing of marble to produce a calcium carbonate product, do currently occur and produce materials requiring disposal. The mining waste regulations provide the oversight of these disposal operations. No changes have been made.

- 151) (b)(6); Please consider removing § 6-1006(b)(6). Like the above referenced request, the VTAPCD regulates surface emission monitoring, so this becomes another layered regulation.

Response: See response to comment 141.

- 152) (b); Please consider removing § 6-1006(b)(7) & § 6-1006(b)(8), these are plans already described within the FMP.

Response: The requirements for a Facility Management Plan (FMP) are described in §6-504(e)(8), these requirements are for all solid waste facilities. As such the inclusion of these two plans, specific to landfills, should remain in this section. By specifying that they must be submitted within this section, the Program is not excluding them from being submitted as part of the FMP. No changes have been made.

§ 6-1009, Disposal Facility Custodial Care

- 153) (b)(3); Disposal Facility Custodial Care- it would be prudent to include language that addresses the presence of CECs, including PFAS, as these “forever” chemicals would continue to pose environmental and public health and safety threats over a very extended period of time.

Response: As determined to be appropriate, contaminants of emerging concern will be added to the post-closure monitoring programs over the post-closure period. A landfill applying for custodial care would be evaluated against any and all monitoring that had occurred at that facility, and any existing regulations at the point of the custodial care application. The performance criteria of demonstrating acceptable leachate quality and quantity would take this into consideration. No additional language is necessary.

- 154) (b)(5)(A); Surface Water System. The wording should be changed to reflect a higher environmental and safety standard, particularly as we experience larger and more frequent storm and weather events in a time of climate change. Specifically, the 25-year, 24-hour storm event standard as written, should be changed to a 100-year, 24-hour storm event. This is fundamental when planning for a contiguous 129-acre impermeable area.

Response: Facilities that have moved out of operational activities and into post-closure range in age from fairly recent closures to those that have been closed for over twenty years. Although the current standard is planning for the 100-year, 24-hour storm event, some of the historic closures did not occur under this regulation. For this reason, the evaluation of approval for custodial care can not be to the same current design standard. However, in consideration of this comment, the Program has rewritten this condition to reflect approval for custodial care to be made in consideration of the applicable design standards for each facility. This way the more stringent recent design standard will need to be attained for more recently closed facility. This regulation now reads:

(A) The surface water diversion system shall be shown to continue to prevent surface water flow on the capped landfill in accordance with the design requirements that imposed and approved during closure.

- 155) (e); This “custodial care” approval section fails to recognize the need to continually require mowing of the area above the closed landfill cell to prevent deep rooted, woody growth from damaging the landfill cap. Please add language to require mowing, and funding to assure mowing, in perpetuity. Towns provide such mechanisms for the maintenance of their town cemeteries. This can AND SHOULD be done for landfills in perpetuity.

Response: Approval for custodial care does require ongoing maintenance of the landfill cap and infrastructure, as necessary to protect human health and safety and the environment. These conditions have typically been included within the certifications, but the program acknowledges that the addition of these conditions to rule would be beneficial. The conditions now reads:

(e) *The approval for cessation of post-closure care and initiation of custodial care does not relieve the owner/operator from taking any and all necessary actions to protect human health and the environment. This includes:*

*(1) Any necessary corrective actions as may be required by the Secretary under 10 V.S.A. § 6615.*

*(2) Necessary continued maintenance (mowing, erosion repairs etc.) performed on a schedule necessary to maintain performance of the landfill cap;*

*(3) Institutional controls to maintain access control and prevent risk; and*

(f) *The custodial care approval shall not release the owner/operator from potential liability to third parties resulting from releases which occur(red) during the operating life, closure period, post-closure period or custodial care period.*

### Subchapter 11 – Compost Facilities

- 156) *General question: Many small farms are filling a collection niche by collecting food scraps for animal feed and allowing chickens to “graze” on compost prior to composting the materials. This is not addressed in the SWMR Subchapter 11. We would recommend that some guidance be presented, at least in terms of how these materials should be best managed.*

Response: The Solid Waste Management Program’s oversight is in the transfer, storage, treatment and disposal of solid waste. Feeding a solid waste to livestock is outside of that scope. However, composting solid waste is treatment, so these Rules specify regulations pertaining to that activity. It should be noted that these Rules do not prohibit foraging on compost piles so long as the general composting performance standards continue to be met. Farmers choosing to compost registration or permit-required amounts of solid waste will simply need to include their foraging access procedures in the facility management plan submitted at the time of application. This allows the operational flexibility necessary on a farm-by-farm basis so long as nuisance, environmental and public health general performance standards are complied with.

#### § 6-1102 Organic Specific Definitions (starting on p.144)

- 157) *“Organics”*: Recommend changing “Organics” to “Organic Materials”.

Response: The Program agrees that the term “Organics” can be improved upon. However, “Organic Materials” is too broad a term and at face value could be misinterpreted to include materials that have not been discarded. We are proposing to replace “Organics” with “Organic Solid Wastes” in this context to clarify we are speaking only about organic materials that meet the definition of solid waste.

*“Organics Solid Waste” means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition of organics.*

- 158) *“Compost”*: We’d recommend, adding: “...means a stable humus-like material produced by the controlled ‘aerobic’ biological decomposition through active management ‘conducted under approved best management practices’...”

Response: The Program agrees, and the following revision is proposed:

~~6-1102(e) “Compost” the product of composting; consisting of a group of organic residues or a mixture of organic residues and soil that have been piled, moistened, and allowed to undergo aerobic biological decomposition~~ means a stable humus-like material produced by the controlled aerobic biological decomposition of organic matter through active management, but shall not mean sewage, septage, or materials derived from sewage or septage.

- 159) Also, there is a typo under “Composting” – under “managed.” We’d again recommend that best management practices be added.

Response: The typo has been corrected and the definition in Subchapter 11 has been revised to match the

definition in Subchapter 2, see the proposed revision below:

6-201 "Composting" means the controlled ~~aerobic~~ biological decomposition of organic matter through active management to produce ~~a stable humus-rich material~~ compost (as that term is defined in 10 V.S.A. §6602 and subchapter 11 of these Rules).

6-1102(g) "Composting" means the ~~accelerated~~ controlled aerobic biological ~~decomposition of~~ organic matter under through active management aerobic conditions resulting in to produce compost.

- 160) "Compostable": *It would be beneficial for composters to include a "certified compostable" definition for serveware and certified compostable collection bags.*

Response: The Program does not understand how a composter would benefit from a definition of certified compostable service ware and collection bags. The Rules require all non-compostable materials be removed from the compost upon receipt at the facility. It is the operator's choice to accept compostable service ware/collection bags, and thus it is the operator's responsibility to work with contributing generators to assure that any service ware and/or collection bags used are compostable. No change to the Rules is proposed.

- 161) "Contaminant" means any **non-biodegradable** material which lends impurity to compost, including but not limited to, glass, metal, plastics, and ceramics. *We'd suggest removing "non-biodegradable" to allow for more flexibility as we learn more about contaminants. Or, instead of "non-biodegradable" (as this term has proven to be very confusing), consider "noncompostable."*

Response: The Program agrees with this commenter's concern that the definition of "contaminant" is too narrow. We are proposing the following revision:

"Contaminant" means ~~any non-biodegradable~~ material which lends physical or chemical impurity to compost, including ~~but not limited to,~~ glass, metal, plastics, and ceramics.

- 162) As used in this Subchapter and Subchapter 12 the following additional definitions apply: (k) "Contaminant" means any **non-biodegradable** material which lends impurity to compost, including but not limited to, glass, metal, plastics, and ceramics. **Comment:** Perhaps allow room for contaminants that come along with some biodegradable materials (e.g., PFAS)? Removing "non-biodegradable" may allow for more flexibility as we learn more about contaminants.

Response: The Program agrees, see response to comment #159 above.

#### § 6-1103 Organics Specific Exemptions

- 163) (a); The following activities are exempt from the requirements of this subchapter: (1) A person(s) composting 100 cubic yards or less annually of combined feedstocks per year of total organics, of which not more than 42 cubic yards per year are food residuals and food processing residuals is not subject to regulation under these Rules. This exemption does not apply to the collection and composting of off-site generated animal offal, slaughterhouse wastes, or animal mortalities.

**Comment:** I have had conversations with Ben about the 42 cubic yard / 100 cubic yard issue (as stated in item 1 of this section), as it pertains to sites that may already be composting exempt materials greater than 100 cubic yards, that may want to add foodscraps – particularly with regards to supporting increased on-farm composting of food residuals. I have provided a few different iterations of language addressing this point.

**Consider adding one of the following:** A person(s) already composting more than 100 cubic yards of otherwise exempt materials, who adds no more than 42 cubic yards per year of food residuals is not subject to regulation under these Rules. This exemption does not apply to the collection and composting of offsite generated animal offal, slaughterhouse wastes, or animal mortalities. The composting of no more than 42 cubic yards or less of food residuals, provided that the food residuals do not exceed 42% of total composted materials.

**Or amending (6) to read:** (6) The composting of **no more than 42 cubic yards of food residuals, and/or 1,000 cubic yards or less of food processing residuals per year** when the composting takes place on a farm. (4) Facilities that compost solely any of the following materials, provided the compost is used for soil enrichment: (A) any amount of animal manure;

**Question:** ... , **that is allowable under the farm's nutrient management plan;** Is the above addition what is intended? Or does this include any amount of manure that may also be sold for soil enrichment elsewhere?

Response: As this comment states, the 6-1103(a)(1) exemption could potentially negate other applicable 6-1103 exemptions and has specific implications for farms. This was an unintended consequence. The Program is proposing to modify the 6-1103(a)(6) language to specifically target the importation of solid waste to a farm. Farms which qualify for an exemption under this section will still need to demonstrate capacity for the additional nutrient importation via their nutrient management plan.

*6-1103(a)(1) A person importing for composting up to 100 cubic yards or less per year of total organics solid wastes, of which not more than 42 cubic yards per year are food residuals and food processing residuals is not subject to regulation under these Rules. This exemption does not apply to the collection and composting of off-site generated animal offal, slaughterhouse wastes, or animal mortalities.*

#### § 6-1103 Organics Specific Exemptions

164) The following activities are exempt from the requirements of this subchapter: (1) A person(s) composting 100 cubic yards or less annually of combined feedstocks per year of total organics, of which not more than 42 cubic yards per year are food residuals and food processing residuals is not subject to regulation under these Rules. This exemption does not apply to the collection and composting of off-site generated animal offal, slaughterhouse wastes, or animal mortalities.

*This is confusing when compared to on-farm composting exemptions. Clarification of the differences between community composting and farms or integrating the exemptions would be helpful.*

Response: Some exemptions apply to farms which conduct specific activities, and some do not. It is less confusing to list the exemptions separately than to try to consolidate them all. The Solid Waste Management Rules do not have a definition for community composting, so a composting activity is either exempt or requires a registration/certification. No organizational changes are proposed.

165) (4); *Does this allow farms to take off-site materials? Seems like a lot of manure. And, does this apply to CC using these feedstocks as long as materials are used onsite?*

Response: This provision exempts anyone composting those materials from needing to register or certify the activity assuming the finished compost is used for soil enrichment regardless of the generation status of the feedstocks.

166) (6) Composting of food residuals: Similar to above question- *Does this include off-site generation? Why is this so much different from community composting? Also, what sort of BMPs are going to be put in place for farms to handle this amount of material? What's to ensure that small farms can manage the material onsite and in accordance with their farm nutrient management plan.*

Response: To provide context, the section of the Rules this comment is addressed to is: *(6) The composting of less than 1,000 cubic yards or less of food processing residuals per year when the composting takes place on a farm.*

*Does this include off-site generation?*

This does include off site generation.

*Why is this so much different from community composting?*

These Rules do not have a definition for "community composting" so the Program is unable to respond.

Also, what sort of BMPs are going to be put in place for farms to handle this amount of material?

No BMP's will be put in place. Normal farm composting practices and the siting standards specified in section 6.09 of the Agency of Agriculture, Food and Markets' Required Agricultural Practices will apply. *What's to ensure that small farms can manage the material onsite and in accordance with their farm nutrient management plan.*

Small farms need to adhere to the Nutrient Management Planning requirements in 6.03 of the Agency of Agriculture, Food and Markets' Required Agricultural Practices if the finished compost is intended to be applied to fields.

- 167) (9) Burial of four or less animal carcasses per year when the disposal occurs in accordance with the following siting requirements:
- (A) One-hundred-fifty (150) feet from the property line and the top of bank of or surface waters,
  - (B) three (3) feet above the seasonal high water table and bedrock,
  - (C) two hundred feet from public or private drinking water supplies; ~~and~~
  - (D) covered with a minimum of 24 inches of soil, and-
  - (E) not located on lands in a floodway or subject to annual flooding.

Response: The Program finds that the majority of the suggested revisions in this comment improve environmental protections. They are also inline with siting criteria applied elsewhere in these Rules for similar organic solid waste management. The following language is proposed:

- (9) Burial of four or less animal carcasses per year when the disposal occurs in accordance with the following siting requirements:*
- (A) One-hundred-fifty (150) feet from the property line or surface waters,*
  - (B) three (3) feet above the seasonal high water table and bedrock,*
  - (C) two hundred feet from public or private drinking water supplies; ~~and~~*
  - (D) is covered with a minimum of 24 inches of soil, and-*
  - (E) is not located in a floodway.*

#### § 6-1104 Compost Facility Types

- 168) (b) Medium Scale Composting Facility – A facility is a medium scale composting facility under these Rules if the facility:
- (2) composts the following materials:
    - (C) more than 10,000 cubic yards per year of leaf and yard waste; or
    - (D) compost 40,000 or less cubic yards per year of total organics consisting of any of the following feedstocks:
      - (i) not more than 5,000 cubic yards per year are food residuals or food processing residuals.
      - (ii) not more than 10 tons of animal mortalities, slaughterhouse waste or offal animal offal, and butcher waste per month.
  - (E) is a vermicomposting facility that is not eligible for the exemption provided by § 6-302(a)(17).

**Comment:** I'm just flagging (E), as it seems oddly out of place... perhaps this should be item (3)?

Response: Correct, this is an organizational typo. Revised to the following:

- (1) ~~This section applies to composting facilities that have a compost management area of less than 10 acres in size; and or~~*
- (2) composts the following materials:*
- (A) more than 10,000 cubic yards per year of leaf and yard waste; or*
  - (B) ~~compost~~ 40,000 or less cubic yards per year of total organics consisting of any of the following feedstocks:*
    - (i) not more than 5,000 cubic yards per year are food residuals or food processing*

residuals.

(ii) not more than 10 tons of animal mortalities, slaughterhouse waste or offal animal offal, and butcher waste per month.

~~(3E)~~ is a vermicomposting facility that is not eligible for the exemption provided by § 6-302(a)(17).

169) §6-1108(b)(4)(A) – typo - should read: “If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least 13 of ~~16~~ 15 consecutive ~~15~~ days.

Response: This has been corrected to the following:

*(A) If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for ~~at least 13 of 16 consecutive~~ 15 days. ~~during which time the materials~~ Windrows must be turned not fewer than five times with a minimum of 3 days between turnings to ensure that all materials reach this temperature. The 15 days do not have to be consecutive.*

#### §6-1102 Organic Specific Definitions

170) VAAFM requests that the inclusion of the following definition:

“Agricultural Waste” means material originating or emanating from a farm that is determined by the Secretary or the Secretary of Natural Resources to be harmful to the waters of the State, including: sediments; minerals, including heavy metals; plant nutrients; pesticides; organic wastes, including livestock waste, animal mortalities, compost, feed and crop debris; waste oils; pathogenic bacteria and viruses; thermal pollution; silage runoff; untreated milkhouse waste; and any other farm waste as the term “waste” is defined in 10 V.S.A. § 1251(12).

In requesting to include this term, VAAFM requests that agricultural wastes be used in addition to the listed agriculturally related materials that are often composted: animal offal, slaughterhouse wastes, or animal mortalities. Under the RAPs, animal mortalities are included as an agricultural waste, however, VAAFM understands that when referring to certain provisions, the focus is on animal mortalities and not necessarily all agricultural wastes. VAAFM requests to include this provision as other agricultural wastes can and are composted, such as livestock waste.

Response: It is unclear what benefit introducing this definition will serve. The draft Solid Waste Management Rules apply to facilities that compost organic solid wastes, but the Rules do not preclude a compost operator from also composting organics materials that are not defined as solid waste, such as “agricultural wastes”. The composter would simply have to include the characteristics of each desired feedstock in the application at the time of submittal for approval by the Program. No change is proposed at this time.

171) VAAFM requests that the inclusion of the following definition:

“Anaerobic Digester” means a facility that provides biological treatment of animal waste in the absence of oxygen.” VAAFM asks to include the NRCS definition of an anaerobic digester, Practice Code 366, for purposes of consistency across agencies and organizations.

Response: The NRCS definition of Anaerobic Digester provided in the comment above is too narrow in scope for the purposes of the Solid Waste Management Rules as it limits feedstocks to animal waste. The Program prefers the broader definition of “Anaerobic Digestion” in § 6-1102(c):

§ 6-1102 (c) “Anaerobic digestion” ~~means~~ *means the controlled anaerobic decomposition of organic food residuals, manure, animal feed waste, and other natural organic waste materials inside a containment structure or vessel, generally resulting in the production of methane-rich gas.*

172) VAAFM requests that the inclusion of the following definition:

“Farm” means a parcel or parcels of land owned, leased, or managed by a person and devoted primarily to farming, as defined in Section 2.16 of the Vermont Required Agricultural Practices Rule, and that meets the threshold criteria as established in Section 3 of the Vermont Required Agricultural Practices Rule, provided that the lessee controls the leased lands to the extent they would be considered as part of the lessee’s own farm. Indicators of control may include whether the lessee makes day-to-day decisions concerning the cultivation or other farming-related use of the leased lands and whether the lessee manages the land for farming during the leased period.

VAAFM makes this request as defining what farm operations fall under the jurisdiction of VAAFM and the RAPs is an important differentiation that isn’t explicitly clear with the current proposed definition.

Response: The Program agrees with the commenter. Defining a farm operation falls under the jurisdiction of VAAFM, and we are proposing to change this definition to the following:

*"Farm" means a parcel or parcels of land owned, leased, or managed by a person and devoted primarily to farming, as defined and determined by the Vermont Agricultural Practices Rule (RAPs), a place used for agricultural or horticultural use and/or cultivation or management of land for orchard crops or food, fiber, Christmas trees, maple sap and maple syrup products, animal 146 husbandry, fish or bees or a greenhouse operation, on site storage of agriculture products principally produced on the farm or the on site production of fuel or power from agriculture products or waste principally produced on the farm*

#### §6-1105 Small Composting Facilities – Accepted Composting Practices

- 173) VAAFM has concerns regarding provision (c)(1)(D) of this section: Small Composting Facility Design. Any waste runoff that is generated on a farm operation that may also meet the definition of a small composting facility may not be directed to a vegetated treatment area (VTA) under VAAFM and NRCS standards. Both VAAFM and NRCS do not design systems where concentrated waste is directed into VTAs as a management technique, regardless of farm size. This would also hold true for compost management areas where the current proposed amendment includes language directing water runoff from compost management areas into the VTA. NRCS designs VTAs to manage high flow leachate, and VAAFM strongly advocates to include this distinction in the SWMR amendment.

Response: The Accepted Composting Practices would not apply to high-strength liquid, concentrated waste or any farm related runoff. It would only apply to the compost management area of small solid waste composting facilities built and operating in accordance with the ACPs. The only material on the pad would be properly mixed compost windrows. The VTA would not be treating liquid from other farm activities such as feedlots, manure management, etc. Under no circumstances could a farm applying for a small composting registration utilize the VTA for treatment of any farm liquid. The Program continues to find a VTA to be an acceptable means of treating compost leachate from a small composting operation. No changes proposed at this time.

- 174) Small Compost Facility Siting AND Medium and Large Compost Facility Siting (to match Waste Storage Facility setbacks):
- (1) 300 feet from the nearest public or private water supplies not owned by the applicant;
  - (2) 3 feet from seasonal high water table and bedrock;
  - (3) 200 feet from the top of bank of surface water;
  - (4) 100 feet from a ditch or conveyance to surface water;
  - (5) areas subject to concentrated runoff, including subsurface tile drainage;
  - (6) 100 feet from all property lines and edge of public roads; and
  - (7) 300 feet from all residences not owned by the applicant and from all public buildings;
  - (8) The 100 year flood plain as shown on the National Flood Insurance Maps;
  - (9) A class I or class II wetland or its associated buffer zone unless a conditional use determination has been issued by the Secretary;
  - (10) A class III wetland unless authorized by the Secretary;

- (11) Any location within a municipality where that municipality has prohibited composting as a part of its zoning bylaws;
- (12) Within a designated downtown or village center, unless the municipality has expressly allowed composting in that area.
- (13) Within 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft.

Response: The Program appreciates the attempt to align requirements for similar activities across Agencies, but it is not appropriate to compare AAFM waste storage facility setback requirements with compost management area setback requirements. Composting is an active biologically controlled treatment process, with designed recipe and frequent pile management to assure optimal composting. The two activities do not present the same level of risk. The existing setbacks are adequate, and no changes are proposed.

*§6-1107 Medium and Large Compost Facility Design Standards*

- 175) (a)(4)(A); VAAFM uses the term waste storage facility (WSF), NRCS Practice Code 313, to define available methods of storing waste on a farm operation.

“Waste Storage Facility” means an impoundment made for the purpose of storing agricultural waste by constructing an embankment, excavating a pit or dugout, fabricating an in-ground or above-ground structure, or any combination thereof. (Section 2.41 of the RAPs)

As leachate is considered an agricultural waste, it’s storage can be considered to be a waste storage facility, which is the method VAAFM would implement to manage such materials. Waste storage facility would be a more accurate term in place of lagoon, to describe the method for waste management that would be prescribed by the Agency, meeting the NRCS Standards of Practice Code 313.

NRCS Practice Code 378 refers to a pond: “A pond stores water for livestock, fish and wildlife, recreation, fire control, erosion control, flow detention, and other uses such as improving water quality.”

NRCS Practice Code 359 refers to a waste treatment lagoon: “A waste treatment impoundment made by constructing an embankment and/or excavating a pit or dugout.”

Response: The Program agrees with the comment and proposes the change below as they apply to farm structures. It is important to note however, that not all certified solid waste composting facilities are located at farms.

*(4) Leachate storage.*

*(A) All facilities subject to the standards of this subsection shall ~~are required to~~ collect and treat all leachate from the active composting area in a lined pond, swale or lagoon. The leachate storage area shall meet the following ~~construction~~ design standards:*

- (i) be single lined with a natural or synthetic liner that has a maximum permeability of  $1 \times 10^{-7}$  cm/sec, in a design approved by the Secretary; or*
- (ii) be constructed in accordance with Natural Resource Conservation Service code ~~378~~ 359 standards and approved by the Secretary; or*
- (iii) be a waste ~~management lagoon~~ storage facility constructed consistent with the Agency of Agriculture, Food, and Markets standards; or*
- (iv) an alternative structure as proposed which meets the equivalent hydraulic conductivity design standards above as approved by the Secretary.*

- 176) (a)(6)(D)(i); VAAFM requests to include to following provision in place of current provision:
  - (i) Application rate shall not exceed agronomic rates, soil analysis and agronomic recommendations.
 Or

- (i) Application rate shall not exceed nutrient recommendations such that it ceases to be useful or beneficial for plant uptake.

Response: The Program agrees with this comment and proposes the following revision.

- (i) Application rate shall not exceed an appropriate agronomic rate based upon soil analysis and the corresponding agronomic recommendations. In no cases shall an application rate exceed 25,000 gallons per acre per day

## Subchapter 12 – Organics Management Facilities

### §6-1202 Organics Management Facilities

177) (b)(4)(viii); VAAFM requests to include the following language in place of current provision:

(viii) digestate meets standards for pathogen treatment and contaminant content and concentration established by the Secretary or Secretary of Agriculture, Food, and Markets. Digestate meeting these standards may be exempted from solid waste disposal siting and certification requirements where collection and land application occur under an approved nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 and, if not used on crops for direct human consumption, and if applied in a manner that minimizes the potential for contact with such crops, both during and after application to such crops.

Response: The Program agrees with the commenter that this section contained a lot of artifacts from the editing process and needed revision. The proposed language is listed below.

(viii) digestate ~~that~~ ~~meetings~~ the standards for pathogen treatment and contaminant content and concentration established by the Secretary or Secretary of Agriculture, Food, and Markets may be exempted from solid waste disposal siting and certification requirements where collection and land application occurs under an approved nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 —Nutrient Management but if not authorized for used on crops for direct human consumption; or, and is applied in a manner that minimizes the potential for contact with such crops.

### § 6-1202 Organics Management Facility Types; Authorization

178) (a); **Question:** Are other organics purposefully being omitted here? What about non-recyclable paper products (e.g., waxed or soiled fiber), for the facilities that accept them – can these be collected at an Organics Drop-Off Facility?

**Comment:** Overall, we're glad to see provisions and guidelines for Organics Drop-Off Facilities!

Response: Given the limited nature of the registration and operational requirements for these drop-offs, the intent is to limit the collection to clean food residuals only. Registrants may choose to utilize compostable odor and vector mitigants such as non-contaminated wood shavings. Those procedures and materials shall be detailed in the facility management plan. If an applicant desires to manage other solid wastes they may do so by obtaining a transfer station certification. For additional clarity, the Program is proposing to revise the title of these registrations to "Food Residual Drop-Off Facilities". See proposed language below.

### § 6-1202 Organics Management Facility Types; Authorization

(a) ~~Organics~~ Food Residual Drop-Off Facilities. Facilities that accept solely food residuals at a volume of less than 144 gallons per week shall register with the Secretary pursuant to § 6-1206 of this subchapter.

- 179) (a); We assume that an “Organic Drop-Off” site is designated as a collection site where collected materials must be hauled to a compost site. This doesn’t include collection of organic materials at a composting facility, where participants would drop-off organics. The distinguishing feature is that the collection is integral to the composting facility.

Response: This registration would only be for locations that are transferring materials off-site. Certified composting facilities can seek approval for a public access food residuals drop-off as part of their certification.

- 180) (a); The definition as stated allows for only the collection of food residuals. Does this prohibit the collection of soiled paper (napkins, pizza boxes)? Also, what if the food scraps in the drop-off container are covered with wood shavings as a biofilter. *If these are allowed, we would ask that the definition state this.*

Response: See response to comment #178.

- 181) (a)(1)(i); Organics storage containers must be located “50 feet from property lines”: This may be unreasonable in both downtown areas (if businesses share dumpsters), and in towns where containers may be located on public works or other town properties. *Is there a possibility of an exemption to this, or some sort of caveat in the definition, such as – “...recommended that storage containers be located 50 feet from property lines, if practical or otherwise operated without odor or other nuisance incidents.*

Response: This siting regulation has been revised to the following:

§ 6-1203(a)(1)(i): Organics storage containers shall be located a minimum of 50 feet from property lines unless otherwise approved by the Secretary:

### Subchapter 13 – Residuals Management Facilities

#### §6-1302 Residuals Management Facility Exemptions

- 182) (b); page 156: Residuals Management Facilities General Exemption 50 lb. bags. The reference noted for regulation of material greater than 50 lb should read 6-1303(a)

Response: Thank you for the comment – corrected to read “6-1303(a)”

- 183) (b); Recommend increasing the net weight from 50 lbs up to 2000 lbs to enable the use of agricultural super sacs. These 1-ton sacs are used by golf courses and athletic fields with Milorganite and other fertilizers.

Response: No further changes made. The Program’s goal for the EQ biosolids importation registry is to track large batches of this material entering Vermont but not ‘off the shelf’ products intended for public retail and individual use on small scales (i.e., 50 lb bags). Importation of a ton of biosolids rises to the level of a bulk use of the material, in the Program’s view, and therefore would not be exempt.

#### §6-1303 Exceptional Quality Biosolids

- 184) (a)(2); We urge the Agency to consider including all EPA Class A Alternatives, not just 1,2,5 and 6 as it applies to EQ biosolids pathogen reduction requirements. Aligning with the EPA Part 503 Biosolids Regulations would allow for the beneficial reuse of Class A biosolids that are confirmed low in pathogens by testing, without having to go through an additional expensive treatment process.

Response: Under 40 CFR 503, the set of pathogen indicator organisms that may be selected for Class A demonstrations is expanded from the testing of fecal coliform or salmonella s.p. densities, the only indicator organisms allowed for Class B demonstrations, to include viable helminth ova (parasitic worm eggs) and enteric

viruses under Class A: Alternatives 3 and 4, neither of which include process-based requirements. Of the six Class A Alternative demonstrations established in Part 503, Vermont only accepts the four Part 503 alternatives (Class A: Alternatives 1, 2, 5, and 6) that do include process-based treatment requirements and that do not recognize the use of viable helminth ova or enteric viruses as indicator organisms. Vermont has adopted this approach for two main reasons: 1) the Program believes that in order to further assure pathogen kill, treatment in a process based on a time/temperature relationship or chemical environment necessary to assure pasteurization is requisite, and 2) the density of viable helminth ova and/or enteric viruses in raw sewage is commonly sufficiently low such that it can meet the Class A standard absent any treatment for pathogen reduction. In other words, the Program believes that a measurement of the absence of these organisms in treated biosolids does not demonstrate the degree of pathogen reduction achieved by the process because the organisms may not have been present in raw sewage to begin with. Furthermore, a determination of the presence/absence of viable helminth ova and enteric viruses in raw sewage may result in the need to seed systems with these pathogen indicators ahead of the pathogen reduction treatment process in order to obtain usable data on the level of their destruction. The program believes it is unsafe and unnecessary (when other testing is available and effective) to intentionally add/seed dangerous pathogens into the raw sewage or sludge in order to prove the pathogens are being destroyed or reduced through the treatment process. The Program will therefore not approve any process that requires seeding helminth ova or enteric viruses (or any other pathogen indicator organisms) in order to have sufficient densities in the raw sewage for the ability to make a compliance demonstration in the treated biosolids.

185) (b)(3); The rule referenced at the end “6-1304(a),(g), and (i)(3)” does not exist.

**Response:** Thank you for the comment – corrected to read “6-1303(a)(g) and (i)(3)”

#### §6-1306 Residuals Management Facility Operating Standards

186) (b); application on.... frozen or snow-covered ground. “Snow Covered” has been broadly interpreted to consider from a dusting of snow to complete cover with snow. This section appears to assume surface application requiring with incorporation to follow. Please consider a revision for direct injection of biosolids when snow is present with ground exposed and soil is not frozen.

**Response:** The Program prefers to maintain this prohibition but has added the following language to the Rule: the Secretary may approve applications on a case-by-case basis upon a determination that current weather conditions and application techniques to be used will not result in abnormal nutrient loss, runoff, or threat to human health or the environment

187) (p); General comment of concern: The cumulative limits in soils in the table in this section for all heavy metals are identical to the maximum allowable levels in biosolids being land applied on farm fields, with the exception of Mercury. In the case of Mercury, the cumulative level limit is raised from 10 mg/kg, dry wt. to 17. Mercury is a highly toxic and persistent heavy metal linked to neurological effects in humans and animals. These fields will be used for the growing of crops and hay for animal feed used for production of human food. Mercury bioaccumulates. The Residuals Management Section 20 years ago attempted this change in the Rule, in addition to raising the allowable levels of Hg in biosolids to be land applied to similar levels. This proposal was met with public outrage and the program backed off. Now here it is again. Please do not move forward with this proposed change, allowing increased cumulative levels of Hg on our precious food producing lands.

**Response:** No further changes made. The Program questions if the comment mistakes ceiling concentration for cumulative loading rate. Previous VSWMRs did not contain cumulative maxima other than for cadmium at 4.5 lbs/acre (5.0 kg Cd/hectare). Cumulative maxima for all other regulated metals are included in the new rule for the first time, and reflect the Part 503s, which for mercury, is 17 kg/ha (~15.2 lbs/ac). The ceiling concentration is *not* proposed to change from 10 to 17 mg/kg, dry. The cumulative rates in 503 were back calculated from the Table 3 (EQ) pollutant limits, not the Table 1 numbers, so mercury is based on the Table 3 ceiling limit of 17 kg/ha, not the 57 kg/ha from Table 1. With the exceptions of cadmium, where the VSWMRs has retained its

historic standard (derived from 40 CFR Part 257-3.5) of 4.5 lbs Cd/acre (5.0 kg Cd/hectare) compared to the federal standard of 39 kg Cd/hectare (34.7 lbs Cd/acre); chromium and molybdenum, where Vermont continues to enforce the CPLRs for these contaminants that were vacated by the federal court action; and arsenic, where the federal CPLR was decreased in proportion to the reduced ceiling concentration (from 75 kg As/hectare down to 15 kg As/hectare); Vermont observes the federal standards.

#### *General Comments From AAFM*

188) Any concerns that originate from VAAFM related to the SWMR are focused on the appropriate application of nutrients on farm fields, including quantity of nutrients, location of any applications, and the concentrations of nutrients in any respective material. VAAFM requests that any requirements that may apply to nutrient management, storage, and application for farm operations that also fall under the jurisdiction of the SWMR, meet or exceed the requirements established in the RAPs.

- Such requirements would include the prohibition of any application on a field where the soil test phosphorus is above 20ppm if a phosphorus reduction strategy is not present.
- Requiring the inclusion of biosolids when farm operations calculate the Phosphorus Index (P-Index) on their farm fields, as opposed to using a general value of 50. This would help determine if fields can or should be receiving any additional nutrients and would contribute to further understanding relating to land base constrictions for farm operations.
- Additional requirements would allow applications on fields only when applied at agronomic rates during times when crop uptake can occur.

Response: §6-1306 includes specific provisions to align land application of biosolids or septage with VAAFM guidelines, including (a) prohibitions on spreading between 12/15 and 4/15, between 10/16 and 4/14 in land with frequently flooded soils, and between 12/1 and 12/15 and 4/1 and 4/30 when VAAFM determines that manure spreading would create potential runoff; (b) that all land application sites are incorporated into a Nutrient Management Plan developed by a certified planner to meet or exceed standards of the RAPs; (c) application rates determined in accordance with "Nutrients Recommendations for Field Crops in Vermont" published by the University of Vermont Extension. The 'general value of 50' is a misunderstanding of our former application rate calculator, which actually does not use the P index at all in its calcs and it merely asks you to input it and then it 'flags' the user if values are 'high'. The Rules already require, under §6-1305 (c)(3), that land application rates are based on agronomic rates.

#### *Comments From CLF "Comments on Solid Waste Management Rules", dated April 7, 2020*

189) The Agency must establish comprehensive controls to prevent exposure to unsafe levels of PFAS in soils, surface water, and groundwater

Response: Revisions to the Rules have been modified to include PFAS monitoring requirements for sludges, land applied biosolids (class B) and septage, and Exceptional Quality (EQ) (Class A) biosolids, under §6-1306(n) of the Rules. As proposed, the frequency PFAS monitoring will be established pursuant to §6-1306(q)(Table 1) (for facilities covered under a Sludge Management Plan) or in the facility certification (pursuant to §6-1306(r)(Table 2)). Testing would include both regulated PFAS and for other PFAS determined to pose health risks and for which the Secretary has determined that reliable testing and analytical methodology is available.

In addition, revisions now include PFAS monitoring requirements for soils, groundwater and plant tissue at all certified land application sites under §6-1306(r)(Table2) and (s). Like other parameters of concern, PFAS monitoring would be required at least annually, or at a frequency otherwise specified in the solid waste certification.

The Rules have also been modified to include specific PFAS-related requirements for EQ biosolids (produced in VT or imported). The proposed revisions now require PFAS testing in accordance with §6-1307(n), for PFAS testing results to be provided upon application for certificate of approval for imported EQ biosolids, and revocation certificate upon failure to provide PFAS testing results. Additional revisions would require product

labeling to include a statement that the product may contain PFAS, annual reporting of PFAS test results, and record keeping requirements - see §6-1303(a)(4); (c)(2)(A)(iii); (c)(2)(B)(iii); (e)(2); (f)(1); (g)(3); (h)(E). Lastly, imported EQ biosolids sold in bags of 50 pounds or less have been exempted from the requirement to obtain a certificate of approval.

Finally, to ensure that land application of biosolids or stabilized septage do not present a potential threat to groundwater language has been added under §6-1307(d) to clarify that an application site cannot be certified unless it demonstrates that it is in compliance with the Groundwater Protection Rule and Strategy.

## Listing of All Changes Made to Rule

| Citation           | Comment         | Change Made  |
|--------------------|-----------------|--|
| §6-101             | Program         | Removed listing of statutory reference topics upon legal recommendation.   |
| §6-102             | Program         | Added language clarifying the presumption of compliance with the Vermont Groundwater Protection Rule and Strategy for facilities in compliance with the Solid Waste Management Rules.  |
| §6-201 Definitions | 4               | Added: "Friable asbestos" definition   |
| §6-201 Definitions | Program         | Edited "Adjoining landowners" to read "adjoining Property Owners" to be consistent with 10 V.S.A. 170. Change applied throughout rule whenever "adjoining landowners" was used.  |
| §6-201 Definitions | 5               | Corrected spacing between "closure" and "clean wood" definitions   |
| §6-201 Definitions | 6               | Edited: "Composting" definition  |
| §6-201 Definitions | 7               | Edited: "Construction and Demolition Waste" Definition   |
| §6-201 Definitions | Program         | Added: a new "Slaughterhouse Waste" definition   |
| §6-201 Definitions | 9               | Changed: "Organics" to "Organic Solid Waste"   |
| §6-201 Definitions | 10              | Added: "Landfill" definition   |
| §6-201 Definitions | 14              | Edited: "Final Grades" definition  |
| §6-201 Definitions | Program,<br>189 | Added: "Groundwater Compliance Points" definition  |
| §6-201 Definitions | Program,<br>189 | Added: "Groundwater Protection Rule and Strategy" definition and Acronym   |
| §6-201 Definitions | 20, 21          | Changed: "Organics" to "Organic Solid Waste"   |
| §6-201 Definitions | Program         | Removed: Definition for "guidelines" as the term is not used within the Rules.   |
| §6-201 Definitions | 22, 23          | Changed "organic drop-off" to "food residual drop-off" and edited definition   |
| §6-201 Definitions | 27              | Changed: "organics" to "organic solid wastes" and edited: "Organic Solid Waste Recovery Facility" definition   |
| §6-201 Definitions | 33              | Added: "Domestic Septage" definition   |
| §6-201 Definitions | Program         | Edited: amended language in sludge definitions and throughout Rule that referred to wastewater treatment plants to read wastewater treatment facilities  |
| §6-302(a)(11)      | 28              | Added: the exemption for glycerol management at off farm anaerobic digesters   |
| §6-302(a)          | Program         | Removed: exemptions for the use of Short Paper Fiber and Wood Ash. In order to be exempt, users must use these materials in accordance with Program Procedures, which have not been moved into the Rule during this revision. The guidance on the use of these materials will remain in a Procedure. |
| §6-302(a)(19)      | Program         | Added: exemption from certification for institutions offering food residual collection for employees   |
| §6-304(a)          | 32              | Corrected citation numbering issue in clean copy version of the rules  |
| §6-304(h)          | Program         | Removed reference to the Regulated Medical Waste Procedure and clarified the requirements needed to accept Regulated Medical Waste for Disposal.   |
| §6-402(a)          | 36              | Edited the description of a solid waste management entity  |
| §6-402(b)(2)       | 37              | Typo correction  |

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|------------------|-----------------|---|
| §6-402(b)(4)     | 38              | Language correction   |
| §6-402(b)(6)     | 39              | Language correction   |
| §6-402(b)(7)     | 40              | Language correction   |
|                  |                 |   |
| §6-501           | Program         | Edited Table for readability  |
| §6-503(a)        | 43              | Typo correction   |
| §6-503(a)(4)     | 44              | Provisional certification language deleted  |
| §6-503(c)(2)     | 45              | Changed "organic drop-off" to "food residual drop-off"  |
| §6-504(e)(12-13) | 46              | Corrected spacing between (e)(12) and (e)(13)   |
| §6-504(e)(23)    | 51              | Corrected to reflect the types of additional information that the Secretary may request an applicant submit to supplement other required materials.   |
| §6-505(a)(2)(N)  | 54              | Removed requirement, duplicative of (a)(2)(M)   |
| §6-507(c)        | Program         | Added language clarifying that the Secretary may request additional application submittals beyond the minimum listed by the Rule, as required to make a determination.  |
|                  |                 |   |
| §6-601(a)        | 58              | Typo correction   |
| §6-601(b)(1)     | 59              | Removed duplicative language  |
| §6-601(b)(3)     | 60              | Added language to provide a notice of administrative completeness to applicants within 15 days of application receipt   |
| §6-602(3)        | 63              | Typo correction   |
| §6-606(a)        | 65              | Added language to clarify the suspension or revocations of certification may be in whole, or in part.   |
| §6-606           | 66              | Removed reference to and requirements for for petition submittals. The process of determining whether there is a basis for a suspension or revocation of a certification lies with the Secretary and that determination could be based on any communications from the public or interested parties. The basis for such a determination by the Secretary remains within these Rules. |
|                  |                 |   |
| §6-703, Table A  | 72              | Corrected the table to reflect a change in text regarding the minimum distance from waste management boundary to schools, daycare facilities, hospitals and nursing homes.  |
| §6-703, Table A  | 73              | Corrected accidental language removal   |
| §6-704(a)        | 75              | Clarified sentence language   |
| §6-704(b)        | Program         | Corrected citation numbering error  |
| §6-704(c)        | 76              | Corrected spacing error   |
| §6-704(f)        | 77              | Typo correction   |
| §6-704(g)        | 78              | Added language for clarity  |
| §6-705(b)        | 80              | Corrected sentence structure  |
| §6-706(c)(2)(B)  | 84              | Added language to provide appropriate contact information and numbers.  |
| §6-708(a)(4)     | Program,<br>189 | Added language to clarify that actions, according to the Groundwater Protection Rule and Strategy, that would be taken to address Preventative Action Level exceedances at points of compliance.  |
| §6-708(b)(3)     | Program,<br>189 | Added language to clarify that actions, according to the Groundwater Protection Rule and Strategy, that would be taken to address groundwater standard exceedances at points of compliance.   |
|                  |                 |   |
| §6-801(b)        | Program         | Clarified that financial responsibility is not required of registered facilities or categorical facilities.   |

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| §6-805(d)            | 91       | Addition of the word 'final' to clarify which capping system the requirement is referring to.  |
| §6-904(a)(1)         | 93       | Typo correction  |
| §6-904(i)            | 94       | Edited to change the use of 'organics' to 'organic solid waste'  |
| §6-904(c)(4)         | 98       | Edited to change the use of 'organics' to 'organic solid waste'  |
| §6-904(d)            | 99       | Edited to differentiate requirements for storage and operational processes at facilities   |
| §6-904(e)(1)         | 100      | Edited to clarify language   |
| §6-905(g)(1)         | 101      | Corrected spacing error  |
| §6-905(m)(1)         | 102      | Typo correction  |
| §6-906(b)            | 103      | Corrected spacing error  |
| §6-1001(b)           | 105      | Typo correction  |
| §6-1003(a)(1)        | Program  | Edited drinking water supply to read drinking water sources to be consistent with the definition   |
| §6-1004              | Program  | Corrected spacing/numbering errors   |
| §6-1004(c)           | 108      | Removed duplicative language   |
| §6-1004(h)           | Program  | Edited to add potential waiver of gas collection requirements, in addition to leachate collection requirements if landfills accepting specific waste components (monofills etc.) can demonstrate there is no potential source of leachate or landfill gas that may be harmful. |
| §6-1004(i)(3)(c)     | 113      | Clarified that interim cap provides erosion and leachate production protection and edited for sentence structure   |
| §6-1004(k)(1)(b)     | 115      | Separated leachate migration and leachate detections as separate performance standards of the leachate collection and removal systems.   |
| §6-1004(j)(1)        | 116      | Added language to provide for the ability to store leachate on a liner for approved contingency events other than storm events (e.x. leachate storage tank inspections)  |
| §6-1004(j)(6)(C)     | 119      | Edited for language clarity  |
| §6-1004(k)(2)        | 120      | Corrected spacing/numbering error  |
| §6-1004(l)(3)        | 121      | Clarified that the use of interim caps is optional   |
| §6-1004(i)(2)(C)     | 128      | Added language to address an additional purpose of the primary liner   |
| §6-1005(c)(6)        | 137      | Edited for language clarity  |
| §6-1005(d)(1)(F)     | 138      | Edited for language clarity  |
| §6-1005(f)(3)        | 141      | Edited to clarify that liquids within the secondary detection and collection system may not necessarily be leachate  |
| §6-1006(a)(3)(C)(iv) | Program  | Removed duplicative language addressing the Groundwater Protection Rule and Strategy and Water Quality Standard compliance   |
| §6-1009(b)(5)        | 154      | Edited section title for clarity and removed language defining the standard for stormwater system performance evaluation to reflect evaluation against design standards that a landfill is closed under.   |
| §6-1009(e)           | 155      | Added language to address ongoing obligations of landfill owners following custodial care approval   |
| §6-1102(c)           | 171      | Edited: "Anaerobic Digestion" Definition   |
| §6-1102(n)           | 172      | Edited: "Farm" Definition  |
| §6-1102(s)           | 157      | Changed: "Organics" to "Organic Solid Waste"   |
| §6-1102(e)           | 158      | Edited: "Compost" Definition   |
| §6-201 & §6-1102(g)  | 159      | Edited: "Composting" Definition  |
| §6-1102(k)           | 161, 162 | Edited: "Contaminant" Definition   |

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| §6-1103(a)(1)  | 163             | Edited: exemption modified to be contingent upon the importation of solid waste not the overall total which penalized farms who are already composting manure/vegetation.   |
| §6-1103(a)(9)  | 167             | Edited: additions and clarifications to animal burial requirements, edited drinking water supplies to read drinking water sources to be consistent with the definitions   |
| §6-1104(b)   | 168             | Edited: organizational correction applied to the vermicomposting citation   |
| §6-1106(b)   | Program         | Edited: to allow for engineered solutions to siting and as appropriate.   |
| §6-1107(a)(4)(A)   | 175             | Changed: “waste management lagoon” to “waste storage facility” in conformance with AAFM definitions   |
| §6-1107 (a)(6)(D)(i)   | 176             | Edited: added that land application of curing runoff shall be based upon an agronomic assessment of the soils.  |
| §6-1108(b)(4)(A)   | 169             | Edited: cleaned up language and revision artifacts  |
|  |                 |   |
| §6-1202(b)(4)  | Program         | Reorganized the exemption requirements to read better   |
| §6-1202(b)(4)(viii)  | 177             | Edited: land application of digestate to align with AAFM.   |
| §6-1202(a)   | 25              | Changed the name of organics drop-off facilities to ‘food residuals drop-off facilities for clarity   |
| §6-1202(c)   | 25              | Edited: Organics to Organic Solid Waste   |
|  |                 |   |
| §6-1302(a)   | Program         | Edited incorrect reference §6-1303(e) to §6-1307(f)   |
| §6-1302(b)   | 182             | Edited incorrect reference §6-1304 to §6-1303   |
| §6-1303(a)(4)  | 189             | Added language that EQ biosolids produced in, or imported into, VT shall be tested for all parameters listed under §6-1306 (n), which includes PFAS   |
| §6-1303(b)(3)  | Program         | Edited incorrect reference §6-1304 to §6-1303   |
| §6-1303(b)(1)(B);<br>§6-1303(b)(1)(C);   |                 | Edited incorrect reference @ (B) from §6-1303(g) to §6-1303(h); and at (C ) from §6-1303(h) to §6-1303(i)   |
| §6-1303(c)(2)(A); (B)  |                 | Change to language referencing effective date of the Rules  |
| §6-1303(c)(2)(A)(iii); §6-1303(c)(2)(B)(iii); §6-1303(e)(2); and §6-1303(f)(1) | 189             | Added language that an application for a certificate of approval for importing EQ biosolids into VT must include results for all parameters listed under §6-1306(n), which includes PFAS, and that if testing requirements are not met, certificate may be revoked, and that for reapproval, testing results must be provided |
| §6-1303(d)   | Program         | Added language that COA will be issued by Secretary, in writing...  |
| §6-1303(f)   | Program         | Edited incorrect reference to subsection (e)  |
| §6-1303(f)   | Program         | Deleted extraneous language “once again” (2)&(3), “reasonably” (6)  |
| §6-1303(g)(3)  | 189             | Added language that EQ biosolids produced in, or imported into, VT shall have a label indicating that the product may contain PFAS  |
| §6-1303(g)(4)&(5)  | Program         | Deleted “typical”; Moved statement following (8) regarding guaranteed nutrient content and registration with VAAFMM under (4)   |
| §6-1303(h)(2)(E)   | 189             | Added reporting requirement for imported EQ biosolids to include testing results under §6-1306 (n), which includes PFAS   |
| §6-1303(i)(1)(c)   | Program         | Edited incorrect reference (h)(2)(F) to (h)(2)  |
| §6-1305  | Program         | Edited: Wastewater Treatment Plant to wastewater treatment facility   |
| §6-1305(c)(4)  | Program,<br>189 | Added that biosolids quality must be documented as required in §6-1306 (n) and (o) prior to application to the land   |
| §6-1306(a)   | Program,<br>186 | Added additional prohibitions for seasonal land application based on VAAFMM manure spreading ban dates for flood plain farmers along with   |

|                    |                 |   |
|--------------------|-----------------|---|
|                    |                 | language allowing the Secretary to approve application on a case-by-case basis upon determination that weather conditions and application techniques will not result in runoff, abnormal nutrient loss, or threat to health or the environment. |
| §6-1306(m)(2)      | Program         | Changed 6 month to a 12 month prohibition on grazing animals at land application sites  |
| §6-1306(n)(2)      | Program,<br>189 | Clarified parameters that biosolids or septage intended for land application must be tested for, including PFAS and additional parameters as determined to be necessary to prevent a threat to human health and the environment                 |
| §6-1306(o)(2)      | Program         | Changed the limit for PCBs in biosolids or septage intended for land application from 10 mg/kg to 1 mk/kg (in consult with VDH)   |
| §6-1306(r) Table 2 | Program,<br>189 | Corrected reference to §6-1307(q) - Table 1 and added PFAS as a monitoring parameter for soils, groundwater and plant tissue for land application certifications, along with monitoring frequency   |
| §6-1306(s)         | Program         | Added that the Secretary may require materials indicated in Table 2 to be tested for additional parameters as determined necessary  |
| §6-1307(a)         | Program         | Changed “plants” to “facilities” to be consistent   |
| §6-1307(d)         | Program         | Added language that no land application site can be certified unless it demonstrates compliance with the Groundwater Protection Rule and Strategy   |
| §6-1307(f)         | Program         | Changed “plants” to “facilities” to be consistent   |
| §6-1308(b)         | Program         | Edited: deleted “or dairy wastes”   |
| §6-1309            | Program         | Changed “plants” to “facilities” to be consistent   |
|                    |                 |   |
| Appendix A         | Program         | Edited to remove language limiting the issuance of letters of credit to financial institutions that are were regulated and examined by the State of Vermont.  |
| Appendix C         | Program         | Added language for clarity that the fees established by statute will supersede the fees listed in the table, should there being any changes to statute following the effective date of these Rules.   |
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## Subchapter 1 – Purpose

### § 6-101 Authority

~~This~~ These Rules ~~is~~ are adopted by the Secretary of the Agency of Natural Resources pursuant to ~~under~~ the authority of 10 V.S.A. Chapter 159, Waste Management. The Secretary has the power to adopt, amend, and repeal Rules pursuant to 3 V.S.A. Chapter 25.

### § 6-102 Declaration of Purpose

- (a) These Rules establish procedures and standards to protect public health and the environment by ensuring the safe, proper, and sustainable management of solid waste in Vermont. ~~They~~ These Rules amend the Solid Waste Management Rules ~~effective as adopted on October 15, 2004~~ March 15, 2012.
- (b) A facility in compliance with the requirements of these Rules is presumed to:
- (1) Not results in an exceedance of groundwater enforcement standards at points of compliance, as defined by the Groundwater Protection Rule and Strategy; or
  - (2) Otherwise adversely affect public trust uses of groundwater in the State.
- (c) Notwithstanding the presumption of §6-102(b), the Secretary may require additional demonstration of compliance with the Groundwater Protection Rule and Strategy.

### § 6-103 Severability

The provisions of any section of these Rules ~~are~~ shall be severable. If any provision of these Rules is invalid or if any application of these Rules 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.

### § 6-104 Fees

- (a) Fees related to these Rules are established in 3 V.S.A. §2822(j). Municipalities shall be exempt from the payment of fees in accordance with 3 V.S.A. §2822(i).
- (b) Facilities operated by a private entity are required to pay relevant fees.
- (c) For ~~projects~~ activities where the role of the private applicant is to function solely as a contracted service provider and the municipality ~~ies~~ establishes and maintains the approved financial responsibility instrument, controls facility operations, directly utilizes the services of the facility, maintains an unencumbered right to possession, maintains access to the facility at all times, and controls the financial aspects of the facility (e.g. obtains the user fees and pays any fees or taxes), the municipal exemption of §6-104(a) applies. Under these circumstances, the contractor would not be vested in the financial viability of the facility.

**§ 6-105**                      **Incorporation by Reference**

When reference is made herein to CFR titles, their parts, subparts, or sections, the reference is to titles of the Code of Federal Regulations as they existed on the effective date of these Rules.

**§ 6-106**                      **Signatories to Certifications and Reports**

- (a) Applications and reports requested or required by the Secretary shall be signed by each applicant or by a duly authorized representative of the applicant.
- (b) A person is a duly authorized representative for the purposes of subsection (a) of this section only if:
  - (1) The authorization is made in writing and is signed by the facility applicant;
  - (2) The authorization states that the applicant has delegated the legal authority for the representative to sign on behalf of the applicant; and
  - (3) The written authorization is submitted to the Secretary.

(c) If an authorization described in subsection (b) of this section no longer meets the requirements of that subsection, a new authorization satisfying the requirements of subsection (b) of this section shall be submitted to the Secretary prior to or together with any documents signed by the new authorized representative.

(d) Any person signing a document pursuant to subsection (a) 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. Based on my inquiry of the person or persons who operate the facility, 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.

## Subchapter 2 – General Definitions and Acronyms

### § 6-201 Definitions

(a) All used in this chapter, all terms not defined herein shall have the meaning given them in 10 V.S.A. §6602, unless a different meaning clearly appears from the context. Terms presented in this subchapter apply generally to these Rules. Additional terms relevant to specific waste management activities are included in subchapters 4 and 11.

“Active life” means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities.

“Active portion” means the part of a facility or operational unit that has received or is receiving wastes and that has not been closed in accordance with the Solid Waste Management Rules.

“Adjoining Property Owners residences and landowners” shall include those residences and landowners residing on land adjacent to the facility applied for, notwithstanding the presence of a road, railroad, other right of way or a watercourse located on the boundary of the parcel of land on which the facility is located means a person who owns land in fee simple, if that land:

(a) shares a property boundary with a tract of land where proposed or actual activity regulated by the Secretary is located; or

(b) is adjacent to a tract of land where such activity is located, and the two properties are separated only by a river, stream or public highway.

“Administrative amendment” means an amendment to a certification or permit that corrects typographical errors, changes the name or mailing address of a permittee, or makes other similar changes to the certification or permit that do not require technical review of the permitted activity or the imposition of new conditions or requirements.

“Administratively complete application” means an application for a certification or permit for which all initially required documentation has been submitted, and any required fee, and the information submitted initially addresses all application requirements but has not yet

been subjected to a complete technical review.

“Agency” means the Vermont Agency of Natural Resources.

“Alternative Daily Cover” means materials which substitute for compacted soils and earthen materials to cover waste at landfills on a daily basis, and which use has been approved by the Secretary.

“Airport” means a public-use airport, open to the public without prior permission and without restrictions within the physical capacities of available facilities.

“Approved Uniform Solid Waste” means solid waste which has been determined in writing by the Secretary to be uniform, consistent and does not contain landfill banned materials ~~yard waste, marketable recyclable materials, hazardous waste~~ as defined by State and/or Federal regulation.

“Architectural Waste” or “AW” means discarded drywall, metal, asphalt shingles, clean wood, and plywood, and oriented strand board derived from the construction or demolition of buildings or structures.

“Asbestos” means the fibrous varieties of primarily the amphibole and serpentine mineral groups which include the minerals: chrysotile, riebeckite (crocidolite), cummingtonite, grunerite (amosite), anthophyllite, actinolite and tremolite.

“Asbestos Waste” means a waste that contains any type of asbestos in an amount greater than one percent by weight, either alone or mixed with other fibrous or non-fibrous material.

“Bird Hazard” means ~~an increase in~~ the likelihood of collision between birds and aircraft that may cause damage to the aircraft or injury to its occupants.

“Biosolids” means sewage sludge derived, in whole or in part, from domestic wastes which have been subjected to a treatment process for the reduction of pathogens and have been demonstrated to meet the applicable requirements of these Rules for contaminant concentrations, vector attraction reduction, and pathogen reduction, such that the material has been approved by the Secretary for application to the land under a site specific solid waste facility certification.

“Cell” means a discrete, confined portion of compacted solid waste within a landfill. A cell is a subpart of an operational unit within a landfill.

“Closure” means the activities and requirements that a facility ~~must~~ shall complete, as prescribed by the ~~facility’s certification~~ approved Facility Management Plan or otherwise by the Secretary, when a portion of the facility or the entire facility is no longer ~~receiving, to processing or dispose~~ disposing of solid waste. ~~The timing of closure is either set in the facility certification or will be determined by the Secretary.~~

“Clean Wood” means untreated and unpainted wood including dimensional lumber, and other natural woody debris. This term includes trees, tree stumps, brush and limbs ( $\geq 1$  inch in diameter), root mats, and logs.

“Commercial Hauler” means any person who transports regulated quantities of hazardous waste and/or transports solid waste for compensation ~~in a vehicle having a rated capacity of more than one ton.~~

“Composite Liner” means a system consisting of two components; the upper component must consist of a minimum 60-mil Flexible Membrane Liner (FML) and a lower component consisting of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec. The FML must be installed in direct and uniform contact with the compacted soil component.

“Composting” means the controlled aerobic biological decomposition of organic matter through active management to produce a stable humus-rich material compost (as that term is defined in 10 V.S.A. §6602 and subchapter 11 of these Rules).

“Conditionally Exempt Generator” or “CEG” means a generator of hazardous waste which is conditionally exempted from certain provisions of the Vermont Hazardous Waste Management Regulations. A generator is conditionally exempt if they meet the requirements as described in subchapter 7 of the Vermont Hazardous Waste Management Regulations.

“Construction and Demolition Waste” or “C&D” means waste derived from the construction or demolition of buildings, roadways or structures, including, but not limited to, clean wood, treated or painted wood, plaster ~~sheetrock~~ drywall, roofing paper and shingles, insulation,

glass, ~~stone, soil~~, flooring materials, brick, masonry, mortar, incidental stone, soil, metal, furniture and mattresses. This definition includes architectural waste. This waste definition does not include asbestos waste, regulated hazardous waste, hazardous waste generated by households, or hazardous waste from conditionally exempt generators, or any material banned from landfill disposal under 10 V.S.A. §6621a.

“Contact person” means a person designated by ~~the a~~ P-permittee or permittee(s) who has the authority to make and implement decisions regarding operating conditions at ~~the solid waste management a~~ facility.

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

“Corrective Action” means steps taken by a person, as directed by the Secretary, to repair facility structures or operations in order to bring the facility into compliance with design, construction, management and operational regulations and/or to prevent reduce or eliminate risk of harm or actual harm to the public health, public safety or the environment.

“Cover Material” means earthen material, or other material approved by the Secretary, that is used to cover compacted solid wastes in a landfill ~~discrete disposal facility~~ in order to control fire, disease vectors and odors, to prevent blowing litter, to discourage scavenging by animals, and to assure an aesthetic appearance.

“Custodial Care” means the continued management of end-use obligations of a landfill, particularly protection of the landfill cap and limiting access, following completion of the post-closure period.

“Development soils” means unconsolidated mineral and organic matter overlying bedrock that is contaminated solely by polycyclic aromatic hydrocarbons (PAHs), arsenic, or lead at concentrations which exceed Vermont Soil Screening Values and are not hazardous waste.

“Development soil concentration level” means those levels of polycyclic aromatic hydrocarbons (PAHs), arsenic, or lead expressed in units of mass per mass, contained in the development soils.

~~“Diffuse Disposal Facility” means surface or subsurface disposal areas where agronomically beneficial wastes are disposed at a controlled application rate, usually based on crop nutrient requirements, not tolerance~~ shall have the same definition as “Land Application Site”.

“Discarded” means a material that is:

- (a) delivered to a treatment, storage, recycling or disposal facility;
- (b) abandoned;
- (c) burned or incinerated;
- (d) stored or placed in a manner that constitutes the discharge, injection, spilling or leaking of material or any constituent thereof into or on any land or water or into the air;
- (e) placed in or near the public right of way for collection; or
- (f) conveyed to a commercial hauler for delivery to a treatment, storage, recycling or disposal facility.

*It does not* mean a material that is used in a manner approved by the Secretary ~~by means of procedure as acceptable~~ and not posing a threat to public health or the environment.

~~“Discharge” means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of a waste, or waste constituent, into or on any land or water, or into the air. placing, deposition or emission of a waste directly or indirectly into or on any land or water or into the air.~~

~~“Discrete Disposal Facilities” means all facilities used for the disposal of solid wastes with the exemption of diffuse disposal facilities. A discrete disposal facility may include one or more landfill units.~~

“Disposal” means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste into or on any land or water so that such solid waste or any constituent

thereof may enter the environment or be emitted into the air or discharged into any ground or surface waters.

“Diversion” means the management of solid wastes through methods other than disposal.

Diversion includes recycling, composting, reuse, and anaerobic energy production.

Diversion does not include use of materials for alternative daily cover at landfills or the incineration of solid waste to produce energy.

“Domestic food source animals” means animals raised for direct human consumption.

“Domestic septage” means either liquid or solid material removed from a septic tank or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial or industrial wastewater, or a mixture of commercial or industrial and domestic wastes, portable toilet waste, holding tank waste, cesspool waste, waste from Type III marine sanitation devices, or grease removed from a grease trap.

“Domestic Wastes” means wastes originating from bathrooms, kitchens, showers, toilets or other sanitary facilities (public or private) regardless of the degree of treatment.

“Drinking Water Source” means any surface water or groundwater intake used or permitted to be used as a source of drinking water for human consumption.

“Environmental Notice Bulletin” or “bulletin” means the website and e-mail notification system required by 3 V.S.A. §2826.

“Exceptional Quality (EQ) Biosolids” means products derived in whole or in part from domestic wastes which have been subjected to and meet the requirements of the following: a pathogen reduction process established in 40 CFR Part 503.32(a)(3), (4), (7) or (8); one of the vector attraction reduction standards established in 40 CFR Part 503.33; the contaminant concentration limits in §6-1304 (a)(1); and if by a composting process, §6-1304(a)(4) of these Rules. EQ biosolids, once released from the generating facility, are no longer considered to be solid wastes in accordance with §6-302(a)(5) of these Rules and may be marketed and distributed to the general public. Residual dairy wastes are considered to be equivalent to EQ biosolids or EQ biosolids products and eligible for marketing and distribution to the general public when they have been prepared and are managed in full accordance with §6-1304.

“Facility” means all contiguous land, structures, other appurtenances and improvements on the land, used for treating, storing or disposing of solid waste. A facility may consist of several treatment, storage or disposal operational units.

“Fact Sheet” means a document that produced by the Secretary that briefly sets forth the principle facts and significant factual, legal, methodological, and policy questions considered in preparing a draft decision.

“Final Closure” means the completion of all closure activities.

“Final Grades” means the maximum authorized slopes and in-place volume of waste and cover materials achieved prior to final closure.

“Final Capping System” means an engineered layer of materials which has been approved by the ~~Program~~ Secretary to be placed on the surface of a landfill in a location where no additional waste will be deposited. A final capping system shall meet the minimum requirements of these Rules and achieve the performance criteria of minimizing infiltration and controlling landfill gas emissions as described in § 6-1004(n) or § 6-1004(o), as applicable.

“Floodplain” means the land area adjacent to a surface water body that is below the one hundred (100) year flood elevation.

“Floodway” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge a one-hundred-year base flood, without cumulatively increasing the water surface elevation more than one foot at any point. ~~area of land and water necessary to convey the one hundred (100) year flood without cumulatively increasing the water surface elevation more than one (1) foot.~~

“Food processing residual” means the remaining organic material from a food processing plant and may include whey and other dairy, cheese making, and ice cream residuals or residuals from any food manufacturing process excluding slaughtering and rendering operations. It does not include materials from markets, groceries, or restaurants.

“Food residual” means ~~compostable~~ source separated and uncontaminated material that is derived from processing or discarding of food and that is recyclable, in a manner

consistent with 10 V.S.A. § 6605k. Food residual may include preconsumer and postconsumer food scraps. “Food residual” does not include meat and meat-related products when these materials are composted by a resident on site.

“Friable asbestos” means any asbestos containing material that can be crushed, crumbled, pulverized or turned to powder with the ordinary force of a human hand.

“Geosynthetics” means a generic classification of all synthetic materials used for geotechnical engineering applications, and includes geotextiles, geogrids, geomembranes, geo nets and geocomposites.

“Groundwater” means the water below the land surface but does not include surface waters within the meaning of 10 V.S.A. §1251(13).

“Groundwater Compliance Points” means the following:

- (1) any point of present use of groundwater, including use as a public water source or as a source of water for potable water supplies;
- (2) the boundary of Class I, Class II, or Class IV groundwater area;
- (3) zone two of a public water source protection area;
- (4) any point at the boundary of the property where the activity is located; and
- (5) any point 150 feet upgradient and any point 300 feet downgradient from a land application area, as measured from the edges of the land application area.
- (6) the additional points established by these Rules or the Groundwater Protection Rule and Strategy for specific facility certification and activity types.

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

“Guidelines” means recommended considerations, technical criteria, specifications and engineering practices for location, siting, design, operation, and maintenance of solid waste management facilities.

“Hazardous materials” means (A) all petroleum and toxic, corrosive, or other chemicals and related sludge included in any of the following: (i) any substance defined in section 101(14) of the federal Comprehensive Environmental Response, Compensation and Liability (CERCLA) Act of 1980; (ii) petroleum, including crude oil or any fraction thereof; (iii) hazardous wastes as defined by the Vermont Hazardous Waste Management Regulations; or (iv) a chemical or substance that, when released, poses a risk to human health or other living organisms and that is listed by this rule. (B) 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 manufacturer’s instructions.

“HHW/CEG Hazardous Waste Collection Facility” means a facility used for the collection and storage of Household Hazardous Wastes (HHW) and/or hazardous waste from Conditionally Exempt Generators (CEG).

“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, is specifically excluded from this definition.

“High Carbon Bulking Agent” means carbon-based material, the use of which is intended for adding structure and bulk to, and/or for moisture management within, a compost pile.

“Household Hazardous Waste” or HHW means any waste from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas) that would be subject to regulation as hazardous wastes if it were not from households.

“Hydric Soils” means soils that are formed under conditions of saturation, flooding, or ponding for a long enough time during the growing season that anaerobic conditions are developed in the upper portions of the soil profile.

“Implementation Plan” means a municipal or Solid Waste Management Entity’s plan which is adopted and found to be consistent with the State Material Management Plan. This plan must include all the elements required for consistency with the State plan and an applicable regional plan and shall be approved by the Secretary.

“Implemented Waste” means all solid waste which originates from a municipality which manages waste in accordance with a solid waste implementation plan approved by the Secretary.

“Interim Cap” means a temporary layered landfill capping system, which may consist of either, or a combination of, soil and geosynthetics barriers designed to control emissions and minimize infiltration and meets the performance standard of §6-1004(1).

“Individual permit” means a permit that authorizes a specific discharge, emission, disposal, facility, or activity that contains terms and conditions that are specific to the discharge, emission, disposal, facility, or activity.

“Intermediate Cover” is a landfill cover system which is used when an opened area of the landfill is not anticipated to receive waste for a period of three (3) months or more.

“Incinerator” means any structure or furnace in which combustion takes place, the primary purpose of which is the reduction in volume and weight of a solid waste and is considered a disposal facility ~~an unwanted material.~~

“Inert Materials” means material that is non-putrescible and that will not exceed Vermont Groundwater Enforcement Standards when analyzed using EPA SW-846 Synthetic Precipitation Leaching Procedure (SPLP).

“Insignificant Waste Management Event Approval” or “IWMEA” means a waste disposal, storage, treatment, collection or processing event of limited duration that the Secretary has determined will not result in a threat to the public health and safety or to the environment and will not create a nuisance.

“Land Application” means the diffuse spreading of non-EQ biosolids and stabilized domestic septage on the land at a controlled application rate for the purpose of providing agricultural nutrients, improving soil structure, or reclaiming a site.

“Land Application Site” or “Land Application Facility”, means a parcel of land certified under these Rules for the management of non-EQ biosolids or stabilized domestic septage via application to the land as a nutrient source or soil conditioner (see also “Diffuse Disposal Site”).

“Lateral Expansion” means a horizontal expansion of the waste boundaries of an existing solid waste landfill unit.

“Leachate” means liquid that passes through or emerges from a solid waste, such as dissolved, suspended or miscible materials, chemicals or biologic products, or other materials that have been derived from the waste. Means liquid containing dissolved, suspended, or miscible materials that pass through or emerges from solid waste.

“Leaf and Yard Residuals” means source separated, compostable untreated vegetative matter, including grass clippings, leaves, kraft paper bags, and brush, which is free from non-compostable materials. It does not include such materials as pre- and post-consumer food residuals, food processing residuals, or soiled paper.

“Liquid Waste” means any waste material that is determined to contain “free liquids” as defined by Method 9095A 9095B (2004, Paint Filter Test), contained in “Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods” (EPA Pub. No. SW-846).

“Major Amendment” means an amendment to an individual permit or notice of intent under a general permit that necessitates technical review.

“Mandated Recyclables” means the following source separated materials: aluminum and steel cans; aluminum foil and aluminum pie plates; glass bottles and jars from food and beverages; polyethylene terephthalate (PET) plastic bottles or jugs; high density polyethylene (HDPE) plastic bottles and jugs; corrugated cardboard; white and colored paper; newspaper; magazines; catalogues; paper mail and envelopes; boxboard; and paper bags.

~~“Mercury Added Consumer Product” means a device or material into which elemental mercury or mercury compounds are intentionally added during its formulation or manufacture in which the continued presence of mercury is desired to provide a specific characteristic, appearance, or quality, or to perform a specific function. For the purposes of this Chapter “mercury added consumer products” shall be those mercury-containing products required to be labeled by 10 V.S.A. §7106; namely:~~

- ~~(a) a thermostat or thermometer~~
- ~~(b) a switch, individually or as part of another product~~
- ~~(c) a medical or scientific instrument~~
- ~~(d) a electric relay or other electrical device~~
- ~~(e) a lamp~~
- ~~(f) a battery, sold to the public, other than a button battery~~

“Mining Activity” means the process or business of extracting metals, minerals, rocks or ores from the earth.

~~“Mining Mineral Processing Waste” means a solid waste from an industrial or manufacturing facility that processes materials from a mining activity and where chemicals are intentionally added as part of that processing. Mining waste Mineral processing waste does not include commercial products from mined materials.~~

~~“Mineral Processing Mining Waste” means a solid waste from an industrial or manufacturing facility that processes materials from a mining activity that is generated from the beneficiation, irrespective of the addition of chemicals, of rock or ore to separate and concentrate valuable minerals from waste material, remove impurities, or prepare the rock for further refinement. Mineral processing Mining waste includes asbestos waste, except when that asbestos waste is disposed at a certified facility in accordance with §6-802(a) subchapter 10 of these Rules. Mineral processing Mining waste does not include mining waste solely from cutting, shaping or finishing granite, marble, limestone, slate or other stones for monuments, buildings or other similar uses.~~

~~“Minor Amendment” means an amendment to an individual permit or notice of intent under a general permit that requires a change in condition or requirement, does not necessitate technical review, and is not an administrative amendment.~~

“Mobile HHW/CEG Hazardous Waste Collection Unit” means a vehicle or trailer used to collect Household Hazardous Waste (HHW) and/or hazardous waste from Conditionally Exempt Generators (CEG), at more than one location.

~~“Mobile Semi-permanent HHW/CEG Hazardous Waste Collection Unit” means either structures or equipment used for the collection and storage of Household Hazardous Waste (HHW) and/or hazardous waste from Conditionally Exempt Generators (CEG), which are transported between sites certified or approved by the Secretary and which may remain temporarily at that location.~~

“Mobile Solid Waste Collection Operation” means the operation of a vehicle or trailer, or a container on or attached to such vehicle or trailer used for the collection of solid waste.

“Municipal Solid Waste” or “MSW” means combined household, commercial and industrial waste materials generated in a given area.

“Non-Implemented Waste” means all solid waste which originates from a municipality that does not have a solid waste implementation plan approved by the Secretary.

“Nuisance” means anything that is injurious to human health or is indecent or offensive to the senses and occurs as the results of the storage, transport, processing or disposal of solid wastes. Constitutes the interference with the comfortable enjoyment of life or property and affects any considerable number of persons at the same time.

“Organic Solid Waste” means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition.

“Food Residual Drop-Off” means a registered facility that is not located at a certified solid waste facility and is approved only for the collection of food residuals.

“Organic Solid Waste Recovery Facility” or “ORF” means a facility where organic solid wastes are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or

compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester.

“Operating Capacity” means the volume of material that a facility is approved by the Secretary to manage, consistent with the volume of materials for which fees have been paid within the operational year and is less than or equal to the permitted design capacity. This applies only to facilities required to pay application fees.

“Operational Unit” means a discrete area of land or excavation that plans to receive, currently receives or has received solid waste for permanent disposal.

“Operator” means the person responsible for the overall operation of the facility and whose actions or failure to act may result in non-compliance with these Rules or the facility certification. Operators must have the minimum required training as required by the training plan submitted with the facility application for certification.

“Open Burning” means the burning of solid wastes in the open where the products of combustion are emitted directly into the atmosphere without passing through a stack, chimney, or other enclosure.

“Permitted Design Capacity” means the volume of materials that a facility’s designed infrastructure is capable of handling. Certifications will be issued with permitted design capacity amounts. This volume may be greater than the actual volumes of material managed at the facility (Operating Capacity).

“Permitted Hazardous Waste Transporter” means a commercial hauler or transporter permitted to transport hazardous waste, ~~pursuant to the Vermont Hazardous Waste Management Regulations.~~

“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.

“Post-Closure” means the regulated time period following landfill closure.

“Processed Construction and Demolition Debris Residual” is construction and demolition debris which has had all hazardous and recyclable materials removed, and which consists of materials with little or no economic value. This material may be disposed of.

“Processed Glass Aggregate” or “PGA” means the mixed glass cullet produced from crushed and screened clean food and beverage glass containers and meets the specification of § 6-302(a)(15).

“Qualified Professional” means a person who possesses the following education, training, and experience: A current professional engineers or professional geologists license, a license or certification to perform environmental site work equivalent if applicable, a baccalaureate or higher degree in a related discipline or five years relevant experience.

“Processed Recyclable” means the product resulting from recyclable materials which have been treated by any method, technique, or process.

“Recyclable Materials” means solid waste materials that can ~~which may~~ be reclaimed and/or processed so that they may to be used in the production of materials or products.

“Recycle” means the process of utilizing reclaiming and/or processing solid waste materials to produce new for the production of raw materials or products. This term does not mean processing incineration of solid waste to produce energy or fuel products.

“Regional Plan” means that plan which is prepared and adopted in accordance with the provisions of 24 V.S.A. §4348.

“Regulated Medical Waste” or “RMW” means that portion of waste generated in health care facilities and requiring special handling and treatment prior to disposal. The following types of solid waste are considered RMW:

- (7) The following types of solid waste are considered RMW:
  - (A) Pathological and microbiological waste containing blood or other potentially infectious materials;
  - (B) Contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state, if compressed;
  - (C) Sharps;
  - (D) Animal infectious waste;

- (E) Liquid or semi-liquid blood or other potentially infectious materials;
  - (F) Items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; and
  - (G) Other wastes not included above, as determined by the Secretary.
- (8) The following types of solid wastes are not considered RMW:
- (A) Waste that has been identified or characterized as hazardous waste based on the compounds listed in the *Vermont Hazardous Waste Management Regulations (HWMR) Appendix 3, U or P (Acute) list [40 CFR 261.33, Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof]* and is the sole active ingredient of the mixed formulation. The formulation may be hazardous if it exhibits any of the characteristics as described in §7-205, *Characteristic of Ignitability*, §7-206, *Characteristic of Corrosivity*, §7-207, *Characteristic of Reactivity*, and §7-208, *Characteristic of Toxicity*, as presented in the Vermont HWMR;
  - (B) Corpses, remains and anatomical parts that are for ceremonial interment or ceremonial cremation;
  - (C) Nasal secretions, sputum, tears, sweat, urine, and vomitus unless they contain visible blood;
  - (D) Teeth; and
  - (E) Medical waste generated in the home that has not been administered by a visiting licensed healthcare professional.

“Residence” means a permanent structure where a person lives during some or all of a year.

“Residual Waste” or “Residuals” shall mean sewage sludge, biosolids, EQ biosolids, short paper fiber, wood ash, sludges produced by the biological treatment of dairy wastes, and drinking water treatment sludge.

“Reuse” means the use of a material or product more than once before it is recycled or discarded as solid waste.

“River corridors” means the land area adjacent to a river that is required to accommodate the dimensions, slope, planform and bowver of the naturally stable channel and that is necessary for the natural maintenance or natural restoration of a dynamic equilibrium condition, and for minimization of fluvial hazards, as delineated by the Agency of Natural Resources in accordance with river corridor protection procedures

“Sanitary Landfill” or “Landfill” means a disposal site employing an engineered method of disposal of solid waste on land in a manner that minimizes environmental hazards by spreading the solid waste in thin layers, compacting the solid waste to the smallest practical volume, and applying and compacting cover material at the end of each operating day.

“Sanitary Waste” means any non-hazardous or non-radioactive solid waste materials.

“Saturated Zone” means the zone in which the voids in the rock or soil are filled with water.

“Secretary” means the Secretary the Agency of Natural Resources, or his or her duly authorized representative.

“Septage” means the liquid ~~and~~ or solid materials pumped from a septic tank that receives either commercial wastewater or industrial wastewater; or a mixture of commercial and domestic wastes, portable toilet waste, holding tank waste, or cesspool waste, waste from Type III marine sanitation devices, or a mixture of grease and domestic waste removed from a grease trap during cleaning.

“Sewage Sludge” means any solid, semisolid, or liquid generated from a municipal, commercial, or industrial wastewater treatment facility or process treating any amount of domestic waste.

“Slaughterhouse Waste” means the residual liquid, inedible animal tissues and offal derived from the production of meat. Slaughterhouse waste is not a food residual.

“Sludge” means any solid, semisolid, or liquid generated from a municipal, commercial, or industrial wastewater treatment facility plant or process, water supply treatment plant, air pollution control facility or any other such waste having similar characteristics and effects.

“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; high

carbon bulking agents used in composting; or solid or dissolved materials in industrial discharges which are point sources subject to permits under the Water Pollution Control Act, 10 V.S.A., ~~ch~~ chapter 47. Note: f~~F~~or the purposes of these Rules, solid waste that is also hazardous waste is subject to further regulation under the Vermont Hazardous Waste Management Regulations.

“Solid Waste Management” means the activities that result in the storage, transportation, transfer, or treatment of solid waste or recyclable materials, or in the disposal of solid waste.

“Solid Waste Management Entity” or “SWME” means a municipal entity (solid waste district, solid waste alliance or individual municipality) that plan and implement plans for the management and regulation of solid waste within a municipality.

“Stabilized” ~~refers~~ means the resulting to the condition of waste in which once the waste it no longer undergoes spontaneous physical, chemical or biological changes spontaneously.

“Storage” means the actual or intended containment of wastes, either on a temporary basis or for a period of years;<sup>2</sup> in such a manner as not to constitute disposal of such wastes.

“Technical Review” means the application of scientific, engineering or other professional expertise to the facts to determine whether the activity for which a permit is requested meets the standards for issuing the permit under statute or rule.

“Transfer” means to carry, remove, transport, or shift solid waste from one place, facility, vehicle, trailer, or container to another.

“Transfer Station” means a solid waste management facility where solid waste is collected, aggregated, sorted, stored and/or processed for the purpose of subsequent transfer to another solid waste management facility for further processing, treatment, transfer or disposal.

“Transport or Transportation” means the movement of wastes by air, rail, road, 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.

“Uniform Solid Waste” means solid waste which has been determined, in writing, by the Secretary to be consistently uniform (e.g. foundry sands) and does not contain yard waste, marketable recyclable materials or hazardous waste as defined by State and/or Federal regulation.

“Untreated Wood” means:

- (a) wood produced by splitting or chipping a whole tree, including wood, bark, tree tops, limbs and logging residue;
- (b) any timber, board or sawn dimensional lumber which has not been treated, coated or preserved. ~~The term “untreated wood”~~ This does not include any manufactured building material, such as, (but not limited to), pressure treated wood, plywood, particle board or waferboard;
- (c) sawdust produced solely by the primary processing of the acceptable materials ~~described in this subsection~~ listed (a & b) in this definition;
- (d) fuel pellets produced from the acceptable materials described in this definition.

“Used Oil” means any petroleum product 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 (Fahrenheit). Used oil includes oils used as lubricants, heat transfer fluids, hydraulic fluids, and for other similar uses, but does not include materials derived from crude or synthetic oils that are used as fuels (e.g. gasoline, jet fuel and diesel fuel), cleaning agents or solvents (e.g. naphtha or mineral spirits).

“Vectors” means organisms or media (e.g., air, water, soil) that serve to transmit disease organisms.

“Vermont Hazardous Waste Management Regulations” or “VHWMR” means the Vermont Hazardous Waste Management Regulations, as amended.

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

“Waste Management Boundary” means the outer perimeter of the area within which solid waste is stored, treated or disposed.

“Water Table” means the upper surface of the zone of saturation.

“Waters” means all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs and all bodies of surface waters, artificial or natural, which are contained within, flow through or border ~~upon the state or any portion of it~~ the State.

“White Goods” means discarded refrigerators, washing machines, clothes dryers, ranges, water heaters, dishwashers, freezers and microwave ovens and other similar domestic and commercial large appliances.

“Working Face” means that portion of ~~the discrete disposal facility~~ a landfill where solid wastes are discharged and are spread and compacted prior to the placement of cover material.

“100-year flood” means a flood that has a 1-percent or greater chance of recurring in any given year or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period

ADC – Alternative Daily Cover

AUD – Acceptable Use Determination

AW – Architectural Waste

C&D – Construction and Demolition Waste

CEG – Conditionally Exempt Generator

CFR – Code of Federal Regulations

EPA – U.S. Environmental Protection Agency

EQ – Exceptional Quality

FML – Flexible Membrane Liner

FMP – Facility Management Plan

GWES – Groundwater Enforcement Standards

GWPRS – Groundwater Protection Rule and Strategy

HDPE – High-density Polyethylene

HHW – Household Hazardous Waste

IWMEA – Insignificant Waste Management Event Approval

LCRS – Leachate Collection and Removal Systems

LGCCS – Landfill Gas Collection and Control System

MSW – Municipal Solid Waste

MRF – Materials Recovery Facility

NPDES – National Pollutant Discharge Elimination System

ORF – Organic Solid Waste Recovery Facility

PAH – Polycyclic Aromatic Hydrocarbons

PCB – Polychlorinated Biphenyl

PET - Polyethylene Terephthalate

PGA – Processed Glass Aggregate

RAPs – Required Agricultural Practices Rule

RMW – Regulated Medical Waste

SDS – Safety Data Sheet

SWIP – Solid Waste Implementation Plan

SWME – Solid Waste Management Entity

SPLP – Synthetic Precipitation Leaching Procedure

TCLP – Toxicity Characteristic Leaching Procedure

VAR – Vector Attraction Reduction

VSA – Vermont Statutes Annotated

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## Subchapter 3 – Applicability, Exemptions, and Prohibitions and Administration

### § 6-301 General Applicability

- (a) Subject to § 6-302 and § 6-303 of these Rules, these Rules shall apply to any persons that stores ~~ing~~, transports ~~ing~~, treats ~~ing~~, disposes ~~ing~~, recycles ~~ing~~ or otherwise owns, operates, or manages ~~ing~~ any solid waste facility; except as provided in § 6-301(b). Such solid waste management facilities include, but are not limited to: storage facilities, (including transfer stations, transportation, incineration, recycling, composting or other processing or treatment facilities) and discrete disposal facilities; and diffuse disposal and land application activities or other solid waste disposal.
- (b) These Rules also apply to persons involved with solid waste planning activities pursuant to 24 V.S.A §2202a(c) (see Subchapter 4 – Waste Management Plans Planning).
- (c) Extended Producer Responsibility (EPR) requirements for end-of-life management of certain materials that are of particular environmental concern. These requirements, including application collection and management requirements, are defined within statute (title 10 of Vermont Statutes Annotated). Solid waste collected under these EPR programs are not subject to these Rules, provided they are managed in accordance with applicable statutory requirements.

