1 2 3	State of Vermont Natural Resources Board District 7 Environmental Commission			
4 5 6 7	RE : Ne	w England Waste Services Of Vermont, Inc	Application 7R0841-13 10 VSA 6085(C)(5)	
8 9 10		PRE-FILED TESTIMONY AND POSITIONS OF	<u> 'FRIEND" DUMP, LLC</u>	
11 12 13 14 15 16 17	Consiste DUMP, came to of the N proceed anticipa	ent with the District Commission's Memorandum of I LLC, a grassroots citizen organization consisting of gether out of common concerns about the continued of lew England Waste Services of Vermont's (NEW ing <u>pro se</u> in the present matter, hereby provides pre-fition of the District Commission's evidentiary hearing	Decision dated November 20, 2018, residents of the North East Kingdom operation, and proposed expansion, SVT) landfill in Coventry, and filed testimony and positions in scheduled for January 22, 2019.	
18 19 20	DUMP argues that the NEWSVT planned 51.2-acre land and related 1,076 airspace expansion of the Coventry Landfill is <u>"a substantial change</u> " to a pre-existing development that has struggled and failed to meet conditions of Land Use Permit #7R0841-8.			
21 22 23 24	DUMP contends that the ANR Air Pollution Control Division Permit and Solid Waste Management Facility Certification were improvidently issued and thus cannot be considered as presumptive evidentiary proof, pursuant to Act 250, Rule 19, that the expansion and operation of the landfill for an additional 10-year period will not result in undue air and water pollution.			
25 26 27 28 29	DUMP will show through hydrologist reports, well monitoring results, ANR Complaint Report Forms, and e-mail communications that non-compliance with applicable statutory and regulatory provisions which ANR is mandated to implement in issuance of its approvals has and "will likely result in, or substantially increase the risk of, undue water [and] air pollution (Act 250 Rule $19(f)(2)$.			
30	Among	other arguments, DUMP will demonstrate:		
31 32 33	•	The inaccuracy in the Agency of Natural Resources pertains to environmental violations pertaining to po	(ANR) permit FINDINGS as it llution of Air.	
34 35 36 37 38	•	A significant and growing issue with odors, an indica 14 years since Land Use Permit #7R0841-8 – includ NEWSVT and its parent company, Casella, have fail emissions, and properly respond to residents who are	ation of ongoing air pollution. In the ing Phase IV – was issued, led to control odors and gas e forced to live with foul odors.	
39 40 41	•	How ANR staff has failed to cite the landfill with vio confirmed. In other words, oversight has not been we quality issues. The result is an inaccurate assessmen	blations for situations that have been hat it should be when it comes to air t of the landfill's impact.	
42 43 44 45 46	•	How the Coventry facility, referred to as "state of the Permit for the 45-acre landfill expansion in 2004, ha failures, causing pollution.	e art" in the Act 250 Land Use s experienced serious system	

1 2 3	• Well monitoring tests show contaminants have migrated in a direction that calls to question the groundwater flow exhibits accompanying hydrology studies by Waite-Heindel.	
4 5 6	• Casella admits it may not be able to keep its commitments for capping landfills.	
7 8 9	• PFAS contaminants have migrated a distance from the lined landfill that is greater than the required buffer distance of 300 feet.	
10 11 12	• Waite-Heindel project a number of <u>compliance wells will exceed</u> Groundwater Enforcement Standards in 10 years, two years before the ANR Certification OL510 expires.	
13 14 15 16 17	DUMP also specifically contends that ANR has failed to comply with the requirements of 10V.S.A.6620(a) insofar as there is no affirmative proof in either the Certification or its accompanying Responsiveness Summary that coordination among the divisions within the ANR took place during the review of this extremely large and complex industrial land use.	
18 19 20 21 22 23	This statutory provision requires more than simply ensuring that each ANR division issues its requisite approvals in isolation. The District Commissions are responsible for a supervisory oversight role of environmental protection as was articulated by the Vermont Supreme Court in its <u>Hawk Mountain</u> [149 VT 179 (1988)] decision. This oversight role is in effect a critical "fail/safe" function on behalf of the public interest.	
24 25 26 27	In providing this testimony, DUMP makes known that numerous arguments made herein are identical to those made by the ANR in its complaint filed against the Moretown landfill in Superior Court in November 2014. We would hope that both the Commission and the ANR have an appreciation for precedent and consistency.	
28 29 30 31	 <i>"Exhibits"</i> and <i>"Documents"</i> noted in this testimony can be accessed according to number in the corresponding folder at: <u>https://drive.google.com/drive/folders/1VoU1n1BEMRunBB2-Ebrc-c3d0sVyn6fg</u>. If the link fails to work, copy and paste it into your browser. 	
32		
33	Facts to Keep in Mind	
34	As you read our testimony, we ask the Commission to consider the following facts:	
35 36 37 38 39 40 41	• Casella has a history of fines and violations at its New England facilities dating back to the early 1990s and continuing to the present. The company has been cited for everything from allowing leachate to contaminate ground water and ignoring state mandates, to failing to comply with emissions limitations, and creating waste slopes that exceed the allowable grade limit. <i>(Exhibit 1)</i> We will show how Casella's performance pattern is no different in our state and how it endangers those of us who live in Vermont	
42 43 44	• There are more modern technologies than those employed at landfills, which provide no only a cleaner approach to waste, but produce exponentially more energy. The NEWSVT gas to energy plant makes use of only the byproduct of methane. Newer	

1 2 3 4	technology takes the entire waste stream and converts it to energy. The cost-benefit comparison of these technologies with landfills is like sweet oranges to rotten apples. An accurate cost of landfills has never been calculated taking into account the never-ending environmental impact and inevitable cleanup required.
5 6 7 8 9	Casella acknowledges the development of and value placed on these technologies in its 2017 Annual Report published, and at the same time recognizes that such development can have a significant adverse effect on its company's revenue streams:
10 11 12 13 14	"As we continue to develop our landfill capacity, the waste management industry is recognizing the value of the waste stream as a renewable resource, and accordingly, alternatives to landfilling are being developed that seek to maximize the renewable energy and other resource benefits of solid waste As a result, our revenues and operating margins could be materially adversely affected due to these disposal
15 16	alternatives. (<u>https://ir.casella.com/static-files/4616233c-eb60-4650-ae5d-b4b3a02af980</u> p.21)
17 18 19 20 21 22 23 24 25 26	 Nonetheless, Casella's updated strategic plan through its fiscal year ending Dec. 31, 2021, does not include green waste technologies in its five strategies: Increasing landfill returns; Improving collection profitability; Creating incremental value through resource solutions (mostly dealing with recycling); Reducing general and administration costs and improving efficiencies; Allocating capital to balance debt delevering with smart growth.
27	PART 1: AIR POLLUTION
28 29	Rebuttal of Solid Waste Management Facility Certification OL510, FINDINGS (2): Air Pollution
30 31 32	DUMP rebuts the claim that NEWSVT has not committed more than one violation as stated in the FINDINGS (2) of the ANR Solid Waste Management Facility Certification OL510:
33 34 35 36 37 38	2. NEWSVT, Inc. and any person required to be listed on the disclosure statement pursuant to 10 VSA $6605f(b)(1)$ have not committed more than one (1) violation of environmental statutes, rules, orders, certifications or permits issued by any jurisdiction, which have the potential to significantly harm the public health, public safety or the environment, giving due consideration to the size and scope of the applicant's business operation.
39 40 41 42 43	According to the scope of the ANR FINDING above, DUMP made a request to the Agency of Natural Resources for all documents concerning violations for which the Coventry landfill had been cited between 2009 and 2018. Marcella Dent, ANR Legal and Planning Program Coordinator, replied:
44	

1 2 3	Dent's response is indicative of two behavioral patterns – patterns that do not serve the public's best interest – exhibited by the Agency of Natural Resources' staff:
4 5	 The truth is distorted, misrepresented or half-told in order to mislead; and, Oversight is lacking.
6 7 8	Therefore ANR's representation of the Coventry landfill's violations and impact on air quality is not accurate.
9 10 11 12 13 14	The ANR Complaint Report Forms concerning odors reveal a number of violations, situations that warrant violations, and a serious lack of oversight. Additionally, there are e-mails and meetings notes that detail numerous circumstances in which the landfill is not in compliance and, therefore, qualify as violations.
15 16 17 18 19 20	Dent provides a clear example in support of our findings that there have been a multitude of violations warranting action. Note that this example occurs eight years after the issuance of the 2004 permit. In the Notice of Alleged Violations, dated Dec. 10, 2012 (<i>Document OL510 2012.12.10.NOAV</i>), noted by Dent , <u>onsite inspections provided the evidence</u> needed to cite several violations against the landfill:
21 22 23 24 25 26 27	• Daily Cover : "During the inspection on 11/16/12, Solid Waste Program staff observed that adequate daily cover had not been applied on the previous day. <u>Raw garbage was exposed</u> on the surface of the cell. The amount of exposed trash over a wide area also indicated <u>insufficient daily cover on previous days</u> , and/or failure to minimize the size of the working face and ensure that cover material remains functional and stable."
28 29 30 31 32 33 34 35 36	• Fluff Cover: "During the inspection on 11/16/12, Solid Waste Program staff observed that the initial (or "fluff") lift in Phase IV cell 3C <u>contained</u> <u>unacceptable items that could pose a threat to the underlying liner</u> . This waste had been placed on a previous day, and the unacceptable items had not been removed by a spotter. Failure to follow the filling procedures in the approved FMP <u>violates conditions 1 and 2 of the certification</u> , which require operation in accordance with the terms of the certification and prohibit unauthorized alterations to the approved Facility Management Plan.
37 38 39 40 41 42 43 44	• Mercury-Containing Bulbs: "Mercury-containing bulbs are accepted at the drop-off area adjacent to the landfill. When lamp boxes are full, they are moved to a storage shed for temporary storage. During the inspection on 11/16/12, Solid Waste Program staff observed a full box of mercury containing lamps in the shed that was not taped shut, and was not adequate to prevent breakage. Some of the bulbs were broken and had released components of the universal waste to the environment. The residue from broken lamps had not been containerized, characterized, or managed."
45 46 47	Rebuttal Continued: Violations Cited By The Agency
48 49 50 51	In addition to the observed violations in the <i>Alleged Violation</i> presented by Dent, there are a dozen Agency (odor) <i>Complaint Report Forms</i> that note violations were "found." Circumstances leading to odorous conditions include system failure, deliveries of "smelly" sludge, landfill project work, and inadequate cover.

