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For a thriving New England

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October 21, 2019

Representative Karen Ebel, Chairman
Committee to Study Recycling Streams and Solid Waste in New Hampshire
New Hampshire General Court
107 North Main Street
Concord, NH 03301

Via email: Karen.ebel@leg.state.nh.us

RE: Comments to HB617 Study Committee on Solid Waste and Recycling in New Hampshire

Dear Representative Ebel:

Conservation Law Foundation (CLF) appreciates the opportunity to submit the following comments relative to the work of the HB617 Study Committee on Recycling Streams and Solid Waste in New Hampshire ("Committee"). CLF is a nonprofit, member-supported, environmental organization working to conserve natural resources, protect public health, and promote thriving communities in New Hampshire and throughout the New England region. CLF's Zero Waste Project aims to reduce waste and protect communities from unsafe and unsustainable waste disposal and plastic pollution, and to promote programs that reduce, reuse, and recycle materials.

We thank you for the thorough process your Committee has undertaken during its brief tenure to examine the state of recycling programs in New Hampshire in light of changing market conditions and challenges faced by the state and municipalities in running recycling programs and solid waste management, as required by HB617. Our over-arching recommendation is that this type of study committee, or perhaps a standing commission, should be created to continue to explore these critical issues, to advise the Department of Environmental Services on waste issues, and to make recommendations for policy changes necessary in New Hampshire to achieve our waste reduction goals.

We respectfully make the additional following recommendations for consideration as you develop the Committee's final report:

- **New Hampshire needs to make a concerted effort to finally achieve essential solid waste management goals established by the Legislature in the 1990s.**

In RSA 149-M:2, the Legislature declared "that the goal of the state, by the year 2000, is to achieve a 40 percent minimum weight diversion of solid waste landfilled or incinerated on a per capita basis." Consistent with this goal, the Legislature established a solid waste management hierarchy for the

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state which favors source reduction, recycling and reuse, and composting over waste disposal, and which ranks landfilling as the management method of last resort. RSA 149-M:3. Regrettably, more than twenty years later the State has neither achieved its "minimum 40 percent" waste diversion goal nor evolved to a waste management system that relies on incineration and landfilling as management methods of last resort. CLF greatly appreciates the work of this Committee and urges it to make recommendations, including those further discussed in these comments, below, to enable the State to finally achieve the essential goals established by the Legislature more than two decades ago.

- **New Hampshire's waste management and planning laws need to be updated to reflect current conditions and our new understanding of the economic, environmental, and public health costs of landfilling and incineration.**

New Hampshire's waste management laws lag behind the rest of the region, and this may be why 49% of the waste we dispose of in the state (largely through landfilling and incineration) comes from neighboring states, as reported in the Department of Environmental Services (DES) Waste Management Division (WMD) October 2019 Biennial Solid Waste Report.[1] Other New England states have more meaningful and enforceable waste reduction and waste management laws, typically utilizing some combination of mandatory recycling and composting and, increasingly, bans or limitations on particularly harmful products such as polystyrene, plastic straws, and single-use plastic. Unfortunately, their more effective laws may mean that more of their waste is being disposed of in New Hampshire, causing a range of environmental impacts here, and filling up our remaining landfill space.

We now understand the significant environmental and public health risks and costs that our outdated waste disposal practices create. For example, the liquid waste from landfills, known as "leachate," contains a number of toxic chemicals, including "forever" chemicals known as PFAS, or per- and polyfluorinated alkyl substances. While New Hampshire has taken important steps to protect the public from these chemicals in drinking water, landfill leachate from the Turnkey landfill in Rochester is currently being disposed of without sufficient treatment at wastewater treatment plants in Maine and Massachusetts. These harmful contaminants are therefore entering rivers, threatening the public's health as well as fish and other aquatic species.

New Hampshire must recognize that landfills pose a danger to the residents of the state. Landfills are a significant source of PFAS chemicals, among other pollutants and toxicants, and their lack of management and subsequent public harm are a health and financial cost to the residents of New Hampshire. The state must protect our waterways and drinking water sources from contamination by these toxic substances, including regulating the treatment of liquid wastes that are produced at landfills and which are often disposed of at municipal wastewater treatment plants.

[1] Available at https://www.des.nh.gov/organization/commissioner/pip/publications/documents/r-wmd-19-02.pdf.

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- **New Hampshire needs updated waste laws and programs to address the fact that we are a major importer of waste from other parts of the region, and that our in-state waste rates are increasing.**

New Hampshire is increasingly the dumping ground for the rest of the region. According to the DES 2019 Biennial Solid Waste Report, the percent of out-of-state sources of waste being disposed of in New Hampshire has increased from 47% in 2015 to 49% in 2018.[2] At the same time, our per-capita in-state disposal rate has increased, from .79 tons per person in 2015 to .91 per person in 2018.[3] These trends are going in the wrong direction, and increase pressure to expand landfilling capacity and incineration rates. New Hampshire must seek creative solutions to meaningfully reduce the amount of waste flowing into our state, as well as creating policies to incentivize New Hampshire residents to produce less waste intended for landfilling or incineration.