### § 6-302 Exemptions

- (a) The following are exempt from ~~the provisions of~~ regulation under these Rules:
- (1) The disposal of ~~unpainted and contaminant-free~~ brick and concrete, trees, stumps, yard waste, and wood chips that is free from paint, staining, is not odorous or otherwise suspected of contamination generated from these materials, when the origin and disposal of such waste occurs on property under the same ownership or control.
  - (2) ~~{Reserved}~~.

- (3) Small volumes of less than one cubic yard of solid waste that ~~exhibit all of the following characteristics:~~
- (A) are stabilized, treated, or composted;
  - (B) are distributed in association with some other primary product (e.g. nursery stock, top soil)
  - (C) do not contain pathogenic or chemical contaminants above applicable standards (as specified in ~~§6-702(a)(10)~~ §6-1307(l) and (o) and;
  - (D) ~~pass the prequalifying tests specified in §6-702(a)(10)~~ meet the requirements of §6-1307(l) and (o).
- (4) Recycling facilities which accept, aggregate, store and/or process less than ~~50~~ fifty (50) tons of recyclable materials per year.
- (5) The product of solid waste that has been treated or processed in a certified waste management facility provided that the applicant demonstrates to the satisfaction of the Secretary that after treatment or processing, the product solid waste poses no threat to the environment, public health and public safety, and does not create a nuisance.
- (6) Storage and compaction operations or activities managed by a solid waste generator or a consortium of generators, provided that:
- (A) the solid waste generator or consortium of generators is a single facility, or a single consolidation point for associated or satellite facilities;
  - (B) the storage or compaction operations or activities will not result in the unauthorized disposal of solid waste;
  - (C) ~~and operations or activities poses no threat to the environment, public health and public safety, and does will not create a nuisance; and~~

- (D) ~~This exemption operations or activities~~ does not apply to occur at sludge and septage storage facilities.
- (7) Mobile solid waste collection operations - the operation of a vehicle, trailer, or container on or attached to such vehicle or trailer, used for the collection of solid waste, provided that:
- (A) the vehicle or trailer is authorized by a current Vermont waste transporter permit, and a current registration and inspection required in the state of registration; ~~registered and inspected as required by the Agency of Transportation;~~
  - (B) the vehicles, trailers, or containers used to collect solid wastes ~~must~~ are in adequate condition to prevent any potential or actual the release or discharge of solid wastes and related liquids; and
  - (C) solid wastes collected ~~pursuant to such an~~ by the operation are delivered to a certified waste management facility by the end of the next business day following the date of collection, or within 48 hours of collection, whichever is later.
- (8) The transfer of solid waste by a commercial hauler from a vehicle or trailer used for the collection or storage of solid waste to a receiving vehicle or trailer provided:
- (A) The transfer activity meets the requirements of ~~§6-301(b)(7)~~ § 6-302(a)(7); and
  - (B) The receiving vehicle or trailer has a capacity not greater than ~~15~~ fifteen (15) tons for solid waste or 10,000 gallons for liquid sludge or septage.
- (9) Sludge management facilities located ~~at~~ inside the fence of municipal wastewater treatment facilities ~~plants that are essential to the wastewater treatment process and are not used solely for the storage or treatment of sludge. Examples of exempt units include, but are not limited to, wastewater treatment lagoons and digesters.~~ provided the facility does not utilize a process to further reduce pathogens in order to produce EQ biosolids for distribution and marketing to the general public.

- (10) Septage, portable toilet, grease trap wastes and holding tank wastes when disposed of at a municipal wastewater treatment facility or other non-land application facility, as approved by the Secretary. This exemption does not ~~however~~ relieve operators of wastewater treatment facilities from complying with the reporting and recordkeeping requirements set forth in ~~Section 6-703~~ § 6-1308.
- (11) Glycerol that is delivered to an anaerobic digester as a feedstock for digester operations, provided that:
- (A) the anaerobic digester is located on a farm; and acceptance of glycerol is allowable under the farm's nutrient management plan.
  - (B) The anaerobic digester is off farm and glycerol is managed according to the Facility Management Plan.
- (12) Collection of used oil and used oil filters provided that the collection is in compliance with all applicable used oil provisions of the Vermont Hazardous Waste Management Regulations, ~~as may be amended, adopted pursuant to 10 V.S.A. Chapter 159.~~
- (13) Processed Glass Aggregate (PGA) that:
- (A) Contains no hazardous waste and no more than 5% contamination by weight from china dishes, ceramics, or plate glass; or 1% contamination by weight from plastics, papers or other objectionable materials. PGA must be crushed and screened such that 95% of the material passes a 25.0 mm screen and not more than 3% of the material that passes through the 4.75 mm sieve passes the 75 µm sieve.; and
  - (B) is used in the following applications:
    - (i) Roadway, trail, parking lot or sidewalk application, including:
      - (I) base course: layer(s) of specified material supporting a surface course;
      - (II) subbase: layer(s) of specified material place on a subgrade to support a base or surface course, or

(III) embankments: a portion of a fill section situated between the existing ground and subgrade;

(ii) Utility Trench Bedding;

(iii) Backfill material for underground utilities (sewer and water pipes, electrical conduit and fiber optic line);

(iv) Drainage applications, including:

(I) Free draining back-fill behind retaining walls; or

(II) Foundations drains, drainage blankets, French drains; or

(v) Filter media for wastewater treatment systems.

(14) The following materials, when used as high-carbon bulking agents in composting:

(A) Clean wood chips and shavings;

(B) Bark wood chips;

(C) Straw;

(D) Shelled corn cobs;

(E) Corn stalks;

(F) Shrub trimmings;

(G) Clean dry leaves, excluding any leaves vacuumed or accumulated from roadways;

(H) Coarse sawdust;

(I) Nut shells;

(J) Pine needles – brown;

(K) Non-legume hay – dry;

(L) Heavily-bedded horse manure (carbon to nitrogen ratio of 22-50:1);

(15) ~~Vermicomposting facilities; regulated under this subchapter are not required to meet siting criteria~~ provided that all vermicomposting activities occur within an fully enclosed structure that is equipped with an impermeable floor.

(16) Collection, storage, and treatment of regulated medical waste (RMW) by a RMW regulated medical waste generator provided that the conditions in (A) through (C) of this subdivision are met. This exemption does not relieve a generator of RMW from compliance with the requirements of § 6-304(h).

(A) The consolidation point shall only accept the same type or types of RMW that is produced at that location ~~The type of RMW accepted is also produced by the generator;~~

(B) ~~The total on-site amount of RMW accepted by the generator from other sources~~ satellite facilities must be is within shall not exceed the storage capacity of the site; and

(C) ~~The total annual amount of RMW accepted by the generator from other sources~~ satellite facilities does not exceed the amount of RMW produced by the generator for that calendar year.

~~(D) This exemption does not relieve a RMW generator from the requirements of §6-304(H) or relieve the waste from meeting the requirements of Subchapter 14 of this rule.~~

(17) Cemeteries as defined in 18 V.S.A. § 5302.

(18) Institutions with an established food residual diversion program choosing to offer food residual consolidation to their employees are exempt from the transfer station certification and food residual drop off registration requirements of these rules.

(b) Insignificant Waste Management Event Approvals

~~(1) Upon submittal of a written request and receipt of written approval from the Secretary, a person may engage in a waste disposal, storage, treatment or processing event of limited duration that will not result in a threat to the public~~

~~health and safety or to the environment, and will not create a nuisance, without having received a Solid Waste Certification.~~

**§ 6-303 Waiver of Technical Standards**

The Secretary may waive technical and siting requirements of these Rules provided the following conditions are met:

- (A) The President of the United States intends to perform a response action, as defined in 42 U.S.C. § 9601(25), or the Secretary intends to perform a removal or remedial action, pursuant to 10 V.S.A. Chapter 159, in response to a release or threatened release of hazardous substances or materials; and
- (B) The Secretary makes a prior written findings that:
  - (1) The proposed response action will not adversely affect public health, safety or the environment; and
  - (2) The technical and siting requirements will be complied with to the extent practical in light of the overall objectives of the response; or
- (C) The Secretary has granted a variance pursuant to section § 6-605 of these Rules. Only those provisions specified in a written determination issued under § 6-605 shall be waived.

**§ 6-304 Prohibitions**

The following activities are prohibited under these Rules:

- (a) Open burning of solid waste except as may be allowed in accordance with the Vermont Air Pollution Control Regulations, as amended, and/or as may be approved by the Secretary pursuant to § 6-505(b) (Insignificant Waste Management Event Approvals) of these Rules. The Secretary may require any person seeking to conduct the following types of open burning to obtain additional approval for such burning pursuant to §6-301(e) of these Rules:
  - (1) ~~Burning of structures for the purpose of training firefighters; and~~

- (2) ~~Fires to thwart a hazard which cannot properly be managed by any other means or fires that are necessary for the protection of public health.~~
- (b) Combustion of solid waste in an incinerator unless the incinerator meets all requirements of the Air Pollution Control Regulations, as amended, and these Rules.
- (c) Construction, substantial alteration, ~~or~~ operation or change of ownership of any solid waste management facility ~~to which these Rules apply~~ without first obtaining certification or modification of a certification from the Secretary in accordance with these Rules.
- (d) Treatment, storage or disposal of solid waste outside of a certified facility except for the ~~limited~~ exemptions set forth in ~~§ 6-301(b) and (c)~~ § 6-302 of these Rules.
- (e) Disposal of ~~septage, portable toilet and holding tank wastes~~ commercial septage, a mixture of commercial and domestic septage, portable toilet waste, holding tank waste, cesspool waste, waste from Type III marine sanitation devices, and waste from Type III marine sanitation devices by application to the land is specifically prohibited.
- (f) Disposal of hazardous waste in solid waste ~~discrete disposal~~ landfill facilities, ~~with the exception of household hazardous as may be permitted under the Vermont Hazardous Waste Management Regulations, as amended.~~
- (g) Knowing disposal of wastes listed in 10 V.S.A. § 6621a which are designated by law to be prohibited from disposal in a discrete disposal landfill facility.
- (h) Disposal of regulated medical waste (RMW) which has not been adequately treated, rendered inaccessible, and obtained a Certificate of Treatment by a regulated medical waste treatment facility or regulated medical waste generator with on-site treatment. does not comply with the provisions of § 6-802(b) of this rule.
- (i) Any other waste treatment, storage, disposal, or other management activity conducted in violation of the provisions of 10 V.S.A. chapter 159, these Rules, or the conditions of an existing permit or other written authorization issued by the Secretary.

## Subchapter 4 – Waste Management Plans

### § 6-401 Planning Specific Definitions

“Materials Management Plan” means the solid waste management plan required to be adopted by the Secretary pursuant to 10 V.S.A. § 6604.

“Solid Waste Management Entity” or “SWME” means a municipal entity (solid waste district, solid waste alliance, solid waste group or individual municipality) that plan and implement plans for the management and regulation of solid waste within a municipality.

### ~~§ 6-402 State Material Management Plan~~

~~Pursuant to 10 V.S.A. §6604, the Secretary shall publish and adopt a waste management plan that sets forth a comprehensive statewide strategy for the management of solid waste.~~

### § 6-402 Solid Waste Implementation Plans; General Requirements

- (a) Municipalities shall participate as member towns to a solid waste management district or alliance or act as independent towns in performance of their solid waste management responsibilities. Collectively, these municipalities are referred to as Solid Waste Management Entities (SWME). Each SWME shall have a Solid Waste Implementation Plan (SWIP) that has been approved by the Secretary. A municipality that does not comply with this section shall not be eligible for State funds to plan and construct solid waste facilities and shall not use facilities certified by the State of Vermont.
- (b) A SWME shall submit for the Secretary’s review and approval a solid waste implementation plan that conforms to the performance standards in the materials management plan (MMP) adopted by the Secretary pursuant to 10 V.S.A. § 6604 and to any applicable regional plan adopted pursuant to title 24, chapter 117 of the Vermont Statutes Annotated. The proposed SWIP submittal shall:
- (1) Address how the performance standards of the MMP and 24 V.S.A. § 2202a will be completed during the current SWIP term;
  - (2) describe siting criteria that will apply to solid waste facilities in the SWME region. As required by 10 V.S.A. § 6605(c), these siting criteria shall not be less

stringent than the criteria of these Rules;

- (3) specify the facilities that are included within the SWIP proposal;
- (4) describe how proposed facilities will be reviewed for inclusion within the SWIP;
- (5) describe the process that will be used to ensure public participation in the development and implementation of the SWIP, including at least two public meetings of the draft SWIP;
- (6) include copies of any solid waste related ordinances with the SWIP; and
- (7) demonstrate conformance with any applicable regional plan. Such a demonstration can be in the form of a letter from the applicable regional planning commission, copies of pertinent sections of the regional plan, or other documentation that demonstrates conformance.

(c) Solid waste implementation plans shall be submitted and shall be reviewed by the Secretary in accordance with § 6-403 of this subchapter.

~~A. Pursuant to 24 V.S.A. §2202a(c)(2), each regional planning commission is required to shall work cooperatively with municipalities within the region to prepare a solid waste implementation plan for adoption by all of the municipalities within the region which are not members of a solid waste district. The plan must conform to the state solid waste management plan and describe in detail how the region will achieve the priorities established by 10 V.S.A. §6604(a)(1).~~

~~Each solid waste district is required to adopt a solid waste implementation plan that conforms to the s State waste management plan, describes in detail how the district will achieve the priorities established in 10 V.S.A. §6604(a)(1), and is in conformance with any regional plan adopted pursuant to 24 V.S.A., chapter 117.~~

#### **§ 6-403                      Review of Solid Waste Implementation Plans**

(a) Plans or amendments thereto shall be reviewed pursuant to this section in the following instances: The Secretary shall review the solid waste implementation plan of a regional planning commission, municipality, or solid waste management district entity and evaluate the plan for conformance with the s State solid waste management plan in the following situations:

- (1) upon any modification by the request of the SWME regional planning commission, municipality, solid waste alliance or district responsible for preparing the plan; or
- (2) upon the Secretary's determination that changes made to the materials management plan or these Rules necessitate review of a solid waste

implementation plan to determine compliance with the changes or requirements of these Rules; and

- (3) ~~whenever there is good cause, including significant changes or amendments to municipal solid waste implementation plans or to the State waste materials management plan.~~

(b) Review; Standards. Plans and plan revisions required to be submitted pursuant to this section shall be reviewed by the Secretary for conformance with the submittal requirements of § 6-403.

(c) Determination; pre-approval. Upon a finding that a solid waste implementation plan or any amendment complies with the performance standards of the MMP established under subsection § 6-402(b) of this section, the Secretary shall issue a written pre-approval of the plan or amendment to the SWME. If a plan or amendment does not comply with one or more of the performance standards, the Secretary shall issue written notification to the SWME indicating that the plan or amendment is not approved and identifying the deficiencies of the plan or amendment. Pre-approval shall not be issued until all deficiencies are fully addressed.

(d) Public notice and comment. Prior to issuance of a final determination by the Secretary, the SWME shall provide public notice and a public hearing on the plan or plan amendment. If the plan or plan amendment addresses nonregulated hazardous waste (HHW), the SWME shall hold two public hearings on the plan or amendment as required by 24 V.S.A. § 2202a(c)(4)(B). The SWME shall submit written verification of compliance with this subsection to the Secretary, including the dates of the public meeting(s) held on the plan or amendment and a summary of each meeting.

(e) Final approval.

(1) The SWME shall submit the solid waste implementation plan or amendment for final review and approval. The final submission shall identify changes made to the plan or the amendment, including any changes made in response to the Secretary's determination under subsection (c) of this section.

(2) The Secretary shall approve the solid waste implementation plan, including any amendments or changes thereto, upon making a determination that:

(A) The plan adequately addresses and conforms to the performance standards in subsection (c) of this section;

(B) The plan and has been publicly noticed; and

(C) the public notice requirements of 24 V.S.A. § 2202a and this subchapter have been satisfied.

(3) When issuing a final approval of a plan or plan amendment, the Secretary may impose any conditions, requirements, or restrictions that may be necessary to ensure the plan's compliance with subdivision (e)(2) of this subsection.

~~(f) The Secretary shall approve the solid waste implementation plan of a municipality, solid waste alliance, or solid waste management district upon a determination that the plan conforms to the state solid waste management plan~~

~~(g) In determining conformance of a submitted solid waste implementation plan with the State plan, the Secretary must find that all planning activities and items required by the State solid waste management plan have been adequately addressed or considered in the plan.~~

~~(h) Prior to approving the solid waste implementation plan of a municipality, solid waste alliance, or solid waste district, the Secretary must also find that the public has had an appropriate opportunity to participate in the plan's development. This finding shall be based on a demonstration of early and continual efforts by the municipality or district to notify and involve interested and potentially affected members of the public in the decisions being contemplated through the planning process.~~

~~(i) Approval of the solid waste implementation plan or amendment by the Secretary shall constitute approval establishes acceptance of solid waste facility siting criteria decisions identified within the plan, unless the approval is expressly qualified or conditioned by the Secretary.~~

## Subchapter 5 – General Application Submittal Requirements

### §6-501      **Applicability**

Any facility or activity that is required to obtain approval by the Secretary shall do so in accordance with the requirements of these Rules. Applications for certification, registration, or other approval shall be submitted and shall be reviewed by the Secretary in accordance with the provisions of this subchapter and subchapter 6 of these Rules.

**Table A. Application Process by Relevant Notice Types**

| <b>Notice Type</b>                                    | <b>Upon Application Submittal</b>                      | <b>Administratively Complete Application</b> | <b>Draft Decision</b>                                     | <b>Comment and Meeting Request Period</b>  | <b>Public Meeting</b>                                | <b>Post-Meeting Comment Period</b> | <b>Final Decision</b>  |
|---|--|--|---|--|--|------------------------------------|--|
| <b>Type 2 - Individual Permits and Certifications</b> | Applicant notices adjoining property owners by US mail | Notice posted to Electronic Notice Bulletin  | Notice and documents posted to Electronic Notice Bulletin | >30 days after draft decision posted. Meeting request must be made within 14 days of draft decision. | Must be announced for >14 days prior to meeting date | Lasts >7 days after public meeting | Notice posted to Electronic Notice Bulletin with final decision and response to any comments |
| <b>Type 4 – Notices of Approval, Minor Amendments</b> | No notice required of adjoining property owners        | Notice posted to Electronic Notice Bulletin  | Notice and documents posted to Electronic Notice Bulletin | >14 days after draft decision posted.  | N/A  | N/A                                | Notice posted to Electronic Notice Bulletin with final decision and response to any comments |
| <b>Type 5 – Emergency Permits and Registrations</b>   | N/A  | N/A  | N/A   | N/A  | N/A  | N/A                                | Notice posted to Electronic Notice Bulletin with final decision                              |

*Further details may be found in 10 V.S.A. Chapter 170*

### §6-502      **General Permitting Provisions**

(a) Signatory requirements.

- (1) The following individuals shall be applicants or co-applicants to a certification, registration, or other request for approval under these Rules (if different parties) and shall be bound by the terms of the certification:

- (A) The facility operator; and

- (B) The owner of the land on which the facility is located, except that where the proposed facility is for the management of sludge or septage and in lieu of the land-owner signature, the operator of the proposed facility may provide a lease for a term consistent with the term of the certification and which does not conflict with the requirements of these Rules; and
- (C) The facility owner.
- (2) Applications and all reports requested or required by the Secretary shall be signed in accordance with the following:
  - (A) If the applicant is a corporation, the application shall be signed by a principal executive officer of at least the level of vice-president, or a duly authorized representative who is responsible for the operation of the facility;
  - (B) If the applicant is a partnership or a sole proprietorship, the application shall be signed by a general partner or proprietor;
  - (C) If the applicant is a municipality, state, or other public entity, the application shall be signed by a principal executive officer, ranking elected official or other duly authorized employee.
  - (D) If the applicant is an individual, the application shall be signed by the applicant or by a duly authorized representative of the applicant.
- (3) Duly authorized representatives shall be established as signatories to certifications and reports as established by § 6-106.

(b) Documentation retention.

- (1) All applicants shall maintain all-keep-records of all data and any supplemental information used to complete applications for all certification and other approvals allowed for by these Rules for a period of at least six ten years from the date on which the application is signed by the applicant. Such records shall be submitted to the Secretary upon request.
- (2) Applicants shall maintain a copy of any current facility management plan (if applicable) and a copy of the current certification or other approval at the facility. These documents shall be accessible by all facility personnel during hours of operations.

**§6-503 Certification Types**

- (a) Full Certifications/Type 2. Applications for the following activity types shall be governed by the general provisions of this subchapter and the review and notice procedures of § 6-504 and § 6-601 of these Rules:

- (1) Solid waste storage facilities, transfer or processing facilities and recycling facilities;
  - (2) Large composting facilities authorized under § 6-1104(c) of these Rules;
  - (3) Interim certifications for solid waste management facilities authorized under 10 V.S.A. §6605b;
  - (4) Treatment, storage or disposal facilities for any waste derived solely or in part from domestic wastes, unless authorized under a Sludge Management Plan as established in §6-1302(a);
  - (5) Land application sites for non-EQ biosolids, residual dairy wastes, or domestic septage;
  - (6) Landfills;
  - (7) Off-farm anaerobic digesters authorized under Subchapter 12; and
  - (8) Any other individual permit issued pursuant to the Secretary's authority under 10 V.S.A. Chapter 159 and these Rules that is not specifically listed under § 6-503(b)-(c).
- (b) Minor Certifications/Type 4. Applications for the following activity types shall be governed by the general provisions of this subchapter and the review and notice procedures of § 6-505 and § 6-602 of these Rules:
- (1) Categorical solid waste certification under 10 V.S.A. chapter 159 and § 6-902(a) and § 6-1002(a) of these Rules; and
  - (2) Medium scale composting certification under 10 V.S.A. Chapter 159 and § 6-1104(b) of these Rules.
  - (3) Insignificant Waste Management Event Approvals under § 6-505(b)
  - (4) Categorical solid waste certification
- (c) Registrations and Emergency Approvals/Type 5. Applications for the following activity types shall be governed by the procedures in § 6-506 and § 6-603 of these Rules:
- (1) Small composting facility registration under § 6-1104(a);
  - (2) Food residual drop-off facility registration under § 6-1202(a);
  - (3) HHW/CEG collection event approvals under § 6-1403(b); and

(4) Issuance of emergency sludge and septage disposal approvals under 10 V.S.A. 6605.

(d) Additional Process.

(1) In an individual case, the Secretary may determine to apply the procedures of a Full Certification/Type 2 to the issuance of a minor certification, registration, or emergency approval otherwise subject to the procedures as prescribed in subdivision (c) or (d) of this section.

(2) In an individual case, the Secretary may require measures in addition to those directed by this subchapter in order to provide notice to other persons potentially affected by the issuance of the certification, registration, or approval.

~~(e) Any person wishing to store, treat or dispose of solid waste or otherwise construct, substantially alter or operate a solid waste facility as identified in §6-301 of these Rules shall file for and obtain certification in the manner set forth in §6-304 and §6-305.~~

~~(f) Facilities that qualify for categorical certification under §6-309, categorical composting certification (§6-1105) or categorical recycling certification under §6-1207 shall file an application for categorical certification as required by those sections.~~

**§6-504 Full Certification Application; Interim Certification Submissions**

(a) Applicability. Any person wishing to store, treat or dispose of solid waste or otherwise construct, substantially alter, or operate a solid waste facility type described in § 6-503(a), shall submit a complete application that complies with the requirements of this section, as applicable. If a solid waste management facility includes more than one operational unit (i.e. multiple sites used for the land application of septage or sludge), the application shall provide all required information for all units.

Note: these are the minimum application requirements necessary for all full certification applications. Refer to the relevant subchapter(s) elsewhere in these Rules that addresses the solid waste management activity(ies) for which certification is desired for any additional application requirements that may apply.

~~(b) Any person required to obtain certification under §6-303 shall fully complete, sign and submit an application. Additionally along with the appropriate fee to the Secretary.~~

~~(c) If the operator does not own the land on which the facility is to be located, the owner of the land must complete and sign the application for certification as a co applicant and~~

~~agree to be bound by the terms of the certification. However, if the proposed facility is for the management of sludge or septage, the operator may provide evidence of a lease provided that the term of the lease is consistent with the term of the certification period.~~

(d) Application preparation. ~~Applications submitted under this section shall be completed under the direction of a qualified professional, professional engineer, licensed in the State of Vermont unless this requirement is specifically waived by the secretary for that application. The engineer shall make appropriate use of other disciplines in order to assure compliance with all applicable standards contained or referenced in these Rules. The qualified professional engineer shall certify that to the best of their information, knowledge and belief that the application is in compliance with such standards contained or referenced in these Rules.~~

(1) ~~An applicant can may request that the Secretary waive this requirement prior to submission of an application. If this a waiver of this requirement is granted by the Secretary, then the applicant is then required to certify that the application is in compliance with such standards contained or referenced in these Rules.~~

(e) Application for full certification. ~~An application for a full certification A complete application shall include the following:~~

~~1. Signatures~~

~~(A) If submitted by a corporation, the application shall be signed by a principal executive officer of at least the level of vice president, or a duly authorized representative who is responsible for the operation of the facility;~~

~~(B) If submitted by a partnership or a sole proprietorship, the application shall be signed by a general partner or proprietor;~~

~~(C) If submitted by a municipality, state or other public entity, the application shall be signed by a principal executive officer, ranking elected official or other duly authorized employee.~~

(1) An application form, provided by the Secretary, that has been completed in accordance with the form's instructions and the signature requirements of § 6-501. Each application for certification shall be accompanied by a form provided for this purpose by the Secretary. This form will address and include, at a

~~minimum:~~

~~Applicant Information: provide the name mailing address, and phone number of the facility, owner of the facility, operator of the facility and the owner of the land on which the facility is located.~~

~~Contact information (name, mailing address and phone numbers) of the primary and any secondary contact persons for the facility;~~

~~The name, signature, mailing address and phone number of the person preparing the application;~~

- (2) Identification of the type of solid waste management facility, including all operational units;
- (3) The physical location of the facility, including the 911 address. The physical location shall be, and marked on an appropriate Vermont orthophoto tax map using the Vermont plane coordination system, or provided using latitude and longitude coordinates in a noted coordinate system.
- (4) The applicable application fee as specified in 3 V.S.A. chapter 51, subchapter 2 §2822(j).
- (5) Evidence of ownership of facility or property: This shall include a copy of a fee simple title to the property or a lease agreement consistent with subsection (e)(2)(B) of this section § 6-502(a)(1)(B). This evidence of ownership requirement does not apply to diffuse disposal land application facilities.
- (6) Evidence of compliance with the disclosure requirements of the waste management personnel background review, see if required by 10 V.S.A. §6605f. for more information
- (7) Documentation demonstrating compliance with the siting, design and operations information sufficient to show compliance with requirements of Subchapters 5, 6 and Subchapter 7 of these Rules, or in the case of Storage, Transfer and Recycling Facilities, with Subchapter 5 and 12; and any additional siting, design and operations requirements specific to the type of facility as provided in Subchapters

9 to 12.

- (8) A facility management plan (FMP), which includes a demonstration that the siting, design and operational information for the facility is sufficient to demonstrate compliance with the standards and requirements of these Rules. The FMP shall address all operational units and wastes to be managed at the facility along with providing the basis for the operating capacity and permitted design capacity planned for the facility. At a minimum, the FMP shall address the components of a FMP identified in § 6-704(b).
- (9) ~~Evidence that the facility, application complies with the planning requirements of 10 V.S.A. §6605(e) is included in a solid waste implementation plan as required by 10 V.S.A. § 6605(c). This requirement shall not apply to land application sites. Such evidence may consist of a written supporting statement from the appropriate municipality solid waste management district, solid waste alliance or regional planning commission that identifies the relevant part(s) of the plan(s). This evidence is not required in the case of a sludge or septage land application project.~~
- (10) Information sufficient, as defined by the Secretary pursuant to 10 V.S.A. Chapter 48, to show that the property on which the facility is located is classified as a Class III or Class IV groundwater area.
- (11) A description of the proposed operation(s), ~~and any future planned development of the facility, and any relevant in accordance with the engineering plans.~~
- (12) A listing of the types and amounts of materials that will be managed at the facility during the certification period.
- (A) For fee considerations, private applicants shall list amounts for the permitted design capacity of the facility and may list an operating capacity.
- (B) Municipal facilities ~~must~~shall only provide permitted design growth capacity estimates.
- (13) An operator training plan ~~must be developed which~~ that provides either classroom or on-the-job training for all facility personnel involved in the handling of waste to receive organized instruction. This instruction shall educate each individual on

the procedures necessary that teaches them to perform their duties safely and in a way that ensures the facility's compliance with all applicable statutes, Rules, facility management plans and conditions of certification.

(14) A closure plan that satisfies the applicable criteria of § 6-907; § 6-1007, § 6-1111, § 6-1208 or § 6-1309 of these Rules, as required for the facility type. The closure plans must include, at least:

(A) ~~A description of the steps necessary to close the facility;~~

(B) ~~A listing of labor, materials, and testing necessary to close the facility;~~

(C) ~~An estimate of the expected year of closure;~~

(15) ~~A schedule for final closure including, at a minimum, the total time required to close the facility and the time required for the various steps or phases in the closure process;~~

(16) ~~A cost estimate for facility closure that satisfies the requirements of § 6-1004;~~

(17) ~~A description of the methods for compliance with the closure requirements; and~~

(18) ~~Any remedial action necessary prior to closure, if required by the Secretary pursuant to § 6-311.~~

(19) A post-closure plan that satisfies the criteria of § 6-1008 of these Rules.

(20) ~~A closure and post closure plan along with cost estimates, unless the application is exempt as described in Subchapter 10.~~

(21) Evidence of compliance with the financial responsibility and capability requirements of Subchapter 9 § of these Rules, or a plan for achieving compliance with these requirements which will result in compliance prior to the issuance of the draft certification.

(22) A signed certification providing the names of adjoining property owners and a statement that notice of application has been completed by the applicant in

accordance with subsection (g) of this section.

(23) Any other information that the Secretary may require, as deemed necessary to protect human health, safety, and the environment.

(24) ~~A plan for effective public notice of the application. Such a plan shall include:~~

~~i. Provisions for a notice to the general public by advertisement in at least two newspapers of general circulation in the area of the proposed facility. One shall be a regional weekly paper when available.~~

~~ii. A listing of the names and mailing addresses of persons and entities that the applicant is required to notice as follows:~~

~~(i) The legislative body~~

~~(ii) All facilities except those specified in subsection (h)(1)(B)(ii), (iii) and (iv) of this section, all residences and landowners within one-half mile radius of the property boundary of the facility or the nearest 100 residences and landowners, whichever is the lesser number;~~

~~(iii) Diffuse disposal facilities, all residences and landowners within 500 feet of the proposed diffuse disposal area, and to all adjoining residences and landowners;~~

~~(iv) For sludge and septage storage and treatment facilities which are located at a wastewater treatment plant, except for those facilities treating the material to achieve PFRP (Process to Further Reduce Pathogens), all adjoining residences and landowners within 1000 feet of the facility; and~~

~~(v) For all facilities, except diffuse disposal facilities, whose applications are determined to be minor by the Secretary, all adjoining residence and landowners.~~

(vi) State agency or subdivision

(vii) ~~Regional planning commission~~

(f) Application for Interim Certification.

(1) A person who does not qualify for a solid waste management certification under 10 V.S.A. § 6605 and this section may apply for an interim certification under this subsection.

(2) A complete application for an interim certification shall include:

(A) Applicants for an interim certification shall submit the information as required by § 6-505 (a-e) above; all of the information required in §6-304. In addition, the applicant shall submit:

(B) Evidence of the necessity of facility operation and public benefits derived from operation;

(C) An assessment of other currently available methods to manage the wastes stored, treated or disposed at the facility;

(D) A schedule of the activities that will result in proper closure or full certification of the facility prior to the expiration of the interim certification;

(E) Monitoring plans for the groundwater, surface water and air quality of the facility; including summary of any existing data;

~~(F)~~ Evidence that the construction, alteration and continued operation of the facility or the activity is consistent with regional solid waste plans, if any, and the solid waste management plan; ~~and~~

(G) An affidavit providing the names of adjoining property owners and a statement that notice of application has been completed by the applicant in accordance with subsection (g) of this section below; and

(H) Any other information the Secretary may require.

(g) Upon (prior or concurrently with) submission of an application to the Secretary, the applicant shall provide written notice of the application to all adjoining property owners. The notice shall be made through U.S. mail using a form developed by the Secretary, and shall provide the following information:

(1) A description and location of the proposed activities;

- (2) A description of the process for review of the application and a statement that includes information about how the property owners can continue to receive notices and information, and the opportunities for public participation and comment, on the application;
- (3) Contact information (name, mailing address and phone number) for a person at the Agency processing the permit.

**§6-505 Minor Application Submissions**

(a) **Categorical Certification Applications.**

- (1) Any person wishing to construct, substantially alter, or operate any categorical solid waste facility shall submit a complete application that complies with the requirements of this section.

Note: The application requirements included in this section are the minimum application requirements necessary for all categorical certification applications. Refer to the relevant subchapter which addresses the solid waste management activity for which certification is desired to determine if there are any additional requirements specific to the management activity.

- (2) ~~In order to qualify~~ An application for a categorical certification, an applicant shall submit to the Secretary an application which provides include the following information:
  - (A) An application form, provided by the Secretary, that has been completed in accordance with the form's instructions and the signature requirements of § 6-502.
  - (B) A description of the proposed activity and operations;
  - (C) The physical location of the facility, including the 911 address. The physical location shall be, marked on an appropriate Vermont orthophoto tax map using the Vermont plane coordination system, or provided using latitude and longitude coordinates in a noted coordinate system.

- (D) Site location map and sketch indicating facility size and layout;
- (E) A site plan map of the facility at a scale of 1:100 or greater that contains:
  - (i) Location of barriers to prevent unauthorized entry;
  - (ii) Access roads;
  - (iii) Location of waste management transfer, storage, treatment and processing areas, and
- (F) Facility boundaries and property boundaries.
- (G) Names, mailing addresses and telephone numbers of the owner of the land and the operator of the facility;
- (H) The facility's proposed hours; Hours of operation;
- (I) An estimate of the type and quantity of materials to be received;
- (J) A letter from solid waste management entity ~~the municipality, municipal alliance or solid waste district serving the town~~ where the facility is located that indicates the facility is acceptable under the solid waste implementation plan, ~~if any;~~
- (K) If disposal is proposed within the source protection area of a public water supply, the location of the disposal area and the delineated source protection area shall be identified on a site map; ~~and~~
- (L) Information addressing compliance with the relevant siting restrictions of Subchapter 75. ~~For the facility type, the Secretary and any may require~~ additional siting limitations required by the Secretary as may be necessary to protect public health and safety or the environment; and
- (M) Other requirements, as determined by the Secretary and including financial responsibility, if deemed necessary to protect human health, safety, and the environment.

- (3) Applicants shall keep records of all data used to complete applications and supplemental information submitted to the Secretary for a period of at least six ~~ten~~ years from the date on which the application is signed unless otherwise authorized by the Secretary.
- (4) ~~Notice: On or before the date of filing any certification application for a facility, the applicant shall send notice and a copy of the application to the municipality where the facility is proposed to be or is located and any adjacent Vermont municipality if the facility is located on a boundary. The applicant shall furnish the Secretary the names of those noticed of the application~~
- (5) ~~If the Secretary determines that the proposed categorical facility size, processes, activities or nature of the solid wastes requires additional review and oversight that is not provided by this section, the Secretary may require that the applicant apply for a full certification pursuant to §6-304.~~

(b) Insignificant Waste Management Event Approvals (IWMEA)

- (1) ~~An IWMEA~~ Upon submittal of a written request and receipt of written approval from the Secretary, a person may engage in a allows for the occurrence of a one-time waste disposal, storage, treatment or processing event that:
  - (A) has been demonstrated to the satisfaction of the Secretary to be of limited duration, generally six months or less, and that will not result in a threat to the public health and safety or to the environment, and will not create a nuisance ~~or, without having received a Solid Waste Certification.~~
  - (B) consists of a one-time, limited duration disposal of, the disposal event shall meet the categorical disposal facility siting requirements of § 6-1003:
    - (i) stumps, root masses, decomposing wood or brush, ~~or untreated wood~~ ;
    - (ii) bituminous concrete;
    - (iii) brick, concrete, masonry, mortar, porcelain, pottery, tile and clay pipe;

(iv) street sweepings;

(v) clogged septic stone;

(vi) burning of structures for the purpose of training firefighters;

(vii) fires to thwart a hazard which cannot properly be managed by any other means, or fires that are necessary for the protection of public health;

(viii) pilot scale experimental facilities for the management of sanitary wastes; and

(ix) other solid wastes that will not result in a threat to the public health and safety or to the environment and will not create a nuisance.

- (2) In order to obtain ~~written~~ approval for an ~~insignificant waste management event IWMEA~~, applicants ~~must shall~~ submit ~~a written request a complete application on a form provided by the Secretary.~~ which, at a minimum, addresses the following items:

Note: Certified solid waste facilities that have provisions for holding collection events included within the issued certification do not need to obtain a separate IWMEA approval if the event is held in compliance with that certification.

(A) ~~Contact information (name, address, phone number) for the applicant;~~

(B) ~~Description of the solid waste being managed and approximate volumes;~~

(C) ~~Site location~~

(D) ~~Evidence that the activity will not occur in a prohibited area (see §6-\*\*\*)  
and will meet necessary isolation distances: (see §6-\*\*\*).~~

- (3) Insignificant waste management events operated by a private entity shall submit application fees in accordance with 3 V.S.A 2822(i) and 2822(j)(6)(D).

**§6-506 Registrations and Emergency Approval Submissions**

A person seeking approval for activities listed in § 6-503(c) shall submit a completed application on a form provided by the Secretary, that includes the following information:

- (a) For a small composting facility, the information required by in § 6-1105(a)
- (b) For a food residual drop-off facility, the information required by § 6-1206(a)
- (c) For a HHW/CEG collection event, the information as required by § 6-1403(b)

**§6-507 Application for Variance from Solid Waste Rules**

- (a) Any person who owns or is in control of any facility, building, structure, process, or equipment may apply to the Secretary for a variance from these Rules in accordance with this section. A variance or renewal shall not be a right of the applicant or holder thereof but shall be in the discretion of the Secretary. In no case shall a request for a variance from these Rules be considered a contested case under 3 V.S.A. § 809.
- (b) Variances from the requirements for the collection of leaf and yard residuals (10 V.S.A. § 6605(j)(2)) and/or food residuals (10 V.S.A. § 6605(j)(3)) shall be made by facilities as provided for by 10 V.S.A. §6613(b).
- (c) With the exception of variances sought under 10 V.S.A. §6613(b), an application for a variance from these Rules shall contain, at a minimum:
- (1) The specific rule provision(s) for which the variance is sought, a written demonstration of need for the variance, and the specific authority under 10 V.S.A §6613(d) for which the variance is sought;
- (2) Information demonstrating that the variance, including any alternate standard and/or process to be employed by the applicant in lieu of the provision(s) from which the variance is requested, will not endanger or tend to endanger human health or safety;

- (3) Information demonstrating serious hardship from compliance with the rule without equal or greater benefit to the public (e.g., cost benefit analyses, profit and loss statements, balance sheets, federal income tax returns, and other documentation as may be necessary);
  - (4) The proposed duration of the requested variance, and, except for a permanent variance from the siting requirements of Rules adopted pursuant to chapter 159 of title 10, a schedule for obtaining compliance with the rule from which the variance is sought;
  - (5) Information demonstrating that the grant of a variance will not enable the applicant to generate, transport, treat, store or dispose of hazardous waste in a manner less stringent than that required by the provisions of Subtitle C of the Resource Conservation and Recovery Act of 1972, as amended, and the regulations promulgated under that Act; and
  - (6) An affidavit providing the names of adjoining property owners and a statement that notice of application has been provided by the applicant in accordance with subdivision (d) of this section.
  - (7) Other requirements, as determined by the Secretary and if deemed necessary to protect human health, safety, and the environment.
- (d) The applicant shall provide notice of application to all adjoining property owners through U.S. mail using a template developed by the Secretary. The notice shall provide:
- (A) a brief description of the rule from which the variance is being sought;
  - (B) the location of the proposed activity;
  - (C) a description of the process for review of the application and opportunities for public participation and comment on the application; and
  - (D) contact information (name, mailing address and phone number) for a representative of the Secretary.

## Subchapter 6 – Application Review and Certification Issuance

### § 6-601 Full Certification (Type 2) Review Process

- (a) Following the submission of an application for full certification the Secretary shall review of the application pursuant to this section.
- (b) Administrative review; notice of application.
- (1) The application shall provide notice through U.S. Mail to adjoining property owners on a form developed by the Secretary. ~~The applicant shall provide this notice by U.S. Mail.~~ The notice shall be provided at the same time that the application is submitted to the Secretary, and the applicant shall provide a signed certification to the Secretary that all adjoining property owners have been notified in accordance with this requirement.
  - (2) The Secretary shall provide notice of the application through the environmental notice bulletin when the Secretary has determined that the application is administratively complete.
  - (3) If the Secretary determines that the application is not administratively complete, the Secretary shall notify the applicant in writing of such decision. This notification shall be completed within 15 days of receipt of the application and shall identify each deficiency in the application that resulted in the Secretary's decision. The Secretary may require the submission of additional information in order to determine that an application is complete for purposes of this section.
- (c) Technical review; public comment period; public informational meeting.
- (1) Following a determination that an application is administratively complete, the Secretary shall review the application to determine whether it meets the applicable standards these Rules and 10 V.S.A. Chapter 159.
  - (2) Upon a determination made pursuant to subdivision (c)(1) above, the Secretary shall provide notice of the draft decision. At a minimum, the Secretary shall post the draft decision and how to request copies of the complete record associated with the application.
  - (3) After notice of the draft decision is provided, the Secretary shall provide a public comment period on the draft decision for a period of no less than 30 days.
  - (4) Upon request by any person, or upon the Secretary's own motion, the Secretary shall hold a public informational meeting within 14 days of the notice to the ENB.

(5) If a public informational meeting is requested, the Secretary shall provide 14 days' notice of the location, date, and time of the public informational meeting. The notice shall be provided to all persons who received notice of the draft decision through the ENB. When a public informational meeting is held, the public comment period shall not end until at least seven days following the public informational meeting.

(d) Final decisions; content; notice.

(1) When the Secretary issues a final decision on an application, the Secretary shall post a copy of the decision on the ENB. The ENB shall send notice of the availability of this information to any person that requested to receive notice.

(2) Secretary's final decision on an application shall include the following:

(A) The Secretary's final decision to either grant or deny the certification, noting any changes made to the Secretary's draft decision since the date of the notice as provided in § 6-601(c) above.

(B) A concise statement of the facts and analysis supporting the decision that is sufficient to apprise the reader of the factual and legal basis for the decision. If the Secretary determines that an application does not meet the applicable standards for issuing the permit, the Secretary shall also identify each deficiency in the application that resulted in the Secretary's decision.

(C) All documents and information on which the Secretary relied in issuing the decision, including the response to comments received during the public comment period.

(D) Notice on how the decision may be appealed and where to file an appeal.

(3) The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the discretion of the Agency, to protect public health, public safety, or the environment.

~~(a) Interim certification procedures shall be identical to the procedures set forth in §6-305 for a full certification, except that where the applicant cannot demonstrate that the facility qualifies for a facility certification pursuant to §6-304. The Secretary may issue an interim certification subject to the findings and conditions established in 10 V.S.A. §6605b.~~

- (b) Within 15 days of the receipt of a certification application, the Secretary shall review the application for administrative completeness. The applicant shall be notified, in writing that the application is either administratively complete or incomplete.
- (1) If the Secretary determines that the application is administratively incomplete, the Secretary shall specify what information is missing or lacking and state that the Secretary's technical review of the application will begin only when it is determined to be complete.
- (c) Upon the Secretary's determination that an application, including the plan for public notice required by §6-304(h), is administratively complete, the applicant shall:
- (1) provide public notice of the application in accordance with their submitted plan and;
- (2) ensure that a complete application is on file with the municipality where the facility is to be located. This must occur prior to the posting of the public notice and the application must remain on file throughout the full certification process.
- (d) The period for the receipt of public comment on the notice of application shall end no sooner than 15 days after the date of the latest newspaper publication date. The applicant shall provide a printed copy of the newspaper notices to the Secretary and a certificate of service from the post office.
- (e) Technical Review: The Secretary shall review the application for conformance with these Rules, as well as other applicable requirements of 10 V.S.A. Chapter 159. In conducting this review, the Secretary shall take into consideration the comments received.
- (f) The Secretary shall inform the applicant, in writing, of the Secretary's determination that the application conforms or does not conform with this subchapter the Solid Waste Rules
- (1) If the application conforms with the Rules; The secretary shall issue a fact sheet, briefly setting forth the basis of the draft certification and the draft certification.
- (2) If the application does not conform to these Rules or any other applicable requirement of 10 V.S.A. Chapter 159, a written denial shall be sent to the applicant along with the reasons for the denial.
- (g) Copies of the fact sheet and draft certification shall be sent to the applicant, to the municipalities, solid waste districts, regional planning commissions, and any other state agencies or subdivision thereof who received the notice of application under § 6-304(h) and to any other person who, in writing, requests the document.
- (h) The Secretary shall provide notice, by advertisement in at least two newspapers of general circulation in the area of the proposed facility, one of which shall be a regional

~~weekly newspaper if one is available, of the issuance of each draft certification, and of the opportunity for public comment. The period for receipt of public comments shall be specified in the notice and shall end no sooner than 22 14 days following the notice or 14 days following a public informational meeting, if one is held pursuant to subsection (a)(9) of this section, whichever date is later. This notice must include information on how and where the public may obtain copies of pertinent documents. Such documents must be available at reasonable times and expense.~~

- ~~(i) The Secretary shall hold a public information meeting to receive comment on the draft certification if it is requested within the public comment period specified in subsection (a)(8) of this section through petition by the selectmen of any town, the trustees of an incorporated village, a city council, the appropriate officials of affected Agencies or subdivision thereof, or 25 or more citizens from within the municipality or adjacent municipalities where the facility is located. The Secretary may also hold a public informational meeting on his or her own motion. The Secretary shall provide public notice of the date and purpose of any such informational meeting by advertisement in at least two newspapers of general circulation in the area of the proposed facility, one of which shall be a regional weekly newspaper if one it available. Any public informational meeting shall be held no sooner than 14 days after the date of the public notice required by this subsection.~~
- ~~(j) Prior to the issuance of a final certification, the Secretary shall prepare a summary of the comments with responses noting all changes to the draft certificate with reasons stated for those changes. If the issuance of a final certification is denied, the Secretary shall send a written denial to the applicant, which shall explain the reason(s) for the denial.~~
- ~~(k) When issuing draft or final certifications, the Secretary may impose any conditions, requirements or restrictions as deemed necessary to assure compliance with statutes, Rules or to protect public health and safety and the environment.~~

**§6-602      Minor Certification (Type 4) Review Process**

- (a) Following the submission of an application for a minor certification, the Secretary shall review the application pursuant to this section.
- (b) Administrative review; notice of application.
  - (1) The Secretary shall provide notice of the application through the environmental notice bulletin when the Secretary has determined that the application is administratively complete.
  - (2) If the Secretary determines that the application is not administratively complete, the Secretary shall notify the applicant in writing of such decision. The notification shall identify each deficiency in the application that resulted in the Secretary's decision. The Secretary may require the submission of additional information in order to determine that an application is complete for purposes of this section.

(c) Technical review; public comment period.

- (1) Following a determination that an application is administratively complete, the Secretary shall review the application to determine whether it meets the applicable standards these Rules and 10 V.S.A. Chapter 159.
- (2) Upon a determination made pursuant to subdivision (c)(1) above, the Secretary shall provide notice of the draft decision. At a minimum, the Secretary shall post the draft decision and how to request copies of the complete record associated with the application.
- (3) After notice of the draft decision is provided, the Secretary shall provide a public comment period on the draft decision for a period of no less than 14 days.

(d) Final decisions; content; notice.

- (1) When the Secretary issues a final decision on an application, the Secretary shall post a copy of the decision on the ENB. The ENB shall send notice of the availability of this information to any person that requested to receive notice.
- (2) Secretary's final decision on an application shall include the following:
  - (A) The Secretary's final decision to either grant or deny the certification, noting any changes made to the Secretary's draft decision since the date of the notice as provided in § 6-601(c) above.
  - (B) All documents and information on which the Secretary relied in issuing the decision, including the response to comments received during the public comment period.
  - (C) Notice on how the decision may be appealed and where to file an appeal.
- (3) The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the discretion of the Agency, to protect public health, public safety, or the environment.

- (e) Additional notice. At any time during the review of an application, the Secretary may require that a permit application being reviewed under the procedures of this section may be reviewed under the Full Certification (Type 2) procedures of § 6-601. When making this determination, the Secretary may base the decision on the size, complexity, potential environmental impact, or degree of public interested associated with the proposed activity.

~~A. Applications for recertification which the Secretary may determine to be minor include, but are not limited to, the following:~~

- ~~1. Minor expansions of, or changes to, currently certified facilities;~~
- ~~2. Amendments to diffuse disposal facility certification where not more than 25% of the acreage used for diffuse disposal is changed;~~
- ~~3. recertification of facilities, or amendments to current certifications, for facilities regulated under Subchapter 12 of these Rules;~~
- ~~4. recertification of facilities, or amendments to current certifications, for food and yard waste composting facilities not otherwise regulated under Subchapter 11 of these Rules;~~
- ~~5. recertification of facilities, or amendments to current certifications, for construction and demolition debris treatment and processing facilities; or~~
- ~~6. recertification of facilities, or amendments to current certifications, for facilities previously certified under the minor application process.~~

~~B. An application may be deemed to be minor if the Secretary determines that, given the nature of the facility, scale of the operation and kinds of activities, the facility for which the certification application is made will not pose a significant threat to public health and safety or the environment or cause a nuisance.~~

~~C. With the exception of recycling facilities, application for certification of solid waste management facilities not previously certified may not be deemed minor by the Secretary.~~

~~D. Recertification of solid waste incinerators and solid waste discrete disposal facilities, with the exception of post-closure certifications, shall not be deemed minor by the Secretary.~~

~~E. Within 15 days of the receipt of a certification application, the Secretary shall review the application for administrative completeness, and shall notify the applicant in writing that the application is either administratively complete or incomplete and whether the application will be reviewed according to the procedures set forth in this section. If the Secretary determines that the application is administratively incomplete, the Secretary shall specify what information is missing or lacking and state that the Secretary's technical review of the application will begin only when it is determined to be administratively complete.~~

~~F. Upon the Secretary's written determination that an application for a minor certification conforms with the Rules the applicant shall provide notice, pursuant to §6-304(h)(1) that:~~

- (a) Following the submission of a request for registration or application for emergency approval, the Secretary shall review the application pursuant to this section.
- (b) Administrative review. The Secretary shall review the request for registration or application for emergency approval for administrative completeness. The Secretary may require the submission of additional information in order to determine that an application is complete for purposes of this section.
- (c) Final decisions; content; notice.
  - (1) When the Secretary issues a final decision on an application, the Secretary shall post a copy of the decision on the ENB. The ENB shall send notice of the availability of this information to any person that requested to receive notice.
  - (2) Secretary's final decision on an application shall include the following:
    - (A) A concise statement of the facts and analysis supporting the decision that is sufficient to apprise the reader of the factual and legal basis for the decision.
    - (B) All documents and information on which the Secretary relied in issuing the decision.
    - (C) Notice on how the decision may be appealed and where to file an appeal.
- (d) The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the discretion of the Agency, to protect public health, public safety, or the environment.
- (e) Additional notice. At any time during the review of an application, the Secretary may require that a permit being reviewed under the procedures of this section may be reviewed under Full Certification (Type 2) procedures of § 6-601 or Minor Certification (Type 4) procedures of § 6-602. When making this determination, the Secretary may base the decision on the size, complexity, potential environmental impact, or degree of public interested associated with the proposed activity.

**§ 6-604**                    Amendments; Renewals

- (a) Amendments; process.
  - (1) If the Secretary determines that an amendment to a certification or other approval is required, only the conditions subject to amendment shall be modified. Until applications for amendment are granted or denied in whole or in part, the terms and conditions of the original certification or other approval shall remain in force.
  - (2) Amendments shall be processed as follows:

- (A) A major amendment shall be subject to the same procedures applicable to the original permit decision under these Rules.
  - (B) A minor permit shall be subject to procedures applicable to the Minor Certification Process (Type 4) in § 6-602 of this subchapter.
  - (C) An administrative amendment shall not be subject to the procedures of this subchapter.
- (b) Renewal. A person may renew a certification under the same application and procedural requirements that are applicable to the original decision under this subchapter.

**§ 6-605          Variance Review Process**

- (a) Variance applications shall be reviewed pursuant to the full certification review process as provided in § 6-601 except as provided in this section below.
- (b) Prior to the determination that an application for a variance is administratively complete, and at the discretion of the Secretary, in accord with 10 V.S.A. § 6613, the processing of a variance application may be delayed when an applicant for a variance or renewal, is not in compliance with an administrative order or an assurance of discontinuance with respect to a violation that is directly related to the activity which is the subject of the application.
- (c) A variance or renewal shall not be a right of the applicant or holder thereof, but shall be in the discretion of the Secretary. The Secretary shall only grant a variance from these Rules upon finding that the requirements of 10 V.S.A. §6613(a) and (b) and the notice and consideration requirements of § 6613(c) have been met.
- (d) Variances shall be issued with conditions and for a time period consistent with the reasons for the variance and consistent with the provisions of 10 V.S.A. §6613(d), as applicable.
- (e) The Secretary's determinations on variance applications (including renewals) shall contain the following:
  - (1) An opinion detailing the factual findings that are the basis of the approval, denial or renewal;
  - (2) the conclusions of the Secretary on whether the variance meets the requirements of 10 V.S.A. § 6613 and these Rules, as applicable;
  - (3) any conditions necessary for the approval or renewal of the variance;

- (4) a summary of responses to comments from the public on the variance application; and
- (5) instructions on how to appeal the Secretary's determination; and
- (6) any other information the Secretary deems necessary.
- (f) Any variance granted may be renewed on terms and conditions and for periods, which would be appropriate on initial granting of a variance. An application for renewal shall be made at least 60 days prior to the expiration of the variance. If complaint is made to the Secretary on account of the variance, no renewal thereof shall be granted, unless following public notice and an opportunity for a public meeting on the complaint, the Secretary finds that renewal is justified.

**§ 6-606                      Suspension and Revocation of Certifications and Registrations**

- (a) Authority. The Secretary may suspend or revoke, in whole or in part, a certification, or registration issued under this subchapter for suspension or revocation.
- (b) Basis for suspension or revocation. The following shall be bases for suspension or revocation of a certification, or registration:
  - (1) Violation of a condition imposed in the certification, or registration as issued;
  - (2) Violation or failure to comply with the provisions of these Rules or any authorizing statutes;
  - (3) False or misleading information submitted in support of an application or request for approval;
  - (4) A determination by the Secretary that the suspension or revocation of the certification, or registration is necessary to prevent:
    - (A) actual substantial harm to the public health, public safety, or the environment, or

- (B) an imminent and substantial threat of harm to the public health, public safety, or the environment.
- (c) Notice of suspension or revocation. The Secretary shall provide notice of the suspension or revocation to the holder of the certification, or registration and post the notice to the ENB or other web-based public notice service provided by the Department of Environmental Conservation. Except as provided in subsection(d) of this section, such notice shall be provided at least 14 days prior to the date when the suspension or revocation takes effect. The notice shall include:
- (1) The legal authority for the proposed action;
  - (2) A brief statement of the facts upon which the proposed action is based;
  - (3) The effective date of suspension or revocation of the certification, plan, or registration; and
  - (4) Notification of the permittee's right to, within 30 days of receipt of the written notification, request a hearing to present information in response to the notice for suspension or revocation.
- (d) Finding of harm; threat of harm. If the Secretary determines that immediate suspension or revocation of a certification, or registration is necessary to prevent actual substantial harm or an imminent and substantial threat of harm to the public health, public safety, or the environment under §6-606(c)(5), the suspension or revocation shall become effective upon the receipt of the Secretary's notice under (d) of this section. The suspension or revocation shall be effective until any requested hearing has been completed and a final decision issued by the Secretary.
- (e) Hearing; request. Upon request for a hearing made within 30 days of receipt of the Secretary's notice of suspension or revocation, the Secretary shall hold a hearing on the decision for suspension or revocation of the certification, plan, or registration. The failure to request a hearing within 30 days of receipt of the Secretary's notice shall constitute a waiver of the right to a hearing on the petition.
- (f) Party status. The Secretary shall determine the right of any other persons requesting party status to participate in the proceedings. In determining party status, the Secretary shall consider whether a person or his or her property is directly affected by the facility or activity(ies) authorized in the certification, or registration. The Agency shall

automatically be a party to the proceeding.

- (g) Burden; admissibility of evidence. The hearing in a contested case shall be conducted by a hearing officer appointed by the Secretary. The burden of establishing that the certification, or registration should be suspended or revoked shall be upon the Secretary. The admissibility of evidence in proceedings under this section shall be determined under the criteria set forth in 3 V.S.A. §810.
- (h) Recording. Upon request of the party, a hearing held under this section shall be transcribed by a qualified stenographer or recorded on an electronic sound device. If a transcription by a stenographer is requested, the request shall be made in writing at least 10 days prior to the scheduled hearing. Costs shall be borne by the requesting party. The requesting party shall provide one copy of the transcript to the Secretary without costs; other parties wishing to obtain a copy of the transcript shall reimburse the requesting party on a prorated basis.
- (i) Examination of evidence; decision and order. The examination of evidence, decision and order shall be governed by the provisions of 3 V.S.A. § 811 and § 812. The final decision shall be made by the Secretary within 30 days after the close of the hearing. The decision shall constitute the final decision of the Secretary. Copies of the decision shall be sent to the holder of the certification, plan, or registration, and other parties to the proceeding.

### **Categorical Certification Notice**

~~A. On or before the date of filing any certification application for a facility, the applicant shall send notice and a copy of the application to the municipality where the facility is proposed to be or is located and any adjacent Vermont municipality if the facility is located on a boundary. The applicant shall furnish the Secretary the names of those noticed of the application.~~

### **Certification or Approval Issuances**

#### **(a) Full and Minor Certifications**

- ~~(1) Prior to the issuance of a final certification, the Secretary shall prepare a summary of the comments with responses noting all changes to the draft certificate with reasons stated for those changes. If the issuance of a final certification is denied, the Secretary shall send a written denial to the applicant, which shall explain the reason(s) for the denial.~~

~~(2) When issuing draft or final certifications, the Secretary may impose any conditions, requirements or restrictions as deemed necessary to assure compliance with statutes, Rules or to protect public health and safety and the environment.~~

~~(3) Certification shall be for a period not to exceed 10 years, except for a sanitary landfill or a household hazardous waste facility which shall not exceed five years.~~

~~(b) Interim Certifications~~

~~(1) An interim certification shall be valid only for a period of time, not to exceed two (2) years, for an applicant to meet the requirements of full certification or closure.~~

~~(2) An interim certification may not be renewed more than once.~~

~~(3) An interim certification shall contain, at a minimum, all provisions required by 10 V.S.A. §6605b(e)~~

**Amendments of Certifications**

A. Any certification or interim certification issued pursuant to these Rules may be amended, in whole or in part, during its term for cause, including, but not limited to:

~~1. material and substantial additions or alterations to the facility or the facility's activities or any other change in conditions, that occurred after certification which justify the application of conditions different or absent from the existing certification;~~

~~2. the receipt of information that was not available when the certification was issued which justifies the application of conditions different or absent from the existing certification;~~

~~3. the statutes, standards or Rules, on which the certification was based, were revised by adoption or judicial decision after the certification was issued and those revisions justify the application of conditions different or absent from the existing certification;~~

~~4. the determination by the Secretary that other good cause exists for amendment, necessary to protect the public health and safety and the environment;~~

B. The Secretary may amend any certification or interim certification upon their own motion or upon a written request by the certification holder containing the facts and reasons supporting the request.

C. If the Secretary determines that an amendment is appropriate, only the conditions subject to the amendment shall be reopened. All amendments under this section shall be performed in accordance with the procedures and requirements of these Rules.

~~D. Until amendments are granted or denied, in whole or in part, all the terms and conditions of the original certification shall remain in full force and effect.~~

~~E. The Secretary may make *de minimis* modifications to a certification without following the procedures set forth in these Rules where the Secretary determines that the modifications pose no threat to public health and safety or to the environment and will not create a nuisance.~~

### **Revocations of Certifications**

~~A. A certification or interim certification may be suspended or revoked, in whole or in part, during its term for cause upon a motion by the Secretary upon a written request containing facts and reasons supporting the request. Cause for suspension or revocation includes:~~

- ~~1. non-compliance with the requirements of 10 V.S.A. Chapter 159, these Rules, or any condition of certification;~~
- ~~2. failure to disclose all relevant facts during the certification process that were known or should have been known, at that time;~~
- ~~3. misrepresentation of any relevant fact at any time; or~~
- ~~4. a determination by the Secretary that only the suspension or revocation of a certification or interim certification can alleviate an actual or potential hazard to public health or the environment.~~

~~B. The certification holder shall be given written notice at least 14 days before suspension or revocation takes place. This written notice shall include a statement of the reasons for suspension or revocation and notice of the certification holder's right to request a hearing or otherwise present information on the suspension or revocation issues.~~

~~C. If the certification holder submits a written request for a hearing within 14 days of the date that such notice is issued, the Secretary shall provide an opportunity to be heard.~~

~~D. If the Secretary determines that only immediate suspension or revocation of a certification or interim certification can alleviate an immediate and substantial hazard to public health and safety or the environment, suspension or revocation shall become effective upon receipt of the written notice by the applicant~~

- ~~1. In such cases the certification holder may still request a hearing, although the suspension or revocation will be in effect until the hearing has been completed and a decision has been issued. The Secretary shall hear the matter at the earliest possible time.~~

## Subchapter 7 – General Siting, Design and Operating Standards

### § 6-701                      **Applicability**

The requirements of this subchapter apply to all solid waste management facilities with the exception of those facilities that have been issued a categorical certification pursuant to § 6-503(b).

Note: The requirements of this subchapter are the minimum requirements necessary for siting, design, and operations of all facilities subject to this subchapter. Refer to the relevant subchapter which addresses the solid waste management facility for any additional requirements specific to that type of facility.

- (a) ~~\_\_\_\_\_ The requirements of this Subchapter apply to solid waste management facilities certified under §§ 6-303 through 6-305, and under Subchapter 12 of these Rules.~~
- (b) ~~The requirements of this subchapter shall not apply to facilities that meet the requirements for categorical certification pursuant to:~~
  - (1) ~~§ 6-309 of these Rules.~~
  - (2) ~~§§ 6-1104 and 6-1105 of these Rules,~~
  - (3) ~~§ 6-1207 of these Rules.~~

### § 6-702                      **Prohibited Areas**

- (a) Facilities are prohibited from being sited in the following designated areas:
  - (1) Class I and Class II Groundwater Areas.;
  - (2) Class I and Class II wetlands and their associated buffer zones, as defined in the Vermont Wetlands Rules, unless allowed by a Wetlands Permit or Conditional Use Determination that has been issued by the Agency.;
  - (3) Class III wetlands as and their associated buffer zones, as defined in the Vermont Wetlands Rules, unless allowed by a Wetlands Permit or Conditional Use Determination that has been issued by the Agency.;
  - (4) Class III wetlands, as defined by the Vermont Wetlands Rules, unless allowed by a Water Quality Certification that has been issued pursuant to 40 CFR Part 401, or has been waived by the Agency;

- (5) A National Wildlife Refuge as designated by the United States Fish and Wildlife Service.;
- (6) A wildlife management area as designated by the Agency.;
- (7) A threatened or endangered species habitat area as designated by the Agency; ~~except for diffuse disposal facilities.;~~
- (8) Floodways, Special Flood Hazard Areas.; ~~This criterion does not apply to storage, transfer or recycling facilities, certified prior to the date of these Rules where there is no expansion of the facility beyond the previously certified waste management boundary.~~
- (9) River corridors, except for land application sites as provided in §6-1305(E).; ~~This criterion does not apply to previously certified storage, transfer or recycling facilities where there is no expansion of the facility beyond the previously certified waste management boundary.~~
- (10) A watershed for a Class A Waters, as designated by the Agency, ~~as designated by the Vermont Water Resources Board or the Natural Resources Board;~~ and
- (11) Within 500-feet of an Outstanding Resource Water ~~as designated by the Vermont Water Resources Board or the Natural Resources Board.~~ This criterion does not apply to previously certified ~~Subchapter 12~~ storage, transfer or recycling facilities where there is no expansion of the facility beyond the previously certified waste management boundary.

§ 6-703

**Siting Standards**

- (a) Facilities shall be located such that an emission or discharge from the facility will not unduly harm the public health and safety and will have the least possible reasonable impact on the environment by demonstrating the requirements of subsection (b) of this section.
- (b) In an application for a facility subject to this subchapter, an applicant ~~In order to meet the general performance standard of subsection (a) of this section, the operator must shall~~ satisfactorily demonstrate each of the following:
  - (1) The isolation distances from the high seasonal water table, bedrock and surface waters are sufficient to ~~as-ensure~~ ensure that an emission or discharge from the facility will meet all applicable environmental quality and public health standards and Rules;
  - (2) ~~That~~ The isolation distance to public and private drinking water sources is sufficient to ~~assure~~ ensure that an emission or discharge from the facility will not

adversely affect drinking water;

- (3) ~~That~~ The isolation distances to property lines or any residence, school, day-care facility, hospital or nursing home, ~~not owned by the applicant,~~ are sufficient to ensure assure that the facility will not:
    - (A) Result in objectionable odors off site;
    - (B) Result in an unreasonable visual impact off site;
    - (C) Unreasonably increase the level of noise detectable off site; or
    - (D) Otherwise adversely affect public health.
  - (4) ~~That~~ The minimum isolation distances for the facility or activity listed in Table B A are met, or other isolation distances as required by the Secretary pursuant to subsection (c) of this section significantly increased, to make the demonstrations required under § 6-703(b)(1-3) subdivisions (1), (2), and (3) of this subsection. Any facility which is not listed in Table BA, shall have an isolation distance to property lines of at least 50 feet.
  - (5) That the facility is not located in areas that have ~~serious~~ development limitations, such as highly erodible soils, steep slopes, or do not have the physical capability to support the facility;
  - (6) That the facility is accessible from a state or federal highway or a Class III or better town highway;
- (c) The Secretary may require that a facility meet isolation distances that are greater than those distances identified in Table B if such increase in distances is necessary for the facility to demonstrate compliance with § 6-703(b)(1)-(3) of this section.
- (d) The Secretary may request any additional information necessary to determine ~~if~~ a proposed facility 's compliance with meets the standards contained in this section.

Table B A: Required minimum isolation distances.

| CATEGORY  | Minimum Distances By Facility Type         |              |                        |  | <u>Categorical Disposal Facilities</u> |
|---|--|--------------|------------------------|--|--|
|   | Land Application <sup>1</sup><br>Injection | Other        | Landfills <sup>2</sup> | <u>Storage, Transfer, Processing,<br/>and Recycling Facilities</u><br>Subchapter 12 facilities |  |
| Minimum vertical separation from high seasonal water table <sup>3</sup>   | 3'   | 3'           | 6'                     | n/a  | 6'                                     |
| Minimum vertical separation to bedrock  | <u>3' 4'</u>                               | <u>3' 4'</u> | 10'                    | n/a  | 10'                                    |
| Minimum distance to waters from the waste management boundary   | 50'  | 100'         | 300'                   | 100' <sup>4</sup>  | 100'                                   |
| Minimum distance from waste management boundary to drinking water source not owned by the applicant.  | 300'                                       | 300'         | 1000'                  | 100' <sup>4</sup>  | 200'                                   |
| Minimum distance to property line from waste management boundary  | 25'  | 50'          | 300' <sup>8</sup>      | 50' <sup>6</sup>   | 50'                                    |
| Minimum distance from a waste management boundary to residences, schools, daycare facilities, hospitals, and nursing homes, <del>not owned by the applicant</del> | 100'                                       | 100'         | 1000' <sup>5</sup>     | 100' <sup>7</sup>  | 300'                                   |

<sup>1</sup> ~~Diffuse disposal, or~~ Applies to land application, applies to of sludge non-EQ biosolids, and stabilized domestic septage distributed over an area of land at a controlled rate to make efficient use of its nutrient and/or soil amendment value.

<sup>2</sup> Minimum criteria for a ~~discrete disposal~~ landfill facility are based on underlying soils with a maximum permeability of  $1 \times 10^{-4}$  cm/sec. ~~Discrete disposal~~ Landfill sites with more permeable soils will be evaluated on a case by case basis, but are generally not acceptable.

<sup>3</sup> For ~~diffuse disposal~~ land application, the ~~three-foot minimum~~ vertical separation for this category shall be measured from the ground surface, or bottom of the zone of incorporation if applicable, to the saturated zone existing at the time of disposal. For ~~discrete disposal facilities~~, the vertical separation for this category shall be measured from the bottom of the ~~discrete disposal facility~~ landfill liner system to the seasonal high groundwater table.

<sup>4</sup> ~~These criteria apply only to facilities constructed after July 1, 1998 or to modifications after July 1, 1998 of existing facilities. This criterion applies to facilities constructed after the effective date of these Rules, and to facilities constructed prior to the effective date of these Rules which have been expanded or modified and such expansion or modification will result in a reduction in the isolation distance to a drinking water source.~~

<sup>5</sup> ~~This~~ These criterion criteria applies apply only to certifications issued after October 15, 2004 for new ~~discrete disposal facility~~ landfill units or lateral expansions or modifications of ~~previously certified~~ existing ~~discrete disposal facility~~ landfill units.

<sup>6</sup> ~~This~~ These criterion criteria applies apply only to facilities certified ~~constructed~~ after July 1, 1998. ~~The Secretary may approve a distance which is less than 50 feet if the operator makes a satisfactory demonstration under § 6-703(b)(3) § 6-503(b)(3).~~

<sup>7</sup> ~~This~~ These criterion criteria applies apply only to initial certification of new facilities certified after October 1, 2004 and to expansions or modifications of existing facilities certified after October 1, 2004.

<sup>8</sup> ~~This~~ These criterion criteria applies apply only to facility certifications issued after October 15, 2004 for new ~~discrete disposal facility~~ landfill units or lateral expansions of previously certified ~~discrete disposal facility~~ landfill units. The minimum distance to the property line is shall be 50 feet for ~~discrete disposal facility~~ landfill units certified prior to October 15, 2004. ~~This~~ This criterion criteria does not apply to any facility located on or adjacent to property sought by a solid waste district through an eminent domain proceeding, pursuant to 24 V.S.A. § 2299a et seq., which was initiated prior to June 24, 2002, provided that the district that demonstrated the necessity in the eminent domain proceeding acquired the property. The minimum distance for such municipal facilities shall be 100 feet.

- (a) General. ~~The D design of all solid waste management facilities shall be addressed in a facility management plan (FMP) that contains a basis of design and an operating plan for all facility components. The basis of design and operational plans for all facility components shall be addressed in a facility management plan (FMP). The plan shall be submitted to the Secretary for review and shall contain sufficient information for to permit the Secretary to determine whether the facility conforms to the provisions of these Rules this section. §§6-604 through 6-606 provide the criteria which must be specifically addressed for each component of a solid waste management facility.~~
- (b) At a minimum, the FMP shall include:
- (1) The number of employees that will be utilized to properly operate the facility;
  - (2) A description of the types of vehicles which will use the facility;
  - (3) A description or diagram of vehicle flow at permitted design capacity;
  - (4) The type, number and handling capacity of the equipment used;
  - (5) Storage capacity at the facility, including the waste transfer schedule;
  - (6) The facility's hours of operation;
  - (7) A site plan map of the facility at a scale of 1:100 or greater that contains:
    - (A) Location of barriers to prevent unauthorized entry;
    - (B) Access roads;
    - (C) Location of waste management transfer, storage, treatment and processing areas, including the tipping floor area, if a tipping floor is part of the facility design ; and
    - (D) Facility boundaries and property boundaries.
  - (8) A contingency action plan which:
    - (A) describes the organized, coordinated and feasible course of action that will be followed in cases of emergency or other identifies any potential occurrences which could cause potential endangerment of human health and safety or environmental hazards. This could These occurrences include, but is are not limited to: fires, failure of facility design

features (e.g. compactors, leachate collection systems), emergency situations or inability to remove waste as scheduled. The plan shall identify the procedures that will be followed to minimize potential hazards during both planned and unplanned events and provide for continued effective waste management; and

- (B) All facilities designed with tipping floors shall have a written contingency plan for operations while the tipping floor is being repaired or replaced or otherwise becomes inoperable in whole or in part. The contingency plan shall consider all aspects of the facility which may be affected by the temporary closure of the tipping floor so that the facility continues to operate within these Rules.
- (c) Any other information relevant to proper operation of the facility.
- (d) ~~This requirement shall not apply to facilities that meet the requirements for categorical certification. Pursuant to:~~
- ~~§6-309;~~
- ~~§§6-1104 and 6-1105; or~~
- (e) §6-1207.
- (f) ~~The management plan FMP documentation shall be prepared under the direction of a qualified professional, an engineer, licensed in the State of Vermont, unless the Secretary specifically approves a waiver of this waives the requirement that an engineer be involved.~~
- (g) ~~The engineer qualified professional shall make appropriate use of available expertise for evaluating geology and hydrogeology, surface grade, soils science, potential for air pollution control and impacts, and other areas of specialized knowledge which may be required to design the facility. assemble a facility management plan.~~
- (h) ~~The facility design management plans shall provide for reliable means to control vectors, emissions or discharges including odor and dust, so as to preclude hazards to public health and safety, reduce impacts on the environment and reduce the likelihood of nuisance conditions.~~
- (i) ~~Except for facility management plan documents prepared for facilities regulated under Subchapter 12 of these Rules, this document shall include information necessary to fully characterize the site and the facility operation. Such site characterization shall be be adequate to determine all mechanisms of emission or discharge to the environment and to allow modeling of contaminant transport with a level of resolution sufficient to determine compliance with applicable environmental quality standards (e.g.,~~

drinking water, surface water or groundwater quality, or air quality standards). At a minimum the site characterization must address:

- (1) Soils and surficial geology;
- (2) Bedrock geology;
- (3) Integrated groundwater geology and geochemistry;
- (4) Topography;
- (5) Surface water;
- (6) Groundwater location and flow direction;
- (7) Air quality; and
- (8) Airshed characteristics such as prevailing wind speed and direction, meteorology, and climatology

#### § 6-705                      Operational Standards

- (a) Applicability requirements are provided below for all solid waste management facilities. Facilities which qualify for categorical disposal, categorical recycling or compost certification under §6-309 or Subchapter 11 and all facilities regulated under Subchapter 12, are exempt from the provisions of this subchapter subsection.

Note., but there are facility specific have o Operational requirements applicable to those facilities for categorical disposal, categorical recycling or compost are contained within the provisions of these relevant subchapters relevant to those activities sections.

- (b) Operational standards; general. Each owner and operator shall ensure that activities conducted at a facility comply at all times with the following standards, as applicable to the facility type.:
- (1) Adequate and a Qualified personnel must shall be retained to operate solid waste management facilities.
  - (2) Before a solid waste management facility may commence operations, a professional engineer licensed in the State of Vermont must certify it was built in accordance with requirements of the certification and furnish a complete set of as-built drawings to the Secretary. Upon written

~~request of the applicant, the Secretary may waive the requirement that the certification referred to above be furnished by a professional engineer.~~

- (3) ~~Owners and operators of a solid waste management facility~~ Activities at the facility shall adhere to all conditions of the facility certification and these Rules.
- (4) At least one (1) contact person shall be identified in the certification application, and shall be on-site during all hours of operation, unless specifically waived by the Secretary, in which case a contact person must nevertheless and be able to be contacted at all times.
- (5) All sampling ~~must~~ shall be performed by properly trained and qualified personnel. Qualified personnel must have a minimum three (3) months training and six (6) months experience in sampling or analysis.
- (6) ~~The owner and operator~~ Each facility shall develop and implement a plan ~~take all steps necessary~~ to prevent and/or control spills, nuisance dust, vectors, wind-blown debris, and odors.
- (7) The owner and operator shall take all practicable steps to prevent the inclusion of hazardous wastes, ~~as defined and regulated by Vermont's Hazardous Waste Management Regulations,~~ into the waste stream being managed by the facility.
- (8) Clearly visible and easily read signs shall be posted at the facility that provide notice of the prohibition on the disposal of banned materials as identified in 10 V.S.A. § 6621a and providing customers with information about available collection programs for such materials.
- (9) Access to the facility shall be controlled at all times to prevent unauthorized access to the facility, as appropriate, in a manner approved by the Secretary. Access points to the facility shall be secured by locked gates or an equivalent access control during times when the facility operator is not present.

## § 6-706

### Reporting

- (a) Reporting for categorical facilities. ~~Categorical~~ Each facility facilities shall maintain records of waste source, waste type, waste quantity and destination. The data shall be reported to the Secretary within 20 days of the end of each calendar year, in a format on forms provided required by the Secretary.
- (b) For facilities other than categorical facilities, the owner and/or operator the facility, including operators of wastewater treatment facilities plants, shall make reports to the Secretary on forms developed for this purpose by the Secretary. The operator and/or owner shall file a report with the Secretary ~~either~~

quarterly or on a as schedule as specified in the facility certification. Such reports shall include, but are not limited to, information on:

- (A) the quantity of wastes, by type, managed by the facility at each site;
  - (B) the sources and quantity of all solid wastes (~~by municipality~~) managed by the facility; ~~and~~
  - (C) the destination of all solid wastes managed by the facility; ~~and~~
- (c) Reporting for certified solid waste management facilities. Each owner and operator shall ensure that activities conducted as a facility comply at all times with the following standards.
- (1) The owner and/or operator shall submit a report to the Secretary within five working days of the receipt of any information indicating non-compliance with any term or condition of certification, these Rules, or other operating authority.
  - (2) Report of discharge.
    - (A) Any ~~unpermitted~~ discharge or ~~emission~~ from a facility or facility activities which poses a threat to public health, public safety, or ~~and safety, a danger to the environment or the creation of a nuisance must~~ shall be reported within 24 hours to the State of Vermont Waste Management & Prevention Division at (802) 838-1138, Monday through Friday, 7:45-16:30 or to the Department of Public Safety, Emergency Management Division at (800) 841-5505, 24 hours a day. Additional notification shall be made to, the local health officer, and the ~~proper~~ appropriate emergency response authorities of the affected municipality(ies) ies.
    - (B) Within 7 days of a ~~discharge~~ the event, a written report shall be submitted to the parties to whom the event was reported required to be notified pursuant to subdivision (c)(2)(A) above. The report shall identify the discharge or ~~spill~~ that occurred, the type, quantity, and quality of waste discharged or ~~spilled~~, and the actions taken by the owner, operators, or other responders to correct the problem.
- (d) Pursuant to 32 V.S.A. 5954(b), the owner and/or operator shall file a copy of the quarterly tax return if required under 32 V.S.A. Chapter 151, subchapter 13 (solid waste franchise tax) with the Secretary (attention Solid Waste Program) by April 30, July 30, October 30 and January 30 of each year.

§ 6-707

**Recordkeeping**

- (a) The following records identified in (a)(1) through (a)(3) of this section ~~must be kept~~ shall be maintained by the owner and/or the operator of the facility. Such records or copies thereof shall be maintained in a

dry and secure location at the facility or the primary location of business for the facility and shall be made for review upon request by the Secretary.

- (1) All information that demonstrates compliance with these Rules, 10 V.S.A. chapter 159, and conditions of the current permit;
  - ~~(2) Copies of the quarterly report forms submitted to the Secretary as a requirement of certification; and~~
  - (2) Copies of any reports, records, data or other information required to be submitted to the Secretary as a requirement of certification.
  - (3) Any other records required by the Secretary to be maintained in accordance with this section.
- (b) All records shall be kept from the date on which the application for initial certification is signed through the date of closure of the facility, with the following exceptions:
- (2) For landfills, such records shall be maintained through the post-closure period and shall cease upon written notification by the Secretary of the completion of post-closure care; and
  - (3) For sludge or septage storage and treatment facilities located at wastewater treatment facilities record keeping shall persist for ten (10) years

**§ 6-708**

**Corrective Action**

- (a) If the operation of a facility, ~~which is otherwise in compliance with its certification, interim certification or categorical certification~~ results in a in an emission or discharge that poses a threat to public health, public safety, and safety or the environment, the Secretary may, under the authority of 10 V.S.A. §6610a, require the facility owner and/or operator to perform certain activities including, but not limited to:
- (1) ~~Additional monitoring~~ Monitoring of the surface water, groundwater, soils and/or air in addition to any monitoring required by these Rules and the facility's certification;
  - (2) Other investigations of the site necessary to determine the nature and extent of the ~~emission or discharge and any contamination resulting from the emission or discharge; or~~
  - (3) Removal and remedial actions necessary to prevent further contamination, to address the existing contamination and to meet applicable environmental quality and public health standards;

- (4) Activities required to address discharges to groundwater causing an exceedance of a Preventative Action Level at a groundwater compliance point, as required by §12-606 (Preventative Actions) of the Vermont Groundwater Protection Rule and Strategy; and
- (5) Any other action required to address the discharge and any resulting contamination that is authorized by law or these Rules.
- (6) In situations where the Secretary determines that only the cessation of operations can alleviate the hazard posed by a facility, certification suspension or revocation proceedings under § 6-307(2) may be initiated. The Secretary may also pursue such other and/or additional remedies authorized under Vermont law.
- (b) Where the Secretary determines that any of the corrective actions in subsection (a) is required, the following shall occur:
- (1) The Secretary shall notify the facility Permittee in writing that corrective action is required. The notification shall describe the need for corrective action and shall describe the corrective actions that are required.
- (2) Within a timeframe established by the Secretary the owner and/or operator shall:
- (A) Submit a corrective action plan that includes:
- (i) A description of the actions necessary to prevent present and future damage to public health and safety and the environment;
- (ii) An estimate of the quantities of labor, materials and testing necessary to perform each corrective action;
- (iii) A timeframe for commencement and conclusion of each corrective action;
- (iv) A plan for public notification of the proposed corrective actions;
- (v) A plan for periodic reporting to the Secretary on the effectiveness of any ongoing corrective actions; and
- (vi) Any other information as required by the Secretary pertaining to the required corrective actions.
- (B) Submit a cost estimate prepared by a third-party contractor for the implementation of the corrective action plan in accordance with § 6-807;

- ~~(C)~~ Provide evidence of financial responsibility for the total cost of the required corrective actions in accordance with the provisions § 6-802 and Appendix A.
  - ~~(D)~~ An increase in the required cost estimates;
  - ~~(E)~~ A determination by the Secretary that the Permittee no longer meets the gross revenue or financial test; or
  - ~~(F)~~ Notification by the Permittee that they intend to substitute alternative financial responsibility for self insurance.
  - ~~(G)~~ (3) Any additional activities required to address discharges to groundwater causing an exceedance of a Groundwater Enforcement Standard at a groundwater compliance point, as required by §12-607 of the Vermont Groundwater Protection Rule and Strategy.
- (c) A corrective action plan, cost estimate and financial responsibility instruments shall be included as conditions through an amendment to the existing facility certification or other operating authority. The corrective action plan may be amended, subject to the approval of the Secretary, at any time during the ongoing action to reflect changes in the method or schedule of remediation. The Permittee shall be required to submit a revised cost estimate and evidence of financial responsibility in accordance with any amendment of the corrective action plan.
- (d) Upon completion of the corrective action plan, the Permittee shall provide written certification to the Secretary that the corrective actions are completed. Upon satisfaction of the Secretary that the corrective actions have been completed, the Secretary shall notify the certification holder within sixty (60) days of the Permittee's certification that the Permittee is no longer required to maintain financial responsibility as required by this section.
- (e) Where the Secretary determines that the cessation of operations is required to alleviate the hazard posed by a facility, certification suspension or revocation proceedings under § 6-307(2)-§ 6-606 shall be initiated. The Secretary may also pursue such other and/or additional remedies authorized under Vermont law.