1			
2	As you review the details of these violations, keep in mind Marcella Dent's assertion that there		
3	has been " <i>no formal enforcement action taken</i> ." This begs the question of why rules, regulations		
4	and permits exist if there is no enforcement of them.		
5			
6	Certainly the Commission understands that the environment and citizens of Vermont are put at		
7	risk when an Agency that claims to "promote the sustainable use of Vermont's natural resources.		
8	protects and improves the health of Vermont's peoples and ecosystems, and promotes sustainable		
9	outdoor recreation." turns a blind eve to environmental violations and takes no formal actions.		
10			
11	Nor are the citizens served by an Agency that makes use of technicalities – formal vs. informal,		
12	and "alleged" as opposed to confirmed – in communications as a means to safeguard an operation		
13	that is in clear violation. While we have an appreciation for the legal implications of language,		
14	alternative phrases referring to "actions taken," "confirmed violations," and/or "violations found"		
15	is appropriate and accurate terminology.		
16			
17	For a "violation" is a "noncompliance with one or more of the statutes specified in 10 V.S.A.		
18	8003 or any related rules permits, assurances, or orders."		
19			
20	And as such, each violation is subject to civil penalties of up \$85,000 for each initial violation		
21	and up to \$42,500 for each day a violation continues, 10 V.S.A. 8221(b)(6).		
22			
23	Below are a few examples of the "violations" noted in ANR documents pursuant SWMR 6-		
24	701(6), all of which resulted in emissions and/or discharges that threatened public health and the		
25	environment. Additional violations can be found in <i>Exhibit 2: Violations Cited</i> with the		
26	corresponding documents as noted.		
27			
28	• 2- <i>Violation(s)</i> Found – <i>Voluntary</i> Correction after contact 12/16/2011 <u>Flare and gas</u>		
29	energy plant shut down. Tests show 9 locations where methane concentrations are higher		
30	than 500 ppm. (Note this is 10 times higher than the standard of 50 ppm.) Phase IV Cell		
31	2A methane levels measure at 63,000 ppm. LPG bubbling out of landfill surface. Side		
32	slope riser pipe not connected to gas collection system. Casella admits odor problem due		
33	to plant shut downs and increased acceptance of sludge. Shut downs occurred on		
34 25	June 9, Dec. 1, and Dec. 11. (Document #25/15)		
35	= 2 V' L' () E L N A' T L (L L C L) + 5/2/2012 + NOTE O L.		
30	• 5-c violation(s) Found – No Action Taken (lack of evidence) 5/5/2013 <u>NOTE: Odor</u>		
3/ 20	was confirmed by fandfill staff: wingwas able to smell a gas odor at her residence.		
38 20	They were digging in the fandrin to $\underline{\text{IX}}$ a leachate breakout. while: the previous gas issues have been received. (Decument #13EC00200)		
39 40	issues have been resolved. (<i>Documeni #15EC00290</i>)		
40 41	• 2 Violation(a) Found Voluntary Connection after contact 6/10/2012 Londfill stoff		
41 12	• 2 <i>Violation(S) Found</i> – <i>Voluntary</i> Correction after contact [0/10/2015] Landini stati pose probable causes for oder: Lenny almost sure oder is due to sludge as Trich reports		
42 12	following a truck that was reaking. John Gay says it could also be gas. Gas Pipe Issue		
45 //	"Our operators accidentally nicked a 6" gas pine on top of the landfill where we are		
44 15	our operators accuentary model a of gas pipe on top of the tangit where we are		
45 46	not he lit (Document #13FC00440)		
47			
48	• 2 Violation(s) Found – Voluntary Correction after contact 12/31/2017 Failure of gas		
49	management systems due to cold weather. Flare and vacuum on system restored on		
50	1/2/2018 after failing on $12/31/2017$ Gas to energy plant expected to be back online		

1	1/3/2018. SWMR 606 (b)(2)(j) Facilities shall assure the control and treatment, if
2	determined necessary by the Secretary, of gasses resulting from the decomposition of
3	wastes to prevent hazards to public health and safety, the environment, or the creation of
4	a nuisance. (Document #18EC00005)
5	
6	Failure to Operate and Maintain a Landfill Gas Collection
7	and Control System that Effectively Captures Landfill Gas
, 0	and Control System that Effectively Captures Landini Gas
0	Occurring between 2011 and 2019 all of the above listed violations involved air pollution, either
9	due to foilunes of the see monocompart system on d/on the syncome of loophate to the environment
10	due to failures of the gas management system and/or the exposure of feachate to the environment.
11	I nrough the years, NEWSVI's efforts have been insufficient to ensure that the landfill gas
12	collection system operates properly and effectively. In fact, there have been six occasions, of
13	which we know, when the systems completely failed in as many years, including the inability to
14	light the flares.
15	
16	While surface emissions most likely varied, there is evidence that methane levels were beyond
17	the compliance point of 50 ppt in 2011, and most likely reached above compliance levels on
18	several of the other occasions when the gas management system shut down and the flares were
19	not lit.
20	
21	There are numerous other occasions when gas emissions were caused by the landfill. In addition
22	to the ones we outline here, we ask the Commission to take note of other system failures noted
23	throughout this testimony.
24	
25	John Gay of NEWSVT writes in an e-mail dated April 13, 2012 (Exhibit 28):
26	John Guy of (12,05,07) writes in an e-mail dated ripin 13, 2012 (22,000, 20).
20	"Over the last week we have attempted to clear a main gas header _ what we
27	thought was debris turned out to be a crushed nine. This header is the primary
20	indugiti was debits turned but to be <u>a crushed pipe</u> <u>It is neader is the primary</u>
29	<u>extraction point</u> for Frase IV which is <u>the area of the tanafiti we have taentified</u>
30	as the likely source for offsite emission.
31	
32	During the day on the dates $(4/4-0, 4/11-12)$ we had to reduce the gas flows by
33	an average of about 1,100 scfm to perform the cleaning/camera work which
34	could have caused off site emission (odor)."
35	
36	On Sept. 5, 2014, John Gay writes to Mayor Paul Monette after the Mayor had made odor
37	complaints (<i>Exhibit 29</i>):
38	
39	" gas pressure built up over the preceding hours and because the valve was
40	closed did not get collected into the collection system; <u>the result was a release of</u>
41	<u>gas."</u>
42	
43	In hand written notes from a meeting (<i>Exhibit 30</i>) that occurred on Sept. 8, 2014, in which Barb
44	Schwendtner and Jeff Bourdeau were in attendance, it states:
45	···, · ·····
46	"I year ago, had huge odor problem. One major trunk line collapse
47	- year ago, naa nage oaor problem. One major ir ante une conapse.
48	Not only do these system failures and gas exceedances create a pattern of unreliability going
19	forward, but they violate the Vermont Solid Waste Management Rules.
	for ward, but they violate the vermont solid waste waltagement Rules.
50	

1	SWMR $606(b)(2)(j)$ Facilities shall assure the control and treatment, if		
2	determined necessary by the Secretary, of gases resulting from the decomposition		
3	of wastes to prevent hazards to public health and safety, the environment, or the		
4	creation of a nuisance.		
5	SWMP $606(h)(2)(H)(y)$ Demonstrate that the facility landfill can collection		
0	SWMR $000(D)(Z)(H)(V)$ Demonstrate that the facility landfill gas concerned as a system is adequate to collect and destroy additional landfill gas concreted as a		
/ 0	system is duequate to contect and desiroy dualitonal landfill gas generated as a negative of additional liquide. The applicant shall include estimates of age		
0 0	production resulting from changes in operations		
10	production resulting from changes in operations		
11	In support of DIMP's assertions, here are the particulars of landfill gas and its impact, according		
12	to the ANR.		
13			
14	• I andfill gas is created as solid waste decomposed in a landfill. I andfill gas		
15	consists of nearly 50 percent methane and 50 percent carbon dioxide and water		
16	vapor as well as less than 1% non-methane organic compounds (NMOCs) small		
17	amounts of nitrogen, oxygen and hydrogen, and trace amounts of inorganic		
18	compounds.		
19			
20	• NMOCs in landfill gas include compounds recognized by the federal		
21	Environmental Protection Agency (EPA) and ANR as hazardous air pollutants,		
22	exposure to which may result in adverse health effects.		
23			
24	• NMOCs in landfill gas include volatile organic compounds which can react with		
25	sunlight to form ground level ozone (smog).		
26			
27	• The release of methane and carbon dioxide in landfill contributes to global		
28	warning.		
29			
30	 Some of the compounds in landfill gas <u>have strong odors even at very low</u> 		
31	concentrations. The odorous compounds include sulfide (hydrogen sulfide,		
32	dimethyl sulfide, and mercaptans) and ammonia.		
33			
34	• Methane released to the atmosphere has the potential to trap 86 times more heat		
35	than carbon dioxide over a 20 year period and 34 times more heat than carbon		
36	dioxide over a 100 year period making it a much more potent greenhouse gas.		
37			
38	Rebuttal Continued: Violations Merited		
39			
40	When considering complaints that should have garnered violations, we ask that the Commission		
41	take into account the fact that oversight is lacking. By its own admission, the Agency cannot		
4Z 42	make unnery investigations due to distance and nours of operation.		
43 11	Park Schwandthar, as documented in complaint forms, evolving these facts to complainents		
44 15	Darb Schwendther, as documented in complaint forms, explains these facts to complainants		
45	24/7 Unfortunately the residents do not get to choose the time they are impacted by odors		
47	$2\pi/r$. Onorthinatery, the residents do not get to enouse the time they are impacted by 00018.		
48	And while it is understandable that one person is not able to perform the necessary investigations		
49	(necessary by virtue that the ANR requires a violation be confirmed through an investigation), it		