- **New Hampshire should develop mandatory composting requirements to divert organic materials from landfills and incinerators.**

New Hampshire lacks basic data on how much compostable material is being landfilled or incinerated, and how much is being diverted and put to productive uses. Without proper staffing and funding of the DES Waste Management Bureau, the state cannot collect the data needed to have a full understanding of the impacts and opportunities related to waste management in the state.

We do know, however, that without policies and programs to require or incentivize composting, we are landfilling and incinerating valuable waste. Not only is disposing of organic materials a waste of a productive resource, but "[d]iverting organics saves landfill space and significantly reduces production of methane gas—a greenhouse gas that is 21 times more damaging than carbon dioxide."[4] One national organization has found that reducing food waste is the third most effective thing we could do globally to address climate change.[5] Unfortunately, New Hampshire lacks even basic rules governing large scale composting that could significantly increase the rate of diversion of valuable organics, and help to grow new businesses in the state to process and sell compost.

In 2015 the Legislature passed SB251, which amended RSA 149-M:7 to require that DES promulgate rules related to "[r]equirements and best practices for facilities that compost organics, including vegetable matter, meat, meat byproducts, dairy products, or dairy product derivatives."[6] Despite this law going into effect in August 2015, DES has still not opened a rulemaking process to address a gap in our regulation of compost. As a result, restaurants and other businesses and institutions that wish to compost in New Hampshire must do so by sending their compost to other

[2] *Id* at p. 4.
[3] *Id*.
[4] 2014 Vermont Materials Management Plan, at p. 7, available at https://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/MMP_18June2014.pdf.
[5] *See* https://www.drawdown.org/solutions-summary-by-rank.
[6] http://www.gencourt.state.nh.us/legislation/2015/SB0251.pdf.

states. CLF is aware of a restaurant in Concord that is sending its compost to Maine, as well as businesses in the Upper Valley that are sending their compost to Vermont. These states have rules for how to compost meat and dairy productions; the technology exists and is readily available.

This major gap in our regulation of compost has several negative results for New Hampshire. First, we send valuable organic material to landfills and incinerators, increasing pollution and using up valuable landfill space. Second, we undermine efforts of businesses and institutions who wish to contribute to waste reduction efforts. Finally, we lose compost business opportunities to surrounding states. We urge the committee to work with DES, and to propose additional legislation if necessary, to get updated composting regulations promulgated in New Hampshire immediately.

- **New Hampshire must develop goals and implementation programs specifically designed to significantly reduce the use and disposal of single-use plastics.**

Plastic creates dangerous pollution at every life cycle stage.[7] Plastics are made from fossil fuels, which is often sourced from fracked gas in the United States.[8] The extraction process releases toxic substances into the air and water, posing serious health risks to nearby communities.[9] Refining and plastic manufacturing operations also put workers and communities in harm's way.[10] Air emissions from these plants contain "hazardous air pollutants," and "catastrophic industrial fires, explosions, and chemical releases are surprisingly common."[11]

Contact with plastics and chemicals added to plastics in consumer products exposes consumers to toxic chemicals.[12] Humans are exposed to plastics and the other toxic contaminants associated with plastic when these chemicals leach from food packaging into food or drink,[13] or through contact with other consumer products.[14]

Ninety-one percent of all plastic ever produced has been disposed of in landfills and incinerators or lost to the environment as litter.[15] While landfills may hold waste in the short term, inevitably they

[7] *See, e.g.*, David Azoulay et al., *Plastic & Health: The Hidden Costs of a Plastic Planet* (Feb. 2019), available at https://www.ciel.org/wp-content/uploads/2019/02/Plastic-and-Health-The-Hidden-Costs-of-a-Plastic-Planet-February-2019.pdf (hereinafter "Plastic & Health").
[8] *Id.* at 11.
[9] *Id.* at 12-14.
[10] *Id.* at 17.
[11] *Id.* at 17, 21.
[12] *Id.* at 27-36.
[13] *Id.* at 31.
[14] *Id.* at 35-36.
[15] Laura Parker, *We Depend On Plastic. Now We're Drowning in It*, National Geographic (June 2018), available at https://www.nationalgeographic.com/magazine/2018/06/plastic-planet-waste-pollution-trash-crisis/ (noting that 6.3 billion tons out of the 6.9 billion tons of plastic waste generated since World War II was not recycled).

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release plastic and other contaminants into the environment.[16] When plastic is burned in incinerators, the dangerous contaminants in plastic are dispersed into the air or enter the environment when the ash and filters from the incinerator are buried in a landfill.[17] In the ocean, seabirds, sea turtles, seals, and other marine mammals can be killed after ingesting plastic or getting entangled in it. In addition, plastics break down into microplastics, which are now ubiquitous in the environment and pose a serious risk to humans and other living organisms.[18] Humans are exposed to microplastics by breathing in or ingesting these dangerous particles, which pose a serious health risk themselves and may also be a carrier for other toxic chemicals and bacteria.[19]

We cannot recycle our way out of the plastic pollution problem. Increasing recycling rates is critical, but it is not enough. Many plastics cannot be recycled due to their chemical make-up, are not economical to recycle, or contaminate valuable recyclables. In addition, China recently stopped accepting most non-Chinese recyclables, including mixed plastic.[20] As the committee is aware, international issues related to recycling markets have had major implications for New Hampshire and for our municipalities, resulting in some local recycling programs being discontinued. This is yet another reason to reduce the use of single-use plastics. Finally, the high lifecycle costs of plastic are also not eliminated even when it is recycled. As a result, the only way to solve this problem is to work towards eliminating the use of single-use plastic products.