## Subchapter 8 – Financial Responsibility, Capability, and Estimates

### § 6-801 Purpose; Applicability

(a) Purpose. This subchapter establishes requirements and procedures for owners and operators of solid waste management facilities to demonstrate evidence of financial responsibility for closure and, as appropriate, post-closure care of the facility. Financial responsibility is ~~shall be provided~~ in accordance with this section so that upon abandonment, cessation or interruption of the operation of a facility, all appropriate measures can be taken, by a third party if necessary, to prevent present and future damage to public health and safety and to the environment.

(b) Applicability.

(1) Registered facilities and categorical certification facilities are excluded from the requirements of §6-802 and §6-803.

(2) The requirements of § 6-802, for financial responsibility for solid waste management facilities, as contained in this section, shall apply to all existing ~~and future~~ and new private solid waste management facilities and to municipally-owned solid waste landfills that close subsequent to the effective date of these Rules.

(1) The requirements of § 6-803, for financial capability, shall apply to municipal solid waste facilities that are not landfills. ~~apply to~~ These facilities may be owned and operated by the State of Vermont or by municipal entities created under 24 V.S.A., including facilities operated by Union Municipal Districts formed under 24 V.S.A. Chapter 121, ~~or by other public entities,~~ and municipal solid waste landfills which closed prior to the effective date of these Rules.

(2) This subchapter shall not apply to facilities certified by registration or emergency approval under § 6-503(c) ~~are exempt from the provisions of this subchapter~~ unless the Secretary determines financial responsibility that compliance with this subchapter is necessary to protect public health, safety or the environment.

~~(b) State and local governments or other public entities are required to comply with the provisions on financial capability in §6-902.~~

### §6- 802 Financial Responsibility

(a) Financial instrument; forms. Evidence of financial responsibility for private facilities and municipally-owned solid waste landfills operating after the effective date of these Rules shall be in one or a combination of the following forms:

- (1) A trust fund maintained by the applicant for the benefit of the Agency with a surety bond guaranteeing full payment into the fund;
- (2) A surety bond guaranteeing performance of closure or post-closure care;
- (3) An irrevocable standby letter of credit;
- (4) A deposit of acceptable collateral, as determined by the Secretary;
- (5) A financial test and corporate guarantee, as determined appropriate by the Secretary; or
- (6) Other financial responsibility instruments that the Secretary may deem appropriate.

The content of any particular Each financial responsibility instrument must shall be submitted on a form prepared for this purpose by the Secretary and shall meet the standards and requirements specified in Appendix A.

- (b) Except as provided in this subchapter, the certification holder shall maintain financial responsibility equal to or greater than the amounts required by this section at all times. The approved financial responsibility instrument shall be effective prior to the date that an owner or operator of a facility receives a certification. Financial responsibility instruments shall be submitted on a form prepared for this purpose by the Secretary. Financial responsibility instruments shall be in the amount of the total of the cost estimates for closure and post-closure care, as applicable, and as calculated using the procedures set forth in § 6-804 and § 6-805 Subchapter 10.
- (c) ~~The certification holder must maintain financial responsibility equal to or greater than the required cost estimates at all times except as provided in this subsection.~~
- (d) The certification holder ~~has~~ shall, within 90 days of any of the following changes, to increase the total amount of the financial responsibility instrument or combination of instruments so as to equal the required total cost estimates after any of the following:
- (1) An increase in the required cost estimates for closure or post-closure care;
  - (2) A decrease in the value of a trust fund used for financial responsibility;

- (3) A determination by the Secretary that the certification holder no longer meets the gross revenue or financial test; or
- (4) Notification by the certification holder that he or she intends to substitute alternative financial responsibility ~~for self insurance~~.
- (e) The Secretary shall be a party to each financial instrument and shall have the right to obtain, without the consent of the owner or operator, exclusive direction and control over the transfer, use, and disbursement of the secured funds or performance benefits to perform approved closure and post-closure maintenance or secure reimbursement for costs incurred for so performing upon its determination that an owner or operator has failed in whole or in part to carry out closure or post-closure requirements in accordance with § 6-1008 or § 6-1009.
- (f) A ~~applicant~~ certification holder may satisfy the requirements of this section by establishing more than one or a combination of financial responsibility instrument per facility. For purposes of this subsection, only ~~These instruments are limited to~~ trust funds, surety bonds, and letters of credit, and ~~deposits of acceptable collateral~~ may be used. ~~The instruments must be as specified in Appendix A, except that it is~~ The combination of instruments, rather than the single instrument, that shall ~~must~~ provide financial responsibility for an amount ~~at least~~ equal to or greater than the closure or post-closure care cost estimates.
- (g) The Secretary may draw on any or all of the instruments to provide for closure or post-closure care at the facility.
- (h) A certification holder may satisfy the requirements of this section by using a single financial responsibility instrument for more than one facility.
- (1) Evidence for financial responsibility submitted to the ~~Secretary Agency~~ shall the name and address of, and the amount of funds assured by the instrument for, each facility. The total amount of the financial instrument shall be no less than the sum of funds that would be required if a separate instrument had been established and maintained for each facility.
- (2) In directing funds available through the instrument for closure or post-closure care for any of the facilities covered by the instrument, the Secretary may direct only the amount of funds designated for that facility, unless the applicant agrees to the use of additional funds available under the instrument.
- (i) A certification holder may satisfy the requirements of this section for both closure and post-closure care for one or more facilities by using one of the instruments specified in this section. The amount of funds available through the instrument shall be no less than the sum of funds that would be required if a

separate instrument has been established and maintained for closure and post-closure care.

- (j) Upon satisfactory demonstration by the certification holder to the Secretary that the requirements of a closure or post-closure care plan have been satisfied, the Secretary shall notify the certification holder in writing, within 60 days, that he or she is no longer required to maintain financial responsibility for closure or post-closure care.

**§ 6-803 Financial Capability**

(a) ~~Documentation of Financial Capability; forms.~~

- (1) The auditor of the entity responsible for operating the facility or an independent certified public accountant shall annually submit a report to the Secretary on the financial condition of the entity. For municipal entities, this shall be the auditor's annual report required by 24 V.S.A. §§ 1681 through 1683. For other public entities, the annual report shall contain at least the information required of municipalities in 24 V.S.A. §§ 1681 through 1683, unless otherwise required by the Secretary. Documentation for a Union Municipal District need not include an annual report for each member town but shall include the district's annual report as required by 24 V.S.A. § 4868.

- (2) The following documents shall be submitted to the Secretary biennially:

- (A) A letter from the entity's chief financial officer outlining current and anticipated income and expenses for the entity's waste management facilities and certifying that the entity will be financially capable to meet the cost estimates made for closure and post-closure care required in these Rules. The letter shall be in a form prescribed by the Secretary and shall include, at a minimum, the total debt for the facility, closure and post-closure estimates, other anticipated expenses, income from user charges, transferred funds, and any other income.
- (B) The opinion of the entity's auditor or an independent certified public accountant as to the entity's financial capability to meet closure and post-closure costs.

- (3) The documents required by this section shall be submitted with the application for certification.

(b) ~~Closure and Post-Closure Fund~~

- (1) ~~Annual contributions to a fund established to meet closure and post-closure care obligations must be made by the entity responsible for operating the facility. The expense must be included as a line item in the facility's budget.~~
- (2) ~~The amount of the annual payment to the fund shall be determined by the following equation:~~

---

$$CE(1+a)^n - x - i$$

---

$$(i+1)^n - 1$$

---

Where CE = Closure Cost Estimate Plus Post-closure Cost Estimate

---

a = Forecasted Average Rate of Inflation

---

i = Anticipated Rate of Interest Income

---

n = Number of Years to Fund Maturity

The number of years to fund maturity shall be no longer than the life of the facility.

- (3) ~~The annual payment to the fund shall be calculated each year using the most recent closure and post-closure cost estimates.~~

#### § 6-804 Closure Cost Estimate

- (a) All facilities required under § 6-1002 to prepare a closure plan pursuant to these Rules shall maintain a current written estimate of the total cost of closing the facility in accordance with the facility closure plan.
- (b) The closure cost estimate shall be developed based on the work each activity that would be required for a third-party contractor to perform closure in accordance with the closure plan at the point in the life of the facility when closure would be most expensive. For purposes of this section, a third-party contractor is a party who is neither a parent nor a subsidiary of the owner or operator of the facility.
- (c) The following minimum factors shall be considered in estimating the closure cost:
- (1) the size and topography of the facility;
  - (2) the daily and weekly tonnage to be received at the facility;
  - (3) the availability of cover and fill material needed for facility grading;
  - (4) expected amounts of leachate production and requirements for treatment and disposal;
  - (5) plans and methods of disposal at the facility;
  - (6) the location of the facility and the character of the surrounding area;
  - (7) requirements for surface drainage;

- (8) leachate and gas collection and treatment systems, as required;
  - (9) environmental quality monitoring systems, as required;
  - (10) structures and other improvements to be dismantled and removed;
  - (11) facility storage capacity for the types of wastes being received;
  - (12) off-site disposal requirements;
  - (13) an appropriate forecasted average rate of inflation over the active life of the facility; and
  - (14) vector control requirements.
- (d) The certification holder may revise the closure cost estimate at any time during the active life of the facility if:
- (1) a certified partial closure has been completed; or
  - (2) a change in the closure plan decreases the closure cost estimate.
- (e) The certification holder shall certify that a closure cost estimate is consistent with the facility closure plan and the requirements of this Rules or must file an application for a certification modification reflecting new plans.
- (f) The certification holder shall revise the closure cost estimate whenever a change in the closure plan increases the closure cost estimate, or as otherwise required in § 6-806 of this section.

**§ 6-805 Post-Closure Cost Estimate**

- (a) Facilities that are required ~~under § 6-1003~~ to prepare a post-closure plan pursuant to these Rules shall have a current written estimate of the cost of post-closure monitoring and maintenance of the facility in accordance with the post-closure plan.
- (b) The post-closure cost estimate shall be based on the work required for a third-party contractor to implement the post-closure plan. For purposes of this section, a third-party contractor is a party who is neither a parent nor a subsidiary of the owner or operator of the facility.
- (c) The factors to be considered in estimating post-closure monitoring and maintenance cost shall include at least:

- (1) the size and topography of the facility;
  - (2) the type and quantity of waste received;
  - (3) the disposal method and plan;
  - (4) the potential for significant leachate production and the possibility of contaminating groundwater or surface waters;
  - (5) environmental quality monitoring systems;
  - (6) soil conditions;
  - (7) an appropriate forecasted average rate of inflation over the active life of the facility and the post-closure care period;
  - (8) the location of the site and the character of the surrounding area; and
  - (9) leachate and gas collection and treatment systems.
- (d) For the purposes of post-closure cost estimates, the post-closure period for landfills shall be at least 30-years from the date that installation of the final capping system is completed or the date of the last most recent estimate submitted. Post-closure care activities shall be performed until the Secretary determines that the performance standards for custodial care, as outlined in § 6-1009, are achieved, and may extend beyond the 30-year post-closure period.
- (e) The financial assurance mechanism provided for the post-closure care shall not decrease below the amount of the 30-year cost estimate at any point during the post-closure period.
- (f) Where post-closure monitoring data and other available information suggests that the required performance standards for custodial care will be achieved as provided for in § 6-1009, the certification holder may submit a request for a modification to the post-closure plan. Upon approval by the Secretary for a modification to the post-closure plan, the certification holder shall adjust associated cost estimates to reflect the change in necessary post-closure care activities.
- (g) The certification holder must revise the post-closure cost estimate whenever a change in the post-closure plan increases the cost of post-closure monitoring and maintenance. If the Secretary determines that post-closure monitoring data or other available information demonstrate that the performance standards for custodial care will not or unlikely to be achieved, the Secretary may require the owner or operator to perform any of the following:

- (1) investigate the cause of the post-closure performance deficiencies and submit findings to the Secretary;
  - (2) pursuant to § 6-806 of this section, submit an amendment of the post-closure cost estimate that reflects any necessary adjustment in remedial post-closure work required to remedy the deficiencies; and
  - (3) perform any additional investigation or submit any additional information as required by the Secretary.
- (h) The certification holder shall certify that a post-closure cost estimate is consistent with the facility post-closure plan and the requirements of this Rules or file an application for a certification modification reflecting new plans.
- (i) The certification holder shall revise a post-closure cost estimate as required in § 6-806 of this section.

**§6-806 Biennial Revision to Closure and Post-Closure Cost Estimates**

Closure cost estimates and post-closure cost estimates shall be revised pursuant to the requirements of this section.

- (a) Annual adjustment for inflation, current rates, and prices. On an annual basis, the certification holder shall adjust a closure cost estimate and post-closure cost estimate to reflect changes to the estimate caused by inflation, changes in current rates and/or prices. The certification holder shall submit to the Secretary a revised cost estimate itemizing the changes, updated rates and prices, or submit a written report demonstrating that no changes are required based on current rates of inflation. The certification holder must revise the closure and post-closure care cost estimates at least once every two years. The certification holder must annually adjust the closure cost estimate for inflation. The adjustment must be submitted on or before the anniversary of the submission of the last adjustment or closure cost revision. The revised cost estimates must be filed on or before the second anniversary of the filing or last revision of the current cost estimates.
- (b) Changes to closure or post-closure plans. The certification holder shall adjust a closure cost estimate or post-closure estimate cost upon any changes to the facility closure plan or upon any changes to the facility post-closure plan, as applicable. The revised estimate shall be submitted to the Secretary with the revised closure/post-closure plan and amendment request, as necessary. The certification holder must review the closure and post-closure care plans prior to filing revised cost estimates in order to determine whether they are consistent with current operations and regulations. The certification holder

~~must either certify that the plans are consistent, or must file an application for certification modification reflecting new plans.~~

- ~~(c) The certification holder must prepare new closure and post-closure care cost estimates reflecting current prices for the items included in the estimates. The certification holder must submit a report to the Secretary showing the necessary calculations and indicating either what the new cost estimates are or that there are no changes.~~

~~The certification holder must revise the closure and post-closure care cost estimates at least once every two years. The certification holder shall annually adjust a closure cost estimate for inflation the closure cost estimate to the Secretary. The adjustment must be submitted on or before the anniversary of the submission of the last adjustment or closure cost revision. The revised cost estimates must be filed on or before the second anniversary of the filing or last revision of the current cost estimates.~~

#### **§ 6-807 Assurances for Corrective Actions**

- ~~(a) An owner or operator required by the Secretary to undertake corrective action pursuant to § 6-708 of these Rules shall have a detailed written estimate of the cost of hiring a third party to perform the all necessary corrective actions. A third-party contractor shall be a party who is neither a parent nor a subsidiary of the owner or operator of the facility.~~
- ~~(b) A corrective action cost estimate shall include the total costs of all corrective actions as approved by the Secretary in the corrective action plan for the corrective action period as designated by the Secretary. The cost estimate shall be submitted to the Secretary on a timeframe designated by the Secretary and shall approved by the Secretary.~~
- ~~(c) Upon any of the following events, Permittee shall, within 90 days of such event, increase the total amount of financial responsibility so as to equal the cost estimates:~~
- ~~(1) An increase in the required cost estimates;~~
  - ~~(2) A determination by the Secretary that the Permittee no longer meets the gross revenue or financial test, if applicable; or~~
  - ~~(3) Notification by the Permittee that they intend to substitute alternative financial responsibility for self-insurance.~~
- ~~(c) A corrective action plan shall be annually adjusted for inflation and revised based on changes in current rates and prices in accordance with the processes outlined in § 6-807 of this section and shall be revised to reflect any changes to the corrective action plan that are approved by the Secretary.~~

## Subchapter 9 – Storage, Transfer, Recycling and Treatment Facilities

### § 6-901 Applicability

- (a) All solid waste recycling, processing, treatment, storage and transfer facilities are subject to the requirements of this Subchapter and the requirements of Subchapters 3, 5, 6, 7 and 8. 9 and 10, except for these This subchapter shall not apply to facilities which manage sludge or septage, facilities used in conjunction with diffuse disposal land application, and those facilities covered under § 6-1207.

### § 6-902 Storage, Transfer, Recycling and Processing Facilities Types

Facilities subject to this subchapter and other subchapters referenced in § 6-901 are designated as follows and shall obtain a certification prior to operation:

- (a) Recycling Facilities: Facilities that only manage solid waste materials that can be diverted from disposal.
- (b) Transfer Stations: Facilities where solid waste is collected, aggregated, sorted, stored and/or processed for the purpose of subsequent transfer to another solid waste management facility for further processing, treatment, transfer or disposal.
- (c) Construction and Demolition Debris Processing Facilities: Facilities which sort and process solid waste from construction or demolition projects for diversion from disposal and may also manage architectural waste materials. These facilities shall obtain a certification prior to operation.
- (d) Architectural Waste Recycling Facilities: Facilities that qualify as Construction and Demolition Processing Facilities that also recycle all six architectural wastes. These facilities shall apply for a new certification or an amendment to an existing certification prior to operation.
- (e) Organic Solid Waste Recovery Facilities or “ORF”: Facilities where organic materials are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester.

### § 6-903 Storage, Transfer, Recycling and Processing Facilities Siting

Facilities subject to this subchapter shall comply with the siting standards and prohibitions of § 6-702 and § 6-703 of these Rules.

§ 6-904

Storage, Transfer, Recycling and Processing Facilities Design Standards

- (a) General performance standards: Facilities shall be designed to ensure the effective collection, storage and/or processing of waste or recyclable materials.
  - (1) Facilities shall be designed and operated to prevent, to the greatest extent feasible, the reduction of the quality of the waste, such as the rotting or contamination of stored wastes or recyclable materials.
- (b) Design Standards.
  - (1) General design standards. To meet the performance standards of § 6-904(a) of this section, facilities subject to this subchapter shall comply with the general design requirements of § 6-704 of these Rules and the additional standards outlined in this section.

~~Facilities shall be designed and operated to prevent, to the greatest extent feasible, the reduction of the quality of the waste, such as the rotting or contamination of stored wastes or recyclable materials.~~

~~Facilities shall be designed to assure the effective collection, storage and/or processing of waste or recyclable materials.~~

- (c) ~~All designs for storage, transfer and recycling facilities subject to this subchapter shall consider address in facility designs the following aspects of the site, and the applicable requirements of Subchapter 7-5, in the design of the facility in order to comply with the General Performance Standards set forth in §6-1203 above:~~
  - (1) soils and surficial geology;
  - (2) topography; and
  - (3) surface water.
- (d) All facilities shall be designed to provide for all weather access, with access controlled and limited to hours of operation identified in the facility management plan FMP.
- (e) ~~All new facilities designed with tipping floors where municipal solid waste is temporarily deposited pending transport shall be designed and constructed so that the tipping floor is either enclosed within a~~

building or covered by a roof to prevent exposure of waste to weather. ~~Liquid storage tanks shall be double-walled, and shall be sized appropriately for the particular facility.~~

- (f) ~~The~~ All tipping floors shall incorporate a collection system designed to collect liquids leachate that may be associated with incoming waste materials. Leachate collection tanks utilized in collection systems shall designed to be:
- (1) double-walled with an interstitial space;
  - (2) sized appropriately for the facility and volume of waste managed;
  - (3) of material compatible with the expected composition of the leachate; and
  - (4) tested or inspected biennially for leak detection.
- (g) ~~Existing facilities which currently have a tipping floor for municipal solid waste shall comply with the requirements of subsection (c) of this section within one year from the effective date of these Rules.~~
- (h) ~~Recycling f~~ Facilities shall be designed to have storage capacity for all recyclable materials and any process residue residuals.
- (i) Organic Solid Waste Recovery Facilities shall be designed to:
- (1) treat food residuals in a manner that prevents impacts to public health and safety, the environment and creation of nuisance conditions (e.g. odors, vector attraction).
  - (2) have adequate storage capacity for all food residuals, unprocessed and processed; and
  - (3) have capability for adequate through-put of processing food residuals such that they maintain optimal material quality for the receiving facility.

**§ 6-905 Storage, Transfer, Recycling and Processing Facilities Operating Standards**

- (a) All facilities subject to this subchapter shall comply with the general operational requirements of § 6-705 of these Rules, the additional general operating standards in subsection (b) of this section, and the additional operating standards of (c) – (m) of this section as applicable to the type of facility.

- (1) ~~A contingency plan must be developed which addresses the proper management of wastes or recyclable materials during both planned and unplanned events when the facility is and is not in operation. The contingency plan must be submitted with the application for certification.~~
- (2) ~~An operator training plan must be developed which provides for all facility personnel involved in the handling of waste to receive organized instruction that teaches them to perform their duties in a way that ensures the facility's compliance with all applicable statutes, Rules and conditions of certification. The operator training plan must be submitted with the application for certification.~~

(b) General operations; additional standards.

- (1) A qualified operator, as identified in the FMP, shall be on site during all hours of waste acceptance operation, unless specifically waived by the Secretary in writing, in which case a A contact person for the facility must nevertheless shall be identified and shall able to be contacted at all times.
- (2) Personal protection materials and equipment appropriate to the materials being handled shall be available at all times for material handling and spill control.
- (3) ~~The operator shall take all practicable steps to prevent the inclusion into the waste stream destined for disposal at a discrete disposal facility of hazardous wastes, subject to regulation under the Vermont Hazardous Waste Management Regulations, and all landfill banned wastes, identified in 10 V.S.A. § 6621a, from being included in the waste stream destined for disposal.~~
- (4) All collected wastewater leachate collected from by transfer stations with tipping floors shall be disposed of in a wastewater treatment facility.
- (5) Hours of operation shall be as specified in a the facility management plan FMP and facility certification.

(c) All solid waste received by a facility shall be actively managed.

- (1) The operator shall take all practicable steps to prevent ~~the inclusion into the waste stream destined for disposal at a discrete disposal facility of hazardous wastes and all~~ landfill banned wastes, identified in 10 V.S.A. § 6621a from being included in the waste stream for disposal.
- (2) Waste shall not be stored for a period of time which results in a condition adversely impacting the environment or public health and safety.

- (3) All solid waste leaving a facility shall be transferred to an appropriate managing facility that is permitted for solid waste management as required by these Rules.
- (4) Organic solid waste shall be stored as briefly as possible at an organic solid waste recovery facility and in a manner that maintains optimal material quality for the receiving facility.

(d) Solid Waste; additional standards.

- (1) Except as specifically provided in this section, all solid waste shall be stored in containers, except during active management. The facility and storage containers shall be managed to minimize prevent a the possibility of an emission or discharge of contaminants from the containers.
- (2) All materials removed from containers for management during routine operations shall be managed under a roof and in a defined operational area to prevent a discharge of contaminants.
- (3) All solid waste shall be transported to a treatment or disposal facility on a schedule adjusted as necessary to minimize odors from the waste.
- (4) Solid waste deposited on a tipping floor shall be removed from the tipping floor as soon as is practical, but in no event later than the end of the operating day as defined in the FMP facility management plan. The facility management plan FMP and contingency plan shall identify any unique circumstances when solid waste might remain on the tipping floor beyond the end of the operating day and the practices that will be implemented at the facility so that the facility complies with the provisions of ~~§ 6-1203~~ § 6-904(a) during this ~~unique~~ circumstance.

(e) Recyclable Materials; additional standards.

- (1) Materials to be recycled, contaminated recyclable materials, and process residue residuals which may be dispersed by wind shall be stored inside buildings, ~~or other~~ under roofed structures, in ~~box~~ enclosed trailers, or in other closed containers which are covered except when the facility is operating.
- (2) In accordance with §10 V.S.A 6605(J)(1), the Permittee(s) shall offer collection for mandated recyclables.
- (3) The Permittee(s) shall not knowingly dispose of recyclable materials previously source separated by the hauler or the commercial or residential customer.

(f) Lead-Acid Batteries; additional standards.

- (1) All lead-acid batteries shall be stored under cover on an impervious surface.
- (2) The facility ~~must~~ shall maintain a supply of absorbent materials and acid neutralizers sufficient to clean up a spill of ~~up to~~ at least one gallon of battery acid solution.
- (3) All batteries shall be transported off-site in accordance with all applicable federal and state hazardous materials transport ~~regulations~~ requirements.

(g) HHW/CEG Hazardous Waste ~~at Semi-Permanent Collection Units and~~ Permanent Collection Facilities; additional standards.

- (1) ~~These facilities or units must meet the requirements of §6-1206(d)(1) and the following requirements:~~
- (2) All HHW/CEG wastes shall be handled by personnel appropriately trained in accordance with the requirements of this subsection and all applicable federal and state regulations:

(A) Training program.

(i) Facility personnel shall 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. The program shall be taught ~~directed~~ by a person trained in hazardous waste management procedures and shall include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

(ii) The training program shall 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:

(I) Waste handling procedures;

(II) Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment;

- (III) Key parameters for automatic waste feed cutoff systems;
- (IV) Communications or alarm systems;
- (V) Response to fires or explosions;
- (VI) Response to groundwater contamination incidents; and
- (VII) Shutdown of operations.

(B) All wastes collected ~~must shall~~ be properly stored at the end of each operating day in accordance with the FMP facility management plan; and,

(C) Facilities ~~must shall~~ comply with the generator short-term storage requirements of the Vermont Hazardous Waste Management Regulations.

(h) Tires; additional standards. No more than ~~3,000~~ 1,500 tires may be stored uncovered and on the ground at the facility site at any time.; Tires shall be removed from the facility on at least an annual basis, unless the facility processes tires on-site, in which case, the maximum amount and the storage design shall be dictated by the FMP facility management plan.

(i) Construction and Demolition Waste (C&D); additional standards.

(1) The maximum storage time and the maximum on-site volume for C&D collected at a facility that processes the material on-site shall be dictated by the approved FMP facility management plan.

(2) C&D collected at a facility that does not treat or process the material on-site ~~must shall~~ be stored in containers or in an enclosed or covered area as dictated by the FMP.

(j) Architectural Waste; additional standards.

(1) Architectural waste recycling facilities shall be designed and operated to achieve the greatest amount and highest quality of marketable materials.

(2) The combustion of architectural waste is prohibited, except for natural wood used as a feedstock for a facility that burns biomass-only for the purpose of generating heat or electricity.

(k) Leaf and Yard Waste; additional standards. In accordance with § 10 V.S.A §6605(j)(2), facilities offering collection of municipal solid waste shall offer collection for leaf and yard waste. These materials may be stored on the ground and are exempt from the containerization requirement of § 6-905(d)(1).

(l) Food Residuals; additional standards.

- (1) In accordance with § 10 V.S.A 6605(j)(3), the facilities offering collection of municipal solid waste shall offer collection for food residuals at the facility.
- (2) All food residuals and organic solid wastes shall be transported to a certified or registered treatment facility on a schedule adjusted to control odors and vectors from the waste.
- (3) The Permittee(s) shall store all food residuals in a manner that prevents leaking of associated liquid, minimizes nuisance odors, prevents vectors, prevents contamination and preserves the integrity of the material for the receiving facility. Specific management methods shall be identified in the FMP.

(m) Other Materials; additional standards.

- (1) Untreated wood, concrete, bricks, mortar or asphalt, ~~serap metals, and~~ appliances and ~~furniture~~ are exempt from the containerization requirement of § 6-905(d)(1) and may be stored uncovered at the facility. ~~All These materials listed in subsection (g)(1) of this section must shall~~ be removed from the ground, and either taken off-site or stored under cover in accordance with a schedule ~~that is~~ included in the approved FMP facility management plan, ~~but~~ In no event shall this schedule more than exceed two years from the date of receipt of the materials. The maximum on-site volume shall not exceed 2,000 cubic yards at any time unless otherwise approved as part of the FMP facility management plan.
- (2) Refrigerants from appliances shall be drained and collected by a licensed refrigerant removal professional qualified person prior to any further treatment of the appliances. Refrigerant-containing appliances shall be stored and handled in a manner that prevents the release of refrigerant.

§ 6-906

**Storage, Transfer, Recycling and Processing Facilities Applications**

Facilities subject to this subchapter shall comply with the siting standards and prohibitions of Subchapter 5 of these Rules and the additional requirements in this section.

Recycling facilities which anticipate collecting and managing between 50 and 400 tons of recyclable materials per year may qualify for categorical certification provided that an applicant submits an application which contains the information in subsection (b) of this section. If the facility qualifies, a categorical certification will be issued for a period up to five years.

- (a) ~~No later than January 1, 2002, any person operating a facility which was granted categorical certification prior to the effective date of these Rules shall reapply for and receive either categorical certification or certification under Section 6-304 of these Rules or shall cease operation of the facility.~~
- (b) ~~Facility Management Plan: Design and operation of storage, transfer and recycling facilities shall be addressed in a facility management plan, which shall describe how the facility will meet the requirements of §§ 6-1203, 6-1204, 6-1205 and all applicable requirements of § 6-1206. The management plan shall be prepared under the direction of a professional engineer, licensed to practice in the State of Vermont, unless the requirement that an engineer be involved is specifically waived by the Secretary. The management plan shall be submitted with the application for certification.~~
- (c) An applicant seeking certification as an Architectural Waste Recycling Facility in accordance with 10 V.S.A. § 6605(m) and these Rules shall specify in the facility FMP how each of the architectural wastes to be managed by the facility will be collected, stored, separated, and processed for market.
- (d) ORFs and on-farm anaerobic digesters which process food residuals shall describe the proposed reuse or disposal of the liquid and solid waste residual streams within the facility FMP.
- (e) ORFs that process food residuals for use as a feedstock at an offsite anaerobic digester or compost facility shall demonstrate in the FMP that the produced feedstock will be transported to a certified facility with sufficient capacity to accept anticipated volumes and/or materials types. An on farm ORF that processes food residuals for use within the farm digester shall establish and submit as part of the FMP a schedule and plan for introduction of the produced feedstock into the digester.

#### § 6-907 Storage, Transfer, Recycling and Processing Facilities Closure

- (a) All facilities ~~subject to closure~~ subject to this subchapter must shall be closed in a manner that:
- (1) Minimizes the need for further maintenance related to the waste facility; and
  - (2) ~~Controls, minimizes, or eliminates to the extent necessary to prevent threats to public health and safety and the environment, including post-closure emission or discharge of waste, waste constituents, leachate, contaminated runoff, and/or waste decomposition products into the groundwater, or surface waters or the atmosphere.~~ Such actions shall be completed to the extent necessary to prevent threats to public health and safety and the environment as determined by the Secretary.
- (b) ~~The~~ An approved closure plan will shall be developed by the facility and an approved closure plan shall become a condition of the facility certification ~~any certification or other operating authority~~ issued by

the Secretary.

- (c) An updated closure plan shall be submitted for approval to the Secretary whenever changes in the operating plan or facility design affect the closure plan. An approved closure plan may be adjusted amended, subject to the approval of the Secretary, at any time during the active life of the facility, except that an amended closure plan may not be submitted for approval less than 90 days before receipt of the final volume of waste.
- (d) ~~An amended closure plan must be submitted for approval to the Secretary whenever:~~
  - (1) ~~Changes in the operating plan or facility design affect the closure plan;~~ or
  - (2) ~~there is a change in the expected year of closure.~~
- (e) ~~When a certification modification is requested to authorize a change in the operating plans or facility design, a closure plan amendment must be requested at the same time. If a certification modification is not needed to authorize the change in operating plans or facility design, the request for a closure plan amendment must be made within 60 days after the change in plans or design occurs.~~
- (f) Notice of Closure. A certification holder shall send to the Secretary a notice of intention to close or notice of closure at the point of closure plan implementation.
- (g) Notice of Closure Completion. A certification holder shall send to the Secretary a notice of closure within 30 days after the date that the final volume of waste is received at the facility.
- (h) ~~Partial Closure. A facility may be partially closed prior to final closure. Any partial closure shall be performed in accordance with an appropriate section of the approved closure plan and shall be subject to all of the requirements of this section.~~
- (i) Certification of Closure. As part of the final closure of a facility, the Permittee shall following must be submit the following ted to the Agency Secretary:
  - (1) Certification by the ~~certification holder~~ owner or operator of the facility and ~~by a professional engineer licensed in the State of Vermont,~~ that the facility has been closed in accordance with the specifications of the approved closure plan. The Secretary reserves the right to require this closure certification to be submitted by a professional engineer licensed in the State of Vermont and will notify the facility of this requirement at the submittal of the notice of closure; and
  - (2) a request for discontinuance of any existing financial assurance mechanism required by § 6-802;

~~(3) verification that the owner of the property on which the facility is located has recorded a notation on the deed to the facility property, or on some other instrument that is normally examined during title search, that will, in perpetuity, notify any potential purchaser of the property that the land has been used as a solid waste management facility.~~

DRAFT

## Subchapter 10 – Discrete Disposal Facilities

### § 6-1001      Applicability

- (a) Unless specifically exempted by these Rules, the disposal of solid waste into or on any land of the State shall be subject to the certification requirements of these Rules.
- (b) Mining or mineral processing waste subject to the hazardous waste management regulations shall not be subject to this subchapter. Any mining or mineral processing waste exempted from the Vermont Hazardous Waste Management Rules pursuant to § 7-203(e) of those Rules shall be subject to the certification requirements of these Rules. Soil, rock, and other materials from mining activities that are not a mining waste or a mineral processing waste are not subject to the certification requirements of these Rules.

### § 6-1002      Disposal Facility Types

- (a) ~~Categorical Disposal Facilities. A person that disposes~~ The disposal of one or more of the following categories of solid wastes, which does not qualify for a limited duration Insignificant Waste Management Event (IWMEA) under § 6-505(b) is a categorical disposal facility. ~~∴ is eligible for categorical certification:~~
- (1) Stumps, root masses, decomposing wood or brush or untreated wood;
  - (2) Bituminous concrete;
  - (3) ~~Rinsed non-recycled glass;~~
  - (4) Concrete, masonry, mortar, porcelain, pottery, tile and clay pipe;
  - (5) Street sweepings;
  - (6) Car wash grit and municipal separated ~~sewer-stormwater~~ catch basin grit; provided that the applicant demonstrates that the solid waste does not leach volatile organic compounds which exceed in excess of applicable groundwater enforcement standards;
  - (7) Mining waste not in excess of 15,000 cubic yards per year; and

(8) Development soils.

(b) Landfill Facilities. No person shall construct, operate, expand, commence closure or perform post-closure care and custodial care of a landfill facility without obtaining prior approval by the Secretary pursuant to 10 V.S.A §6605(a)(1). This requirement applies to and includes municipal solid waste landfills, mono-fill landfills, construction and demolition debris landfills, mining waste landfills (>15,000 cubic yards per year) and mineral processing waste landfills.

**§ 6-1003      Additional Disposal Facility Siting Prohibitions**

In addition to the general siting standards and prohibitions of Subchapter 7 of these Rules, the additional following prohibitions apply to all disposal facilities:

(a) Applicants for a categorical disposal facility must shall also demonstrate that subdivisions (a)(1) and (a)(2) of this subsection are satisfied

(1) Categorical disposal facility prohibitions.

(A) Fifty (50) feet of a public highway, or property line(s) of adjoining property owners;

(B) the source isolation zone of a public water supply, or within 200 feet of the source of a public drinking water source supply, whichever is greater.

(C) ~~within~~ 200 feet of the source of a private drinking water source supply.

(D) ~~Disposal shall not occur within One-hundred (100) feet of Class B Waters, and as designated by the Water Resources Board or the Natural Resources Board;~~

(2) Disposal shall not occur within 300 feet of a public highway or within 300 feet of the property line(s) of lands owned by others adjoining property owners unless the applicant can demonstrate to the sufficiency of the Secretary that a reduced distance (less than 300 feet) will not result in any of the following:

(A) objectionable odors to be present off-site of the facility,

(B) unreasonable visual impact observed off site of the facility,

(C) unreasonable increase in level of noise detected off site of the facility, and

(D) ~~creates a nuisance and shall not create a~~ or condition that otherwise adversely affects public health and safety and the environment. ~~In no instance shall the distance be less than 50 feet.~~

~~(3) Animal and wildlife carcass disposal shall not occur within three (3) feet of seasonal high groundwater or within six feet of bedrock~~

(b) ~~Discrete Disposal Applicants for a landfill facility must~~ shall also demonstrate that subdivisions (1-5) of this subsection are satisfied. Landfills shall:

(1) ~~prohibited from being~~ not be sited in the Green Mountain National Forest, except for a one half-mile corridor drawn from the center line of the right of way of each Federal and secondary highway or as approved by the National United States Forest Service;

(2) ~~prohibited from being~~ not be sited within the floodway, mapped fluvial erosion hazard zones, or within the 100-year flood plain;

(3) ~~prohibited from location~~ not be sited within the Source Protection Area of a public water system using a groundwater source; and

(4) ~~prohibited from location~~ not be sited within zone 1 or zone 2 of a Source Protection Area for a public water system using a surface water source.

(5) be sited such that any emissions or discharges from the facility will be detected through monitoring and remediated prior to such emission or discharge impacting any off-site property.

#### § 6-1004 Additional Disposal Facility Design Standards

In addition to the general site characterization and facility design requirements of Subchapter 7, the following design standards apply to all disposal facilities:

(a) Facilities shall be designed to provide a reliable means to control vectors, emissions or discharges, including odor and dust, so as to preclude hazards to public health and safety, reduce impacts on the environment and reduce the likelihood of nuisance conditions. ~~to minimize the possibility of an emissions or discharges of contaminants from the facility, and, should an emission or discharge occur, the threats from the emission or discharge to public health and the environment.~~

- (b) ~~Facilities shall be designed to identify a means to control odor, vectors, and dust so as to preclude hazards to public health and safety or the creation of nuisance conditions.~~
- (c) ~~Facilities shall be designed to protect surface water, groundwater and the air, and to by detecting, detect, through monitoring where appropriate, the emission or discharge of contaminants. ~~from the facility to surface water, groundwater, or the air.~~~~
- (d) ~~Facility management plans shall include provisions for contingencies for the proper management of wastes during both planned and unplanned events when the facility is not in operation.~~
- (e) ~~Facility management plans shall include operator training plans that assure that all facility personnel involved in the handling of waste receive organized instruction that teaches them to perform their duties in a way that ensures the facility's compliance with these Rules and conditions of certification.~~
- (f) ~~Final cover systems for discrete disposal facilities shall be designed, constructed and maintained to minimize erosion and infiltration from precipitation.~~
- (g) ~~Discrete disposal facilities in operation prior to July 1, 1987, that are certified to receive or actually receive less 1,000 tons of municipal waste per year may be exempted from liner and leachate requirements if the Secretary finds that they will not create a significant risk to public health and that they will not cause irreparable harm to the environment. This exemption only applies to discrete disposal facility operations within the waste management boundary of the facility as that boundary existed on November 3, 1995.~~
- (h) ~~New discrete disposal facilities landfills or new operational units at an existing facility, placed in operation after July 1, 1987, shall have liner and leachate collection systems and appropriate provisions for leachate treatment, except as otherwise provided in § 6-309(b) or in § 6-606(b)(2)(B) of these Rules. The Secretary may further waive the liner, gas collection requirements, leachate collection system and leachate treatment requirements for discrete disposal facilities landfills or portions of discrete disposal facilities landfills that are designated solely to receive particular waste components that are designated by the Secretary as not the a potential source of leachate or landfill gas that is harmful to public health and safety or the environment or capable of the creation of nuisance conditions. Landfills accepting municipal solid waste shall not be granted a liner waiver.~~
- (i) Expansion of an existing facility that has documented groundwater contamination may be approved. It must be demonstrated that the design and operation of the proposed expansion activities will not worsen the existing contamination and that remediation, containment and/or monitoring of the existing

contamination will concurrently occur with the expansion operations. The design for expansion at a facility with existing contamination must provide:

- (1) sufficient environmental monitoring to assess the impacts of the expansion prior to a point or points of compliance and provide for the capability of remediation within property boundaries if necessary;
  - (2) any additional monitoring systems necessary to monitor the proposed expansion area independently of preexisting operational units (monitoring systems beneath the liner of the expansion area, expanded monitoring well networks, tracer systems etc.);
  - (3) demonstration through modelling, or other means, that existing contamination will not be worsened by the expansion.
  - (4) Placement of a liner system over buried solid waste may will be approved by the Secretary on a case by case basis where the following are adequately addressed in addition to all other requirements for lined discrete disposal facilities:
    - (A) stability;
    - (B) settlement;
    - (C) drainage of leachate to leachate collection systems;
    - (D) ability to monitor the proposed landfill unit as required in § 6-604(a)(4) and § 6-1004(C); and
    - (E) compliance with the Groundwater Protection Rule and Strategy, as amended §6-303(d) for both the proposed and existing landfill units.
- (j) Lined landfill liner systems. Lined landfills shall be designed to comply with the following standards.
- (1) The landfill shall have a Landfill Liner Base System that consists of the following components:
    - (A) Subgrade. This component shall be designed to provide structural integrity and support to the facility; and

(B) Bedding layer. This component shall be designed to screen earthen material sufficient to provide puncture protection to the secondary liner.

(C) The landfill liner base system shall be designed to be consistent with the following standards:

(i) Be of low-permeability materials and adequate for supporting the loads and stresses imposed by the weight of the landfill and all facility components during all phases of construction, operation, closure and post-closure;

(ii) Shall be graded and prepared for landfill construction such that the subgrade below the liner provides a uniform and consistent bedding layer capable of preventing puncture of the landfill liner; and

(iii) Shall be graded such that there is a minimum 2% slope toward the leachate collection sump.

(2) The landfill shall have a Landfill Liner System that consists of the following components:

(A) Secondary Liner. This component shall be designed to collect and detect leachate leakage through the primary liner.

(B) Leak Detection Drainage Layer. This component shall be designed to reduce hydraulic head on the secondary liner and facilitate migration of leachate to the secondary leachate collection system.

(C) Primary Liner. This component shall be designed to prevent leachate migration into the Leak Detection Drainage Layer or outside of the designed lined landfill area.

(D) Leachate Collection Drainage Layer. This component shall be designed to reduce hydraulic head on the primary liner and facilitate migration of leachate to the leachate collection system.

(E) Liner Protection Layer. This component shall be designed to screen material sufficient and provide puncture protection to the primary liner and leachate collection system.

- (F) The landfill liner system shall be designed to be consistent with the following standards:
- (i) All liner systems shall be of double liner construction. All liner systems must be approved by the Secretary on a case-by-case basis:
  - (ii) The secondary liner shall consist of a HDPE FML geomembrane with a minimum nominal thickness of 60-mil or an alternative composite (synthetic and natural material) liner system which achieves the equivalent hydraulic barrier properties. The secondary liner shall consist of a synthetic material, or a composite of synthetic and natural materials.
  - (iii) The primary liner shall consist of a HDPE FML geomembrane with a minimum nominal thickness of 60-mil or an alternative composite (synthetic and natural material) liner system which achieves the equivalent hydraulic barrier properties. The primary liner shall be a synthetic material, or a composite of synthetic and natural material.
  - (iv) All liner materials shall be chemically non-reactive with anticipated disposed waste and leachate characteristics.
  - (v) The leak detection drainage layer and leachate collection drainage layer shall:
    - (I) achieve a minimum hydraulic conductivity of  $1 \times 10^{-2}$  cm/sec;
    - (II) consist of a granular material with fines removed or a combination of granular material and geosynthetics within basal areas;
    - (III) consist of a granular material with fines removed or a combination of granular materials and geosynthetics along extended side slopes. If granular material placement impossible, geosynthetics may be used provided it can be demonstrated that they provide equivalent functionality; and;
    - (IV) be covered by a filtration layer or geosynthetic that aids in the prevention of clogging.
  - (vi) The liner system shall not be penetrated by any appurtenances, with an exception of penetrations located at the top of the slope and outside a defined limit of waste,

as needed and as approved to facilitate the operation and maintenance of the secondary leachate collection and removal system.

- (G) For landfills disposing of waste other than MSW, the Secretary may approve an alternative liner system design that deviates from the standards required by § 6-1004(i)(1-2) of this subsection upon a finding that the liner system proposed design is adequate to protect human health and the environment.

(3) The landfill shall have an Operating System that consists of the following components:

- (A) Daily Cover. This component shall be designed to provides odor control, inhibit fires, prevent vectors and wind-blown debris and promote anaerobic waste decomposition.
- (B) Intermediate Cover. This component shall be designed to provide limited duration control of landfill odors and infiltration of precipitation into the waste mass.
- (C) Interim Cap. This component shall be designed to provide extended duration control of landfill odors, infiltration of precipitation into the waste mass, enhancing gas collection and control, accommodating waste settlement, and reducing erosion and leachate production.

(4) The landfill shall have a Final Capping System that consists of the following components:

- (A) Hydraulic Barrier Layer. This component shall be designed to prevent infiltration of liquids into the waste mass.
- (B) Final Capping Drainage Layer. This component shall be designed to facilitate migration of liquids to perimeter drains and stormwater management systems, and to prevent saturation of final capping layers.
- (C) Final Capping Protection Layer. This component shall be designed to provide frost and physical protection of the final capping drainage layer.
- (D) Vegetative Support Layer. This component shall be designed to support herbaceous vegetative growth for erosion stabilization.

- (5) The Secretary may approve alternative design components that can be determined to achieve equivalent or improved performance standards.
- (k) Leachate Collection and Removal Systems (LCRS). All such facilities Landfills shall be equipped with leak detection and leachate collection and removal systems that are designed to be consistent with the requirements of this section. ~~capable of detecting and collecting leaks from the primary liner system.~~
- (1) Performance standards. The LCRS shall be designed to meet the following performance standards:
- (A) Collect and remove all leachate and gas condensate generated by the landfill.
  - (B) Enable detection of leachate migration through the primary landfill liner system.
  - (C) Prevent migration of leachate off of the landfill site.
  - (D) Restrict leachate depth to 30 cm or less over the liner system, except within the leachate sump area, under typical operating conditions.
  - (E) The LCRS shall restore leachate depth to less than 30 cm within five days following a 25-year/24-hour or greater storm event, or other approved contingency storage events.
  - (F) Provide capability of accurately and independently measuring and recording leachate generation within the primary and secondary collection systems.
  - (G) Be designed to be hydrologically separate from the stormwater management system and designed such that the secondary leachate collection system is separate from the primary leachate collection system.
- (2) Piping. The LCRS shall utilize piping that:
- (A) is composed of material compatible with anticipated leachate composition;
  - (B) is perforated sufficiently for anticipated leachate quantities; and
  - (C) Allows for effective flow monitoring with access for routine maintenance.

- (3) Sump. The LCRS shall include a sump that:
- (A) Provides a supplemental hydraulic liner system protection in the sump areas where leachate will be stored;
  - (B) Utilizes a sump fill that shall be porous and made of transmissible materials such that it will not biologically or physically clog over time;
  - (C) Provides for adequate access to change pumps and for general cleaning and maintenance; and
  - (D) operates to prevent 30 cm of leachate from collecting on the primary liner in the base area under normal operations.
- (4) Leachate and gas condensate storage infrastructure shall provide capacity for storing a volume of leachate sufficient to allow for the restoration of 30 cm of hydraulic head on the liner within five days of the 25-year-24-hour storm event or greater.
- (5) Leachate containment; leak detection. All LCRS components constructed outside of the lined portion of the waste management area shall provide double containment and be equipped with effective leak detection.
- (6) Leachate collection tanks shall be:
- (A) double-walled with interstitial space;
  - (B) constructed of material compatible with the expected composition of the leachate; and
  - (C) tested biennially for leaks.
- (7) Leachate collection systems shall be placed and sized to minimize ponding on the liner. The components of leachate collection systems that feed to leachate storage facilities shall be designed to ensure that the depth of leachate does not exceed 12 inches over the liner. Leachate can be stored on the primary liner in excess of 12 inches for up to five days following a 25 year/24 hour or greater storm event.

- (l) Operating system. Landfills shall have an operating system that is designed to be consistent with the following standards:
- (1) The facility shall maintain daily cover that shall consist of at least a six (6) inches thickness is required when of earthen material is used as cover material. Alternative daily cover may be proposed in accordance with § 6-1005(e).
  - (2) The facility shall maintain intermediate cover shall consist of a minimum 1-foot thickness of compacted earthen material, which may include the 6-inch daily cover, and shall be stabilized by vegetated cover.
  - (3) The facility may utilize an interim cap. Interim caps shall consist of a flexible membrane liner or a minimum two-foot thick layer of earthen material with a permeability of less than  $1 \times 10^{-5}$  cm/sec overlain by six (6) inches of earthen material capable of sustaining vegetation.
  - (4) The engineering design and plan for The design and sequencing of waste lift development shall ensure proper drainage on the discrete disposal facility landfill site and prevent ponding of water on the facility surface. This requirement applies both during the working life of the facility and after the final cover capping system has been installed and vegetation established.
  - (5) Landfill design and fill plans shall be designed such that final grades are achieved as soon as possible and that the open area for active filling is minimized to the extent practicable. Designs shall include the sequencing and extent of planned intermediate cover and interim cap that will be utilized prior to final capping of the landfill units.
  - (6) Discrete disposal facility Landfill designs shall provide include a sequential capping plan for closing operational units of the disposal facility during its life. Such Operational units shall be designed for a life not to exceed five ten (10) years unless otherwise approved by the Secretary.
- (m) The Landfill Gas Collection and Control System (LGCCS). Landfills shall have a system to ensure that combustible landfill gases created by decomposition of wastes are captured. This system shall be designed to be consistent with the following standards: creates combustible landfill gases, the landfill design shall assure the control and treatment of gases to prevent hazards to public health and safety, the environment or the creation of a nuisance
- (1) The LGCCS system shall achieve the following performance standards:
    - (A) The LGCCS system shall be designed to effectively manage all landfill gas collected.

- (B) All appurtenances shall be designed, operated and maintained to effectively collect and control landfill gases and to prevent emissions and related odors or nuisance conditions, or other hazards to public health and safety.
- (2) Gas extraction wells. Landfills shall incorporate the following gas extraction well standards into the facility design:
- (A) Vertical landfill gas extraction wells shall be located with overlapping radii of influence; and
- (B) Vertical landfill gas extraction wells shall be designed, constructed, operated and maintained:
- (i) with a wellhead that provides a means of controlling gas flow, a means of measuring liquid level, and a means of sampling temperature and gas quality;
  - (ii) to passively drain leachate and condensate to the leachate system;
  - (iii) to resist physical and biological clogging;
  - (iv) to minimize oxygen induction into the landfill gas collection and control system while under vacuum; and
  - (v) to terminate at least ten (10) feet above the primary liner system.
- (3) Gas collection system piping. The landfill shall be equipped with a gas collection system piping shall is designed to:
- (A) withstand the expected temperature of the landfill gas, the negative pressures of the vacuum system and to be durable throughout the life of the landfill;
- (B) passively drain condensate into the leachate collection system; and
- (C) incorporate a looped header piping system to provide a second means for extracting gas from each well. Headers shall be designed with flow control valves to isolate portions of the gas collection and control system when repairs are necessary.

- (4) The landfill design shall include a vacuum system, header and lateral piping sizing and layout that is designed to be capable of providing a minimum of ten (10) inches of water column of vacuum at each gas extraction well.
- (5) Extraction wells shall be subject to negative pressure adjusted to maximize the extraction without inducing oxygen migration or otherwise compromising landfill gas quality.
- (6) The landfill gas treatment and destruction design shall incorporate, as applicable, the following:
- (A) A totalizing meter capable of measuring the amount of gas collected by the landfill gas collection and control system. A means for sampling the temperature and quality of the aggregated landfill gas shall also be provided.
  - (B) If a combustion engine is used as the primary method of destroying landfill gas, a backup flare shall be provided to manage gas when the engine is not in operation. The backup flare shall be directly connected to the landfill gas collection and control system and shall be sized to destroy the peak gas flow occurring during the life of the landfill. Backup flares shall be constructed with automatic ignition capabilities.
  - (C) If the nature of the landfill gas poses a hazard to the condition and/or operational efficiency of the combustion equipment, gas pre-treatment shall be provided to protect and preserve the condition and operational efficiency of the equipment.
- (n) Final Cap System; Lined Landfills. Lined landfills shall have a The final capping cover system design for lined discrete disposal facilities shall include that is designed to be consistent with the following standards:
- (1) The system shall be integrated with the facility LGCCS. a gas collection layer;
  - (2) a infiltration-The hydraulic barrier layer shall provide a graded, stable base of earthen materials capable of protecting the overlying FML from the underlying waste mass. Intermediate cover may function as this base material if it is demonstrated to the sufficiency of the Secretary to meet this standard.
    - (A) consisting of a minimum 18 inches thick layer of earthen material with a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present or a permeability less than  $1 \times 10^{-5}$  cm/sec, whichever is less. This layer shall be free of

contaminants where the hydraulic barrier layer comes in contact with the flexible membrane liner.

(3) consisting of a minimum 18 inches thick layer of earthen material with a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present or a permeability less than  $1 \times 10^{-5}$  cm/sec, whichever is less. This layer shall be free of contaminants where the hydraulic barrier layer comes in contact with the flexible membrane liner.

(4) ~~an~~ The LLDPE flexible membrane liner shall be of with a minimum nominal thickness of 40-mil and.

(5) The final capping drainage layer shall effectively transmit infiltrated water off of the FML and into a toe slope drainage system. Stability calculations shall demonstrate that the design materials are capable of maintaining final cap stability for a precipitation event equivalent to a 100-year, 24-hour storm event.

a geocomposite drainage layer;

(6) The final capping protection layer shall be constructed of materials demonstrated to provide physical protection of the drainage layer (considering frost, burrowing, dessication etc.) and capable of preventing clogging of the drainage layer.

(7) The system shall incorporate a vegetative/erosion support layer that consists ing of a minimum of 6-inch thick earthen material layer capable of sustaining native plant growth.

(8) The Secretary may approve an alternative final cover design and/or materials that includes an infiltration layer and/or an erosion layer of different specifications or materials which are that does not comply with the standards in this section when the alternative design and/or materials are demonstrated to the sufficiency of the Secretary to achieve a minimum of equivalent performance to the requirements of this section.

(9) All components of the final capping system shall be designed to function over the full closure, post-closure, and custodial care life of the landfill.

(o) Final Cap System; Unlined Landfills. Unlined landfills shall have a final ~~cover~~ capping system that is designed to be consistent with the following standards: ~~The final cover system design for unlined~~

~~discrete disposal facilities shall include:~~

- (1) The system shall be constructed with:
    - (A) a minimum two-foot thick layer of earthen material with a permeability of less than  $1 \times 10^{-5}$  cm/sec and less than the permeability of the facility base soils, and
    - (B) a minimum six-inch thick earthen material layer capable of sustaining native plant growth, or some other earthen material, as approved by the Secretary, that has been demonstrated to achieve a minimum of equivalent performance.
  - (2) ~~Alternatively, Notwithstanding the requirements of (m)(1) of this section, to further minimize the threat to public health, safety or the environment, the Secretary may require that a final capping cover system for an unlined landfill as described comply with the standards as required by in subsection (b)(2)(M) § 6-1004(n) for lined landfills. of this section for lined discrete disposal facilities will be utilized for unlined discrete disposal facilities, if required by the Secretary.~~
  - (3) ~~The Secretary may approve alternative materials to the earthen material which are demonstrated to achieve equivalent performance.~~
- (p) Other Provisions Applicable to All Landfills. All landfills, lined and unlined, shall be designed to comply with the standards of this section.
- (1) The final capping cover system design for all either lined or unlined discrete disposal landfill facilities shall provide for a minimum slope of five (5) percent after complete settlement and a maximum slope of 33 percent at closure.
  - (2) ~~Discrete disposal facility~~ All landfill designs shall provide for the appropriate control of surface water run-on and run-off, as determined by the Secretary. At a minimum, designs shall include a management system to divert run-on, control run-off discharge, control erosion, sedimentation, siltation and flooding and minimize the generation of leachate.
  - (3) All new municipal solid waste ~~discrete disposal landfill~~ facilities and lateral expansions located in seismic impact zones must be have containment structures designed to resist withstand the maximum horizontal acceleration in lithified earth material for the site. A seismic impact zone is an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material will exceed 0.10g in 250 years. Note: A seismic impact zone can be identified

from the latest USGS seismic hazard map or a site specific seismic hazard study.

- (4) Notwithstanding any other provisions of these Rules, facilities used for the disposal of ash from waste incinerators ~~must~~ shall have liner and leachate collection systems and appropriate provisions for leachate treatment. Waste incinerator ash shall not be disposed with other waste within the lined cell.
- (5) A groundwater monitoring system shall be designed and installed with a sufficient distribution and number of monitoring wells at depths capable of yielding groundwater samples from aquifers potentially impacted by the landfill. Up-gradient and/or other monitoring wells shall also be established, as determined by the Secretary, for the determination of local background groundwater quality.

#### § 6-1005 Additional Disposal Facility Operating Standards

In addition to the standards otherwise enumerated in these Rules, the following general standards apply to the following special solid wastes:

In addition to the general operational requirements of Subchapter 7, the following requirements apply to disposal facilities:

- (a) All Categorical disposal facilities. Categorical disposal certifications shall ~~contain, at a minimum,~~ operate in accordance with the following operating and reporting conditions:
  - (1) Solid waste shall be covered and the disposal area shall be graded to promote runoff when closing the facility. A minimum cover shall consist of at least one-foot thickness ~~of a silty fine sand or other~~ earthen or other material capable of sustaining grassy vegetation. The Secretary reserves the authority to require additional ~~more frequent~~ cover requirements.
  - (2) Vehicle access. ~~A~~ Vehicle access to the disposal facility shall be controlled at all times by a fence or barrier ~~and~~ or a lockable gate. An attendant shall be present during hours of operation to assure that only the waste allowed by the categorical disposal certification is disposed of at the facility, to perform record keeping and to observe disposal ~~during the hours of operation;~~
  - (3) Siting limitations. ~~The~~ Applicable siting limitations, ~~set forth in subsection (d)(6) of this section~~ are to be maintained throughout the period of disposal and closure.

(4) Reporting.

- (A) The facility operator shall make reports to the Secretary on forms developed by the Secretary. ~~The facility operator~~ These reports shall be filed electronically file a report with the Secretary on a quarterly basis or as specified in the facility certification; and
- (B) Operators or owners shall report to the Secretary within five working days of the receipt of any information indicating non-compliance with any term or condition of certification or other operating authority.

(5) Additional requirements. The Secretary may require any additional operational requirements in the certification, including financial responsibility or capability requirements set forth in Subchapter 8 of these Rules, if it is determined necessary to protect public health, safety, or the environment.

(b) Development soils categorical disposal facilities. Development soils categorical disposal facilities shall operate in accordance with the following additional operating and reporting conditions:

- (A) Facilities shall, on a quarterly basis or as specified in the facility certification, provide copies of the originating site work as required by § 6-1006(a)(3)(A) prior to disposal at the site.
- (B) Waste shall be covered and graded to promote runoff at least once a year in accordance with the standards of this subsection.
  - (i) At a minimum, cover shall be capable of sustaining vegetation and suitable for the avoidance of nuisance dust conditions.
  - (ii) At closure, a minimum slope of five (5) percent and a maximum slope of 33 ½ percent shall be achieved.
  - (iii) Upon closure of the facility, the Permittee shall record a notation on the deed(s) to the facility property or on some other instrument that is normally examined during a title search as may be approved by the Secretary. This notation shall notify any potential purchaser of the property that the land has been used as a solid waste management facility.

(iv) The Secretary reserves the right to require cover requirements in addition to this subsection.

(c) Landfill facilities. The additional operational requirements for a landfill facility are as follows:

- (1) Before the facility may commence operations within a newly constructed cell, a professional engineer, licensed in the State of Vermont, shall certify that the cell was built in accordance with the requirements of the certification, approved plans, approved change orders, and furnish a complete set of as-built drawings to the Secretary.
- (2) A qualified operator familiar with ~~procedures and~~ the approved FMP facility management, facility certification, and the requirements of these Rules shall be on site during all hours of landfilling operations.
- (3) Properly maintained and calibrated scales ~~should~~ shall be used to measure the weight of solid waste received and disposed at the facility.
- (4) Adequate horizontal and vertical benchmarks shall be established prior to depositing any waste, and maintained throughout the life of the facility.
- (5) Non-implemented waste shall not be accepted for disposal.
- (6) Approved uniform solid waste and approved processed construction and demolition waste may be accepted, and only in accordance with the standards set forth in the Secretary's written approval of such waste.
- (7) The first lift of waste placed shall consist of select waste, with no large or rigid objects, that might cause damage to the liner system or stability. Placement of this first lift of waste shall be completed in a manner that prevents damage to the liner system from operating equipment and the select waste materials.
- (8) Lift development shall be carried out in accordance with the engineering plans, to ensure proper drainage and to prevent ponding.
- (9) The ~~owner and/or operator~~ permittee shall make provisions for standby equipment to be operational within 24 hours of breakdown of ~~the~~ primary equipment.

- (10) All cover and capping materials, and earthen or other approved alternative cover materials, when stored on-site, shall be managed to prevent the production of fugitive dust or the creation of nuisance or other impairment to public health, safety or the environment.
- (11) With the exception of construction and demolition waste landfills, daily cover material shall be in place at the end of each operating day, or at more frequent intervals if necessary, as needed to control disease vectors, fires and odors, to prevent blowing litter, and to discourage scavenging by animals, without presenting a threat to human health and the environment. This shall require compliance with the following:
- (A) Grading of cover materials shall be sufficient to accomplished to prevent ponding.
  - (B) In all areas, other than except the working face, which have not received waste material in any given operating day, the owner or operator shall take all steps necessary to ensure that the cover material remains functional and stable until such time as intermediate cover, interim cap or the final capping cover system is installed.
- (12) Construction and demolition waste landfills shall maintain cover pursuant ~~to the cover~~ requirements contained within facility's approved facility management plan.
- (13) Intermediate cover shall be placed as soon as possible on any area that is not anticipated to receive waste for a period of 3 months or more. Intermediate cover shall be replaced by an interim or final capping system if additional waste is not placed in the area within one year of intermediate cover installation. Extensions beyond the one-year deadline may be granted by the Secretary on a case-by-case basis.
- (14) Interim capping shall be performed in accordance with approved plans. To minimize infiltration and enhance gas collection, the operator may place interim cap in areas that are not anticipated to receive waste for a significant period of time. Interim caps shall:
- (A) be maintained and inspected to ensure performance and functionality, provide proper drainage, enable gas collection, prevent ponding; and
  - (B) be removed and replaced by the final capping system when it is determined that additional waste will not be placed in the area.
- (15) Within 30 days, the operator shall notify the Agency in writing when the facility has reached final grades, or capacity limits, or ceases accepting waste. The final cover capping

system shall be in place within 90 days of attaining final grades, final capacity, or of the last date of receipt of waste for disposal, whichever is applicable. ~~Grass or ground~~ Vegetative cover, or other approved final capping system, shall be established and functional within four (4) months of final ~~cover cap~~ installation. The Secretary may approve an extension to these deadlines if warranted by weather conditions ~~cause an extension to be necessary.~~

- (16) Disposal of regulated hazardous waste is prohibited. Industrial and commercial solid waste, sludge, septage or other materials that ~~which~~ may combine to form hazardous substances shall be deposited only as specified in the certification.
- (17) The groundwater compliance point shall be no more than 150 meters from the waste management unit boundary and be located on property owned by the landfill owners.
- (18) All components of the designed landfill system, including the leachate collection and removal system, and the landfill gas collection and control system, shall be maintained to achieve the performance standards of § 6-1004. If any component is individually incapable of achieving, or which prevents the entire system from achieving, the required performance standards, the Agency shall be notified, and it shall be replaced to comply with and achieve the performance standard. A certification amendment may be necessary if design changes are proposed in order to achieve the needed performance standard.

(d) Landfill facilities. The additional material specific operational requirements are as follows:

- (1) Sludge Disposal at a Municipal Solid Waste Landfills.
  - (A) Sludges shall only be disposed at municipal solid waste landfills
  - (B) Prior to the disposal of sludge, written approval from the Secretary is required.
  - (C) Sludges shall be at least 18 percent solids content to be accepted at the facility.
  - (D) Sludges that cannot pass the following tests are prohibited from disposal:
  - (E) Paint filter test (indicating that the materials do not contain free liquids); and
  - (F) Sludges shall not exhibit the hazardous waste characteristic of toxicity as determined using the Toxicity Characterization Leaching Procedure (TCLP); and

(G) Sludges shall be mixed at the working face to minimize odors, vectors, and bacteria and managed according to the approved FMP.

(2) Asbestos Disposal.

(A) ~~Any amount of asbestos waste exceeding ten cubic yards from a single source must be disposed of in a disposal facility certified to receive asbestos waste only, unless otherwise approved by the Secretary.~~

(B) Asbestos-containing waste (ACW) shall only be disposed of in a facility certified to receive asbestos-containing waste, and within a demarcated asbestos disposal area.

(C) Facilities accepting ACW shall: The operator of such a facility shall:

~~(i) Disposes of waste in an area of the certified facility away from the working face, but not along a final slope; and~~

~~(ii) Take appropriate measures to ensure the protection so all persons present during the disposal of any asbestos waste and who perform duties within the disposal facility;~~

~~(iii) Ensure that the incoming ACW is packaged in accordance with the Vermont Department of Health Regulations for Asbestos Controls, the Agency's Policy on the Management of Asbestos-Containing Waste and Vermiculite Insulation in Vermont, and that the ACW is transported separately from other wastes;~~

~~(iv) Take appropriate measures to ensure the protection of all persons present during the disposal of any ACW, and all persons who perform duties within the disposal facility. This shall include ensuring that transporters and facility personnel wear NIOSH-approved air purifying respirators whenever outside of a structure or a vehicle while ACW disposal operations are occurring.~~

~~(v) Maintain records on the generator, source and type of ACW asbestos waste, volume disposed, and dates of disposal;~~

~~(vi) Ensure that a water truck or other water source, and sufficient cover material is readily available at the time of ACW disposal operations;~~

- (vii) Mist the daily disposal cell prior to disposal;
  - ~~(viii) Inspect vehicle contents to determine whether all asbestos waste has been properly contained and labeled in accordance with Department of Health Regulations for Asbestos Control;~~
  - ~~(ix) Verify the content of contained asbestos waste from each generator;~~
  - ~~(x) Mist the contained asbestos waste as it is removed from the vehicle;~~
  - ~~(xi) Perform disposal in such a way as to ensure no airborne emissions;~~
  - (xii) Cover ACW immediately after placement with at least six inches of ~~appropriate cover~~ material, ensuring no breakage of contained ACW; asbestos waste;
  - (xiii) Provide training of employees in the asbestos waste disposal procedures; and
  - ~~(xiv) Ensure that the properly contained asbestos waste is transported in closed transport vehicle containers and that the containers have not been mechanically compacted prior to receipt at the disposal facility; and~~
  - (xv) Use a three-dimensional grid system to identify where the ACW waste is disposed.
- (3) ~~Amounts of non friable asbestos waste less than ten (10) cubic yards from a single source may be disposed of at a certified municipal solid waste landfill discrete disposal facility if the operator:~~

(A) ~~Meets the requirements of § 6-802(a)(1)(A), (B), (D), (E), (G), (H), and (J).~~

(4) Liquid Waste Disposal at Landfills.

(A) Containers holding liquid waste shall not be placed in a landfill unless:

(i) The container is similar in size to that normally found in household waste;

- (ii) The container is designed to hold liquids for use other than storage; or
  - (iii) The waste is household waste.
  - (B) Bulk or non-containerized liquid waste shall not be placed in a landfill unless the liquid waste is a household waste, other than septage.
  - (C) Absorbent material may be added, or dewatering of waste may be performed, prior to placement in a landfill so that waste is not considered a liquid waste.
  - (D) Written approval from the Secretary is required ~~Liquid wastes including septage and sludge. prior to the disposal of liquid wastes including septage and/or sludge, these wastes in any discrete solid waste landfill facility. , written approval from the Secretary is required.~~
  - (E) ~~Liquid containers with a capacity of greater than 30 gallons shall be cleaned prior to disposal.~~
- (5) Regulated Medical Waste. Landfills shall only dispose of regulated medical waste that has been documented as having been treated and shall: RMW which is treated as provided in subdivision (b)(2) of this section, and is accompanied by a certification of treatment or written alternative management method approval, may be disposed of at a certified municipal solid waste discrete disposal facility, if the operator:
- (A) ~~disposes of the waste in an isolated area within the working face except if incinerated and as precluded provided in § 6-606(b)(2)(C) § 6-1004(s);~~
  - (B) ~~takes appropriate measures to ensure the protection of all persons present during the disposal of any treated RMW and who perform duties within the disposal facility; and~~
  - (C) ~~cover the area immediately after placement with at least six inches of appropriate cover material, ensuring no breakage of contained RMW while exposed to an open-air environment.~~
  - (D) ~~For purposes of this subsection RMW shall be considered treated if:~~

~~(i) RMW is treated to the RMW treatment standard in a method approved by the Secretary; or~~

~~(ii) The applicant demonstrates to the satisfaction of the Secretary that the alternate method of management of the RMW to be implemented by the applicant protects human health, safety, and the environment.~~

(e) Alternative Landfill Daily Cover Materials.

- (1) Alternative materials for landfill daily cover material may only be utilized following approval by the Secretary, on a case-by-case basis. Written approval of the Secretary of the material shall be obtained by the facility provided prior to use.
- (2) To receive approval under this section, the owner or operator shall submit a request in accordance with subdivision (e)(3), and shall demonstrate to the sufficiency of the Secretary that the performance of the proposed ADC will control disease vectors, control fires, reduce odors, prevent blowing litter, discourage scavenging, assure aesthetic appearance and control moisture and erosion.
- (3) The request for approval shall include the following:
  - (A) The material type and name;
  - (B) A safety data sheet (SDS) for the material, if available;
  - (C) A detailed operations plan which demonstrates that the performance of the material will meet the performance criteria for alternative daily cover;
  - (D) Specifications of the material, procedures for placement, thickness and weather conditions during which the material can or cannot be used;
  - (E) A contingency plan for the use of earthen daily cover in the event that the ADC material cannot be used, is not available or is not performing adequately; and
  - (F) Any available documentation of the material's use at other landfills which addresses the materials performance and regulatory status.

- (4) A field demonstration may be requested by the Secretary prior to approval.
- (f) Response to Action Leakage Rate Exceedance. If flow within the secondary leachate collection system exceeds the monthly average action leakage rate of 20 gallons-per-acre-per-day, the landfill shall:
- (1) Notify the Secretary in writing within 24 hours of discovery of the exceedance;
  - (2) Take immediate actions to reduce or eliminate any leaks or other causes of the exceedance;
  - (3) Sample and analyze the primary and secondary detection liquid as provided for within the approved certification application, with results submitted to the Secretary within 5 days.
  - (4) Investigate and determine the location, size and cause of any leak(s) or other causes of the exceedance;
  - (5) Submit a preliminary assessment regarding the cause of the exceedance to the Secretary for approval within 14 days of the discovery of the exceedance, including a management plan for elimination of any leak; and
  - (6) Implement the approved management plan and/or any other requirements determined by the Secretary to be necessary for the protection of public health and safety and the environment.
- (g) Landfill Gas Management.
- (1) The landfill gas management system shall be designed and operated in order to effectively control landfill decomposition gas emissions and any related odors.
  - (2) Surface Emissions Monitoring (SEM) shall occur as provided for under an approved SEM plan and shall be performed for the detection of fugitive emissions.
  - (3) Emissions shall be managed to prevent off-site migration of landfill gases and explosive concentrations of landfill gases within structures on the landfill property. Monitoring shall be performed as required by the facility certification to document such management.
  - (4) If methane levels exceed 25% of the lower explosive limit (LEL) within structures or if the LEL is exceeded at the facility or at the property boundary, the owner and/or operator shall:

- (A) Immediately take all steps necessary to ensure protection of human health and safety;
  - (B) Within 24 hours of identification of the exceedance, notify the Secretary and all affected property owners;
  - (C) Within 30 days of identification, submit a remedial action plan for the gas releases to the Secretary for approval; and
  - (D) Implement the approved plan in accordance with a compliance schedule established within the approved plan.
- (h) Mining waste/mineral processing waste facilities. The permittee of a ~~At a minimum a mining waste or mineral processing waste landfill certification holder~~ shall notify the Secretary prior to the implementation of any change to the mining or manufacturing process or any change to the management of the mining waste that would chemically or physically alter the character of the mining waste.
- (1) ~~Report to the Secretary within five working days of the receipt of any information indicating non-compliance with any term or condition of certification or other operating authority.~~
  - (2) ~~Notify the Secretary, the local health officer, and the municipal legislative body of the affected municipalities about any unpermitted discharge or emission from a facility within 24 hours. Within seven days of the event, a written report shall be submitted to the Secretary, the local health officer and the selectpersons of the affected municipalities. The report shall identify the discharge or spill that occurred, the type, quantity and quality of the waste discharge or spilled and the actions taken to correct the problem. This condition applies in addition to the requirement of 10 V.S.A. §6617.~~
  - (3) ~~Adhere to any additional certification conditions, requirements, restrictions, as the Secretary may deem necessary to preserve and protect the public health and the air, groundwater and surface water quality. This may include requirements concerning the recording, reporting and inspections of the operation of the facility.~~

**§ 6-1006      Disposal Facility Applications; Additional Application Requirements**

- (a) Categorical disposal facilities. In addition to the general application requirements of § 6-505, an application for a categorical disposal facility shall include the following:

- (1) Except for development soil categorical disposal facilities, categorical disposal facilities shall submit the application requirements established in § 6-505.
- (2) Privately operated categorical disposal facilities shall pay fees in accordance with 3 V.S.A. 2822(i) and 2822(j)(6)(D).
- (3) The following shall be required for development soil categorical disposal facilities:
  - (A) The preparation of a site characterization that includes information necessary to determine all paths of emission or discharge to the environment and shall be sufficient to model potential contaminant transport.
  - (B) The site characterization must address, unless deemed non-applicable by the Secretary:
    - (i) Soils and surficial geology.
    - (ii) Bedrock geology.
    - (iii) Integrated groundwater geology and geochemistry, including flow direction, presence of multiple aquifer, preferential pathways and parameters for hydraulic conductivity and transmissivity.
    - (iv) Topography.
    - (v) Surface water.
  - (C) Demonstration of the following:
    - (i) That the isolation distances from the high seasonal water table, bedrock, and waters are sufficient to ensure that an emission or discharge from the facility will not occur or result in an exceedance of applicable environmental quality and public health standards and Rules;
    - (ii) That the isolation distance to public and private drinking water sources is sufficient to ensure that an emission or discharge from the facility will not adversely affect drinking water;

(iii) That the isolation distances to property lines or any residence, school, day care facility, hospital or nursing home are sufficient to ensure that the facility will not:

(I) result in nuisance dust off site of the facility;

(II) result in an unreasonable visual impact off site;

(III) unreasonably increase the level of noise detectable off site; or

(IV) otherwise adversely affect public health.

(iv) that the facility is in compliance with the Groundwater Protection Rule and Strategy, as may be amended, adopted pursuant to 10 V.S.A. Chapter 48, Groundwater Protection; Vermont Water Quality Standards, as may be amended, adopted pursuant to 10 V.S.A. Chapter 47; and the laws of Vermont.

(D) Any additional information that the Secretary deems necessary to evaluate potential impacts to the public health, and the air, groundwater, and surface water quality. This includes the origin site work required by §35-512 of the Investigation and Remediation of Contaminated Properties Rule.

~~(4) If the Secretary determines that the proposed categorical facility size, processes, disposal activities or the nature of the wastes require additional review and oversight, not provided by this section, the Secretary may require that the person apply for a full mining waste facility certification pursuant to § 6-503.~~

(b) Landfill facilities. In addition to the general application requirements of § 6-504, an application for a new landfill facility shall include the following:

(1) A hydrogeological study, which shall include all data, maps, cross-sections, schematics and calculations necessary to accurately determine the physical and chemical characteristics of the overburden and bedrock groundwater characteristics, any modelling to demonstrate worse-case scenario impacts to the groundwater and surface water systems and develop a groundwater monitoring plan which will demonstrate ongoing compliance with the Vermont Groundwater Protection Rule and Strategy at the groundwater compliance points of the facility.

(2) A Landfill Siting Report, which shall demonstrate compliance with the minimum siting requirements of these Rules.

- (3) A Landfill Design Plan, which shall but not limited to, design and construction specifications of the groundwater protection system, the environmental monitoring systems, the cover and final capping and other appurtenances associated with the facility.
- (4) Landfill Slope Stability Calculations.
- (5) A Seismic Impact Analysis, or a demonstration that seismic impact analysis is not necessary if the landfill is sited outside of a seismic impact zone.
- (6) An Odor Control and Surface Emissions Monitoring (SEM) Plan.
- (7) A landfill operation and maintenance plan, which shall include the sequence and direction of cell, lift and phase development, capacity and life expectancy for each phase and the sequence of placement of interim and final cover.
- (8) A Waste Control plan, which shall include a description of how waste will be received and monitored, identification and management of wastes requiring special handling (friable asbestos, sludges etc.), and the program for detecting and preventing disposal of unauthorized wastes (random load inspections etc.).
- (9) A Construction Quality Assurance and Quality Control plan which shall include a description of the observations and tests that will be used before, during and upon completion of construction to ensure that construction materials will meet the design and operation criteria.
- (10) A Landfill Closure Plan, which shall identify all the steps necessary to close the landfill at any point during its active life and the associated closure cost estimate necessary for establishing a financial responsibility instrument.
- (11) A Landfill Post-Closure Plan, which shall identify the monitoring and inspections that will occur following closure in order to maintain compliance with § 6-1008 of these Rules and the associated post-closure cost estimate necessary for establishing a financial responsibility instrument.
- (12) A FAA Notification. In a case where a ~~municipal solid waste discrete disposal~~ landfill facility is proposed to be located within a 5-mile radius of an airport runway, serving piston-driven or turbojet aircraft, the applicant shall also provide evidence that the applicant has notified the Federal Aviation Administration (FAA) and the affected airport have been notified. ~~Discrete disposal~~ Landfill facilities ~~which may attract birds~~ located within 10,000 feet of a runway used

by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft, shall not pose a bird hazard to aircraft and shall include a Bird Hazard Management Plan with their application.

(c) Mining waste; mineral processing waste landfills. In addition to the general application requirements of § 6-504, an application for a mineral waste and mineral processing waste landfill shall include the following:

- (1) ~~At the request of the Secretary, or as required by §6-1303(a)(1), T~~ the applicant shall provide the Secretary with a mining waste or mineral processing waste Waste Characterization report for all mining waste and mineral processing waste that is disposed of within the landfill. This report shall provide the showing the following information:
  - (A) A description of the mining and industrial process or processes that are taking place at the facility, including a process flow diagram.
  - (B) A detailed description of all materials processed which generate mining waste or mineral processing waste including identification of:
    - (i) Reagents, chemicals or additives that are used in the mining and industrial process and the point that they are added in that process, including the amount used per year and an estimate of the amount in the waste using a mass balance analysis. A copy of the material safety data sheets for each reagent, chemical or additive used in the industrial process shall be included; and
    - (ii) Natural contaminants (including heavy metals, metal salts, fluorine, radioisotopes, asbestos, arsenic) present in the material that is processed.
- (2) The annual amount of mining wastes or mineral processing wastes proposed to be treated, stored, or disposed.
- (3) The results of analytical tests of extract from representative samples of the mining waste or mineral processing waste to determine the concentration of metals, organic compounds, volatile compounds, semi-volatile compounds or other contaminants. The analytical results shall be presented in a format approved by the Secretary.
- (4) A statement that the applicant has examined alternatives to reduce the amount of reagents, chemicals, or additives in the mining waste or mineral processing waste. The statement shall include potential reuse and recycling options explored by the applicant for the waste. The

statement ~~should~~ shall also include a brief description of the alternatives considered and the conclusions reached.

- (5) Any additional information that the applicant or the Secretary believes would assist the Secretary in accurately characterizing the mining waste or mineral processing waste.
- (d) Except for facilities that qualify for a categorical certification under ~~§6-309~~ § 6-1002(a), the Secretary ~~may~~ cannot certify a ~~discrete~~ disposal facility unless it demonstrates that it is in compliance with the Groundwater Protection Rule and Strategy, , as may be amended, adopted pursuant to 10 V.S.A. Chapter 48, Groundwater Protection; Vermont Water Quality Standards, as may be amended, adopted pursuant to 10 V.S.A. Chapter 47; and the laws of Vermont.

#### § 6-1007      **Disposal Facility Closure**

- (a) A closure plan ~~is~~ shall be required for all facilities subject to closure requirements and that are operating on the effective date of these Rules and ~~to all~~ new facilities required to obtain certification under these Rules.
- (b) All facilities subject to closure ~~must~~ shall be closed in a manner that:
- (1) Minimizes the need for further maintenance related to the waste facility; and
  - (2) Controls minimizes or eliminates to the extent necessary to prevent threats to public health and safety and the environment, including post-closure emission or discharge of waste, waste constituents, leachate, contaminated runoff, and/or waste decomposition products into the groundwater or surface waters or the atmosphere.
- (c) The ~~approved~~ closure plan submitted at the point of application and approved by the Secretary will become a condition of ~~any the facility certification. or other operating authority issued by the Secretary.~~
- (d) An approved closure plan may be amended, subject to the approval of the Secretary, at any time during the active life of the facility, except that an amended closure plan may not be submitted for approval less than 90 days before receipt of the final volume of waste.
- (e) An amended closure plan ~~must~~ shall be submitted for approval to the Secretary whenever:
- (1) Changes in the operating plan or facility design affect the closure plan; or

- (2) There is a change in the expected year of closure; or
- (3) There is a change in the closure cost estimate or financial instrument.
- (f) When a certification modification is requested to authorize a change in the operating plans or facility design, a closure plan amendment ~~must~~ shall be requested at the same time. If the Secretary determines that a certification modification is not needed to authorize the change in operating plans or facility design, the a request for a closure plan amendment must shall be made submitted within 60 days after the change in plans or design occurs.
- (g) Notice of Closure. A certification holder shall send to the Secretary a notice of closure within 30 days after the date the final volume of waste is received at the facility.
- (h) Partial Closure. A facility may be partially closed prior to final closure. Any partial closure shall be performed in accordance with an approved closure plan and shall be subject to all of the requirements of this section.
- (i) Notification of facility use. Upon final closure of the facility, the owner shall record a notation on the deed(s) to the facility property or on some other instrument that is normally examined during a title search, as may be approved by the Secretary. This notation shall notify any potential purchaser of the property that the land has been used as a solid waste management facility.
- (j) Certification of Closure. As part of the final closure of a facility, the following must be submitted to the Agency:
- (1) Certification by the certification holder of the facility and by a professional engineer licensed in the State of Vermont that the facility has been closed in accordance with the specifications of the approved closure plan; and
  - (2) Verification that the owner of the property on which the facility is located has recorded a notation ~~on the deed to the facility property, or on some other instrument that is normally examined during title search, that will in perpetuity notify any potential purchaser of the property that the land has been used as a solid waste management facility.~~ as required by subsection (i) of this section; and
  - (3) a request for discontinuance of any existing financial assurance mechanism required by § 6-802.

§ 6-1008 Disposal Facility Post-Closure

- (a) Except for categorical disposal facilities, a post-closure plan is required for facilities that are operating on the effective date of these Rules, or are otherwise required to obtain certification under these Rules. A post-closure plan shall be required where waste or waste constituents remain at or in the facility after closure, and that are operating on the effective date of these Rules, or are otherwise required to obtain certification under these Rules.
- (b) The facility post-closure plan approved by the Secretary shall be a condition of the facility certification.
- (c) Upon written approval of the certification of closure from the Secretary, the Permittee shall implement the post-closure plan. A facility's post-closure care period shall continue until the owner or operator can demonstrate that the threat to public health and safety and the environment has been eliminated and the performance criteria of custodial care, § 6-1009, are achieved.
- (d) The post-closure plan shall identify the activities that will be carried out during the post-closure period to minimize the possibility of an emission or discharge and to demonstrate the achievement of the custodial care performance criteria. The plan shall include:
- (1) A description of the appropriate air, surface water, groundwater monitoring activities, to include:
    - (A) A plan for monitoring and maintenance of the landfill cover system, erosion control measures, drainage systems, groundwater monitoring networks, leachate collection systems, and gas control systems, as applicable. This shall include an annual evaluation of the landfill performed by a registered engineer or approved qualified professional in the month of May. This inspection shall assess whether the facility systems are sufficient to prevent impacts to human health or the environment.
    - (B) A groundwater monitoring plan developed to demonstrate compliance with the Groundwater Protection Rule and Strategy at the groundwater compliance points of the facility.
    - (C) A plan for detection monitoring at potentially impacted sensitive receptors (e.g., surface waters, residential wells), as applicable.
    - (D) A plan for explosive gas management and explosive gas monitoring, as applicable.