1 2 3	is not accep stipulations	otable that the State does not provide adequate resources to follow through on its own .
4 5 6 7	In essence, an unfair an nuisance od	citizens are encouraged to inform the landfill and Agency of odors to no avail. This is ad unacceptable situation for residents who have been forced to endure objectionable lors for more than a decade.
8 9 10	The Agency inaccurate a	y's lack of ability to provide adequate investigations and oversight contribute to an assessment of the seriousness of the odor problem and resulting undue air pollution.
10 11 12 13 14	A variety of violation du odors were well as proj	f circumstances were acknowledged in connection with odor complaints that merit a ne to attributable evidence in lieu of an onsite investigation. Circumstances include actually confirmed (5 instances), and weather patterns consistent with impact (6), as ect work (5), and sludge deliveries (3) that coincided with complaints.
15 16 17 18	Note that in complaint a complained	a some of these situations, multiple elements are acknowledged and serve to confirm a us valid and meriting a violation. There was also one situation in which three people in less than an hour.
19 20 21 22	We list here coinciding	e just a few examples, with the remainder listed in <i>Exhibit 7: Violations Merited</i> with the noted documents.
23 24 25 26 27 28 29	a)	May 1, 2014 <i>Had to close windows on Main and School in Newport because it's pretty nauseating.</i> Email from Kirsten Sultan explains: "There were some <u>specific mechanical issues that led to specific odor emissions.</u> The bottom line is that the systems at the landfill and methane recovery plant are very complicated and sensitive, occasionally the system malfunctions. They have isolated one problem (a particular valve or sensor ?) within the complex system and are in the process of completed replacement/repair of the component." (<i>Document # 14EC00309</i>)
30 31 32 33 34 35 36 37 28	b)	Sept. 2, 2014 <i>Newport mayor reports 3 residents on West Side complain of foul odors.</i> Landfill staff hypothesize two plausible causes: 1) A gas wellhead was closed too much during Sanborn Head's balancing on Friday, <u>causing odors to sneak out around the cap.</u> 2) <u>More cover is needed</u> since waste is sitting there for a longer period. On Saturday, they only took two loads of C&D from Austin's. Will use an extra 10 inches of cover on Friday at the close of business. (<i>Document #14EC00759</i>)
39 40 41 42 42	c)	March 20, 2018 Complainant believes it is gas odor, smells toxic. He <u>noticed a</u> <u>large white plume near the plant</u> . Wondered if it was related. It was totally vertical. Also mentions odors woke him up at 1 or 2 a.m. two weeks ago on a Monday. (Document #18EC00173)
45 44 45 46 47 48		Schwendtner informs Wakefield & Shepard of air complaint. "Just FYI: Air needs at least 2 complaints to have authority as public nuisance." <i>NOTE: On several occasions there are two or more complainants, but Wakefield & Shepard, nor anyone else, is informed.</i>
48 49 50 51		There was no wind. Schwendtner explains to Sam Wiggett that the <u>weather</u> conditions are allowing odors to travel as a block without getting broken up by wind, so it may not take much to cause impacts. Wiggett reports they have been installing 3

1 2 2		new horizontals in the last few weeks and installed a new vacuum line that was hooked up Friday.	
5 /		(We note a pattern of complaints attributed by landfill staff to project work or	
4 5 6		<i>construction at the landfill.</i>) Schwendtner suggests: Since more gas construction is planned in upcoming days, that they inform the complainant.	
7 8		Schwendtner also reminds Wiggett of previous construction when a valve got left in	
9 10		the wrong position, and suggests he inspect to make sure something has not been missed.	
11			
12	d)	April 25, 2018 Awfullest air on the planet why do we have to live this way" Text	
13		missed and not relayed until April 27. Schwendtner notes wind speed and direction	
14 15		were consistent with possible impacts on Maple Ridge. (Document # 18EC00457)	
16		Schwendtner states they have never confirmed odors at this site: Maple Ridge. It's	
17 18		pertinent to note that there have been several confirmations on Lawson Ridge, beyond Maple Ridge:	
10		• Complaint Forms: 13EC00290 13EC00449 13EC00574 14EC00382	
20		• Comptaint Forms. 151C00270, 151C00447, 151C00574, 141C00562.	
21		In addition, in the weeks following the April 25 complaint, there are multiple	
22		confirmations of odor on the ridges:	
23		• 18EC00808.	
24		• Landfill complaints dated 5/17/2018 (Document L-18EC07), 5/30/2018	
25		(Document L-18EC08), and 6/11/2018 (Document L-18EC014).	
26		• Emails between Barb Schwendtner and Jeremy Labbe between June 7 and	
27		June 15, 2018. (Exhibit 28)	
28			
29 30	(e)	July 31, 2018 Complaints from three different people on ridges between 8:45 and 9:21 a m	
31		Despite three complaints, landfill staff did not detect odors. How many people	
32 33		have to complain before Agency recognizes there is a problem? (<i>Documents</i> : # $18EC00917$ #L-EC017 #L-EC018 #L-EC019)	
34			
35		Failure to Prevent Nuisance Odors	
36 37 38 39	All complaints detailed in sections titled <u>Violations Cited</u> and <u>Violations Merited</u> , including those listed in the accompanying documents, collectively serve to show that NEWSVT has failed to take all the necessary steps to prevent or control nuisance odors, which is a violation of SWMR 701(6).		
40	The set	al for a long has a mission of a long lifth is a more lift of the second lift is a second lift of the second	
41 42	The potential for odors becoming a nuisance at a landfill is generally present unless active steps are taken to prevent, minimize and control odors to the maximum extent possible.		
43	Section 550	10VSA and the VADCD define "air contaminant" as "dust furner mist and	
44 45	Section 552, 10V.S.A., and the VAPCR define " <u>air contaminant</u> " as "dust, fumes, mist, smoke, other particulate matter, vapor, gas, odorous substances or any combination thereof."		
46			
47 48	Section 5-2	41(1) of the VAPCR provides:	
49	"A	person shall not discharge, cause, suffer, allow, or permit from any source	
50	whe	atsoever such quantities of ' <u>air contaminants'</u> or other material which will	

1 cause injury, detriment, nuisance or annovance to any considerable number of 2 people or to the public or which endangers the comfort, repose, health or safety 3 of any such persons or the public or which causes or has a natural tendency to 4 cause injury or damage to business or property." 5 6 Almost daily, NEWSVT has emitted air contaminants from the Coventry Landfill in the form of 7 gas and/or odorous substances, including odors from gas generated by the decomposition of waste 8 and odors from biosolids and leachate loads. 9 Biosolids, also known as sludge, are nutrient rich organic matter produced at waste water 10 treatment facilities, and then shipped to the Coventry landfill. 11 12 13 According to ANR, biosolids can exacerbate the odors generated by a landfill in a number of ways, including directly, by being particularly odiferous, and, indirectly, by accelerating the 14 15 creation of landfill gas and by increasing leachate generation due to their relatively high water content, which can lead to problems with collection and control of landfill gas. 16 17 18 Sludge is connected to the cause of odors in the details of at least 16 situations, between 2010 and 2018. In particular, sludge from Manchester, N.H., Haverhill, MA, Shelburne, VT, Springfield, 19 20 MA, Essex, VT, and Rutland, VT, are noted. 21 22 In relation to an odor complaint on July 31, 2014, the landfill reported that a "stinky load" had 23 arrived from Shelburne, and that it was odorous for about 20 minutes until it was covered. 24 Schwendtner felt compelled to speak with the landfill manager about the "landfill's responsibility to reject overly smelly loads or not accept contracts for overly smelly sludge." 25 (*Document # 14EC00662*) 26 27 28 Four years later, sludge becomes such a prominent cause of odor that in the summer of 2018 it is 29 a topic of a meeting at the landfill. (Document # 18EC00769) After discussion about what constitutes an odor violation, the meeting focus turned to "sludge odors and efforts Casella 30 31 Organics is making with the WWTP generators of the sludge to control odors at the treatment 32 plants." 33 34 Residents living in proximity, sometimes not so close, have reported to ANR and NEWSVT staff that landfill odors have disrupted their quality of life and caused concern for their health. 35 36 Complaints sometimes mention odors over the past three and four years, and conditions that are 37 "eye-watering." Therefore, as previously stated, NEWSVT is in violation of SWMR 701(6) and 38 VAPCR 5-21(1). 39 40 Oversight and Enforcement Lacking 41 42 In talking with residents, we learned that many of them have called continually through the years, 43 even though their calls have not produced any results. 44 45 In several Complaint Report Forms, starting in 2010, additional and separate complaints are mentioned within detail of the complaint of record. However, there is no separate form 46 47 documenting the details of these additional complaints and related details. The lack of 48 documentation prevents an accurate and complete assessment of the odor issue and undue air pollution caused by the Coventry landfill. 49 50

1 Supposedly there were no complaints in all of 2016. We know this to be untrue. In talking with residents and business owners, we were told of their calls through the years. 2 3 4 At Blodgett's Supply in Newport, two employees - Robert Fortunati and Dave Elko - confirm that a former employee named Steve Farrar, now retired, used to keep a log of calls because he 5 called almost daily on behalf of the firm. They told us about summer days when they had to keep 6 7 overhead doors closed because of strong odors. 8 9 Farrar provided a notarized statement talking about his experience and confirming his calls. (Exhibit 29) There is no evidence of any of his calls among the ANR Complaint Report Forms or 10 confirmation of the "sludge" odors offsite that would have been violations. 11 12 13 We suspect that the lack of record keeping could be intentional, as is the misleading of the public. Jeff Bourdeau of the Agency told attendees of the public hearing held on June 21, 2018, that only 14 15 two complaints had been received. Jeremy Labbe, landfill general manager, confirms that he heard Bourdeau say this with the stipulation that Bourdeau was referring to only those complaints 16 received by ANR. His confirmation is documented along with those of two residents - Eve 17 18 Mishou Fournier and Bob Fortunati, who take issue with Bourdeau's statement – in records attached to a Complaint Form. (Document # L-18EC015) (Exhibit 30) 19 20 21 Bourdeau's statement came on the heels of 18 complaints being recorded in May through mid-22 June. Four of those complaints were confirmed, three of which were directly related to deliveries 23 of sludge. And while most of those complaints were called into the landfill, Schwendtner acknowledges 12 complaints received by the landfill between May 2 and June 14 in an email 24 dated June 14, one week before Bourdeau conducted the public hearing. (Exhibit 6) 25 26 27 If Bourdeau was truly that much out of the loop, either he should not have been the one to 28 conduct the public hearing, or he should have made an effort to be informed about such matters as 29 odor complaints. We tend to doubt he was that much out of the loop, and that the ANR communication could be that poor among its staff members. 30 31 32 We also believe the ANR records are incomplete because NEWSVT was not required to provide documentation of complaints until recently according to a November, 2018, email written by 33 34 Barb Schwendtner: 35 36 "The landfill has only been required to report odor complaints to DEC within 24 37 hours/next business day since the recent issuance of the expansion certification (see condition #42) issued on 10/12/18. Prior to that they only had to retain 38 39 records for DEC inspection, so the Agency does not have their records going 40 back 10 years." 41 42 This is significant because most people have only known to call the landfill. And often to this 43 day, they are directed to do so even by the Agency because the Agency staff is two hours away and cannot do timely investigations. 44 45 46 The Agency repeatedly tells complainants that they must call in at the exact moment that they 47 detect an odor with an explicit description, otherwise their complaint cannot be investigated. 48 However, more often than not, timely complaints are not investigated. (We count 24 complaints 49 not investigated in the records released to us, but believe this represents only a fraction of 50 complaints where there were no efforts made to verify them.)

