

Testimony for House Environment Committee 2-18-26
DUMP support for H.652

SLIDE 1: Hi and thank you for inviting us to testify on H.652 today. Before we start, we want to emphasize that all of our statements are evidence-based, largely informed by ANR research and reports, and other scientific research reports. We also want to acknowledge the partnership of Don't Undermine Memphremagog's Purity, or DUMP, and Memphremagog Conservation Inc. (MCI). Both are grassroots volunteer organizations focused on protecting the watershed and water quality of Lake Memphremagog, a precious international natural resource. Their alliance is an example of international cooperation at the most essential level.

I am Peggy Stevens;

and I am Polly Jones, Peggy and I have been working with DUMP, as well as with legislators and the State SWM and Water Quality Divisions in recent years, to shine a light on concerns about Lake Memphremagog's water quality, PFAS chemicals in the waste stream and threat to our environment from PFAS chemicals in landfill emissions. We have come to realize that the only way to make real environmental change is through legislation.

Our presentation today focuses on Vermont House Bill 652, a bill to prohibit discharge of landfill leachate, treated or not, anywhere in the Memphremagog watershed. H652 is sponsored by Rep. Woody Page of Newport, Vt. and Rep. Larry Labor of Morgan, Vt. They are joined by 19 bipartisan co-sponsors. This degree of support is evidence that when it comes to protecting our environment, political party is irrelevant.

H.652 is founded on Legislative Authority, prioritizes Public Health and Safety, Environmental Protection and Environmental Justice, and considers Economic Impacts- of action or inaction- for the Memphremagog watershed region.

We have included this aerial view to show the proximity of Vermont's only landfill in Coventry to the South Bay, the Black River, and the lake where the waters flow north. While VT contributes 75% of the water in the lake, about 75% of the lake lies across the border in Quebec. In previous presentations we have delved into the precarious siting of the landfill, which is uphill and surrounded by hundreds of acres of protected wetlands and a State Wildlife Management area.

Slide 2 : H.652 is elegant in its simplicity. It will prohibit discharge of landfill leachate anywhere in the Memphremagog watershed. Leachate, even after current treatment, contains many harmful PFAS chemicals that accumulate and persist in the environment and all living things in that environment. While landfill chemicals are unfortunately not the only threat to the lake, prohibiting discharge of landfill leachate into the watershed is the most immediate and effective way to curb additional harm to water quality.

Slide 3: Why H.652 and Why Now? The Act 250 moratorium on leachate disposal into the watershed is reaching its expiration date. Also of concern, A DUMP public records request for information provided 2020 ANR interoffice communications discussing "the reasonableness" of "discharging treated leachate directly to the Black River".

Another concerning message is about the possibility of leachate being imported to the landfill, which would increase the environmental burden on the region and increase exponentially the amount of leachate potentially to be discharged into the watershed.

Side 4: Existing Vermont State law, historic international treaties like the 1909 Boundary Waters Treaty, and the Stockholm Convention—all support the environmental and moral imperative to protect water quality. The Unanimous Motion by the National Assembly of Quebec in 2021 strongly urges VT to adhere to the law of these treaties for the benefit of Lake Memphremagog. The lake is the drinking water reservoir for 185,000 Quebec neighbors, many of whom are also family and friends. The lake also potentially charges wells on both sides of the border, depending on the geology.

Slide 5: The threat of leachate discharge to the health and well-being of all living creatures in the watershed, especially humans, cannot be overstated. PFAS, or “forever” chemicals, which are the focus of concern here, enter our bodies most commonly through contaminated food and water, but also through inhalation and dermal contact. They remain in our bodies for decades and longer because their chemical bonds do not break down, causing serious, even fatal, health effects. The current leachate treatment method, SAFF, does not capture many harmful PFAS chemicals, allowing them to escape into the environment.

Slide 6: We know that landfill PFAS can escape to our environment via leachate discharge, runoff, breakouts through landfill liners and caps, and through air emissions. Evidence from State and NEWSVT reports indicate PFAS chemicals found in leachate have also been measured in landfill groundwater wells for years. Evidence exists that PFAS contamination is already present in Memphremagog’s surface water and fish that live there. The experimental SAFF system onsite has been shown in other applications to achieve removal rates of 70-99% for long-chain PFAS, but removal rates for some short-chain PFAS are below 30%. So, clearly many PFAS chemicals are escaping capture. David Burns, lead scientist for the SAFF system currently in use, is quoted as saying, *“Of course, there is no suggestion that the treated landfill leachate should be used directly as potable water or allowed to discharge or otherwise migrate into receiving waters reserved for drinking water use.”* Like Memphremagog...

Slide 7 - In 2021, VT DEC and VT F&W tested for PFAS at 19 sites in northern Vermont. Hazardous PFOS, just one of 15,000 PFAS chemicals, was measured in Memphremagog’s surface water mid-lake at 2.8 ppt, the highest of any surface water sampled in the study. 2.8ppt is 70% of the Maximum Contamination Level or MCL of 4ppt. FYI, one ppt is equivalent to one drop in 20 Olympic size swimming pools, giving you an idea of how toxic PFAS are. You may hear it said that these levels are “trace amounts”; however, trace amounts are hazardous. For PFOS, there is no safe level of exposure without risk of negative health impacts. In four species of fish, PFOS was present in their tissues at significant levels. PFAS in fish tissue is measured in micrograms per kilogram, or ppb. As you can see, if ppb are converted to ppt, the level of PFOS in these fish is concerning and demonstrates harmful bioaccumulation. We must do everything possible to limit further contamination of the lake. H652 will benefit the water quality by prohibiting the discharge of any more PFAS chemicals into this already contaminated ecosystem.