- (2) A description and schedule of any planned maintenance activities;
  - (3) The name, address and phone number of the person or office to contact about the facility during the post-closure period; and
  - (4) A post-closure cost estimate pursuant to § 6-805 and provisions for financial assurance pursuant to § 6-802 or § 6-803 as appropriate.
  - ~~(5) The approved post-closure plan will become a condition of any certification or other operating authority issued by the Secretary.~~
- (e) During the post-closure period, the owner or operator must maintain the integrity and effectiveness of the following:
- (1) The landfill cover system, access controls, erosion controls, drainage systems, groundwater monitoring networks, leachate collection systems, if applicable, and gas control systems, if applicable. This shall include making any repairs as necessary to correct for sparse vegetative cover, settlement, erosion, burrowing, deficiencies in the run-on and run-off systems and mowing the vegetative cover at least once a year; and
  - (2) Environmental and facility monitoring points.
- (f) A post-closure plan may be amended, subject to the approval of the Secretary, at any time during the active life of the facility or during the post-closure period.
- (g) An amended post-closure plan ~~must~~ shall be submitted for approval to the Secretary whenever:
- (1) Changes in the operating plan, facility design or closure plan, or events that occur during the active life of the facility or during the post-closure period, affect the post-closure plan; ~~or~~
  - (2) There is a change in the expected year of closure;
  - (3) There is a change to the post closure cost estimate and/or the post closure financial assurance document;
  - (4) There is a change in the post-closure monitoring activities described within § 6-1008(d); or

- (5) There is a change in the anticipated end use of the property. Proposed construction, operation or maintenance of any development upon a closed solid waste landfill shall demonstrate that there will be no compromise to the integrity of the landfill capping system, any landfill gas collection and removal system, leachate collection and removal system, surface water control system, environmental monitoring system, and access controls, or otherwise increase the environmental or public health and safety risk from the facility.
- (h) When a certification modification is requested to authorize a change in the operating plans or facility design, a post-closure plan amendment ~~must~~ shall be requested at the same time. In all other cases, the request for a post-closure plan amendment ~~must~~ shall be made within 60 days after the change in operating plans or facility design or the event that affect the post-closure plan occur.
- (i) As required by the approved post-closure plan and described in § 6-1008(d), the owner or operator shall submit the following to the Secretary:
- (1) Copies of the inspection reports shall be submitted within 30 days of completion of the inspection;
  - (2) Copies of all water quality reports shall be submitted within 60 days following the sampling event at the facility; and
  - (3) Notification within 7 days of any damage, malfunction or sub-standard performance at the facility.
- (j) ~~Upon the satisfactory demonstration by the certification holder that the post-closure care requirements have been completed in accordance with the approved post-closure plan, the Secretary shall, at the request of the certification holder provide a written notification of the completion of post-closure care.~~
- (k) ~~A notification provided under this section by the Secretary shall in no way preclude the liability provisions of 10 V.S.A. §6615.~~
- (l) At the point of this rule's promulgation, all owner/operators who have previously received a post-closure certification will have the existing certification replaced by the provisions of this subchapter and post-closure care management will be regulated under these Rules and the post-closure plan, post-closure cost estimates and financial assurance instruments that are approved at the point of certification expiration.

§ 6-1009 Disposal Facility Custodial Care

- (a) Upon the completion of Post-closure Care as approved in a facility post-closure care certification, the owner/operator shall submit a written request for post-closure care completion, along with accompanying documentation to the Secretary that demonstrates that the facility is stable and poses no threat to human health or the environment without further maintenance or monitoring beyond the associated provisions of custodial care outlined in § 6-1009(e).
- (b) The post-closure care completion request shall be prepared under the direction of a professional engineer, licensed in the State of Vermont, and, a minimum, address the following performance criteria standards:
- (1) Groundwater Quality.
    - (A) Concentrations of all contaminants attributed to the facility shall be stable, decreasing, or non-detectable over the most recent five-year period;
    - (B) Contaminants do not reach or exceed Groundwater Enforcement Standards (GWES) as established in the Groundwater Protection Rule and Strategy at the point of compliance. In the absence of a GWES, any US EPA Maximum Contaminant Level (MCL) or Vermont Health Advisory (VHA) would apply. Statistical significance of detections may be used to demonstrate compliance as approved by the Secretary.
  - (2) Landfill Gas Emissions.
    - (A) Methane concentrations, if monitored, in monitoring wells shall be stable, decreasing or non-detectable over the most recent five-year period;
    - (B) Methane emissions shall not have the potential of reaching or exceeding 25% of the Lower Explosive Limit (LEL) at the property boundary or in facility buildings or result in objectionable off-site odors.
    - (C) Any established gas venting system, including passive venting, is fully operational or is decommissioned when determined to be no longer necessary.
  - (3) Leachate Management. If required to be collected, leachate quality and quantity shall be demonstrated to be stable, decreasing or non-detectable over the most recent five-year period with no GWES, MCL or VHA exceedances for a minimum of two consecutive semi-annual

monitoring events.

(4) Final Cover Integrity.

- (A) Waste decomposition and settlement rates shall be shown to be negligible and that future settlement will not affect integrity of the final cover system;
- (B) Vegetative cover shall be uniformly well-established, stable and resistant to erosion.

(5) Surface Water Diversion System.

- (A) The surface water diversion system shall be shown to continue to prevent surface water flow on the capped landfill in accordance with the design requirements that imposed and approved during closure.
- (B) Surface water discharge from the facility does not and will not violate Vermont Water Quality Standards, or any requirements of the Clean Water Act, including the National Pollutant Discharge Elimination System (NPDES).

(6) Institutional Controls. Evidence shall be provided to demonstrate that institutional controls (e.g. land record notices, deed restrictions, access controls) are in place. A land record notice or other control approved by the Secretary to the Secretary at the time of the custodial care request.

(7) Corrective Actions. Documentation shall be provided to demonstrate that any mandated corrective actions (e.g. waste removal, structural improvements, groundwater remediation) have been successfully performed.

(8) End Use Plans. Documentation shall be provided that the facility owner has identified the end use activities to occur at the facility and that these activities will not pose a threat to human health or the environment.

(9) Adjoining Property Owner Notification. Written notification shall be provided to all adjoining property owners at the post of application for post-closure care cessation. Evidence of this notification should be provided along with the written request.

(c) If the Secretary determines that the findings of § 6-1009(b) cannot be made, the Secretary shall deny a request for post-closure care completion and notify the owner/operator of the basis for denial. The Secretary may require the continuation of post-closure care and/or implementation of corrective action.

and may consider modification of specific post-closure care activities.

- (d) If the Secretary approves the findings of § 6-1009(b), the Secretary shall provide the owner/operator with written approval of post-closure care completion and commencement of custodial care. Upon custodial care approval, the facility owner/operator shall properly close and abandon all groundwater monitoring wells in accordance with §12.3.5 of Appendix A of the Vermont Water Supply Rule, as may be amended, and discontinue any existing active gas control systems.
- (e) The approval for cessation of post-closure care and initiation of custodial care shall not relieve the owner/operator from taking necessary corrective actions to protect human health and the environment. This includes
- (1) Any necessary corrective actions as may be required by the Secretary under 10 V.S.A. § 6615:r
  - (2) Necessary continued maintenance (mowing, erosion repairs, etc.) performed on a schedule necessary to maintain performance of the landfill cap;
  - (3) Institutional controls to maintain access control and prevent risk; and
  - (4) The custodial care approval shall not release the owner/operator from potential liability to third parties resulting from releases which occur(red) during the operating life, closure period, post-closure period or custodial care period.
- (f) At the point of this rule's promulgation, all owner/operators who have previously received a post-closure certification which contained the approval to transition from post-closure care management to custodial care management will be approved for custodial care upon expiration of the certification.

## Subchapter 11 – Compost Facilities

### § 6-1101 Applicability

- (a) ~~Notwithstanding the other requirements of these Rules, t~~ This Subchapter applies to persons engaged in composting ~~and organics management activities~~ where the wastes materials being composted do not contain any amount of sewage sludge, domestic septage, or septage. Composting activities where the wastes materials being composted do contain any amount of sewage sludge, domestic septage, or septage shall be managed as diffuse disposal facilities subject to the provisions of Subchapter 13 of these Rules.
- (b) The siting requirements of ~~§6-1107~~ § 6-1106 and the liquid management standards of ~~§6-1108~~ § 6-1107 shall not apply to facilities permitted prior to March 15, 2012 ~~[effective date of this rule]~~, except if an expansion in the compost management area or an increase in processing capacity is proposed. A lateral expansion, or a significant improvement or an increase in processing capacity to at a facility permitted subsequent to March 15, 2012 [the effective date of this rule] shall require the facility to meet the siting requirements for the expansion and the liquid management standards for the facility. The Secretary may require a facility to meet the liquid management standards of §6-1106 as necessary to protect the environment.
- (c) ~~This subchapter does not apply to sewage sludge and septage. Refer to Subchapter 13: Residual Management Facilities, for regulation of these materials.~~

### § 6-1102 Organic Solid Waste Management Specific Definitions

As used in this Subchapter and Subchapter 12 the following additional definitions apply:

- (a) “Actively aerated” means forcibly inducing the flow of air through a compost pile or windrow utilizing mechanical means, such as electrically powered blowers and is accomplished by a pile design which incorporates perforated piping or other mechanisms to direct air flow through the pile.
- (b) “Aerated piles” means inducing natural flow of air through a free standing compost pile or windrow through proper compost pile design.
- (c) “Anaerobic digestion” means the controlled anaerobic decomposition of food residuals, manure, animal feed waste and other natural organic waste materials inside a containment structure or vessel, generally resulting in the production of methane-rich gas.

- (d) "Clean high carbon bulking agent" means the materials exempt as clean high carbon bulking agents by § 6-302(a)(16). ~~defined as clean high carbon bulking agents in the procedure entitled "Approved clean high carbon bulking agents for use at composting facilities" dated March 21, 2012 as may be amended.~~
- (e) "Compost" ~~means the product of composting; consisting of a group of organic residues or a mixture of organic residues and soil that have been piled, moistened, and allowed to undergo aerobic biological decomposition.~~ means a stable humus-like material produced by the controlled aerobic biological decomposition of organic matter through active management, but shall not mean sewage, septage, or materials derived from sewage or septage.
- (f) "Compostable" means a product, package or material that will safely decompose, in a composting system, into a humus-like material, that can be safely used as a beneficial soil amendment.
- (g) "Composting" means the ~~controlled biological decomposition of organic matter through active management to produce a stable humus-like material but shall not mean sewage, septage, or materials derived from sewage or septage~~ accelerated biological decomposition of organic matter under managed aerobic conditions resulting in compost.
- (h) "Compost facility operator" means a person who operates a composting facility regulated under this subchapter.
- (i) "Compost management area" means an area used for the unloading and storage of ~~feed stocks~~ feedstocks, and active and curing compost. Compost management area does not include the area used for the management of runoff or leachate and does not include areas where finished compost is stored.
- (j) "Compost tea" means a product produced by mixing finished compost with water and incubating the mixture to make a product used for soil enrichment. Compost tea producers may actively aerate the mixture or add additives to increase the microbial population during its production.
- (k) "Contaminant" means ~~any non biodegradable~~ any non biodegradable material which lends physical or chemical impurity to compost, including ~~but not limited to~~, glass, metal, plastics, and ceramics.
- (l) "Curing" means the final stage of composting in which stabilization of the compost continues after much of the readily metabolized material has decomposed. Curing occurs after material has met the treatment process for compost required by this subchapter.
- (m) "Digestate" means the remaining solid and liquid derived from the finished stage of in-vessel anaerobic digestion.
- (n) "Farm" means a parcel or parcels of land owned, leased, or managed by a person and devoted primarily to farming, as defined and determined by Vermont Required Agricultural Practices Rule (RAPs). ~~place~~

~~used for agricultural or horticultural use and/or cultivation or management of land for orchard crops or food, fiber, Christmas trees, maple sap and maple syrup products, animal husbandry, fish or bees or a greenhouse operation, on-site storage of agriculture products principally produced on the farm or the on-site production of fuel or power from agriculture products or waste principally produced on the farm.~~

- (o) "Food processing residual" means the remaining organic material from a food processing plant and may include whey and other dairy, cheese making, and ice cream residuals or residuals from any food manufacturing process excluding slaughtering and rendering operations. It does not include materials from markets, groceries, or restaurants. Typically and historically regulated by the Indirect Discharge Program.
- (p) "Food residual" means ~~compostable~~ source separated and uncontaminated material that is derived from processing or discarding of food and that is recyclable, in a manner consistent with 10 V.S.A. § 6605k excluding residuals derived from the processing of meat and meat products such as animal slaughtering and rendering operations. Food residual may include preconsumer and postconsumer food scraps. "Food residual" does not include meat and meat-related products when these materials are composted by a resident on site.
- (q) "Leachate" means liquid containing dissolved, suspended, or miscible materials that passes through or emerges from raw feedstocks and the active compost area. "Leachate" does not include liquid containing dissolved, suspended, or miscible materials that pass through or emerges from the area where compost is curing, or storage of finished product.
- (r) "Leaf and yard residual" means compostable untreated vegetative matter, including but not limited to grass clippings, leaves, Kraft paper bags and brush, which are free from contaminants. It does not include such materials as pre- and post-consumer food residuals, food processing residuals or soiled paper.
- (s) "Organic Solid Waste" means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose. Examples of organic solid wastes include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human feces) is not included in this definition.
- (t) "Passively aerated" means inducing the flow of air through a free standing compost pile or windrow.
- (u) "Processed food residuals" are food residuals which have been slurried into a condition which is suitable to being directly pumped into a holding tank.
- (v) "Specified risk material" means tissues of ruminants that could contain Bovine Spongiform Encephalopathy causing prions as defined by the United States Department of Agriculture. These tissues include the tonsils, skull, brain, trigeminal ganglia (nerves attached to brain and close to the skull

exterior), eyes, spinal cord, distal ileum (a part of the small intestine), and the dorsal root ganglia (nerves attached to the spinal cord and close to the vertebral column) of cattle aged 30 months or older and the tonsils and distal ileum of the small intestine of all cattle.

(w) "Vermicomposting" means a method of composting utilizing red worms or similar worms to breakdown organic material into a nutrient rich soil amendment.

~~(x) "Unprocessed food residuals" are collected directly from businesses and residences and are not in a slurried form.~~

(y) "Untreated wood residual" means untreated wood as defined in § 6-201.

### § 6-1103      **Organics Solid Waste Management Specific Exemptions**

(a) The following activities are exempt from the requirements of this subchapter:

(1) A person(s) importing for composting 100 cubic yards or less annually of combined feedstocks per year of total organic solid wastes, of which not more than 42 cubic yards per year are food residuals and food processing residuals is not subject to regulation under these Rules. This exemption does not apply to the collection and composting of off-site generated animal offal, slaughterhouse wastes, or animal mortalities.

(2) Facilities that manage ~~less than~~ 3,000 cubic yards or less per year of solely leaf, yard, plant and untreated wood residuals provided that not more than 20 percent of the residuals are grass clippings.

~~(3) Food residuals when anaerobically digested provided that the residuals do not exceed one five percent of the design capacity of the digester.~~

(4) Facilities that compost solely any of the following materials, provided the compost is used for soil enrichment:

(A) any amount of animal manure;

(B) any amount of absorbent bedding; and

(C) any amount of clean high carbon bulking agent.

- (5) Facilities located on a farm that compost vegetative farm waste from a farm.
- (6) The composting of ~~less than~~ 1,000 cubic yards or less of food processing residuals per year when the composting takes place on a farm.
- (7) Facilities located on a farm that compost animal mortalities ~~and or~~ slaughter house waste from the farm's livestock.
- (8) The disposal of animal mortalities when disposed on a farm when the mortalities are from the farm.
- (9) Burial of four or less animal carcasses per year when the disposal occurs in accordance with the following siting requirements:
  - (A) One-hundred-fifty (150) feet from the property line or surface waters,
  - (B) three (3) feet above the seasonal high water table and bedrock,
  - (C) two hundred feet from public or private drinking water sources supplies; and,
  - (D) is covered with a minimum of 24 inches of soil; and
  - (E) is not located in a floodway.
- (10) Household pet burial on the owner's property.
- (11) The treatment or disposal of animal, bird, and fish species resulting from an emergency declaration to control the spread of disease, provided that the disposal activities occur in consultation with the Secretary. This exemption shall be contingent on the following:
  - (A) In the case of domestic animals, the declaration ~~shall be~~ is issued by the Secretary of Agriculture, Food & Markets, in accordance with the authorities provided under 6 V.S.A. §§ 1159 and 1464.
  - (B) In the case of wild animal, bird, and fish species, such declaration shall be issued by the Commissioner of the Department of Fish and Wildlife in accordance with the authorities provided under 10 V.S.A. § 4136.

(12) Pet cemeteries. For purposes of this subdivision a pet cemetery means any plot of ground used, or intended to be used, for the permanent burial or disposition of the remains of a pet in a grave, a mausoleum, a columbarium, a vault, or other receptacle.

(13) Organic Solid Wastes that meet the Vermont Agency of Agriculture, Food & Markets' Commercial Feed Law when those materials are used as animal feed on a farm.

#### § 6-1104 Compost Facility Types

(a) Small Composting Facility. ~~This section applies to composting facilities~~ A facility is designated as a Small Composting Facility under these Rules if the facility that:

- (1) composts 5,000 cubic yards per year or less of total organic materials of which not more than 2,000 cubic yards per year ~~or less~~ are food residuals or food processing residuals;
- (2) manages 10,000 cubic yards or less per year of solely leaf, yard, and or untreated wood residuals; and
- ~~(3) do not compost animal mortalities, slaughterhouse waste, or offal; and~~
- (3) has ~~ve~~ a compost management area of four acres or less in size; ~~or.~~
- ~~(4) A facility that is exempt from Act 250 pursuant to 10 V.S.A. § 6001 (3)(D)(vii)(VI) is not eligible to be registered as a small compost facility under this section and shall apply for a permit as a medium compost facility under § 6-1105 § 6-1109(a).~~
- ~~(5) Composting facilities that compost animal mortalities, slaughterhouse waste, or offal are not eligible for registration as a small compost facility under this section and shall apply for a permit as a medium compost facility under § 6-1109(a).~~
- (6) Facilities registered ~~under this section~~ and in compliance with this Subchapter section, the facility registration, and its facility management plan shall be considered operating consistent with accepted composting practices and subject to the permit limitations of 10 V.S.A. 6605j.

(b) Medium Scale Composting Facility – A facility is a medium scale composting facility under these Rules if the facility:

(1) ~~This section applies to composting facilities that has~~ve a compost management area of less than 10 acres in size; ~~and or~~

(2) composts the following materials:

(C) more than 10,000 cubic yards per year of leaf and yard waste; or

(D) ~~compost~~ 40,000 or less cubic yards per year of total organic materials consisting of any of the following feedstocks:

(i) not more than 5,000 cubic yards per year are food residuals or food processing residuals.

(ii) not more than 10 tons of animal mortalities, slaughterhouse waste or offal ~~animal offal, and butcher waste~~ per month.

(3) is a vermicomposting facility that is not eligible for the exemption provided by § 6-302(a)(17).

(c) Large Composting Facility – A facility is a large composting facility under these Rules if the facility:

(1) Has a compost management area greater than 10 acres in size; or

(2) Composts more than 40,000 cubic yards per year of total organic materials or exceeds 5,000 cubic yards per year of food residuals or food processing residuals; or

(3) ~~This section applies to composting facilities if it does not qualify for a de minimis exemption, a small composting facility registration or a medium composting facility certification. that do not qualify medium categorical composting certification under § 6-1105.~~

#### § 6-1105 **Small Composting Facilities Facility Registration – Accepted Composting Practices**

(a) Registration. No person shall operate a small composting facility without registering that facility with the Secretary on a form provided by the Secretary and providing ~~a copy of the facility management plan. A copy of the facility management plan and registration form shall also be provided to the solid waste planning entity. At a minimum the form shall contain~~ the following:

(1) The name and contact information for the facility registrant.

- (2) The name and location of the facility registered under this section.
  - (3) A certification by the facility registrant that the facility has been sited, designed, constructed, and will be operated in accordance with these Rules.
  - (4) A statement by the facility owner that a copy of the registration and facility management plan was sent to the municipality and to the solid waste ~~planning~~ management entity where the facility is located.
  - (5) ~~Prior to submitting a registration, the applicant shall obtain a~~ A letter from the local solid waste planning entity that the facility is acceptable under its plan.
- (b) Small Compost Facility Siting. ~~A composting operation registered to operate under this section shall not construct the e-Compost management areas and any or the area(s) used to treat leachate and run-off from composting activities shall not be sited or operated within any of the following siting minimum distances. The following siting distances shall not affect another property owner's ability to conduct activities not regulated by these Rules:~~
- (1) ~~minimum~~ of 300 feet from the nearest public or private water supplies not owned by the applicant;
  - (2) ~~minimum~~ of 3 feet from seasonal high water table and bedrock;
  - (3) ~~minimum~~ of 100 feet from surface water;
  - (4) ~~minimum~~ of 100 feet from all property lines and edge of public roads; and
  - (5) ~~minimum~~ of 300 feet from all residences not owned by the applicant and from all public buildings;
  - (6) The 100 year flood plain as shown on the National Flood Insurance Maps;
  - (7) A class I or class II wetland or its associated buffer zone unless a conditional use determination has been issued by the Secretary;
  - (8) A class III wetland unless authorized by the Secretary;

- (9) Any location within a municipality where that municipality has prohibited composting as a part of its zoning bylaws;
- (10) Within a designated downtown or village center, unless the municipality has expressly allowed composting in that area.
- (11) Within 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft.

(c) Small Composting Facility Design.

- (1) Liquids Management. Composting ~~activities~~ facilities shall be ~~managed~~ designed in a manner that prevents discharges off site and to surface waters. At a minimum, the facility shall ~~conform~~ meet to the following design ~~to meet that~~ standards:
  - (A) ~~Clean~~ Stormwater run-off from up-gradient areas shall be diverted from running onto the compost management area and the ~~vegetative treatment area used for the management of run-off and leachate from the compost management area.~~ This shall be accomplished using berms, swales, and other similar controls.
  - (B) The compost management area shall be constructed with an average slope between two and five percent. ~~The slope and shall be maintained so that to prevent ponding in the compost management area will not occur.~~
  - (C) All compost curing run off and leachate shall be managed on property owned or leased by the registrant.
  - (D) ~~A registrant shall manage~~ Leachate from the compost management area shall be managed through the use of a vegetative treatment area ~~for the treatment of leachate and stormwater run-off from the compost management area~~ designed and maintained in the following manner:
    - (i) The vegetative treatment area shall be, at a minimum, equal to the area of the compost management area.
    - (ii) The vegetative treatment area shall be equal in length to the contributing length of the compost management area in the downslope direction.
    - (iii) The vegetative treatment area shall be located on an area with a slope of less than or equal to five percent and shall be managed to prevent the ponding or pooling of

liquids in the area.

- (iv) The vegetative treatment area shall be maintained and operated to slow the movement of liquids ~~off the site~~ and promote the uptake of liquids and nutrients into the vegetation ~~or infiltration of liquids into the soils~~.
- (v) Any berms, swales or ditches used to convey water from the compost management area to the vegetative treatment area shall use finished compost, bark, woodchips, stone, and fabric in the construction as is necessary to filter suspended solids and excess nutrients from leachate.

(d) Small Composting Facility Operating Standards

(1) Prohibitions. A Small Composting Facility ~~operation~~ registered to operate under this section shall not conduct any of the following prohibited activities:

- (A) The discharge of any waste or wastewater from the operation of the facility into surface waters or wetlands.
- (B) The construction of any basin, trench, pond, or depression with the purpose of discharging run-off or leachate to groundwater.
- (C) The operation or management of the facility in a manner that causes objectionable off-site odors, noise, vectors or other a nuisance conditions.
- (D) The composting of animal mortalities, slaughterhouse waste, or offal.
- (E) The creation of a threat to public health and safety or the environment.

(2) Feedstocks and compost recipe. Small composting facilities shall ~~not create a threat to public health and safety or the environment and shall~~ be managed to properly compost materials and destroy pathogens, ~~and not create objectionable odors, noise, vectors or other nuisance conditions~~. The facility shall ~~conform to meet~~ the following ~~to meet that~~ operational standards:

- (A) The compost feedstocks shall be limited to those listed on the procedure entitled "*Approved feedstocks for small facilities registered to operate under acceptable composting practices*" dated ~~[date of signature]~~ March 21, 2012 as may be amended.

- (B) The clean high carbon bulking agents shall be limited to those listed as exempt high carbon bulking agents in § 6-302(a)(16) ~~on the procedure entitled "Approved clean high carbon bulking agents for use at composting facilities" dated March 21, 2012 as may be amended.~~
- (C) All recipes shall be designed to ensure that the initial compost mix results in:
- (i) A carbon to nitrogen (C:N) ratio of 20:1 to 40:1
  - (ii) A bulk density of less than 1,200 pounds per cubic yard
  - (iii) A pH in the range of six to eight S.U.
- (D) Compost piles shall be optimized for the composting methods and equipment used and shall be sized to maximize operational maneuverability and to minimize compaction and odor potential. ~~The pile size and windrow or pile, at the time of construction, shall be not greater than ten feet at the base and a maximum height of six feet.~~
- (E) Food residuals and ~~or~~ food processing residuals shall be specific management ~~as follows:~~
- (i) ~~The~~ Food residuals and food processing residuals shall be incorporated into the compost mix the same day the residuals arrive at the facility; or
  - (ii) The residuals shall be in a sealed container, or immediately covered with finished compost or untreated wood and incorporated into the compost mix within 72 hours of the residuals arrival at the facility.
- (F) Inspection of compost feedstocks. The compost feedstocks shall be inspected upon delivery to the facility and all non-compostable material removed either manually or mechanically. All non-compostable materials shall be disposed of at a certified solid waste facility.
- (G) Treatment of food and food processing residuals. ~~The~~ All facilities ~~composting of food or food processing residuals shall use~~ meet one of the following treatment methods:
- (i) If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least ~~13 of 16~~

~~consecutive 15 days, during which time the materials~~ Windrows must be turned not fewer than five times with a minimum of 3 days between turnings to ensure that all materials reach this temperature. The 15 days do not have to be consecutive.

- (ii) If using an actively or passively aerated static pile or the within vessel method (including bins), the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days.

(H) Compost stability. All finished ~~products~~ compost shall meet the following prior to marketing or distribution for sale:

- (i) Temperature decline to near ambient conditions (less than 100° F) provided that the decline is not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting feedstocks.

- (ii) At a minimum, at least two of the following analyses shall be required annually if the Agency suspects, either through site inspections or complaint investigations, that compost is being distributed off-site before it matures:

- (I) Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.

- (II) Specific oxygen uptake. To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.

- (III) Solvita™ Compost Maturity Test. To be classified as stable the product must exhibit a ~~equal~~ maturity index score equal or greater than six.

- (IV) Carbon dioxide evolution. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.

- (V) Ammonia/Nitrate ratio of less than 3.

(VI) Plant tests conducted in a manner approved by the Agency.

- (I) Fecal Coliform and Salmonella Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters annually.

| Parameter      | Maximum Total Concentration           |
|----------------|---------------------------------------|
| Fecal Coliform | 1,000 MPN/g total solids (dry weight) |
| Salmonella     | 3 MPN/4 g total solids (dry weight)   |

- (J) Metals Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters must be completed annually.

| Parameter | Maximum Total Concentration (mg/kg dry weight) |
|-----------|--|
| Arsenic   | 15   |
| Cadmium   | 21   |
| Chromium  | 1,200  |
| Copper    | 1,500  |
| Lead      | 300  |
| Mercury   | 10   |
| Nickel    | 420  |
| Zinc      | 2,800  |

- (K) Screening of finished compost. The finished compost shall be screened to remove any remaining physical contaminants. All ~~contaminant~~ non-compostable materials shall be disposed of at a certified solid waste facility.

- (L) The Secretary may require additional testing of finished compost, groundwater, leachate and run-off as necessary to protect human health and the environment.

- (3) Recordkeeping and Reporting requirements. The compost facility shall keep records for the following activities at the facility office in a dry and secure location available for review for five years. At a minimum, records on the following shall be retained:

- (A) Temperature records for active compost piles sufficient to demonstrate compliance with the treatment requirements:

- (i) If composting food residuals, the temperature of the compost windrows shall be monitored on a daily basis during the treatment process in accordance with an approved facility management plan. The temperature should be monitored at one foot and three-foot depths at least every five linear 15 linear feet of windrow at the base of the windrow while achieving the treatment standards established in § 6-1105(d)(2)(G) subsection (j)(4) of this section.
  - (ii) If composting food residuals in an aerated static pile, passive aerated pile or in-vessel method temperatures records shall be kept for the 3 day treatment period.
- (B) weekly amounts, recorded in either tons or cubic yards, and types, of incoming compost feedstock;
  - (C) annual amount of compost produced in cubic yards;
  - (D) annual amount of physical contaminants disposed of and;
  - (E) copies of all analytical results for maturity, bacteriological and metals testing as required by § 6-1105(d)(2)(H) above ~~subsection (g)(5), (6) and (7).~~
- (4) Leaf and yard residual composting facilities operational requirements. Facilities that compost solely leaf and yard residuals shall also meet the following requirements:
- (A) Pile Construction. Incoming leaf and yard residuals, and untreated wood must, within one week of delivery to the site, be formed into windrow piles no more than ~~ten~~ 12 feet high by ~~15 to~~ 20 feet wide at the base, or other configuration that provides for the proper conditions under which aerobic composting will occur. Windrows must run with the slope of the land such that runoff is not trapped by the windrows. Leaf and yard residual compost facilities may use horse manure within the composting process.
  - (B) Grass clippings must be incorporated, and thoroughly mixed into established windrows at a ratio of no more than one-part grass to three parts leaf or wood residuals by volume within 24 hours of receipt at the facility. The composting facility must not accept grass clippings unless there is a sufficient volume of high carbon ~~feed-stocks~~ feedstocks available to meet this ratio.
  - (C) Windrow turning. The windrow must be turned at least four times per year. There must be no more than six months between any two turnings.

- (D) Distribution. Compost must be distributed for use within one year of completion of the compost process, and within three years of receipt of the raw materials for composting.
  - (E) Fire control. The operator must develop and implement a plan to prevent spontaneous combustion in residual and compost piles at the site.
- (5) Facility operator training. The facility operator shall complete an approved operator training course within six (6) months of filing the registration with the Secretary.

~~Note: A list of approved operator training requirements can be found at the Agency's website.~~

- (e) If the Secretary determines that the proposed facility size, processes, activities, or the nature of the composting activities require additional review and oversight not provided by this section, the Secretary may require that the applicant apply for a certification pursuant to ~~§6-1105~~ § 6-1104(B).

**§ 6-1106 Medium and Large Compost Facility Siting**

- (a) Applicability. All Medium and Large compost facilities, shall be are not subject to the specific siting requirements of this section (i.e., the general siting requirements provided in Subchapter 7 of these Rules, do not apply).
- (b) ~~A composting operation registered to operate under this section shall not construct the e-Compost management areas and any or the area(s) used to treat or store leachate and run-off from composting activities shall not be sited or operated within any of the following unless otherwise approved by the Secretary siting minimum distances. The following siting distances shall not affect another property owner's ability to conduct activities not regulated by these Rules:~~
  - (1) ~~minimum~~ of 300 feet from the nearest public or private water supplies not owned by the applicant;
  - (2) ~~minimum~~ of 3 feet from seasonal high water table and bedrock;
  - (3) ~~minimum~~ of 100 feet from surface water;
  - (4) ~~minimum~~ of 100 feet from all property lines and edge of public roads; and
  - (5) ~~minimum~~ of 300 feet from all residences not owned by the applicant and from all public buildings;

- (6) The 100 year flood plain as shown on the National Flood Insurance Maps;
- (7) A class I or class II wetland or its associated buffer zone unless a conditional use determination has been issued by the Secretary;
- (8) A class III wetland unless authorized by the Secretary;
- (9) Any location within a municipality where that municipality has prohibited composting as a part of its zoning bylaws;
- (10) Within a designated downtown or village center, unless the municipality has expressly allowed composting in that area.
- (11) Within 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft.
- (12) 1,000 feet of a residential housing unit located within an area that has a residential housing density of 3 units per acre or greater.

**§ 6-1107 Medium and Large Compost Facility Design Standards**

**(a) Medium and Large Compost Facilities**

- (1) ~~Clean~~ Stormwater run-off from up-gradient areas shall be diverted from running onto the compost management area and the area used for the management of run-off and leachate ~~from the compost management area. This shall be accomplished~~ using berms, swales, and other similar controls as approved by the Secretary.
- (2) The compost facility shall not have an unpermitted discharge of leachate or runoff to a surface water.
- (3) Storage and management of untreated material. All raw feedstocks and composting piles material that ~~has~~ not met the treatment standard defined in ~~§6-1110(d)~~ § 6-1108(b)(4), excluding leaf and yard residuals and high carbon bulking agents, shall be stored and managed in an area that meets the following design standards:
  - (A) ~~Has located on~~ an average slope of between two and five percent. ~~The slope shall be and is maintained so that ponding in the compost management area will not occur; and. The area for this material shall be located on the following:~~

- (B) Is on an impervious pad; or
- (C) Has been granted approval by the Secretary for use of improved native soils as approved by the Secretary; or
- (D) Is a compacted gravel pad meeting a hydraulic conductivity of  $1 \times 10^{-7.5}$  cm/sec or alternative standard as approved by the Secretary.

(4) Leachate storage.

- (A) All facilities subject to the standards of this subsection shall be required to collect and treat all leachate from the active composting area in a lined pond, swale or lagoon. The leachate storage area shall meet the following construction design standards:
  - (i) be single lined with a natural or synthetic liner that has a maximum permeability of  $1 \times 10^{-7}$  cm/sec, in a design approved by the Secretary; or
  - (ii) be constructed in accordance with Natural Resource Conservation Service code 378 standards and approved by the Secretary; or
  - (iii) be a waste management lagoon storage facility constructed consistent with the Agency of Agriculture, Food, and Markets standards; or
  - (iv) an alternative structure as proposed which meets the equivalent hydraulic conductivity design standards above as approved by the Secretary.
- (B) Leachate storage areas structures shall be designed to, at all times, maintain a minimum of two feet of freeboard and be isolated from public access with fencing prevent overflow at all times and to prevent public access.

(5) Treatment of leachate. Acceptable leachate treatment options include the following:

- (A) Collection and treatment at a permitted wastewater treatment facility;
- (B) Collection and application to active composting piles in a manner approved by the Secretary;
- (C) Treatment on site in a manner approved by the Secretary;

(6) Acceptable treatment for run-off collected from compost curing areas include:

- (A) Collection and treatment at a permitted wastewater treatment facility;
- (B) Collection and application to ~~active~~ composting piles in a manner detailed in the facility management plan and approved by the Secretary, if used to wet compost that has achieved the treatment standards established in §6-1110(d) § 6-1107(d)(4).
- (C) Treatment on site in a manner approved by the Secretary;
- (D) Collection and land application under a nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 – Nutrient Management ~~with~~ provided that the following restrictions shall apply:
  - (i) Application rate shall not exceed an appropriate agronomic rate based upon soil analysis and the corresponding agronomic recommendations. In no cases shall an application rate exceed 25,000 gallons per acre per day.
  - (ii) Liquid application shall not occur when the fields are saturated, frozen, or snow covered or when ponding occurs.
  - (iii) The application shall not result in an offsite discharge or a discharge to surface water.

**§ 6-1108 Medium and Large Compost Facility Operating Standards**

- (a) Medium and Large Scale Composting Facilityies shall comply with the following operating standards:
  - (1) The facility shall operate in accordance with its approved facility management plan and the requirements of this section.
  - (2) The facility shall be managed to properly compost materials, destroy pathogens, not create a threat to public health and safety or the environment, and not create objectionable odors, noise, vectors or other nuisance conditions.
  - (3) The ~~design, construction, and~~ operation of the facility shall comply with the Vermont Groundwater Protection Rule and Strategy as may be amended.
  - (4) Unless an alternative is approved as a part of the facility management plan the initial compost mix shall result in:

- (A) A carbon to nitrogen (C:N) ratio of 20:1 to 40:1.
  - (B) A bulk density of less than 1,200 pounds per cubic yard.
  - (C) A pH in the range of six to eight S.U.
- (5) ~~A facility that uses food residuals or food processing residuals as a compost feedstock shall comply with the requirements of §6-1110.~~
- (6) A facility that uses animal mortalities, offal, or butchering waste as a compost feedstock shall comply with the requirements of ~~§6-1112~~ § 6-1108(c).
- (7) ~~A facility that uses leaf and yard residuals as a compost feedstock shall comply with the requirements of subsection (f) of this section.~~
- (8) Compost Stability. Finished products marketed or distributed for sale shall be tested for two of the following methods listed below:
- (A) Temperature decline to near ambient conditions (less than 100° F) when not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting feedstocks.
  - (B) Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.
  - (C) Specific oxygen uptake. To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.
  - (D) Solvita™ Compost Maturity Test. To be classified as stable the product must exhibit a maturity index score equal or greater than six.
  - (E) Carbon dioxide evolution or Respiration Rate. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.

(F) Reduction in organic matter (ROM) of at least 60 %

(G) Plant tests conducted in a manner approved by the Agency.

(9) Metals Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following metals concentrations. One test for these parameters shall be conducted annually.

| <b>Parameter</b> | <b>Maximum Total Concentration<br/>(mg/kg dry weight)</b> |
|------------------|---|
| Arsenic          | 15  |
| Cadmium          | 21  |
| Chromium         | 1,200   |
| Copper           | 1,500   |
| Lead             | 300   |
| Mercury          | 10  |
| Nickel           | 420   |
| Zinc             | 2,800   |

(10) Fecal Coliform and Salmonella Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters shall be conducted annually.

| <b>Parameter</b> | <b>Maximum Total Concentration</b>    |
|------------------|---------------------------------------|
| Fecal Coliform   | 1,000 MPN/g total solids (dry weight) |
| Salmonella       | 3 MPN/4 g total solids (dry weight)   |

(11) The Secretary may require additional testing of, finished compost, groundwater, leachate and run-off may be required dependent on the approved feedstocks accepted at the facility. as necessary to protect human health and the environment.

(12) Facility operator training. A minimum of one person at the facility on any operating day shall have completed an approved operator training course within six months of the issuance of the certification. A list of approved operator training requirements can be found at the Agency's website.

(13) Leaf and yard residual facilities. Facilities that solely compost leaf and yard residuals shall also meet the following requirements:

- (A) Pile Construction. Incoming leaf and yard residuals and untreated wood must, within one week of delivery to the site, be formed into windrow piles no more than ten feet high by 15 to 20 feet wide at the base, or other configuration that provides for the proper conditions under which aerobic composting will occur. Windrows must run with the slope of the land such that runoff is not trapped by the windrows. Leaf and yard residual compost facilities may use horse manure within the composting process.
  - (B) Grass. Grass clippings must be incorporated, and thoroughly mixed into established windrows at a ratio of no more than one part grass to three parts leaf or untreated wood by volume within 24 hours of receipt at the facility. The composting facility must not accept grass clippings unless there is a sufficient volume of high carbon ~~feed-stocks~~ feedstocks available to meet this ratio.
  - (C) Windrow turning. The windrow must be turned at least four times per year. There must be no more than six months between any two turnings.
  - (D) Distribution. Compost must be distributed for use within one year of completion of the compost process, and within three years of receipt of the raw materials for composting.
- (14) Fire control. The operator must develop and implement a plan to prevent spontaneous combustion in residual and compost piles at the site.
- (b) Food and Food Processing Residuals —~~At Medium and Large Composting Facilities~~
- (1) Food residuals or food processing residuals shall be managed as follows:
    - (A) The residuals shall be incorporated into the compost mix the same day it arrives at the facility; or
    - (B) The residuals shall be in a sealed container, or immediately covered with finished compost or untreated wood and incorporated into the compost mix within 72 hours of its arrival at the facility.
  - (2) Inspection of compost feedstocks. The compost feedstocks shall be inspected upon delivery to the facility and non-compostable materials either manually or mechanically removed. Mechanical processing shall not result in a final particle size of non-compostable materials that is smaller than the finished screen that will be used pursuant to §6-1108(b)(3). All non-compostable

materials shall be disposed of at a certified solid waste facility.

- (3) Screening of finished compost. The finished compost shall be screened to remove non-compostable materials. All non-compostable materials shall be disposed of at a certified solid waste facility.
- (4) Treatment of food residuals. The composting of food or food processing residuals shall use one of the following treatment methods:
  - (A) If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for ~~at least 13 of 16 consecutive~~ 15 days, ~~during which time the materials~~ Windrows must be turned not fewer than five times with a minimum of 3 days between turnings to ensure that all materials reach this temperature. The 15 days do not have to be consecutive.
  - (B) If using an actively or passively aerated static pile (including static windrows), or the within vessel method (including bins), the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days followed by at least 14 days above 113 degrees Fahrenheit (45 degrees Celsius).
  - (C) Medium or large compost facilities may utilize another method that reduces pathogens to the extent equivalent to the reduction achieved by the methods in subsections ~~(d)(1) or (2)~~ §6-1108(b)(4)(A) and §6-1108(b)(4)(B) of this section, which is when approved by the Secretary.

(c) Animal Mortality Composting Facility

- (1) Applicability. This section applies to a medium or large composting facility that includes animal mortalities, animal offal, or butchering waste as a compost feedstock
- (2) Composting and burial prohibited. Animals showing signs of a neurological disease shall be reported to authorities and managed in accordance with their directions. Animals that show signs of a neurological disease shall not be composted or buried.
- (3) Emergency situations. When the Secretary determines that an emergency event has occurred that requires the composting of animal mortalities from that event, the Secretary may authorize a one-time composting event in accordance with an issued Insignificant Waste Management Event Approval (IWMEA) as provided for in § 6-505(b) ~~§ 6-301(e)~~. To the maximum extent practical,

the disposal event shall conform to the requirements of this subsection ~~(d) of this section~~.

(4) Compost pile management. Composting of animal mortalities, animal offal and butchering waste must comply with the same operational standards as § 6-1108 and include the following operational standards:

(A) Feedstock management. The feedstock shall be incorporated into the compost mix when it arrives at the facility.

(B) Compost pile construction. Compost piles shall be constructed in the following manner:

(i) Prepare a 24-inch depth bed of bulky, absorbent organic material such as wood chips or similar material. Ensure the base is large enough to allow for two-foot clearance around the carcass.

(ii) Lay animal in the center of the bed. Lance the rumen to avoid bloating and possible explosion.

(iii) Cover carcass with two feet of a dry, high-carbon material, old silage, sawdust or dry stall bedding (some semi-solid manure will expedite the process).

(iv) For small animals, layer mortalities with a minimum of two feet of carbon material between layers.

(v) Add cover material as necessary to maintain the two-foot cover.

(5) Monitoring and Turning Requirements.

(A) The composting of animal mortalities shall use one of the following treatment methods:

(i) If using an actively or passively aerated static pile (including static windrows), or the within vessel method (including bins), the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days.

(ii) Another method that reduces pathogens to extent equivalent to the reduction achieved by the methods in subsection ~~(d)(3)(A)(i)~~ (f)(5)(A)(i) of this section,

which is approved by the Secretary.

- (B) The compost shall not be turned until at least the third month of composting.
  - (C) After three months treatment, if the requirements of ~~subsection (d)(3)~~ § 6-1107(f)(5)(A) ~~of this section~~ have been met, the permittee may visually examine the compost pile to determine whether the piles may be turned based upon whether the mortalities have degraded (with the exception of bones) and no odors are evident.
- (6) Compost that contains specified risk material from ruminants or carcasses of ruminants greater than 30 months old cannot be distributed off-site and must be managed on land owned or controlled by the permittee.
  - (7) If finished compost is to be sold or distributed off-site it shall meet the testing requirements in § 6-1105 (e)(7), (8) and (9).

**§ 6-1109      Medium and Large Compost Facility Applications**

(a) Medium Compost Facility Application Requirements. In order to qualify for a medium scale compost certification, the applicant shall submit an application which provides the following information:

- (1) The requirements of § 6-504;
- (2) Site plan map. A site plan map at a scale of 1:100 or greater that contains: the property boundaries; structures; access roads; truck loading and unloading areas; wash area for totes; location of barriers to unauthorized entry; water supplies; feedstock storage areas; compost management area; areas for the management and treatment of leachate and run-off; and water quality sampling points, if applicable.
- (3) Topographic map. A United States Geological Survey topographic map with a scale of 1:24,000 or a color printout from the Agency internet mapping program that contains all available layers that show siting criteria and prohibited areas established under ~~§6-1107~~ § 6-1103.
- (4) Soils map. The application shall include a copy of a Natural Resource Conservation Service soils map for the area.
- (5) Management plan detailing, at a minimum:

- (A) expected volume and type of incoming materials;
- (B) methods for achieving odor control;
- (C) methods for achieving noise control;
- (D) methods for controlling vectors, dusts, and litter;
- (E) methods for achieving the liquid management standards at ~~§6-1108~~ § 6-1107;
- (F) methods to inspect loads and remove non-compostable materials or contaminants from the incoming feedstocks;
- (G) a description of the composting process and how that process will meet the standards established under ~~§6-1110(e)~~ § 6-1108 including temperature monitoring protocols;
- (H) fire prevention and control measures;
- (I) list of equipment to be used;
- (J) hours of operation;
- (K) access control;
- (L) product distribution; and,
- (M) a sampling plan for maturity, bacteriological and metals concentrations testing of the finished compost as required by §6-1107(b) ~~subsection (e)(8) of this section and stability and maturity testing of the finished compost.~~

(b) Large Composting Facility application requirements. In order to qualify for a large ~~scale~~ compost facility certification, the applicant shall submit an application which provides the following information:

~~(1) Applications for certification under this section shall be treated as solid waste facility certifications and shall address the following:~~

- ~~(A) the requirements of §§ 6-304(e)(10) (financial responsibility); (11) (closure plan); (13) (planning requirements of 10 V.S.A. § 6605(c)); and (14) (background disclosure~~

~~requirements of 10 V.S.A. § 6615f 6605f);~~

~~(B) submit a plan for effective public notice as required by § 6-304(h); and~~

~~(C) be subject to the application review requirements of §§6-305 and 307.~~

~~(2) Application Requirements~~

(3) the complete application requirements listed in ~~of~~ § 6-504;

(4) Site plan map. A site plan map at a scale of 1:100 or greater that contains: the property boundaries; structures; access roads; truck loading/unloading areas; wash areas for totes; location of barriers to unauthorized entry; water supplies; feedstock storage areas; compost management area; areas for the management and treatment of leachate and run-off; and water quality sampling points, if applicable established by ~~§6-1107~~ § 6-1106(b).

(5) Topographic map. A United States Geological Survey topographic map with a scale of 1:24,000 or a color printout from the Agency internet mapping program that contains all available layers that show siting features and prohibited areas.

(6) Soils map. The application shall include a copy of a Natural Resource Conservation Service soils map for the area.

(7) Management plan detailing, at a minimum:

(A) expected volume and type of incoming materials;

(B) methods for achieving odor control;

(C) methods for achieving noise control;

(D) methods for controlling vectors, dusts, and litter;

(E) methods for achieving the liquid management standards at ~~§6-1108~~ § 6-1107;

(F) methods to inspect loads and properly screen for potential contaminants in incoming feedstocks;

- (G) a description of the composting process and how that process will meet the standards established under ~~§6-1110(e)~~ § 6-1108 including temperature monitoring protocols;
- (H) fire prevention and control measures;
- (I) list of equipment to be used;
- (J) hours of operation;
- (K) access control;
- (L) product distribution; and,
- (M) plan for metals concentrations as required in § 6-1108 ~~(e)(7) of this section~~ and stability and maturity testing of the final compost product.
- (N) Privately operated large composting facilities shall pay application fees in accordance with 3 V.S.A.2822(i) and 2822(j)(6)(B).

**§ 6-1110 Medium and Large Compost Facility Recordkeeping and Reporting**

- (a) Recordkeeping requirements. The compost facility shall keep records for the following activities at the facility office available for review in a dry and secure location for five years. At a minimum, records on the following shall be retained:
  - (1) The temperature of the active compost windrows shall be monitored ~~on a daily basis during the treatment process~~ in accordance with the protocols identified in the approved facility management plan.
    - ~~(A) The temperature should be monitored at one foot and three foot depths every five linear feet of windrow at the base of the windrow while achieving the treatment standards established in subsection (j)(4) of this section~~
    - (B) ~~The temperature of the active compost windrows shall be monitored on a daily basis during the treatment process in accordance with the requirements of the approved facility management plan.~~

- (2) weekly amounts, recorded in either tons or cubic yards and types of incoming compost feedstock;
  - (3) annual amount of compost produced in cubic yards or tons;
  - (4) annual amount of physical contaminants disposed of; and,
  - (5) copies of all analytical results for metals and maturity testing of the final compost product as required by ~~subsection (g)(4) and (5)~~ § 6-1108.
- (b) Recordkeeping ~~Data~~ shall be ~~forwarded~~ provided to the Secretary in the form of an annual report by January 20 of each year, on forms provided by the Secretary.
- (c) Any discharge or emission from a facility which poses a threat to public health and safety, a threat to the environment or the creation of a nuisance must be reported within 24 hours to the State of Vermont Department of Environmental Conservation, the local health officer, and the selectpersons of the affected municipalities. A written report shall be submitted to the parties to whom the event was reported within seven days of the discharge or emission. The report shall identify the discharge or emission that occurred, the type, quantity, and quality of waste, and the actions taken to correct the problem.

#### § 6-1111 Compost Facility Closure

- (a) Closure. All compost facilities ~~The facility~~ must be closed in a manner that minimizes the need for further maintenance; and so that the closed facility will not pollute any waters of the state, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance. At a minimum, the applicant must remove all compost, wastes, feedstocks, secondary materials, and residue, including compost screenings, from the facility; and broom clean the facility structures and equipment.

## Subchapter 12 – Organics Solid Waste Management Facilities

### § 6-1201 Applicability; Definitions

- (a) This Subchapter applies to persons engaged in organic solid waste management activities that do not include composting (as that term is defined in Subchapter 11, § 6-1102 ). Activities where wastes being managed contain any amount of sewage sludge, domestic septage, or septage shall be subject to Subchapter 13 of these Rules.
- (b) The definitions in Subchapter 11 (§ 6-1102) shall apply to terms used this subchapter.

~~Applicability. This section applies to the following anaerobic digesters:~~

- (1) ~~When any amount of food scraps are used as a feedstock for the digester; or~~
- (2) ~~If the digester is not located on a farm and any amount of food processing waste is used as a feedstock for the digester; or~~
- (3) ~~A digester may accept a limited amount food residuals on a trial basis and not apply for a permit under this section. The amount of food residuals shall not exceed five percent of the design capacity of the digester and the trial shall not to exceed 12 weeks in duration. The facility shall apply for and receive an insignificant waste management event approval for the activity under § 6-301(e).~~

### § 6-1202 Organic Solid Waste Management Facility Types; Authorization

- (a) Food Residual Drop-Off Facilities. Facilities that accept solely food residuals at a volume of less than 144 gallons per week shall register with the Secretary pursuant to § 6-1206 of this subchapter.

Note: Facilities accepting more than 144 gallons per week of food residuals or any other materials shall obtain a certification in accordance with Subchapter 9. Any facility that collects food residuals and obtains certification under Subchapter 9 does not need to register under .§ 6-1202(a).

- (b) Anaerobic Digester Facilities. Facilities that operate anaerobic digestion activities shall be subject to the certification requirements of these Rules as follows:
- (1) Digesters that are located on a farm and receive unprocessed food residuals for processing prior to introduction into the digester shall apply for a full certification as an organic solid waste

recovery facility, described within § 6-902(e), and according to the regulations of Subchapter 9.

- (2) Digesters that are located off-farm and that process, receive or store any amount of solid waste shall apply for full certification pursuant to § 6-504 and as provided for within this subchapter.
- (3) Any anaerobic digester that accepts any amount of biosolids as a feedstock shall apply for full certification as a residuals management facility pursuant to Subchapter 13.
- (4) Digester facilities shall be exempt from certification under these Rules if the digester is located on a farm; and:
  - (A) The anaerobic digester is designed, constructed and operated in accordance with the Agency Agriculture Food Markets requirements;
  - (B) The imported organic solid wastes are limited to:
    - (i) slurried food residuals
    - (ii) liquid food processing residuals; or
    - (iii) dry organic solid wastes with no potential for leachate generation and requiring no onsite processing prior to introduction into the anaerobic digester.
  - (C) All imported organic solid wastes:
    - (i) have received substrate importation form approval from the Agency of Agriculture, Food and Markets prior to management of the organic solid wastes on the farm;
    - (ii) are stored and handled to prevent odors, vectors, emissions and discharges.
      - (I) All slurried food residuals and liquid food processing residuals are pumped directly into a reception tank or an earthen pit constructed in accordance with the NRCS 313 for introduction into the digester,
      - (ii) are stored and handled to prevent any deterioration of the waste prior to introduction into the anaerobic digester
  - (D) The farm has at least 180 days of storage capacity for the liquid digestate;

(E) The liquid and solid digestate is managed in accordance with a current Agency of Agriculture, Food and Markets approved Nutrient Management plan.

(c) Organic Solid Waste Recovery Facilities (ORF). Facilities that aggregate food residuals and process them into a slurried form for delivery to an organic material management facility. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester. The facilities must obtain a certification pursuant to subchapter 9.

#### § 6-1203 **Organic Solid Waste Management Facility Siting**

(a) Food Residual Drop-Off Facilities.

(1) The Secretary may require an organics drop-off facility to obtain a transfer station certification pursuant to § 6-504 if the Secretary determines that such certification is necessary to ensure that the facility operations meet the operational requirements of § 6-1205 of this subchapter and will not present a hazard to public health and safety or the environment, or create a nuisance.

(i) Food Residual storage containers shall be located 50 feet from property lines unless otherwise approved by the Secretary;

(ii) Drop-off locations shall be approved by the local Solid Waste Management Entity as necessary for providing convenient access to organic solid waste management and in conformance with the applicable Solid Waste Implementation Plan;

(b) Anaerobic digester facilities. A digester facility constructed after the effective date of these Rules shall meet the general siting standards of § 6-703.

~~Siting requirements. Facilities permitted under this section shall meet the siting and prohibited area requirements of Subchapter 5. Facilities permitted under this section shall be sited in the same fashion as facilities permitted under Subchapter 12.~~

#### § 6-1204 **Organic Solid Waste Management Facility Design Standards**

(a) General requirements. All food residual drop-off facilities and off-farm anaerobic digesters shall be designed to:

(1) control vectors, and to control emissions or discharges to the environment, including odor and dust, so as to preclude the creation of nuisance conditions and undue threats to public health and

safety or to the environment;

(2) prevent, to the greatest extent feasible, the reduction of the quality of the waste, such as the rotting or contamination of stored wastes; and

(3) ensure the effective collection, storage, and processing of all waste materials.

(b) Food Residual Drop-off facilities. In addition to the requirements of § 6-1204(a) of this section, these facilities shall provide storage capable of preventing leaking, providing protection from precipitation and to be secure when the drop-off is not open for drop-off activities.

(c) Off-farm anaerobic digester facilities. In addition to the requirements of § 6-1204(a) of this section and the general design requirement provided within § 6-704 of these Rules, off-farm anaerobic digestion facilities shall:

(1) Design the facility to comply with general operational performance standards;

(2) provide for access in all weather conditions, with access controlled and limited to hours of operation identified in the facility management plan;

(3) incorporate the following standards for liquid storage tanks in a collection system;

(A) tanks that are sized appropriately for the facility and volume of waste managed;

(B) tanks that are constructed of material compatible with the expected composition of the liquid; and

(C) provisions for biennial testing and inspection of the tanks;

(4) have sufficient and appropriate storage for all materials and feedstocks and any process residuals; and

(5) If utilizing an onsite depackager unit, facilities shall be designed and constructed with a tipping floor that:

(A) is enclosed within a building or covered by a roof to prevent exposure of waste to weather if temporarily depositing organic solid waste on the ground pending processing; and;

- (B) incorporates a collection system that meets the requirements of § 6-904(f) and is designed to collect liquids that may be associated with incoming waste materials.

**§ 6-1205 Organic Solid Waste Management Facility Operating Standards**

(a) Food Residual Drop-Off Facilities

- (1) ~~An organics drop-off facility shall be deemed to meet the requirements provided that the owner(s) and operator(s) prevents damage and pollution of water, air, soil, and other natural resources and the environment; and provided that the drop-off does not create a public nuisance or present a threat to public health or safety.~~
- (2) The facility's operations shall comply with the following requirements:
- (A) The containers used to store the food residuals shall be water tight, and have lids which can be closed securely and locked to prevent vectors, fugitive odors, and access when not operating;
- (B) Facilities shall control liquids and prevent vectors and odors from the stored waste;
- (C) All food residuals stored at the facility shall be removed from the facility as needed to preclude the creation of nuisance conditions and the deterioration of the material; and
- (D) In no case shall food residuals managed at the facility create public nuisance conditions, including odors or vectors.

(b) Off-farm Anaerobic Digesters: In addition to the general operational requirement of § 6-704, the following specific operating requirements apply:

- (1) The facility shall operate in accordance with its approved facility management plan and the requirements of this section.
- (2) ~~Animals showing signs of a neurological disease shall be reported to authorities and managed in accordance with their directions.—~~
- (2) All stored solid waste shall be containerized or stored such there is no possibility of an emission or discharge.
- (3) Digestate (liquid or solid) shall be managed in the following manner:

- (A) Solid portions of digestate shall meet the treatment standards established in § 6-1108(a) by composting or other treatment options prior to distribution off-site for non-farm use, unless adequate pathogen inactivation can be demonstrated to the sufficiency of the Secretary.
- (B) ~~If the facility is not located on a farm,~~ collection and land application of leachate (the liquid portion of the digestate) shall meet solid waste siting and certification criteria and occur under an approved nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 – Nutrient Management or a plan approved by the Secretary ~~with the following restrictions:~~
  - ~~(i) Application rate shall be based upon the character of the liquid digestate, but shall not to exceed 25,000 gallons per acre per day.~~
  - ~~(ii) Liquid application shall not occur when the fields are saturated, frozen, snow covered, or when ponding occurs.~~
- (4) The facility shall be responsible for managing the collection and proper destruction of the generated biogas. The facility shall maintain a properly functioning backup method of destroying biogas. Any biogas that is not used or otherwise destroyed in the facility's combustion engine, for the production of electricity, shall be destroyed using an automatic flare system or equivalent. The backup flare shall be sized to destroy peak potential flow.

**§ 6-1206      Organic Solid Waste Management Facility Applications**

(a) Food Residual Drop-Off Facilities.

- (1) Registration. No person shall operate an food residual drop-off without receiving prior approval from the local solid waste management entity (i.e., district, alliance, or approved town) and registering with the Secretary on a registration form provided by the Secretary. The registration application shall contain the following:
  - (A) The name and contact information for the facility owner/operator.
  - (B) The name, address, and location of the facility to be registered under this section.
  - (C) A letter from the host solid waste management entity demonstrating that the facility is in conformance with their approved solid waste implementation plan and demonstrating that the facility location is needed for convenient access to food residual management;

- (D) Estimated amounts of food residuals that the facility will collect on a weekly and annual basis;
- (E) Hours of operation for the facility;
- (F) How the facility will manage material, such as the types of containers to be used, how odors and vectors will be addressed, contamination prevention methods, access control methods, facility staffing, transportation frequency and destination for the materials; and
- (G) A certification by the drop-off registrant that the drop-off will be operated in accordance with these Rules.

(b) Off-Farm Anaerobic Digester Facilities: In addition to the general application requirements of Subchapter 5, the following application requirements apply: Permitting. Facilities permitted under this subsection shall meet the same requirements as facilities permitted under § 6-1106(f). Anaerobic digester permitting. All facilities shall meet the following requirements:

(1) Application Requirements. In order to qualify for a certification, the applicant shall submit an application which provides the following information: Facility Management Plan. In addition to the general requirements of § 6-504(e)(8), the facility FMP shall include the following:

(A) Topographic map. A United States Geological Survey topographic map with a scale of 1:24,000 or a color printout from the Agency environmental interest locator that contains all available layers that show siting features and prohibited areas

Note: The environmental interest locator may be found at the Agency's website.

(A) Site plan map. A site plan map at a scale of 1:100 or greater that indicate the location of the following areas of the facility:

(i) Location of barriers to prevent unauthorized entry;

(ii) Access roads;

(iii) Location of the following areas of the facility:

(I) The area used for processing and handling for the feedstocks for the anaerobic digester;

(II) Wash area for totes;

- (III) Areas designated for storage of non-permitted wastes delivered to or generated by the facility; and
- (IV) Area for scales, if any;
- (B) ~~Facility boundaries and property boundaries. Management~~ Operational plans detailing:
  - (i) expected volume and type of incoming feedstocks;
  - (ii) methods of tracking the weight of incoming feedstocks for reporting (i.e. percent solids, gallons pumped, scales);
  - (iii) methods for achieving odor control;
  - (iv) methods for achieving noise control;
  - (v) methods for controlling vectors, dusts, and litter;
  - (vi) methods for digestate management.
  - (vii) methods to properly prevent or remove potential contaminants in incoming feedstocks;
  - (viii) fire prevention and control measures, gas leak monitoring, fire contingency and control measures;
  - (ix) list of equipment to be used in addition to the digester; and
  - ~~(x) hours of operation for the acceptance of food residuals, food processing residuals and other feedstocks;~~
  - (xi) For facilities that use a tipping floor for the management of food residuals or food processing residuals, the tipping floor shall be managed in accordance with § 6-904. If the facility does not use a tipping floor, the facility shall be managed to prevent a discharge or emission from the containers.
- (C) Engineering design plans that detail:
  - (i) The facility design;

- (ii) A schematic of the anaerobic digester that includes any additional processes, including pasteurization, the generator unit, the gas processing unit, digestate processing or holding ponds;
- (iii) A design of all operational aspects of the anaerobic digester and related components, including utility hookups;
- (iv) A design and location of a flare to be used as a backup combustion method;
- (v) For facilities that use a tipping floor for the management of food residuals or food processing residuals, design plans for the tipping floor that meet the requirements of § 6-904 shall be constructed in accordance with § 6-1204(e).

(D) Closure Plans demonstrating conformance with § 6-1208.

**§ 6-1207      Organic Solid Waste Management Facility Recordkeeping and Reporting**

**(a) Food Residual Drop-Off Facilities.**

- (1) Reporting requirements. Facilities shall report to the Secretary on certain facility activities as follows:
  - (A) The amount of food residuals accepted by the facility. This information shall be reported to the Secretary on an annual basis by January 20 of each year on forms provided by the Secretary.
  - (B) Any discharge or emission from a facility which poses a threat to public health and safety, a threat to the environment or the creation of a nuisance shall be reported within 24 hours to the Department of Environmental Conservation, the local health officer, solid waste management entity, and the governing body of the affected municipalities. A written report shall be submitted to the parties to whom the event was reported within seven (7) days of the discharge or emission. The report shall identify the discharge or emission that occurred, the type, quantity, and quality of waste, and the actions taken to correct the problem.
- (2) Recordkeeping requirements. Records required in §6-1207(a)(1) above shall be maintained by the owner and/or operator of the facility. Such records or copies thereof shall be maintained in a dry and secure location for at least three years, and shall be made available to the Secretary upon request.

(b) Anaerobic Digesters.

- (1) Recordkeeping requirements. ~~The compost facility shall keep records for the following activities. At a minimum, records on the following shall be retained.~~ The following records shall be maintained by the owner and/or operator of the facility. Such records or copies thereof shall be maintained in a dry and secure location for at least three years and shall be made available to the Secretary upon request.
- (A) Documentation that the facility's anaerobic digestion process meets pathogen inactivation standards (if digestate is used off site or sold for public use).
  - (B) Weekly amounts and types of incoming feedstocks.
  - (C) Annual amounts of liquid and solid digestate produced and description of how ~~digestate~~ each is managed.
- (2) Reporting requirements. Facilities shall report to the Secretary on certain facility activities as follows:
- (A) Any discharge or emission from a facility which poses a threat to public health and safety or the environment or has the potential for creation of a nuisance must be reported within 24 hours to the State of Vermont Department of Environmental Conservation, the local health officer, solid waste management entity, and the governing body of the affected municipalities. A written report shall be submitted to these same parties within seven (7) days of the discharge or emission. The report shall identify the discharge or emission that occurred, they type, quantity and quality of the waste and the actions taken to correct the problem.
  - (B) The following information shall be reported to the Secretary on an annual basis by January 20 of each year on forms provided by the Secretary.
    - (i) Annual amounts and types of incoming feedstocks; ~~and~~
    - (ii) Annual tonnage of solid waste, reported by type; and
    - (iii) Annual amount of liquid and solid digestate produced and description of how ~~digestate~~ each is managed.

- (a) Food Residual Drop-Off Facilities. The facility shall be closed in a manner that minimizes the need for further maintenance; and so that the closed facility will not pollute any waters of the state, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance. At a minimum, the applicant shall transfer all wastes to an appropriately certified facility, remove secondary materials and residues from the facility; and broom clean the facility structures and equipment. The registrant shall send the Secretary a notice of closure completion within 30 days after the date that the final volume of waste is received at the facility.
- (b) Off-farm anaerobic digesters shall be closed according to the same requirements of § 6-907 for Storage, Transfer, Recycling and Processing Facility closure.

## Subchapter 13 – Residuals Management Facilities

### § 6-1301 Residuals Management Facility Types

- (a) Sewage Sludge, Biosolids, and Septage Storage and Transfer Facilities: these include, but are not limited to the following: storage tanks, bunkers, stockpiles, storage lagoons, drying beds, and holding tanks.
- (b) Sewage Sludge, Biosolids and Septage Treatment Facilities: these include, but are not limited to the following: lime stabilization vessels, dewatering equipment, drying beds, biosolids drying facilities, biosolids composting facilities and any facilities for the production of EQ biosolids or EQ biosolids products.
- (c) Land Application Site: agricultural, silvicultural, or reclamation sites used for the management of non-EQ biosolids or septage by application to the land as a nutrient source or soil conditioner. Also known as a “diffuse disposal site” or “land application facility”.

### § 6-1302 Residuals Management Facility Exemptions

- (a) Exemptions from Certification: Treatment or storage facilities for a sewage sludge, biosolids, or septage that are located inside the fenced area of a domestic wastewater treatment facility plant permitted under 10 V.S.A. Chapter 47 are exempt from obtaining a certification provided that:
  - (1) the treatment facility does not utilize a process to further reduce pathogens in order for the waste to qualify for to produce EQ biosolids or an EQ biosolids products for distribution and marketing to the general public; and
  - ~~(2) the facility is not a sludge or septage drying bed, lagoon or non-concrete bunker; if a lagoon, it is a component of the wastewater treatment process permitted under 10 V.S.A. Chapter 47 and does not serve solely for the storage or treatment of sludge removed from the effluent stream; and~~
  - (2) a Sludge and septage Management Plan for the facility, as specified in § 6-310(a) § 6-1307(f), has been submitted to the Secretary and the Secretary has approved the Plan.
- (b) General Exemption: EQ biosolids or EQ biosolids products that are imported into the State of Vermont solely in individual bags or containers having a net weight of fifty (50) pounds or less are exempt from these Rules except for the standards established in § 6-1303(a), the labeling requirements of § 6-1304(g), and the recordkeeping requirements of § 6-1304(i)(3).

### § 6-1303 Exceptional Quality Biosolids

(a) EQ biosolids or EQ biosolids products produced in, or imported into, the State of Vermont shall:

(1) Meet the lower of:

(A) The pollutant limits established in § 6-1307(o);

(B) the contaminant standards established at 40 CFR 503.13 – Table 3;

(C) the corresponding pollutant limits of the jurisdiction in which they are generated or prepared, even if any given parameter is not otherwise regulated under these Rules or 40 CFR Part 503.

(2) Meet one of the pathogen reduction requirements established in 40 CFR Part 503.32(a)(3, 4, 7 or 8);

(3) Meet one of the vector attraction reduction requirements established in 40 CFR Part 503.33 Alternatives 1 – 8; and

(4) Be tested for all parameters listed under § 6-1307(n); and

(5) Compost Stability. Finished composted EQ biosolids or composted EQ biosolids products marketed for sale or distributed in the State of Vermont shall be tested annually for two of the following methods listed below:

(A) Temperature decline to near ambient conditions (less than 100° F) when not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting feedstocks.

(B) Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.

(C) Specific Oxygen Uptake Rate (SOUR). To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.

(D) Solvita™ Compost Maturity Test. To be classified as stable the product must exhibit color equal or greater than six.

- (E) Carbon dioxide evolution or Respiration Rate. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.
- (F) Reduction in organic matter (ROM) of at least 60 %
- (G) Plant tests conducted in a manner approved by the Agency.

(b) Applicability

- (1) EQ biosolids or EQ biosolids product generators who treat or prepare sewage sludge, domestic septage, or a biosolids product in the State of Vermont at a facility certified under these Rules to be eligible for management via marketing and/or distribution as an EQ biosolids or EQ biosolids product to the general public as a commodity pursuant to §6-301 (a)(5), shall:
  - (A) comply with the labeling requirements of § 6-1303(g); and
  - (B) comply with the reporting requirements of § 6-1303(h), except that the operator shall submit quarterly reports, rather than an annual report, to the Secretary. Quarterly reports shall be submitted to the Secretary on or before the fifteenth (15<sup>th</sup>) day of the month following the end of each calendar quarter, i.e. January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup>, of each year; and
  - (C) comply with the record keeping requirements of § 6-1303(i); and
  - (D) utilize only the marketing and/or distribution plan authorized in the solid waste management facility certification; and
  - (E) be exempt from the provisions of subsections (c), (d), (e), and (f) of this section.
- (2) In order for sewage sludge, domestic septage, or a biosolids product that has not been treated or prepared to EQ biosolids standards in the State of Vermont at a facility certified under these Rules to be eligible for management via marketing and/or distribution to the general public in the State of Vermont as a commodity pursuant to § 6-302(a)(5), the EQ biosolids or EQ biosolids product generator shall first obtain a Certificate of Approval from the Secretary unless the material is marketed and distributed in the State of Vermont solely in bags having a net weight of fifty (50) pounds or less.
- (3) EQ biosolids or EQ biosolids marketed and distributed in the State of Vermont solely in bags having a net weight of fifty (50) pounds or less shall nonetheless meet the requirements of § 6-1303(a), (i)(3), and bear labeling or be accompanied by an informational flyer that meets the

requirements of subsection (g) of this section.

(c) Certificate of Approval

An application to the Secretary for a Certificate of Approval shall consist of the following information. If the application is for multiple generating facilities under the EQ biosolids or EQ biosolids product generator's ownership, the required information shall be submitted for each generating facility:

- (1) an application form approved by the Secretary, which shall include the following information:
  - (A) the name, mailing address, and telephone number of the EQ biosolids or EQ biosolids product generator;
  - (B) the name, mailing address, telephone number, and physical location of the facility generating the EQ biosolids or EQ biosolids product;
  - (C) the name, mailing address, and telephone number of a primary and secondary contact person for the EQ biosolids or EQ biosolids product generator;
  - (D) the estimated annual volume of EQ biosolids or EQ biosolids product, in tons per year, that will be so managed; and
  - (E) the signature of the EQ biosolids or EQ biosolids product generator or an authorized representative of the EQ biosolids or EQ biosolids product generator.
- (2) Information documenting the pathogen reduction and vector attraction reduction treatments to which the EQ biosolids or EQ biosolids product is subjected and chemical analyses conducted on the EQ biosolids or EQ biosolids product, which shall include the following:
  - (A) for facilities that commenced operation two years or more prior to effective date of these Rules:
    - (i) records for the two (2) year period preceding the date of application documenting that the treated EQ biosolids or EQ biosolids product meets one of the Class A pathogen reduction standards established in 40 CFR 503.32 (a) (3, 4, 7, or 8);
    - (ii) records for the two (2) year period preceding the date of application documenting that the treated EQ biosolids or EQ biosolids product meets one of the vector attraction reduction standards established in 40 CFR 503.33 - Alternative 1

through VAR Alternative 8;

(iii) the results of all chemical analysis of the EQ biosolids or EQ biosolids product completed in the two (2) year period preceding the date of application. The results shall document that the treated EQ biosolids or EQ biosolid product has been tested for parameters in § 6-1306(n) and also meets the lowest of:

(I) the contaminant ceiling concentrations established in § 6-1306(o);

(II) the contaminant standards established at 40 CFR 503.13 – Table 3; or

(III) the contaminant standards established for such materials in the jurisdiction in which the EQ biosolids or EQ biosolids product was generated, even if any given parameter is not otherwise regulated under these Rules or 40 CFR 503.13 – Table 3;

(B) for facilities that commenced operation less than two years prior to the effective date of these Rules:

(i) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the Class A pathogen reduction standards established in 40 CFR 503.32 (a) (3, 4, 7, or 8);

(ii) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the vector attraction reduction standards established in 40 CFR 503.33 Alternative 1 through VAR Alternative 8;

(iii) records sufficient to document that the treated EQ biosolids or EQ biosolids product has been tested for parameters in § 6-1306(n) and also meets the lowest of:

(I) the contaminant ceiling concentrations established in § 6-1306(o);

(II) the contaminant standards established at 40 CFR 503.13 – Table 3; or

(III) the contaminant standards established for such materials in the jurisdiction in which the EQ biosolids or EQ biosolids product was generated, even if any given parameter is not otherwise regulated under these Rules or 40 CFR 503.13 – Table 3.

- (3) a copy of the informational flyer, fact sheet, or label that will be provided by the EQ biosolids or EQ biosolids generator to each recipient of the treated material.
- (4) a monitoring and sampling plan which assures that every batch of EQ biosolids or EQ biosolids product released for marketing and/or distribution in the State of Vermont is tested and demonstrated to meet the requirements of § 6-1303(a).
- (d) A Certificate of Approval shall be issued by the Secretary, in writing, and shall not be valid for a period of more than five (5) years from the date of issuance.
- (e) Non-conformances
- (1) Upon receipt by the EQ biosolids or EQ biosolids product generator of any information documenting failure an exceedance of any ceiling concentration established in §6-1307(o) or any failure to meet the Class A pathogen reduction standards established in 40 CFR 503.32 (a)(3, 4, 7, or 8)) or the vector attraction reduction standards established in 40 CFR 503.33 Alternative 1 through VAR Alternative 8, the following shall occur:
- (A) The EQ biosolids or EQ biosolids product generator shall notify the Secretary of the non-conformance within twenty-four (24) hours or on the next business day; and
- (B) the Certificate of Approval for the generating facility involved shall immediately become suspended for a minimum period of thirty (30) days. In such instances, the EQ biosolids or EQ biosolids product from the affected generating facility, if managed in the State of Vermont, shall be managed only in accordance with the Vermont Solid Waste Management Rules. If the Certificate of Approval covers more than one generating facility under the control of a single generator, only the Certificate of Approval for the generating facility so involved shall be considered suspended; and
- (C) within five (5) days of receipt by the EQ biosolids or EQ biosolids product generator of the information, the generator shall submit a written report to the Secretary. The report shall identify the nature of the non-conformance and the actions taken or anticipated to be taken to correct the problem; and
- (D) the EQ biosolids generator or EQ biosolids product generator shall make any other reports that may be reasonably required by the Secretary.
- (2) Upon a determination by the Secretary that the testing requirements established in §6-1303 (4) were not met, the Secretary may suspend the Certificate of Approval.

- (3) Upon a determination by the Secretary that the storage or use of EQ biosolids or an EQ biosolids product that is used in the State of Vermont under this section has created a nuisance, the Secretary shall suspend the Certificate of Approval.
- (f) Reapproval: The Certificate of Approval for a generating facility that has been suspended pursuant to subsection (e) of this section may be reinstated at the discretion of the Secretary upon submittal of the following relevant to the non-conformance causing the suspension:
- (1) the results of a chemical analysis of four (4) consecutive weekly samples of EQ biosolids or EQ biosolids product generated at the involved facility documenting that the EQ biosolids or EQ biosolids product has been tested for parameters in § 6-1306(n) and material quality once again is in compliance with the most restrictive of:
    - (A) the contaminant ceiling concentrations established in § 6-1306(o);
    - (B) the contaminant standards established at 40 CFR 503.13 – Table 3; or
    - (C) the contaminant ceiling concentrations established for such materials in the jurisdiction in which the EQ biosolids or EQ biosolids product was generated even if any given parameter relevant to either (A) or (B) is not otherwise regulated under these Rules.
  - (2) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the Class A pathogen reduction standards established 40 CFR 503.32 (a)(3, 4, 7, or 8).
  - (3) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the vector attraction reduction standards established in 40 CFR 503.33 Alternative 1 through VAR Alternative 8.
  - (4) evidence sufficient to demonstrate that storage or use of the EQ biosolids or EQ biosolids product will no longer create a nuisance, as necessary to document that the cause or causes for the Certificate of Approval having been voided have been corrected and that the EQ biosolids or EQ biosolids product once again meets the applicable standard(s).
  - (5) a written explanation of how the non-conformance occurred and a written explanation of steps that have been taken to prevent a recurrence of the non-conformance.
  - (6) any other reports that may be required by the Secretary.
- (g) Labeling: The EQ biosolids or EQ biosolids product generator shall provide to all persons to whom materials regulated under this section are marketed or distributed a flyer, fact sheet or label which, at a

minimum, shall provide the following information:

- (1) the name, address, and telephone number of the generator;
- (2) a statement that the product is derived or partially derived from sewage sludge or domestic septage;
- (3) a statement that the product may contain per- and polyfluoroalkyl substances (PFAS);
- (4) the concentration of total nitrogen, available phosphorus, and total potassium in the material. Any such products which are marketed and distributed in the State of Vermont with a guaranteed nutrient content shall be registered as a fertilizer with the Vermont Agency of Agriculture, Food, & Markets in accordance with 6 V.S.A. §364;
- (5) the concentration in the material of the metals regulated under §6-1307 (o);
- (6) recommendations for acceptable uses and non-uses of the material;
- (7) suggested application rates for the recommended acceptable uses; and
- (8) suggested methods of application for the recommended uses.

(h) Reporting

- (1) The EQ biosolids or EQ biosolids product generator shall report to the Secretary on an annual basis, the following information for each calendar year. The annual report of the preceding calendar year's activity shall be submitted to the Secretary on or before February 19<sup>th</sup> of each year.
- (2) The annual report shall, at a minimum, provide the following information for all EQ biosolids or EQ biosolids product regulated under this section that is marketed or distributed in the State of Vermont:
  - (A) the total volume of EQ biosolids or EQ biosolids product that was marketed or distributed in the State of Vermont in the calendar year;
  - (B) analytical reports documenting that the EQ biosolids or EQ biosolids product met the contaminant standard of § 6-1303(a)(1);

- (C) the Class A pathogen reduction alternative by which the EQ biosolids or EQ biosolids product was demonstrated to meet the requirement of § 6-1303(a)(2);
- (D) the vector attraction reduction alternative by which the EQ biosolids or EQ biosolids product was demonstrated to meet the requirement of § 6-1304(a)(3);
- (E) analytical reports documenting that the EQ biosolids or EQ biosolids product were tested per § 6-1303(a)(4);
- (F) a statement signed by the EQ biosolids or EQ biosolids products generator that all EQ biosolids or EQ biosolids products that were marketed or distributed in the State of Vermont met the requirements of these rules; and
- (G) any additional records required to be kept under this section, as the Secretary may require upon request in order to demonstrate compliance with these rules.

(i) Recordkeeping

- (1) The following records shall be kept in a dry and secure location by the EQ biosolids or EQ biosolids product generator:
  - (A) all reports, records, data or other information required to demonstrate compliance with this section;
  - (B) copies of the annual reports that have been submitted to the Secretary;
  - (C) copies of any reports, records, data or other information required to be submitted to the Secretary under subsection (h)(2) of this section;
  - (D) copies of any reports, records, data, certifications, or other information required under 40 CFR 503.17.
- (1) All records shall be kept for a minimum of five (5) years following the date on which the applicable annual report was submitted to the Secretary.
- (2) Producers of EQ biosolids or EQ biosolids products which are imported into the State of Vermont solely in individual bags or containers weighing 50 pounds or less shall keep the following records for a minimum of five (5) years following importation and shall submit such records to the Agency upon request by the Secretary:

- (A) all reports, records, data, certifications required under 40 CFR 503.17 or other information required to demonstrate compliance with this section; and
  - (B) records of the annual volume of EQ biosolids or EQ biosolids products imported into the State of Vermont.
- (4) Maintenance of records in an electronic format is acceptable.

#### § 6-1304 Residuals Management Facility Siting Standards

In addition to the general siting requirements of Subchapter 7, the following facility specific siting requirements apply:

- (a) Sewage Sludge, Biosolids and Septage Storage and Transfer Facilities: Facilities in existence as of February 1, 1989 which are used for the transfer, storage and treatment of sludge and septage and which are located at inside the fence of a Wwastewater T treatment facility Plant permitted under 10 V.S.A. Chapter 47 are exempt from the requirements of Subchapter 7 and this subsection.
- (b) Treatment Facilities: Facilities in existence as of February 1, 1989 which are used for the storage and treatment of sludge and septage and located at a Wastewater Treatment Plant are exempt from the requirements of §6-703(B).
- (c) Diffuse Disposal Land Application Sites: Facilities
  - (1) Are P-prohibited from location being sited within a zone 1 or zone 2 of an approved Public Water Supply Source Protection area.
  - (2) The Secretary may, on a case-by-case basis, make a determination that a diffuse disposal land application site facility may be sited in zone 2 of an approved surface water Public Water Supply Source Protection Area.
  - (3) Are prohibited in locations with hydric soils.

#### § 6-1305 Residuals Management Facility Design Standards

In addition to the general design requirements of Subchapter 7, the following facility specific design standards apply. Facilities in existence as of February 1, 1989 which are used for the transfer, storage and treatment of sewage sludge, biosolids and septage and which are located inside the fence of a Wwastewater Ttreatment

facility Plant permitted under 10 V.S.A. Chapter 47 are exempt from the requirements of Subchapter 7 and this section.

(a) Treatment Facilities: General

- (1) Facilities shall be designed to provide adequate storage to assure the protection of public health and safety and the environment and to assure that the disposal of stored ~~wastes~~ waste material occurs at proper times and under environmentally sound conditions.
- (2) Facilities shall be designed to prevent, to the greatest extent feasible, the reduction of the quality of the ~~waste~~ waste material, such as the rotting or contamination of stored wastes.
- (3) Facilities shall be designed to protect surface water, ~~and~~ groundwater and the air, and to detect, through monitoring where appropriate, the emission or discharge of contaminants from the facility to surface water, groundwater or the air.
- (4) Facility management plans shall include provisions for contingencies for the proper management of ~~wastes~~ waste material during both planned and unplanned events when the facility is not in operation.
- (5) Facility management plans shall include operator training plans that assure that all facility personnel involved in the handling of ~~waste~~ waste material receive organized instruction that teaches them to perform their duties in a way that ensure the facility's ~~facilities~~ compliance with these rules and conditions of certification.
- (6) Facility management plan must include estimates of amounts and types of solid wastes and other regulated material brought to storage facilities, and a schedule for transport, ~~and~~ disposal or use of these materials.