1 Other times complaints are investigated too late, after weather conditions have shifted. 2 If complaints are investigated, the Agency most often relies on landfill staff to "sniff" out 3 4 evidence to confirm a complaint. In the majority of cases, landfill staff cannot detect odors. This begs the question, Can a staff person who has been immersed in landfill odors accurately detect 5 an "objectionable odor" offsite the same as a resident? 6 7 8 With the odor detecting abilities aside, it appears that the Agency has the fox guarding the hen house. In fact, we find 26 complaints that were left to landfill staff to investigate. 9 10 Random odor patrols are conducted with very little odor detected. With the agency "two hours" 11 12 away, patrols might seem like a good idea, but they have been infrequent and proven to be an 13 insufficient substitute for complaint investigation and verification. 14 15 An e-mail exchange between Act 250 staff members on Sept. 3, 2014, demonstrates that odors were of great concern to residents. A complaint about ongoing odors from Newport businessman 16 17 Richard Isabelle, and observing that a "Casella Smells" Facebook page has more than 100 18 members, is shared with ANR staff and discussed among Act 250 staff. (Exhibits 8, 9, 31) 19 20 As is evident with the ongoing complaints provided herein, the complaint issue is one that has 21 been ongoing for years and impacting "a number of people" without penalty to the NEWSVT 22 landfill. It is history that confirms oversight has been lacking and ineffective. 23 24 When reviewing Paragraph 21 of Land Use Permit #7R0841-8, 25 26 Permittee shall, prior to the disposal of waste into Phase IV of the landfill, 27 provide a plan, developed cooperatively with the Agency of Natural Resources, 28 for increased on-site presence of ANR Solid Waste Program staff for the purpose of enhanced state oversight of the facility. 29 30 31 one can only conclude that either NEWSVT and the Agency did not take this mandate seriously, 32 or the plan is so inadequate as to not meet the letter of intent of the permit mandate. Barb Schwendtner's repeated assertions that staff is two hours away and cannot investigate all odor 33 34 complaints confirms that this condition went unmet. 35 36 Indroductory Findings II (i) of Land Use Permit #7R0841-8 required an "aggressive 24-hour per day, motion sensitive video monitoring of the landfill facility." The Commission believed this 37 would "contribute to the long-term safety of the watershed." Monitoring data was to be made 38 39 available to "all state and federal monitoring agencies, the District Commission, and the newly 40 formed Canadian-US representative oversight committee ... " 41 42 While a system was installed, it became inaccessible at some point. In an e-mail (Exhibit 10) 43 written by David DiDomenico to Donald Hendrich on Oct. 27, 2009, DiDomenico states: 44 45 "Below is some of what I heard back from our internal enforcement person. It is difficult to investigate these types of claims without staging a person at the site 46 47 24 hours a day. 48 49 ... I remembered as I was driving in this morning, there is a video camera that overlooks the landfill. It was an ACT 250 requirement and we had access to it for 50 a while. For some reason we are not able to access it now, but we are going to 51

1 2 3	add a condition to their upcoming recertification to maintain the camera and give us access."
4 5 6 7	When taking a big picture view of the evidence presented here, it is easy to conclude that while odor control is a condition of the permit, it is not taken seriously by the Agency. And NEWSVT seems to believe that because they are "doing everything possible," residents should be understanding and tolerate odors.
8 9 10 11 12	This is an unacceptable way for a government agency and a multi-million dollar corporation to operate. And given that both have had 14 years since the last Land Use Permit was granted, there has been more than enough time to organize their operations and deal with shortcomings.
13 14 15 16 17	We can only conclude they are unable to do so, and therefore the Commission should not grant a Land Use Permit that includes a 51-acre expansion. The expansion is 6 acres larger than the previous one, and if approved, as the evidence here indicates, would guarantee greater problems and more pollution to come.
18	PART 2: WATER POLLUTION
19 20	Failure to Protect Groundwater: 10 V.S.A.6086.(a)(1) an (a)(1)(b)
21 22 23	"Groundwater is of critical importance to the State of Vermont and must be actively protected and managed in order to protect public health and welfare," pursuant to 12-302(1)(a) of the Environmental Protection Rules (GWPRS) as adopted under 10V.S.A. 1390-1394.
24 25 26	We will show ANR, as an agent of the state and the certifying agency, has been inactive in preventing "substantial harm" and "unacceptable risk" through the act of certifying continued operations of the NEWSVT landfill and its expansion.
27 28	"Substantial harm" means a deterioration of groundwater quality to a level that requires treatment to restore or maintain groundwater quality enforcement standards." GWPRS 12-302(28)
29 30 31	"Unacceptable risk" means an activity which is likely to cause or causes a ground water quality condition that reaches or exceeds one or more of the groundwater quality enforcement. GWPRS. 12-302(30)
32 33 34	Therefore, the ANR recertification of the NEWSVT operations, including the 51-acre expansion, serves as an example of the Agency's level of inactivity concerning protection of groundwater. Further support of this premise is forthcoming in the review of water quality reports.
35 36	The Commission, it its review of fact provided within, will see that NEWSVT does not qualify for a Land Use Permit under Act 250, pursuant to 10 V.S.A.6086.(a)(1) an (a)(1)(b):
37 38 39	<i>"Before granting a permit, the District Commission <u>shall</u> find that the development:</i>
40 41 42 43 44	(a)(1) Will not result in undue Water or Air Pollution. In making this determination it shall "at least" consider:soils slopesability to adequately support waste disposal: availability of streams for disposal of effluents: etc

1	(a)(1)(b) Waste Disposal. A permit will be granted whenever it is demonstrated
2	by the applicant that, in addition to all other applicable criteria, the development
3	will meet any applicable Health and Environmental Conservation Department
4	regulations regarding disposal of wastes, and <u>will not</u> involve the injection of
5 6	waste material or any toxic substances into the ground water or wells."
7	This testimony will provide evidence to the fact that "the development," known as the NEWSVT
8	Coventry landfill and its 51-acre expansion:
9 10	• Has in the past is today, and will continue into the future to allow toxic substances to
11	enter into the groundwater or wells.
12	• Is knowingly a party to inorganic toxins being poured into Vermont's rivers and lakes.
13	• Is based on questionable assumptions as to the flow of groundwater.
14	• Offers false assurances that its double-liner design does not leak or fail in any way.
15 16	Rebuttal of Solid Waste Management Facility Certification OI 510
17	FINDINGS (a): Water Pollution
18	
19	DUMP rebuts the foundation upon which the ANR based this certification as it relates to
20	FINDING (o):
21	
22	"A detailed summary of the re-certification application's compliance with the
23	requirements of applicable Rules and Procedures is in the Fact Sheet issued with
24	the draft certification."
25	
26	In referencing the NEWSVT, Inc., Phase VI Application – Fact Sheet, the ANR is in essence
27	accepting the assertions found within. For the ANR makes no qualifying statements otherwise in
28	reference to FINDING (o).
29	
30	DUMP specifically rebuts the following paragraph found on Page 4 of the NEWSVT Fact Sheet:
31	
32	"As documented by the application, the hydrogeologic characteristics, landfill
33	design and anticipated volume, physical and chemical characteristics of landfills
34	leachate, coupled with the detection monitoring of groundwater at and prior to
35	the compliance point provides sufficient support for making the determination
36	that an <u>exceedance at the point of compliance is not probable.</u> Should the
37	component of the landfill design fail, the monitoring systems in the place will
38	detect any discharge occurrence and will allow repairs or remediation to occur
39	prior to an exceedance at the point of compliance."
40	
41 42	Our reduttal includes ANK's assertion as stated in its permit certification on FINDINGS $(q)(2)$:
43	"Based on the application for certification, the proposed design of the Facility.
44	the nature of the waste disposed of and the comprehensive water quality testing
45	which occurs at the site, the Secretary has determined the activities proposed by

1 2 3	this application <u>will not</u> contribute to exceedances of the Vermont Groundwater Enforcement Standards at a point of compliance."
4 5 6 7 8 9	Prior to making these statements within the certification document, the ANR received water quality reports in 2017 and 2018 that clearly showed exceedances of groundwater enforcement standards (GES). These exceedances are an indication that contaminants are increasing and migrating to a degree that should cause alarm about the implications for water quality into the future at compliance points.
10 11 12 13 14 15	In addition, throughout this testimony, the Commission will come to realize that the water quality testing is not "comprehensive" and the design of the facility does not preclude failure as it pertains to human error. Nor does the facility design eliminate naturally occurring issues; such naturally occurring issues therefore would be representative of an "ineffective design" or construction not representative of the design.
16 17 18 19 20 21	We contend that the best predictor of future compliance is actual performance as it relates to the past and present. We will show that exceedances of the groundwater enforcement standards have been commonplace for the Coventry landfill operation, so much so that regulators have been lulled into routinely accepting such results to the degree of not giving proper thought to the implications for future impacts to public health and the environment.
21 22 23	Tests Confirm Landfill is Polluting Groundwater
24 25 26 27 28 29	Groundwater testing of the Coventry landfill monitoring wells is done on a semi-annual basis by Waite-Heindel, an environmental consulting firm hired by NEWSVT. Consecutive tests in the past five years have shown exceedances of the ground water enforcement standards for some, if not many of the substances tested. And in some of the wells, these exceedances are increasing significantly.
30 31 22	According to the Certification FINDINGS (g) the ANR stated it did not have adequate information about the quality ground water and surface water:
33 34 35 36 37	"On April 13,2017 the Agency (ANR) determined the application for the landfill expansion to be technically incomplete. The application did not contain sufficient information pertaining to groundwater quality and surface water quality at the site." (Exhibit 16)
38 39 40 41 42	While we contend that the ANR had more than sufficient information pertaining to groundwater quality in terms of Groundwater Enforcement Standards and exceedances of these standards as documented in the Waite-Heindel reports, we concur the ANR was lacking information pertaining to PFAS compounds, as these compounds have not been included in the semi-annual testing.
43 44 45 46	In support of our statements, we quote an ANR letter written by Kasey Kathan. She is writing to Joe Gay about ground water exceedances cited in the Fall 2015 Semi-Annual Water Quality Monitoring Report by Waite-Heindel (<i>Exhibit 34</i>):