As the State of Vermont has noted in its Materials Management Plan, "[p]lastics . . . have increased in the trash in Vermont and elsewhere. [B]y volume, plastics are the largest single material in the trash."[21] Vermont's Act 69, which prohibits the use of single-use plastic bags, stirrers, and polystyrene foam, and makes plastic straws available only on request, is a significant step forward towards reducing single-use plastics in Vermont. The new law also includes directives to state agencies, legislators, and other stakeholders to develop recommendations to further eliminate single-use plastics. Several other New England states are taking steps to address plastic pollution, and New Hampshire cannot risk being the dumping ground for single-use plastics.

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[16] Kirstie Pecci. (July 23, 2018). *All Landfills Leak, and Our Health and Environment Pay the Toxic Price*, Conservation Law Foundation, https://www.clf.org/blog/all-landfills-leak-and-our-health-and-environment-pay-the-toxic-price/

[17] Global Alliance for Incinerator Alternatives (February 2012). *Incinerators: Myths vs. Facts About "Waste to Energy."* http://www.no-burn.org/wp-content/uploads/Incinerator_Myths_vs_Facts-Feb2012.pdf

[18] Plastic & Health, 54-59; Perelman, J., *Pesky Plastic: The True Harm of Microplastics in the Ocean*, National Geographic (Apr. 4, 2016), https://blog.nationalgeographic.org/2016/04/04/pesky-plastic-the-true-harm-of-microplastics-in-the-oceans/.

[19] Plastic & Health, 54, 56.

[20] Sara Watson, *China Has Refused to Accept the West's Plastics. What Now?*, National Public Radio (June 28, 2018), https://www.npr.org/sections/goatsandsoda/2018/06/28/623972937/china-has-refused-to-recycle-the-wests-plastics-what-now (last visited Apr. 25, 2019).

[21] Vermont 2014 Materials Management Plan, at p. 4.

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We have attached our comments on HB558 and HB560, which sought to address some single-use plastics. Both bills passed the House last Session but were killed in the Senate. We urge the committee to recommend that the State adopt restrictions on single-use plastics as soon as possible.

- **New Hampshire should encourage more communities to adopt pay-as-you-throw programs.**

One of the fastest and most efficient ways to decrease residential waste disposal and save towns money are programs that encourage people to dispose of less waste using financial incentives. One such program, known as Pay-As-You-Throw, has been shown to dramatically reduce waste and garner significant savings for municipalities throughout New England. For example, researchers from the University of New Hampshire found that cities and towns with Pay-As-You-Throw programs produce 42 – 54% less waste than those without them.[22] In Concord, Pay-As-You-Throw helped the community generate approximately 44% less trash.[23]

Although many New Hampshire communities have these programs in place, our per capita disposal rate is still increasing. We must do more to help municipalities see the value in instituting programs like Pay-As-You-Throw to reduce the amount of waste that is landfilled or incinerated.

- **The Legislature should adequately fund the Waste Management Division of the Department of Environmental Services to fulfill its statutory duties and support the policy recommendations in this letter.**

Despite statutory requirements to undertake regular planning and reporting on waste management,[24] the DES Waste Management Division is significantly underfunded. The most recent State Solid Waste plan is from 2003, and DES has stated before the Committee that it lacks the staff to create an updated plan. New Hampshire cannot address our pressing waste management challenges without good planning. We urge the Committee to recommend proper funding of the DES WMD, including through a mechanism such as a statewide tipping fee that would generate needed revenues and send a price signal that – consistent with the Legislature's solid waste management hierarchy – disfavors waste disposal as compared to source reduction, recycling and composting.

* * *

CLF appreciates the opportunity to provide these comments and your consideration of solutions needed to tackle the problem of solid waste. We look forward to the opportunity to continue this

[22] University of New Hampshire, UNH Research Finds Pay-As-You-Throw Trash Policies Cut Solid Waste Disposal (Nov. 5. 2018), https://www.unh.edu/unhtoday/news/release/2018/11/05/unh-research-finds-pay-you-throw-trash-policies-cut-solid-waste-disposal.
[23] Allie Gross, *Pay-As-You-Throw Programs Slash the Trash*, Jackson Hole News & Guide (Jan. 30, 2019), https://www.jhnewsandguide.com/news/town_county/article_a53b0451-1a39-5cc7-85ff-c50fb16bc762.html.
[24] See RSA 149-M:29, which requires biennial reporting and a state solid waste plan every six years.

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important dialogue with you and other policymakers so that we can reduce the public health and environmental impacts of waste management in New Hampshire.

Sincerely,

Tom Irwin
V.P. and CLF New Hampshire Director