(b) Treatment Facilities: Exceptional Quality (EQ) Biosolids ~~Compost~~

- (1) To meet the requirements for distribution and/or marketing, any solid wastes derived or partially derived from a domestic waste to be ~~composted~~ considered EQ biosolids or an EQ biosolids product shall: must
  - (A) undergo a process to further reduce pathogens as defined in 40 CFR Part 503.32(a)(3,4,7, or 8) ~~Appendix B~~ or other treatment processes deemed appropriate for other pathogen containing waste;

- (B) meet one of the vector attraction reduction standards established in 40 CFR Part 503.33 Alternative 1 – Alternative 8;
  - (C) meet the contaminant standards established in § 6-1303(a)(1);
  - (D) EQ biosolids or EQ biosolids products produced by composting processes shall meet the stability requirements of § 6-1303(a)(4), and
  - (E) design documentation must demonstrate the capability to meet ~~this~~ these standards.
- (2) The design shall provide adequate storage at the treatment facility for curing ~~the EQ biosolids or EQ biosolids product produced by composting processes~~ compost, and for periods of time when ~~the EQ biosolids or EQ biosolids products are~~ compost is not in demand.
  - (3) ~~Evidence of the ability to pass the prequalification test specified in § 6-1305 (A)(12) of these rules.~~
  - (4) For EQ biosolids or EQ biosolids products ~~compost~~ derived or partially derived from a domestic waste a feasible marketing and distribution development plan discussing how, where, and under what conditions the EQ biosolids or EQ biosolids product ~~compost~~ will be marketed, distributed or disposed of is required for certification.

(c) ~~Diffuse Disposal~~ Land Application Facilities

- (1) Facilities shall be designed to provide for an aggregate storage volume for ~~six~~ five months of the waste biosolids generated to account for storage during winter months, inclement weather and normal agricultural and silvicultural practices. Alternatives, such as but not limited to landfill disposal, which provide the equivalent of storage are acceptable if adequately documented.
- (2) Design documentation shall detail each disposal land application site with respect to soil character, cropping practices, usable area, floodplain and seasonal restrictions, application area and rates, and site life, ~~as these affect the management of the facilities.~~
- (3) Land application rates shall be based on agronomic rates unless otherwise limited by the Secretary. Application rates shall be calculated using a method approved by the Secretary.
- (4) Waste Biosolids quality must be fully documented as required in §6-702(a)(10) § 6-1306(n) and (o) prior to application to the land.

- (5) Design shall show obvious points of public access and provide for any appropriate measures to control public access.

(d) ~~Waste Stock Piles Intended for Land Application Diffuse Disposal~~

- (1) ~~Waste Stock~~ pile storage areas ~~shall must~~ be of adequate volume to contain the waste in accordance with the generation, transport and ~~disposal~~ application schedule contained in the facility management plan.
- (2) ~~Waste Stock~~ piles shall be managed covered to prevent the ~~generation of leaching to groundwater and surface runoff. ate.~~ if the contents are subject to leaching to groundwater.
- (3) Stock piles shall be managed to prevent the generation of nuisance odors beyond the facility boundary.
- (4) ~~Waste Stock~~ piles of biosolids located at ~~diffuse disposal facilities~~ land application sites are prohibited except for short term staging (less than two weeks) prior to an application event.

(e) Lagoons

- (1) The liner composition shall be compatible with the ~~solid waste~~ material to be stored in a lagoon.
- (2) Lagoons shall be designed to provide a minimum of two (2) feet of freeboard at all times.

**§ 6-1306 Residuals Management Facility Operating Standards**

In addition to the general operating requirements of Subchapter 7, the following facility specific operational standards apply:

- (a) Application of biosolids or septage derived from domestic waste to the land shall be limited per this subsection. However, the Secretary may approve application on a case-by-case basis upon a determination that current weather conditions and application techniques to be used will not result in abnormal nutrient loss, runoff, or threat to human health or the environment.
  - (1) Application of ~~solid wastes~~ biosolids or septage on frozen ground or on top of snow-covered ground is prohibited.
  - (2) Application of biosolids or septage to the land is prohibited between December 15 and April 1 of consecutive years.
  - (3) Application of biosolids or septage to the land is prohibited between October 16 and April 14 of consecutive years in areas of land with frequently flooded soils.

- (4) Application of biosolids or septage to the land is prohibited between December 1 and December 15 and between April 1 and April 30 of any calendar year when the Secretary of Agriculture, Food, & Markets determines that due to weather conditions, soil conditions, or other limitations, the application of manure to land would pose a significant potential of runoff to waters of the State.
- (b) All biosolids and septage land application sites shall be incorporated in a field by field nutrient management plan developed by a certified nutrient management planner or the permittee. Development and implementation of the nutrient management plan shall meet or exceed the standards of Vermont Required Agricultural Practices and the Vermont USDA NRCS Nutrient Management Plan 590 Standard.
- (c) The application rate for biosolids, except for domestic septage, shall be determined using a calculation method approved by the Secretary, performed in accordance with “Nutrients Recommendations for Field Crops in Vermont” published by the University of Vermont Extension, and based on a representative sampling and analysis of the material applied, the crop nutrient requirements, other sources of nutrient used, and limited by other factors as determined by the Secretary.
- (d) The application rate for domestic septage shall be determined by the following formula, unless the Secretary approves an alternative calculation method:
- $$AAR = \frac{N}{0.0026} - \text{the amount of nitrogen provided by all other sources}$$
- where: AAR = annual application rate (in gallons per acre) and N = amount of nitrogen (in pounds per acre per growing season) needed by the crop grown on the land.
- (e) The pH of the soil in the zone of incorporation for all land application sites shall be maintained between 6.5 S.U. and 8.0 S.U. during the certification period. Biosolids or septage shall not be applied to a land application site if the soil’s pH is not within the specified range, except for when biosolids or septage that have been stabilized by an alkaline stabilization process and the pH of the biosolids or septage is 11.0 S.U. or greater at the time that it is applied to the land and the soil’s pH is in the range 5.0 S.U. to 6.5 S.U.. In such cases, the soil’s pH shall, if necessary, immediately be raised to the range 6.5 S.U. to 8.0 S.U. by other lime addition if the application of alkaline stabilized biosolids or septage was not sufficient to raise the soil’s pH to within the range 6.5 S.U. and 8.0 S.U.
- ~~(f) Application rates shall be determined on the basis of representative sampling and analysis of the wastes applied, the crop nutrient requirements, and other sources of nutrient used, and limited by other factors such as metals.~~

- (f) Cadmium application shall be limited to 0.45 pounds per acre (0.5 kilograms per hectare) in any 365-day period annually, and 4.5 pounds per acre cumulatively.
- ~~(g) The pH of the soil in the zone of incorporation for all sites used for application of solid wastes shall be maintained between 6.5 and 8.0 during the time of application, unless the pH of the waste is 11.0 or greater at the time that it is applied to the land.~~
- (g) Application of ~~solid waste~~ biosolids or septage is prohibited on the 100-year floodplain unless:
- (1) The biosolids or septage is incorporated within 48 hours of application; or
  - (2) The site is in no-till management and
    - (A) is cover cropped; or
    - (B) is planted to hay, pasture, or other perennial crop.
- (h) Application of domestic waste biosolids or septage within the floodway portion of the 100-year floodplain is prohibited.
- (i) Application of ~~solid waste~~ biosolids or septage is prohibited at times when groundwater is within three (3) feet of the bottom of the zone of incorporation.
- (j) Application of ~~solid waste~~ biosolids or septage is prohibited in Class I and Class II Groundwater areas.
- (k) Application of biosolids or septage is prohibited in a watershed for a Class A stream or stream segment.
- (l) Land Application. Prior to the land application of ~~solid wastes~~ biosolids or septage derived from domestic waste, the waste must be treated, by lime stabilization, pyrolysis, or by other chemical, biological, or physical processes, to:
- (1) meet the requirements of a process to significantly reduce or further reduce pathogens as included established in 40 CFR Part 503.32(a)(3, 4, 7 or 8) or 40 CFR Part 503.32(b) Appendix B; and to
  - (2) meet the vector attraction reduction requirements established in 40 CFR Part 503.33; and,
  - (3) assure that the final product is homogeneous and not otherwise deleterious in character.

(m) ~~Where solid waste is a domestic waste~~ For land application sites used for biosolids or septage management, unless otherwise directed by the Secretary, the following restrictions shall apply:

- (1) ~~Public access shall be controlled for the duration of disposal, and for twelve (12) months beyond after the last application of biosolids or septage disposal episode.~~
- (2) ~~Domestic food source animals shall be prohibited from grazing on land application sites disposal facilities for the duration of the project and twelve (12) six (6) months after the last application of biosolids or septage beyond the last disposal episode.~~
- (3) ~~Sites amended by solid waste application shall not be used for~~ The production of crops for direct human consumption, is prohibited for the duration of the project and 36- thirty-eight (38) months after beyond the last application of biosolids or septage disposal episode.
- (4) ~~Feed crops grown on solid waste amended disposal facilities shall not be harvested for a period of five (5) weeks beyond after the last application of biosolids or septage disposal episode.~~
- (5) ~~Silage to be used as a feed crop, from solid waste amended sites shall not be fed to domestic food source animals for a period of four (4) months after the last application of waste biosolids or septage.~~
- (6) Turf shall not be harvested for a period of one (1) year after the last application of biosolids or septage.

(n) The following requirements for sampling, analysis, and standards shall be met:

- (1) All solid wastes sludges, biosolids or septage intended for land application, and EQ biosolids products diffuse disposal shall be sampled and analyzed for the following parameters. The frequency will be established in each sludge management plan or certification. Any biosolids or EQ biosolids products that are imported into Vermont shall also be analyzed for any parameters not established herein for which a regulatory standard is established in the jurisdiction in which they were produced or prepared.

~~(i) The waste must pass the Extraction Procedure (EP) Toxicity Test Method (or other EPA approved extraction procedure). This can be done one of two ways; through sampling and analysis or calculation.~~

~~(I) Sampling and Analysis. Perform the EP Toxicity Test Method on the sample; or~~

(II) Calculation. For a superior quality waste material it may be possible to show mathematically that the waste cannot fail the extraction procedure. If this method is chosen, the calculations must be based on an assumption that all metals are extracted from the sample.

(A) ~~The waste must material shall~~ be tested analyzed for the total metals concentration for of the following metals:

Arsenic (As)

Cadmium (Cd)

Chromium (Cr)

Copper (Cu)

Lead (Pb)

Mercury (Hg)

Molybdenum (Mo)

Nickel (Ni)

Selenium (Se)

Zinc (Zn)

Note that Arsenic (As), Silver (Ag), Barium (Ba), and Selenium (Se) must be analyzed if the calculation method, subsection (A)(11)(i)(a)(ab) of this section is chosen.

(B) The material shall be analyzed for total percent solids.

(2) ~~The waste must material shall be tested analyzed~~ for total polychlorinated biphenyls (PCB).

(2) Biosolids or septage intended for land application and EQ biosolids products ~~The waste must shall be tested~~ analyzed for following parameters:

(A) Total polychlorinated biphenyls (PCB);

(B) pH, Total Kjeldahl Nitrogen (TKN), Ammonia-Nitrogen (NH<sub>4</sub>-N), Nitrate-Nitrogen (NO<sub>3</sub>-N), Total Phosphorus (TP), ~~and~~ Total Potassium (TK), and water extractable phosphorus (WEP);

- (C) Per- and polyfluoroalkyl substances (PFAS) in accordance with this subdivision:
- (i) PFAS regulated by the Secretary; and
  - (ii) Any other PFAS that the Secretary has determined may pose a risk to human health or other living organism and for which the Secretary has determined that a reliable testing and analytical methodology is available.
- (D) The Secretary may require the material to be tested for additional parameters as determined to be necessary to prevent a threat to human health or the environment resulting from the application of materials.
- (3) The waste material shall be analyzed tested for the following nutrients parameters, if land application is the chosen disposal management method:
- (A) Percent solids; pH; Total Kjeldahl Nitrogen (TKN); Ammonia Nitrogen (NH<sub>4</sub>-N); Nitrate Nitrogen (NO<sub>3</sub>-N); Total Phosphorus (TP); and Total Potassium (TK); and water extractable phosphorus (WEP).
- (4) The Secretary may require analysis of the material for additional parameters.
- (o) All wastes biosolids or septage intended for land application diffuse disposal, or for or for management at a processing at a composting or co-composting facility or a facility preparing EQ biosolids, must shall meet the following standards. At the Secretary's discretion, these standards may be made more or less stringent.
- (2) EP Toxicity Test Method limits (or other EPA approved extraction procedure), or demonstrate mathematically that based on the total metals concentrations in the waste, it will not fail EP Toxicity Test Method limits.
  - (1) Total metals concentrations of in the wastes material must be no more than the concentrations established in the following table:

| <b>PARAMETER</b> | <b>MAX CONCENTRATION (mg/kg, dry wt.)</b> |
|------------------|---|
| Arsenic (As)     | 15  |
| Cadmium (Cd)     | 21  |
| Chromium (Cr)    | 1,200                                     |
| Copper (Cu)      | 1,500                                     |
| Lead (Pb)        | 300                                       |
| Mercury (Hg)     | 10  |

|                 |       |
|-----------------|-------|
| Molybdenum (Mo) | 75    |
| Nickel (Ni)     | 420   |
| Selenium (Se)   | 100   |
| Zinc (Zn)       | 2,800 |

(2) The concentration of T-total PCB must be no more than 10 1 mg/kg or less, dry weight.

(3) Pathogen reduction standards, as follow:

(A) Compost. To be considered compost, and eligible for disposal by general distribution, t  
The material must shall undergo a process to further significantly reduce pathogens as  
defined in 40 CFR Part 503.32(b) or a process to further reduce pathogens as defined in  
40 CFR Part 503.32(a)(3,4,7, or 8). Appendix B. This subsection (A)(12)(iv) applies  
only to compost derived or partially derived from domestic waste.

(B) Diffuse disposal by land application. Prior to land application of solid waste derived from  
domestic waste, the waste must undergo a process to significantly reduce pathogens or a  
process to further reduce pathogens, as defined in Appendix B.

(C) A certification may be issued to a person who does not meet the standards contained in  
subsection (A)(12)(ii), provided that the certification contains a compliance schedule  
with the following approved by the Secretary:

(i) a management plan that is designed to achieve compliance with the applicable  
standards with a reasonable period of time;

(ii) the waste intended for diffuse disposal, as managed, does not present an  
unreasonable risk to human health or the environment; and;

(iii) the holder of the certification notifies all users and property owners where the  
waste is applied of the nature and extent of noncompliance with the applicable  
standards.

(p) The cumulative loading rate for each metal on a land application site shall not exceed the cumulative  
loading rate limits for the metals in the following table:

| <u>Metal</u>         | <u>Kilograms per Hectare</u> | <u>Pounds per Acre</u> |
|----------------------|------------------------------|------------------------|
| <u>Arsenic (As)</u>  | <u>15</u>                    | <u>(13.4)</u>          |
| <u>Cadmium (Cd)</u>  | <u>5</u>                     | <u>(4.5)</u>           |
| <u>Chromium (Cr)</u> | <u>1200</u>                  | <u>(1071.6)</u>        |

|                 |      |          |
|-----------------|------|----------|
| Copper (Cu)     | 1500 | (1339.5) |
| Lead (Pb)       | 300  | (267.9)  |
| Mercury (Hg)    | 17   | (15.2)   |
| Molybdenum (Mo) | 75   | (66.0)   |
| Nickel (Ni)     | 420  | (375.1)  |
| Selenium (Se)   | 100  | (89.3)   |
| Zinc (Zn)       | 2800 | (2500.5) |

Note: the established regulatory standards are those given in units of kilograms per hectare. Those numbers in parentheses (pounds per acre) are rounded conversions of the officially established standards and are provided for informational purposes only.

- (q) Facilities covered under a Sludge Management Plan shall test sludge at the more frequent of the rate specified in the Sludge Management Plan or in Table 1.

**Table 1**

| <u>Amount of sludge produced in the preceding 365 days*; dry weight</u> | <u>Monitoring Frequency</u>  |
|---|--|
| > 0 – 290 metric tons<br>(> 0 – 319 US tons)                            | Once per year  |
| > 290- 1,500 metric tons<br>(>319 – 1,650 US tons)                      | Once per quarter (four times per year)   |
| > 1,500 – 15,000 metric tons<br>(>1,650 – 16,500 US tons)               | Once per sixty (60) days   |
| >15,000 metric tons<br>(>16,500 dry US tons)                            | Once per month   |
| <b><u>For lagoon type treatment works producing sludge</u></b>          |  |
| Any amount  | Once each time sludge is removed from the lagoon; or, according to Table 1 non-lagoon type schedule if sludge is routinely removed |

\*If the amount of sludge produced in a non-lagoon type treatment works at any time in a rolling period of the preceding 365 days either increases or decreases such that it triggers a different monitoring frequency category in the table above, the monitoring frequency shall be adjusted accordingly unless otherwise established in a certification.

(r) For facilities covered under a solid waste certification, the monitoring frequency of biosolids, septage, soil, groundwater, surface water, and plant tissue shall be performed at the more frequent of the rate specified in the solid waste management facility certification or in Table 2.

**Table 2**

| <u>MEDIA</u>                 | <u>PARAMETERS</u>  | <u>MONITORING FREQUENCY</u>  |
|------------------------------|--|--|
| <u>Biosolids and Septage</u> | <u>As established in § 6-1306(n) or as otherwise specified in the facility certification</u> | 1) <u>At the greater of the frequency established in the table § 6-1307(q), every batch of biosolids applied to the land, or as otherwise specified in the facility certification.</u><br>2) <u>For domestic septage applied to a land application site: once per year, or as otherwise specified in the facility certification.</u> |
|                              | <u>As established in the facility certification</u>  | <u>Once per year or as otherwise specified in the facility certification.</u>  |
| <u>Soil</u>                  | <u>Total PCB</u>   | <u>Once per certification period or as otherwise specified in the facility certification.</u>  |
|                              | <u>PFAS</u>  | <u>Once per year or as otherwise specified in the facility certification.</u>  |
| <u>Groundwater</u>           | <u>As established in the facility certification</u>  | <u>Once per year or as otherwise specified in the facility certification.</u>  |
|                              | <u>PFAS</u>  | <u>Once per year or as otherwise specified in the facility certification.</u>  |
| <u>Plant Tissue</u>          | <u>As established in the facility certification</u>  | <u>Once per certification period or as otherwise specified in the facility certification.</u>  |
|                              | <u>PFAS</u>  | <u>Once per certification period or as otherwise specified in the facility certification.</u>  |

(s) The Secretary may require the materials in Table 2 to be tested for additional parameters as determined to be necessary to prevent a threat to human health or the environment resulting from the application of materials

~~The Secretary may require analysis of per- and polyfluoroalkyl substances (PFAS) for the media specified in Table 2 or for additional parameters beyond those established in § 6-1306(n).~~

(t) For compost EQ biosolids derived or partially derived from a domestic waste, only those marketing and distribution methods authorized in the solid waste management facility certification are allowed.

- (u) Only domestic septage may be managed by application to the land. The management of portable toilet waste, holding tank waste, cesspool waste and waste from Type III marine sanitation devices by application to the land is specifically prohibited.
- (v) Domestic septage applied to a land application site shall either be:
  - (1) screened prior to application to remove to the greatest reasonable extent, any debris, trash, non-biodegradable, and other deleterious objects; or,
  - (2) if not screened for the removal of debris, trash, non-biodegradable, and other deleterious objects prior to application to a land application site, the operator shall physically remove such objects from the site on each day that domestic septage is applied to the site; and,
  - (3) refuse removed by screening or manual removal shall be stored in a manner that prevents any release to the environment and shall be disposed only at a municipal solid waste landfill.

**§ 6-1307 Residuals Management Facility Applications**

In addition to the general application requirements of Subchapter 5, the following facility specific requirements apply:

- (a) Either approved Sludge Management Plans or Solid Waste Management Certifications are required for all wastewater treatment facilities plants that generate sewage sludge.
- (b) Solid Waste Management Certifications are required for the land application sites where either septage, non-EQ biosolids, or residual dairy wastes are managed.
- (c) Solid Waste Management Certifications are required for all sewage sludge, biosolids, and septage storage, treatment or transfer facilities located outside the fenced area of a wastewater treatment facility except for transfer facilities operated in accordance with § 6-302(a)(7) and (8) of these Rules.
- (d) The Secretary may not certify a land application site unless it demonstrates that it is in compliance with the Groundwater Protection Rule and Strategy, as may be amended, adopted pursuant to 10 V.S.A. Chapter 48, Groundwater Protection; Vermont Water Quality Standards, as may be amended, adopted pursuant to 10 V.S.A. Chapter 47; and the laws of Vermont.
- (e) Solid Waste Management Certifications are required for facilities that prepare EQ biosolids or EQ biosolids products.
- (f) Sludge Management Plans shall include the following:

- (1) All owners of wastewater treatment facilities plants that generate sludge as a result of the treatment process and that do not manage or dispose of sludge at a facility under their control or ownership shall submit Sludge Management Plans to the Secretary for review and approval in all cases where a Solid Waste Management Certification is not required by these Rules. The Plans shall:
  - (A) identify the owners and operators of the facility plants and their contact information;
  - (B) and shall include a contingency disposal plan, a spill response plan and a reporting plan;
  - (C) include a schematic diagram of the facility;
  - (D) present information demonstrating conformance with an approved Solid Waste Implementation Plan; and
  - (E) present information regarding methods of sampling and disposal.
- (2) The Secretary shall append a schedule of parameters and frequency of monitoring sludge to an approved Sludge Management Plan.

**§ 6-1308 Residuals Management Facility Reporting and Recordkeeping**

In addition to the general reporting and recordkeeping requirements of Subchapter 7, the following facility specific requirements apply:

(a) Recordkeeping

- (1) The following records shall be kept in a dry and secure location by the biosolids or biosolids product generator or septage manager:
  - (A) all reports, records, data or other information required to demonstrate compliance with this section; and
  - (B) copies of the quarterly report forms that have been submitted to the Secretary; and
  - (C) copies of all certifications required under 40 CFR 503.17.
- (2) All records shall be kept for a minimum of ten (10) years following the date on which the applicable quarterly report was submitted to the Secretary.
- (3) Maintenance of records in an electronic format is acceptable.

(b) ~~Treatment Facility: Reporting:~~ All owners of wastewater treatment facilities plants that generate sewage sludge as a results of the treatment of domestic waste or dairy wastes, all producers of biosolids or EQ biosolids, all owners of companies that manage septage, and all commercial haulers of residual wastes subject to the permit requirements of 10 V.S.A. 6607(a) shall report to the Secretary on a quarterly basis on forms provided by the Secretary. Reports are due on the 15<sup>th</sup> day of the month following the end of each calendar quarter (January 15, April 15, July 15 and October 15). The reports shall include:

- (1) the quantity of sludge, biosolids, septage, or residual wastes disposed or managed; removed
- (2) the location where the sludge, biosolids, septage, or residual waste was delivered for management, or disposal, or end use; and
- (3) the volume of sludge, biosolids, septage, or residual waste received from other generators or managers of those materials;
- (4) sludge, biosolids, or septage, or residual waste quality and other facility monitoring data, when required; and
- (5) where required for septage managers, the fee established under 3 V.S.A §2822(j)(33) for the volume of septage managed shall be submitted with each quarterly report for the corresponding quarter's septage management activities. The fee is calculated based on the volume of septage generated in Vermont regardless of where it is disposed or managed and on all septage disposed or managed in Vermont regardless of where it was generated. The fee is owed by the person who first pumped the septage from a septic tank, holding tank, or cess pool.

~~(6) the location where the sludge was delivered for management or disposal~~

~~(c) Commercial haulers subject to the permit requirements of 10 V.S.A. 6607a as a result of hauling septage or sludge, must report to the Secretary in accordance with the following schedule:~~

- ~~(1) Annually (by April 30 of each year) for the coming year, submit letter of intent from all facilities with conditions; and~~
- ~~(2) Quarterly record of the facilities and quantities of septage or sludge delivered.~~

#### § 6-1309 Residuals Management Facility Closure

(a) A closure plan is required for all facilities except:

- (1) Land used for the ~~diffuse~~ land application of septage, ~~sludge biosolids~~, or other residual appropriate wastes, as determined appropriate by the Secretary; and
- (2) Septage, ~~or~~ sludge, biosolids, or other residual waste facilities located ~~at~~ inside the fence of a domestic wastewater treatment facilities plants or drinking water treatment facilities plant.
- (b) At the Secretary's discretion, a financial instrument sufficient to cover the anticipated costs of a closure plan may be required. Such financial instruments shall be in conformance with Subchapter 8 of these Rules.

## Subchapter 14 – Special Topics

### § 6-1401 Special Waste Designations

- (a) The Secretary may designate that certain types or categories of solid wastes are special solid wastes if he or she determines that the waste pose special environmental or public health and safety concerns, or have other characteristics (e.g. size, composition) that cause problems in handling or management.
- (a) Subsequent to a special waste designation issued pursuant to subsection (a) of this section, the Secretary may require, ~~as part of a certification or other operating authority, any that such wastes be subject to special handling or management techniques requirements for the wastes involved~~ as may be necessary to ensure assure the protection of public health and safety and the environment. Such management requirements may be included as conditions of a certification or other approval issued pursuant to these Rules.

### § 6-1402 Approval for Acceptable Uses of Solid Waste

- (a) Any person may request a written determination by the Secretary of an acceptable use designation of a type or category of solid waste. This section shall not apply to:
- (1) Activities which require a solid waste certification, including land application of sludge and septage wastes;
  - (2) Disposal activities of limited duration which require an insignificant waste management event approval (IWMEA);
  - (3) Materials or activities which are exempt from these Rules;
  - (4) Material which is reused;
  - (5) Solid waste which is recycled (recycling does not include incineration of solid waste to produce energy or fuel products);
  - (6) solid waste which: contains, or the use of which will create a hazardous waste;
  - (7) solid waste the use of which will result in a threat to human health and safety or to the environment, or will cause a nuisance;

- (8) solid waste that contains asbestos;
  - (9) solid waste that contains infectious waste; or
  - (10) solid waste that is incinerated to produce energy or fuel products.
- (b) Any person who wishes to receive written approval for acceptable use of a solid waste shall submit a written request to the Secretary. The request shall be in writing and contain the following:
- (1) A description of the proposed solid waste to be used, including identification of the source of the waste, characteristics of the proposed waste (physical, chemical and biological) and the quantities to be used;
  - (2) A description of the proposed use of the solid waste, including:
    - (A) Where the material will be used;
    - (B) The duration of use;
    - (C) A description of any manufacturing or processing by which an end product is produced; and
    - (D) Characteristics of the end product (physical, chemical and biological); if an end product is to be marketed.
  - (3) A written demonstration that the proposed use will not adversely affect human health and safety and the environment or create a nuisance. This demonstration shall contain one or more of the following:
    - (A) A characterization plan;
    - (B) Historic analytical test data;
    - (C) Risk assessment; and
    - (D) A risk management plan;
    - (E) Another type of assessment that has been approved in writing by the Secretary.
  - (4) A written management plan which addresses the management of the solid waste from its source through its final use, including, but not limited to, storage of the waste prior to use, quality

control/quality assurance, stormwater control, risk management, application rates, monitoring and a contingency plan that addresses how the solid waste will be managed if the proposed use of the material becomes unviable.

- (5) If required by the Agency, financial assurance in an amount deemed by the Secretary to be sufficient to cover the costs associated with implementing the approved contingency plan.
- (c) Approval: If the Secretary finds that the solid waste and proposed use of that waste is not Determinations made regarding acceptable uses of materials and associated activities shall be published by the Secretary. A determination for acceptable use of a solid waste may apply to uses by other persons of the same solid waste(s) for the activities and uses specified in the written designation.
- (d) Denial: If the Secretary determines that the use of the solid waste will result in a threat to human health and safety or to the environment, or will cause a nuisance; then the acceptable use determination will be denied or rescinded.

#### **§ 6-1403 Standards for Hazardous Household and Very Small Quantity Generator Wastes**

- (a) Very Small Quantity Generator (VSQG) hazardous waste and household hazardous waste (HHW) may be accepted for management only by solid waste facilities certified or approved by the Secretary to manage these wastes according to the provisions of Subchapter 9 of these Rules.
- (b) Collection Events.
- (1) HHW/VSQG hazardous waste collection events shall take place only at certified solid waste facilities or at other locations specifically approved by the Secretary pursuant to § 6-505(b). Collection events shall be pre-approved and operated under the requirements of this section. A certified solid waste facility shall not hold a collection event unless the facility management plan for the facility specifies the wastes to be managed and the activities to be conducted during the event.
- (2) To obtain approval for a collection event not located at a certified solid waste facility, the applicant shall submit the following:
- (A) A complete HHW/VSQG hazardous waste collection event approval form; and
- (B) A safety, accident and contingency plan for the site. This plan shall address:
- (i) Public/transport;

(ii) Emergency contacts, plan of action;

(iii) Location and distance to closest hospital; and

(iv) Chain of command

(C) If the collection event location has not been assigned a permanent EPA Identification Number, the applicant is required to obtain either a permanent or temporary EPA Identification Number prior to holding the collection event. Permanent and temporary EPA Identification Numbers may be obtained by contacting the Vermont Hazardous Waste Management Program. Temporary EPA Identification Numbers are only valid for one year.

(3) Approval for a HHW/VSQG hazardous waste collection event location is only required one-time. Subsequent events in the same location may operate on the previous approval provided that the safety, accident and contingency plan for the specific site has not changed. The event operator shall send in notification that the safety, accident and contingency plan has remained unchanged at least 30 days prior to the event.

(4) All wastes managed during the collection event must be handled by personnel trained in accordance with § 6-905(g)(2)(A).

(5) At the end of an event, all VSQG hazardous waste collected during the event shall be packaged, labeled, and transported off-site by a permitted hazardous waste transporter and in accordance with Vermont Hazardous Waste Management Regulations.

(6) At the end of an event, all HHW collected during the event shall be removed from the site by a permitted hazardous waste transporter. The waste may be managed as a regulated hazardous waste as provided in § 6-1503(b)(5) above or may be transported to a solid waste facility certified to accept HHW/VSQG Hazardous Waste.

(c) Mobile HHW/VSQG Hazardous Waste Collection Units.

(1) Mobile HHW/VSQG Hazardous Waste Collection Units shall meet the requirements of § 6-1403(b) for collection events and the following requirements:

(A) The operator of the mobile collection unit shall be permitted as a hazardous waste transporter at the time that VSQG hazardous wastes are collected;

- (B) The mobile collection unit shall return to a solid waste facility certified to accept HHW/VSQG hazardous waste upon completion of each collection event; and
- (C) Collected HHW and VSQG hazardous wastes may remain in the mobile unit while at the certified HHW/VSQG hazardous waste collection facility for no more than 10 days from the date of collection after which it shall be transferred to another permitted hazardous waste transporter, a certified hazardous waste treatment, storage or disposal facility, or to a HHW/CEG hazardous waste collection facility.

### **Standards for Hazardous Household and Conditionally Exempt Generator Wastes**

~~(a) Hazardous waste from Conditionally Exempt Generator: may be accepted for handling and transfer only by solid waste facilities certified or approved by the Secretary to manage these wastes according to the provisions of Subchapter 12 of these Rules.~~

#### ~~(b) Collection Events~~

~~(1) collection events may take place only at certified solid waste facilities or at other locations specifically approved by the Secretary pursuant to §6-301(e).~~

~~(A) The facility management plan to be managed and the activities to be conducted during the event.~~

~~(2) If the event is held at a site which does not have appropriate safety, accident and contingency provisions in its existing facility management plan, the collection event organizer must submit a safety, accident and contingency plan to the Secretary for the specific site or sites where the collection event will take place.~~

~~(3) All wastes must be handled by personnel appropriately trained in accordance with all applicable federal and state statutes and regulations.~~

~~(4) At the end of an event, all CEG hazardous waste collected during the event must be packaged, labeled, and transported off-site by a permitted hazardous waste transporter in accordance with Vermont Hazardous Waste Management Regulations.~~

~~(5) At the end of an event, all HHW collected during the event must be removed from the site. The waste may be managed as a regulated hazardous waste as provided in subsection (d)(1)(D) or may be transported to a certified HHW/CEG Hazardous Waste Collection Facility or a Semi-Permanent HHW/CEG Hazardous Waste Collection Unit.~~

~~(d) Mobile HHW/CEG Hazardous Waste Collection Units~~

- ~~(1) Mobile HHW/CEG Hazardous Waste Collection Units must meet the requirements of §601206(d)(1) and the following requirements:~~
- ~~(2) The operator of the mobile collection unit must be a permitted hazardous waste transporter when CEG hazardous wastes are collected;~~
- ~~(3) The mobile collection unit must return to a solid waste facility certified to support it upon completion of each collection event; and~~
- ~~(4) Collected HHW and CEG hazardous wastes may remain in the mobile unit while at the vehicles' support facility for no more than 10 days before it must be transferred to another permitted hazardous waste transporter, a certified hazardous waste treatment, storage or disposal facility, or to a HHW/CEG hazardous waste collection facility or a semi-permanent HHW/CEG hazardous waste collection unit. All transfers of collected HHW and CEG hazardous wastes to another permitted hazardous waste transporter must occur at a certified facility or a certified collection site.~~

**Research, Development and Demonstration Permits**

~~A. Facilities proposing to recirculate leachate shall address the following issues:~~

- ~~1. Demonstrate that the facility accepts more than 2,500 tons per year of municipal solid waste at the facility.~~
- ~~2. Provide research or demonstration objectives that will be achieved by permitting the project and milestones for evaluation at permit renewal.~~
- ~~3. Demonstrate that the facility has screening measures in place to ensure that household hazardous wastes, hazardous wastes, and other solid wastes that may pose any issue to leachate quality have been screened from disposal at the landfill.~~
- ~~4. Demonstrate that the facility has adequate measures in place to protect human health, the environment, and ensure the proper management of leachate.~~
- ~~5. Demonstrate that the facility leachate collection system maintains less than a 12-inch depth of leachate head on the liner system using the Hydrologic Evaluation of Landfill Performance (HELP) Model or other approved method. The applicant shall include estimates of leachate production resulting from changes in operations.~~

- ~~6. Demonstrate that the facility landfill gas collection system is adequate to collect and destroy additional landfill gas generated as a result of additional liquids. The applicant shall include estimates of gas production resulting from changes in operations.~~
- ~~7. Demonstrate that the facility protects surface water and groundwater in a manner that meets or exceeds the requirements established in 40 C.F.R. Part 258.~~
- ~~8. Demonstrate that the addition of water to a landfill does not compromise the geotechnical stability of the waste. The application shall include a stability analysis demonstrating the physical stability of the landfill prior to the issuance of a permit to include consideration of the increased density of the solid waste due to saturation, pore pressures, and angles of internal friction. Any movement of the waste and shall be documented and the application shall include a description of the methods for determining whether there is any actual or potential movement of the waste or liquid seepage from the landfill. Leachate will not be transferred to another site. Leachate recirculation will only occur at site generated.~~
- ~~9. Provide an Operations and Maintenance Plan that outlines the system operator responsibilities in at least the following:
  - ~~i. Limits to stop pumping leachate in recirculation lines;~~
  - ~~ii. Parameters used for monitoring to determine maximum leachate volume within a set area;~~
  - ~~iii. Application at low rate and uniform distribution;~~
  - ~~iv. Maintain a routine testing program with a sampling protocol to monitor changes in leachate composition;~~
  - ~~v. Schedule and log of daily inspections for odors, clogged piping, and leachate outbreaks;~~
  - ~~vi. Contingency/emergency plan in the event that the recirculation system becomes inoperable;~~
  - ~~vii. Maintain records for each sump area with:
    - ~~1. dates and method of recirculation,~~
    - ~~2. rates recirculated in gallons per minute,~~
    - ~~3. leachate generation volume,~~
    - ~~4. source of leachate,~~
    - ~~5. any system adjustments,~~
    - ~~6. weather conditions, and~~
    - ~~7. outbreaks and correction measures taken;~~
    - ~~8. Track pump cycle times by measuring inflow rates;~~
    - ~~9. Track location, timing, and amount of leachate recirculated;~~
    - ~~10. Track total leachate in storage; and~~~~~~

- 11. Track site precipitation and other weather conditions that influence operational decisions.
- 10. Other demonstrations that the Secretary finds necessary to protect human health, the environment, and prevent the creation of a nuisance condition.
- 11. When reviewing a renewal application for a sanitary landfill that recirculates leachate the Secretary shall review the research objectives established for the project and evaluate whether the project achieved those objectives. The Secretary may, at the Secretary's sole discretion, terminate the project if it is determined that the project does not achieve the objective.

**§6-1404 — Mercury Added Consumer Products**

- (a) To facilitate the source reduction of mercury from solid waste and to help ensure proper handling, recycling and disposal of waste mercury added consumer products, certain mercury added items be labeled prior sale.
- (b) After July 1, 1999, manufacturer or wholesaler may not sell at retail in this state, to a retailer in this state, or for use in this state, and a retailer may not knowingly sell, any of the items listed in 10 V.S.A. ~~§7106~~ at retail if they contain added mercury, unless the item is labeled in accordance with § 6-803(b) or (c) ~~§ 6-1504(c) or §6-1504(d)~~.
- (c) Items to be labeled are:
  - (1) A thermostat or thermometer;
  - (2) A switch, individually or as part of another product;
  - (3) A medical or scientific instrument;
  - (4) An electric relay or other electrical device;
  - (5) A lamp; or
  - (6) A battery, sold to the public, other than a button battery;
- (d) The following labeling standards shall apply to all mercury added consumer products listed in §6-803(a)(2) ~~§6-1504(b)~~ above:
  - (1) The label must clearly inform the purchaser or consumer that mercury is present in the item and that the item may not be disposed of or placed in a waste stream destined for disposal until the

~~mercury is removed and reused, recycled, or otherwise managed to ensure that mercury does not become part of solid waste or wastewater.~~

- ~~(2) A label must be clearly visible and legible to consumers prior to purchase of the product. The label must be located on a surface of the product that is visible during installation and removal.~~
  - ~~(3) For labels affixed to products, the required words or symbols must be printed, mounted, molded, or engraved on the surface of the product using materials sufficiently durable to remain legible for the useful life of the product. —~~
  - ~~(4) For products with enclosed mercury added switches, both the enclosed device and the larger product must be labeled.~~
  - ~~(5) A listed mercury added consumer product must be labeled if manufactured after July 1, 1999.~~
  - ~~(6) Primary responsibility for affixing the required labels shall be on the manufacturer, and not on the wholesaler or retailer.~~
- ~~(e) The Secretary may administratively authorize alternative labeling, including package labeling, for mercury added consumer products listed in §6-803(a)(2) §6-1504(b) under the following conditions:~~
- ~~(1) A manufacturer must submit a written request for alternative labeling documenting that a product or class of products cannot reasonably be labeled to comply with specific requirements of §6-802(a) and/or (b) §6-1504(A), §6-1504(B); and/or §6-1504(C).~~
  - ~~(2) All authorizations for alternative labeling granted under this Subsection will be limited in duration and may be renewed.~~

#### **§ 6-1404 Waste Incineration**

- (a) Waste incineration facilities shall be designed to ensure that there is complete combustion as evidenced by the greatest practical reduction in content of carbon compounds in the waste of all wastes to be incinerated.
- (b) Facility operations shall include methods to separate from the incinerator those wastes that may not or cannot be burned.
- (c) A waste incineration facility shall apply for full certification following the application requirements for a solid waste treatment facility under § 6-504 of these Rules. In addition to the requirements in § 6-504, the facility management plan shall include the following:

- (1) the amounts and types of waste to be treated;
- (2) the air and water pollution control devices to be used;
- (3) plans for the proper storage and handling of incoming wastes and of residues;
- (4) plans for the disposal of incinerator ash and of solid wastes not processed by the incinerator;
- (5) a description of testing requirements for waste generated by an incineration unit, using a federally accepted test procedure with frequency of testing determined on a case by case basis, but not less than annually; and
- (6) a written describe of how all ash residue will be properly wetted or contained to prevent dust emissions or discharges during on-site storage, loading, transport, and unloading. Stored ash must be kept in watertight containers approved by the Secretary. Containers used for the transport of ash must be watertight, leach resistant, have covers, and be approved by the Secretary. Containers shall be prominently marked with an identification coding system so that it is possible to maintain records of what containers are used for ash transport.

**§ 6-1405 Animal Burial Standards Categorical Certifications**

- ~~(1) This section applies to the burial or disposal of all non-exempt animal mortalities, animal offal, and butchering waste.~~
- (2) Composting and burial ~~prohibition prohibited~~. Animals showing signs of a neurological disease shall be reported to authorities and managed in accordance with their directions. Animals that show signs of a neurological disease shall not be composted or buried.
- (3) Emergency situations. When the Secretary determines that an emergency event has occurred that requires the disposal of animal mortalities from that event, the Secretary may authorize a one-time disposal event in accordance with § 6-505(b). To the maximum extent practical, the disposal event shall conform to the requirements of § 6-1108(c) ~~subsection (d) of this section~~.
- (4) Applications for animal burial shall apply for a permit as follows:
  - (A) The facility shall be sited ~~and constructed~~ in conformance with ~~§6-1107~~ § 6-1106.
  - (B) The facility shall meet the following:

- (a) The pit must be managed so that the carcasses do not attract pests or vectors;
  - (b) Upon deposit in the pit the carcasses shall be:
    - (I) immediately covered with a minimum of 1/8" layer of hydrated lime and covered with at least 2 feet of soil; or
    - (II) immediately covered with a minimum of 1/8" layer of hydrated lime and covered with at least 6" of soil and covered with boards; or,
    - (III) managed in an alternative manner if approved in advance by the Solid Waste Program;
  - (c) Active pits must have snow fencing, or equivalent around the perimeter until the top of pit is at ground level;
  - (d) No carcasses shall be deposited within two feet of the surface;
  - (e) Final cover shall consist of at least two feet of compacted soil.
- ~~(5) Notice. On or before the date of filing any certification application or an amendment thereto, the applicant shall send notice and a copy of the application to the solid waste planning entity, to the municipality where the facility is proposed to be or is located and any adjacent Vermont municipality if the facility is located on a boundary. The applicant shall also notify all adjoining residences and landowners. The notice shall inform interested persons that they have 14 days to comment on the application and that comments may be sent to the Department of Environmental Conservation, Solid Waste Management Program. The applicant shall furnish the secretary the names of those noticed of the application.~~
- ~~(6) Public informational meeting. Upon a written request from a party identified in § 6-305(a)(9), or upon the Secretary's own motion, the Secretary shall hold a public informational meeting on the application. The request shall be made within 14 days of the Secretary's receipt of the application. Upon determining to hold a public informational meeting the Secretary shall:~~
- ~~(A) schedule and convene a public informational meeting;~~
  - ~~(B) extend the public comment period for a period not less than three days and not more than seven days from the date of the public informational meeting; and require that the~~

applicant provide notice of the application to all persons notified under subsection (e)(1) of this section.

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**Appendix A**  
Specific Requirement for Financial Responsibility Instruments

A-1 Trust Fund with Surety

- (a) An applicant may satisfy the financial responsibility requirements of subchapter 9 by establishing a trust fund for the benefit of the Agency according to the requirements of this section and subsections A-2 (b), (c), (f), (g), (h), (i), (k), and (l). The surety bond must guarantee full payment into the trust fund of the cost estimate for closure or post-closure plan submitted with the certification application. The trustee for the trust fund must be a bank or financial institution which has the authority to act as a trustee and whose operations are regulated and examined by the State of Vermont. The surety for the bond must be a surety company licensed to operate as a surety in the State of Vermont and shall be approved by the secretary.
- (b) The trust agreement and surety bond shall be executed in the form provided for such purposes by the Secretary.
- (c) Payments to the trust fund must be made annually by the certification holder over the term of the state certification issued for such facility or over the life of the facility if such facility life is shorter than the term of the state permit. Payments must be made as follows:
  - (1) The first payment shall be made when the trust is established and shall be at least equal to the cost estimated divided by the number of years in the term of the permit or life of the facility, whichever is the shorter.
  - (2) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment shall be the cost estimate minus the current value of the trust fund, divided by the number of years remaining in the term of the certification or the remaining number of years in the life of the facility, whichever is the shorter.
- (d) The certification holder may accelerate payments into the trust fund or he may deposit the full amount of the cost estimate at the time the fund is established. However, the value of the fund must be maintained at no less than the value would have been if annual payments were made as specified in paragraphs a and c of this subsection.

- (e) Whenever the cost estimate changes after the pay-in period is completed, the certification holder shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new cost estimate, the certification holder must, within 90 days of the change in the cost estimate, deposit a sufficient amount into the fund so that its value after payment at least equals the amount of the new estimate, or obtain other financial assurance as specified in subchapter 9 to cover the difference. If the value of the trust fund is greater than the total amount of the cost estimate, the certification holder may submit a written request to the secretary for release of the amount which is in excess of the cost estimate.
- (f) If the certification holder substituted other financial responsibility as specified in subchapter 9 for all or part of the trust fund, he may submit a written request to the secretary for release of the amount which is greater than the amount required as a result of the substitution.
- (g) Within 60 days after receiving a request from the certification holder for release of funds specified in paragraphs e and f of this subsection, the secretary will instruct the trustee to release to the certification holder such funds as the secretary specifies in writing.
- (h) After beginning final closure or during the period of post-closure care, a certification holder or any other person authorized to conduct closure, may request reimbursement for closure or post-closure expenditures respectively by submitting itemized bills to the secretary within 60 days after receiving bills for closure or post-closure activities. The secretary shall instruct the trustees to make reimbursement in those amounts as the secretary determines are in accordance with the closure or post-closure plan or are otherwise justified.
- (i) The secretary shall agree to terminate the trust when:
  - (1) The certification holder substitutes alternate financial responsibility as specified in subchapter 9; or
  - (2) The secretary notifies the certification holder that he is no longer required by subchapter 9 to maintain financial responsibility for the closure or post-closure of the facility.
- (j) The term of the surety bond shall be for the pay in period of the trust fund.
- (k) The bond must guarantee that the certification holder will:

- (1) Fund the trust in the amount of the cost estimate by the end of the pay-in period; or
- (2) During the pay-in period, fund the trust in the amount of the cost estimate within 15 days after an order to begin closure or post-closure care by the secretary or by a court, or following issuance of a notice of revocation of the certification; or
- (3) Provide alternative assurance within 90 days after receipt by the secretary of a notice of cancellation of the bond by the surety.

A-2 Surety Bonds

- (a) An applicant may satisfy the financial responsibility requirements of subchapter 9 by obtaining a surety bond according to the requirements of this section and by submitting the original copy of the bond with the facility closure or post-closure plans with the certification application. Only bonds issued by surety companies licensed to operate as sureties in the State of Vermont and approved by the secretary will satisfy the requirements of this section.
- (b) A surety bond form supplied by the secretary shall be used by the applicant and the surety.
- (c) The surety bond must name the applicant as the principal and name the State of Vermont as the obligee.
- (d) The term of the bond shall be for the life of the facility for which a certification is applied by the applicant through the closure period. A bond used for post-closure responsibility shall extend through the post-closure period.
- (e) The bond must guarantee that the certification holder will:
  - (1) Perform final closure or post-closure care in accordance with the closure or post-closure plan and other requirements in the certification for the facility; or
  - (2) Perform final closure or post-closure care following an order to begin closure or post-closure care issued by the secretary or by a court, or following issuance of a notice of revocation of the certification; or

- (3) Provide alternate financial assurance as specified in this section within 90 days after receipt by the secretary of a notice of cancellation of the bond from the surety.
- (f) The surety will become liable on the bond obligation when the certification holder fails to perform as guaranteed by the bond.
- (g) The penal sum of the bond must be in an amount at least equal to the amount of the closure or post-closure cost estimate.
- (h) Whenever the cost estimate increases to an amount greater than the amount of the penal sum of the bond, the certification holder shall, within 90 days after the increase, cause the penal sum of the bond to be increased to an amount at least equal to the new estimate or obtain other financial assurance, as specified in subchapter 9, to cover the increase. Whenever the cost estimate decreases, the penal sum may be reduced to the amount of the cost estimate following written approval by the secretary. Notice of an increase or decrease in the penal sum must be sent to the secretary by certified mail within 90 days after the change.
- (i) the bond shall remain in force for its term unless the surety sends written notice of cancellation by certified mail to the certification holder and to the secretary. Cancellation can not occur, however:
- (1) During the 120 days beginning on the date of receipt of the notice of cancellation by the secretary as shown on the signed return receipt; or
  - (2) While a compliance or enforcement action is pending.
- (j) following a determination that the certification holder has failed to perform final closure or post-closure care in accordance with the approved plan and other certification requirements when required to do so, the surety shall perform final closure or post-closure care in accordance with the terms of the bond, approved plan and other certification requirements or closure order. As an alternative to performing final closure or post-closure care the surety may forfeit the full amount of the penal sum to the State.
- (k) The certification holder may cancel the bond if the secretary has given prior written consent based on receipt of evidence of alternative financial assurance as specified in subchapter 9.

- (l) The secretary will notify the surety if the certification holder provides alternate financial assurance as specified in subchapter 9.
- (m) The surety will not be liable for deficiencies in the performance of closure by the certification holder after the certification holder has been notified by the secretary that the certification holder is no longer required by subchapter 9 to maintain financial assurance for closure or post-closure care of the facility.
- (n) As performed either by the certification holder or the surety, proper closure of post-closure care shall be deemed to have occurred only when the secretary so determines according to these Rules.

A-3 Letters of Credit

- (a) An applicant may satisfy the requirements of subchapter 9 by obtaining an irrevocable standby letter of credit according to the requirements of this section and by submitting the original copy of the letter of credit attached to the facility closure or post-closure plan along with the certification application. For new facilities, the letter of credit must be effective before the initial receipt of waste at the facility for which it is issued. ~~The issuing institution must be a bank or other financial institution which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by the State of Vermont. The financial institution branch issuing the letter of credit shall be located within the United States and shall be:~~
  - (1) a federally-chartered bank or financial institution that is regulated by the Office of the Comptroller of Currency, the Federal Reserve System, or the Federal Deposit Insurance Corporation; or
  - (2) a state-chartered bank or financial institution:
    - (A) whose deposits are insured by the Federal Deposit Insurance Corporation,  
or
    - (B) is a member of the Federal Reserve System; or
  - (3) is a branch of a foreign bank or other financial institution that is:
    - (A) licensed by either the banking authority in the state in which the branch is located or the Office of the Comptroller of the Currency; and

(B) examined by the Federal Reserve Systems.

- (b) The wording of the letter of credit must be approved by the secretary.
- (c) The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year. If the issuing institution decides not to extend the letter of credit beyond the current expiration date it must, at least 120 days before the date, notify both the certification holder and the secretary by certified mail of that decision. The 120 day period will begin on the date of receipt by the secretary as shown on the signed return receipt. Expiration can not occur, however, while a compliance or enforcement action is pending.
- (d) The letter of credit must be issued for at least the amount of the closure or post-closure cost estimate.
- (e) Whenever the cost estimate increases to an amount greater than the amount of credit, the certification holder shall, within 90 days of the increase, cause the amount of credit to be increased to an amount at least responsibility as specified in subchapter 9 to cover the increase. Whenever the cost estimate decreases, the letter of credit may be reduced to the amount of new estimate following written approval by the secretary. Notice of an increase or decrease in the amount of the credit shall be sent to the secretary by certified mail within 90 days of the change.
- (f) Following a determination that the certification holder has failed to perform closure or post-closure care in accordance with the approved plan or other certification requirement, the secretary will draw on the letter of credit.
- (g) the certification holder must establish alternate financial responsibility as specified in subchapter 8 and obtain written approval from the secretary within 90 days after receipt by both the certification holder and the secretary of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date. if the certification holder does ;not establish such alternative financial responsibility within the 90 days, the secretary will draw on the letter of credit. If the issuing institution grants an extension of the term of credit, the secretary may do the drawing during the last 30 days of credit if the operator has failed to provide alternative financial responsibility as specified in subchapter 9 and obtain written approval of such responsibility from the secretary .
- (h) The secretary shall return the original letter of credit to the issuing institution for termination when:

- (1) the certification holder substitutes alternate financial responsibility for closure or post-closure as specified in subchapter 9; or
- (2) The secretary notifies the certification holder, in accordance with section 6-901(1) of these Rules, that he is no longer required to maintain financial responsibility for closure or post-closure of the facility.

A-4 Deposits of Acceptable Collateral

- ~~(a) — An applicant may satisfy the requirements of subchapter 9, wholly or in part, by filing with the secretary a collateral bond payable to the State of Vermont, conditioned so that the applicant shall comply with the closure or post-closure plan filed for the facility. The amount of the bond shall be at least equal to the estimated closure or post-closure cost of the facility for which the certification application has been filed or any part thereof not covered by other financial responsibility instruments. Such bond shall be executed by the applicant after depositing with the secretary acceptable collateral, the market value of which shall be at least equal to the total estimated closure or post-closure cost or any part thereof not covered by other financial responsibility instruments.~~
- ~~(b) — Acceptable collateral may include certificates of deposit, negotiable bonds of the United States Government, the State of Vermont or any of its agencies, any government authority within the State of Vermont, or any county, municipality or other local bond issuing authority within the State of Vermont approved as acceptable for financial responsibility purposes by the secretary.~~
- ~~(c) — The secretary shall, upon receipt of such collateral, place the instrument(s) with the state treasurer to be held in the name of the state of Vermont in trust, for the purposes for which such deposit is made.~~
- ~~(d) — The certification holder shall be entitled to demand, receive and recover the interest and income from said instrument(s) as it becomes due and payable as long as the market value of the instrument(s) plus any other mechanisms used continue to be at least equal the closure or post-closure cost estimate.~~
- ~~(d) — the certification holder shall also be permitted to replace the collateral instruments with other like instruments of at least equal market value upon proper notification to the secretary and the state treasurer.~~

- ~~(f) — In the event of failure of the certification holder to comply with the final closure or post closure plan, the secretary shall declare said collateral forfeited and shall request the state treasurer to convert said collateral into cash and transfer such funds to the secretary to be used for final closure or post closure purposes.~~
- ~~(g) — The term of a collateral bond shall be for the life of the facility through the closure or post closure period, as appropriate.~~
- ~~(h) — The secretary shall return collateral instruments to the certification holder when:
  - ~~(1) — the certification holder substitutes alternate financial responsibility for closure or post closure as specified in subchapter 9; or~~
  - ~~(2) — the secretary notifies the certification holder, in accordance with these Rules, that he is no longer required to maintain financial responsibility for closure or post closure of the facility.~~~~

#### ~~A-5 — Financial Test and Corporate Guarantee~~

- ~~(a) — An applicant may satisfy the subchapter 8 requirements for financial responsibility by demonstrating that he passes a financial test as specified in this section. To pass this test the applicant must meet the criteria of either subsection (a)(1) or (a)(2).
  - ~~(1) — The applicant must have:
    - ~~(A) — two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and~~
    - ~~(B) — new working capital and tangible net worth each at least six times the sum of the current closure and post closure cost estimates; and~~
    - ~~(C) — tangible net worth of at least \$10 million; and~~
    - ~~(D) — assets in the United States amounting to at least 90% of his total assets or at least six times the sum of the current closure and post closure cost estimates.~~~~
  - ~~(2) — The applicant must have:~~~~

- ~~(A) — a current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and~~
  - ~~(B) — tangible net worth at least six times the sum of the current closure and post-closure cost estimates; and~~
  - ~~(C) — net worth of at least \$10 million; and~~
  - ~~(D) — assets located in the United States amounting to at least 90% of his total assets or at least six times the sum of the current closure and post-closure cost estimates.~~
- ~~(b) — To demonstrate that he meets this test, the applicant shall submit the following items to the secretary:
  - ~~(1) — A letter signed by the applicant's chief financial officer and worded as specified by the secretary.~~
  - ~~(2) — A copy of the independent certified public accountant's report on examination of the applicant's financial statement for the latest completed fiscal year; and~~
  - ~~(3) — a special report from the applicant's independent certified accountant to the applicant stating that:
    - ~~(A) — He has compared the data which the letter from the chief financial officer specifies as having been derived from an independently audited, year-end financial statement for the latest fiscal year with the amounts in such financial statements; and~~
    - ~~(B) — In connection with that procedure, no matters come to his attention which caused him to believe that the specified data should be adjusted.~~~~~~
- ~~(c) — For a new facility, the applicant shall submit the items specified to the secretary at least 60 days before the date on which solid waste is first received for treatment, storage, or disposal.~~

- ~~(d) After the initial submission of items specified in subsection (b), the certification holder shall send updated information to the secretary within 90 days after the close of each succeeding fiscal year. This information shall consist of all three items specified in subsection (b).~~
- ~~(e) If the certification holder no longer meets the requirements of subsection (a), he shall send notice to the secretary of intent to establish alternate financial responsibility as specified in subchapter 9. The notice shall be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the certification holder no longer meets the requirements. The certification holder shall provide the alternate financial responsibility within 120 days after the end of such fiscal year.~~
- ~~(f) The secretary may, based on a reasonable belief that the certification holder may no longer meet the requirements of subsection (a), require reports of financial condition at any time from the operator in addition to those specified in subsection (b). If the secretary finds, on the basis of such reports or other information, that the certification holder no longer meets the requirements of subsection (a), the certification holder shall provide alternate financial responsibility as specified in subchapter 9 within 30 days after notification of such a finding.~~
- ~~(g) The secretary may disallow use of this test on the basis of qualification in the opinion expressed by the independent certified public accountant in his report on examination of the applicant's or certification holder's financial statements (see subsection (b)(2)). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The secretary will evaluate other qualifications on an individual basis. The certification holder shall provide alternate financial responsibility as specified in subchapter 9 within 30 days after notification of the disallowance.~~
- ~~(h) During the period of post closure care, the secretary may approve a decrease in the current post closure cost estimate for which this test demonstrated financial responsibility if the certification holder demonstrates to the secretary that the amount of the cost estimate exceeds the remaining costs of the post closure care.~~
- ~~(i) the certification holder is no longer required to submit the items specified in subsection (b) when:~~
- ~~(1) a certification holder substitutes financial responsibility as specified in subchapter 9; or~~

- ~~(2) — the secretary releases the certification holder from the requirements of this section as specified in section 6-902(1) of these Rules.~~
- ~~(j) — An certification holder may meet the requirements of this subsection by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor shall be the parent corporation of the certification holder. The guarantor shall meet the requirements for applicant or certification holder in subsections (a) through (g) and shall comply with the terms of the corporate guarantee. The wording of the corporate guarantee shall be specified by the secretary. The corporate guarantee shall accompany the items sent to the secretary as specified in subsection (b). The terms of the corporate guarantee shall provide that:~~
- ~~(1) — If the certification holder fails to perform final closure or post-closure of a facility covered by the corporate guarantee in accordance with the closure plan or post closure plan, the guarantor will do so or establish a trust fund in the name of the certification holder as specified in these Rules.~~
- ~~(2) — The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the certification holder and to the secretary. The cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the certification holder and the secretary as evidenced by the return receipts.~~
- ~~(3) — If the certification holder fails to provide alternate financial responsibility as specified in subchapter 9 and obtain the written approval of such alternate responsibility from the secretary within 90 days after the receipt by both the certification holder and the secretary of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial responsibility in the name of the certification holder.~~

## APPENDIX B

### Processes to Significantly Reduce and Further Reduce Pathogens

#### 1. Processes to Significantly Reduce Pathogens

##### Aerobic Digestion

Aerobic conditions are maintained at residence times ranging from 60 days at 15°C to 40 days at 20°C, with a volatile solids reduction of at least 38 percent.

##### Anaerobic Digestion

The process is conducted without air at residence times ranging from 60 days at 20°C to 15 days at 30°C, to 55°C, with a volatile solids reduction of at least 38 percent.

##### Air Drying (Sand Beds)

Sludge is allowed to dry on sand beds for a minimum of 90 days, 60 days of which temperatures average above 0°C on a daily basis. Sludge depth on the drying beds is 9 inches or less at the time the sludge is deposited on the beds.

##### Composting

Sludge is maintained at minimum operation conditions of 40°C for five days. For four hours during this period the temperature exceeds 55°C. The composting methods used are the static aerated pile, windrow or within vessel methods.

##### Lime Stabilization

Lime is added to produce a pH of 12 after two hours contact.

#### 2. Processes to Further Reduce Pathogens

##### High Temperature Composting

Using the within vessel or static aerated pile composting method, the sludge is maintained at operating conditions of 55°C or greater for three days. Using the windrow composting method, the sludge attains a temperature of 55°C or greater for at least 15 days during the

composting period. During the high temperature period, there will be a minimum of five turnings of the windrow.

### **Heat Drying**

Dewatered sludge cake is dried by direct or indirect contact with hot gases, and moisture content is reduced to 10 percent or lower. Sludge particles reach temperatures well in excess of 80°C.

### **Heat Treatment**

Liquid sludge is heated to temperature of 180°C for 30 minutes.

### **High Temperature Aerobic Digestion**

Liquid sludge is agitated with air or oxygen to maintain aerobic conditions at residence times of 10 days at 55°C–60°C with a volatile solids reduction of at least 38 percent.

The processes below do not, on their own, reduce the attraction of disease vectors; therefore, they can only be used after a process to significantly reduce pathogens.

### **Beta Ray Irradiation**

Sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (20°C).

### **Gamma Ray Irradiation**

Sludge is irradiated with gamma rays from certain isotopes, such as 60 cobalt and 137 cesium, at dosages of at least 1.0 megarad at room temperature (20°C).

### **Pasteurization**

Sludge is maintained for at least 30 minutes at a minimum temperature of 70°C.

METHOD 9095A

PAINT FILTER LIQUIDS TEST

**To receive a copy of the paint filter liquids test (Method 9095AB) contact:**

**Solid Waste Management Program**

**Waste Management Division**

**103 South Main Street**

**West Office Building**

**Waterbury VT 05671-0404**

**Telephone 802-241-3444**

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### Appendix C

#### Fee Schedule for Applications for Certification

Fees related to these Rules are established in 3 V.S.A. §2822(j). Fees shall be applied according to statute, as may be amended, . As of the effective date of this rule these fees are as follows:

|  |  |
|--|--|
| <u>Original and renewal applications – excluding recycling and composting facilities and categorical solid waste facilities</u>  | <u>\$0.75 per ton certified operational capacity prorated and paid on an annual basis over the term of the certification</u>   |
| <u>Original and renewal applications for recycling and composting facilities, excluding categorical solid waste facilities that solely manage recycling or composting solid waste</u>                          | <u>\$100.00</u>  |
| <u>Original and renewal applications for categorical solid waste disposal facilities</u>   | <u>\$100.00</u>  |
| <u>Original and renewal applications for facilities certified pursuant to 10 V.S.A. §6605 and §6605b, that treat, store or dispose of waste generated solely from mining, extraction or mineral processing</u> | <u>If &lt;25,000 cubic yards operational capacity - \$200.00</u><br><u>If &gt;25,000 cubic yards operational capacity - \$0.95 per cubic yard of operational capacity</u><br><u>Maximum annual payment, \$75,000</u> |
| <u>Increase in tonnage, excluding recycling and composting facilities, and categorical solid waste facilities</u>  | <u>\$0.75 per ton certified operational capacity prorated and paid on an annual basis over the term of the certification</u>   |
| <u>Insignificant Waste Management Event Application</u>  | <u>\$100.00 per event</u>  |
| <u>Sludge and Septage Facilities: Land application sites, facilities that further reduce pathogens and disposal facilities</u>   | <u>\$1,000.00</u>  |
| <u>Sludge and Septage Facilities: All other facilities, and application to amend certifications for land application sites, facilities that further reduce pathogens and disposal facilities</u>               | <u>\$125.00</u>  |



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## **Subchapter 1 – Purpose**

### **§ 6-101 Authority**

These Rules are adopted by the Secretary of the Agency of Natural Resources pursuant to the authority of 10 V.S.A. chapter 159, Waste Management. The Secretary has the power to adopt, amend, and repeal Rules pursuant to 3 V.S.A. chapter 25.

### **§ 6-102 Declaration of Purpose**

- (a) These Rules establish procedures and standards to protect public health and the environment by ensuring the safe, proper, and sustainable management of solid waste in Vermont. These Rules amend the Solid Waste Management Rules as adopted on March 15, 2012.
- (b) A facility in compliance with the requirements of these Rules is presumed to:
  - (1) Not results in an exceedance of groundwater enforcement standards at points of compliance, as defined by the Groundwater Protection Rule and Strategy; or
  - (2) Otherwise adversely affect public trust uses of groundwater in the State.
- (c) Notwithstanding the presumption of §6-102(b), the Secretary may require additional demonstration of compliance with the Groundwater Protection Rule and Strategy.

### **§ 6-103 Severability**

The provisions of any section of these Rules shall be severable. If any provision of these Rules is invalid or if any application of these Rules 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.

**§ 6-104**

**Fees**

- (a) Fees related to these Rules are established in 3 V.S.A. §2822(j). Municipalities shall be exempt from the payment of fees in accordance with 3 V.S.A. §2822(i).
- (b) Facilities operated by a private entity are required to pay relevant fees.
- (c) For activities where the role of the private applicant is to function solely as a contracted service provider and the municipality establishes and maintains the approved financial responsibility instrument, controls facility operations, directly utilizes the services of the facility, maintains an unencumbered right to possession, maintains access to the facility at all times, and controls the financial aspects of the facility (e.g. obtains the user fees and pays any fees or taxes), the municipal exemption of §6-104(a) applies. Under these circumstances, the contractor would not be vested in the financial viability of the facility.

**§ 6-105**

**Incorporation by Reference**

When reference is made herein to CFR titles, their parts, subparts, or sections, the reference is to titles of the Code of Federal Regulations as they existed on the effective date of these Rules.

**§ 6-106**

**Signatories to Certifications and Reports**

- (a) Applications and reports requested or required by the Secretary shall be signed by each applicant or by a duly authorized representative of the applicant.
- (b) A person is a duly authorized representative for the purposes of subsection (a) of this section only if:
  - (1) The authorization is made in writing and is signed by the facility applicant;
  - (2) The authorization states that the applicant has delegated the legal authority for the representative to sign on behalf of the applicant; and

(3) The written authorization is submitted to the Secretary.

(c) If an authorization described in subsection (b) of this section no longer meets the requirements of that subsection, a new authorization satisfying the requirements of subsection (b) of this section shall be submitted to the Secretary prior to or together with any documents signed by the new authorized representative.

(d) Any person signing a document pursuant to subsection (a) 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. Based on my inquiry of the person or persons who operate the facility, 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.

## Subchapter 2 – General Definitions and Acronyms

### § 6-201 Definitions

- (a) All terms not defined herein shall have the meaning given them in 10 V.S.A. §6602. Terms presented in this subchapter apply generally to these Rules. Additional terms relevant to specific waste management activities are included in subchapters 4 and 11.

“Active life” means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities.

“Active portion” means the part of a facility or operational unit that has received or is receiving wastes and that has not been closed in accordance with the Solid Waste Management Rules.

“Adjoining Property Owners” means a person who owns land in fee simple, if that land:

- (a) shares a property boundary with a tract of land where proposed or actual activity regulated by the Secretary is located; or
- (b) is adjacent to a tract of land where such activity is located, and the two properties are separated only by a river, stream or public highway.

“Administrative amendment” means an amendment to a certification or permit that corrects typographical errors, changes the name or mailing address of a permittee, or makes other similar changes to the certification or permit that do not require technical review of the permitted activity or the imposition of new conditions or requirements.

“Administratively complete application” means an application for a certification or permit for which all initially required documentation has been submitted, and any required fee, and the information submitted initially addresses all application requirements but has not yet been subjected to a complete technical review.

“Agency” means the Vermont Agency of Natural Resources.

“Alternative Daily Cover” means materials which substitute for compacted soils and earthen materials to cover waste at landfills on a daily basis, and which use has been approved by the Secretary.

“Airport” means a public-use airport, open to the public without prior permission and without restrictions within the physical capacities of available facilities.

“Approved Uniform Solid Waste” means solid waste which has been determined in writing by the Secretary to be uniform, consistent and does not contain landfill banned materials as defined by State and/or Federal regulation.

“Architectural Waste” or “AW” means discarded drywall, metal, asphalt shingles, clean wood, and plywood, and oriented strand board derived from the construction or demolition of buildings or structures.

“Asbestos” means the fibrous varieties of primarily the amphibole and serpentine mineral groups which include the minerals: chrysotile, riebeckite (crocidolite), cummingtonite, grunerite (amosite), anthophyllite, actinolite and tremolite.

“Asbestos Waste” means a waste that contains any type of asbestos in an amount greater than one percent by weight, either alone or mixed with other fibrous or non-fibrous material.

“Bird Hazard” means the likelihood of collision between birds and aircraft that may cause damage to the aircraft or injury to its occupants.

“Biosolids” means sewage sludge derived, in whole or in part, from domestic wastes which have been subjected to a treatment process for the reduction of pathogens and have been demonstrated to meet the applicable requirements of these Rules for contaminant concentrations, vector attraction reduction, and pathogen reduction, such that the material has been approved by the Secretary for application to the land under a site specific solid waste facility certification.

“Cell” means a discrete, confined portion of compacted solid waste within a landfill. A cell is a subpart of an operational unit within a landfill.

“Closure” means the activities and requirements that a facility shall complete, as prescribed by the approved Facility Management Plan or otherwise by the Secretary, when a portion of the facility or the entire facility is no longer receiving, processing or disposing of solid waste. “Clean Wood” means untreated and unpainted wood including dimensional lumber, and other natural woody debris. This term includes trees, tree stumps, brush and limbs ( $\geq 1$  inch in diameter), root mats, and logs.

“Commercial Hauler” means any person who transports regulated quantities of hazardous waste and/or transports solid waste for compensation.

“Composite Liner” means a system consisting of two components; the upper component must consist of a minimum 60-mil Flexible Membrane Liner (FML) and a lower component consisting of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec. The FML must be installed in direct and uniform contact with the compacted soil component.

“Composting” means the controlled aerobic biological decomposition of organic matter through active management to produce compost (as that term is defined in 10 V.S.A. §6602 and subchapter 11 of these Rules).

“Conditionally Exempt Generator” or CEG” means a generator of hazardous waste which is conditionally exempted from certain provisions of the Vermont Hazardous Waste Management Regulations. A generator is conditionally exempt if they meet the requirements as described in subchapter 7 of the Vermont Hazardous Waste Management Regulations.

“Construction and Demolition Waste” or “C&D” means waste derived from the construction or demolition of buildings, roadways or structures, including, but not limited to, clean wood, treated or painted wood, plaster drywall, roofing paper and shingles, insulation, glass, , flooring materials, brick, masonry, mortar, incidental stone, soil, metal, furniture and mattresses. This definition includes architectural waste. This definition *does not* include asbestos waste, regulated hazardous waste, hazardous waste generated by households, or hazardous waste from conditionally exempt generators.

“Contact person” means a person designated by a permittee or permittee(s) who has the authority to make and implement decisions regarding operating conditions at a facility.

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

“Corrective Action” means steps taken by a person, as directed by the Secretary, to repair facility structures or operations in order to bring the facility into compliance with design, construction, management and operational regulations and/or to reduce or eliminate risk of harm or actual harm to the public health, public safety or the environment.

“Cover Material” means earthen material, or other material approved by the Secretary, that is used to cover compacted solid wastes in a landfill in order to control fire, disease vectors and odors, to prevent blowing litter, to discourage scavenging by animals, and to assure an aesthetic appearance.

“Custodial Care” means the continued management of end-use obligations of a landfill, particularly protection of the landfill cap and limiting access, following completion of the post-closure period.

“Development soils” means unconsolidated mineral and organic matter overlying bedrock that is contaminated solely by polycyclic aromatic hydrocarbons (PAHs), arsenic, or lead at concentrations which exceed Vermont Soil Screening Values and are not hazardous waste.

“Development soil concentration level” means those levels of polycyclic aromatic hydrocarbons (PAHs), arsenic, or lead expressed in units of mass per mass, contained in the development soils.

“Diffuse Disposal Facility” shall have the same definition as “Land Application Site”.

“Discarded” means a material that is:

- (a) delivered to a treatment, storage, recycling or disposal facility;
- (b) abandoned;

- (c) burned or incinerated;
- (d) stored or placed in a manner that constitutes the discharge, injection, spilling or leaking of material or any constituent thereof into or on any land or water or into the air;
- (e) placed in or near the public right of way for collection; or
- (f) conveyed to a commercial hauler for delivery to a treatment, storage, recycling or disposal facility.

It *does not* mean a material that is used in a manner approved by the Secretary and not posing a threat to public health or the environment.

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

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

“Diversion” means the management of solid wastes through methods other than disposal. Diversion includes recycling, composting, reuse, and anaerobic energy production. Diversion does not include use of materials for alternative daily cover at landfills or the incineration of solid waste to produce energy.

“Domestic food source animals” means animals raised for direct human consumption.

“Domestic septage” means either liquid or solid material removed from a septic tank or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial or industrial wastewater, or a mixture of commercial or industrial and domestic wastes, portable toilet waste, holding tank waste, cesspool waste, waste from Type III marine sanitation devices, or grease removed from a grease trap.

“Domestic Wastes” means wastes originating from bathrooms, kitchens, showers, toilets or other sanitary facilities (public or private) regardless of the degree of treatment.

“Drinking Water Source” means any surface water or groundwater intake used or permitted to be used as a source of drinking water for human consumption.

“Environmental Notice Bulletin” or “bulletin” means the website and e-mail notification system required by 3 V.S.A. §2826.

“Exceptional Quality (EQ) Biosolids” means products derived in whole or in part from domestic wastes which have been subjected to and meet the requirements of the following: a pathogen reduction process established in 40 CFR Part 503.32(a)(3), (4), (7) or (8); one of the vector attraction reduction standards established in 40 CFR Part 503.33; the contaminant concentration limits in §6-1303(a)(1); and if by a composting process, §6-1303(a)(4) of these Rules. EQ biosolids, once released from the generating facility, are no longer considered to be solid wastes in accordance with §6-302(a)(4) of these Rules and may be marketed and distributed to the general public. Residual dairy wastes are considered to be equivalent to EQ biosolids or EQ biosolids products and eligible for marketing and distribution to the general public when they have been prepared and are managed in full accordance with §6-1305.

“Facility” means all contiguous land, structures, other appurtenances and improvements on the land, used for treating, storing or disposing of solid waste. A facility may consist of several treatment, storage or disposal operational units.

“Fact Sheet” means a document that produced by the Secretary that briefly sets forth the principle facts and significant factual, legal, methodological, and policy questions considered in preparing a draft decision.

“Final Closure” means the completion of all closure activities.

“Final Grades” means the maximum authorized slopes and in-place volume of waste and cover materials achieved prior to final closure.

“Final Capping System” means an engineered layer of materials which has been approved by the Secretary to be placed on the surface of a landfill in a location where no additional waste will be deposited. A final capping system shall meet the minimum requirements of these

Rules and achieve the performance criteria of minimizing infiltration and controlling landfill gas emissions as described in § 6-1004, as applicable.

“Floodplain” means the land area adjacent to a surface water body that is below the one hundred (100) year flood elevation.

“Floodway” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge a one-hundred-year base flood, without cumulatively increasing the water surface elevation more than one foot at any point.

“Food processing residual” means the remaining organic material from a food processing plant and may include whey and other dairy, cheese making, and ice cream residuals or residuals from any food manufacturing process excluding slaughtering and rendering operations. It does not include materials from markets, groceries, or restaurants.

“Food residual” means source separated and uncontaminated material that is derived from processing or discarding of food and that is recyclable, in a manner consistent with 10 V.S.A. § 6605k. Food residual may include pre-consumer and postconsumer food scraps. “Food residual” does not include meat and meat-related products when these materials are composted by a resident on site.

“Friable asbestos” means any asbestos containing material that can be crushed, crumbled, pulverized or turned to powder with the ordinary force of a human hand.

“Geosynthetics” means a generic classification of all synthetic materials used for geotechnical engineering applications, and includes geotextiles, geogrids, geomembranes, geo nets and geocomposites.

“Groundwater” means the water below the land surface but does not include surface waters within the meaning of 10 V.S.A. §1251(13).

“Groundwater Compliance Points” means the following:

- (1) any point of present use of groundwater, including use as a public water source or as a source of water for potable water supplies;
- (2) the boundary of Class I, Class II, or Class IV groundwater area;

- (3) zone two of a public water source protection area;
- (4) any point at the boundary of the property where the activity is located: and
- (5) any point 150 feet upgradient and any point 300 feet downgradient from a land application area, as measured from the edges of the land application area.
- (6) the additional points established by these Rules or the Groundwater Protection Rule and Strategy for specific facility certification and activity types.

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

“Hazardous materials” means (A) all petroleum and toxic, corrosive, or other chemicals and related sludge included in any of the following: (i) any substance defined in section 101(14) of the federal Comprehensive Environmental Response, Compensation and Liability (CERCLA) Act of 1980; (ii) petroleum, including crude oil or any fraction thereof; (iii) hazardous wastes as defined by the Vermont Hazardous Waste Management Regulations; or (iv) a chemical or substance that, when released, poses a risk to human health or other living organisms and that is listed by this rule. (B) 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 manufacturer’s instructions.

“HHW/CEG Hazardous Waste Collection Facility” means a facility used for the collection and storage of Household Hazardous Wastes (HHW) and/or hazardous waste from Conditionally Exempt Generators (CEG).

“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, is

specifically excluded from this definition.

“High Carbon Bulking Agent” means carbon-based material, the use of which is intended for adding structure and bulk to, and/or for moisture management within, a compost pile.

“Household Hazardous Waste” or HHW means any waste from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas) that would be subject to regulation as hazardous wastes if it were not from households.

“Hydric Soils” means soils that are formed under conditions of saturation, flooding, or ponding for a long enough time during the growing season that anaerobic conditions are developed in the upper portions of the soil profile.

“Implementation Plan” means a municipal or Solid Waste Management Entity’s plan which is adopted and found to be consistent with the State Material Management Plan. This plan must include all the elements required for consistency with the State plan and an applicable regional plan and shall be approved by the Secretary.

“Implemented Waste” means all solid waste which originates from a municipality which manages waste in accordance with a solid waste implementation plan approved by the Secretary.

“Interim Cap” means a temporary layered landfill capping system, which may consist of either, or a combination of, soil and geosynthetic barriers designed to control emissions and minimize infiltration and meets the performance standard of §6-1004(i).

“Individual permit” means a permit that authorizes a specific discharge, emission, disposal, facility, or activity that contains terms and conditions that are specific to the discharge, emission, disposal, facility, or activity.

“Intermediate Cover” is a landfill cover system which is used when an opened area of the landfill is not anticipated to receive waste for a period of three (3) months or more.

“Incinerator” means any structure or furnace in which combustion takes place, the primary purpose of which is the reduction in volume and weight of a solid waste and is considered a disposal facility.

“Inert Materials” means material that is non-putrescible and that will not exceed Vermont Groundwater Enforcement Standards when analyzed using EPA SW-846 Synthetic Precipitation Leaching Procedure (SPLP).

“Insignificant Waste Management Event Approval” or “IWMEA” means a waste disposal, storage, treatment, collection or processing event of limited duration that the Secretary has determined will not result in a threat to the public health and safety or to the environment and will not create a nuisance.

“Land Application” means the diffuse spreading of non-EQ biosolids and stabilized domestic septage on the land at a controlled application rate for the purpose of providing agricultural nutrients, improving soil structure, or reclaiming a site.

“Land Application Site” or “Land Application Facility”, means a parcel of land certified under these Rules for the management of non-EQ biosolids or stabilized domestic septage via application to the land as a nutrient source or soil conditioner (see also “Diffuse Disposal Site”).

“Lateral Expansion” means a horizontal expansion of the waste boundaries of an existing solid waste landfill unit.

“Leachate” means liquid that passes through or emerges from a solid waste, such as dissolved, suspended or miscible materials, chemicals or biologic products, or other materials that have been derived from the waste.

“Leaf and Yard Residuals” means source separated, compostable untreated vegetative matter, including grass clippings, leaves, kraft paper bags, and brush, which is free from non-compostable materials. It does not include such materials as pre- and post-consumer food residuals, food processing residuals, or soiled paper.

“Liquid Waste” means any waste material that is determined to contain “free liquids” as defined by Method 9095B (2004, Paint Filter Test), contained in “Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods” (EPA Pub. No. SW-846).

“Major Amendment” means an amendment to an individual permit or notice of intent under a general permit that necessitates technical review.

“Mandated Recyclables” means the following source separated materials: aluminum and steel cans; aluminum foil and aluminum pie plates; glass bottles and jars from food and beverages; polyethylene terephthalate (PET) plastic bottles or jugs; high density polyethylene (HDPE) plastic bottles and jugs; corrugated cardboard; white and colored paper; newspaper; magazines; catalogues; paper mail and envelopes; boxboard; and paper bags.

“Mining Activity” means the process or business of extracting metals, minerals, rocks or ores from the earth.

“Mineral Processing Waste” means a solid waste from an industrial or manufacturing facility that processes materials from a mining activity and where chemicals are intentionally added as part of that processing. Mineral processing waste does not include commercial products from mined materials.

“Mining Waste” means a solid waste from an industrial or manufacturing facility that processes materials from a mining activity that is generated from the beneficiation, irrespective of the addition of chemicals, of rock or ore to separate and concentrate valuable minerals from waste material, remove impurities, or prepare the rock for further refinement. Mining waste includes asbestos waste, except when that asbestos waste is disposed at a certified facility in accordance with subchapter 10 of these Rules. Mining waste does not include mining waste solely from cutting, shaping or finishing granite, marble, limestone, slate or other stones for monuments, buildings or other similar uses.

“Minor Amendment” means an amendment to an individual permit or notice of intent under a general permit that requires a change in condition or requirement, does not necessitate technical review, and is not an administrative amendment.

“Mobile HHW/CEG Hazardous Waste Collection Unit” means a vehicle or trailer used to collect Household Hazardous Waste and/or hazardous waste from Conditionally Exempt Generators, at more than one location.

“Mobile Solid Waste Collection Operation” means the operation of a vehicle or trailer, or a container on or attached to such vehicle or trailer used for the collection of solid waste.

“Municipal Solid Waste” or “MSW” means combined household, commercial and industrial waste materials generated in a given area.

“Non-Implemented Waste” means all solid waste which originates from a municipality that does not have a solid waste implementation plan approved by the Secretary.

“Nuisance” means anything that is injurious to human health or is indecent or offensive to the senses and occurs as the results of the storage, transport, processing or disposal of solid wastes. Constitutes the interference with the comfortable enjoyment of life or property and affects any considerable number of persons at the same time.

“Organic Solid Waste” means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose into soil and is therefore free of non-organic materials and contamination. Examples of organic materials include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human and pet feces) is not included in this definition.

“Food Residual Drop-Off” means a registered facility that is not located at a certified solid waste facility and is approved only for the collection of food residuals.

“Organic Solid Waste Recovery Facility” or “ORF” means a facility where organic solid wastes are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester.

“Operating Capacity” means the volume of material that a facility is approved by the Secretary to manage, consistent with the volume of materials for which fees have been paid within the operational year and is less than or equal to the permitted design capacity. This applies only to facilities required to pay application fees.

“Operational Unit” means a discrete area of land or excavation that plans to receive, currently receives, or has received solid waste for permanent disposal.

“Operator” means the person responsible for the overall operation of the facility and whose actions or failure to act may result in non-compliance with these Rules or the facility certification. Operators must have the minimum required training as required by the training plan submitted with the facility application for certification.

“Open Burning” means the burning of solid wastes in the open where the products of combustion are emitted directly into the atmosphere without passing through a stack, chimney, or other enclosure.

“Permitted Design Capacity” means the volume of materials that a facility’s designed infrastructure is capable of handling. Certifications will be issued with permitted design capacity amounts. This volume may be greater than the actual volumes of material managed at the facility (Operating Capacity).

“Permitted Hazardous Waste Transporter” means a commercial hauler or transporter permitted to transport hazardous waste.

“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.

“Post-Closure” means the regulated time period following landfill closure.

“Processed Construction and Demolition Debris Residual” is construction and demolition debris which has had all hazardous and recyclable materials removed, and which consists of materials with little or no economic value. This material may be disposed of.

“Processed Glass Aggregate” or “PGA” means the mixed glass cullet produced from crushed and screened clean food and beverage glass containers and meets the specification of § 6-302(a)(12).

“Qualified Professional” means a person who possesses the following education, training, and experience: A current professional engineers or professional geologists license, a license or certification to perform environmental site work equivalent if applicable, a baccalaureate or higher degree in a related discipline or five years relevant experience.

“Recyclable Materials” means solid waste materials that can be reclaimed and/or processed to be used in the production of materials or products.

“Recycle” means the process of reclaiming and/or processing solid waste materials to produce new materials or products. This term does not mean incineration of solid waste to produce energy or fuel products.

“Regional Plan” means that plan which is prepared and adopted in accordance with the provisions of 24 V.S.A. §4348.