1	"As is typical, <u>this recent monitoring report is consistent with previous</u>
2	observations at this site. Evidence of groundwater impact is principally
3	concentrated to the monitoring wells that are located down-gradient of the
4	<u>unlined portions</u> of the facility. Groundwater impact is indicated by the presence
5	of both inorganic and organic components mixed trends and some <u>exceedances</u>
6	of Vermont Groundwater Enforcement Standards (VGES) and there are also
7	exceedances of the Vermont Water Quality Standards (VWQS) in surface water
8	samples.
9	
10	Down-gradient of the unlined landfill (Areas A and B) the groundwater impact is
11	apparent in exceedances of both inorganic and organic contaminants at multiple
12	groundwater monitoring wells."
13	
14	Likewise, the May 2017 Semi Annual Water Quality Report is typical of the results seen in the
15	semi-annual reports in recent years including GES exceedances listed below (<i>Frhibit 17</i>):
16	sonn annuar reports in recent years, meruaning OLS exceedances instea below (<i>Lxmbu 17)</i> .
10	
1/	• Arsenic, iron, lead and manganese levels statistically exceed groundwater
18	standards in <u>many of the up-gradient and down-gradient wells</u> at NEWSVT."
19	
20	• " a few of the wells tested in exceedance for two other metals, chloride and
21	cadmium this round."
22	
23	In addition to GES exceedances, during sampling of Surface Water Station SW-3, Waite-Heindel
24	samplers noted an odor from the stream (not wafting from another location), and noted this
25	location also had higher flow in comparison to previous sampling events. (Exhibit 35)
26	
27	Waite-Heindel samplers also noted "what appeared to be Didymo at this location, a native
28	species of freshwater diatom with the nickname "rock snot" due to the dense slimy mats it can
29	form."
30	
31	Beyond increases in the exceedances of a variety of regulated contaminants, there have been
32	other indicators of water pollution. For example, in terms of the "Didymo" observed, as
33	mentioned above, the 2017 Waite-Heindel report went on to state:
34	
35	"We have not seen it to this degree before, although small amounts have been observed in the
36	past at this location. The lab results of stream water sampled at this location indicated the
37	presence of BOD, COD, several metals, and two VOCs (some were highest to date)."
38	
39	In the 2018 report, it is noted that COD exceeded the maximum allowable concentration (MAC),
40	which is the highest concentration of a pollutant to which aquatic life can be exposed for a short
41	period of time (1 hour average) once every three years without deleterious effects.
42	
43	Projections Show Compliance Wells Exceeding GESs
44	
45	Dump's contention that evidence of the current exceedances of GESs is an indication of future
46	water contamination is supported by Waite-Heindel. In 2016, Waite-Heindel made 10-vear
47	projections for GES of 22 monitoring wells located in both the lined and unlined portions of the
48	landfill.
49	

1 2 3 4	The details were contained in "Memo A" dated March 28, 2016, and sent to Kasey Kathan of ANR and Joe Gay of NEWSVT. These projections estimate that <u>up to 9 compliance wells will</u> exceed GESs within 10 years, two years prior to the end of the recertification period for <u>NEWSVT's permit.</u> (<i>Exhibit 35</i>)
5 6 7	Of the five wells down-gradient of the lined portion, half are expected to exceed GESs by 2026.
8 9 10	In addition, one well up-gradient of the landfill's <u>lined portion</u> and, up to 6 or 7 wells up-gradient in the unlined portion are expected to exceed GESs within the permitted timeframe.
10 11 12 13 14	The evidence herein sufficiently proves that the recertification of the current operations alone will lead to undue water contamination. Expansion of the landfill will only exacerbate the level and breadth of water contamination caused by the Coventry landfill.
15 16	Direction of Groundwater Flow in Question
17 18	We draw attention to these puzzling test results as stated in the May 2018 Semi-Annual Water Quality Report authored by Waite-Heindel:
19 20 21 22 23	"Arsenic within MW-D2 has increased significantly within the last several sampling rounds and has been <u>steadily increasing</u> in MW-BRW-3D <u>since it's installation in 2013</u> . Given the rising arsenic concentrations in these wells, this northeast wetland <u>region requires further consideration to determine definitive groundwater flow directions, for property boundary compliance point issues.</u> "
24 25 26	In response to this discovery of a different flow pattern, in March 2018 Waite-Heindel hand installed 9 monitoring wells in the northeast wetland in an effort to better understand the representative groundwater conditions of the NEW area.
27 28 29	FYI, MW-D2 has shown generally upward trends in the concentrations of several metals over the past years (As, Mn, Fe), as well as for several indicator parameters (COD, Na, Cl, Spec. Cond.).
30 31 32	MW-BRW-3D is downgradient from unlined Areas A and B in the wetlands and is very close to the property line. The significance of its location is that it lies outside what was believed to be the direction of groundwater flow as mapped by Waite-Heindel.
33 34 35 36	With high concentrations of Arsenic in both wells, it appears that groundwater could be flowing in the general direction from MW-D2 northeast to MW-BRW-3D, counter to what Waite-Heindel groundwater flow maps show. This brings into question the accuracy of the previously assumed flow directions of the groundwater. (<i>Exhibits 14 and 15-map</i>)
37 38 39 40	"The well <u>in the wetlands</u> MW-BRW-3D is testing very high in arsenic and has increased significantly within the last several sampling rounds and has been steadily <u>increasing since its installation in 2013."</u>
41 42 43 44 45	Due to these increased levels of arsenic, the report goes on to state, "the northeast wetlands region requires further consideration to determine <u>definitive</u> <u>groundwater flow direction</u> for property boundary compliance point issues first, determining the groundwater flow directions in the NEW region relative to the unlined landfills, Black River and property boundaries.

1	
2	Evident here is that the mapping of the groundwater flow direction, which has been used for
3	years, is now questionable. Phase V, in particular would be based on these expected flows.
4	
5	There are two possible explanations for this discrepancy. Either the map detailing groundwater
6	flow has been inaccurate for many years, or the groundwater flow has changed. Either
7	explanation is disturbing as it puts the Black River, South Bay Wetlands, Lake Memphremagog
8	and Newport City's municipal drinking water supply at greater risk.
9	
10	The fact that NEWSVT was not knowledgeable about the direction of groundwater flow as it
11	pertains to the unlined portion of the landfill is a serious matter. What they presumed to be true
12	for a long time has now been called into question. And therefore, assumptions about the
13	possibility of contaminants migrating through the wetlands and impacting the South Bay of Lake
14	Memphremagog are no longer credible.
15	
16	Migration of Leachate
17	
18	Waite-Heindel suggest leachate migration is the <u>"likely cause"</u> of exceedances of GESs in three
19	wells, as stated in the May 2017 semi-annual report:
20	"The statistical exceedances of groundwater standards for organic compounds in
21	MW-A1, MW-D2 and MW-F1 are likely the result of migration of leachate
22	from the Unlined Landfill Areas A & B." (Exhibit 17)
า ว	Vacaning in mind the lock of anoundruster flow accuracy shown in this area as described shows
23	this migration of loophoto is not more than a the risk of under motion that
24 25	and extend to the Plack Piver, which creates the compliance houndary. The threat groups in
25	could extend to the Black River, which creates the compliance boundary. The threat grows in
20	magnitude at this point due to the Black River nowing into Lake Mempinemagog.
27	In addition, according to the problematic examples of Casella's landfill failures (Exhibit 1), we
28	count 10 individual reports involving leachate contamination of water due to a variety of
29	operational issues. One example involved leachate being dumped intentionally through the years.
30	
31	Leachate Cannot be Treated
32	
33	The applicant does not meet the criteria pursuant to 10 V.S.A.6086 (1) (b) as it pertains to
34 25	leachate:
35 26	"Waste disposal A permit will be granted whenever it is domonstrated by the
20 27	waste alsposal. A permit will be granied whenever it is demonstrated by the applicant that in addition to all other applicable criteria, the development or
38	subdivision will meet any applicable Health and Environmental Conservation
39	Department regulations regarding the disposal of wastes, and will not involve the
40	injection of waste materials or any harmful or toxic substances into ground water
41	or wells."
42	
43	NEWSVT is the producer of and a party to the disposal of leachate. And in that capacity,
44	NEWSVT has not taken responsibility to contribute to the safe disposal of leachate. NEWSVT
45	trucks leachate to Newport and Montpelier wastewater treatment facilities with full knowledge
46	that these facilities cannot filter out the PFAS compounds.

It is accepted by the Vermont Agency of Natural Resources and the Department of Environmental Conservation that Waste Water Treatment Facilities cannot effectively treat inorganic material or
PFAS.
Attachment A of the Responsiveness Document compiled by the ANR in connection with the permit certification states as much:
"Conventional WWTF treatment processes do not efficiently remove PFAS;
WWTF treatment processes can lead to physical or chemical partitioning of the
various PFAS compounds into either the treated liquid (effluent) or into the
solids (sludges) which then may serve as sources of PFAS to the environment."
(Exhibit 21)
In addition, Sen. Christopher Bray, chair of the Senate Natural Resources and Energy Committee,
sought some answers from Tom, DiPietro, Deputy Director of Department of Public Works in
South Burlington. (<i>Exhibit 33</i>)
Bray asked, "Are waste water treatment plants designed to handle PFAS and to detoxify it before
discharging?"
To which DiDietro replied "No Typical processes used to treat wastewater are not affective in
removing PEAS "
In support of DiPietro's answer. Chief Operator Christopher Cox agreed that the Montpelier
Water Resource Recovery Facility he operates passes the PFAS compounds through to the
Winooski River in its effluent.
The inability of the wastewater treatment facilities to filter out PFAS compounds results in these
toxic substances being dumped directly into the Clyde and Winooski rivers, which then feed into
Lake Memphremagog and Lake Champlain.
While the ANR and NEWSVT will argue that the effluent meets standards, what they are not
stating is that dilution is used to meet standards. This is problematic because of the nature of
PFAS compounds, which are inorganic. Simply said, they don't break down. And due to their
soluble nature, they become invisible to the human eye, and allow for the deception of dilution
being effective.
Decays DEAS compounds don't break down, they remain in the environment for years and
accumulate over time, according to the EPA among other sources
accumulate over time, according to the Er A among other sources.
To illustrate this point consider salt, which is also soluble. If you put a tablespoon of salt into a
glass and then drink it you are consuming a tablespoon of salt though the amount is not visible
If you add another tablespoon of salt to the glass of water, the accumulation will equal two
tablespoons no matter how large your glass of water and the level of dilution.
If the Commission grants NEWSVT a land use permit, they are sanctioning the production of an
additional 264 million gallons of toxic leachate on top of the millions already produced annually.
The accumulation of PFAS compounds over time will contribute "undue water pollution" not just in the North East Kingdom, but throughout Vermont. As the producer of this toxic liquid and the