Slide 8 : Lake Memphremagog has the dubious distinction of being the only water body in Vermont that is home to cancerous Brown Bullhead. The sick fish on the left exhibits the black cancerous lesions—kidney and liver lesions are also found in afflicted fish. USGS Surveys from 2014 to 2017 found that 30 to 45% of adult Brown Bullhead in the lake had malignant tumors. These sick BBs have only ever been found in environmentally contaminated waters. While no causative link has been made to PFAS, there

are many potential contributing factors, including environmental contaminants found in landfill leachate.

Slide 9 : Landfills worldwide are among the top four industrial environmental polluters. The Coventry landfill is no exception. This graphic shows the pathways in which PFAS in landfills can escape into our environment even in a lined landfill. Vermont's Environmental Justice law "protects communities from disproportionate environmental burdens such as polluted air and water". The pollution of Lake Memphremagog's water quality is documented. Our Environmental Justice law also protects marginalized communities and requires that the voices of vulnerable residents be incorporated in decision-making processes. The communities in the region nearest the landfill are among Vermont's most economically challenged and remote. The landfill is out of sight and mind of the municipalities in Vermont that generate the most waste. The entire tri-county NEK contributes merely 7% of the waste disposed yet bears 100% of the environmental burden. It is only just to send the leachate produced from that waste back to the regions that generated it. Even after leachate is trucked offsite, PFAS chemicals will continue to contaminate our region.

Slide 10 : Discharge of landfill leachate into the watershed is not the only way PFAS enter our environment. Even the most well-constructed landfills eventually leak. State landfill inspection reports confirm breaches in landfill caps leading to "breakouts," releasing leachate and gas emissions to the environment. Test results have documented the presence of PFAS in landfill groundwater monitoring wells for many years. And it is important for us to know that Groundwater and Surface water are one system. The environmental injustice of siting Vermont's only landfill at the head of Lake Memphremagog cannot be overstated. Even after landfill closure, leachate will continue to be produced and require management for decades to come, perpetuating environmental injustice long after another Vermont another waste management facility is established out of this watershed.

11- Landfill gases (LFGs) are an often overlooked and an even more hazardous byproduct of waste disposal. PFAS in air emissions are present in concentrations that can exceed PFAS in leachate. If you smell a landfill odor, which many in the region do, you are inhaling landfill gases, including odorless PFAS. LFGs cause health concerns, particularly for those living nearest to the source. These hazardous gases are carried on prevailing winds for miles before they land on soil and water. This is one more injustice this region will be living with until the strictest monitoring standards and emission controls are required by the ANR. This means that well after leachate discharge into the watershed is prohibited, the Memphremagog region will continue to be subjected to hazardous PFAS emissions from the landfill.

12- Environmental contamination affects our regional economy. Our lakes, especially Memphremagog, attract tourists and recreational enthusiasts; boating, swimming, and fishing are all designated uses requiring regulatory protections. Concerns about contamination erode public confidence. Acting now will demonstrate that our state government is committed to protecting our most precious, finite, natural resource- clean water. H.652 is also an expression of respect and concern for our Quebec neighbors, who are members of our historically tight-knit, international economic community.

13: The cost to taxpayers of prohibiting leachate discharge, treated or not, into the Memphremagog watershed is ZERO, while the cost of inaction, resulting in further contamination requiring future remediation, is immeasurable. Is this risk to our local economy worth taking? H.652 is a simple and economical solution to an existential problem.

14- Take a Quick scan of the Timeline of Actions taken by both DUMP and MCI since 2018. This timeline of protective actions is not reflective of the hours spent preparing for countless public meetings, or providing written and oral comments, but it does document efforts by both environmental organizations leading to the introduction of H.652.

SLIDE 15- Starting in 2004, MCI worked with Quebec municipalities to obtain a five-year moratorium, 2005-2009, prohibiting NEWSVT from discharging leachate into the lake; finally, in 2010 (sixteen years ago !) and thanks to continued pressure from MCI, the Waste Management Bestan landfill in Magog was closed, and leachate has been trucked out of the watershed ever since. What an achievement!

What will Vermont do to match that? If the shoe were on the other foot, and instead the lake flowed from north to south, with Quebec contaminating Vermonters' drinking water, we would demand and expect action. H.652 is the obvious next step- prohibiting discharge of landfill leachate, treated or not anywhere in the watershed. Remember David Burns' quote: ***"Of course, there is no suggestion that the treated landfill leachate should be used directly as potable water or allowed to discharge or otherwise migrate into receiving waters reserved for drinking water use."*** David Burns, Lead Research Scientist, SAFF

Thank you for your attention and now we will turn to Robert Benoit and Antonio DiFruscia, representing our partner in environmental protection, Memphremagog Conservation Incorporated, or MCI."