“Regulated Medical Waste” or “RMW” means that portion of waste generated in health care facilities and requiring special handling and treatment prior to disposal. The following types of solid waste are considered RMW:

(1) The following types of solid waste are considered RMW:

- (A) Pathological and microbiological waste containing blood or other potentially infectious materials;
- (B) Contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state, if compressed;
- (C) Sharps;
- (D) Animal infectious waste;
- (E) Liquid or semi-liquid blood or other potentially infectious materials;
- (F) Items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; and
- (G) Other wastes not included above, as determined by the Secretary.

(2) The following types of solid wastes are not considered RMW:

- (A) Waste that has been identified or characterized as hazardous waste based on the compounds listed in the *Vermont Hazardous Waste Management Regulations* (HWMR) Appendix 3, U or P (Acute) list [40 CFR 261.33, *Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof*] and is the sole active

ingredient of the mixed formulation. The formulation may be hazardous if it exhibits any of the characteristics as described in §7-205, *Characteristic of Ignitability*, §7-206, *Characteristic of Corrosivity*, §7-207, *Characteristic of Reactivity*, and §7-208, *Characteristic of Toxicity*, as presented in the Vermont HWMR;

- (B) Corpses, remains and anatomical parts that are for ceremonial interment or ceremonial cremation;
- (C) Nasal secretions, sputum, tears, sweat, urine, and vomitus unless they contain visible blood;
- (D) Teeth; and
- (E) Medical waste generated in the home that has not been administered by a visiting licensed healthcare professional.

“Residence” means a permanent structure where a person lives during some or all of a year.

“Residual Waste” or “Residuals” shall mean sewage sludge, biosolids, EQ biosolids, short paper fiber, wood ash, and drinking water treatment sludge.

“Reuse” means the use of a material or product more than once before it is recycled or discarded as solid waste.

“River corridors” means the land area adjacent to a river that is required to accommodate the dimensions, slope, planform and bovver of the naturally stable channel and that is necessary for the natural maintenance or natural restoration of a dynamic equilibrium condition, and for minimization of fluvial hazards, as delineated by the Agency of Natural Resources in accordance with river corridor protection procedures

“Sanitary Landfill” or “Landfill” means a disposal site employing an engineered method of disposal of solid waste on land in a manner that minimizes environmental hazards by spreading the solid waste in thin layers, compacting the solid waste to the smallest practical volume, and applying and compacting cover material at the end of each operating day.

“Sanitary Waste” means any non-hazardous or non-radioactive solid waste materials.

“Saturated Zone” means the zone in which the voids in the rock or soil are filled with water.

“Secretary” means the Secretary the Agency of Natural Resources, or his or her duly authorized representative.

“Septage” means the liquid or solid materials pumped from a septic tank that receives either commercial wastewater or industrial wastewater; or a mixture of commercial and domestic wastes, portable toilet waste, holding tank waste, cesspool waste, waste from Type III marine sanitation devices, or a mixture of grease and domestic waste removed from a grease trap during cleaning.

“Sewage Sludge” means any solid, semisolid, or liquid generated from a municipal, commercial, or industrial wastewater treatment facility or process treating any amount of domestic waste.

“Slaughterhouse Waste” means the residual liquid, inedible animal tissues and offal derived from the production of meat. Slaughterhouse waste is not a food residual.

“Sludge” means any solid, semisolid, or liquid generated from a municipal, commercial, or industrial wastewater treatment facility or process, water supply treatment plant, air pollution control facility or any other such waste having similar characteristics and effects.

“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; high carbon bulking agents used in composting; or solid or dissolved materials in industrial discharges which are point sources subject to permits under the Water Pollution Control Act, 10 V.S.A., chapter 47. Note: for the purposes of these Rules, solid waste that is also hazardous waste is subject to further regulation under the Vermont Hazardous Waste Management Regulations.

“Solid Waste Management” means the activities that result in the storage, transportation, transfer, or treatment of solid waste or recyclable materials, or in the disposal of solid waste.

“Solid Waste Management Entity” or “SWME” means a municipal entity (solid waste district, solid waste alliance or individual municipality) that plan and implement plans for the management and regulation of solid waste within a municipality.

“Stabilized” means the resulting condition of waste once the waste no longer undergoes spontaneous physical, chemical or biological changes .

“Storage” 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.

“Technical Review” means the application of scientific, engineering or other professional expertise to the facts to determine whether the activity for which a permit is requested meets the standards for issuing the permit under statute or rule.

“Transfer” means to carry, remove, transport, or shift solid waste from one place, facility, vehicle, trailer, or container to another.

“Transfer Station” means a solid waste management facility where solid waste is collected, aggregated, sorted, stored and/or processed for the purpose of subsequent transfer to another solid waste management facility for further processing, treatment, transfer or disposal.

“Transport or Transportation” means the movement of wastes by air, rail, road, 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, storage, or reduced in volume, or for hazardous wastes, so as to render such waste non-hazardous.

“Uniform Solid Waste” means solid waste which has been determined, in writing, by the Secretary to be consistently uniform (e.g. foundry sands) and does not contain yard waste, marketable recyclable materials or hazardous waste as defined by State and/or Federal regulation.

“Untreated Wood” means:

- 1) wood produced by splitting or chipping a whole tree, including wood, bark, tree tops, limbs and logging residue;
- 2) any timber, board or sawn dimensional lumber which has not been treated, coated or preserved. This *does not* include any manufactured building material, such as, pressure treated wood, plywood, particle board or waferboard;
- 3) sawdust produced solely by the primary processing of the acceptable materials listed (1 & 2) in this definition;
- 4) fuel pellets produced from the acceptable materials described in this definition.

“Used Oil” means any petroleum product 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 (Fahrenheit). Used oil includes oils used as lubricants, heat transfer fluids, hydraulic fluids, and for other similar uses, but does not include materials derived from crude or synthetic oils that are used as fuels (e.g. gasoline, jet fuel and diesel fuel), cleaning agents or solvents (e.g. naphtha or mineral spirits).

“Vectors” means organisms or media (e.g., air, water, soil) that serve to transmit disease organisms.

“Vermont Hazardous Waste Management Regulations” or “VHWMR” means the Vermont Hazardous Waste Management Regulations, as amended.

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

“Waste Management Boundary” means the outer perimeter of the area within which solid waste is stored, treated or disposed.

“Water Table” means the upper surface of the zone of saturation.

“Waters” means all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs and all bodies of surface waters, artificial or natural, which are contained within, flow through or border portion of the State.

“White Goods” means discarded refrigerators, washing machines, clothes dryers, ranges, water heaters, dishwashers, freezers and microwave ovens and other similar domestic and commercial large appliances.

“Working Face” means that portion of a landfill where solid wastes are discharged and are spread and compacted prior to the placement of cover material.

“100-year flood” means a flood that has a 1-percent or greater chance of recurring in any given year or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period

ADC – Alternative Daily Cover  
AUD – Acceptable Use Determination  
AW – Architectural Waste  
C&D – Construction and Demolition Waste  
CEG – Conditionally Exempt Generator  
CFR – Code of Federal Regulations  
EPA – U.S. Environmental Protection Agency  
EQ – Exceptional Quality  
FML – Flexible Membrane Liner  
FMP – Facility Management Plan  
GWES – Groundwater Enforcement Standards  
GWPRS – Groundwater Protection Rule and Strategy  
HDPE – High-density Polyethylene  
HHW – Household Hazardous Waste  
IWMEA – Insignificant Waste Management Event Approval  
LCRS – Leachate Collection and Removal Systems  
LGCCS – Landfill Gas Collection and Control System  
MSW – Municipal Solid Waste  
MRF – Materials Recovery Facility  
NPDES – National Pollutant Discharge Elimination System  
ORF – Organic Solid Waste Recovery Facility  
PAH – Polycyclic Aromatic Hydrocarbons  
PCB – Polychlorinated Biphenyl  
PET - Polyethylene Terephthalate  
PGA – Processed Glass Aggregate

RAPs – Required Agricultural Practices Rule

RMW – Regulated Medical Waste

SDS – Safety Data Sheet

SWIP – Solid Waste Implementation Plan

SWME – Solid Waste Management Entity

SPLP – Synthetic Precipitation Leaching Procedure

TCLP – Toxicity Characteristic Leaching Procedure

VAR – Vector Attraction Reduction

VSA – Vermont Statutes Annotated

DRAFT

## **Subchapter 3 – Applicability, Exemptions, and Prohibitions**

### **§ 6-301                      General Applicability**

- (a) Subject to § 6-302 and § 6-303 of these Rules, these Rules shall apply to any persons that stores, transports, treats, disposes, recycles or otherwise owns, operates, or manages any solid waste facility. Such solid waste management facilities include, storage facilities, (including transfer stations, transportation, incineration, recycling, composting or other processing or treatment facilities) disposal facilities; and land application activities.
- (b) These Rules also apply to persons involved with solid waste planning activities pursuant to 24 V.S.A §2202a(c) (see Subchapter 4 – Waste Management Plans ).
- (c) Extended Producer Responsibility (EPR) requirements for end-of-life management of certain materials that are of particular environmental concern. These requirements, including application collection and management requirements, are defined within statute (title 10 of Vermont Statutes Annotated). Solid waste collected under these EPR programs are not subject to these Rules, provided they are managed in accordance with applicable statutory requirements.

### **§ 6-302                      Exemptions**

- (a) The following are exempt from regulation under these Rules:
  - (1) The disposal of brick and concrete, trees, stumps, yard waste, and wood chips that is free from paint, staining, is not odorous or otherwise suspected of contamination , when the origin and disposal of such waste occurs on property under the same ownership or control.
  - (2) Small volumes of less than one cubic yard of solid waste that:
    - (A) are stabilized, treated, or composted;

- (B) are distributed in association with some other primary product (e.g. nursery stock, top soil)
  - (C) do not contain pathogenic or chemical contaminants above applicable standards (as specified in §6-1306); and
  - (D) meet the requirements of §6-1307.
- (3) Recycling facilities which accept, aggregate, store and/or process less than fifty (50) tons of recyclable materials per year.
- (4) The product of solid waste that has been treated or processed in a certified waste management facility provided that the applicant demonstrates to the satisfaction of the Secretary that after treatment or processing; the product poses no threat to the environment, public health and public safety, and does not create a nuisance.
- (5) Storage and compaction operations or activities managed by a solid waste generator or a consortium of generators, provided that:
- (A) the solid waste generator or consortium of generators is a single facility, or a single consolidation point for associated or satellite facilities;
  - (B) the storage or compaction operations or activities will not result in the unauthorized disposal of solid waste;
  - (C) operations or activities poses no threat to the environment, public health and public safety, and does not create a nuisance; and
  - (D) operations or activities do not occur at sludge and septage storage facilities.
- (6) Mobile solid waste collection operations - the operation of a vehicle, trailer, or container on or attached to such vehicle or trailer, used for the collection of solid waste, provided that:
- (A) the vehicle or trailer is authorized by a current Vermont waste transporter permit, and a current registration and inspection required in the state of

registration;

- (B) the vehicles, trailers, or containers used to collect solid wastes are in adequate condition to prevent any potential or actual release or discharge of solid wastes and related liquids; and
  - (C) solid wastes collected by the operation are delivered to a certified waste management facility by the end of the next business day following the date of collection, or within 48 hours of collection, whichever is later.
- (7) The transfer of solid waste by a commercial hauler from a vehicle or trailer used for the collection or storage of solid waste to a receiving vehicle or trailer provided:
- (A) The transfer activity meets the requirements of § 6-302(a)(7); and
  - (B) The receiving vehicle or trailer has a capacity not greater than fifteen (15) tons for solid waste or 10,000 gallons for liquid sludge or septage.
- (8) Sludge management facilities located inside the fence of municipal wastewater treatment facilities provided the facility does not utilize a process to further reduce pathogens in order to produce EQ biosolids for distribution and marketing to the general public.
- (9) Septage, portable toilet, grease trap wastes and holding tank wastes when disposed of at a municipal wastewater treatment facility or other non-land application facility, as approved by the Secretary. This exemption does not relieve operators of wastewater treatment facilities from complying with the reporting and recordkeeping requirements set forth in § 6-1308.
- (10) Glycerol that is delivered to an anaerobic digester as a feedstock for digester operations, provided that:
- (A) the anaerobic digester is located on a farm; and acceptance of glycerol is allowable under the farm's nutrient management plan.
  - (B) The anaerobic digester is off farm and glycerol is managed according to the Facility Management Plan.

(11) Collection of used oil and used oil filters provided that the collection is in compliance with all applicable used oil provisions of the Vermont Hazardous Waste Management Regulations.

(12) Processed Glass Aggregate (PGA) that:

(A) Contains no hazardous waste and no more than 5% contamination by weight from china dishes, ceramics, or plate glass; or 1% contamination by weight from plastics, papers or other objectionable materials. PGA must be crushed and screened such that 95% of the material passes a 25.0 mm screen and not more than 3% of the material that passes through the 4.75 mm sieve passes the 75  $\mu$ m sieve.; and

(B) is used in the following applications:

(i) Roadway, trail, parking lot or sidewalk application, including:

(I) base course: layer(s) of specified material supporting a surface course;

(II) subbase: layer(s) of specified material place on a subgrade to support a base or surface course, or

(III) embankments: a portion of a fill section situated between the existing ground and subgrade;

(ii) Utility Trench Bedding;

(iii) Backfill material for underground utilities (sewer and water pipes, electrical conduit and fiber optic line);

(iv) Drainage applications, including:

(I) Free draining back-fill behind retaining walls; or

(II) Foundations drains, drainage blankets, French drains; or

(v) Filter media for wastewater treatment systems.

(13) The following materials, when used as high-carbon bulking agents in composting:

- (A) Clean wood chips and shavings;
- (B) Bark wood chips;
- (C) Straw;
- (D) Shelled corn cobs;
- (E) Corn stalks;
- (F) Shrub trimmings;
- (G) Clean dry leaves, excluding any leaves vacuumed or accumulated from roadways;
- (H) Coarse sawdust;
- (I) Nut shells;
- (J) Pine needles – brown;
- (K) Non-legume hay – dry;
- (L) Heavily-bedded horse manure (carbon to nitrogen ratio of 22-50:1);

(14) Vermicomposting facilities, provided that all vermicomposting activities occur within a fully enclosed structure that is equipped with an impermeable floor.

(15) Collection, storage, and treatment of regulated medical waste (RMW) by a RMW generator provided that the conditions in (A) through (C) of this subdivision are met. This exemption does not relieve a generator of RMW from compliance with the requirements of § 6-304(h).

- (A) The consolidation point shall only accept the same type or types of RMW that is produced at that location;
- (B) The on-site amount of RMW accepted by the generator from satellite facilities shall not exceed the storage capacity of the site; and

- (C) The annual amount of RMW accepted by the generator from satellite facilities does not exceed the amount of RMW produced by the generator for that calendar year.

(16) Cemeteries as defined in 18 V.S.A. § 5302.

(17) Institutions with an established food residual diversion program choosing to offer food residual consolidation to their employees are exempt from the transfer station certification and food residual drop off registration requirements of these rules.

### **§ 6-303 Waiver of Technical Standards**

The Secretary may waive technical and siting requirements of these Rules provided the following conditions are met:

(A) The President of the United States intends to perform a response action, as defined in 42 U.S.C. § 9601(25), or the Secretary intends to perform a removal or remedial action, pursuant to 10 V.S.A. Chapter 159, in response to a release or threatened release of hazardous substances or materials; and

(B) The Secretary makes prior written findings that:

(1) The proposed response action will not adversely affect public health, safety or the environment; and

(2) The technical and siting requirements will be complied with to the extent practical in light of the overall objectives of the response; or

(C) The Secretary has granted a variance pursuant to section § 6-605 of these Rules. Only those provisions specified in a written determination issued under § 6-605 shall be waived.

### **§ 6-304 Prohibitions**

The following activities are prohibited under these Rules:

(a) Open burning of solid waste except as may be allowed in accordance with the Vermont Air Pollution Control Regulations, as amended, and/or as may be approved by the Secretary pursuant to § 6-505(b) (Insignificant Waste Management Event Approvals) of

these Rules.

- (b) Combustion of solid waste in an incinerator unless the incinerator meets all requirements of the Air Pollution Control Regulations, as amended, and these Rules.
- (c) Construction, substantial alteration, operation or change of ownership of any solid waste management facility without first obtaining certification or modification of a certification from the Secretary in accordance with these Rules.
- (d) Treatment, storage or disposal of solid waste outside of a certified facility except for the exemptions set forth in § 6-302 of these Rules.
- (e) Disposal of commercial septage, a mixture of commercial and domestic septage, portable toilet waste, holding tank waste, cesspool waste, waste from Type III marine sanitation devices, and waste from Type III marine sanitation devices by application to the land is specifically prohibited.
- (f) Disposal of hazardous waste in solid waste landfill facilities, as may be permitted under the Vermont Hazardous Waste Management Regulations, as amended.
- (g) Knowing disposal of wastes listed in 10 V.S.A. § 6621a which are designated by law to be prohibited from disposal in a landfill facility.
- (h) Disposal of regulated medical waste (RMW) which has not been adequately treated, rendered inaccessible, and obtained a Certificate of Treatment by a regulated medical waste treatment facility or regulated medical waste generator with on-site treatment.
- (i) Any other waste treatment, storage, disposal, or other management activity conducted in violation of the provisions of 10 V.S.A. chapter 159, these Rules, or the conditions of an existing permit or other written authorization issued by the Secretary.

## **Subchapter 4 – Waste Management Plans**

### **§ 6-401                      Planning Specific Definitions**

“Materials Management Plan” means the solid waste management plan required to be adopted by the Secretary pursuant to 10 V.S.A. § 6604.

“Solid Waste Management Entity” or “SWME” means a municipal entity (solid waste district, solid waste alliance, solid waste group or individual municipality) that plan and implement plans for the management and regulation of solid waste within a municipality.

### **§ 6-402                      Solid Waste Implementation Plans; General Requirements**

- (a) Municipalities shall participate as member towns to a solid waste management district or alliance or act as independent towns in performance of their solid waste management responsibilities. Collectively, these municipalities are referred to as Solid Waste Management Entities (SWME). Each SWME shall have a Solid Waste Implementation Plan (SWIP) that has been approved by the Secretary. A municipality that does not comply with this section shall not be eligible for State funds to plan and construct solid waste facilities and shall not use facilities certified by the State of Vermont.
  
- (b) A SWME shall submit for the Secretary’s review and approval a solid waste implementation plan that conforms to the performance standards in the materials management plan (MMP) adopted by the Secretary pursuant to 10 V.S.A. § 6604 and to any applicable regional plan adopted pursuant to title 24, chapter 117 of the Vermont Statutes Annotated. The proposed SWIP submittal shall:
  - (1) Address how the performance standards of the MMP and 24 V.S.A. § 2202a will be completed during the current SWIP term;
  - (2) describe siting criteria that will apply to solid waste facilities in the SWME region. As required by 10 V.S.A. § 6605(c), these siting criteria shall not be less stringent than the criteria of these Rules;
  - (3) specify the facilities that are included within the SWIP proposal;
  - (4) describe how proposed facilities will be reviewed for inclusion within the SWIP;
  - (5) describe the process that will be used to ensure public participation in the development and implementation of the SWIP, including at least two public

meetings of the draft SWIP;

- (6) include copies of any solid waste related ordinances with the SWIP; and
  - (7) demonstrate conformance with any applicable regional plan. Such a demonstration can be in the form of a letter from the applicable regional planning commission, copies of pertinent sections of the regional plan, or other documentation that demonstrates conformance.
- (c) Solid waste implementation plans shall be submitted and shall be reviewed by the Secretary in accordance with § 6-403 of this subchapter.

**§ 6-403                      Review of Solid Waste Implementation Plans**

- (a) Plans or amendments thereto shall be reviewed pursuant to this section in the following instances:
  - (1) upon any modification by the SWME responsible for preparing the plan;
  - (2) upon the Secretary's determination that changes made to the materials management plan or these Rules necessitate review of a solid waste implementation plan to determine compliance with the changes or requirements of these Rules.
- (b) Review; Standards. Plans and plan revisions required to be submitted pursuant to this section shall be reviewed by the Secretary for conformance with the submittal requirements of § 6-403.
- (c) Determination; pre-approval. Upon a finding that a solid waste implementation plan or any amendment complies with the performance standards of the MMP established under subsection § 6-402(b) of this section, the Secretary shall issue a written pre-approval of the plan or amendment to the SWME. If a plan or amendment does not comply with one or more of the performance standards, the Secretary shall issue written notification to the SWME indicating that the plan or amendment is not approved and identifying the deficiencies of the plan or amendment. Pre-approval shall not be issued until all deficiencies are fully addressed.
- (d) Public notice and comment. Prior to issuance of a final determination by the Secretary, the SWME shall provide public notice and a public hearing on the plan or plan amendment. If the plan or plan amendment addresses nonregulated hazardous waste (HHW), the SWME shall hold two public hearings on the plan or amendment as required by 24 V.S.A. § 2202a(c)(4)(B). The SWME shall submit written verification of compliance with this subsection to the Secretary, including the dates of the public meeting(s) held on the plan or amendment and a summary of each meeting.

(e) Final approval.

- (1) The SWME shall submit the solid waste implementation plan or amendment for final review and approval. The final submission shall identify changes made to the plan or the amendment, including any changes made in response to the Secretary's determination under subsection (c) of this section.
- (2) The Secretary shall approve the solid waste implementation plan, including any amendments or changes thereto, upon making a determination that:
  - (A) The plan adequately addresses and conforms to the performance standards in subsection (c) of this section;
  - (B) The plan and has been publicly noticed; and
  - (C) the public notice requirements of 24 V.S.A. § 2202a and this subchapter have been satisfied.
- (3) When issuing a final approval of a plan or plan amendment, the Secretary may impose any conditions, requirements, or restrictions that may be necessary to ensure the plan's compliance with subdivision (e)(2) of this subsection.

## Subchapter 5 – General Application Submittal Requirements

### §6-501      **Applicability**

Any facility or activity that is required to obtain approval by the Secretary shall do so in accordance with the requirements of these Rules. Applications for certification, registration, or other approval shall be submitted and shall be reviewed by the Secretary in accordance with the provisions of this subchapter and subchapter 6 of these Rules.

Table A. Application Process by Relevant Notice Types

| Notice Type   | Upon Application Submittal                             | Administratively Complete Application       | Draft Decision  | Comment and Meeting Request Period   | Public Meeting                                       | Post-Meeting Comment Period        | Final Decision   |
|---|--|---|---|--|--|------------------------------------|--|
| <b>Type 2 - Individual Permits and Certifications</b> | Applicant notices adjoining property owners by US mail | Notice posted to Electronic Notice Bulletin | Notice and documents posted to Electronic Notice Bulletin | ≥30 days after draft decision posted. Meeting request must be made within 14 days of draft decision. | Must be announced for ≥14 days prior to meeting date | Lasts ≥7 days after public meeting | Notice posted to Electronic Notice Bulletin with final decision and response to any comments |
| <b>Type 4 – Notices of Approval, Minor Amendments</b> | No notice required of adjoining property owners        | Notice posted to Electronic Notice Bulletin | Notice and documents posted to Electronic Notice Bulletin | ≥14 days after draft decision posted.  | N/A  | N/A                                | Notice posted to Electronic Notice Bulletin with final decision and response to any comments |
| <b>Type 5 – Emergency Permits and Registrations</b>   | N/A  | N/A   | N/A   | N/A  | N/A  | N/A                                | Notice posted to Electronic Notice Bulletin with final decision                              |

Further details may be found in 10 V.S.A. Chapter 170.

### §6-502      **General Permitting Provisions**

(a) Signatory requirements.

- (1) The following individuals shall be applicants or co-applicants to a certification, registration, or other request for approval under these Rules (if different parties) and shall be bound by the terms of the certification:

- (A) The facility operator; and

- (B) The owner of the land on which the facility is located, except that where the proposed facility is for the management of sludge or septage and in lieu of the land-owner signature, the operator of the proposed facility may provide a lease for a term consistent with the term of the certification and which does not conflict with the requirements of these Rules; and
  - (C) The facility owner.
- (2) Applications and all reports requested or required by the Secretary shall be signed in accordance with the following:
- (A) If the applicant is a corporation, the application shall be signed by a principal executive officer of at least the level of vice-president, or a duly authorized representative who is responsible for the operation of the facility.
  - (B) If the applicant is a partnership or a sole proprietorship, the application shall be signed by a general partner or proprietor.
  - (C) If the applicant is a municipality, state, or other public entity, the application shall be signed by a principal executive officer, ranking elected official or other duly authorized employee.
  - (D) If the applicant is an individual, the application shall be signed by the applicant or by a duly authorized representative of the applicant.
- (3) Duly authorized representatives shall be established as signatories to certifications and reports as established by § 6-106.

(b) Documentation retention.

- (1) All applicants shall maintain all records of data and any supplemental information used to complete applications for all certification and other approvals allowed for by these Rules for a period of at least ten years from the date on which the application is signed by the applicant. Such records shall be submitted to the Secretary upon request.
- (2) Applicants shall maintain a copy of any current facility management plan (if applicable) and a copy of the current certification or other approval at the facility. These documents shall be accessible by all facility personnel during hours of operations.

**§6-503 Certification Types**

- (a) Full Certifications/Type 2. Applications for the following activity types shall be governed by the general provisions of this subchapter and the review and notice procedures of § 6-504 and § 6-601 of these Rules:

- (1) Solid waste storage facilities, transfer or processing facilities and recycling facilities;
  - (2) Large composting facilities authorized under § 6-1104(c) of these Rules;
  - (3) Interim certifications for solid waste management facilities authorized under 10 V.S.A. §6605b;
  - (4) Treatment, storage or disposal facilities for any waste derived solely or in part from domestic wastes, unless authorized under a Sludge Management Plan as established in §6-1302(a);
  - (5) Land application sites for non-EQ biosolids, residual dairy wastes, or domestic septage;
  - (6) Landfills;
  - (7) Off-farm anaerobic digesters authorized under Subchapter 12; and
  - (8) Any other individual permit issued pursuant to the Secretary's authority under 10 V.S.A. Chapter 159 and these Rules that is not specifically listed under § 6-503(b)-(c).
- (b) Minor Certifications/Type 4. Applications for the following activity types shall be governed by the general provisions of this subchapter and the review and notice procedures of § 6-505 and § 6-602 of these Rules:
- (1) Categorical solid waste certification under 10 V.S.A. chapter 159 and § 6-902(a) and § 6-1002(a) of these Rules; and
  - (2) Medium scale composting certification under 10 V.S.A. Chapter 159 and § 6-1104(b) of these Rules.
  - (3) Insignificant Waste Management Event Approvals under § 6-505(b)
  - (4) Categorical solid waste certification
- (c) Registrations and Emergency Approvals/Type 5. Applications for the following activity types shall be governed by the procedures in § 6-506 and § 6-603 of these Rules:
- (1) Small composting facility registration under § 6-1104(a);
  - (2) Food residual drop-off facility registration under § 6-1202(a);
  - (3) HHW/CEG collection event approvals under § 6-1403(b); and

(4) Issuance of emergency sludge and septage disposal approvals under 10 V.S.A. 6605.

(d) Additional Process.

(1) In an individual case, the Secretary may determine to apply the procedures of a Full Certification/Type 2 to the issuance of a minor certification, registration, or emergency approval otherwise subject to the procedures as prescribed in subdivision (b) or (c) of this section.

(2) In an individual case, the Secretary may require measures in addition to those directed by this subchapter in order to provide notice to other persons potentially affected by the issuance of the certification, registration, or approval.

#### **§6-504 Full Certification Application; Interim Certification Submissions**

(a) **Applicability.** Any person wishing to store, treat or dispose of solid waste or otherwise construct, substantially alter, or operate a solid waste facility type described in § 6-503(a), shall submit a complete application that complies with the requirements of this section, as applicable. If a solid waste management facility includes more than one operational unit (i.e. multiple sites used for the land application of septage or sludge), the application shall provide all required information for all units.

Note: these are the minimum application requirements necessary for all full certification applications. Refer to the relevant subchapter(s) elsewhere in these Rules that addresses the solid waste management activity(ies) for which certification is desired for any additional application requirements that may apply.

(b) **Application preparation.** Applications submitted under this section shall be completed under the direction of a qualified professional, licensed in the State of Vermont. The qualified professional shall certify that to the best of their information, knowledge and belief that the application is in compliance with standards contained or referenced in these Rules.

(1) An applicant may request that the Secretary waive this requirement prior to submission of an application. If a waiver of this requirement is granted by the Secretary, the applicant is required to certify that the application is in compliance with standards contained or referenced in these Rules.

(c) Application for full certification. An application for a full certification shall include the following:

- (1) An application form, provided by the Secretary, that has been completed in accordance with the form's instructions and the signature requirements of § 6-501.
- (2) Identification of the type of solid waste management facility, including all operational units;
- (3) The physical location of the facility, including the 911 address. The physical location shall be marked on an appropriate Vermont orthophoto tax map using the Vermont plane coordination system, or provided using latitude and longitude coordinates in a noted coordinate system.
- (4) The applicable application fee as specified in 3 V.S.A. chapter 51, subchapter 2 §2822(j).
- (5) Evidence of ownership of facility or property: This shall include a copy of a fee simple title to the property or a lease agreement consistent with § 6-502(a)(1)(B). This evidence of ownership requirement does not apply to land application facilities.
- (6) Evidence of compliance with the disclosure requirements of the waste management personnel background review if required by 10 V.S.A. §6605f.
- (7) Documentation demonstrating compliance with the siting, design and operations requirements of Subchapter 7 and any additional siting, design and operations requirements specific to the type of facility as provided in Subchapters 9 to 12.
- (8) A facility management plan (FMP), which includes a demonstration that the siting, design and operational information for the facility is sufficient to demonstrate compliance with the standards and requirements of these Rules. The FMP shall address all operational units and wastes to be managed at the facility along with providing the basis for the operating capacity and permitted design capacity planned for the facility. At a minimum, the FMP shall address the components of a FMP identified in § 6-704(b).
- (9) Evidence that the facility, is included in a solid waste implementation plan as required by 10 V.S.A. § 6605(c). This requirement shall not apply to land application sites.
- (10) Information sufficient, as defined by the Secretary pursuant to 10 V.S.A. Chapter 48, to show that the property on which the facility is located is classified as a Class III or Class IV groundwater area.
- (11) A description of the proposed operation(s), any planned development of the facility, and any relevant engineering plans.

- (12) A listing of the types and amounts of materials that will be managed at the facility during the certification period.
  - (13) For fee considerations, private applicants shall list amounts for the permitted design capacity of the facility and may list an operating capacity. Municipal facilities shall only provide permitted design capacity estimates.
  - (14) An operator training plan that provides either classroom or on-the-job training for all facility personnel involved in the handling of waste. This instruction shall educate each individual on the procedures necessary to perform their duties safely and in a way that ensures the facility's compliance with all applicable statutes, Rules, facility management plans and conditions of certification.
  - (15) A closure plan that satisfies the applicable criteria of § 6-907; § 6-1007, § 6-1111, § 6-1208 or § 6-1309 of these Rules, as required for the facility type.
  - (16) A post-closure plan that satisfies the criteria of § 6-1008 of these Rules.
  - (17) Evidence of compliance with the financial responsibility and capability requirements of Subchapter 8 of these Rules, or a plan for achieving compliance with these requirements which will result in compliance prior to the issuance of the draft certification.
  - (18) A signed certification providing the names of adjoining property owners and a statement that notice of application has been completed by the applicant in accordance with subsection (g) of this section.
  - (19) Any other information that the Secretary may require, as deemed necessary to protect human health, safety, and the environment.
- (d) Application for Interim Certification.
- (1) A person who does not qualify for a solid waste management certification under 10 V.S.A. § 6605 and this section may apply for an interim certification under this subsection.
  - (2) A complete application for an interim certification shall include:
    - (A) Applicants for an interim certification shall submit the information as required by § 6-505 (a-e) above;

- (B) Evidence of the necessity of facility operation and public benefits derived from operation;
  - (C) An assessment of other currently available methods to manage the wastes stored, treated or disposed at the facility;
  - (D) A schedule of the activities that will result in proper closure or full certification of the facility prior to the expiration of the interim certification;
  - (E) Monitoring plans for the groundwater, surface water and air quality of the facility; including summary of any existing data;
  - (F) Evidence that the construction, alteration and continued operation of the facility or the activity is consistent with regional solid waste plans, if any, and the solid waste management plan; An affidavit providing the names of adjoining property owners and a statement that notice of application has been completed by the applicant in accordance with subsection (g) of this section below; and
  - (G) Any other information the Secretary may require.
- (e) Upon (prior or concurrently with) submission of an application to the Secretary, the applicant shall provide written notice of the application to all adjoining property owners. The notice shall be made through U.S. mail using a form developed by the Secretary, and shall provide the following information:
- (1) A description and location of the proposed activities;
  - (2) A description of the process for review of the application and a statement that includes information about how the property owners can continue to receive notices and information, and the opportunities for public participation and comment, on the application;
  - (3) Contact information (name, mailing address and phone number) for a person at the Agency processing the permit.

#### **§6-505 Minor Application Submissions**

- (a) Categorical Certification Applications.
  - (1) Any person wishing to construct, substantially alter, or operate any categorical solid waste facility shall submit a complete application that complies with the requirements of this section.

Note: The application requirements included in this section are the minimum application requirements necessary for all categorical certification applications. Refer to the relevant subchapter which addresses the solid waste management activity for which certification is desired to determine if there are any additional requirements specific to the management activity.

- (2) An application for a categorical certification, shall include the following:
  - (A) An application form, provided by the Secretary, that has been completed in accordance with the form's instructions and the signature requirements of § 6-502.
  - (B) A description of the proposed activity and operations;
  - (C) The physical location of the facility, including the 911 address. The physical location shall be marked on an appropriate Vermont orthophoto tax map using the Vermont plane coordination system, or provided using latitude and longitude coordinates in a noted coordinate system.
    - (i) A site plan map of the facility at a scale of 1:100 or greater that contains:
      - Location of barriers to prevent unauthorized entry;
    - (ii) Access roads;
  - (D) Location of waste management transfer, storage, treatment and processing areas, and facility boundaries and property boundaries.
  - (E) Names, mailing addresses and telephone numbers of the owner of the land and the operator of the facility;
  - (F) The facility's proposed hours; of operation;
  - (G) An estimate of the type and quantity of materials to be received;
  - (H) A letter from solid waste management entity where the facility is located that indicates the facility is acceptable under the solid waste implementation plan,

- (I) If disposal is proposed within the source protection area of a public water supply, the location of the disposal area and the delineated source protection area shall be identified on a site map;
- (J) Information addressing compliance with the relevant siting restrictions of Subchapter 7 and any additional siting limitations required by the Secretary as may be necessary to protect public health and safety or the environment; and
- (K) Other requirements, as determined by the Secretary and including financial responsibility, if deemed necessary to protect human health, safety, and the environment.

(b) Insignificant Waste Management Event Approvals (IWMEA)

(1) An IWMEA allows for the occurrence of a one-time waste disposal, storage, treatment or processing event that:

(A) has been demonstrated to the satisfaction of the Secretary to be of limited duration, generally six months or less, and will not result in a threat to the public health and safety or to the environment, and will not create a nuisance or.

(B) consists of a one-time, limited duration disposal of, the disposal event shall meet the categorical disposal facility siting requirements of § 6-1003:

(i) stumps, root masses, decomposing wood or brush;

(ii) bituminous concrete;

(iii) brick, concrete, masonry, mortar, porcelain, pottery, tile and clay pipe;

(iv) street sweepings;

(v) clogged septic stone;

- (vi) burning of structures for the purpose of training firefighters;
  - (vii) fires to thwart a hazard which cannot properly be managed by any other means, or fires that are necessary for the protection of public health;
  - (viii) pilot scale experimental facilities for the management of sanitary wastes; and
  - (ix) other solid wastes that will not result in a threat to the public health and safety or to the environment and will not create a nuisance.
- (2) In order to obtain approval for an IWMEA, applicants shall submit a complete application on a form provided by the Secretary.

Note: Certified solid waste facilities that have provisions for holding collection events included within the issued certification do not need to obtain a separate IWMEA approval if the event is held in compliance with that certification.

- (3) Insignificant waste management events operated by a private entity shall submit application fees in accordance with 3 V.S.A 2822(i) and 2822(j)(6)(D).

#### **§6-506 Registrations and Emergency Approval Submissions**

A person seeking approval for activities listed in § 6-503(c) shall submit a completed application on a form provided by the Secretary, that includes the following information:

- (a) For a small composting facility, the information required by in § 6-1105(a)
- (b) For a food residual drop-off facility, the information required by § 6-1206(a)
- (c) For a HHW/CEG collection event, the information as required by § 6-1403(b)

#### **§6-507 Application for Variance from Solid Waste Rules**

- (a) Any person who owns or is in control of any facility, building, structure, process, or equipment may apply to the Secretary for a variance from these Rules in accordance with this section. A variance or renewal shall not be a right of the applicant or holder thereof but shall be in the discretion of the Secretary. In no case shall a request for a variance from these Rules be considered a contested case under 3 V.S.A. § 809.
- (b) Variances from the requirements for the collection of leaf and yard residuals (10 V.S.A. § 6605(j)(2)) and/or food residuals (10 V.S.A. § 6605(j)(3)) shall be made by facilities as provided for by 10 V.S.A. §6613(b).
- (c) With the exception of variances sought under 10 V.S.A. §6613(b), an application for a variance from these Rules shall contain, at a minimum:
  - (1) The specific rule provision(s) for which the variance is sought, a written demonstration of need for the variance, and the specific authority under 10 V.S.A. §6613(d) for which the variance is sought;
  - (2) Information demonstrating that the variance, including any alternate standard and/or process to be employed by the applicant in lieu of the provision(s) from which the variance is requested, will not endanger or tend to endanger human health or safety;
  - (3) Information demonstrating serious hardship from compliance with the rule without equal or greater benefit to the public (e.g., cost benefit analyses, profit and loss statements, balance sheets, federal income tax returns, and other documentation as may be necessary);
  - (4) The proposed duration of the requested variance, and, except for a permanent variance from the siting requirements of Rules adopted pursuant to chapter 159 of title 10, a schedule for obtaining compliance with the rule from which the variance is sought;
  - (5) Information demonstrating that the grant of a variance will not enable the applicant to generate, transport, treat, store or dispose of hazardous waste in a manner less stringent than that required by the provisions of Subtitle C of the Resource Conservation and Recovery Act of 1972, as amended, and the regulations promulgated under that Act; and
  - (6) An affidavit providing the names of adjoining property owners and a statement that notice of application has been provided by the applicant in accordance with

subdivision (d) of this section.

(7) Other requirements, as determined by the Secretary and if deemed necessary to protect human health, safety, and the environment.

(d) The applicant shall provide notice of application to all adjoining property owners through U.S. mail using a template developed by the Secretary. The notice shall provide:

- (1) a brief description of the rule from which the variance is being sought;
- (2) the location of the proposed activity;
- (3) a description of the process for review of the application and opportunities for public participation and comment on the application; and
- (4) contact information (name, mailing address and phone number) for a representative of the Secretary.

## Subchapter 6 – Application Review and Certification Issuance

### § 6-601

### Full Certification (Type 2) Review Process

- (a) Following the submission of an application for full certification the Secretary shall review of the application pursuant to this section.
- (b) Administrative review; notice of application.
  - (1) The application shall provide notice through U.S. Mail to adjoining property owners on a form developed by the Secretary. The notice shall be provided at the same time that the application is submitted to the Secretary, and the applicant shall provide a signed certification to the Secretary that all adjoining property owners have been notified in accordance with this requirement.
  - (2) The Secretary shall provide notice of the application through the environmental notice bulletin when the Secretary has determined that the application is administratively complete.
  - (3) If the Secretary determines that the application is not administratively complete, the Secretary shall notify the applicant in writing of such decision. This notification shall be completed within 15 days of receipt of the application and shall identify each deficiency in the application that resulted in the Secretary's decision. The Secretary may require the submission of additional information in order to determine that an application is complete for purposes of this section.
- (c) Technical review; public comment period; public informational meeting.
  - (1) Following a determination that an application is administratively complete, the Secretary shall review the application to determine whether it meets the applicable standards these Rules and 10 V.S.A. Chapter 159.
  - (2) Upon a determination made pursuant to subdivision (c)(1) above, the Secretary shall provide notice of the draft decision. At a minimum, the Secretary shall post the draft decision and how to request copies of the complete record associated with the application.
  - (3) After notice of the draft decision is provided, the Secretary shall provide a public comment period on the draft decision for a period of no less than 30 days.
  - (4) Upon request by any person, or upon the Secretary's own motion, the Secretary shall hold a public informational meeting within 14 days of the notice to the ENB.

(5) If a public informational meeting is requested, the Secretary shall provide 14 days' notice of the location, date, and time of the public informational meeting. The notice shall be provided to all persons who received notice of the draft decision through the ENB. When a public informational meeting is held, the public comment period shall not end until at least seven days following the public informational meeting.

(d) Final decisions; content; notice.

(1) When the Secretary issues a final decision on an application, the Secretary shall post a copy of the decision on the ENB. The ENB shall send notice of the availability of this information to any person that requested to receive notice.

(2) Secretary's final decision on an application shall include the following:

(A) The Secretary's final decision to either grant or deny the certification, noting any changes made to the Secretary's draft decision since the date of the notice as provided in § 6-601(c) above.

(B) A concise statement of the facts and analysis supporting the decision that is sufficient to apprise the reader of the factual and legal basis for the decision. If the Secretary determines that an application does not meet the applicable standards for issuing the permit, the Secretary shall also identify each deficiency in the application that resulted in the Secretary's decision.

(C) All documents and information on which the Secretary relied in issuing the decision, including the response to comments received during the public comment period.

(D) Notice on how the decision may be appealed and where to file an appeal.

(3) The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the discretion of the Agency, to protect public health, public safety, or the environment.

#### **§6-602 Minor Certification (Type 4) Review Process**

(a) Following the submission of an application for a minor certification, the Secretary shall review the application pursuant to this section.

(b) Administrative review; notice of application.

- (1) The Secretary shall provide notice of the application through the environmental notice bulletin when the Secretary has determined that the application is administratively complete.
- (2) If the Secretary determines that the application is not administratively complete, the Secretary shall notify the applicant in writing of such decision. The notification shall identify each deficiency in the application that resulted in the Secretary's decision. The Secretary may require the submission of additional information in order to determine that an application is complete for purposes of this section.

(c) Technical review; public comment period.

- (1) Following a determination that an application is administratively complete, the Secretary shall review the application to determine whether it meets the applicable standards these Rules and 10 V.S.A. Chapter 159.
- (2) Upon a determination made pursuant to subdivision (c)(1) above, the Secretary shall provide notice of the draft decision. At a minimum, the Secretary shall post the draft decision and how to request copies of the complete record associated with the application.
- (3) After notice of the draft decision is provided, the Secretary shall provide a public comment period on the draft decision for a period of no less than 14 days.

(d) Final decisions; content; notice.

- (1) When the Secretary issues a final decision on an application, the Secretary shall post a copy of the decision on the ENB. The ENB shall send notice of the availability of this information to any person that requested to receive notice.
- (2) Secretary's final decision on an application shall include the following:
  - (A) The Secretary's final decision to either grant or deny the certification, noting any changes made to the Secretary's draft decision since the date of the notice as provided in § 6-601(c) above.
  - (B) All documents and information on which the Secretary relied in issuing the decision, including the response to comments received during the public comment period.
  - (C) Notice on how the decision may be appealed and where to file an appeal.
- (3) The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the

discretion of the Agency, to protect public health, public safety, or the environment.

- (e) Additional notice. At any time during the review of an application, the Secretary may require that a permit application being reviewed under the procedures of this section may be reviewed under the Full Certification (Type 2) procedures of § 6-601. When making this determination, the Secretary may base the decision on the size, complexity, potential environmental impact, or degree of public interested associated with the proposed activity.

#### **§6-603 Registration and Emergency Approvals (Type 4)**

- (a) Following the submission of a request for registration or application for emergency approval, the Secretary shall review the application pursuant to this section.
- (b) Administrative review. The Secretary shall review the request for registration or application for emergency approval for administrative completeness. The Secretary may require the submission of additional information in order to determine that an application is complete for purposes of this section.
- (c) Final decisions; content; notice.
  - (1) When the Secretary issues a final decision on an application, the Secretary shall post a copy of the decision on the ENB. The ENB shall send notice of the availability of this information to any person that requested to receive notice.
  - (2) Secretary's final decision on an application shall include the following:
    - (A) A concise statement of the facts and analysis supporting the decision that is sufficient to apprise the reader of the factual and legal basis for the decision.
    - (B) All documents and information on which the Secretary relied in issuing the decision.
    - (C) Notice on how the decision may be appealed and where to file an appeal.
- (d) The Secretary may impose conditions which are necessary to assure compliance with applicable laws or regulations, or that are otherwise necessary, in the discretion of the Agency, to protect public health, public safety, or the environment.
- (e) Additional notice. At any time during the review of an application, the Secretary may require that a permit being reviewed under the procedures of this section may be reviewed under Full Certification (Type 2) procedures of § 6-601 or Minor Certification (Type 4) procedures of § 6-602. When making this determination, the Secretary may base the decision on the size, complexity, potential environmental impact, or degree of public interested associated with the proposed activity.

**§ 6-604**

**Amendments; Renewals**

(a) Amendments; process.

(1) If the Secretary determines that an amendment to a certification or other approval is required, only the conditions subject to amendment shall be modified. Until applications for amendment are granted or denied in whole or in part, the terms and conditions of the original certification or other approval shall remain in force.

(2) Amendments shall be processed as follows:

(A) A major amendment shall be subject to the same procedures applicable to the original permit decision under these Rules.

(B) A minor permit shall be subject to procedures applicable to the Minor Certification Process (Type 4) in § 6-602 of this subchapter.

(C) An administrative amendment shall not be subject to the procedures of this subchapter.

(b) Renewal. A person may renew a certification under the same application and procedural requirements that are applicable to the original decision under this subchapter.

**§ 6-605**

**Variance Review Process**

(a) Variance applications shall be reviewed pursuant to the full certification review process as provided in § 6-601 except as provided in this section below.

(b) Prior to the determination that an application for a variance is administratively complete, and at the discretion of the Secretary, in accord with 10 V.S.A. § 6613, the processing of a variance application may be delayed when an applicant for a variance or renewal, is not in compliance with an administrative order or an assurance of discontinuance with respect to a violation that is directly related to the activity which is the subject of the application.

(c) A variance or renewal shall not be a right of the applicant or holder thereof, but shall be in the discretion of the Secretary. The Secretary shall only grant a variance from these Rules upon finding that the requirements of 10 V.S.A. §6613(a) and (b) and the notice and consideration requirements of § 6613(c) have been met.

(d) Variances shall be issued with conditions and for a time period consistent with the reasons for the variance and consistent with the provisions of 10 V.S.A. §6613(d), as applicable.

- (e) The Secretary's determinations on variance applications (including renewals) shall contain the following:
- (1) An opinion detailing the factual findings that are the basis of the approval, denial or renewal;
  - (2) the conclusions of the Secretary on whether the variance meets the requirements of 10 V.S.A. § 6613 and these Rules, as applicable;
  - (3) any conditions necessary for the approval or renewal of the variance;
  - (4) a summary of responses to comments from the public on the variance application; and
  - (5) instructions on how to appeal the Secretary's determination; and
  - (6) any other information the Secretary deems necessary.
- (f) Any variance granted may be renewed on terms and conditions and for periods, which would be appropriate on initial granting of a variance. An application for renewal shall be made at least 60 days prior to the expiration of the variance. If complaint is made to the Secretary on account of the variance, no renewal thereof shall be granted, unless following public notice and an opportunity for a public meeting on the complaint, the Secretary finds that renewal is justified.

**§ 6-606**

**Suspension and Revocation of Certifications and Registrations**

- (a) Authority. The Secretary may suspend or revoke, in whole or in part, a certification, or registration issued under this subchapter for suspension or revocation.
- (b) Basis for suspension or revocation. The following shall be bases for suspension or revocation of a certification, or registration:
- (1) Violation of a condition imposed in the certification, or registration as issued;
  - (2) Violation or failure to comply with the provisions of these Rules or any authorizing statutes;
  - (3) False or misleading information submitted in support of an application or request for approval; or

- (4) A determination by the Secretary that the suspension or revocation of the certification, or registration is necessary to prevent:
- (A) actual substantial harm to the public health, public safety, or the environment, or
  - (B) an imminent and substantial threat of harm to the public health, public safety, or the environment.
- (c) Notice of suspension or revocation. The Secretary shall provide notice of the suspension or revocation to the holder of the certification, or registration and post the notice to the ENB or other web-based public notice service provided by the Department of Environmental Conservation. Except as provided in subsection(e) of this section, such notice shall be provided at least 14 days prior to the date when the suspension or revocation takes effect. The notice shall include:
- (1) The legal authority for the proposed action;
  - (2) A brief statement of the facts upon which the proposed action is based;
  - (3) The effective date of suspension or revocation of the certification, plan, or registration; and
  - (4) Notification of the permittee's right to, within 30 days of receipt of the written notification, request a hearing to present information in response to the notice for suspension or revocation.
- (d) Finding of harm; threat of harm. If the Secretary determines that immediate suspension or revocation of a certification, or registration is necessary to prevent actual substantial harm or an imminent and substantial threat of harm to the public health, public safety, or the environment under §6-606(c)(5), the suspension or revocation shall become effective upon the receipt of the Secretary's notice under (d) of this section. The suspension or revocation shall be effective until any requested hearing has been completed and a final decision issued by the Secretary.

- (e) Hearing; request. Upon request for a hearing made within 30 days of receipt of the Secretary's notice of suspension or revocation, the Secretary shall hold a hearing on the decision for suspension or revocation of the certification, plan, or registration. The failure to request a hearing within 30 days of receipt of the Secretary's notice shall constitute a waiver of the right to a hearing on the petition.
- (f) Party status. The Secretary shall determine the right of any other persons requesting party status to participate in the proceedings. In determining party status, the Secretary shall consider whether a person or his or her property is directly affected by the facility or activity(ies) authorized in the certification, or registration. The Agency shall automatically be a party to the proceeding.
- (g) Burden; admissibility of evidence. The hearing in a contested case shall be conducted by a hearing officer appointed by the Secretary. The burden of establishing that the certification, or registration should be suspended or revoked shall be upon the Secretary. The admissibility of evidence in proceedings under this section shall be determined under the criteria set forth in 3 V.S.A. §810.
- (h) Recording. Upon request of the party, a hearing held under this section shall be transcribed by a qualified stenographer or recorded on an electronic sound device. If a transcription by a stenographer is requested, the request shall be made in writing at least 10 days prior to the scheduled hearing. Costs shall be borne by the requesting party. The requesting party shall provide one copy of the transcript to the Secretary without costs; other parties wishing to obtain a copy of the transcript shall reimburse the requesting party on a prorated basis.
- (i) Examination of evidence; decision and order. The examination of evidence, decision and order shall be governed by the provisions of 3 V.S.A. § 811 and § 812. The final decision shall be made by the Secretary within 30 days after the close of the hearing. The decision shall constitute the final decision of the Secretary. Copies of the decision shall be sent to the holder of the certification, plan, or registration, and other parties to the proceeding.

## **Subchapter 7 – General Siting, Design and Operating Standards**

### **§ 6-701                      Applicability**

The requirements of this subchapter apply to all solid waste management facilities with the exception of those facilities that have been issued a categorical certification pursuant to § 6-503(b).

Note: The requirements of this subchapter are the minimum requirements necessary for siting, design, and operations of all facilities subject to this subchapter. Refer to the relevant subchapter which addresses the solid waste management facility for any additional requirements specific to that type of facility.

### **§ 6-702                      Prohibited Areas**

(a) Facilities are prohibited from being sited in the following designated areas:

- (1) Class I and Class II Groundwater Areas.
- (2) Class I and Class II wetlands and their associated buffer zones, as defined in the Vermont Wetlands Rules, unless allowed by a Wetlands Permit or Conditional Use Determination that has been issued by the Agency.
- (3) Class III wetlands as and their associated buffer zones, as defined in the Vermont Wetlands Rules, unless allowed by a Wetlands Permit or Conditional Use Determination that has been issued by the Agency.
- (4) Class III wetlands, as defined by the Vermont Wetlands Rules, unless allowed by a Water Quality Certification that has been issued pursuant to 40 CFR Part 401, or has been waived by the Agency;
- (5) A National Wildlife Refuge as designated by the United States Fish and Wildlife Service.
- (6) A wildlife management area as designated by the Agency.
- (7) A threatened or endangered species habitat area as designated by the Agency.
- (8) Floodways, Special Flood Hazard Areas. This criterion does not apply to storage, transfer or recycling facilities, certified prior to the date of these Rules where

there is no expansion of the facility beyond the previously certified waste management boundary.

- (9) River corridors, except for land application sites as provided in §6-1304. This criterion does not apply to previously certified storage, transfer or recycling facilities where there is no expansion of the facility beyond the previously certified waste management boundary.
- (10) A watershed for a Class A Waters, as designated by the Agency; and
- (11) Within 500-feet of an Outstanding Resource Water. This criterion does not apply to previously certified storage, transfer or recycling facilities where there is no expansion of the facility beyond the previously certified waste management boundary.

**§ 6-703**

**Siting Standards**

- (a) Facilities shall be located such that an emission or discharge from the facility will not unduly harm the public health and safety and will have the least possible reasonable impact on the environment by demonstrating the requirements of subsection (b) of this section.
- (b) In an application for a facility subject to this subchapter, an applicant shall satisfactorily demonstrate each of the following:
  - (1) The isolation distances from the high seasonal water table, bedrock and surface waters are sufficient to ensure that an emission or discharge from the facility will meet all applicable environmental quality and public health standards and Rules;
  - (2) The isolation distance to public and private drinking water sources is sufficient to ensure that an emission or discharge from the facility will not adversely affect drinking water;
  - (3) The isolation distances to property lines or any residence, school, day-care facility, hospital or nursing home, are sufficient to ensure that the facility will not:
    - (A) Result in objectionable odors off site;
    - (B) Result in an unreasonable visual impact off site;
    - (C) Unreasonably increase the level of noise detectable off site; or
    - (D) Otherwise adversely affect public health.
  - (4) The minimum isolation distances for the facility or activity listed in Table B are met, or other isolation distances as required by the Secretary pursuant to

subsection (c) of this section Any facility which is not listed in Table B, shall have an isolation distance to property lines of at least 50 feet.

- (5) That the facility is not located in areas that have development limitations, such as highly erodible soils, steep slopes, or do not have the physical capability to support the facility;
- (6) That the facility is accessible from a state or federal highway or a Class III or better town highway;
- (c) The Secretary may require that a facility meet isolation distances that are greater than those distances identified in Table B if such increase in distances is necessary for the facility to demonstrate compliance with § 6-703(b)(1)-(3) of this section.
- (d) The Secretary may request any additional information necessary to determine a proposed facility 's compliance with the standards contained in this section.

Table B : Required minimum isolation distances.

| CATEGORY  | Minimum Distances By Facility Type         |       |                        |  | Categorical Disposal Facilities |
|---|--|-------|------------------------|--|---------------------------------|
|   | Land Application <sup>1</sup><br>Injection | Other | Landfills <sup>2</sup> | Storage, Transfer, Processing,<br>and Recycling Facilities |                                 |
| Minimum vertical separation from high seasonal water table <sup>3</sup>   | 3'   | 3'    | 6'                     | n/a  | 6'                              |
| Minimum vertical separation to bedrock  | 4'   | 4'    | 10'                    | n/a  | 10'                             |
| Minimum distance to waters from the waste management boundary   | 50'  | 100'  | 300'                   | 100' <sup>4</sup>  | 100'                            |
| Minimum distance from waste management boundary to drinking water source not owned by the applicant.                        | 300'                                       | 300'  | 1000'                  | 100' <sup>4</sup>  | 200'                            |
| Minimum distance to property line from waste management boundary  | 25'  | 50'   | 300' <sup>8</sup>      | 50' <sup>6</sup>   | 50'                             |
| Minimum distance from a waste management boundary to residences, schools, daycare facilities, hospitals, and nursing homes. | 100'                                       | 100'  | 1000' <sup>5</sup>     | 100' <sup>7</sup>  | 300'                            |

<sup>1</sup> Applies to land application, of non-EQ biosolids, and stabilized domestic septage.

<sup>2</sup> Minimum criteria for a landfill facility are based on underlying soils with a maximum permeability of  $1 \times 10^{-4}$  cm/sec. Landfill sites with more permeable soils will be evaluated on a case by case basis, but are generally not acceptable.

<sup>3</sup> For land application, vertical separation for this category shall be measured from the ground surface, or bottom of the zone of incorporation if applicable, to the saturated zone existing at the time of disposal. For disposal facilities, vertical separation for this category shall be measured from the bottom of the landfill liner system to the seasonal high groundwater table.

<sup>4</sup> This criterion applies to facilities constructed after the effective date of these Rules, and to facilities constructed prior to the effective date of these Rules which have been expanded or modified and such expansion or modification will result in a reduction in the isolation distance to a drinking water source.

<sup>5</sup> This criterion applies only to certifications issued after October 15, 2004 for new landfill units or lateral expansions or modifications of existing landfill units.

<sup>6</sup> This criterion applies only to facilities certified after July 1, 1998.

<sup>7</sup> This criterion applies only to facilities certified after October 1, 2004 and to expansions or modifications of existing facilities certified after October 1, 2004.

<sup>8</sup> This criterion applies only to facility certifications issued after October 15, 2004 for new landfill units or lateral expansions of previously certified landfill units. The minimum distance to the property line shall be 50 feet for landfill units certified prior to October 15, 2004. This criterion does not apply to any facility located on or adjacent to property sought by a solid waste district through an eminent domain proceeding, pursuant to 24 V.S.A. § 2299a et seq., which was initiated prior to June 24, 2002, provided that the district that demonstrated the necessity in the eminent domain proceeding acquired the property. The minimum distance for such municipal facilities shall be 100 feet.

- (a) General. The basis of design and operational plans for all facility components shall be addressed in a facility management plan (FMP). The plan shall be submitted to the Secretary for review and shall contain sufficient information for the Secretary to determine whether the facility conforms to the provisions of this section.
- (b) At a minimum, the FMP shall include:
- (1) The number of employees that will be utilized to properly operate the facility;
  - (2) A description of the types of vehicles which will use the facility;
  - (3) A description or diagram of vehicle flow at permitted design capacity;
  - (4) The type, number and handling capacity of the equipment used;
  - (5) Storage capacity at the facility, including the waste transfer schedule;
  - (6) The facility's hours of operation;
  - (7) A site plan map of the facility at a scale of 1:100 or greater that contains:
    - (A) Location of barriers to prevent unauthorized entry;
    - (B) Access roads;
    - (C) Location of waste management transfer, storage, treatment and processing areas, including the tipping floor area, if a tipping floor is part of the facility design ; and
    - (D) Facility boundaries and property boundaries.
  - (8) A contingency action plan which:
    - (A) describes the organized, coordinated and feasible course of action that will be followed in cases of emergency or other occurrences which could cause potential endangerment of human health and safety or environmental hazards. These occurrences include, but are not limited to: fires, failure of facility design features (e.g. compactors, leachate collection systems), emergency situations or inability to remove waste as scheduled. The plan shall identify the procedures that will be followed to minimize potential hazards during both planned and unplanned events and provide for continued effective waste

management; and

- (B) All facilities designed with tipping floors shall have a written contingency plan for operations while the tipping floor is being repaired or replaced or otherwise becomes inoperable in whole or in part. The contingency plan shall consider all aspects of the facility which may be affected by the temporary closure of the tipping floor so that the facility continues to operate within these Rules.
- (c) Any other information relevant to proper operation of the facility.
- (d) The FMP documentation shall be prepared under the direction of a qualified professional, t, unless the Secretary specifically approves a waiver of this requirement.
- (e) The qualified professional shall make appropriate use of available expertise for evaluating geology and hydrogeology, surface grade, soils science, potential for air pollution impacts, and other areas of specialized knowledge which may be required to design the facility.
- (f) The facility design shall provide for reliable means to control vectors, emissions or discharges including odor and dust, so as to preclude hazards to public health and safety, reduce impacts on the environment and reduce the likelihood of nuisance conditions.

## § 6-705

### Operational Standards

- (a) Applicability. Facilities which qualify for categorical disposal, categorical recycling or compost certification, are exempt from the provisions of this subsection.

Note: Operational requirements for categorical disposal, categorical recycling or compost are contained within the provisions of subchapters relevant to those activities.

- (b) Operational standards; general. Each owner and operator shall ensure that activities conducted at a facility comply with the following standards, as applicable to the facility type.
  - (1) Qualified personnel shall be retained to operate solid waste management facilities.
  - (2) Activities at the facility shall adhere to all conditions of the facility certification and these Rules.
  - (3) At least one (1) contact person shall be identified in the certification application, and be able to be contacted at all times.

- (4) All sampling shall be performed by properly trained and qualified personnel. Qualified personnel must have a minimum three (3) months training and six (6) months experience in sampling or analysis.
- (5) Each facility shall develop and implement a plan to prevent and/or control spills, nuisance dust, vectors, wind-blown debris, and odors.
- (6) The owner and operator shall take all practicable steps to prevent the inclusion of hazardous wastes, into the waste stream being managed by the facility.
- (7) Clearly visible and easily read signs shall be posted at the facility that provide notice of the prohibition on the disposal of banned materials as identified in 10 V.S.A. § 6621a and providing customers with information about available collection programs for such materials.
- (8) Access to the facility shall be controlled at all times to prevent unauthorized access to the facility. Access points to the facility shall be secured by locked gates or an equivalent access control during times when the facility operator is not present.

**§ 6-706**

**Reporting**

- (a) Reporting for categorical facilities. Each facility shall maintain records of waste source, waste type, waste quantity and destination. The data shall be reported to the Secretary within 20 days of the end of each calendar year, in a format required by the Secretary.
- (b) For facilities other than categorical facilities, the owner and/or operator the facility, including operators of wastewater treatment facilities, shall make reports to the Secretary on forms developed for this purpose by the Secretary. The operator and/or owner shall file a report with the Secretary quarterly or on a schedule as specified in the facility certification. Such reports shall include, but are not limited to, information on:
  - (1) the quantity of wastes, by type, managed by the facility at each site;
  - (2) the sources and quantity of all solid wastes managed by the facility;
  - (3) the destination of all solid wastes managed by the facility; and
- (c) Reporting for certified solid waste management facilities. Each owner and operator shall ensure that activities conducted as a facility comply at all times with the following standards.

(1) The owner and/or operator shall submit a report to the Secretary within five working days of the receipt of any information indicating non-compliance with any term or condition of certification, these Rules, or other operating authority.

(2) Report of discharge.

(A) Any unpermitted discharge from a facility or facility activities which poses a threat to public health, public safety, or the environment shall be reported within 24 hours to the State of Vermont Waste Management & Prevention Division at (802) 838-1138, Monday through Friday, 7:45-16:30 or to the Department of Public Safety, Emergency Management Division at (800) 841-5505, 24 hours a day. Additional notification shall be made to, the local health officer, and appropriate emergency response authorities of the affected municipality(ies).

(B) Within 7 days of a discharge, a written report shall be submitted to the parties required to be notified pursuant to subdivision (c)(2)(A) above. The report shall identify the discharge that occurred, the type, quantity, and quality of waste discharged, and the actions taken by the owner, operators, or other responders to correct the problem.

(d) Pursuant to 32 V.S.A. 5954(b), the owner and/or operator shall file a copy of the quarterly tax return if required under 32 V.S.A. Chapter 151, subchapter 13 (solid waste franchise tax) with the Secretary (attention Solid Waste Program) by April 30, July 30, October 30 and January 30 of each year.

## § 6-707

### Recordkeeping

(a) The records identified in (a)(1) through (a)(3) of this section shall be maintained by the owner and/or the operator of the facility. Such records or copies thereof shall be maintained in a dry and secure location at the facility or the primary location of business for the facility and shall be made for review upon request by the Secretary.

(1) All information that demonstrates compliance with these Rules, 10 V.S.A. chapter 159, and conditions of the current permit;

(2) Copies of any reports, records, data or other information required to be submitted to the Secretary as a requirement of certification.

(3) Any other records required by the Secretary to be maintained in accordance with this section.

(b) All records shall be kept from the date on which the application for initial certification is signed through the date of closure of the facility, with the following exceptions:

- (2) For landfills, such records shall be maintained through the post-closure period and shall cease upon written notification by the Secretary of the completion of post-closure care; and
- (3) For sludge or septage storage and treatment facilities located at wastewater treatment facilities record keeping shall persist for ten (10) years

**§ 6-708**

**Corrective Action**

- (a) If the operation of a facility results in a discharge that poses a threat to public health, public safety, or the environment, the Secretary may, , require the facility owner and/or operator to perform certain activities including, but not limited to:
  - (1) Monitoring of the surface water, groundwater, soils and/or air in addition to any monitoring required by these Rules and the facility's certification;
  - (2) Other investigations of the site necessary to determine the nature and extent of the discharge and any contamination resulting from the discharge;
  - (3) Removal and remedial actions necessary to prevent further contamination, to address the existing contamination and to meet applicable environmental quality and public health standards;
  - (4) Activities required to address discharges to groundwater causing an exceedance of a Preventative Action Level at a groundwater compliance point, as required by §12-606 (Preventative Actions) of the Vermont Groundwater Protection Rule and Strategy; and
  - (5) Any other action required to address the discharge and any resulting contamination that is authorized by law or these Rules.
- (b) Where the Secretary determines that any of the corrective actions in subsection (a) is required, the following shall occur:
  - (1) The Secretary shall notify the facility Permittee in writing that corrective action is required. The notification shall describe the need for corrective action and shall describe the corrective actions that are required.
  - (2) Within a timeframe established by the Secretary the owner and/or operator shall:
    - (A) Submit a corrective action plan that includes:

- (i) A description of the actions necessary to prevent present and future damage to public health and safety and the environment;
  - (ii) An estimate of the quantities of labor, materials and testing necessary to perform each corrective action;
  - (iii) A timeframe for commencement and conclusion of each corrective action;
  - (iv) A plan for public notification of the proposed corrective actions;
  - (v) A plan for periodic reporting to the Secretary on the effectiveness of any ongoing corrective actions; and
  - (vi) Any other information as required by the Secretary pertaining to the required corrective actions.
- (B) Submit a cost estimate prepared by a third-party contractor for the implementation of the corrective action plan in accordance with § 6-807;
  - (C) Provide evidence of financial responsibility for the total cost of the required corrective actions in accordance with the provisions § 6-802 and Appendix A.
- (3) Any additional activities required to address discharges to groundwater causing an exceedance of a Groundwater Enforcement Standard at a groundwater compliance point, as required by § 12-607 of the Vermont Groundwater Protection Rule and Strategy.
- (c) A corrective action plan, cost estimate and financial responsibility instruments shall be included as conditions through an amendment to the existing facility certification or other operating authority. The corrective action plan may be amended, subject to the approval of the Secretary, at any time during the ongoing action to reflect changes in the method or schedule of remediation. The Permittee shall be required to submit a revised cost estimate and evidence of financial responsibility in accordance with any amendment of the corrective action plan.
  - (d) Upon completion of the corrective action plan, the Permittee shall provide written certification to the Secretary that the corrective actions are completed. Upon satisfaction of the Secretary that the corrective actions have been completed, the Secretary shall notify the certification holder within sixty (60) days of the Permittee's certification that the Permittee is no longer required to maintain financial responsibility as required by this section.
  - (e) Where the Secretary determines that the cessation of operations is required to alleviate the hazard posed by a facility, certification suspension or revocation proceedings under § 6-606 shall be initiated. The Secretary may also pursue such other and/or additional remedies authorized under Vermont law.

## Subchapter 8 – Financial Responsibility, Capability, and Estimates

### § 6-801 Purpose; Applicability

- (a) Purpose. This subchapter establishes requirements and procedures for owners and operators of solid waste management facilities to demonstrate evidence of financial responsibility for closure and, as appropriate, post-closure care of the facility. Financial responsibility shall be provided in accordance with this section so that upon abandonment, cessation or interruption of the operation of a facility, all appropriate measures can be taken, by a third party if necessary, to prevent present and future damage to public health and safety and to the environment.
- (b) Applicability.
- (1) Compost facilities and categorical facilities are excluded from the requirements of §6-802 and §6-803.
  - (2) The requirements of § 6-802, for financial responsibility, shall apply to all existing and new private solid waste management facilities and to municipally-owned solid waste landfills that close subsequent to the effective date of these Rules.
  - (1) The requirements of § 6-803, for financial capability, shall apply to municipal solid waste facilities that are not landfills. These facilities may be owned and operated by the State of Vermont or by municipal entities created under 24 V.S.A., including facilities operated by Union Municipal Districts formed under 24 V.S.A. Chapter 121, other public entities, and municipal solid waste landfills which closed prior to the effective date of these Rules.
  - (2) This subchapter shall not apply to facilities certified by registration or emergency approval under § 6-503(c) unless the Secretary determines that compliance with this subchapter is necessary to protect public health, safety or the environment.

### §6- 802 Financial Responsibility

- (a) Financial instrument; forms. Evidence of financial responsibility for private facilities and municipally-owned solid waste landfills operating after the effective date of these Rules shall be in one or a combination of the following forms:

- (1) A trust fund maintained by the applicant for the benefit of the Agency with a surety bond guaranteeing full payment into the fund;
  - (2) A surety bond guaranteeing performance of closure or post-closure care;
  - (3) An irrevocable standby letter of credit; or
  - (4) Other financial responsibility instruments that the Secretary may deem appropriate.
- (b) Each financial instrument shall be submitted on a form prepared for this purpose by the Secretary and shall meet the standards and requirements specified in Appendix A.
- (c) Except as provided in this subchapter, the certification holder shall maintain financial responsibility equal to or greater than the amounts required by this section at all times. The approved financial responsibility instrument shall be effective prior to the date that an owner or operator of a facility receives a certification. Financial responsibility instruments shall be in the amount of the total of the cost estimates for closure and post-closure care, as applicable, and as calculated using the procedures set forth in § 6-804 and § 6-805. The certification holder shall, within 90 days of any of the following changes, increase the total amount of the financial instrument or combination of instruments to equal the required total cost estimates :
- (1) An increase in the required cost estimates for closure or post-closure care;
  - (2) A decrease in the value of a trust fund used for financial responsibility;
  - (3) A determination by the Secretary that the certification holder no longer meets the gross revenue or financial test; or
  - (4) Notification by the certification holder that he or she intends to substitute alternative financial responsibility.
- (d) The Secretary shall be a party to each financial instrument and shall have the right to obtain, without the consent of the owner or operator, exclusive direction and control over the transfer, use, and disbursement of the secured funds or performance benefits to perform approved closure and post-closure maintenance or secure reimbursement for costs incurred for so performing upon its determination that an owner or operator has failed in whole or in part to carry out closure or post-closure requirements in accordance with § 6-1008 or § 6-1009.
- (e) A certification holder may satisfy the requirements of this section by establishing more than one or a combination of financial responsibility instrument per facility. For purposes of this subsection, only trust funds, surety bonds, and letters of credit, may be used. The combination of instruments shall provide financial responsibility for an amount equal to or greater than the closure or post-closure care cost

estimates.

- (f) The Secretary may draw on any or all of the instruments to provide for closure or post-closure care at the facility.
- (g) A certification holder may satisfy the requirements of this section by using a single financial responsibility instrument for more than one facility.
  - (1) Evidence for financial responsibility submitted to the Secretary shall the name and address of, and the amount of funds assured by the instrument for, each facility. The total amount of the financial instrument shall be no less than the sum of funds that would be required if a separate instrument had been established and maintained for each facility.
  - (2) In directing funds available through the instrument for closure or post-closure care for any of the facilities covered by the instrument, the Secretary may direct only the amount of funds designated for that facility, unless the applicant agrees to the use of additional funds available under the instrument.
- (h) A certification holder may satisfy the requirements of this section for both closure and post-closure care for one or more facilities by using one of the instruments specified in this section. The amount of funds available through the instrument shall be no less than the sum of funds that would be required if a separate instrument has been established and maintained for closure and post-closure care.
- (i) Upon satisfactory demonstration by the certification holder to the Secretary that the requirements of a closure or post-closure care plan have been satisfied, the Secretary shall notify the certification holder in writing, within 60 days, that he or she is no longer required to maintain financial responsibility for closure or post-closure care.

**§ 6-803                      Financial Capability**

- (a) Financial Capability; forms.
  - (1) The auditor of the entity responsible for operating the facility or an independent certified public accountant shall annually submit a report to the Secretary on the financial condition of the entity. For municipal entities, this shall be the auditor's annual report required by 24 V.S.A. §§ 1681 through 1683. For other public entities, the annual report shall contain at least the information required of municipalities in 24 V.S.A. §§ 1681 through 1683, unless otherwise required by the Secretary. Documentation for a Union Municipal District need not include an annual report for each member town but shall include the district's annual report as required by 24 V.S.A. § 4868.

(2) The following documents shall be submitted to the Secretary biennially:

- (A) A letter from the entity's chief financial officer outlining current and anticipated income and expenses for the entity's waste management facilities and certifying that the entity will be financially capable to meet the cost estimates made for closure and post-closure care required in these Rules. The letter shall be in a form prescribed by the Secretary and shall include, at a minimum, the total debt for the facility, closure and post-closure estimates, other anticipated expenses, income from user charges, transferred funds, and any other income.
- (B) The opinion of the entity's auditor or an independent certified public accountant as to the entity's financial capability to meet closure and post-closure costs.

(3) The documents required by this section shall be submitted with the application for certification.

**§ 6-804**

**Closure Cost Estimate**

- (a) All facilities required to prepare a closure plan pursuant to these Rules shall maintain a current written estimate of the total cost of closing the facility in accordance with the facility closure plan.
- (b) The closure cost estimate shall be developed based on each activity that would be required for a third-party contractor to perform closure in accordance with the closure plan at the point in the life of the facility when closure would be most expensive. For purposes of this section, a third-party contractor is a party who is neither a parent nor a subsidiary of the owner or operator of the facility.
- (c) The following minimum factors shall be considered in estimating the closure cost:
  - (1) the size and topography of the facility;
  - (2) the daily and weekly tonnage to be received at the facility;
  - (3) the availability of cover and fill material needed for facility grading;
  - (4) expected amounts of leachate production and requirements for treatment and disposal;
  - (5) plans and methods of disposal at the facility;
  - (6) the location of the facility and the character of the surrounding area;
  - (7) requirements for surface drainage;

- (8) leachate and gas collection and treatment systems, as required;
  - (9) environmental quality monitoring systems, as required;
  - (10) structures and other improvements to be dismantled and removed;
  - (11) facility storage capacity for the types of wastes being received;
  - (12) off-site disposal requirements;
  - (13) an appropriate forecasted average rate of inflation over the active life of the facility; and
  - (14) vector control requirements.
- (d) The certification holder may revise the closure cost estimate at any time during the active life of the facility if:
- (1) a certified partial closure has been completed; or
  - (2) a change in the closure plan decreases the closure cost estimate.
- (e) The certification holder shall certify that a closure cost estimate is consistent with the facility closure plan and the requirements of this Rules or must file an application for a certification modification reflecting new plans.
- (f) The certification holder shall revise the closure cost estimate whenever a change in the closure plan increases the closure cost estimate, or as otherwise required in § 6-806 of this section.

**§ 6-805                      Post-Closure Cost Estimate**

- (a) Facilities that are required to prepare a post-closure plan pursuant to these Rules shall have a current written estimate of the cost of post-closure monitoring and maintenance of the facility in accordance with the post-closure plan.
- (b) The post-closure cost estimate shall be based on the work required for a third-party contractor to implement the post-closure plan. For purposes of this section, a third-party contractor is a party who is neither a parent nor a subsidiary of the owner or operator of the facility.
- (c) The factors to be considered in estimating post-closure monitoring and maintenance cost shall include at least:

- (1) the size and topography of the facility;
  - (2) the type and quantity of waste received;
  - (3) the disposal method and plan;
  - (4) the potential for significant leachate production and the possibility of contaminating groundwater or surface waters;
  - (5) environmental quality monitoring systems;
  - (6) soil conditions;
  - (7) an appropriate forecasted average rate of inflation over the active life of the facility and the post-closure care period;
  - (8) the location of the site and the character of the surrounding area; and
  - (9) leachate and gas collection and treatment systems.
- (d) For the purposes of post-closure cost estimates, the post-closure period for landfills shall be at least 30-years from the date that installation of the final capping system is completed or the date of the last most recent estimate submitted. Post-closure care activities shall be performed until the Secretary determines that the performance standards for custodial care, as outlined in § 6-1009, are achieved, and may extend beyond the 30-year post-closure period.
- (e) The financial assurance mechanism provided for the post-closure care shall not decrease below the amount of the 30-year cost estimate at any point during the post-closure period.
- (f) Where post-closure monitoring data and other available information suggests that the required performance standards for custodial care will be achieved as provided for in § 6-1009, the certification holder may submit a request for a modification to the post-closure plan. Upon approval by the Secretary for a modification to the post-closure plan, the certification holder shall adjust associated cost estimates to reflect the change in necessary post-closure care activities.
- (g) If the Secretary determines that post-closure monitoring data or other available information demonstrate that the performance standards for custodial care will not or unlikely to be achieved, the Secretary may require the owner or operator to perform any of the following:

- (1) investigate the cause of the post-closure performance deficiencies and submit findings to the Secretary;
  - (2) pursuant to § 6-806 of this section, submit an amendment of the post-closure cost estimate that reflects any necessary adjustment in remedial post-closure work required to remedy the deficiencies; and
  - (3) perform any additional investigation or submit any additional information as required by the Secretary.
- (h) The certification holder shall certify that a post-closure cost estimate is consistent with the facility post-closure plan and the requirements of this Rules or file an application for a certification modification reflecting new plans.
- (i) The certification holder shall revise a post-closure cost estimate as required in § 6-806 of this section.

**§6-806            Revision to Closure and Post-Closure Cost Estimates**

- (a) Closure cost estimates and post-closure cost estimates shall be revised pursuant to the requirements of this section.
- (b) Annual adjustment for inflation, current rates, and prices. On an annual basis, the certification holder shall adjust a closure cost estimate and post-closure cost estimate to reflect changes to the estimate caused by inflation, changes in current rates and/or prices. The certification holder shall submit to the Secretary a revised cost estimate itemizing the changes, updated rates and prices, or submit a written report demonstrating that no changes are required based on current rates of inflation.
- (c) Changes to closure or post-closure plans. The certification holder shall adjust a closure cost estimate or post-closure estimate cost upon any changes to the facility closure plan or upon any changes to the facility post-closure plan, as applicable. The revised estimate shall be submitted to the Secretary with the revised closure/post-closure plan and amendment request, as necessary.

**§ 6-807            Assurances for Corrective Actions**

- (a) An owner or operator required by the Secretary to undertake corrective action pursuant to § 6-708 of these Rules shall have a detailed written estimate of the cost of hiring a third party to perform the all

necessary corrective actions. A third-party contractor shall be a party who is neither a parent nor a subsidiary of the owner or operator of the facility.

- (b) A corrective action cost estimate shall include the total costs of all corrective actions as approved by the Secretary in the corrective action plan for the corrective action period as designated by the Secretary. The cost estimate shall be submitted to the Secretary on a timeframe designated by the Secretary and shall be approved by the Secretary.
- (c) Upon any of the following events, Permittee shall, within 90 days of such event, increase the total amount of financial responsibility so as to equal the cost estimates:
  - (1) An increase in the required cost estimates;
  - (2) A determination by the Secretary that the Permittee no longer meets the gross revenue or financial test, if applicable; or
  - (3) Notification by the Permittee that they intend to substitute alternative financial responsibility for self-insurance.
- (c) A corrective action plan shall be annually adjusted for inflation and revised based on changes in current rates and prices in accordance with the processes outlined in § 6-807 of this section and shall be revised to reflect any changes to the corrective action plan that are approved by the Secretary.

## **Subchapter 9 – Storage, Transfer, Recycling and Treatment Facilities**

### **§ 6-901 Applicability**

- (a) All solid waste recycling, processing, treatment, storage and transfer facilities are subject to the requirements of this Subchapter and the requirements of Subchapters 3, 5, 6, 7 and 8. This subchapter shall not apply to facilities which manage sludge or septage, facilities used in conjunction with land application, .

### **§ 6-902 Storage, Transfer, Recycling and Processing Facilities Types**

Facilities subject to this subchapter and other subchapters referenced in § 6-901 are designated as follows and shall obtain a certification prior to operation:

- (a) **Recycling Facilities:** Facilities that only manage solid waste materials that can be diverted from disposal.
- (b) **Transfer Stations:** Facilities where solid waste is collected, aggregated, sorted, stored and/or processed for the purpose of subsequent transfer to another solid waste management facility for further processing, treatment, transfer or disposal.
- (c) **Construction and Demolition Debris Processing Facilities:** Facilities which sort and process solid waste from construction or demolition projects for diversion from disposal and may also manage architectural waste materials. These facilities shall obtain a certification prior to operation.
- (d) **Architectural Waste Recycling Facilities:** Facilities that qualify as Construction and Demolition Processing Facilities that also recycle all six architectural wastes. These facilities shall apply for a new certification or an amendment to an existing certification prior to operation.
- (e) **Organic Solid Waste Recovery Facilities or “ORF”:** Facilities where organic materials are collected, treated, and/or stored in preparation for transfer to an anaerobic digester or compost operation. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester.

### **§ 6-903 Storage, Transfer, Recycling and Processing Facilities Siting**

Facilities subject to this subchapter shall comply with the siting standards and prohibitions of § 6-702 and § 6-703 of these Rules.

**§ 6-904**

**Storage, Transfer, Recycling and Processing Facilities Design Standards**

- (a) General performance standards: Facilities shall be designed to ensure the effective collection, storage and/or processing of waste or recyclable materials.
  - (1) Facilities shall be designed and operated to prevent, the reduction of the quality of the waste, such as the rotting or contamination of stored wastes or recyclable materials.
- (b) Design Standards.
  - (1) General design standards. To meet the performance standards of § 6-904(a) of this section, facilities subject to this subchapter shall comply with the general design requirements of § 6-704 of these Rules and the additional standards outlined in this section.
- (c) All facilities subject to this subchapter shall address in facility designs the following aspects of the site, and the applicable requirements of Subchapter,
  - (1) soils and surficial geology;
  - (2) topography; and
  - (3) surface water.
- (d) All facilities shall be designed to provide for all weather access, with access controlled and limited to hours of operation identified in the FMP.
- (e) Facilities with tipping floors where municipal solid waste is temporarily deposited pending transport shall be designed so that the tipping floor is within a building or covered by a roof to prevent exposure of waste to weather.
- (f) All tipping floors shall incorporate a collection system designed to collect leachate that may be associated with incoming waste materials. Leachate collection tanks utilized in collection systems shall be designed to be:
  - (1) double-walled with an interstitial space;
  - (2) sized appropriately for the facility and volume of waste managed;

- (3) of material compatible with the expected composition of the leachate; and
  - (4) tested or inspected biennially for leak detection.
- (g) Facilities shall be designed to have storage capacity for all recyclable materials and any process residue.
- (h) Organic Solid Waste Recovery Facilities shall be designed to:
- (1) treat food residuals in a manner that prevents impacts to public health and safety, the environment and creation of nuisance conditions (e.g. odors, vector attraction).
  - (2) have adequate storage capacity for all food residuals, unprocessed and processed; and
  - (3) have capability for adequate through-put of processing food residuals such that they maintain optimal material quality for the receiving facility.

**§ 6-905**

**Storage, Transfer, Recycling and Processing Facilities Operating Standards**

- (a) All facilities subject to this subchapter shall comply with the general operational requirements of § 6-705 of these Rules, the additional general operating standards in subsection (b) of this section, and the additional operating standards of (c) – (m) of this section as applicable to the type of facility.
- (b) General operations; additional standards.
- (1) A qualified operator, as identified in the FMP, shall be on site during all hours of waste acceptance. A contact person for the facility shall be identified and shall be able to be contacted at all times.
  - (2) Personal protection equipment appropriate to the materials being handled shall be available at all times for material handling and spill control.
  - (3) All leachate collected by transfer stations with tipping floors shall be disposed of in a treatment facility.
  - (4) Hours of operation shall be as specified in a FMP and facility certification.

(c) All solid waste received by a facility shall be actively managed.