1 benefactor of profits from the landfill, NEWSVT should bear the responsibility for the treatment 2 and safe disposal of leachate for years to come. 3 4 Danger of PFAS Compounds Ignored 5 6 In recent years, according to Battelle, the world's largest nonprofit research and development 7 organization with major technology centers and national laboratories around the world, there has 8 been increased interest in per- and polyfluoroalkyl substances (PFASs) from regulators, industry and the public. And for good reason: many of these chemicals have been shown to be highly 9 10 persistent in the environment and in biological tissue, and have been correlated with negative health impacts. 11 12 13 Perfluorinated alkylacids are the highly persistent PFAS chemicals that are further classified 14 according to the functional groups attached to the perfluorinated carbon chain. Commonly detected perfluorinated alkylacids include Perfluorooctanoic acid (PFOA), the most commonly 15 16 detected of the compounds. 17 18 The debate concerning PFAS compounds is framed as to how much is safe. The more accurate 19 and honest portrayal of the current debate by regulators is how much can a human body withstand 20 before people become critically or deathly sick; anything less is therefore being interpreted as "safe." 21 22 23 Let's not kid ourselves, toxic is toxic, there is no level that is safe. We should not employ the same lengthy and unhealthy learning curve that we did with nuclear waste, DDT, lead paint and 24 25 various other contaminants. It is not responsible to "wait and see" when the circumstances, including lack of knowledge, put at risk the public's health. 26 There have been attempts to get the public to think that the clear waste water, containing PFAS 27 compounds from leachate, which emerges as effluent at wastewater treatment facilities is safe. 28 29 One person actually drank some to make the point. However, as previously stated, PFAS is inorganic, which means it doesn't break down. Second, PFAS is soluble, it dissolves and becomes 30 invisible just as salt does when put in water. We all know that while the water may appear clear, 31 32 the salt is still there. The same is true of PFAS, it remains though it is invisible. And over time it 33 accumulates. 34 ANR admits that more evaluation of PFAS compounds is needed and a safe method for treating 35 them has yet to be determined. This admission is found in the Responsiveness Summary, 36 Attachment A, on the last page of a Memo titled: Next Steps to Address Concerns Regarding 37 Poly- and Perfluoroalkyl Substances (PFAS) in Landfill Leachate (Exhibit 25): 38 "Utilizing PFAS concentrations measured at the Newport WWTF, the DEC has 39 calculated likely receiving water concentrations of PFAS downstream of the Newport WWTF within the Clyde River. These calculations show that the PFAS 40 41 concentration within the Clyde River would be lower than Health Advisory for drinking water (20 ppt) as established by the Vermont Department of Health. 42 Notwithstanding these initial findings, the DEC has concluded additional 43 44 evaluation of landfill operations and leachate management is appropriate to minimize potential impacts on local receiving waters." 45

1 2 3	Standards for PFAS compounds are limited and not based on adequate research. Therefore these standards cannot guarantee safety at any level. Furthermore, health standards, which vary from state to state, cannot be relied on to protect the public's health.
4 5 6 7 8 9	The EPA concurs that further study of PFAS compounds is needed, and is taking a serious attitude toward such research. In an unprecedented national summit hosted by the EPA in May, 2018, the EPA announced it is beginning the necessary steps to propose <u>designating PFOA and PFOS as hazardous substances</u> through one of the available statutory mechanisms through the Super Fund Law. <u>https://www.epa.gov/newsreleases/historic-epa-summit-provides-active-engagement-and-actions-address-pfas</u>)
10 11 12 13 14 15 16 17 18	<u>Rebuttal of Responsiveness Summary As it Relates to PFAS Analysis</u> In Amendment A of the Responsiveness Summary (<i>Exhibit 22</i>), the ANR makes a misleading statements, claiming that the results of PFAS analysis of the NEWSVT landfill and the Newport waste water treatment facility <u>are similar</u> to other like facilities tested around Vermont. This statement is misleading because it omits an important distinction made by the Weston & Sampson report.
19 20 21 22 23 24 25 26 27	"In January 2018 DEC obtained samples for PFAS analysis of landfill leachate and wastewater treatment facility (WWTF) influent, effluent and biosolids from all (five total: NEWSVT, Moretown, Randolph, Chittenden Solid Waste District and Burlington City) of the lined landfills in Vermont, and the Vermont WWTFs (six total: Montpelier, Newport, Burlington Main, South Burlington Airport, Barre and Randolph) that manage leachate from those facilities. This sampling included leachate from the New England Waste Services of Vermont landfill (NEWSVT) and the Newport WWTF." (Exhibit 22)
28 29 30 31 32 33	"The concentrations detected within the NEWSVT landfill leachate and at the Newport WWTF <u>are similar to the detections and concentrations at the other</u> <u>lined landfill facilities and WWTFs tested within Vermont</u> and other published concentrations. The mean concentration of PFOA within Vermont leachate was 1,295 ppt (maximum: 2,110 ppt) and the mean concentration of PFOS within Vermont leachate was 183 ppt (maximum: 278 ppt)". (Exhibit 21)
35 36 37 38 39	In rebutting this statement, we reference the conclusions from the actual report as submitted by Weston & Sampson on May 3, 2018. More complete than the ANR statement, Weston & Sampson conclude the concentrations detected at NEWSVT top the levels detected at the landfills. " <i>PFAS concentrations in landfill leachate are elevated with <u>the highest concentrations at the NEWSVT landfill</u>". (<i>Exhibit 23</i>)</i>
40 41 42	In terms of the waste water treatment facilities, Weston & Sampson conclusions are considerably different than what those of the ANR.
43 44 45 46 47	"Overall, PFAS concentrations in influent and effluent samples were generally less than 10ng/L. At <u>Montpelier and Newport, PFAS concentrations were higher,</u> but still less than 100 ng/L."

1	"The difference between influent and effluent concentrations are generally small $(<5 \text{ mg/L})$ are ant for at the Newport WWTE where detected effluent
2	(<5 ng/L) except for at the Newport WWIT, where detected efficient
3	concentrations are 18 to 75 ng/L higher than influent concentrations
4	Additionally, the AND Decrementary server a Considient study to report on how the
5	Additionally, the AINK Responsiveness Summary uses a Canadian study to report on now the
0	mean value concentrations and nignest concentrations of PFAS compounds from 28 fandifies
/	vary. In doing so, they misrepresent now the study results relate to Vermont findings.
8	
9	A Canadian study reported mean concentration value of a number PFAS
10	compounds from 28 landfills to be 2,950 ppt, with the highest concentration
11	report at 21,300 ppt (Li et al., 2012). Work by Busch et al. (2010) evaluated the
12	concentration of individual PFAS compounds within landfill leachate and
13	observed a mean PFOA concentration of 197 ppt (maximum: 1,000 ppt) and a
14	mean PFOS concentration of 97 ppt (maximum: 1,500 ppt)." (Exhibit 22)
15	
16	The ANR goes on to state that "the mean concentration of PFOA, which is just
17	one PFAS compound, within Vermont leachate was 1,295 ppt (maximum 2,110
18	ppt) and the mean concentration of PFOS (just one of PFAS compounds) within
19	Vermont leachate was 183 ppt (maximum: 278 ppt).
20	
21	To be clear about this spurious statement, the ANR is talking about two different and individual
22	contaminants as opposed to a collection of contaminants making up the concentration of PFAS
23	compounds referred to in the Canadian study. The accumulative level of several contaminants
24	would likely be greater than any individual contaminant.
25	
26	what the ANK fails to say is that <u>PFAS detected at NEWSVI was higher than all 28 landfills</u>
2/	included in the Canadian study. On page 9 of the weston & Sampson Report (<i>Exhibit 24</i>), the
20	table of results shows the total <u>PFAS at NEWS V1 is actually 24,000 lig/L of ppt., 5,500 ppt</u>
29	ingher than the highest concentration detected at the Canadian fandrins.
50 21	As shown throughout this testimony. AND habitually distorts the facts by leaving out conclusive
21 21	As shown unoughout this testimoly, ANK habituary distorts the facts by leaving out conclusive information or summarizing by using general terms that are not true to the word of the actual
22	reports
37	Teports.
25	We urge the Commission to recognize the difference between the facts and ANR's
36	misrepresentation of them. The PEAS detected at the NEWSVT landfill is clearly significantly
37	higher than what is detected at other landfills
38	ingher than what is detected at other fandrins.
39	PEAS Testing Incomplete and Inconclusive
55	<u>11110 Testing meonprete und meonerusive</u>
40	PFAS has already been detected in groundwater monitoring wells at the Coventry landfill,
41	according to the ANR Report on PFAS Sampling at NEWSVT Landfill, dated Sept. 4, 2018.
42	(Exhibit 13) ANR requested this testing in August 2018 following a review of submitted public
43	comments. Of the six wells tested around the unlined and lined portions, PFAS was detected in
44	two, or one-third, of the wells.
45	
46	The additional testing for PFAS compounds provided valuable information pertaining to
40 //7	contaminant mobility or the migration of pollutants. However, we do not believe that the
47 10	additional tasting of walls was comprehensive arough to show the densars and degree of
40 40	additional testing of wens was comprehensive enough to show the dangers and degree of
49	ponutant migration of bour the unimed and <u>inted portions of the landfill</u> .

1	
2	Alarming Level of PFAS Warrants Additional Testing in Unlined Area
3 4 5 6 7	Sampling of MW-P2RR, located in the wetlands adjacent to the northern end of the unlined landfill, revealed dangerously high levels of two PFAS compounds: PFOA (57 ppt) and PFHpA (41 ppt). Additionally, PFHxS was measured at 18 ppt. Collectively these PFAS compounds totaled 116 ppt, exceeding Vermont's safety standard of 20ppt by almost six times. <i>(Exhibit 13)</i>
8 9 10 11	The ANR diminishes the implications of this test result by noting that MW-P2RR is located on the landfill property, which serves as a compliance point for the unlined landfill. We take issue with this premise for several reasons:
12 13 14 15	• The direction of the groundwater flow in this region is under question, as was established previously.
16 17 18 19 20	• There is an information gap because no down-gradient wells were tested, including those down-gradient and closest to MW-P2RR, despite detection the highest concentration of PFAS compounds. The wells that we believe should be tested include: MW-B1, MW-A1, BR-W1, and BRW-2R.
21 22 23 24 25	• Using the property line, <u>which abuts the Black River</u> , as the compliance point is irresponsible and contrary to global knowledge about unlined landfills. All agree that unlined landfills are <u>significantly less safe</u> than lined landfills, and yet the ANR has allowed the Coventry landfill to be in compliance without a buffer to protect the Black River.
26 27 28 29 20	Despite historic practices, the Commission needs to give serious consideration as to why no buffer is required of an unlined landfill when one is required for the "state of the art" lined landfills?
30 31 32 33 34 35 36 37	We remind the Commission that Vermont's Act 78 called for the closure of 58 unlined landfills across the state of Vermont due to the environmental hazards they posed. And although these landfills all had caps installed after their closures, most are unlined underneath. This means that once water infiltrates the caps of these landfills, leachate can readily pollute the area's groundwater, according to a 2014 University of Vermont (UVM) study of the closed landfills. (<i>Document 1 UVM</i>)
38 39 40 41	In the 2014 UVM study, a calculator was developed to assess the risk to the environment posed by each of these landfills. The Coventry Landfill score was rated <u>"High Risk"</u> with a "High Reliability" score.
42 43	There is already evidence of leachate migration from the unlined portion. And while to some degree this is expected, we cannot let that skew the assessment of how dangerous this is to the

44 waters of this region. Once leachate, containing PFAS compounds, comes in contact with the

1	Black River, the domino effect will take over and consequences will be costly, both to the public
2	health and the environment. Leachate migration must be a top concern.
3	
4	NEWSVT has not thoroughly evaluated the potential impact of perfluoroalkyl and
5	polyfluoroalkyl substances (PFAS) on groundwater or the public's health. Although the permit
6	certification requires testing going forward, a permit should not have been issued. For a long line
7	of Act 250 precedents prohibit "conditions subsequent," or impermissible substitutes for
8	affirmative evidentiary proof that the standards of Act 250 criteria are satisfied prior to the
9	approval of a project.
10	
11	PFAS Detected in Well on Compliance Boundary of Lined Landfill
12	
13	The second groundwater monitoring well that showed levels of PFAS was MW-E1, which is
14	down-gradient and right on the compliance boundary of the lined disposal cells. PFAS was
15	measured at 6.7 ppt. And while that is below the Vermont safety standard, it is an indicator of
16	ground water quality issues to come. (Exhibit 13)
17	ground water quality issues to conter (2.0000 re)
18	Considering buffer zones are only required to be 300 feet, it is significant to note that MW-E1 is
19	400 feet downhill from Phase IV. The fact that it is located in a wetland discharge zone provides
20	additional concern.
21	
22	The location of MW-E1 in relationship to Phase IV is evidence of contaminants migrating a
23	significant distance from the lined landfill. The close proximity to the compliance boundary,
24	combined with the distance the contaminants have already migrated, indicate that groundwater
25	quality beyond the compliance points will be impacted at some time in the future, probably the
26	relatively near future.
27	
28	It is alarming that none of the wells located down-gradient of MW-E1 was tested in order to
29	determine that no wells beyond the compliance point have been contaminated. In particular, the
30	two wells that should be tested are BRW-8S and BRW-9S. They are located in the buffer zone
31	next to the property line, which is the Black River.
32	
33	MW-E1 is directly downgradient of the 45-acre Phase IV portion of the lined landfill, which is
34	the newest phase permitted in 2004. So in the span of the less than 14 years, a significant level of
35	PFAS contaminants is being detected 400 feet from the lined portion of the landfill.
36	
37	Additionally, when considering the migration distance of these PFAS compounds, it can be
38	concluded that NEWSVT <u>cannot prove</u> that the groundwater enforcement standards <u>will not</u> be
39	exceeded at compliance points related to both the lined and unlined portions of the landfill.
40	For this reason, it is not prudent or precautionary for Commission to issue a land use permit for
41	the continued operation of the Coventry landfill, much less a 51-acre expansion.
42	
43	
44	

1	EPA States Landfill Liners Leak
2	
3 4 5	All landfill liners will eventually leak due to deterioration, however, leaks are also possible prior to deterioration.
6 7	According to the EPA as reported in the Rachel's Hazardous Waste News, The Environmental Research Foundation research sited these quotes from the EPA Federal Register: (<i>Exhibit 20</i>)
9 10 11 12 13	"There is good theoretical and empirical evidence that the hazardous constituents that are placed in land disposal facilities very likely will migrate from the facility into the broader environment. This may occur several years, even many decades, after placement of the waste in the facility, but data and scientific prediction indicate that, in most cases, even with the application of best
14	available land disposal technology, it will occur eventually."
15 16 17 18	More immediate threats to the integrity of landfill liners are human errors in the form of mistakes made during installation in the welding of membrane sections, or the dumping of wastes that could puncture the membrane, causing leakage.
20 21 22 23	As shown previously, human error is known to cause problematic conditions at the Coventry Landfill. We remind the Commission of one in particular that is of the type that could puncture the liner.
24 25 26 27	During an inspection of the landfill on Nov. 16, 2012, solid waste program staff observed <i>"unacceptable items that could pose a threat to the underlying liner"</i> in Cell 3C of Phase IV. (Document OL510 2012,12.10 NOAV)
28 29 30 31	This particular waste had been placed in the cell on the previous day, and either went unnoticed or, was noticed and ignored. This amplifies the risk, for most likely this waste that posed a threat to the liner would have remained if it had not been for an inspection. And because inspections don't happen daily or even frequently, it remains unknown how often this is happening.
32 33 34 35	Other factors contributing to leaks can be the accumulation of waste and the pressure it creates, as well as the uneven settling common to certain types of waste, such as asbestos.
36 37 38	Taking into account all the potential ways a landfill liner can leak, we submit that it is beyond reasonable risk to allow the Coventry landfill to continue to operate or expand.
39 40	Membrane Liners Are Only As Good As Landfill Operation Allows
41 42 43	The Coventry landfill design involves a double liner system: one is a membrane and the other is the natural clay soils of the area. Both, in connection with the underground drainage system, are intended to keep leachate from entering the groundwater.
44 45 46	However, the success of such a system does not guarantee the containment of leachate. For the liners are meant to act much like bowls, holding the liquid leachate until it can be removed and

1 2 3	hauled away. In the case that the liner and system become full, the leachate would overflow, or breakout.
4	We know of one such breakout at the Coventry landfill as it was mentioned "in passing" during
5	the discussion about an odor complaint. (<i>Document 13EC00290</i>) As you consider this incident.
6	we emphasize that our records are not complete and all inclusive, and none relate to the
7	intentional documentation of such events
8	
9	Unlined Landfill Needs to be Remediated Sooner Rather Than Later
10	
11	In the 2014 UVM study cited earlier (Document UVM 1), made "recommendations showing
12	estimations of likelihood that certain actions are needed," according to the unlined landfill's
13	priority classification. For landfills with a High Reliability score and a High Risk score, as is the
14	case with the Coventry Landfill, the UVM study states restoration is likely needed.
15	
16	In addition to the exceedingly high 116 ppt of PFAS compounds found in MW-P2RR, the ANR
17	notes concern for additional contaminants in a letter addressed to John Gay of NEWSVT on Feb.
18	26, 2016. Kasey Kathan outlines the following issues concerning GESs exceedances
19	(<i>Exhibit 36</i>):
20	
21	"As is typical, this recent monitoring report is consistent with previous
22	observations at this site. Evidence of groundwater impact is principally
23	concentrated to the monitoring wells that are <u>located down-gradient</u> of the
24	unlined portions of the facility. Groundwater impact is indicated by the presence
25	of both inorganic and organic components mixed trends and some exceedances
26	of Vermont Groundwater Enforcement Standards (VGES) and there are also
2/	exceedances of the Vermont Water Quality Standards (VWQS) in surface water
28	samples.
29	"Down anadiant of the unlined landfill (Anoge A and P) the anoundwater impact
30 21	Down-gradient of the unlined tanafili (Areas A and B) the groundwater impact
33	is apparent in <u>exceedances of boin inorganic and organic contaminants at</u> multiple groundwater monitoring wells Similarly MW-P2R has seen a
22	significant increase in the concentrations of arsenic iron and manganese during
34	the 2015 sampling events
35	ne 2010 Sumpring events
36	"Of some concern are the continued inorganic contaminant exceedances down-
37	gradient of the lined portion of the facility and without direct influence by the
38	unlined portion of the landfill. While these exceedances are limited to
39	contaminants that may be attributable to naturally occurring constituents,
40	preliminary evaluation does indicate that they are above the concentrations in
41	the up-gradient monitoring wells that are available."
42	
43	Despite ANR's concerns and the Coventry landfill being scored as a "High Risk," regulators are
44	not mandating the transfer of waste contained in the unlined landfill to cells that are lined. And
45	NEWSVT has not put forth its Phase V plan for implementation, stating the firm will not deal
46	with the unlined landfill for another 18 to 20 years at a City Council meeting in Newport in
47	October, 2018.

1 2 3	The Phase V plan includes a Class II Wetlands variance. The plan is to construct Phase V immediately adjacent to the Black River wetland, including where the unlined landfill Cells A and B are now located.
4	
5 6 7	The waste containment boundary of Phase V will be closer than the minimum isolation distance to waters of 300 feet pursuant SWMR. Wetlands are considered to be "waters" in this isolation distance requirement. The sail herm along the northern side of Phase V on the Black Piver.
7 8 9	wetland will extend into this wetland.
10	Phase V cells will be constructed in the same area as BRW-3D in the wetlands. This well has
10 11 12	tested significantly higher every year for several contaminants, attracting the concern of ANR.
13	Permitting of such a plan is another example of a total disregard for established regulations as
14 15	they pertain to Class II Wetlands and regulators' responsibility to provide protection from pollution.
16	1
17 18	The main reason for the wetlands variance is that NEWSVT has stated that <u>an alternative plan to</u> locate Phase V to another area would not be cost effective. Considering they may not be able to
19 20	afford such a project in the future, NEWSVT's financial considerations should not be the Commission's main concern.
21	
22 23	We ask that Commission address this gross misstep. For we would hope that the public's health and environmental protection are not foregone in the interest of a private corporation's profit
24 25	margins.
26 27	No Insurance for the Future
28 29 30	Most of us have values that incorporate our responsibility to future generations. We do not believe in creating disastrous conditions and leaving them for our grandchildren to clean up. The Coventry landfill falls within the realm of disastrous conditions.
31	
32 33	Creating trash mountains that rival the size of some of the worlds treasures, such as the Eiffel Tower and the Pyramid of Giza, will not leave the kind of legacy any of us would so choose. For
34 35	it is, and will continue to be, harmful to the environment, and therefore negatively impact all future life.
36	
37 38	There is no guarantee it will not. In fact, Casella openly admits it may not be able to insure against environmental impacts. As much is stated in its 2017 Annual Report
39 40	(<u>https://ir.casella.com/static-files/4616233c-eb60-4650-ae5d-b4b3a02af980</u> (page 23):
41	"We may not have sufficient insurance coverage for our environmental
42	liabilities, such coverage may not cover all of the potential liabilities we
43	may be subject to and/or we may not be able to obtain insurance
44	coverage in the future at reasonable expense, or at all."
45	
46	Considering the evidence presented within this testimony of Casella's inability to manage the
47	landfill without ongoing issues that threaten the public's health and the environment, this is a
48	fact, that in and of itself, should warrant the Commission to cut Vermont's losses and call for a
49	closure plan of the entire landfill, lined and unlined. To do otherwise, is subjecting the citizens
50	of Vermont to risks that are beyond reason.
51	