- (1) The operator shall take all practicable steps to prevent hazardous wastes and landfill banned wastes, identified in 10 V.S.A. § 6621a from being included in the waste stream for disposal.
- (2) Waste shall not be stored for a period of time which results in a condition adversely impacting the environment or public health and safety.
- (3) All solid waste leaving a facility shall be transferred to an appropriate managing facility that is permitted for solid waste management as required by these Rules.
- (4) Organic solid waste shall be stored as briefly as possible at an organic solid waste recovery facility and in a manner that maintains optimal material quality for the receiving facility.

(d) Solid Waste; additional standards.

- (1) Except as specifically provided in this section, all solid waste shall be stored in containers, except during active management. The facility and storage containers shall be managed to prevent a discharge of contaminants from the containers.
- (2) All materials removed from containers for management during routine operations shall be managed under a roof and in a defined operational area to prevent a discharge of contaminants.
- (3) All solid waste shall be transported to a treatment or disposal facility on a schedule adjusted as necessary to minimize odors from the waste.
- (4) Solid waste deposited on a tipping floor shall be removed from the tipping floor as soon as is practical, but in no event later than the end of the operating day as defined in the FMP . The FMP and contingency plan shall identify any unique circumstances when solid waste might remain on the tipping floor beyond the end of the operating day and the practices that will be implemented at the facility so that the facility complies with the provisions of § 6-904(a) during this circumstance.

(e) Recyclable Materials; additional standards.

- (1) Materials to be recycled, contaminated recyclable materials, and process residue which may be dispersed by wind shall be stored inside buildings, under roofed structures, in enclosed trailers, or in other closed containers which are covered except when the facility is operating.

(2) In accordance with §10 V.S.A 6605(J)(1), the Permittee(s) shall offer collection for mandated recyclables.

(3) The Permittee(s) shall not knowingly dispose of recyclable materials previously source separated by the hauler or the commercial or residential customer.

(f) Lead-Acid Batteries; additional standards.

(1) All lead-acid batteries shall be stored under cover on an impervious surface.

(2) The facility shall maintain a supply of absorbent materials and acid neutralizers sufficient to clean up a spill of at least one gallon of battery acid solution.

(3) All batteries shall be transported off-site in accordance with all applicable federal and state hazardous materials transport requirements.

(g) HHW/CEG Hazardous Waste at Permanent Collection Facilities; additional standards.

(1) All HHW/CEG wastes shall be handled by personnel appropriately trained in accordance with the requirements of this subsection and all applicable federal and state regulations:

(A) Training program.

(i) Facility personnel shall 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. The program shall be taught by a person trained in hazardous waste management procedures and shall include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

(ii) The training program shall 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:

(I) Waste handling procedures;

(II) Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment;

(III) Key parameters for automatic waste feed cutoff systems;

(IV) Communications or alarm systems;

(V) Response to fires or explosions;

(VI) Response to groundwater contamination incidents; and

(VII) Shutdown of operations.

(B) All wastes collected shall be properly stored at the end of each operating day in accordance with the FMP.

(C) Facilities shall comply with the generator short-term storage requirements of the Vermont Hazardous Waste Management Regulations.

(h) Tires; additional standards. No more than 1,500 tires may be stored uncovered and on the ground at the facility site at any time. Tires shall be removed from the facility on at least an annual basis, unless the facility processes tires on-site, in which case, the maximum amount and the storage design shall be dictated by the FMP.

(i) Construction and Demolition Waste (C&D); additional standards.

(1) The maximum storage time and the maximum on-site volume for C&D collected at a facility that processes the material on-site shall be dictated by the approved FMP.

(2) C&D collected at a facility that does not treat or process the material on-site shall be stored in containers or in an enclosed or covered area as dictated by the FMP.

(j) Architectural Waste; additional standards.

(1) Architectural waste recycling facilities shall be designed and operated to achieve the greatest amount and highest quality of marketable materials.

(2) The combustion of architectural waste is prohibited, except for natural wood used as a feedstock for a facility that burns biomass-only for the purpose of generating heat or electricity.

(k) Leaf and Yard Waste; additional standards. In accordance with § 10 V.S.A §6605(j)(2), facilities offering collection of municipal solid waste shall offer collection for leaf and yard waste. These materials may be stored on the ground and are exempt from the containerization requirement of § 6-905(d)(1).

(l) Food Residuals; additional standards.

- (1) In accordance with § 10 V.S.A 6605(j)(3), the facilities offering collection of municipal solid waste shall offer collection for food residuals at the facility.
- (2) All food residuals and organic solid wastes shall be transported to a certified or registered treatment facility on a schedule adjusted to control odors and vectors from the waste.
- (3) The Permittee(s) shall store all food residuals in a manner that prevents leaking of associated liquid, minimizes nuisance odors, prevents vectors, prevents contamination and preserves the integrity of the material for the receiving facility. Specific management methods shall be identified in the FMP.

(m) Other Materials; additional standards.

- (1) Untreated wood, concrete, bricks, mortar or asphalt, and appliances and are exempt from the containerization requirement of § 6-905(d)(1) and may be stored uncovered at the facility. These materials shall be removed from the ground, and either taken off-site or stored under cover in accordance with a schedule included in the approved FMP. In no event shall this schedule exceed two years from the date of receipt of the materials. The maximum on-site volume shall not exceed 2,000 cubic yards at any time unless otherwise approved as part of the FMP.
- (2) Refrigerants from appliances shall be drained and collected by a licensed refrigerant removal professional prior to any further treatment of the appliances. Refrigerant-containing appliances shall be stored and handled in a manner that prevents the release of refrigerant.

**§ 6-906**

**Storage, Transfer, Recycling and Processing Facilities Applications**

- (a) Facilities subject to this subchapter shall comply with the siting standards and prohibitions of Subchapter 5 of these Rules and the additional requirements in this section.
- (b) An applicant seeking certification as an Architectural Waste Recycling Facility in accordance with 10 V.S.A. § 6605(m) and these Rules shall specify in the facility FMP how each of the architectural wastes to be managed by the facility will be collected, stored, separated, and processed for market.

- (c) ORFs and on-farm anaerobic digesters which process food residuals shall describe the proposed reuse or disposal of the liquid and solid waste residual streams within the facility FMP.
- (d) ORFs that process food residuals for use as a feedstock at an offsite anaerobic digester or compost facility shall demonstrate in the FMP that the produced feedstock will be transported to a certified facility with sufficient capacity to accept anticipated volumes and/or materials types. An on farm ORF that processes food residuals for use within the farm digester shall establish and submit as part of the FMP a schedule and plan for introduction of the produced feedstock into the digester.

**§ 6-907 Storage, Transfer, Recycling and Processing Facilities Closure**

- (a) All facilities subject to this subchapter shall be closed in a manner that:
  - (1) Minimizes the need for further maintenance related to the waste facility; and
  - (2) Controls, minimizes, or eliminates post-closure emission or discharge of waste, waste constituents, leachate, contaminated runoff, and/or waste decomposition products into the groundwater, surface waters or the atmosphere. Such actions shall be completed to the extent necessary to prevent threats to public health and safety and the environment as determined by the Secretary.
- (b) An approved closure plan shall be developed by the facility and an approved closure plan shall become a condition of the facility certification issued by the Secretary.
- (c) An updated closure plan shall be submitted for approval to the Secretary whenever changes in the operating plan or facility design affect the closure plan. An approved closure plan may be adjusted , subject to the approval of the Secretary, at any time during the active life of the facility, except that an closure plan may not be submitted for approval less than 90 days before receipt of the final volume of waste.
- (d) Notice of Closure. A certification holder shall send to the Secretary a notice of intention to close or notice of closure at the point of closure plan implementation.
- (e) Notice of Closure Completion. A certification holder shall send to the Secretary a notice of closure within 30 days after the date that the final volume of waste is received at the facility.
- (f) Partial Closure. Any partial closure shall be performed in accordance with an appropriate section of the approved closure plan and shall be subject to all of the requirements of this section.

(g) Certification of Closure. As part of the final closure of a facility, the Permittee shall submit the following to the Secretary:

- (1) Certification by the owner or operator of the facility and that the facility has been closed in accordance with the specifications of the approved closure plan. The Secretary reserves the right to require this closure certification to be submitted by a professional engineer licensed in the State of Vermont and will notify the facility of this requirement at the submittal of the notice of closure; and
- (2) a request for discontinuance of any existing financial assurance mechanism required by § 6-802.

DRAFT

## Subchapter 10 – Disposal Facilities

### § 6-1001 Applicability

- (a) Unless specifically exempted by these Rules, the disposal of solid waste into or on any land of the State shall be subject to the certification requirements of these Rules.
- (b) Any mining or mineral processing waste exempted from the Vermont Hazardous Waste Management Rules pursuant to § 7-203(e) of those Rules shall be subject to the certification requirements of these Rules. Soil, rock, and other materials from mining activities that are not a mining waste or a mineral processing waste are not subject to the certification requirements of these Rules.

### § 6-1002 Disposal Facility Types

- (a) Categorical Disposal Facilities The disposal of one or more of the following categories of solid wastes, which does not qualify for a limited duration Insignificant Waste Management Event (IWMEA) under § 6-505(b) is a categorical disposal facility. :
  - (1) Stumps, root masses, decomposing wood or brush;
  - (2) Bituminous concrete;
  - (3) Concrete, masonry, mortar, porcelain, pottery, tile and clay pipe;
  - (4) Street sweepings;
  - (5) Car wash grit and municipal separated stormwater catch basin grit; that does not leach volatile organic compounds in excess of applicable groundwater enforcement standards;
  - (6) Mining waste not in excess of 15,000 cubic yards per year; and
  - (7) Development soils.
- (b) Landfill Facilities. No person shall construct, operate, expand, commence closure or perform post-closure care and custodial care of a landfill facility without obtaining prior approval by the Secretary pursuant to 10 V.S.A §6605(a)(1). This requirement applies to and includes municipal solid waste landfills, mono-fill landfills, construction and demolition debris landfills, mining waste landfills

(>15,000 cubic yards per year) and mineral processing waste landfills.

**§ 6-1003 Additional Disposal Facility Siting Prohibitions**

In addition to the general siting standards and prohibitions of Subchapter 7 of these Rules, the additional following prohibitions apply to all disposal facilities:

(a) Applicants for a categorical disposal facility shall demonstrate that subdivisions (a)(1) and (a)(2) of this subsection are satisfied

(1) Categorical disposal facility prohibitions.

- (A) Fifty (50) feet of a public highway, or property line(s) of adjoining property owners;
- (B) the source isolation zone of a public water supply, or within 200 feet of the source of a public drinking water source, whichever is greater.
- (C) 200 feet of the source of a private drinking water source.
- (D) One-hundred (100) feet of Class B Waters, and

(2) Disposal shall not occur within 300 feet of a public highway or within 300 feet of the property line(s) of adjoining property owners unless the applicant can demonstrate to the sufficiency of the Secretary that a reduced distance (less than 300 feet) will not result in any of the following:

- (A) objectionable odors to be present off-site of the facility,
- (B) unreasonable visual impact observed off site of the facility,
- (C) unreasonable increase in level of noise detected off site of the facility, and
- (D) a nuisance or condition that otherwise adversely affects public health and safety and the environment

(3) Applicants for a landfill facility shall demonstrate that subdivisions (A-E) of this subsection are satisfied. Landfills shall:

- (A) not be sited in the Green Mountain National Forest, except for a one half-mile corridor drawn from the center line of the right of way of each Federal and secondary highway or as approved by the United States Forest Service;
- (B) not be sited within the floodway, mapped fluvial erosion hazard zones, or within the 100-year flood plain;
- (C) not be sited within the Source Protection Area of a public water system using a groundwater source;
- (D) not be sited within zone 1 or zone 2 of a Source Protection Area for a public water system using a surface water source; and
- (E) be sited such that any emissions or discharges from the facility will be detected through monitoring and remediated prior to such emission or discharge impacting any off-site property.

**§ 6-1004 Additional Disposal Facility Design Standards**

In addition to the general site characterization and facility design requirements of Subchapter 7, the following design standards apply to all disposal facilities:

- (a) Facilities shall be designed to provide a reliable means to control vectors, emissions or discharges, including odor and dust, so as to preclude hazards to public health and safety, reduce impacts on the environment and reduce the likelihood of nuisance conditions.
- (b) Facilities shall be designed to protect surface water, groundwater and the air, by detecting, through monitoring where appropriate, the emission or discharge of contaminants.
- (c) New landfills or new operational units at an existing facility, shall have liner and leachate collection systems and appropriate provisions for leachate treatment. The Secretary may waive the liner, gas collection requirements, leachate collection system and leachate treatment requirements for landfills or portions of landfills that are designated solely to receive particular waste components that are designated by the Secretary as not a potential source of leachate or landfill gas that is harmful to public health and safety or the environment or capable of the creation of nuisance conditions. Landfills accepting municipal solid waste shall not be granted a liner waiver.

(d) Expansion of an existing facility that has documented groundwater contamination may be approved. It must be demonstrated that the design and operation of the proposed expansion activities will not worsen the existing contamination and that remediation, containment and/or monitoring of the existing contamination will concurrently occur with the expansion operations. The design for expansion at a facility with existing contamination must provide:

- (1) sufficient environmental monitoring to assess the impacts of the expansion prior to a point or points of compliance and provide for the capability of remediation within property boundaries if necessary;
- (2) any additional monitoring systems necessary to monitor the proposed expansion area independently of preexisting operational units (monitoring systems beneath the liner of the expansion area, expanded monitoring well networks, tracer systems etc.);
- (3) demonstration through modelling, or other means, that existing contamination will not be worsened by the expansion.

(e) Lined landfill liner systems. Lined landfills shall be designed to comply with the following standards.

(1) The landfill shall have a Landfill Liner Base System that consists of the following components:

- (A) Subgrade. This component shall be designed to provide structural integrity and support to the facility; and
- (B) Bedding layer. This component shall be designed to screen earthen material sufficient to provide puncture protection to the secondary liner.
- (C) The landfill liner base system shall be designed to be consistent with the following standards:
  - (i) Be of low-permeability materials and adequate for supporting the loads and stresses imposed by the weight of the landfill and all facility components during all phases of construction, operation, closure and post-closure;
  - (ii) Shall be graded and prepared for landfill construction such that the subgrade below the liner provides a uniform and consistent bedding layer capable of

preventing puncture of the landfill liner; and

(iii) Shall be graded such that there is a minimum 2% slope toward the leachate collection sump.

(2) The landfill shall have a Landfill Liner System that consists of the following components:

- (A) Secondary Liner. This component shall be designed to collect and detect leachate leakage through the primary liner.
- (B) Leak Detection Drainage Layer. This component shall be designed to reduce hydraulic head on the secondary liner and facilitate migration of leachate to the secondary leachate collection system.
- (C) Primary Liner. This component shall be designed to prevent leachate migration into the Leak Detection Drainage Layer or outside of the designed lined landfill area.
- (D) Leachate Collection Drainage Layer. This component shall be designed to reduce hydraulic head on the primary liner and facilitate migration of leachate to the leachate collection system.
- (E) Liner Protection Layer. This component shall be designed to screen material sufficient and provide puncture protection to the primary liner and leachate collection system.
- (F) The landfill liner system shall be designed to be consistent with the following standards:
  - (i) All liner systems shall be of double liner construction.
  - (ii) The secondary liner shall consist of a HDPE FML geomembrane with a minimum nominal thickness of 60-mil or an alternative composite (synthetic and natural material) liner system which achieves the equivalent hydraulic barrier properties.
  - (iii) The primary liner shall consist of a HDPE FML geomembrane with a minimum nominal thickness of 60-mil or an alternative composite (synthetic and natural material) liner system which achieves the equivalent hydraulic barrier properties.

- (iv) All liner materials shall be chemically non-reactive with anticipated disposed waste and leachate characteristics.
- (v) The leak detection drainage layer and leachate collection drainage layer shall:
  - (I) achieve a minimum hydraulic conductivity of  $1 \times 10^{-2}$  cm/sec;
  - (II) consist of a granular material with fines removed or a combination of granular material and geosynthetics within basal areas;
  - (III) consist of a granular material with fines removed or a combination of granular materials and geosynthetics along extended side slopes. If granular material placement impossible, geosynthetics may be used provided it can be demonstrated that they provide equivalent functionality; and;
  - (IV) be covered by a filtration layer or geosynthetic that aids in the prevention of clogging.
- (vi) The liner system shall not be penetrated by any appurtenances, with an exception of penetrations located at the top of the slope and outside a defined limit of waste, as needed and as approved to facilitate the operation and maintenance of the secondary leachate collection and removal system.
- (vii) For landfills disposing of waste other than MSW, the Secretary may approve an alternative liner system design that deviates from the standards required by § 6-1004(e) of this subsection upon a finding that the liner system proposed design is adequate to protect human health and the environment.

(f) The landfill shall have an Operating System that consists of the following components:

- (1) Daily Cover. This component shall be designed to provides odor control, inhibit fires, prevent vectors and wind-blown debris and promote anaerobic waste decomposition.
- (2) Intermediate Cover. This component shall be designed to provide limited duration control of landfill odors and infiltration of precipitation into the waste mass.

- (3) Interim Cap. This component shall be designed to provide extended duration control of landfill odors, infiltration of precipitation into the waste mass, enhancing gas collection and control, accommodating waste settlement, and reducing erosion and leachate production.

(g) The landfill shall have a Final Capping System that consists of the following components:

- (1) Hydraulic Barrier Layer. This component shall be designed to prevent infiltration of liquids into the waste mass.
- (2) Final Capping Drainage Layer. This component shall be designed to facilitate migration of liquids to perimeter drains and stormwater management systems, and to prevent saturation of final capping layers.
- (3) Final Capping Protection Layer. This component shall be designed to provide frost and physical protection of the final capping drainage layer.
- (4) Vegetative Support Layer. This component shall be designed to support herbaceous vegetative growth for erosion stabilization.
- (5) The Secretary may approve alternative design components that can be determined to achieve equivalent or improved performance standards.

(h) Leachate Collection and Removal Systems (LCRS). Landfills shall be equipped with leak detection and leachate collection and removal systems that are designed to be consistent with the requirements of this section.

(1) Performance standards. The LCRS shall be designed to meet the following performance standards:

- (A) Collect and remove all leachate and gas condensate generated by the landfill.
- (B) Enable detection of leachate migration through the primary landfill liner system.
- (C) Prevent migration of leachate off of the landfill site.
- (D) Restrict leachate depth to 30 cm or less over the liner system, except within the leachate sump area, under typical operating conditions.

- (E) The LCRS shall restore leachate depth to less than 30 cm within five days following a 25-year/24-hour or greater storm event, or other approved contingency storage events.
  - (F) Provide capability of accurately and independently measuring and recording leachate generation within the primary and secondary collection systems.
  - (G) Be designed to be hydrologically separate from the stormwater management system and designed such that the secondary leachate collection system is separate from the primary leachate collection system.
- (2) Piping. The LCRS shall utilize piping that:
- (A) is composed of material compatible with anticipated leachate composition;
  - (B) is perforated sufficiently for anticipated leachate quantities; and
  - (C) Allows for effective flow monitoring with access for routine maintenance.
- (3) Sump. The LCRS shall include a sump that:
- (A) Provides a supplemental hydraulic liner system protection in the sump areas where leachate will be stored;
  - (B) Utilizes a sump fill that shall be porous and made of transmissible materials such that it will not biologically or physically clog over time;
  - (C) Provides for adequate access to change pumps and for general cleaning and maintenance; and
  - (D) operates to prevent 30 cm of leachate from collecting on the primary liner in the base area under normal operations.
- (4) Leachate and gas condensate storage infrastructure shall provide capacity for storing a volume of leachate sufficient to allow for the restoration of 30 cm of hydraulic head on the liner within five days of the 25-year-24-hour storm event or greater.
- (5) Leachate containment; leak detection. All LCRS components constructed outside of the lined portion of the waste management area shall provide double containment and be equipped with

effective leak detection.

(6) Leachate collection tanks shall be:

(A) double-walled with interstitial space;

(B) constructed of material compatible with the expected composition of the leachate; and tested biennially for leaks.

(i) Operating system. Landfills shall have an operating system that is designed to be consistent with the following standards:

(1) The facility shall maintain daily cover that shall consist of at least a six (6) inches of earthen material. Alternative daily cover may be proposed in accordance with § 6-1004(e).

(2) The facility shall maintain intermediate cover shall consist of a minimum 1-foot thickness of compacted earthen material, which may include the 6-inch daily cover, and shall be stabilized by vegetated cover.

(3) The facility may utilize an interim cap. Interim caps shall consist of a flexible membrane liner or a minimum two-foot thick layer of earthen material with a permeability of less than  $1 \times 10^{-5}$  cm/sec overlain by six (6) inches of earthen material capable of sustaining vegetation.

(4) The design and sequencing of waste lift development shall ensure proper drainage on the landfill site and prevent ponding of water on the facility surface. This requirement applies both during the working life of the facility and after the final capping system has been installed and vegetation established.

(5) Landfill design and fill plans shall be designed such that final grades are achieved as soon as possible and that the open area for active filling is minimized to the extent practicable. Designs shall include the sequencing and extent of planned intermediate cover and interim cap that will be utilized prior to final capping of the landfill units.

(6) Landfill designs shall include a sequential capping plan for closing operational units of the disposal facility during its life. Operational units shall be designed for a life not to exceed ten (10) years unless otherwise approved by the Secretary.

(j) The Landfill Gas Collection and Control System (LGCCS). Landfills shall have a system to ensure that combustible landfill gases created by decomposition of wastes are captured. This system shall be designed to be consistent with the following standards:

(1) The LGCCS system shall achieve the following performance standards:

- (A) The LGCCS system shall be designed to effectively manage all landfill gas collected.
- (B) all appurtenances shall be designed, operated and maintained to effectively collect and control landfill gases and to prevent emissions and related odors or nuisance conditions, or other hazards to public health and safety.
- (C) Gas extraction wells. Landfills shall incorporate the following gas extraction well standards into the facility design:
- (D) Vertical landfill gas extraction wells shall be located with overlapping radii of influence; and
- (E) Vertical landfill gas extraction wells shall be designed, constructed, operated and maintained:
  - (i) with a wellhead that provides a means of controlling gas flow, a means of measuring liquid level, and a means of sampling temperature and gas quality;
  - (ii) to passively drain leachate and condensate to the leachate system; to resist physical and biological clogging;
  - (iii) to minimize oxygen induction into the landfill gas collection and control system while under vacuum; and
  - (iv) to terminate at least ten (10) feet above the primary liner system.  
Gas collection system piping.
- (F) The landfill shall be equipped with a gas collection system piping shall is designed to:
  - (i) withstand the expected temperature of the landfill gas, the negative pressures of the vacuum system and to be durable throughout the life of the landfill;

- (ii) passively drain condensate into the leachate collection system; and
- (iii) incorporate a looped header piping system to provide a second means for extracting gas from each well. Headers shall be designed with flow control valves to isolate portions of the gas collection and control system when repairs are necessary.
- (iv) The landfill design shall include a vacuum system, header and lateral piping sizing and layout that is designed to be capable of providing a minimum of ten (10) inches of water column of vacuum at each gas extraction well.
- (v) Extraction wells shall be subject to negative pressure adjusted to maximize the extraction without inducing oxygen migration or otherwise compromising landfill gas quality.

(G) The landfill gas treatment and destruction design shall incorporate, as applicable, the following:

- (i) A totalizing meter capable of measuring the amount of gas collected by the landfill gas collection and control system. A means for sampling the temperature and quality of the aggregated landfill gas shall also be provided.
- (ii) If a combustion engine is used as the primary method of destroying landfill gas, a backup flare shall be provided to manage gas when the engine is not in operation. The backup flare shall be directly connected to the landfill gas collection and control system and shall be sized to destroy the peak gas flow occurring during the life of the landfill. Backup flares shall be constructed with automatic ignition capabilities.
- (iii) If the nature of the landfill gas poses a hazard to the condition and/or operational efficiency of the combustion equipment, gas pre-treatment shall be provided to protect and preserve the condition and operational efficiency of the equipment.

(k) Final Cap System; Lined Landfills. Lined landfills shall have a final capping system that is designed to be consistent with the following standards:

- (i) The system shall be integrated with the facility LGCCS.
  - (ii) The hydraulic barrier layer shall provide a graded, stable base of earthen materials capable of protecting the overlying FML from the underlying waste mass. Intermediate cover may function as this base material if it is demonstrated to the sufficiency of the Secretary to meet this standard.
  - (i) The LLDPE flexible membrane liner shall be of a minimum nominal thickness of 40-mil.
  - (ii) The final capping drainage layer shall effectively transmit infiltrated water off of the FML and into a toe slope drainage system. Stability calculations shall demonstrate that the design materials are capable of maintaining final cap stability for a precipitation event equivalent to a 100-year, 24-hour storm event.
  - (iii) The final capping protection layer shall be constructed of materials demonstrated to provide physical protection of the drainage layer (considering frost, burrowing, desiccation etc.) and capable of preventing clogging of the drainage layer. The system shall incorporate a vegetative support layer that consists of earthen material capable of sustaining native plant growth.
- (3) The Secretary may approve an alternative final cover design and/or materials that does not comply with the standards in this section when the alternative design and/or materials are demonstrated to the sufficiency of the Secretary to achieve a minimum of equivalent performance to the requirements of this section.
- (4) All components of the final capping system shall be designed to function over the full closure, post-closure, and custodial care life of the landfill.
- (1) Final Cap System; Unlined Landfills. Unlined landfills shall have a final capping system that is designed to be consistent with the following standards:
- (1) The system shall be constructed with:
    - (A) a minimum two-foot thick layer of earthen material with a permeability of less than  $1 \times 10^{-5}$  cm/sec and less than the permeability of the facility base soils, and

(B) a minimum six-inch thick earthen material layer capable of sustaining native plant growth, or some other earthen material, as approved by the Secretary, that has been demonstrated to achieve a minimum of equivalent performance.

(2) Notwithstanding the requirements of (1)(1) of this section, to further minimize the threat to public health, safety or the environment, the Secretary may require that a final capping system for an unlined landfill comply with the standards as required by in § 6-1004 for lined landfills.

(m) Other Provisions Applicable to All Landfills. All landfills, lined and unlined, shall be designed to comply with the standards of this section.

(1) The final capping system design for all landfill facilities shall provide for a minimum slope of five (5) percent after complete settlement and a maximum slope of 33 percent at closure.

(2) All landfill designs shall provide for the appropriate control of surface water run-on and run-off, as determined by the Secretary. At a minimum, designs shall include a management system to divert run-on, control run-off discharge, control erosion, sedimentation, siltation and flooding and minimize the generation of leachate.

(3) All new municipal solid waste landfill facilities and lateral expansions located in seismic impact zones must be designed to withstand the maximum horizontal acceleration in lithified earth material for the site. A seismic impact zone is an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material will exceed 0.10g in 250 years. Note: A seismic impact zone can be identified from the latest USGS seismic hazard map or a site specific seismic hazard study.

(4) Notwithstanding any other provision of these Rules, facilities used for the disposal of ash from waste incinerators shall have liner and leachate collection systems and appropriate provisions for leachate treatment. Waste incinerator ash shall not be disposed with other waste within the lined cell.

(5) A groundwater monitoring system shall be designed and installed with a sufficient distribution and number of monitoring wells at depths capable of yielding groundwater samples from aquifers potentially impacted by the landfill. Up-gradient and/or other monitoring wells shall also be established, as determined by the Secretary, for the determination of local background groundwater quality.

**§ 6-1005 Additional Disposal Facility Operating Standards**

In addition to the general operational requirements of Subchapter 7, the following requirements apply to disposal facilities:

- (a) All Categorical disposal facilities. Categorical disposal certifications shall operate in accordance with the following operating and reporting conditions:
  - (1) Solid waste shall be covered and the disposal area shall be graded to promote runoff when closing the facility. A minimum cover shall consist of at least one-foot thickness earthen or other material capable of sustaining grassy vegetation. The Secretary reserves the authority to require additional cover requirements.
  - (2) Vehicle access. Vehicle access to the disposal facility shall be controlled at all times by a fence or barrier or a lockable gate. An attendant shall be present during hours of operation to assure that only the waste allowed by the categorical disposal certification is disposed of at the facility, to perform record keeping and to observe disposal;
  - (3) Siting limitations. Applicable siting limitations are to be maintained throughout the period of disposal and closure.
  - (4) Reporting.
    - (A) The facility operator shall make reports to the Secretary on forms developed by the Secretary. These reports shall be filed electronically with the Secretary on a quarterly basis or as specified in the facility certification;
    - (B) Operators or owners shall report to the Secretary within five working days of the receipt of any information indicating non-compliance with any term or condition of certification or other operating authority.
  - (5) Additional requirements. The Secretary may require any additional operational requirements in the certification, including financial responsibility or capability requirements set forth in Subchapter 8 of these Rules, if it is determined necessary to protect public health, safety, or the environment.

(b) Development soils categorical disposal facilities. Development soils categorical disposal facilities shall operate in accordance with the following additional operating and reporting conditions:

- (1) Facilities shall, on a quarterly basis or as specified in the facility certification, provide copies of the originating site work as required by § 6-1006(a)(3)(A) prior to disposal at the site.
- (2) Waste shall be covered and graded to promote runoff at least once a year in accordance with the standards of this subsection.
  - (A) At a minimum, cover shall be capable of sustaining vegetation and suitable for the avoidance of nuisance dust conditions.
  - (B) At closure, a minimum slope of five (5) percent and a maximum slope of 33 ⅓ percent shall be achieved.
  - (C) Upon closure of the facility, the Permittee shall record a notation on the deed(s) to the facility property or on some other instrument that is normally examined during a title search as may be approved by the Secretary. This notation shall notify any potential purchaser of the property that the land has been used as a solid waste management facility.
  - (D) The Secretary reserves the right to require cover requirements in addition to this subsection.

(c) Landfill facilities. The additional operational requirements for a landfill facility are as follows:

- (1) Before the facility may commence operations within a newly constructed cell, a professional engineer, licensed in the State of Vermont, shall certify that the cell was built in accordance with the requirements of the certification, approved plans, approved change orders, and furnish a complete set of as-built drawings to the Secretary.
- (2) A qualified operator familiar with the approved FMP, facility certification, and the requirements of these Rules shall be on site during all hours of landfilling operations.
- (3) Properly maintained and calibrated scales shall be used to measure the weight of solid waste received and disposed at the facility.

- (4) Adequate horizontal and vertical benchmarks shall be established prior to depositing any waste, and maintained throughout the life of the facility.
- (5) Non-implemented waste shall not be accepted for disposal.
- (6) Approved uniform solid waste and approved processed construction and demolition waste may be accepted, and only in accordance with the standards set forth in the Secretary's written approval of such waste.
- (7) The first lift of waste placed shall consist of select waste, with no large or rigid objects, that might cause damage to the liner system or stability. Placement of this first lift of waste shall be completed in a manner that prevents damage to the liner system from operating equipment and the select waste materials.
- (8) Lift development shall be carried out in accordance with the engineering plans, to ensure proper drainage and to prevent ponding.
- (9) The permittee shall make provisions for standby equipment to be operational within 24 hours of breakdown of primary equipment.
- (10) All cover and capping materials, and earthen or other approved alternative cover materials, when stored on-site, shall be managed to prevent the production of fugitive dust or the creation of nuisance or other impairment to public health, safety or the environment.
- (11) With the exception of construction and demolition waste landfills, daily cover material shall be in place at the end of each operating day, or at more frequent intervals, as needed to control disease vectors, fires and odors, prevent blowing litter, and discourage scavenging by animals, without presenting a threat to human health and the environment. This shall require compliance with the following:
  - (A) Grading of cover materials sufficient to prevent ponding.
  - (B) In all areas, except the working face, which have not received waste material in any given operating day, the owner or operator shall take all steps necessary to ensure that the cover material remains functional and stable until such time as intermediate cover, interim cap or the final capping system is installed.

- (12) Construction and demolition waste landfills shall maintain cover pursuant requirements contained within facility's approved facility management plan.
- (13) Intermediate cover shall be placed as soon as possible on any area that is not anticipated to receive waste for a period of 3 months or more. Intermediate cover shall be replaced by an interim or final capping system if additional waste is not placed in the area within one year of intermediate cover installation. Extensions beyond the one-year deadline may be granted by the Secretary on a case-by-case basis.
- (14) Interim capping shall be performed in accordance with approved plans. To minimize infiltration and enhance gas collection, the operator may place interim cap in areas that are not anticipated to receive waste for a significant period of time. Interim caps shall:
- (A) be maintained and inspected to ensure performance and functionality, provide proper drainage, enable gas collection, prevent ponding; and
  - (B) be removed and replaced by the final capping system when it is determined that additional waste will not be placed in the area.
- (15) Within 30 days, the operator shall notify the Agency in writing when the facility has reached final grades, capacity limits, or ceases accepting waste. The final capping system shall be in place within 90 days of attaining final grades, final capacity, or of the last date of receipt of waste for disposal, whichever is applicable. Vegetative cover, or other approved final capping system, shall be established and functional within four (4) months of final cap installation. The Secretary may approve an extension to these deadlines if warranted by weather conditions.
- (16) Disposal of regulated hazardous waste is prohibited. Industrial and commercial solid waste, sludge, septage or other materials that may combine to form hazardous substances shall be deposited only as specified in the certification.
- (17) The groundwater compliance point shall be no more than 150 meters from the waste management unit boundary and be located on property owned by the landfill owners.
- (18) All components of the designed landfill system, including the leachate collection and removal system, and the landfill gas collection and control system, shall be maintained to achieve the performance standards of § 6-1004. If any component is individually incapable of achieving, or which prevents the entire system from achieving, the required performance standards, the Agency shall be notified, and it shall be replaced to comply with and achieve the

performance standard. A certification amendment may be necessary if design changes are proposed in order to achieve the needed performance standard.

(d) Landfill facilities. The additional material specific operational requirements are as follows:

(1) Sludge Disposal at a Municipal Solid Waste Landfills.

- (A) Sludges shall only be disposed at municipal solid waste landfills
- (B) Prior to the disposal of sludge, written approval from the Secretary is required.
- (C) Sludges shall be at least 18 percent solids content to be accepted at the facility.
- (D) Sludges that cannot pass the following tests are prohibited from disposal:
- (E) Paint filter test (indicating that the materials do not contain free liquids); and
- (F) Sludges shall not exhibit the hazardous waste characteristic of toxicity as determined using the Toxicity Characterization Leaching Procedure (TCLP); and
- (G) Sludges shall be mixed at the working face to minimize odors, vectors, and bacteria and managed according to the approved FMP.

(2) Asbestos Disposal.

- (A) Asbestos-containing waste (ACW) shall only be disposed of in a facility certified to receive asbestos-containing waste, and within a demarcated asbestos disposal area. Facilities accepting ACW shall:
  - (i) Ensure that the incoming ACW is packaged in accordance with the Vermont Department of Health Regulations for Asbestos Controls, the Agency's Policy on the Management of Asbestos-Containing Waste and Vermiculite Insulation in Vermont, and that the ACW is transported separately from other wastes;
  - (ii) Take appropriate measures to ensure the protection of all persons present during the disposal of any ACW, and all persons who perform duties within the disposal facility. This shall include ensuring that transporters and facility personnel wear NIOSH-approved air purifying respirators whenever outside of a structure or a

vehicle while ACW disposal operations are occurring.

- (iii) Maintain records on the generator, source and type of ACW, volume disposed, and dates of disposal;
- (iv) Ensure that a water truck or other water source, and sufficient cover material is readily available at the time of ACW disposal operations;
- (v) Perform disposal in such a way as to ensure no airborne emissions;
- (vi) Cover ACW immediately after placement with at least six inches of material, ensuring no breakage of contained ACW;
- (vii) Provide training of employees in the asbestos waste disposal procedures; and
- (viii) Use a three-dimensional grid system to identify where the ACW is disposed.

### (3) Liquid Waste Disposal at Landfills.

- (A) Containers holding liquid waste shall not be placed in a landfill unless:
  - (i) The container is similar in size to that normally found in household waste;
  - (ii) The container is designed to hold liquids for use other than storage; or
  - (iii) The waste is household waste.
- (B) Bulk or non-containerized liquid waste shall not be placed in a landfill unless the liquid waste is a household waste, other than septage.
- (C) Absorbent material may be added, or dewatering of waste may be performed, prior to placement in a landfill so that waste is not considered a liquid waste.
- (D) Written approval from the Secretary is required prior to the disposal of liquid wastes including septage and/or sludge, in any landfill facility.

(4) Regulated Medical Waste. Landfills shall only dispose of regulated medical waste that has been documented as having been treated and shall:

- (A) dispose of the waste in an isolated area within the working face except if incinerated and as provided in § 6-1004;
- (B) take appropriate measures to ensure the protection of all persons present during the disposal of any treated RMW and who perform duties within the disposal facility; and
- (C) cover the area immediately after placement with at least six inches of appropriate cover material, ensuring no breakage of contained RMW while exposed to an open-air environment.

(5) Alternative Landfill Daily Cover Materials.

- (A) Alternative materials for landfill daily cover material may only be utilized following approval by the Secretary, on a case-by-case basis. Written approval of the Secretary of the material shall be obtained by the facility provided prior to use.
- (B) To receive approval under this section, the owner or operator shall submit a request in accordance with subdivision (e)(3), and shall demonstrate to the sufficiency of the Secretary that the performance of the proposed ADC will control disease vectors, control fires, reduce odors, prevent blowing litter, discourage scavenging, assure aesthetic appearance and control moisture and erosion.
- (C) The request for approval shall include the following:
  - (i) The material type and name;
  - (ii) A safety data sheet (SDS) for the material, if available;
  - (iii) A detailed operations plan which demonstrates that the performance of the material will meet the performance criteria for alternative daily cover;
  - (iv) Specifications of the material, procedures for placement, thickness and weather conditions during which the material can or cannot be used;

- (v) A contingency plan for the use of earthen daily cover in the event that the ADC material cannot be used, is not available or is not performing adequately; and
  - (vi) Any available documentation of the material's use at other landfills which addresses the materials performance and regulatory status.
  - (vii) A field demonstration may be requested by the Secretary prior to approval.
- (6) Response to Action Leakage Rate Exceedance. If flow within the secondary leachate collection system exceeds the monthly average action leakage rate of 20 gallons-per-acre-per-day, the landfill shall:
- (A) Notify the Secretary in writing within 24 hours of discovery of the exceedance;
  - (B) Take immediate actions to reduce or eliminate any leaks or other causes of the exceedance;
  - (C) Sample and analyze the primary and secondary detection liquid as provided for within the approved certification application, with results submitted to the Secretary within 5 days.
  - (D) Investigate and determine the location, size and cause of any leak(s) or other causes of the exceedance;
  - (E) Submit a preliminary assessment regarding the cause of the exceedance to the Secretary for approval within 14 days of the discovery of the exceedance, including a management plan for elimination of any leak; and
  - (F) Implement the approved management plan and/or any other requirements determined by the Secretary to be necessary for the protection of public health and safety and the environment.
- (7) Landfill Gas Management.
- (A) The landfill gas management system shall be designed and operated in order to effectively control landfill decomposition gas emissions and any related odors.

- (B) Surface Emissions Monitoring (SEM) shall occur as provided for under an approved SEM plan and shall be performed for the detection of fugitive emissions.
- (C) Emissions shall be managed to prevent off-site migration of landfill gases and explosive concentrations of landfill gases within structures on the landfill property. Monitoring shall be performed as required by the facility certification to document such management.
- (D) If methane levels exceed 25% of the lower explosive limit (LEL) within structures or if the LEL is exceeded at the facility or at the property boundary, the owner and/or operator shall:
  - (i) Immediately take all steps necessary to ensure protection of human health and safety;
  - (ii) Within 24 hours of identification of the exceedance, notify the Secretary and all affected property owners;
  - (iii) Within 30 days of identification, submit a remedial action plan for the gas releases to the Secretary for approval; and
  - (iv) Implement the approved plan in accordance with a compliance schedule established within the approved plan.
- (e) Mining waste/mineral processing waste facilities. The permittee of a mining waste or mineral processing waste landfill shall notify the Secretary prior to the implementation of any change to the mining or manufacturing process or any change to the management of the mining waste that would chemically or physically alter the character of the mining waste.

**§ 6-1006 Disposal Facility Applications; Additional Application Requirements**

- (a) Categorical disposal facilities. In addition to the general application requirements of § 6-505, an application for a categorical disposal facility shall include the following:
  - (1) Except for development soil categorical disposal facilities, categorical disposal facilities shall submit the application requirements established in § 6-505.

- (2) Privately operated categorical disposal facilities shall pay fees in accordance with 3 V.S.A. 2822(i) and 2822(j)(6)(D).
- (3) The following shall be required for development soil categorical disposal facilities:
- (A) The preparation of a site characterization report that includes information necessary to determine all paths of emission or discharge to the environment and shall be sufficient to model potential contaminant transport.
  - (B) The site characterization must address, unless deemed non-applicable by the Secretary:
    - (i) Soils and surficial geology.
    - (ii) Bedrock geology.
    - (iii) Integrated groundwater geology and geochemistry, including flow direction, presence of multiple aquifer, preferential pathways and parameters for hydraulic conductivity and transmissivity.
    - (iv) Topography.
    - (v) Surface water.
  - (C) Demonstration of the following:
    - (i) That the isolation distances from the high seasonal water table, bedrock, and waters are sufficient to ensure that an emission or discharge from the facility will not occur or result in an exceedance of applicable environmental quality and public health standards and Rules;
    - (ii) That the isolation distance to public and private drinking water sources is sufficient to ensure that an emission or discharge from the facility will not adversely affect drinking water;
    - (iii) That the isolation distances to property lines or any residence, school, day care facility, hospital or nursing home are sufficient to ensure that the facility will not:
      - (I) result in nuisance dust off site of the facility;

- (II) result in an unreasonable visual impact off site;
- (III) unreasonably increase the level of noise detectable off site; or
- (IV) otherwise adversely affect public health.

(iv) that the facility is in compliance with the Groundwater Protection Rule and Strategy, as may be amended, adopted pursuant to 10 V.S.A. Chapter 48, Groundwater Protection; Vermont Water Quality Standards, as may be amended, adopted pursuant to 10 V.S.A. Chapter 47; and the laws of Vermont.

(D) Any additional information that the Secretary deems necessary to evaluate potential impacts to the public health, and the air, groundwater, and surface water quality. This includes the origin site work required by §35-512 of the Investigation and Remediation of Contaminated Properties Rule.

(b) Landfill facilities. In addition to the general application requirements of § 6-504, an application for a new landfill facility shall include the following:

- (1) A hydrogeological study, which shall include all data, maps, cross-sections, schematics and calculations necessary to accurately determine the physical and chemical characteristics of the overburden and bedrock groundwater characteristics, any modelling to demonstrate worst-case scenario impacts to the groundwater and surface water systems and develop a groundwater monitoring plan which will demonstrate ongoing compliance with the Vermont Groundwater Protection Rule and Strategy at the groundwater compliance points of the facility.
- (2) A Landfill Siting Report, which shall demonstrate compliance with the minimum siting requirements of these Rules.
- (3) A Landfill Design Plan, which shall but not limited to, design and construction specifications of the groundwater protection system, the environmental monitoring systems, the cover and final capping and other appurtenances associated with the facility.
- (4) Landfill Slope Stability Calculations.
- (5) A Seismic Impact Analysis, or a demonstration that seismic impact analysis is not necessary if the landfill is sited outside of a seismic impact zone.

- (6) An Odor Control and Surface Emissions Monitoring (SEM) Plan.
  - (7) A landfill operation and maintenance plan, which shall include the sequence and direction of cell, lift and phase development, capacity and life expectancy for each phase and the sequence of placement of interim and final cover.
  - (8) A Waste Control plan, which shall include a description of how waste will be received and monitored, identification and management of wastes requiring special handling (friable asbestos, sludges etc.), and the program for detecting and preventing disposal of unauthorized wastes (random load inspections etc.).
  - (9) A Construction Quality Assurance and Quality Control plan which shall include a description of the observations and tests that will be used before, during and upon completion of construction to ensure that construction materials will meet the design and operation criteria.
  - (10) A Landfill Closure Plan, which shall identify all the steps necessary to close the landfill at any point during its active life and the associated closure cost estimate necessary for establishing a financial responsibility instrument.
  - (11) A Landfill Post-Closure Plan, which shall identify the monitoring and inspections that will occur following closure in order to maintain compliance with § 6-1008 of these Rules and the associated post-closure cost estimate necessary for establishing a financial responsibility instrument.
  - (12) A FAA Notification. In a case where a landfill facility is proposed to be located within a 5-mile radius of an airport runway, serving piston-driven or turbojet aircraft, the applicant shall also provide evidence that the Federal Aviation Administration (FAA) and the affected airport have been notified. Landfill facilities located within 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft, shall not pose a bird hazard to aircraft and shall include a Bird Hazard Management Plan with their application.
- (c) Mining waste; mineral processing waste landfills. In addition to the general application requirements of § 6-504, an application for a mineral waste and mineral processing waste landfill shall include the following:
- (1) Waste Characterization report for all mining waste and mineral processing waste that is disposed of within the landfill. This report shall provide the following information:

- (A) A description of the mining and industrial process or processes that are taking place at the facility, including a process flow diagram.
- (B) A detailed description of all materials processed which generate mining waste or mineral processing waste including identification of:
  - (i) Reagents, chemicals or additives that are used in the mining and industrial process and the point that they are added in that process, including the amount used per year and an estimate of the amount in the waste using a mass balance analysis. A copy of the material safety data sheets for each reagent, chemical or additive used in the industrial process shall be included; and
  - (ii) Natural contaminants (including heavy metals, metal salts, fluorine, radioisotopes, asbestos, arsenic) present in the material that is processed.
- (2) The annual amount of mining wastes or mineral processing wastes proposed to be treated, stored, or disposed.
- (3) The results of analytical tests of extract from representative samples of the mining waste or mineral processing waste to determine the concentration of metals, organic compounds, volatile compounds, semi-volatile compounds or other contaminants. The analytical results shall be presented in a format approved by the Secretary.
- (4) A statement that the applicant has examined alternatives to reduce the amount of reagents, chemicals, or additives in the mining waste or mineral processing waste. The statement shall include potential reuse and recycling options explored by the applicant for the waste. The statement shall also include a brief description of the alternatives considered and the conclusions reached.
- (5) Any additional information that the applicant or the Secretary believes would assist the Secretary in accurately characterizing the mining waste or mineral processing waste.
- (d) Except for facilities that qualify for a categorical certification under § 6-1002(a), the Secretary cannot certify a disposal facility unless it demonstrates that it is in compliance with the Groundwater Protection Rule and Strategy, , as may be amended, adopted pursuant to 10 V.S.A. Chapter 48, Groundwater Protection; Vermont Water Quality Standards, as may be amended, adopted pursuant to 10 V.S.A. Chapter 47; and the laws of Vermont.

**§ 6-1007 Disposal Facility Closure**

- (a) A closure plan shall be required for all facilities subject to closure requirements and that are operating on the effective date of these Rules and to new facilities required to obtain certification under these Rules.
- (b) All facilities subject to closure shall be closed in a manner that:
  - (1) Minimizes the need for further maintenance related to the waste facility; and
  - (2) Controls minimizes or eliminates to the extent necessary to prevent threats to public health and safety and the environment, including post-closure emission or discharge of waste, waste constituents, leachate, contaminated runoff, and/or waste decomposition products into the groundwater or surface waters or the atmosphere.
- (c) The closure plan submitted at the point of application and approved by the Secretary will become a condition of the facility certification.
- (d) An approved closure plan may be amended, subject to the approval of the Secretary, at any time during the active life of the facility, except that an amended closure plan may not be submitted for approval less than 90 days before receipt of the final volume of waste.
- (e) An amended closure plan shall be submitted for approval to the Secretary whenever:
  - (1) Changes in the operating plan or facility design affect the closure plan; or
  - (2) There is a change in the expected year of closure; or
  - (3) There is a change in the closure cost estimate or financial instrument.
- (f) When a certification modification is requested to authorize a change in the operating plans or facility design, a closure plan amendment shall be requested at the same time. If the Secretary determines that a certification modification is not needed to authorize the change in operating plans or facility design, a request for a closure plan amendment shall be submitted within 60 days after the change in plans or design occurs.

- (g) Notice of Closure. A certification holder shall send to the Secretary a notice of closure within 30 days after the date the final volume of waste is received at the facility.
- (h) Partial Closure. A facility may be partially closed prior to final closure. Any partial closure shall be performed in accordance with an approved closure plan and shall be subject to all of the requirements of this section.
- (i) Notification of facility use. Upon final closure of the facility, the owner shall record a notation on the deed(s) to the facility property or on some other instrument that is normally examined during a title search, as may be approved by the Secretary. This notation shall notify any potential purchaser of the property that the land has been used as a solid waste management facility.
- (j) Certification of Closure. As part of the final closure of a facility, the following must be submitted to the Agency:
  - (1) Certification by the certification holder of the facility and by a professional engineer licensed in the State of Vermont that the facility has been closed in accordance with the specifications of the approved closure plan;
  - (2) Verification that the owner of the property on which the facility is located has recorded a notation on the deed as required by subsection (i) of this section; and
  - (3) a request for discontinuance of any existing financial assurance mechanism required by § 6-802.

**§ 6-1008 Disposal Facility Post-Closure**

- (a) Except for categorical disposal facilities, a post-closure plan is required for facilities that are operating on the effective date of these Rules or are otherwise required to obtain certification under these Rules. A post-closure plan shall be required where waste or waste constituents remain at or in the facility after closure.
- (b) The facility post-closure plan approved by the Secretary shall be a condition of the facility certification.
- (c) Upon written approval of the certification of closure from the Secretary, the Permittee shall implement the post-closure plan. A facility's post-closure care period shall continue until the owner or operator can demonstrate that the threat to public health and safety and the environment has been eliminated and the

performance criteria of custodial care, § 6-1009, are achieved.

(d) The post-closure plan shall identify the activities that will be carried out during the post-closure period to minimize the possibility of an emission or discharge and to demonstrate the achievement of the custodial care performance criteria. The plan shall include:

(1) A description of the appropriate air, surface water, groundwater monitoring activities, to include:

(A) A plan for monitoring and maintenance of the landfill cover system, erosion control measures, drainage systems, groundwater monitoring networks, leachate collection systems, and gas control systems, as applicable. This shall include an annual evaluation of the landfill performed by a registered engineer or approved qualified professional in the month of May. This inspection shall assess whether the facility systems are sufficient to prevent impacts to human health or the environment.

(B) A groundwater monitoring plan developed to demonstrate compliance with the Groundwater Protection Rule and Strategy at the groundwater compliance points of the facility.

(C) A plan for detection monitoring at potentially impacted sensitive receptors (e.g., surface waters, residential wells), as applicable.

(D) A plan for explosive gas management and explosive gas monitoring, as applicable.

(2) A description and schedule of any planned maintenance activities;

(3) The name, address and phone number of the person or office to contact about the facility during the post-closure period; and

(4) A post-closure cost estimate pursuant to § 6-805 and provisions for financial assurance pursuant to § 6-802 or § 6-803 as appropriate.

(e) During the post-closure period, the owner or operator must maintain the integrity and effectiveness of the following:

(1) The landfill cover system, access controls, erosion controls, drainage systems, groundwater monitoring networks, leachate collection systems, if applicable, and gas control systems, if applicable. This shall include making any repairs as necessary to correct for sparse vegetative

cover, settlement, erosion, burrowing, deficiencies in the run-on and run-off systems and mowing the vegetative cover at least once a year; and

- (2) Environmental and facility monitoring points.
- (f) A post-closure plan may be amended, subject to the approval of the Secretary, at any time during the active life of the facility or during the post-closure period.
- (g) An amended post-closure plan shall be submitted for approval to the Secretary whenever:
- (1) Changes in the operating plan, facility design or closure plan, or events that occur during the active life of the facility or during the post-closure period, affect the post-closure plan;
  - (2) There is a change in the expected year of closure;
  - (3) There is a change to the post closure cost estimate and/or the post closure financial assurance document;
  - (4) There is a change in the post-closure monitoring activities described within § 6-1008(d); or
  - (5) There is a change in the anticipated end use of the property. Proposed construction, operation or maintenance of any development upon a closed solid waste landfill shall demonstrate that there will be no compromise to the integrity of the landfill capping system, any landfill gas collection and removal system, leachate collection and removal system, surface water control system, environmental monitoring system, and access controls, or otherwise increase the environmental or public health and safety risk from the facility.
- (h) When a certification modification is requested to authorize a change in the operating plans or facility design, a post-closure plan amendment shall be requested at the same time. In all other cases, the request for a post-closure plan amendment shall be made within 60 days after the change in operating plans or facility design or the event that affect the post-closure plan occur.
- (i) As required by the approved post-closure plan and described in § 6-1008(d), the owner or operator shall submit the following to the Secretary:
- (1) Copies of the inspection reports shall be submitted within 30 days of completion of the inspection;

- (2) Copies of all water quality reports shall be submitted within 60 days following the sampling event at the facility; and
- (3) Notification within 7 days of any damage, malfunction or sub-standard performance at the facility.
- (j) At the point of this rule's promulgation, all owner/operators who have previously received a post-closure certification will have the existing certification replaced by the provisions of this subchapter and post-closure care management will be regulated under these Rules and the post-closure plan, post-closure cost estimates and financial assurance instruments that are approved at the point of certification expiration.

**§ 6-1009 Disposal Facility Custodial Care**

- (a) Upon the completion of Post-closure Care as approved in a facility post-closure care certification, the owner/operator shall submit a written request for post-closure care completion, along with accompanying documentation to the Secretary that demonstrates that the facility is stable and poses no threat to human health or the environment without further maintenance or monitoring beyond the associated provisions of custodial care outlined in § 6-1009.
- (b) The post-closure care completion request shall be prepared under the direction of a professional engineer, licensed in the State of Vermont, and, a minimum, address the following performance criteria standards:
  - (1) Groundwater Quality.
    - (A) Concentrations of all contaminants attributed to the facility shall be stable, decreasing, or non-detectable over the most recent five-year period;
    - (B) Contaminants do not reach or exceed Groundwater Enforcement Standards (GWES) as established in the Groundwater Protection Rule and Strategy at the point of compliance. In the absence of a GWES, any US EPA Maximum Contaminant Level (MCL) or Vermont Health Advisory (VHA) would apply. Statistical significance of detections may be used to demonstrate compliance as approved by the Secretary.
  - (2) Landfill Gas Emissions.

- (A) Methane concentrations, if monitored, in monitoring wells shall be stable, decreasing or non-detectable over the most recent five-year period;
  - (B) Methane emissions shall not have the potential of reaching or exceeding 25% of the Lower Explosive Limit (LEL) at the property boundary or in facility buildings or result in objectionable off-site odors.
  - (C) Any established gas venting system, including passive venting, is fully operational or is decommissioned when determined to be no longer necessary.
- (3) Leachate Management. If required to be collected, leachate quality and quantity shall be demonstrated to be stable, decreasing or non-detectable over the most recent five-year period with no GWES, MCL or VHA exceedances for a minimum of two consecutive semi-annual monitoring events.
- (4) Final Cover Integrity.
- (A) Waste decomposition and settlement rates shall be shown to be negligible and that future settlement will not affect integrity of the final cover system;
  - (B) Vegetative cover shall be uniformly well-established, stable and resistant to erosion.
- (5) Surface Water Diversion System.
- (A) The surface water diversion system shall be shown to continue to prevent surface water flow on the capped landfill in accordance with the design requirements that imposed and approved during closure.
  - (B) Surface water discharge from the facility does not and will not violate Vermont Water Quality Standards, or any requirements of the Clean Water Act, including the National Pollutant Discharge Elimination System (NPDES).
- (6) Institutional Controls. Evidence shall be provided to demonstrate that institutional controls (e.g. land record notices, deed restrictions, access controls) are in place. A land record notice or other control approved by the Secretary to the Secretary at the time of the custodial care request.
- (7) Corrective Actions. Documentation shall be provided to demonstrate that any mandated corrective actions (e.g. waste removal, structural improvements, groundwater remediation) have

been successfully performed.

- (8) End Use Plans. Documentation shall be provided that the facility owner has identified the end use activities to occur at the facility and that these activities will not pose a threat to human health or the environment.
  - (9) Adjoining Property Owner Notification. Written notification shall be provided to all adjoining property owners at the post of application for post-closure care cessation. Evidence of this notification should be provided along with the written request.
- (c) If the Secretary determines that the findings of § 6-1009(b) cannot be made, the Secretary shall deny a request for post-closure care completion and notify the owner/operator of the basis for denial. The Secretary may require the continuation of post-closure care and/or implementation of corrective action, and may consider modification of specific post-closure care activities.
- (d) If the Secretary approves the findings of § 6-1009(b), the Secretary shall provide the owner/operator with written approval of post-closure care completion and commencement of custodial care. Upon custodial care approval, the facility owner/operator shall properly close and abandon all groundwater monitoring wells in accordance with §12.3.5 of Appendix A of the Vermont Water Supply Rule, as may be amended, and discontinue any existing active gas control systems.
- (e) The approval for cessation of post-closure care and initiation of custodial care shall not relieve the owner/operator from taking necessary corrective actions to protect human health and the environment. This includes
- (1) Any necessary corrective actions as may be required by the Secretary under 10 V.S.A. § 6615;
  - (2) Necessary continued maintenance (mowing, erosion repairs, etc.) performed on a schedule necessary to maintain performance of the landfill cap;
  - (3) Institutional controls to maintain access control and prevent risk; and
  - (4) The custodial care approval shall not release the owner/operator from potential liability to third parties resulting from releases which occur during the operating life, closure period, post-closure period or custodial care period.

- (f) At the point of this rule's promulgation, all owner/operators who have previously received a post-closure certification which contained the approval to transition from post-closure care management to custodial care management will be approved for custodial care upon expiration of the certification.

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## **Subchapter 11 – Compost Facilities**

### **§ 6-1101 Applicability**

- (a) This Subchapter applies to persons engaged in composting where the materials being composted do not contain any amount of sewage sludge, domestic septage, or septage. Composting activities where the materials being composted do contain any amount of sewage sludge, domestic septage, or septage shall be subject to the provisions of Subchapter 13 of these Rules.
- (b) The siting requirements of § 6-1106 and the liquid management standards of § 6-1107 shall not apply to facilities permitted prior to March 15, 2012, except if an expansion in the compost management area or an increase in processing capacity is proposed.

### **§ 6-1102 Organic Solid Waste Management Specific Definitions**

As used in this Subchapter and Subchapter 12 the following additional definitions apply:

- (a) “Actively aerated” means forcibly inducing the flow of air through a compost pile or windrow utilizing mechanical means, such as electrically powered blowers and is accomplished by a pile design which incorporates perforated piping or other mechanisms to direct air flow through the pile.
- (b) “Aerated piles” means inducing natural flow of air through a free standing compost pile or windrow through proper compost pile design.
- (c) “Anaerobic digestion” means the controlled anaerobic decomposition of food residuals, manure, animal feed waste and other natural organic waste materials inside a containment structure or vessel, generally resulting in the production of methane-rich gas.
- (d) “Clean high carbon bulking agent” means the materials exempt as clean high carbon bulking agents by § 6-302(a)(13).
- (e) “Compost” means a stable humus-like material produced by the controlled aerobic biological decomposition of organic matter through active management, but shall not mean sewage, septage, or materials derived from sewage or septage.
- (f) “Compostable” means a product, package or material that will safely decompose, in a composting system, into a humus-like material, that can be safely used as a beneficial soil amendment.

- (g) "Composting" means the accelerated biological decomposition of organic matter under managed aerobic conditions resulting in compost.
- (h) "Compost facility operator" means a person who operates a composting facility regulated under this subchapter.
- (i) "Compost management area" means an area used for the unloading and storage of feedstocks, and active and curing compost. Compost management area does not include the area used for the management of runoff or leachate and does not include areas where finished compost is stored.
- (j) "Compost tea" means a product produced by mixing finished compost with water and incubating the mixture to make a product used for soil enrichment. Compost tea producers may actively aerate the mixture or add additives to increase the microbial population during its production.
- (k) "Contaminant" means material which lends physical or chemical impurity to compost, including glass, metal, plastics, and ceramics.
- (l) "Curing" means the final stage of composting in which stabilization of the compost continues after much of the readily metabolized material has decomposed. Curing occurs after material has met the treatment process for compost required by this subchapter.
- (m) "Digestate" means the remaining solid and liquid derived from the finished stage of in-vessel anaerobic digestion.
- (n) "Farm" means a parcel or parcels of land owned, leased, or managed by a person and devoted primarily to farming, as defined and determined by Vermont Required Agricultural Practices Rule (RAPs).
- (o) "Food processing residual" means the remaining organic material from a food processing plant and may include whey and other dairy, cheese making, and ice cream residuals or residuals from any food manufacturing process excluding slaughtering and rendering operations. It does not include materials from markets, groceries, or restaurants. Typically, and historically, regulated by the Indirect Discharge Program.
- (p) "Food residual" means source separated and uncontaminated material that is derived from processing or discarding of food and that is recyclable, in a manner consistent with 10 V.S.A. § 6605k Food residual may include preconsumer and postconsumer food scraps. "Food residual" does not include meat and meat-related products when these materials are composted by a resident on site.
- (q) "Leachate" means liquid containing dissolved, suspended, or miscible materials that passes through or emerges from raw feedstocks and the active compost area. "Leachate" does not include liquid containing

dissolved, suspended, or miscible materials that pass through or emerges from the area where compost is curing, or storage of finished product.

- (r) "Leaf and yard residual" means compostable untreated vegetative matter, including but not limited to grass clippings, leaves, Kraft paper bags and brush, which are free from contaminants. It does not include such materials as pre- and post-consumer food residuals, food processing residuals or soiled paper.
- (s) "Organic Solid Waste" means any solid waste that is a carbon-based plant or animal material or byproduct thereof which will decompose. Examples of organic solid wastes include food residuals, leaf and yard residuals, grass clippings, and paper products. Domestic waste (human feces) is not included in this definition.
- (t) "Passively aerated" means inducing the flow of air through a free standing compost pile or windrow.
- (u) "Processed food residuals" are food residuals which have been slurried into a condition which is suitable to being directly pumped into a holding tank.
- (v) "Specified risk material" means tissues of ruminants that could contain Bovine Spongiform Encephalopathy causing prions as defined by the United States Department of Agriculture. These tissues include the tonsils, skull, brain, trigeminal ganglia (nerves attached to brain and close to the skull exterior), eyes, spinal cord, distal ileum (a part of the small intestine), and the dorsal root ganglia (nerves attached to the spinal cord and close to the vertebral column) of cattle aged 30 months or older and the tonsils and distal ileum of the small intestine of all cattle.
- (w) "Vermicomposting" means a method of composting utilizing red worms or similar worms to breakdown organic material into a nutrient rich soil amendment.
- (x) "Untreated wood residual" means untreated wood as defined in § 6-201.

#### **§ 6-1103      Organic Solid Waste Management Specific Exemptions**

- (a) The following activities are exempt from the requirements of this subchapter:
  - (1) A person(s) importing for composting 100 cubic yards or less per year of total organic solid wastes, of which not more than 42 cubic yards per year are food residuals and food processing residuals is not subject to regulation under these Rules. This exemption does not apply to the collection and composting of off-site generated animal offal, slaughterhouse wastes, or animal

mortalities.

- (2) Facilities that manage 3,000 cubic yards or less per year of solely leaf, yard, plant and untreated wood residuals provided that not more than 20 percent of the residuals are grass clippings.
- (3) Facilities that compost solely any of the following materials, provided the compost is used for soil enrichment:
  - (A) any amount of animal manure;
  - (B) any amount of absorbent bedding; and
  - (C) any amount of clean high carbon bulking agent.
- (4) Facilities located on a farm that compost vegetative farm waste from a farm.
- (5) The composting of 1,000 cubic yards or less of food processing residuals per year when the composting takes place on a farm.
- (6) Facilities located on a farm that compost animal mortalities or slaughter house waste from the farm's livestock.
- (7) The disposal of animal mortalities when disposed on a farm when the mortalities are from the farm.
- (8) Burial of four or less animal carcasses per year when the disposal occurs in accordance with the following siting requirements:
  - (A) One-hundred-fifty (150) feet from the property line or surface waters,
  - (B) three (3) feet above the seasonal high water table and bedrock,
  - (C) two hundred feet from public or private drinking water sources ;
  - (D) is covered with a minimum of 24 inches of soil; and
  - (E) is not located in a floodway.

- (9) Household pet burial on the owner's property.
- (10) The treatment or disposal of animal, bird, and fish species resulting from an emergency declaration to control the spread of disease, provided that the disposal activities occur in consultation with the Secretary. This exemption shall be contingent on the following:
  - (A) In the case of domestic animals, the declaration is issued by the Secretary of Agriculture, Food & Markets, in accordance with the authorities provided under 6 V.S.A. §§ 1159 and 1464.
  - (B) In the case of wild animal, bird, and fish species, such declaration shall be issued by the Commissioner of the Department of Fish and Wildlife in accordance with the authorities provided under 10 V.S.A. § 4136.
- (11) Pet cemeteries. For purposes of this subdivision a pet cemetery means any plot of ground used, or intended to be used, for the permanent burial or disposition of the remains of a pet in a grave, a mausoleum, a columbarium, a vault, or other receptacle.
- (12) Organic Solid Wastes that meet the Vermont Agency of Agriculture, Food & Markets' Commercial Feed Law when those materials are used as animal feed on a farm.

**§ 6-1104 Compost Facility Types**

- (a) Small Composting Facility. A facility is designated as a Small Composting Facility under these Rules if the facility:
  - (1) composts 5,000 cubic yards per year or less of total organic materials of which not more than 2,000 cubic yards per year are food residuals or food processing residuals;
  - (2) manages 10,000 cubic yards or less per year of solely leaf, yard, and/or untreated wood residuals;  
and
  - (3) has a compost management area of four acres or less in size.
  - (4) Composting facilities that compost animal mortalities, slaughterhouse waste, or offal are not eligible for registration as a small compost facility under this section and shall apply for a permit as a medium compost facility under § 6-1109(a).

(5) Facilities registered and in compliance with this Subchapter, the facility registration, and its facility management plan shall be considered operating consistent with accepted composting practices and subject to the permit limitations of 10 V.S.A. 6605j.

(b) Medium Scale Composting Facility – A facility is a medium scale composting facility under these Rules if the facility:

(1) has a compost management area of less than 10 acres in size; or

(2) composts the following materials:

(C) more than 10,000 cubic yards per year of leaf and yard waste; or

(D) 40,000 or less cubic yards per year of total organic materials consisting of any of the following feedstocks:

(i) not more than 5,000 cubic yards per year are food residuals or food processing residuals.

(ii) not more than 10 tons of animal mortalities, slaughterhouse waste or offal per month.

(3) is a vermicomposting facility that is not eligible for the exemption provided by § 6-302(a)(17).

(c) Large Composting Facility – A facility is a large composting facility under these Rules if the facility:

(1) Has a compost management area greater than 10 acres in size; or

(2) Composts more than 40,000 cubic yards per year of total organic materials or exceeds 5,000 cubic yards per year of food residuals or food processing residuals; or

(3) if it does not qualify for a de minimis exemption, a small composting facility registration or a medium composting facility certification.

#### **§ 6-1105 Small Composting Facilities – Accepted Composting Practices**

(a) Registration. No person shall operate a small composting facility without registering that facility with the Secretary on a form provided by the Secretary and providing the following:

- (1) The name and contact information for the facility registrant.
  - (2) The name and location of the facility registered under this section.
  - (3) A certification by the facility registrant that the facility has been sited, designed, constructed, and will be operated in accordance with these Rules.
  - (4) A statement by the facility owner that a copy of the registration and facility management plan was sent to the municipality and to the solid waste management entity where the facility is located.
  - (5) A letter from the local solid waste planning entity that the facility is acceptable under its plan.
- (b) Small Compost Facility Siting. Compost management areas and any area(s) used to treat leachate and run-off from composting activities shall not be sited or operated within any of the following:
- (1) 300 feet from the nearest public or private water supplies not owned by the applicant;
  - (2) 3 feet from seasonal high water table and bedrock;
  - (3) 100 feet from surface water;
  - (4) 100 feet from all property lines and edge of public roads; and
  - (5) 300 feet from all residences not owned by the applicant and from all public buildings;
  - (6) The 100 year flood plain as shown on the National Flood Insurance Maps;
  - (7) A class I or class II wetland or its associated buffer zone unless a conditional use determination has been issued by the Secretary;
  - (8) A class III wetland unless authorized by the Secretary;
  - (9) Any location within a municipality where that municipality has prohibited composting as a part of its zoning bylaws;
  - (10) Within a designated downtown or village center, unless the municipality has expressly allowed composting in that area.

(11) Within 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft.

(c) Small Composting Facility Design.

- (1) Liquids Management. Composting facilities shall be designed in a manner that prevents discharges off site and to surface waters. At a minimum, the facility shall meet the following design standards:
- (A) Stormwater run-off from up-gradient areas shall be diverted from running onto the compost management area and the vegetative treatment area using berms, swales, and other similar controls.
  - (B) The compost management area shall be constructed with an average slope between two and five percent and shall be maintained to prevent ponding.
  - (C) All compost curing run off and leachate shall be managed on property owned or leased by the registrant.
  - (D) Leachate from the compost management area shall be managed through the use of a vegetative treatment area designed and maintained in the following manner:
    - (i) The vegetative treatment area shall be, at a minimum, equal to the area of the compost management area.
    - (ii) The vegetative treatment area shall be equal in length to the contributing length of the compost management area in the downslope direction.
    - (iii) The vegetative treatment area shall be located on an area with a slope of less than or equal to five percent and shall be managed to prevent the ponding or pooling of liquids in the area.
    - (iv) The vegetative treatment area shall be maintained and operated to slow the movement of liquids and promote the uptake of liquids and nutrients into the vegetation .
    - (v) Any berms, swales or ditches used to convey water from the compost management area to the vegetative treatment area shall use finished compost,

bark, woodchips, stone, and fabric in the construction as is necessary to filter suspended solids and excess nutrients from leachate.

(d) Small Composting Facility Operating Standards

- (1) Prohibitions. A Small Composting Facility registered to operate under this section shall not conduct any of the following prohibited activities:
  - (A) The discharge of any waste or wastewater from the operation of the facility into surface waters or wetlands.
  - (B) The construction of any basin, trench, pond, or depression with the purpose of discharging run-off or leachate to groundwater.
  - (C) The operation or management of the facility in a manner that causes objectionable off-site odors, noise, vectors or other nuisance conditions.
  - (D) The composting of animal mortalities, slaughterhouse waste, or offal.
  - (E) The creation of a threat to public health and safety or the environment.
- (2) Feedstocks and compost recipe. Small composting facilities shall be managed to properly compost materials and destroy pathogens. The facility shall meet the following operational standards:
  - (A) The compost feedstocks shall be limited to those listed on the procedure entitled "*Approved feedstocks for small facilities registered to operate under acceptable composting practices*" dated [March 21, 2012 as may be amended.
  - (B) The clean high carbon bulking agents shall be limited to those listed as exempt high carbon bulking agents in § 6-302(a)(13).
  - (C) All recipes shall be designed to ensure that the initial compost mix results in:
    - (i) A carbon to nitrogen (C:N) ratio of 20:1 to 40:1
    - (ii) A bulk density of less than 1,200 pounds per cubic yard

- (iii) A pH in the range of six to eight S.U.
- (D) Compost piles shall be optimized for the composting methods and equipment used and shall be sized to maximize operational maneuverability and to minimize compaction and odor potential. .
- (E) Food residuals and food processing residual specific management:
- (i) Food residuals and food processing residuals shall be incorporated into the compost mix the same day the residuals arrive at the facility; or
  - (ii) The residuals shall be in a sealed container, or immediately covered with finished compost or untreated wood and incorporated into the compost mix within 72 hours of the residuals arrival at the facility.
- (F) Inspection of compost feedstocks. The compost feedstocks shall be inspected upon delivery to the facility and all non-compostable material removed either manually or mechanically. All non-compostable materials shall be disposed of at a certified solid waste facility.
- (G) Treatment of food and food processing residuals. All facilities composting food or food processing residuals shall meet one of the following treatment methods:
- (i) If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least 15 days. Windrows must be turned not fewer than five times with a minimum of 3 days between turnings to ensure that all materials reach this temperature. The 15 days do not have to be consecutive.
  - (ii) If using an actively or passively aerated static pile or the within vessel method (including bins), the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days.
- (H) Compost stability. All finished compost shall meet the following prior to marketing or distribution for sale:
- (i) Temperature decline to near ambient conditions (less than 100° F) provided that the decline is not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting

feedstocks.

(ii) At a minimum, at least two of the following analyses shall be required annually if the Agency suspects, either through site inspections or complaint investigations, that compost is being distributed off-site before it matures:

(I) Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.

(II) Specific oxygen uptake. To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.

(III) Solvita™ Compost Maturity Test. To be classified as stable the product must exhibit a maturity index score equal or greater than six.

(IV) Carbon dioxide evolution. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.

(V) Ammonia/Nitrate ratio of less than 3.

(VI) Plant tests conducted in a manner approved by the Agency.

(I) Fecal Coliform and Salmonella Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters annually.

| <b>Parameter</b> | <b>Maximum Total Concentration</b>    |
|------------------|---------------------------------------|
| Fecal Coliform   | 1,000 MPN/g total solids (dry weight) |
| Salmonella       | 3 MPN/4 g total solids (dry weight)   |

(J) Metals Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters must be completed annually.

| Parameter | Maximum Total Concentration<br>(mg/kg dry weight) |
|-----------|---|
| Arsenic   | 15  |
| Cadmium   | 21  |
| Chromium  | 1,200   |
| Copper    | 1,500   |
| Lead      | 300   |
| Mercury   | 10  |
| Nickel    | 420   |
| Zinc      | 2,800   |

- (K) Screening of finished compost. The finished compost shall be screened to remove any remaining physical contaminants. All non-compostable materials shall be disposed of at a certified solid waste facility.
- (L) The Secretary may require additional testing of finished compost, groundwater, leachate and run-off as necessary to protect human health and the environment.
- (3) Recordkeeping and Reporting requirements. The compost facility shall keep records for the following activities at the facility office in a dry and secure location available for review for five years. At a minimum, records on the following shall be retained:
- (A) Temperature records for active compost piles sufficient to demonstrate compliance with the treatment requirements:
- (i) If composting food residuals, the temperature of the compost windrows shall be monitored during the treatment process in accordance with an approved facility management plan. The temperature should be monitored at one foot and three-foot depths at least every 15 linear feet of windrow while achieving the treatment standards established in § 6-1105(d)(2)(G).
  - (ii) If composting food residuals in an aerated static pile, passive aerated pile or in-vessel method temperatures records shall be kept for the 3 day treatment period.
- (B) weekly amounts, recorded in either tons or cubic yards, and types, of incoming compost feedstock;
- (C) annual amount of compost produced in cubic yards;
- (D) annual amount of physical contaminants disposed of and;

- (E) copies of all analytical results for maturity, bacteriological and metals testing as required by § 6-1105(d)(2)(H) above
- (4) Leaf and yard residual composting operational requirements. Facilities that compost solely leaf and yard residuals shall also meet the following requirements:
- (A) Pile Construction. Incoming leaf and yard residuals, and untreated wood must, within one week of delivery to the site, be formed into windrow piles no more than 12 feet high by 20 feet wide at the base, or other configuration that provides for the proper conditions under which aerobic composting will occur. Windrows must run with the slope of the land such that runoff is not trapped by the windrows. Leaf and yard residual compost facilities may use horse manure within the composting process.
  - (B) Grass clippings must be incorporated, and thoroughly mixed into established windrows at a ratio of no more than one-part grass to three parts leaf or wood residuals by volume within 24 hours of receipt at the facility. The composting facility must not accept grass clippings unless there is a sufficient volume of high carbon feedstocks available to meet this ratio.
  - (C) Windrow turning. The windrow must be turned at least four times per year. There must be no more than six months between any two turnings.
  - (D) Distribution. Compost must be distributed for use within one year of completion of the compost process, and within three years of receipt of the raw materials for composting.
  - (E) Fire control. The operator must develop and implement a plan to prevent spontaneous combustion in residual and compost piles at the site.
- (5) Facility operator training. The facility operator shall complete an approved operator training course within six (6) months of filing the registration with the Secretary.
- (e) If the Secretary determines that the proposed facility size, processes, activities, or the nature of the composting activities require additional review and oversight not provided by this section, the Secretary may require that the applicant apply for a certification pursuant to § 6-1104(B).

**§ 6-1106 Medium and Large Compost Facility Siting**

- (a) Applicability. All Medium and Large compost facilities, shall be subject to the specific siting requirements of this section (i.e., the general siting requirements provided in Subchapter 7 of these

Rules, do not apply).

- (b) Compost management areas and any area(s) used to treat or store leachate and run-off from composting activities shall not be sited or operated within any of the following unless otherwise approved by the Secretary:
- (1) 300 feet from the nearest public or private water supplies not owned by the applicant;
  - (2) 3 feet from seasonal high water table and bedrock;
  - (3) 100 feet from surface water;
  - (4) 100 feet from all property lines and edge of public roads; and
  - (5) 300 feet from all residences not owned by the applicant and from all public buildings;
  - (6) The 100 year flood plain as shown on the National Flood Insurance Maps;
  - (7) A class I or class II wetland or its associated buffer zone unless a conditional use determination has been issued by the Secretary;
  - (8) A class III wetland unless authorized by the Secretary;
  - (9) Any location within a municipality where that municipality has prohibited composting as a part of its zoning bylaws;
  - (10) Within a designated downtown or village center, unless the municipality has expressly allowed composting in that area.
  - (11) Within 10,000 feet of a runway used by turbojet aircraft, or 5,000 feet of a runway used only by piston-type aircraft.
  - (12) 1,000 feet of a residential housing unit located within an area that has a residential housing density of 3 units per acre or greater.

**§ 6-1107 Medium and Large Compost Facility Design Standards**

(a) Medium and Large Compost Facilities

- (1) Stormwater run-off from up-gradient areas shall be diverted from running onto the compost management area and the area used for the management of run-off and leachate using berms, swales, and other similar controls as approved by the Secretary.
- (2) The compost facility shall not have an unpermitted discharge of leachate or runoff to a surface water.
- (3) Storage and management of untreated material. All raw feedstocks and composting piles that have not met the treatment standard defined in § 6-1108(b)(4), excluding leaf and yard residuals and high carbon bulking agents, shall be stored and managed in an area that meets the following design standards:
  - (A) Has an average slope of between two and five percent and is maintained so that ponding in the compost management area will not occur; and:
  - (B) Is on an impervious pad; or
  - (C) Has been granted approval by the Secretary for use of improved native soils ; or
  - (D) Is a compacted gravel pad meeting a hydraulic conductivity of  $1 \times 10^{-5}$  cm/sec or alternative standard as approved by the Secretary.
- (4) Leachate storage.
  - (A) All facilities subject to the standards of this subsection shall collect and treat all leachate from the active composting area in a lined pond, swale or lagoon. The leachate storage area shall meet the following design standards:
    - (i) be lined with a natural or synthetic liner that has a maximum permeability of  $1 \times 10^{-7}$  cm/sec, in a design approved by the Secretary; or
    - (ii) be constructed in accordance with Natural Resource Conservation Service code 378 standards and approved by the Secretary; or
    - (iii) be a waste storage facility constructed consistent with the Agency of Agriculture, Food, and Markets standards; or

(iv) an alternative structure as proposed which meets the equivalent hydraulic conductivity design standards above as approved by the Secretary.

(B) Leachate storage structures shall be designed to prevent overflow at all times and to prevent public access.

(5) Treatment of leachate. Acceptable leachate treatment options include the following:

(A) Collection and treatment at a permitted wastewater treatment facility;

(B) Collection and application to active composting piles in a manner approved by the Secretary;

(C) Treatment on site in a manner approved by the Secretary;

(6) Acceptable treatment for run-off collected from compost curing areas include:

(A) Collection and treatment at a permitted wastewater treatment facility;

(B) Collection and application to composting piles in a manner detailed in the facility management plan and approved by the Secretary,

(C) Treatment on site in a manner approved by the Secretary;

(D) Collection and land application under a nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 – Nutrient Management provided that the following restrictions shall apply:

(i) Application rate shall not exceed an appropriate agronomic rate based upon soil analysis and the corresponding agronomic recommendations. In no cases shall an application rate exceed 25,000 gallons per acre per day.

(ii) Liquid application shall not occur when the fields are saturated, frozen, or snow covered or when ponding occurs.

(iii) The application shall not result in an offsite discharge or a discharge to surface water.

(a) Medium and Large Scale Composting Facilities shall comply with the following operating standards:

- (1) The facility shall operate in accordance with its approved facility management plan and the requirements of this section.
- (2) The facility shall be managed to properly compost materials, destroy pathogens, not create a threat to public health and safety or the environment, and not create objectionable odors, noise, vectors or other nuisance conditions.
- (3) The operation of the facility shall comply with the Vermont Groundwater Protection Rule and Strategy as may be amended.
- (4) Unless an alternative is approved as a part of the facility management plan the initial compost mix shall result in:
  - (A) A carbon to nitrogen (C:N) ratio of 20:1 to 40:1.
  - (B) A bulk density of less than 1,200 pounds per cubic yard.
  - (C) A pH in the range of six to eight S.U.
- (5) A facility that uses animal mortalities, offal, or butchering waste as a compost feedstock shall comply with the requirements of § 6-1108(c).
- (6) Compost Stability. Finished products marketed or distributed for sale shall be tested for two of the following methods listed below:
  - (A) Temperature decline to near ambient conditions (less than 100° F) when not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting feedstocks.
  - (B) Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.

- (C) Specific oxygen uptake. To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.
  - (D) Solvita™ Compost Maturity Test. To be classified as stable the product must exhibit a maturity index score equal or greater than six.
  - (E) Carbon dioxide evolution or Respiration Rate. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.
  - (F) Reduction in organic matter (ROM) of at least 60 %
  - (G) Plant tests conducted in a manner approved by the Agency.
- (7) Metals Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following metals concentrations. One test for these parameters shall be conducted annually.

| Parameter | Maximum Total Concentration<br>(mg/kg dry weight) |
|-----------|---|
| Arsenic   | 15  |
| Cadmium   | 21  |
| Chromium  | 1,200   |
| Copper    | 1,500   |
| Lead      | 300   |
| Mercury   | 10  |
| Nickel    | 420   |
| Zinc      | 2,800   |

- (8) Fecal Coliform and Salmonella Testing. If the compost is to be marketed or distributed for sale, the final product shall not exceed the following concentrations. One test for these parameters shall be conducted annually.

| Parameter      | Maximum Total Concentration           |
|----------------|---------------------------------------|
| Fecal Coliform | 1,000 MPN/g total solids (dry weight) |
| Salmonella     | 3 MPN/4 g total solids (dry weight)   |

- (9) The Secretary may require additional testing of, finished compost, groundwater, leachate and run-off as necessary to protect human health and the environment.
- (10) Facility operator training. A minimum of one person at the facility on any operating day shall have completed an approved operator training course within six months of the issuance of the certification. A list of approved operator training requirements can be found at the Agency's website.
- (11) Leaf and yard residual facilities. Facilities that solely compost leaf and yard residuals shall also meet the following requirements:
- (A) Pile Construction. Incoming leaf and yard residuals and untreated wood must, within one week of delivery to the site, be formed into windrow piles no more than ten feet high by 15 to 20 feet wide at the base, or other configuration that provides for the proper conditions under which aerobic composting will occur. Windrows must run with the slope of the land such that runoff is not trapped by the windrows. Leaf and yard residual compost facilities may use horse manure within the composting process.
  - (B) Grass. Grass clippings must be incorporated, and thoroughly mixed into established windrows at a ratio of no more than one part grass to three parts leaf or untreated wood by volume within 24 hours of receipt at the facility. The composting facility must not accept grass clippings unless there is a sufficient volume of high carbon feedstocks available to meet this ratio.
  - (C) Windrow turning. The windrow must be turned at least four times per year. There must be no more than six months between any two turnings.
  - (D) Distribution. Compost must be distributed for use within one year of completion of the compost process, and within three years of receipt of the raw materials for composting.
- (12) Fire control. The operator must develop and implement a plan to prevent spontaneous combustion in residual and compost piles at the site.