1	And though, as stated, Casella's admissions concerning insurance are enough justification to
2	stop the landfill expansion, we must inform the Commission that there is more to take into
3	account when considering the risks of allowing Casella to continue to operate in Vermont.
4	
5	In the Land Use Permit #7R0841-8, Condition #26, the Commission required a plan to recap
6	the unlined portion of the Coventry Landfill:
7	
8	"Permittee shall, within six (6) months of the issuance of this permit,
9	submit all necessary permit applications and support documents
10	necessary to gain ANR and Act 250 approval for the transfer of waste
11	contained in the unlined landfill cells (known as the Nadeau unlined cells
12	"A & B") to cells that are lined."
13	
14	A Hydrogeological Site Characterization was done by Heindel and Noves Inc. dated May 11
15	2005 as part of the proposed Phase V application process. We ask the Commission to note the
16	following statements as they will have bearing on conclusive statements about risk
17	Tonowing statements, as they will have bearing on conclusive statements about lisk.
10	"The waste containment boundary of Phase V is proposed to be located
10	at distances rancing from 125 feet to 220 feet from this northeast
19	ai aistances ranging from 125 feet to 220 feet from this northeast
20	wellana.
21	"Western de mus souri dans d'ha SWAD to ha "Suntane" in this is a lation
22	weitunds are considered by the SWMP to be waters in this isolation
23	aistance requirement.
24	"W. I. was not some date date date its date mention date and date and all
25	we nave not conducted a detailed numerical modeling of potential
26	groundwater impacts from a theoretical leak from the liner system if an
2/	alternative Phase V were constructed with more than 300 feet of
28	<u>isolation distance to the wetlands. NEWSVT has indicated it cannot cost-</u>
29	<u>effectively construct such a small lined cell</u> ."
30	
31	Casella clearly states it cannot meet Condition #26 if it is held to the State's environmental
32	standards because it is not cost effective. We believe any concern for cost effectiveness should
33	not be remiss in weighing those concerns against the costs of having to clean up land and water if
34	polluted, along with the health care costs of citizens who could become ill as a result of pollution.
35	
36	The Commission may feel it is doing due diligence by requiring closure and post-closure funds.
37	We provide evidence that such funds are not a guarantee.
38	
39	For Casella cannot guarantee it can meet Condition #15 of Land Use Permit #7R0841-8, nor any
40	future statement as would be required of permitting of the Coventry landfill 51-acre expansion:
41	
42	Permittee shall, as per the outline provided in the Findings of Fact and
43	Conclusions of Law, create and contribute to a Post-Post-Closure Fund
44	(Fund) the purpose of which is to insure that adequate funds will be
45	available for necessary maintenance, repair and mitigation more than 30
46	vears beyond the closure of the Coventry landfill facility and operation.
47	
48	Casella, again by its own admission, may be unable to cap the Coventry landfill, unlined and
49	lined, due to lack of funds. It is factually stated in the Casella 2017 Annual Report
50	https://ir.casella.com/static-files/4616233c-eb60-4650-ae5d-b4b3a02af980 (nage 25)
51	

1 2 3	"Our financial obligations for final capping, closure or post-closure costs could exceed the amounts accrued or amounts otherwise receivable pursuant to trust funds established for this purpose."
4 5 6 7 8 9	We urge the Commission to have a good understanding of Casella's financial circumstances, taking in the level of debt when considering revenues and all of the company's obligations. We believe Casella's own statements are reason to take the precautionary path, and not approve the expansion of an already problematic and harmful development.
10 11 12	The citizens of Vermont do not deserve to have their lives and environment be so diminished in value as to have decision-makers gamble them away.
13	In Conclusion
14 15 16 17 18	For more than a decade, Coventry landfill owner, the very profitable Casella, has had the opportunity to cure the issues of its "state of the art" facility. The company has 40 years of experience in the waste management industry and owns/operates 111 waste management facilities. And yet, with all of its experience and resources, Casella has failed solve its problems here in Vermont, just as it has in many of its other operations.
19 20 21	This is not to say that the landfill staff and management have not tried. Rather their efforts have made way to landfill issues that have run the gamut of systems failure and human error, to the inability to control the stench of sludge and migration of contaminants into the groundwater.
22 23 24 25 26	And we don't kid ourselves, and hope the Commission will follow suit, when it comes to acknowledging the fact that just a fraction of the issues that are a routine part of the operations at the Coventry Landfill have been exposed. Along with the demonstration that oversight and documentation are lacking, this assertion is supported by recognizing the number of documents concerning the landfill operations are many compared to what we have included in this testimony.
27 28 29 30	It must be acknowledged that these issues are not isolated incidents, but ongoing evidence of systemic failure. And with this acknowledgement, we ask that the Commission be clear about the level of risk the Coventry landfill poses to the citizens of Vermont. It is not, as stated in the Land Use Permit #7R0841-8, <u>a low risk facility</u> that will cause undue air and water pollution.
31 32 33 34 35 36	Act 250 precedents have evaluated the term "undue" with respect to air and water pollution. In <u>Upper Valley Regional Landfill</u> 3R0609-EB (1991) the Board held that:
	The word "undue" is not defined in Act 250. Webster's New Collegiate Dictionary defines "undue" in pertinent part, as:
37	• "Inappropriate; unsuitable.
38	• Not right; not lawful or legal.
39 40	• Not agreeable to a standard; excessive; immoderate; inordinate."
41 42 43	A review of decisions addressing the term "undue" in the context of Act 250 indicates that it has been interpreted in the context of the specific facts of each case under consideration; the decisions are more instructive about what is not undue rather than what is.
45 46	In Pike Industries, Inc 5R1415-EB (2005), the Board concluded that:

1 "Whether a pollutant is undue can depend on a series of factors, which may 2 include an analysis of the nature and amount of the pollution, a proposed 3 project's location and topography, prevailing winds, whether the pollutant 4 complies with certain standards or recommended levels, and whether effective 5 measures will be taken to mitigate the pollution." 6 7 And in In re: Rivers Development [68-3-07 Vtec (2010)] the Environmental Court instructed 8 that the historical interpretations of Criterion 1 regarding air pollution do not establish a sole 9 reliance on governmental air quality standards, but vest the adjudicating tribunal with the responsibility of determining whether all applicable factors support a finding of undue air 10 pollution. 11 12 13 Other precedents require that the District Commissions not worsen an existing undue or unreasonable impact on the jurisdictional tract and its surroundings by permitting additional or 14 15 increased impacts. 16 17 DUMP understands clearly that it is not the role of a District Commission to pursue violations of 18 environmental laws or to enforce those provisions. Having said that, DUMP provides extensive evidence in its written testimony of substantive noncompliance at the landfill and proffers this as 19 20 probative evidence in support of the above referenced standard set out in Act 250 Rule 19 (F)(2) 21 22 In other words, a reasonable person will conclude that undue air and water pollution is already 23 resulting on the NEWSVT jurisdictional tract and in the surrounding environs, and that it will continue to do so with the expansion operation notwithstanding the ANR technical approvals of 24 25 the landfill expansion. 26 27 District Commissions are charged with evaluating the credibility of an applicant and its ability to 28 operate a project as materially represented. Here, there is no credible proof that the facility can be 29 properly operated. 30 31 We restate for the purpose of emphasis that there is long line of Act 250 precedents that prohibit 32 "conditions subsequent" as impermissible substitutes for affirmative evidentiary proof that the 33 standards of the Act 250 criteria are satisfied prior to approval of a project. [See eg Blair Family 34 4C0388-EB (1988); Smith and Killington, Ltd 1R0593-EB (1990) and Town of Stowe 100035-35 9-EB (1998)] 36 37 The terms and findings - let alone the actual conditions - in the ANR Air Permit and Certification are largely "conditions subsequent." The Commission is being asked to accept those 38 39 ANR approvals as presumptive proof under criteria 1(Air) and 1(B). The evidence presented by DUMP demonstrates that the ANR approvals are, in effect, "conditions subsequent" in their 40 entirety, issued by an agency that is incapable of ensuring substantive compliance with the 41 content of its approvals due to a mix of inadequate staffing, an inability to ensure timely 42 43 verification of landfill operations given the distance from ANR offices to the project site, and frankly, conditions which are impossible to implement in a consistent and effective manner. 44 45 46 Based upon the testimony herein, DUMP requests that the Commission conclude that the 47 applicant has failed to meet its evidentiary burdens of production and proof under criteria 1(Air) 48 and 1(B) and thus the application for a land use permit must be denied. 49 50 We also urge the Commission to force the elephant in the room be acknowledged by all, but especially those who hold the responsibility to do so: the State of Vermont and its leaders, elected 51

1 and appointed. That elephant, which leaders are so conveniently hiding behind, is the false

2 assertion that the Coventry landfill is Vermont's only option for managing waste. <u>There truly are</u>

3 <u>more modern and greener options</u> to dumping the state's waste into one monstrous landfill, and

4 <u>the time is now to pursue those options.</u>

5 As previously stated, this fact cannot be denied when Casella supports it in its 2017 Annual

6 Report by stating the waste management industry is switching directions and pursuing waste to7 energy technologies.

8 By denying a land use permit for Application 7R0841-13, based on and according to the findings

9 presented by DUMP pursuant Act 250 Criteria 1 and 1(B), the Commission would cause the State

and its agencies to create a comprehensive waste management plan that meets current statues andregulations.

12 We, the members of DUMP, believe when taking into account the entire contents of this

13 testimony, that the Commission cannot in good conscience approve a land use permit that

14 includes Phase VI for the Coventry Landfill. There is enough proof that NEWSVT operations,

- 15 with or without the expansion, will not maintain compliance, and will cause undue air and water
- 16 pollution.

17 And therefore, issuance of a land use permit by virtue of Act 250 Criteria 1 and 1(B) would not

18 be in the best interest of the state, its environment, and its citizen, present and future. We believe

19 it is <u>not</u> the Commission's role to protect problematic development when the costs far exceed the

20 benefits.

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Furthermore, the evidence presented herein, justifies the Commission to call for a plan to close

- 22 the entire operation of the Coventry Landfill without additional study or review.
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- 25 Respectfully submitted by,
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- 27 Charlie Pronto
- 28 Anita Ancel
- 29 DUMP, LLC
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