(b) Food and Food Processing Residuals

- (1) Food residuals or food processing residuals shall be managed as follows:

- (A) The residuals shall be incorporated into the compost mix the same day it arrives at the facility; or
  - (B) The residuals shall be in a sealed container, or immediately covered with finished compost or untreated wood and incorporated into the compost mix within 72 hours of its arrival at the facility.
- (2) Inspection of compost feedstocks. The compost feedstocks shall be inspected upon delivery to the facility and non-compostable materials either manually or mechanically removed. Mechanical processing shall not result in a final particle size of non-compostable materials that is smaller than the finished screen that will be used pursuant to §6-1108(b)(3). All non-compostable materials shall be disposed of at a certified solid waste facility.
- (3) Screening of finished compost. The finished compost shall be screened to remove non-compostable materials. All non-compostable materials shall be disposed of at a certified solid waste facility.
- (4) Treatment of food residuals. The composting of food or food processing residuals shall use one of the following treatment methods:
- (A) If using a turned windrow system, the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher for 15 days. Windrows must be turned not fewer than five times with a minimum of 3 days between turnings to ensure that all materials reach this temperature. The 15 days do not have to be consecutive.
  - (B) If using an actively or passively aerated static pile (including static windrows), or the within vessel method (including bins), the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days followed by at least 14 days above 113 degrees Fahrenheit (45 degrees Celsius).
  - (C) Medium or large compost facilities may utilize another method that reduces pathogens to the extent equivalent to the reduction achieved by the methods in subsections §6-1108(b)(4)(A) and §6-1108(b)(4)(B) of this section, when approved by the Secretary.
- (c) Animal Mortality Composting Facility

- (1) Applicability. This section applies to a medium or large composting facility that includes animal mortalities, animal offal, or butchering waste as a compost feedstock
- (2) Composting and burial prohibited. Animals showing signs of a neurological disease shall be reported to authorities and managed in accordance with their directions. Animals that show signs of a neurological disease shall not be composted or buried.
- (3) Emergency situations. When the Secretary determines that an emergency event has occurred that requires the composting of animal mortalities from that event, the Secretary may authorize a one-time composting event in accordance with an issued Insignificant Waste Management Event Approval (IWMEA) as provided for in § 6-505(b). To the maximum extent practical, the disposal event shall conform to the requirements of this subsection.
- (4) Compost pile management. Composting of animal mortalities, animal offal and butchering waste must comply with the same operational standards as § 6-1108 and include the following operational standards:
  - (A) Feedstock management. The feedstock shall be incorporated into the compost mix when it arrives at the facility.
  - (B) Compost pile construction. Compost piles shall be constructed in the following manner:
    - (i) Prepare a 24-inch depth bed of bulky, absorbent organic material such as wood chips or similar material. Ensure the base is large enough to allow for two-foot clearance around the carcass.
    - (ii) Lay animal in the center of the bed. Lance the rumen to avoid bloating and possible explosion.
    - (iii) Cover carcass with two feet of a dry, high-carbon material, old silage, sawdust or dry stall bedding (some semi-solid manure will expedite the process).
    - (iv) For small animals, layer mortalities with a minimum of two feet of carbon material between layers.
    - (v) Add cover material as necessary to maintain the two-foot cover.

(5) Monitoring and Turning Requirements.

(A) The composting of animal mortalities shall use one of the following treatment methods:

- (i) If using an actively or passively aerated static pile (including static windrows), or the within vessel method (including bins), the temperature must be maintained at 131 degrees Fahrenheit (55 degrees Celsius), or higher, for at least three consecutive days.
- (ii) Another method that reduces pathogens to extent equivalent to the reduction achieved by the methods in subsection (f)(5)(A)(i) of this section, which is approved by the Secretary.

(B) The compost shall not be turned until at least the third month of composting.

(C) After three months treatment, if the requirements of § 6-1107(f)(5)(A) have been met, the permittee may visually examine the compost pile to determine whether the piles may be turned based upon whether the mortalities have degraded (with the exception of bones) and no odors are evident.

(6) Compost that contains specified risk material from ruminants or carcasses of ruminants greater than 30 months old cannot be distributed off-site and must be managed on land owned or controlled by the permittee.

(7) If finished compost is to be sold or distributed off-site it shall meet the testing requirements in § 6-1105 (e)(7), (8) and (9).

**§ 6-1109 Medium and Large Compost Facility Applications**

(a) Medium Compost Facility Application Requirements. In order to qualify for a medium scale compost certification, the applicant shall submit an application which provides the following information:

- (1) The requirements of § 6-504;
- (2) Site plan map. A site plan map at a scale of 1:100 or greater that contains: the property boundaries; structures; access roads; truck loading and unloading areas; wash area for totes; location of barriers to unauthorized entry; water supplies; feedstock storage areas; compost management area; areas for the management and treatment of leachate and run-off; and water

quality sampling points, if applicable.

- (3) Topographic map. A United States Geological Survey topographic map with a scale of 1:24,000 or a color printout from the Agency internet mapping program that contains all available layers that show siting criteria and prohibited areas established under § 6-1103.
- (4) Soils map. The application shall include a copy of a Natural Resource Conservation Service soils map for the area.
- (5) Management plan detailing, at a minimum:
  - (A) expected volume and type of incoming materials;
  - (B) methods for achieving odor control;
  - (C) methods for achieving noise control;
  - (D) methods for controlling vectors, dusts, and litter;
  - (E) methods for achieving the liquid management standards at § 6-1107;
  - (F) methods to inspect loads and remove non-compostable materials or contaminants from the incoming feedstocks;
  - (G) a description of the composting process and how that process will meet the standards established under § 6-1108 including temperature monitoring protocols;
  - (H) fire prevention and control measures;
  - (I) list of equipment to be used;
  - (J) hours of operation;
  - (K) access control;
  - (L) product distribution; and,

(M) a sampling plan for maturity, bacteriological and metals testing of the finished compost as required by §6-1107(b)

(b) Large Composting Facility application requirements. In order to qualify for a large compost facility certification, the applicant shall submit an application which provides the following information:

(A)

- (2) the complete application requirements listed in § 6-504;
- (3) Site plan map. A site plan map at a scale of 1:100 or greater that contains: the property boundaries; structures; access roads; truck loading/unloading areas; wash areas for totes; location of barriers to unauthorized entry; water supplies; feedstock storage areas; compost management area; areas for the management and treatment of leachate and run-off; and water quality sampling points, if applicable established by § 6-1106(b).
- (4) Topographic map. A United States Geological Survey topographic map with a scale of 1:24,000 or a color printout from the Agency internet mapping program that contains all available layers that show siting features and prohibited areas.
- (5) Soils map. The application shall include a copy of a Natural Resource Conservation Service soils map for the area.
- (6) Management plan detailing, at a minimum:
  - (A) expected volume and type of incoming materials;
  - (B) methods for achieving odor control;
  - (C) methods for achieving noise control;
  - (D) methods for controlling vectors, dusts, and litter;
  - (E) methods for achieving the liquid management standards at § 6-1107;
  - (F) methods to inspect loads and properly screen for potential contaminants in incoming feedstocks;

- (G) a description of the composting process and how that process will meet the standards established under § 6-1108 including temperature monitoring protocols;
- (H) fire prevention and control measures;
- (I) list of equipment to be used;
- (J) hours of operation;
- (K) access control;
- (L) product distribution; and,
- (M) plan for metals concentrations as required in § 6-1108 and stability and maturity testing of the final compost product.
- (N) Privately operated large composting facilities shall pay application fees in accordance with 3 V.S.A.2822(i) and 2822(j)(6)(B).

**§ 6-1110 Medium and Large Compost Facility Recordkeeping and Reporting**

- (a) Recordkeeping requirements. The compost facility shall keep records for the following activities at the facility office available for review in a dry and secure location for five years. At a minimum, records on the following shall be retained:
  - (1) The temperature of the active compost windrows shall be monitored in accordance with the protocols identified in the approved facility management plan.
  - (2) weekly amounts, recorded in either tons or cubic yards and types of incoming compost feedstock;
  - (3) annual amount of compost produced in cubic yards or tons;
  - (4) annual amount of physical contaminants disposed of; and,
  - (5) copies of all analytical results for metals and maturity testing of the final compost product as required by § 6-1108.

- (b) Recordkeeping data shall be provided to the Secretary in the form of an annual report by January 20 of each year, on forms provided by the Secretary.
- (c) Any discharge or emission from a facility which poses a threat to public health and safety, a threat to the environment or the creation of a nuisance must be reported within 24 hours to the State of Vermont Department of Environmental Conservation, the local health officer, and the selectpersons of the affected municipalities. A written report shall be submitted to the parties to whom the event was reported within seven days of the discharge or emission. The report shall identify the discharge or emission that occurred, the type, quantity, and quality of waste, and the actions taken to correct the problem.

**§ 6-1111 Compost Facility Closure**

- (a) Closure. All compost facilities must be closed in a manner that minimizes the need for further maintenance; and so that the closed facility will not pollute any waters of the state, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance. At a minimum, the applicant must remove all compost, wastes, feedstocks, secondary materials, and residue, including compost screenings, from the facility; and broom clean the facility structures and equipment.

## Subchapter 12 – Organic Solid Waste Management Facilities

### § 6-1201 Applicability; Definitions

- (a) This Subchapter applies to persons engaged in organic solid waste management activities that do not include composting (as that term is defined in Subchapter 11, § 6-1102). Activities where wastes being managed contain any amount of sewage sludge, domestic septage, or septage shall be subject to Subchapter 13 of these Rules.
- (b) The definitions in Subchapter 11 (§ 6-1102) shall apply to terms used this subchapter.

### § 6-1202 Organic Solid Waste Management Facility Types; Authorization

- (a) Food Residual Drop-Off Facilities. Facilities that accept solely food residuals at a volume of less than 144 gallons per week shall register with the Secretary pursuant to § 6-1206 of this subchapter.

Note: Facilities accepting more than 144 gallons per week of food residuals or any other materials shall obtain a certification in accordance with Subchapter 9. Any facility that collects food residuals and obtains certification under Subchapter 9 does not need to register under .§ 6-1202(a).

- (b) Anaerobic Digester Facilities. Facilities that operate anaerobic digestion activities shall be subject to the certification requirements of these Rules as follows:
  - (1) Digesters that are located on a farm and receive unprocessed food residuals for processing prior to introduction into the digester shall apply for a full certification as an organic solid waste recovery facility, described within § 6-902(e), and according to the regulations of Subchapter 9.
  - (2) Digesters that are located off-farm and that process, receive or store any amount of solid waste shall apply for full certification pursuant to § 6-504 and as provided for within this subchapter.
  - (3) Any anaerobic digester that accepts any amount of biosolids as a feedstock shall apply for full certification as a residuals management facility pursuant to Subchapter 13.
  - (4) Digester facilities shall be exempt from certification under these Rules if the digester is located on a farm; and:

- (A) The anaerobic digester is designed, constructed and operated in accordance with the Agency Agriculture Food Markets requirements;
  - (B) The imported organic solid wastes are limited to:
    - (i) slurried food residuals
    - (ii) liquid food processing residuals; or
    - (iii) dry organic solid wastes with no potential for leachate generation and requiring no onsite processing prior to introduction into the anaerobic digester.
  - (C) All imported organic solid wastes:
    - (i) have received substrate importation form approval from the Agency of Agriculture, Food and Markets prior to management of the organic solid wastes on the farm;
    - (ii) are stored and handled to prevent odors, vectors, emissions and discharges.
      - (I) All slurried food residuals and liquid food processing residuals are pumped directly into a reception tank or an earthen pit constructed in accordance with the NRCS 313 for introduction into the digester,
      - (iii) are stored and handled to prevent any deterioration of the waste prior to introduction into the anaerobic digester
  - (D) The farm has at least 180 days of storage capacity for the liquid digestate;
  - (E) The liquid and solid digestate is managed in accordance with a current Agency of Agriculture, Food and Markets approved Nutrient Management plan.
- (c) Organic Solid Waste Recovery Facilities (ORF). Facilities that aggregate food residuals and process them into a slurried form for delivery to an organic material management facility. This includes on-farm anaerobic digesters that process food residuals on-site prior to introduction to the digester. The facilities must obtain a certification pursuant to Subchapter 9.

**§ 6-1203 Organic Solid Waste Management Facility Siting**

(a) Food Residual Drop-Off Facilities.

(1) The Secretary may require an organics drop-off facility to obtain a transfer station certification pursuant to § 6-504 if the Secretary determines that such certification is necessary to ensure that the facility operations meet the operational requirements of § 6-1205 of this subchapter and will not present a hazard to public health and safety or the environment, or create a nuisance.

(i) Food Residual storage containers shall be located 50 feet from property lines unless otherwise approved by the Secretary;

(ii) Drop-off locations shall be approved by the local Solid Waste Management Entity as necessary for providing convenient access to organic solid waste management and in conformance with the applicable Solid Waste Implementation Plan;

(b) Anaerobic digester facilities. A digester facility constructed after the effective date of these Rules shall meet the general siting standards of § 6-703.

**§ 6-1204 Organic Solid Waste Management Facility Design Standards**

(a) General requirements. All food residual drop-off facilities and off-farm anaerobic digesters shall be designed to:

(1) control vectors, and to control emissions or discharges to the environment, including odor and dust, so as to preclude the creation of nuisance conditions and undue threats to public health and safety or to the environment;

(2) prevent, to the greatest extent feasible, the reduction of the quality of the waste, such as the rotting or contamination of stored wastes; and

(3) ensure the effective collection, storage, and processing of all waste materials.

(b) Food Residual Drop-off facilities. In addition to the requirements of § 6-1204(a) of this section, these facilities shall provide storage capable of preventing leaking, providing protection from precipitation and to be secure when the drop-off is not open for drop-off activities.

(c) Off-farm anaerobic digester facilities. In addition to the requirements of § 6-1204(a) of this section and the general design requirement provided within § 6-704 of these Rules, off-farm anaerobic digestion facilities shall:

- (1) Design the facility to comply with general operational performance standards;
- (2) provide for access in all weather conditions, with access controlled and limited to hours of operation identified in the facility management plan;
- (3) incorporate the following standards for liquid storage tanks in a collection system;
  - (A) tanks that are sized appropriately for the facility and volume of waste managed;
  - (B) tanks that are constructed of material compatible with the expected composition of the liquid; and
  - (C) provisions for biennial testing and inspection of the tanks;
- (4) have sufficient and appropriate storage for all materials and feedstocks and any process residuals; and
- (5) If utilizing an onsite depackager unit, facilities shall be designed and constructed with a tipping floor that:
  - (A) is enclosed within a building or covered by a roof to prevent exposure of waste to weather if temporarily depositing organic solid waste on the ground pending processing; and;
  - (B) incorporates a collection system that meets the requirements of § 6-904(f) and is designed to collect liquids that may be associated with incoming waste materials.

**§ 6-1205 Organic Solid Waste Management Facility Operating Standards**

(a) Food Residual Drop-Off Facilities

- (1) The facility's operations shall comply with the following requirements:
  - (A) The containers used to store the food residuals shall be water tight, and have lids which can be closed securely and locked to prevent vectors, fugitive odors, and access when not operating;

- (B) Facilities shall control liquids and prevent vectors and odors from the stored waste;
- (C) All food residuals stored at the facility shall be removed from the facility as needed to preclude the creation of nuisance conditions and the deterioration of the material; and
- (D) In no case shall food residuals managed at the facility create public nuisance conditions, including odors or vectors.

(b) Off-farm Anaerobic Digesters: In addition to the general operational requirement of § 6-704, the following specific operating requirements apply:

- (1) The facility shall operate in accordance with its approved facility management plan and the requirements of this section.
- (2) All stored solid waste shall be containerized or stored such there is no possibility of an emission or discharge.
- (2) Digestate (liquid or solid) shall be managed in the following manner:
  - (A) Solid portions of digestate shall meet the treatment standards established in § 6-1108(a) by composting or other treatment options prior to distribution off-site for non-farm use, unless adequate pathogen inactivation can be demonstrated to the sufficiency of the Secretary.  
collection and land application of leachate (the liquid portion of the digestate) shall meet solid waste siting and certification criteria and occur under an approved nutrient management plan prepared in accordance with Natural Resource Conservation Service Practice Standard 590 – Nutrient Management or a plan approved by the Secretary :
- (3) The facility shall be responsible for managing the collection and proper destruction of the generated biogas. The facility shall maintain a properly functioning backup method of destroying biogas. Any biogas that is not used or otherwise destroyed in the facility's combustion engine, for the production of electricity, shall be destroyed using an automatic flare system or equivalent. The backup flare shall be sized to destroy peak potential flow.

**§ 6-1206      Organic Solid Waste Management Facility Applications**

(a) Food Residual Drop-Off Facilities.

- (1) Registration. No person shall operate a food residual drop-off without receiving prior approval from the local solid waste management entity (i.e., district, alliance, or approved town) and

registering with the Secretary on a registration form provided by the Secretary. The registration application shall contain the following:

- (A) The name and contact information for the facility owner/operator.
- (B) The name, address, and location of the facility to be registered under this section;
- (C) A letter from the host solid waste management entity demonstrating that the facility is in conformance with their approved solid waste implementation plan and demonstrating that the facility location is needed for convenient access to food residual management;
- (D) Estimated amounts of food residuals that the facility will collect on a weekly and annual basis;
- (E) Hours of operation for the facility;
- (F) How the facility will manage material, such as the types of containers to be used, how odors and vectors will be addressed, contamination prevention methods, access control methods, facility staffing, transportation frequency and destination for the materials; and
- (G) A certification by the drop-off registrant that the drop-off will be operated in accordance with these Rules.

(b) **Off-Farm Anaerobic Digester Facilities:** In addition to the general application requirements of Subchapter 5, the following application requirements apply:

(1) **Facility Management Plan.** In addition to the general requirements of § 6-504(e), the facility FMP shall include the following:

- (A) Site plan map that indicate the location of the following areas of the facility: The area used for processing and handling for the feedstocks for the anaerobic digester;
- (B) Wash area for totes;
- (C) Areas designated for storage of non-permitted wastes delivered to or generated by the facility; and
- (D) Area for scales, if any; Operational plans detailing:
  - (i) expected volume and type of incoming feedstocks;

- (ii) methods of tracking the weight of incoming feedstocks for reporting (i.e. percent solids, gallons pumped, scales);
- (iii) methods for achieving odor control;
- (iv) methods for achieving noise control;
- (v) methods for controlling vectors, dusts, and litter;
- (vi) methods for digestate management.
- (vii) methods to properly prevent or remove potential contaminants in incoming feedstocks;
- (viii) fire prevention and control measures, gas leak monitoring, fire contingency and control measures;
- (ix) list of equipment to be used in addition to the digester; and
- (x) For facilities that use a tipping floor for the management of food residuals or food processing residuals, the tipping floor shall be managed in accordance with § 6-904. If the facility does not use a tipping floor, the facility shall be managed to prevent a discharge or emission from the containers.

(E) Engineering design plans that detail:

- (i) The facility design;
- (ii) A schematic of the anaerobic digester that includes any additional processes, including pasteurization, the generator unit, the gas processing unit, digestate processing or holding ponds;
- (iii) A design of all operational aspects of the anaerobic digester and related components, including utility hookups;
- (iv) A design and location of a flare to be used as a backup combustion method;
- (v) For facilities that use a tipping floor for the management of food residuals or food processing residuals, design plans for the tipping floor that meet the requirements of § 6-904.

(F) Closure Plans demonstrating conformance with § 6-1208.

**§ 6-1207 Organic Solid Waste Management Facility Recordkeeping and Reporting**

(a) Food Residual Drop-Off Facilities.

- (1) Reporting requirements. Facilities shall report to the Secretary on certain facility activities as follows:
  - (A) The amount of food residuals accepted by the facility. This information shall be reported to the Secretary on an annual basis by January 20 of each year on forms provided by the Secretary.
  - (B) Any discharge or emission from a facility which poses a threat to public health and safety, a threat to the environment or the creation of a nuisance shall be reported within 24 hours to the Department of Environmental Conservation, the local health officer, solid waste management entity, and the governing body of the affected municipalities. A written report shall be submitted to the parties to whom the event was reported within seven (7) days of the discharge or emission. The report shall identify the discharge or emission that occurred, the type, quantity, and quality of waste, and the actions taken to correct the problem.
- (2) Recordkeeping requirements. Records required in §6-1207(a)(1) above shall be maintained by the owner and/or operator of the facility. Such records or copies thereof shall be maintained in a dry and secure location for at least three years, and shall be made available to the Secretary upon request.

(b) Anaerobic Digesters.

- (1) Recordkeeping requirements. The following records shall be maintained by the owner and/or operator of the facility. Such records or copies thereof shall be maintained in a dry and secure location for at least three years and shall be made available to the Secretary upon request.
  - (A) Documentation that the facility's anaerobic digestion process meets pathogen inactivation standards (if digestate is used off site or sold for public use).
  - (B) Weekly amounts and types of incoming feedstocks.
  - (C) Annual amounts of liquid and solid digestate produced and description of each is managed.

(2) Reporting requirements. Facilities shall report to the Secretary on certain facility activities as follows:

- (A) Any discharge or emission from a facility which poses a threat to public health and safety or the environment or has the potential for creation of a nuisance must be reported within 24 hours to the State of Vermont Department of Environmental Conservation, the local health officer, solid waste management entity, and the governing body of the affected municipalities. A written report shall be submitted to these same parties within seven (7) days of the discharge or emission. The report shall identify the discharge or emission that occurred, they type, quantity and quality of the waste and the actions taken to correct the problem.
- (B) The following information shall be reported to the Secretary on an annual basis by January 20 of each year on forms provided by the Secretary.
  - (i) Annual amounts and types of incoming feedstocks;
  - (ii) Annual tonnage of solid waste, reported by type; and
  - (iii) Annual amount of liquid and solid digestate produced and description of how each is managed.

**§ 6-1208 Organic Solid Waste Management Facility Closure**

- (a) Food Residual Drop-Off Facilities. The facility shall be closed in a manner that minimizes the need for further maintenance; and so that the closed facility will not pollute any waters of the state, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance. At a minimum, the applicant shall transfer all wastes to an appropriately certified facility, remove secondary materials and residues from the facility; and broom clean the facility structures and equipment. The registrant shall send the Secretary a notice of closure completion within 30 days after the date that the final volume of waste is received at the facility.
- (b) Off-farm anaerobic digesters shall be closed according to the same requirements of § 6-907 for Storage, Transfer, Recycling and Processing Facility closure.

## Subchapter 13 – Residuals Management Facilities

### § 6-1301 Residuals Management Facility Types

- (a) Sewage Sludge, Biosolids, and Septage Storage and Transfer Facilities: these include, but are not limited to the following: storage tanks, bunkers, stockpiles, storage lagoons, drying beds, and holding tanks.
- (b) Sewage Sludge, Biosolids and Septage Treatment Facilities: these include, but are not limited to the following: lime stabilization vessels, dewatering equipment, drying beds, biosolids drying facilities, biosolids composting facilities and any facilities for the production of EQ biosolids or EQ biosolids products.
- (c) Land Application Site: agricultural, silvicultural, or reclamation sites used for the management of non-EQ biosolids or septage by application to the land as a nutrient source or soil conditioner. Also known as a “diffuse disposal site” or “land application facility”.

### § 6-1302 Residuals Management Facility Exemptions

- (a) Exemptions from Certification: Treatment or storage facilities for sewage sludge, biosolids, or septage that are located inside the fenced area of a wastewater treatment facility permitted under 10 V.S.A. Chapter 47 are exempt from obtaining a certification provided that:
  - (1) the treatment facility does not utilize a process to further reduce pathogens in order to produce EQ biosolids or an EQ biosolids products for distribution and marketing to the general public; and
  - (2) a Sludge Management Plan for the facility, as specified in § 6-1307(f), has been submitted to the Secretary and the Secretary has approved the Plan.
- (b) General Exemption: EQ biosolids or EQ biosolids products that are imported to into the State of Vermont solely in individual bags or containers having a net weight of fifty (50) pounds or less are exempt from these Rules except for the standards established in § 6-1303(a), the labeling requirements of § 6-1304(g), and the recordkeeping requirements of § 6-1304(i)(3).

### § 6-1303 Exceptional Quality Biosolids

- (a) EQ biosolids or EQ biosolids products produced in, or imported into, the State of Vermont shall:

- (1) Meet the lower of:
  - (A) The pollutant limits established in § 6-1307(o);
  - (B) the contaminant standards established at 40 CFR 503.13 – Table 3;
  - (C) the corresponding pollutant limits of the jurisdiction in which they are generated or prepared, even if any given parameter is not otherwise regulated under these Rules or 40 CFR Part 503.
- (2) Meet one of the pathogen reduction requirements established in 40 CFR Part 503.32(a)(3, 4, 7 or 8);
- (3) Meet one of the vector attraction reduction requirements established in 40 CFR Part 503.33 Alternatives 1 – 8;
- (4) Be tested for all parameters listed under § 6-1307(n); and
- (5) Compost Stability. Finished composted EQ biosolids or composted EQ biosolids products marketed for sale or distributed in the State of Vermont shall be tested annually for two of the following methods listed below:
  - (A) Temperature decline to near ambient conditions (less than 100° F) when not the result of improper management of the composting process. Composting records shall indicate appropriate schedules for turning, monitoring of moisture within the required range, and an appropriate mix of composting feedstocks.
  - (B) Reheat potential using the Dewar Compost Self-Heating Flask. The results must indicate a stable product. Temperature rise above ambient must not exceed 20°C for stable compost.
  - (C) Specific Oxygen Uptake Rate (SOUR). To be classified as stable the product must have a specific oxygen uptake rate of less than 0.1 milligrams per gram of dry solids per hour.
  - (D) Solvita™ Compost Maturity Test. To be classified as stable the product must exhibit color equal or greater than six.
  - (E) Carbon dioxide evolution or Respiration Rate. Respirometry rate that meets or is equivalent to standards established by the US Composting Council Seal of Testing Assurance to be classified as stable.

- (F) Reduction in organic matter (ROM) of at least 60 %
- (G) Plant tests conducted in a manner approved by the Agency.

(b) Applicability

- (1) EQ biosolids or EQ biosolids product generators who treat or prepare sewage sludge, domestic septage, or a biosolids product in the State of Vermont at a facility certified under these Rules to be eligible for management via marketing and/or distribution as an EQ biosolids or EQ biosolids product to the general public as a commodity pursuant to §6-301(a)(5), shall:
  - (A) comply with the labeling requirements of § 6-1303(g); and
  - (B) comply with the reporting requirements of § 6-1303(h), except that the operator shall submit quarterly reports, rather than an annual report, to the Secretary. Quarterly reports shall be submitted to the Secretary on or before the fifteenth (15<sup>th</sup>) day of the month following the end of each calendar quarter, i.e. January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup>, of each year; and
  - (C) comply with the record keeping requirements of § 6-1303(i); and
  - (D) utilize only the marketing and/or distribution plan authorized in the solid waste management facility certification; and
  - (E) be exempt from the provisions of subsections (c), (d), (e), and (f) of this section.
- (2) In order for sewage sludge, domestic septage, or a biosolids product that has not been treated or prepared to EQ biosolids standards in the State of Vermont at a facility certified under these Rules to be eligible for management via marketing and/or distribution to the general public in the State of Vermont as a commodity pursuant to § 6-302(a)(2), the EQ biosolids or EQ biosolids product generator shall first obtain a Certificate of Approval from the Secretary unless the material is marketed and distributed in the State of Vermont solely in bags having a net weight of fifty (50) pounds or less.
- (3) EQ biosolids or EQ biosolids marketed and distributed in the State of Vermont solely in bags having a net weight of fifty (50) pounds or less shall nonetheless meet the requirements of § 6-1303(a), (i)(3), and bear labeling or be accompanied by an informational flyer that meets the requirements of subsection (g) of this section.

(c) Certificate of Approval

An application to the Secretary for a Certificate of Approval shall consist of the following information. If the application is for multiple generating facilities under the EQ biosolids or EQ biosolids product generator's ownership, the required information shall be submitted for each generating facility:

- (1) an application form approved by the Secretary, which shall include the following information:
  - (A) the name, mailing address, and telephone number of the EQ biosolids or EQ biosolids product generator;
  - (B) the name, mailing address, telephone number, and physical location of the facility generating the EQ biosolids or EQ biosolids product;
  - (C) the name, mailing address, and telephone number of a primary and secondary contact person for the EQ biosolids or EQ biosolids product generator;
  - (D) the estimated annual volume of EQ biosolids or EQ biosolids product, in tons per year, that will be so managed; and
  - (E) the signature of the EQ biosolids or EQ biosolids product generator or an authorized representative of the EQ biosolids or EQ biosolids product generator.
- (2) Information documenting the pathogen reduction and vector attraction reduction treatments to which the EQ biosolids or EQ biosolids product is subjected and chemical analyses conducted on the EQ biosolids or EQ biosolids product, which shall include the following:
  - (A) for facilities that commenced operation two years or more prior to effective date of these Rules:
    - (i) records for the two (2) year period preceding the date of application documenting that the treated EQ biosolids or EQ biosolids product meets one of the Class A pathogen reduction standards established in 40 CFR 503.32 (a) (3, 4, 7, or 8);
    - (ii) records for the two (2) year period preceding the date of application documenting that the treated EQ biosolids or EQ biosolids product meets one of the vector attraction reduction standards established in 40 CFR 503.33 - Alternative 1 through VAR Alternative 8;
    - (iii) the results of all chemical analysis of the EQ biosolids or EQ biosolids product completed in the two (2) year period preceding the date of application. The results shall document that the treated EQ biosolids or EQ biosolid product has been

tested for parameters in § 6-1306(n) and also meets the lowest of:

- (I) the contaminant ceiling concentrations established in § 6-1306(o);
  - (II) the contaminant standards established at 40 CFR 503.13 – Table 3; or
  - (III) the contaminant standards established for such materials in the jurisdiction in which the EQ biosolids or EQ biosolids product was generated, even if any given parameter is not otherwise regulated under these Rules or 40 CFR 503.13 – Table 3;
- (B) for facilities that commenced operation less than two years prior to the effective date of these Rules:
- (i) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the Class A pathogen reduction standards established in 40 CFR 503.32 (a) (3, 4, 7, or 8);
  - (ii) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the vector attraction reduction standards established in 40 CFR 503.33 Alternative 1 through VAR Alternative 8;
  - (iii) records sufficient to document that the treated EQ biosolids or EQ biosolids product has been tested for parameters in § 6-1306(n) and also meets the lowest of:
    - (I) the contaminant ceiling concentrations established in § 6-1306(o);
    - (II) the contaminant standards established at 40 CFR 503.13 – Table 3; or
    - (III) the contaminant standards established for such materials in the jurisdiction in which the EQ biosolids or EQ biosolids product was generated, even if any given parameter is not otherwise regulated under these Rules or 40 CFR 503.13 – Table 3.
- (3) a copy of the informational flyer, fact sheet, or label that will be provided by the EQ biosolids or EQ biosolids generator to each recipient of the treated material.
- (4) a monitoring and sampling plan which assures that every batch of EQ biosolids or EQ biosolids product released for marketing and/or distribution in the State of Vermont is tested and demonstrated to meet the requirements of § 6-1303(a).

(d) A Certificate of Approval shall be issued by the Secretary, in writing, and shall not be valid for a period of more than five (5) years from the date of issuance.

(e) Non-conformances

(1) Upon receipt by the EQ biosolids or EQ biosolids product generator of any information documenting failure an exceedance of any ceiling concentration established in §6-1307(o) or any failure to meet the Class A pathogen reduction standards established in 40 CFR 503.32 (a)(3, 4, 7, or 8)) or the vector attraction reduction standards established in 40 CFR 503.33 Alternative 1 through VAR Alternative 8, the following shall occur:

(A) The EQ biosolids or EQ biosolids product generator shall notify the Secretary of the non-conformance within twenty-four (24) hours or on the next business day; and

(B) the Certificate of Approval for the generating facility involved shall immediately become suspended for a minimum period of thirty (30) days. In such instances, the EQ biosolids or EQ biosolids product from the affected generating facility, if managed in the State of Vermont, shall be managed only in accordance with the Vermont Solid Waste Management Rules. If the Certificate of Approval covers more than one generating facility under the control of a single generator, only the Certificate of Approval for the generating facility so involved shall be considered suspended; and

(C) within five (5) days of receipt by the EQ biosolids or EQ biosolids product generator of the information, the generator shall submit a written report to the Secretary. The report shall identify the nature of the non-conformance and the actions taken or anticipated to be taken to correct the problem; and

(D) the EQ biosolids generator or EQ biosolids product generator shall make any other reports that may be reasonably required by the Secretary.

(2) Upon a determination by the Secretary that the testing requirements established in §6-1303 (4) were not met, the Secretary may suspend the Certificate of Approval.

(3) Upon a determination by the Secretary that the storage or use of EQ biosolids or an EQ biosolids product that is used in the State of Vermont under this section has created a nuisance, the Secretary shall suspend the Certificate of Approval.

(f) Reapproval: The Certificate of Approval for a generating facility that has been suspended pursuant to subsection (e) of this section may be reinstated at the discretion of the Secretary upon submittal of the

following relevant to the non-conformance causing the suspension:

- (1) the results of a chemical analysis of four (4) consecutive weekly samples of EQ biosolids or EQ biosolids product generated at the involved facility documenting that the EQ biosolids or EQ biosolids product has been tested for parameters in § 6-1306(n) and material quality once again is in compliance with the most restrictive of:
    - (A) the contaminant ceiling concentrations established in § 6-1306(o);
    - (B) the contaminant standards established at 40 CFR 503.13 – Table 3; or
    - (C) the contaminant ceiling concentrations established for such materials in the jurisdiction in which the EQ biosolids or EQ biosolids product was generated even if any given parameter relevant to either (A) or (B) is not otherwise regulated under these Rules.
  - (2) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the Class A pathogen reduction standards established 40 CFR 503.32 (a)(3, 4, 7, or 8).
  - (3) records sufficient to document that the treated EQ biosolids or EQ biosolids product meets one of the vector attraction reduction standards established in 40 CFR 503.33 Alternative 1 through VAR Alternative 8.
  - (4) evidence sufficient to demonstrate that storage or use of the EQ biosolids or EQ biosolids product will no longer create a nuisance, as necessary to document that the cause or causes for the Certificate of Approval having been voided have been corrected and that the EQ biosolids or EQ biosolids product once again meets the applicable standard(s).
  - (5) a written explanation of how the non-conformance occurred and a written explanation of steps that have been taken to prevent a recurrence of the non-conformance.
  - (6) any other reports that may be required by the Secretary.
- (g) Labeling: The EQ biosolids or EQ biosolids product generator shall provide to all persons to whom materials regulated under this section are marketed or distributed a flyer, fact sheet or label which, at a minimum, shall provide the following information:
- (1) the name, address, and telephone number of the generator;
  - (2) a statement that the product is derived or partially derived from sewage sludge or domestic septage;

- (3) a statement that the product may contain per- and polyfluoroalkyl substances (PFAS);
- (4) the concentration of total nitrogen, available phosphorus, and total potassium in the material.  
Any such products which are marketed and distributed in the State of Vermont with a guaranteed nutrient content shall be registered as a fertilizer with the Vermont Agency of Agriculture, Food, & Markets in accordance with 6 V.S.A. §364;
- (5) the concentration in the material of the metals regulated under §6-1307 (o);
- (6) recommendations for acceptable uses and non-uses of the material;
- (7) suggested application rates for the recommended acceptable uses; and
- (8) suggested methods of application for the recommended uses.

(h) Reporting

- (1) The EQ biosolids or EQ biosolids product generator shall report to the Secretary on an annual basis, the following information for each calendar year. The annual report of the preceding calendar year's activity shall be submitted to the Secretary on or before February 19<sup>th</sup> of each year.
- (2) The annual report shall, at a minimum, provide the following information for all EQ biosolids or EQ biosolids product regulated under this section that is marketed or distributed in the State of Vermont:
  - (A) the total volume of EQ biosolids or EQ biosolids product that was marketed or distributed in the State of Vermont in the calendar year;
  - (B) analytical reports documenting that the EQ biosolids or EQ biosolids product met the contaminant standard of § 6-1303(a)(1);
  - (C) the Class A pathogen reduction alternative by which the EQ biosolids or EQ biosolids product was demonstrated to meet the requirement of § 6-1303(a)(2);
  - (D) the vector attraction reduction alternative by which the EQ biosolids or EQ biosolids product was demonstrated to meet the requirement of § 6-1304(a)(3);
  - (E) analytical reports documenting that the EQ biosolids or EQ biosolids product were tested per § 6-1303(a)(4);

- (F) a statement signed by the EQ biosolids or EQ biosolids products generator that all EQ biosolids or EQ biosolids products that were marketed or distributed in the State of Vermont met the requirements of these rules; and
- (G) any additional records required to be kept under this section, as the Secretary may require upon request in order to demonstrate compliance with these rules.

(i) Recordkeeping

- (1) The following records shall be kept in a dry and secure location by the EQ biosolids or EQ biosolids product generator:
  - (A) all reports, records, data or other information required to demonstrate compliance with this section;
  - (B) copies of the annual reports that have been submitted to the Secretary;
  - (C) copies of any reports, records, data or other information required to be submitted to the Secretary under subsection (h)(2) of this section;
  - (D) copies of any reports, records, data, certifications, or other information required under 40 CFR 503.17.
- (1) All records shall be kept for a minimum of five (5) years following the date on which the applicable annual report was submitted to the Secretary.
- (2) Producers of EQ biosolids or EQ biosolids products which are imported into the State of Vermont solely in individual bags or containers weighing 50 pounds or less shall keep the following records for a minimum of five (5) years following importation and shall submit such records to the Agency upon request by the Secretary:
  - (A) all reports, records, data, certifications required under 40 CFR 503.17 or other information required to demonstrate compliance with this section; and
  - (B) records of the annual volume of EQ biosolids or EQ biosolids products imported into the State of Vermont.
- (4) Maintenance of records in an electronic format is acceptable.

In addition to the general siting requirements of Subchapter 7, the following facility specific siting requirements apply:

- (a) Sewage Sludge, Biosolids and Septage Storage and Transfer Facilities: Facilities in existence as of February 1, 1989 which are used for the transfer, storage and treatment of sludge and septage and which are located inside the fence of a wastewater treatment facility permitted under 10 V.S.A. Chapter 47 are exempt from the requirements of Subchapter 7 and this subsection.
- (b) Land Application Sites:
  - (1) Are prohibited from being sited within zone 1 or zone 2 of an approved Public Water Supply Source Protection area.
  - (2) The Secretary may, on a case-by-case basis, make a determination that a land application site may be sited in zone 2 of an approved surface water Public Water Supply Source Protection Area.
  - (3) Are prohibited in locations with hydric soils.

**§ 6-1305 Residuals Management Facility Design Standards**

In addition to the general design requirements of Subchapter 7, the following facility specific design standards apply. Facilities in existence as of February 1, 1989 which are used for the transfer, storage and treatment of sewage sludge, biosolids and septage and which are located inside the fence of a wastewater treatment facility permitted under 10 V.S.A. Chapter 47 are exempt from the requirements of Subchapter 7 and this section.

- (a) Treatment Facilities: General
  - (1) Facilities shall be designed to provide adequate storage to assure the protection of public health and safety and the environment and to assure that the disposal of stored material occurs at proper times and under environmentally sound conditions.
  - (2) Facilities shall be designed to prevent, to the greatest extent feasible, the reduction of the quality of the material, such as the rotting or contamination of stored wastes.
  - (3) Facilities shall be designed to protect surface water, groundwater and the air, and to detect, through monitoring where appropriate, the emission or discharge of contaminants from the facility to surface water, groundwater or the air.

- (4) Facility management plans shall include provisions for contingencies for the proper management of material during both planned and unplanned events when the facility is not in operation.
- (5) Facility management plans shall include operator training plans that assure that all facility personnel involved in the handling of material receive organized instruction that teaches them to perform their duties in a way that ensure the facility's compliance with these rules and conditions of certification.
- (6) Facility management plan must include estimates of amounts and types of solid wastes and other regulated material brought to storage facilities, and a schedule for transport, disposal or use of these materials.

(b) Treatment Facilities: Exceptional Quality (EQ) Biosolids

- (1) To meet the requirements for distribution and/or marketing, any solid wastes derived or partially derived from a domestic waste to be considered EQ biosolids or an EQ biosolids product shall:
  - (A) undergo a process to further reduce pathogens as defined in 40 CFR Part 503.32(a)(3,4,7, or 8) or other treatment processes deemed appropriate for other pathogen containing waste;
  - (B) meet one of the vector attraction reduction standards established in 40 CFR Part 503.33 Alternative 1 – Alternative 8;
  - (C) meet the contaminant standards established in § 6-1303(a)(1);
  - (D) EQ biosolids or EQ biosolids products produced by composting processes shall meet the stability requirements of § 6-1303(a)(4), and
  - (E) design documentation must demonstrate the capability to meet these standards.
- (2) The design shall provide adequate storage at the treatment facility for curing EQ biosolids or EQ biosolids product produced by composting processes, and for periods of time when the EQ biosolids or EQ biosolids products are not in demand.
- (3) For EQ biosolids or EQ biosolids products derived or partially derived from a domestic waste a feasible marketing and distribution plan discussing how, where, and under what conditions the EQ biosolids or EQ biosolids product will be marketed, distributed or disposed is required for certification.

(c) Land Application Facilities

- (1) Facilities shall be designed to provide for an aggregate storage volume for six months of the biosolids generated to account for storage during winter months, inclement weather and normal agricultural and silvicultural practices. Alternatives, such as but not limited to landfill disposal, which provide the equivalent of storage are acceptable if adequately documented.
- (2) Design documentation shall detail each land application site with respect to soil character, cropping practices, usable area, floodplain and seasonal restrictions, application area and rates, and site life.
- (3) Land application rates shall be based on agronomic rates unless otherwise limited by the Secretary. Application rates shall be calculated using a method approved by the Secretary.
- (4) Biosolids quality must be fully documented as required in § 6-1306(n) and (o) prior to application to the land.
- (5) Design shall show obvious points of public access and provide for any appropriate measures to control public access.

(d) Stock Piles Intended for Land Application

- (1) Stock pile storage areas shall be of adequate volume to contain the waste in accordance with the generation, transport and application schedule contained in the facility management plan.
- (2) Stock piles shall be managed to prevent leaching to groundwater and surface runoff. .
- (3) Stock piles shall be managed to prevent the generation of nuisance odors beyond the facility boundary.
- (4) Stock piles of biosolids located at land application sites are prohibited except for short term staging (less than two weeks) prior to an application event.

(e) Lagoons

- (1) The liner composition shall be compatible with the material to be stored in a lagoon. Lagoons shall be designed to provide a minimum of two (2) feet of freeboard at all times.

**§ 6-1306 Residuals Management Facility Operating Standards**

In addition to the general operating requirements of Subchapter 7, the following facility specific operational standards apply:

- (a) Application of biosolids or septage derived from domestic waste to the land shall be limited per this subsection. However, the Secretary may approve application on a case-by-case basis upon a determination that current weather conditions and application techniques to be used will not result in abnormal nutrient loss, runoff, or threat to human health or the environment.
  - (1) Application of biosolids or septage on frozen ground or on top of snow-covered ground is prohibited.
  - (2) Application of biosolids or septage to the land is prohibited between December 15 and April 1 of consecutive years.
  - (3) Application of biosolids or septage to the land is prohibited between October 16 and April 14 of consecutive years in areas of land with frequently flooded soils.
  - (4) Application of biosolids or septage to the land is prohibited between December 1 and December 15 and between April 1 and April 30 of any calendar year when the Secretary of Agriculture, Food, & Markets determines that due to weather conditions, soil conditions, or other limitations, the application of manure to land would pose a significant potential of runoff to waters of the State.
- (b) All biosolids and septage land application sites shall be incorporated in a field by field nutrient management plan developed by a certified nutrient management planner or the permittee. Development and implementation of the nutrient management plan shall meet or exceed the standards of Vermont Required Agricultural Practices and the Vermont USDA NRCS Nutrient Management Plan 590 Standard.
- (c) The application rate for biosolids, except for domestic septage, shall be determined using a calculation method approved by the Secretary, performed in accordance with “Nutrients Recommendations for Field Crops in Vermont” published by the University of Vermont Extension, and based on a representative sampling and analysis of the material applied, the crop nutrient requirements, other sources of nutrient used, and limited by other factors as determined by the Secretary.
- (d) The application rate for domestic septage shall be determined by the following formula, unless the Secretary approves an alternative calculation method:

$$AAR = \frac{N}{0.0026} - \text{the amount of nitrogen provided by all other sources}$$

where: AAR = annual application rate (in gallons per acre) and N = amount of nitrogen (in pounds per acre per growing season) needed by the crop grown on the land.

- (e) The pH of the soil in the zone of incorporation for all land application sites shall be maintained between 6.5 S.U. and 8.0 S.U. during the certification period. Biosolids or septage shall not be applied to a land application site if the soil's pH is not within the specified range, except for when biosolids or septage that have been stabilized by an alkaline stabilization process and the pH of the biosolids or septage is 11.0 S.U. or greater at the time that it is applied to the land and the soil's pH is in the range 5.0 S.U. to 6.5 S.U.. In such cases, the soil's pH shall, if necessary, immediately be raised to the range 6.5 S.U. to 8.0 S.U. by other lime addition if the application of alkaline stabilized biosolids or septage was not sufficient to raise the soil's pH to within the range 6.5 S.U. and 8.0 S.U.
- (f) Cadmium application shall be limited to 0.45 pounds per acre (0.5 kilograms per hectare) in any 365-day period .
- (g) Application of biosolids or septage is prohibited on the 100-year floodplain unless:
  - (1) The biosolids or septage is incorporated within 48 hours of application; or
  - (2) The site is in no-till management and
    - (A) is cover cropped; or
    - (B) is planted to hay, pasture, or other perennial crop.
- (h) Application of biosolids or septage within the floodway portion of the 100-year floodplain is prohibited.
- (i) Application of biosolids or septage is prohibited at times when groundwater is within three(3) feet of the bottom of the zone of incorporation.
- (j) Application of biosolids or septage is prohibited in Class I and Class II Groundwater areas.
- (k) Application of biosolids or septage is prohibited in a watershed for a Class A stream or stream segment.
- (l) Land Application. Prior to the land application of biosolids or septage derived from domestic waste, the waste must be treated, by lime stabilization, pyrolysis, or by other chemical, biological, or physical processes, to:
  - (1) meet the requirements of a process to significantly reduce or further reduce pathogens as established in 40 CFR Part 503.32(a)(3, 4, 7 or 8) or 40 CFR Part 503.32(b) ; and
  - (2) meet the vector attraction reduction requirements established in 40 CFR Part 503.33; and,

(3) assure that the final product is homogeneous and not otherwise deleterious in character.

(m) For land application sites used for biosolids or septage management, unless otherwise directed by the Secretary, the following restrictions shall apply:

- (1) Public access shall be controlled for twelve (12) months after the last application of biosolids or septage .
- (2) Domestic food source animals shall be prohibited from grazing on land application sites for twelve (12) months after the last application of biosolids or septage .
- (3) The production of crops for direct human consumption, is prohibited for thirty-eight (38) months after the last application of biosolids or septage .
- (4) Feed crops shall not be harvested for a period of five (5) weeks after the last application of biosolids or septage .
- (5) Silage to be used as a feed crop, shall not be fed to domestic food source animals for a period of four (4) months after the last application of biosolids or septage.
- (6) Turf shall not be harvested for a period of one (1) year after the last application of biosolids or septage.

(n) The following requirements for sampling, analysis, and standards shall be met:

- (1) All sludges, biosolids or septage intended for land application, and EQ biosolids products shall be sampled and analyzed for the following parameters. The frequency will be established in each sludge management plan or certification. Any biosolids or EQ biosolids products that are imported into Vermont shall also be analyzed for any parameters not established herein for which a regulatory standard is established in the jurisdiction in which they were produced or prepared.

(A) The material shall be analyzed for the total concentration of the following metals:

Arsenic (As)

Cadmium (Cd)

Chromium (Cr)

Copper (Cu)

Lead (Pb)

Mercury (Hg)

Molybdenum (Mo)

Nickel (Ni)

Selenium (Se)

Zinc (Zn)

(B) The material shall be analyzed for total percent solids.

(2) Biosolids or septage intended for land application and EQ biosolids products shall be analyzed for following parameters:

Total polychlorinated biphenyls (PCB);

pH,

Total Kjeldahl Nitrogen (TKN),

Ammonia-Nitrogen (NH<sub>4</sub>-N),

Nitrate-Nitrogen (NO<sub>3</sub>-N),

Total Phosphorus (TP),

Total Potassium (TK),

water extractable phosphorus (WEP); and

Per- and polyfluoroalkyl substances (PFAS) in accordance with this subdivision;

(A) PFAS regulated by the Secretary; and any other PFAS that the Secretary has determined may pose a risk to human health or other living organism and for which the Secretary has determined that a reliable testing and analytical methodology is available. The Secretary may require the material to be tested for additional parameters as determined to be necessary to prevent a threat to human health or the environment resulting from the application of materials.

(n) All biosolids or septage intended for land application, or for management at a facility preparing EQ biosolids, shall meet the following standards. At the Secretary's discretion, these standards may be made more or less stringent.

(1) Total metals concentrations in the material must be no more than the concentrations established in the following table:

| <b>PARAMETER</b> | <b>CONCENTRATION (mg/kg, dry wt.)</b> |
|------------------|---------------------------------------|
| Arsenic (As)     | 15                                    |
| Cadmium (Cd)     | 21                                    |
| Chromium (Cr)    | 1,200                                 |
| Copper (Cu)      | 1,500                                 |
| Lead (Pb)        | 300                                   |
| Mercury (Hg)     | 10                                    |
| Molybdenum (Mo)  | 75                                    |
| Nickel (Ni)      | 420                                   |
| Selenium (Se)    | 100                                   |
| Zinc (Zn)        | 2,800                                 |

(i) The concentration of total PCB must be no more than 1 mg/kg , dry weight. The material shall undergo a process to significantly reduce pathogens as defined in 40 CFR Part 503.32(b) or a process to further reduce pathogens as defined in 40 CFR Part 503.32(a)(3,4,7, or 8) . .

(p) The cumulative loading rate for each metal on a land application site shall not exceed the cumulative loading rate limits for the metals in the following table:

| <b>Metal</b>    | <b>Kilograms per Hectare</b> | <b>Pounds per Acre</b> |
|-----------------|------------------------------|------------------------|
| Arsenic (As)    | 15                           | (13.4)                 |
| Cadmium (Cd)    | 5                            | (4.5)                  |
| Chromium (Cr)   | 1200                         | (1071.6)               |
| Copper (Cu)     | 1500                         | (1339.5)               |
| Lead (Pb)       | 300                          | (267.9)                |
| Mercury (Hg)    | 17                           | (15.2)                 |
| Molybdenum (Mo) | 75                           | (66.0)                 |
| Nickel (Ni)     | 420                          | (375.1)                |

|               |      |          |
|---------------|------|----------|
| Selenium (Se) | 100  | (89.3)   |
| Zinc (Zn)     | 2800 | (2500.5) |

Note: the established regulatory standards are those given in units of kilograms per hectare. Those numbers in parentheses (pounds per acre) are rounded conversions of the officially established standards and are provided for informational purposes only.

- (q) Facilities covered under a Sludge Management Plan shall test sludge at the more frequent of the rate specified in the Sludge Management Plan or in Table 1.

**Table 1**

| <b>Amount of sludge produced in the preceding 365 days*; dry weight</b> | <b>Monitoring Frequency</b>  |
|---|--|
| > 0 – 290 metric tons<br>(> 0 – 319 US tons)                            | Once per year  |
| > 290- 1,500 metric tons<br>(>319 – 1,650 US tons)                      | Once per quarter (four times per year)   |
| > 1,500 – 15,000 metric tons<br>(>1,650 – 16,500 US tons)               | Once per sixty (60) days   |
| >15,000 metric tons<br>(>16,500 dry US tons)                            | Once per month   |
| <b>For lagoon type treatment works producing sludge</b>                 |  |
| Any amount  | Once each time sludge is removed from the lagoon; or, according to Table 1 non-lagoon type schedule if sludge is routinely removed |

\*If the amount of sludge produced in a non-lagoon type treatment works at any time in a rolling period of the preceding 365 days either increases or decreases such that it triggers a different monitoring frequency category in the table above, the monitoring frequency shall be adjusted accordingly unless otherwise established in a certification.

- (r) For facilities covered under a solid waste certification, the monitoring frequency of biosolids, septage, soil, groundwater, surface water, and plant tissue shall be performed at the more frequent of the rate specified in the solid waste management facility certification or in Table 2.

**Table 2**

| <b>MEDIA</b>          | <b>PARAMETERS</b>   | <b>MONITORING FREQUENCY</b>  |
|-----------------------|---|--|
| Biosolids and Septage | As established in § 6-1306(n) or as otherwise specified in the facility certification | 1) At the greater of the frequency established in the table § 6-1307(q), every batch of biosolids applied to the land, or as otherwise specified in the facility certification.<br>2) For domestic septage applied to a land application site: once per year, or as otherwise specified in the facility certification. |
| Soil                  | As established in the facility certification  | Once per year or as otherwise specified in the facility certification.   |
|                       | Total PCB   | Once per certification period or as otherwise specified in the facility certification.   |
|                       | PFAS  | Once per year or as otherwise specified in the facility certification.   |
| Groundwater           | As established in the facility certification  | Once per year or as otherwise specified in the facility certification.   |
|                       | PFAS  | Once per year or as otherwise specified in the facility certification.   |
| Plant Tissue          | As established in the facility certification  | Once per certification period or as otherwise specified in the facility certification.   |
|                       | PFAS  | Once per certification period or as otherwise specified in the facility certification.   |

- (s) The Secretary may require the materials in Table 2 to be tested for additional parameters as determined to be necessary to prevent a threat to human health or the environment resulting from the application of materials
- (t) For EQ biosolids derived or partially derived from a domestic waste, only those marketing and distribution methods authorized in the solid waste management facility certification are allowed.
- (u) Only domestic septage may be managed by application to the land. The management of portable toilet waste, holding tank waste, cesspool waste and waste from Type III marine sanitation devices by

application to the land is specifically prohibited.

(v) Domestic septage applied to a land application site shall either be:

- (1) screened prior to application to remove to the greatest reasonable extent, any debris, trash, non-biodegradable, and other deleterious objects; or,
- (2) if not screened for the removal of debris, trash, non-biodegradable, and other deleterious objects prior to application to a land application site, the operator shall physically remove such objects from the site on each day that domestic septage is applied to the site; and,
- (3) refuse removed by screening or manual removal shall be stored in a manner that prevents any release to the environment and shall be disposed only at a municipal solid waste landfill.

#### **§ 6-1307 Residuals Management Facility Applications**

In addition to the general application requirements of Subchapter 5, the following facility specific requirements apply:

- (a) Either approved Sludge Management Plans or Solid Waste Management Certifications are required for all wastewater treatment facilities that generate sewage sludge.
- (b) Solid Waste Management Certifications are required for the land application sites where either septage, non-EQ biosolids, or residual dairy wastes are managed.
- (c) Solid Waste Management Certifications are required for all sewage sludge, biosolids, and septage storage, treatment or transfer facilities located outside the fenced area of a wastewater treatment facility except for transfer facilities operated in accordance with § 6-302(a)(7) and (8) of these Rules.
- (d) The Secretary may not certify a land application site unless it demonstrates that it is in compliance with the Groundwater Protection Rule and Strategy, as may be amended, adopted pursuant to 10 V.S.A. Chapter 48, Groundwater Protection; Vermont Water Quality Standards, as may be amended, adopted pursuant to 10 V.S.A. Chapter 47; and the laws of Vermont.
- (e) Solid Waste Management Certifications are required for facilities that prepare EQ biosolids or EQ biosolids products.
- (f) Sludge Management Plans shall include the following:
  - (1) All owners of wastewater treatment facilities that generate sludge as a result of the treatment process and that do not manage or dispose of sludge at a facility under their control or ownership

shall submit Sludge Management Plans to the Secretary for review and approval in all cases where a Solid Waste Management Certification is not required by these Rules. The Plans shall:

- (A) identify the owners and operators of the facility and their contact information;
  - (B) include a contingency disposal plan, a spill response plan and a reporting plan;
  - (C) include a schematic diagram of the facility;
  - (D) present information demonstrating conformance with an approved Solid Waste Implementation Plan; and
  - (E) present information regarding methods of sampling and disposal.
- (2) The Secretary shall append a schedule of parameters and frequency of monitoring sludge to an approved Sludge Management Plan.

**§ 6-1308 Residuals Management Facility Reporting and Recordkeeping**

In addition to the general reporting and recordkeeping requirements of Subchapter 7, the following facility specific requirements apply:

(a) Recordkeeping

- (1) The following records shall be kept in a dry and secure location by the biosolids or biosolids product generator or septage manager:
  - (A) all reports, records, data or other information required to demonstrate compliance with this section; and
  - (B) copies of the quarterly report forms that have been submitted to the Secretary; and
  - (C) copies of all certifications required under 40 CFR 503.17.
- (2) All records shall be kept for a minimum of ten (10) years following the date on which the applicable quarterly report was submitted to the Secretary.
- (3) Maintenance of records in an electronic format is acceptable.

- (b) Reporting: All owners of wastewater treatment facilities that generate sewage sludge as a result of the treatment of domestic waste , all producers of biosolids or EQ biosolids, all owners of companies that

manage septage, and all commercial haulers of residual wastes subject to the permit requirements of 10 V.S.A. 6607(a) shall report to the Secretary on a quarterly basis on forms provided by the Secretary. Reports are due on the 15<sup>th</sup> day of the month following the end of each calendar quarter (January 15, April 15, July 15 and October 15). The reports shall include:

- (1) the quantity of sludge, biosolids, septage, or residual wastes disposed or managed;
- (2) the location where the sludge, biosolids, septage, or residual waste was delivered for management, disposal, or end use;
- (3) the volume of sludge, biosolids, septage, or residual waste received from other generators or managers of those materials;
- (4) sludge, biosolids, or septage, or residual waste quality and other facility monitoring data, when required; and
- (5) where required for septage managers, the fee established under 3 V.S.A §2822(j)(33) for the volume of septage managed shall be submitted with each quarterly report for the corresponding quarter's septage management activities. The fee is calculated based on the volume of septage generated in Vermont regardless of where it is disposed or managed and on all septage disposed or managed in Vermont regardless of where it was generated. The fee is owed by the person who first pumped the septage from a septic tank, holding tank, or cess pool.

**§ 6-1309 Residuals Management Facility Closure**

- (a) A closure plan is required for all facilities except:
  - (1) Land used for the land application of septage, biosolids, or other residual wastes, as determined appropriate by the Secretary; and
  - (2) Septage, sludge, biosolids, or other residual waste facilities located inside the fence of a domestic wastewater treatment facilities or drinking water treatment facilities .
- (b) At the Secretary's discretion, a financial instrument sufficient to cover the anticipated costs of a closure plan may be required. Such financial instruments shall be in conformance with Subchapter 8 of these Rules.

## Subchapter 14 – Special Topics

### § 6-1401 Special Waste Designations

- (a) The Secretary may designate that certain types or categories of solid wastes are special solid wastes if he or she determines that the waste pose special environmental or public health and safety concerns, or have other characteristics (e.g. size, composition) that cause problems in handling or management.
- (b) Subsequent to a special waste designation issued pursuant to subsection (a) of this section, the Secretary may require that such wastes be subject to management requirements as may be necessary to ensure the protection of public health and safety and the environment. Such management requirements may be included as conditions of a certification or other approval issued pursuant to these Rules.

### § 6-1402 Approval for Acceptable Uses of Solid Waste

- (a) Any person may request a written determination by the Secretary of an acceptable use designation of a type or category of solid waste. This section shall not apply to:
  - (1) Activities which require a solid waste certification, including land application of sludge and septage wastes;
  - (2) Disposal activities of limited duration which require an insignificant waste management event approval (IWMEA);
  - (3) Materials or activities which are exempt from these Rules;
  - (4) Material which is reused;
  - (5) Solid waste which is recycled (recycling does not include incineration of solid waste to produce energy or fuel products);
  - (6) solid waste which: contains, or the use of which will create a hazardous waste;
  - (7) solid waste the use of which will result in a threat to human health and safety or to the environment, or will cause a nuisance;
  - (8) solid waste that contains asbestos;

- (9) solid waste that contains infectious waste; or
- (10) solid waste that is incinerated to produce energy or fuel products.
- (b) Any person who wishes to receive written approval for acceptable use of a solid waste shall submit a written request to the Secretary. The request shall be in writing and contain the following:
- (1) A description of the proposed solid waste to be used, including identification of the source of the waste, characteristics of the proposed waste (physical, chemical and biological) and the quantities to be used;
  - (2) A description of the proposed use of the solid waste, including:
    - (A) Where the material will be used;
    - (B) The duration of use;
    - (C) A description of any manufacturing or processing by which an end product is produced; and
    - (D) Characteristics of the end product (physical, chemical and biological); if an end product is to be marketed.
  - (3) A written demonstration that the proposed use will not adversely affect human health and safety and the environment or create a nuisance. This demonstration shall contain one or more of the following:
    - (A) A characterization plan;
    - (B) Historic analytical test data;
    - (C) Risk assessment; and
    - (D) A risk management plan;
    - (E) Another type of assessment that has been approved in writing by the Secretary.
  - (4) A written management plan which addresses the management of the solid waste from its source through its final use, including, but not limited to, storage of the waste prior to use, quality control/quality assurance, stormwater control, risk management, application rates, monitoring and a contingency plan that addresses how the solid waste will be managed if the proposed use

of the material becomes unviable.

- (5) If required by the Agency, financial assurance in an amount deemed by the Secretary to be sufficient to cover the costs associated with implementing the approved contingency plan.
- (c) Approval: If the Secretary finds that the solid waste and proposed use of that waste is not Determinations made regarding acceptable uses of materials and associated activities shall be published by the Secretary. A determination for acceptable use of a solid waste may apply to uses by other persons of the same solid waste(s) for the activities and uses specified in the written designation.
- (d) Denial: If the Secretary determines that the use of the solid waste will result in a threat to human health and safety or to the environment, or will cause a nuisance; then the acceptable use determination will be denied or rescinded.

#### **§ 6-1403 Standards for Hazardous Household and Very Small Quantity Generator Wastes**

- (a) Very Small Quantity Generator (VSQG) hazardous waste and household hazardous waste (HHW) may be accepted for management only by solid waste facilities certified or approved by the Secretary to manage these wastes according to the provisions of Subchapter 9 of these Rules.
- (b) Collection Events.
  - (1) HHW/VSQG hazardous waste collection events shall take place only at certified solid waste facilities or at other locations specifically approved by the Secretary pursuant to § 6-505(b). Collection events shall be pre-approved and operated under the requirements of this section. A certified solid waste facility shall not hold a collection event unless the facility management plan for the facility specifies the wastes to be managed and the activities to be conducted during the event.
  - (2) To obtain approval for a collection event not located at a certified solid waste facility, the applicant shall submit the following:
    - (A) A complete HHW/VSQG hazardous waste collection event approval form; and
    - (B) A safety, accident and contingency plan for the site. This plan shall address:
      - (i) Public/transport;
      - (ii) Emergency contacts, plan of action;

(iii) Location and distance to closest hospital; and

(iv) Chain of command

(C) If the collection event location has not been assigned a permanent EPA Identification Number, the applicant is required to obtain either a permanent or temporary EPA Identification Number prior to holding the collection event. Permanent and temporary EPA Identification Numbers may be obtained by contacting the Vermont Hazardous Waste Management Program. Temporary EPA Identification Numbers are only valid for one year.

- (3) Approval for a HHW/VSQG hazardous waste collection event location is only required one-time. Subsequent events in the same location may operate on the previous approval provided that the safety, accident and contingency plan for the specific site has not changed. The event operator shall send in notification that the safety, accident and contingency plan has remained unchanged at least 30 days prior to the event.
- (4) All wastes managed during the collection event must be handled by personnel trained in accordance with § 6-905(g)(2)(A).
- (5) At the end of an event, all VSQG hazardous waste collected during the event shall be packaged, labeled, and transported off-site by a permitted hazardous waste transporter and in accordance with Vermont Hazardous Waste Management Regulations.
- (6) At the end of an event, all HHW collected during the event shall be removed from the site by a permitted hazardous waste transporter. The waste may be managed as a regulated hazardous waste as provided in § 6-1403(b)(5) above or may be transported to a solid waste facility certified to accept HHW/VSQG Hazardous Waste.

(c) Mobile HHW/VSQG Hazardous Waste Collection Units.

- (1) Mobile HHW/VSQG Hazardous Waste Collection Units shall meet the requirements of § 6-1403(b) for collection events and the following requirements:
  - (A) The operator of the mobile collection unit shall be permitted as a hazardous waste transporter at the time that VSQG hazardous wastes are collected;
  - (B) The mobile collection unit shall return to a solid waste facility certified to accept HHW/VSQG hazardous waste upon completion of each collection event; and
- (2) Collected HHW and VSQG hazardous wastes may remain in the mobile unit while at the certified HHW/VSQG hazardous waste collection facility for no more than 10 days from the date

of collection after which it shall be transferred to another permitted hazardous waste transporter, a certified hazardous waste treatment, storage or disposal facility, or to a HHW/CEG hazardous waste collection facility.

**§ 6-1404 Waste Incineration**

- (a) Waste incineration facilities shall be designed to ensure that there is complete combustion as evidenced by the greatest practical reduction in content of carbon compounds in the waste of all wastes to be incinerated.
- (b) Facility operations shall include methods to separate from the incinerator those wastes that may not or cannot be burned.
- (c) A waste incineration facility shall apply for full certification following the application requirements for a solid waste treatment facility under § 6-504 of these Rules. In addition to the requirements in § 6-504, the facility management plan shall include the following:
  - (1) the amounts and types of waste to be treated;
  - (2) the air and water pollution control devices to be used;
  - (3) plans for the proper storage and handling of incoming wastes and of residues;
  - (4) plans for the disposal of incinerator ash and of solid wastes not processed by the incinerator;
  - (5) a description of testing requirements for waste generated by an incineration unit, using a federally accepted test procedure with frequency of testing determined on a case by case basis, but not less than annually; and
  - (6) a written describe of how all ash residue will be properly wetted or contained to prevent dust emissions or discharges during on-site storage, loading, transport, and unloading. Stored ash must be kept in watertight containers approved by the Secretary. Containers used for the transport of ash must be watertight, leach resistant, have covers, and be approved by the Secretary. Containers shall be prominently marked with an identification coding system so that it is possible to maintain records of what containers are used for ash transport.

**§ 6-1405 Animal Burial Standards Categorical Certifications**

- (1) Composting and burial prohibition. Animals showing signs of a neurological disease shall be reported to authorities and managed in accordance with their directions. Animals that show signs of a neurological disease shall not be composted or buried.
- (2) Emergency situations. When the Secretary determines that an emergency event has occurred that requires the disposal of animal mortalities from that event, the Secretary may authorize a one-time disposal event in accordance with § 6-505(b). To the maximum extent practical, the disposal event shall conform to the requirements of § 6-1108(c).
- (3) Applications for animal burial shall apply for a permit as follows:
  - (A) The facility shall be sited in conformance with § 6-1106.
  - (B) The facility shall meet the following:
    - (a) The pit must be managed so that the carcasses do not attract pests or vectors;
    - (b) Upon deposit in the pit the carcasses shall be:
      - (I) immediately covered with a minimum of 1/8" layer of hydrated lime and covered with at least 2 feet of soil; or
      - (II) immediately covered with a minimum of 1/8" layer of hydrated lime and covered with at least 6" of soil and covered with boards; or,
      - (III) managed in an alternative manner if approved in advance by the Solid Waste Program;
    - (c) Active pits must have snow fencing, or equivalent around the perimeter until the top of pit is at ground level;
    - (d) No carcasses shall be deposited within two feet of the surface;
    - (e) Final cover shall consist of at least two feet of compacted soil.

**Appendix A**  
Specific Requirement for Financial Responsibility Instruments

A-1 Trust Fund with Surety

- (a) An applicant may satisfy the financial responsibility requirements of subchapter 9 by establishing a trust fund for the benefit of the Agency according to the requirements of this section and subsections A-2 (b), (c), (f), (g), (h), (i), (k), and (l). The surety bond must guarantee full payment into the trust fund of the cost estimate for closure or post-closure plan submitted with the certification application. The trustee for the trust fund must be a bank or financial institution which has the authority to act as a trustee and whose operations are regulated and examined by the State of Vermont. The surety for the bond must be a surety company licensed to operate as a surety in the State of Vermont and shall be approved by the secretary.
- (b) The trust agreement and surety bond shall be executed in the form provided for such purposes by the Secretary.
- (c) Payments to the trust fund must be made annually by the certification holder over the term of the state certification issued for such facility or over the life of the facility if such facility life is shorter than the term of the state permit. Payments must be made as follows:
  - (1) The first payment shall be made when the trust is established and shall be at least equal to the cost estimated divided by the number of years in the term of the permit or life of the facility, whichever is the shorter.
  - (2) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment shall be the cost estimate minus the current value of the trust fund, divided by the number of years remaining in the term of the certification or the remaining number of years in the life of the facility, whichever is the shorter.
- (d) The certification holder may accelerate payments into the trust fund or he may deposit the full amount of the cost estimate at the time the fund is established. However, the value of the fund must be maintained at no less than the value would have been if annual payments were made as specified in paragraphs a and c of this subsection.
- (e) Whenever the cost estimate changes after the pay-in period is completed, the certification holder shall compare the new estimate with the trustee's most recent

annual valuation of the trust fund. If the value of the fund is less than the amount of the new cost estimate, the certification holder must, within 90 days of the change in the cost estimate, deposit a sufficient amount into the fund so that its value after payment at least equals the amount of the new estimate, or obtain other financial assurance as specified in subchapter 9 to cover the difference. If the value of the trust fund is greater than the total amount of the cost estimate, the certification holder may submit a written request to the secretary for release of the amount which is in excess of the cost estimate.

- (f) If the certification holder substituted other financial responsibility as specified in subchapter 9 for all or part of the trust fund, he may submit a written request to the secretary for release of the amount which is greater than the amount required as a result of the substitution.
- (g) Within 60 days after receiving a request from the certification holder for release of funds specified in paragraphs e and f of this subsection, the secretary will instruct the trustee to release to the certification holder such funds as the secretary specifies in writing.
- (h) After beginning final closure or during the period of post-closure care, a certification holder or any other person authorized to conduct closure, may request reimbursement for closure or post-closure expenditures respectively by submitting itemized bills to the secretary within 60 days after receiving bills for closure or post-closure activities. The secretary shall instruct the trustees to make reimbursement in those amounts as the secretary determines are in accordance with the closure or post-closure plan or are otherwise justified.
- (i) The secretary shall agree to terminate the trust when:
  - (1) The certification holder substitutes alternate financial responsibility as specified in subchapter 9; or
  - (2) The secretary notifies the certification holder that he is no longer required by subchapter 9 to maintain financial responsibility for the closure or post-closure of the facility.
- (j) The term of the surety bond shall be for the pay in period of the trust fund.
- (k) The bond must guarantee that the certification holder will:

- (1) Fund the trust in the amount of the cost estimate by the end of the pay-in period; or
- (2) During the pay-in period, fund the trust in the amount of the cost estimate within 15 days after an order to begin closure or post-closure care by the secretary or by a court, or following issuance of a notice of revocation of the certification; or
- (3) Provide alternative assurance within 90 days after receipt by the secretary of a notice of cancellation of the bond by the surety.

#### A-2 Surety Bonds

- (a) An applicant may satisfy the financial responsibility requirements of subchapter 9 by obtaining a surety bond according to the requirements of this section and by submitting the original copy of the bond with the facility closure or post-closure plans with the certification application. Only bonds issued by surety companies licensed to operate as sureties in the State of Vermont and approved by the secretary will satisfy the requirements of this section.
- (b) A surety bond form supplied by the secretary shall be used by the applicant and the surety.
- (c) The surety bond must name the applicant as the principal and name the State of Vermont as the obligee.
- (d) The term of the bond shall be for the life of the facility for which a certification is applied by the applicant through the closure period. A bond used for post-closure responsibility shall extend through the post-closure period.
- (e) The bond must guarantee that the certification holder will:
  - (1) Perform final closure or post-closure care in accordance with the closure or post-closure plan and other requirements in the certification for the facility; or
  - (2) Perform final closure or post-closure care following an order to begin closure or post-closure care issued by the secretary or by a court, or following issuance of a notice of revocation of the certification; or

- (3) Provide alternate financial assurance as specified in this section within 90 days after receipt by the secretary of a notice of cancellation of the bond from the surety.
- (f) The surety will become liable on the bond obligation when the certification holder fails to perform as guaranteed by the bond.
- (g) The penal sum of the bond must be in an amount at least equal to the amount of the closure or post-closure cost estimate.
- (h) Whenever the cost estimate increases to an amount greater than the amount of the penal sum of the bond, the certification holder shall, within 90 days after the increase, cause the penal sum of the bond to be increased to an amount at least equal to the new estimate or obtain other financial assurance, as specified in subchapter 9, to cover the increase. Whenever the cost estimate decreases, the penal sum may be reduced to the amount of the cost estimate following written approval by the secretary. Notice of an increase or decrease in the penal sum must be sent to the secretary by certified mail within 90 days after the change.
- (i) the bond shall remain in force for its term unless the surety sends written notice of cancellation by certified mail to the certification holder and to the secretary. Cancellation can not occur, however:
- (1) During the 120 days beginning on the date of receipt of the notice of cancellation by the secretary as shown on the signed return receipt; or
  - (2) While a compliance or enforcement action is pending.
- (j) following a determination that the certification holder has failed to perform final closure or post-closure care in accordance with the approved plan and other certification requirements when required to do so, the surety shall perform final closure or post-closure care in accordance with the terms of the bond, approved plan and other certification requirements or closure order. As an alternative to performing final closure or post-closure care the surety may forfeit the full amount of the penal sum to the State.
- (k) The certification holder may cancel the bond if the secretary has given prior written consent based on receipt of evidence of alternative financial assurance as specified in subchapter 9.

- (l) The secretary will notify the surety if the certification holder provides alternate financial assurance as specified in subchapter 9.
- (m) The surety will not be liable for deficiencies in the performance of closure by the certification holder after the certification holder has been notified by the secretary that the certification holder is no longer required by subchapter 9 to maintain financial assurance for closure or post-closure care of the facility.
- (n) As performed either by the certification holder or the surety, proper closure of post-closure care shall be deemed to have occurred only when the secretary so determines according to these Rules.

A-3 Letters of Credit

- (a) An applicant may satisfy the requirements of subchapter 9 by obtaining an irrevocable standby letter of credit according to the requirements of this section and by submitting the original copy of the letter of credit attached to the facility closure or post-closure plan along with the certification application. For new facilities, the letter of credit must be effective before the initial receipt of waste at the facility for which it is issued. The financial institution branch issuing the letter of credit shall be located within the United States and shall be:
  - (1) a federally-chartered bank or financial institution that is regulated by the Office of the Comptroller of Currency, the Federal Reserve System, or the Federal Deposit Insurance Corporation; or
  - (2) a state-chartered bank or financial institution:
    - (A) whose deposits are insured by the Federal Deposit Insurance Corporation,  
or
    - (B) is a member of the Federal Reserve System; or
  - (3) is a branch of a foreign bank or other financial institution that is:
    - (A) licensed by either the banking authority in the state in which the branch is located or the Office of the Comptroller of the Currency; and
    - (B) examined by the Federal Reserve Systems.
- (b) The wording of the letter of credit must be approved by the secretary.

- (c) The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year. If the issuing institution decides not to extend the letter of credit beyond the current expiration date it must, at least 120 days before the date, notify both the certification holder and the secretary by certified mail of that decision. The 120 day period will begin on the date of receipt by the secretary as shown on the signed return receipt. Expiration can not occur, however, while a compliance or enforcement action is pending.
- (d) The letter of credit must be issued for at least the amount of the closure or post-closure cost estimate.
- (e) Whenever the cost estimate increases to an amount greater than the amount of credit, the certification holder shall, within 90 days of the increase, cause the amount of credit to be increased to an amount at least responsibility as specified in subchapter 9 to cover the increase. Whenever the cost estimate decreases, the letter of credit may be reduced to the amount of new estimate following written approval by the secretary. Notice of an increase or decrease in the amount of the credit shall be sent to the secretary by certified mail within 90 days of the change.
- (f) Following a determination that the certification holder has failed to perform closure or post-closure care in accordance with the approved plan or other certification requirement, the secretary will draw on the letter of credit.
- (g) the certification holder must establish alternate financial responsibility as specified in subchapter 8 and obtain written approval from the secretary within 90 days after receipt by both the certification holder and the secretary of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date. if the certification holder does ;not establish such alternative financial responsibility within the 90 days, the secretary will draw on the letter of credit. If the issuing institution grants an extension of the term of credit, the secretary may do the drawing during the last 30 days of credit if the operator has failed to provide alternative financial responsibility as specified in subchapter 9 and obtain written approval of such responsibility from the secretary .
- (h) The secretary shall return the original letter of credit to the issuing institution for termination when:
  - (1) the certification holder substitutes alternate financial responsibility for closure or post-closure as specified in subchapter 9; or

- (2) The secretary notifies the certification holder, in accordance with section 6-901(1) of these Rules, that he is no longer required to maintain financial responsibility for closure or post-closure of the facility.

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**Appendix B**  
**Fee Schedule for Applications for Certification**

Fees related to these Rules are established in 3 V.S.A. §2822(j). Fees shall be applied according to statute, as may be amended, . As of the effective date of this rule these fees are as follows:

|   |   |
|---|---|
| Original and renewal applications – excluding recycling and composting facilities and categorical solid waste facilities  | \$0.75 per ton certified operational capacity prorated and paid on an annual basis over the term of the certification   |
| Original and renewal applications for recycling and composting facilities, excluding categorical solid waste facilities that solely manage recycling or composting solid waste                          | \$100.00  |
| Original and renewal applications for categorical solid waste disposal facilities   | \$100.00  |
| Original and renewal applications for facilities certified pursuant to 10 V.S.A. §6605 and §6605b, that treat, store or dispose of waste generated solely from mining, extraction or mineral processing | If <25,000 cubic yards operational capacity - \$200.00<br>If >25,000 cubic yards operational capacity - \$0.95 per cubic yard of operational capacity<br>Maximum annual payment, \$75,000 |
| Increase in tonnage, excluding recycling and composting facilities, and categorical solid waste facilities  | \$0.75 per ton certified operational capacity prorated and paid on an annual basis over the term of the certification   |
| Insignificant Waste Management Event Application  | \$100.00 per event  |
| Sludge and Septage Facilities: Land application sites, facilities that further reduce pathogens and disposal facilities   | \$1,000.00  |
| Sludge and Septage Facilities: All other facilities, and application to amend certifications for land application sites, facilities that further reduce pathogens and disposal facilities               | \$125.00  |

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 which 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 which, 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. § 6604c)

#### § 6604c. Management of development soils

(a)-(c) [Repealed.]

(d) On or before July 1, 2017, the Secretary shall adopt rules that allow for the management of excavated soils requiring disposal that contain PAHs, arsenic, or lead in a manner that ensures protection of human health and the environment and promotes Vermont's traditional settlement patterns in compact village or city centers. At a minimum, the rules shall:

(1) include statewide or regional background concentration levels for PAHs, arsenic, and lead that are representative of typical soil concentrations and found throughout existing development areas;

(2) specify that development soils with concentration levels equal to or lower than the background concentration levels established by the Secretary shall not be defined as or required to be treated as solid waste;

(3) include criteria for determining site-specific maximum development soil concentration levels for PAHs, arsenic, and lead;

(4) in addition to disposal at a certified waste facility, adopt procedures for the management or disposal of development soils that have concentration levels that exceed residential soil screening levels, but are below the site-specific maximum development soils concentration levels;

(5) adopt a process to preapprove sites to receive development soils from multiple developments; and

(6) be designed to provide that the criteria established under subdivision (3) of this subsection and the process developed under subdivision (4) of this subsection shall be no less protective of human health and the environment than the standard for development soils and the process established under subsection (b) of this section.

(e) At any time, the Secretary may adopt by rule background and maximum concentration

levels for other potentially hazardous material in soils such that the development soils containing these other materials would be categorized and treated according to the rules adopted by the Secretary under subsection (d) of this section. (Added 2015, No. 52, § 3, eff. June 5, 2015; amended 2015, No. 150 (Adj. Sess.), § 37a, eff. May 31, 2016.)



# Proposed Rules Postings

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## Search Rules

### Deadline For Public Comment

Deadline: Apr 01, 2020

Please submit comments to the agency or primary contact person listed below, before the deadline.

### Rule Details

|                  |  |
|------------------|--|
| Rule Number:     | 20P005   |
| Title:           | Solid Waste Management Rules.  |
| Type:            | Standard   |
| Status:          | Proposed   |
| Agency:          | Agency of Natural Resources  |
| Legal Authority: | 10 V.S.A. §§ 6603(1), 6604c(d)   |
| Summary:         | These Rules contain requirements for solid waste management activities at facilities including transfer stations, recycling facilities, organics processing and landfills. The Rules have been restructured and organized for clarity. |

The proposed revisions include changes to provisions addressing organics management with consideration of Anaerobic Digesters, Organic Recovery Facilities, and Organic Drop-off facilities. Also financial responsibility for landfills and post closure certifications including permit by rule for post closure. Subchapter 13 added a registry for imported class A biosolids, and also to align nutrient management standards with required Agency of Agriculture, Food and Markets practices. Provisions have been added addressing management of development soils. The revisions also propose changes to permitting requirements in accordance with Act 150 of 2015(adj) [10 V.S.A. chapter 170], and incorporation of existing Agency of Natural Resources (ANR) written procedures addressing solid waste management.

**Persons Affected:**

The following are subject to the provision of these Rules: solid waste management districts, alliances and independent towns; solid waste management companies, haulers, and facility owners and operators; solid waste engineering firms; and organics management entities.

**Economic Impact:**

Proposed changes to financial responsibility requirements may impact landfill facility owners, but are necessary to ensure that public funds are not used for closure or post-closure maintenance and monitoring of the landfill. However, any economic impacts resulting from these changes are appropriately balanced with the need for protection of human health and the environment, and avoid costs associated with long-term cleanup and ongoing maintenance and monitoring (40 CFR 258.61(b)(1)-(2)). The post closure certifications becoming permit by Rule (10 V.S.A. § 6605(i), essentially complying with the approved facility management plan), will have a positive economic impact by avoiding application costs for owners of closed landfills, including municipalities. Further the proposed changes will also result in potential savings for the regulated community by allowing development soils disposal in a categorical facility.

**Posting date:**

Feb 12, 2020

## Hearing Information

### Information for Hearing # 1

Hearing date: 03-18-2020 6:00 PM [ADD TO YOUR CALENDAR](#)  
Location: St. Johnsbury Town Offices  
Address: 51 Depot Square  
City: St. Johnsbury  
State: VT  
Zip: 05819  
Hearing Notes:

### Information for Hearing # 2

Hearing date: 03-23-2020 6:00 PM [ADD TO YOUR CALENDAR](#)  
Location: ANR Annex Building  
Address: 190 Junction Road  
City: Berlin  
State: VT  
Zip: 05602  
Hearing Notes:

## Contact Information

### Information for Contact # 1

Level: Primary  
Name: Dennis Fekert  
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[SEND A COMMENT](#)  
Website Address: <https://dec.vermont.gov/waste-management/solid>  
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### Information for Contact # 2

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## Keyword Information

Keywords:

procedures  
public notice application  
solid waste  
landfill  
compost  
composting  
financial organics  
land application development soils  
anaerobic digestion

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## PROPOSED STATE RULES

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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).

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### Solid Waste Management Rules.

Vermont Proposed Rule: 20P005

AGENCY: Agency of Natural Resources

CONCISE SUMMARY: These Rules contain requirements for solid waste management activities at facilities including transfer stations, recycling facilities, organics processing and landfills. The Rules have been restructured and organized for clarity. The proposed revisions include changes to provisions addressing organics management with consideration of Anaerobic Digesters, Organic Recovery Facilities, and Organic Drop-off facilities. Also, financial responsibility for landfills and post closure certifications including permit by rule for post closure. Subchapter 13 added a registry for imported class A biosolids, and also to align nutrient management standards with required Agency of Agriculture, Food and Markets practices. Provisions have been added addressing management of development soils. The revisions also propose changes to permitting requirements in accordance with Act 150 of 2015 (adj) [10 V.S.A. chapter 170], and incorporation of existing Agency of Natural Resources (ANR) written procedures addressing solid waste management.

FOR FURTHER INFORMATION, CONTACT: Dennis Fekert, Agency of Natural Resources, 1 National Life Drive, 1 Davis, Montpelier, VT 05620 Tel: 802-522-0195 Email: [dennis.fekert@vermont.gov](mailto:dennis.fekert@vermont.gov) URL: <https://dec.vermont.gov/waste-management/solid>.

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