

October 13, 2020

To the Maine Department of Environmental Protection;

I am writing with comments on license application #S-010735-WD-YB-N, which proposes major expansions to Waste Management's Crossroads landfill facility in Norridgewock.

The Crossroads facility is the only landfill in Maine licensed to take "special waste." This waste may include incinerator ash, sludge, oil and solvent contaminated soils, asbestos, medical and laboratory waste. All of these materials contribute to production of leachate and pose the risk of contaminating local water supplies.

According to Waste Management's application, it appears that all of the out-of-state waste going into the Crossroads facility is Special waste. The application fails to state how much of that Special waste contains asbestos, sludge, or medical waste. Much of what is classified as "special waste" in Maine is prohibited from landfill disposal in other states.

#### Fires, Air Quality, and Aquifers

Depending on what materials are disposed of in the new facility and how gas production is managed, the risk of landfill fires is likely increase. Two acres of the northeast corner of the Crossroads landfill set on fire in the summer of 2018. Construction and demolition debris chips used as cover on a portion of the Crossroads landfill spontaneously combusted, requiring response from multiple departments and State helicopters, resulting in the injury of several local firefighters, and a plume of toxic smoke that issued from the smoldering landfill for weeks.

This summer there was another fire at the WM landfill, reportedly in the same section of the landfill where the 2018 fire happened. Waste Management did not notify neighbors of this fire. If the 2020 fire occurred in the same area, it may indicate that use of CDD chips as cover material poses a risk of spontaneous combustion, and should not be allowed. The license application does not address danger of explosion if fire reached gas and fuel storage containers, or the landfill gas fueled electrical generation facility. These fires negatively impact the air quality for people living downwind in the local community. The application does not demonstrate how the company will ensure compliance with the licensing criteria requirement of No Unreasonable Adverse Effect on Air Quality.

#### Water Quality

If the new landfill takes in greater volumes of sludge, it will result in greater volumes of gas and leachate production. Increased gas production and circulation necessary for a gas-fired electrical generating facility has led to fires and leaks at other landfills, including the Pine Tree Landfill in Hampden. It is unclear as to the full impact of these fires is on the landfill liner, however any landfill fire is likely to damage to the liner and contribute to leaks. The license application does not specify how the new facility would ensure that fires not result in leaks and groundwater contamination. The application to build a new landfill and gas facility does not address how fires would be prevented in the future as methane gas production and volumes of combustible wastes increase.

Other northeast states, including NH, MA, NY, CT, VT, and NJ, have enacted bans on disposing of organics (variously septage, municipal and industrial waste water sludge, compostable materials, liquid waste) in landfills. Sludge materials are often the most likely to include contamination by PFOS and PFAS. In the past, these biosolids were often used for agricultural landspreading in Maine. Since Maine regulatory agencies have started restricting the landspreading of organics/biosolids contaminated with PFAS/PFOS on farmland, the only acceptable alternative method of disposal has been landfilling, resulting in an increase in disposal of more PFAS-contaminated biosolids Maine landfills. It is not clear if monitoring wells are testing for PFAS compounds migrating to local aquifers.

Waste Management's Industrial Wastewater Discharge permit from the Anson-Madison Sanitary District allows up to 56,000 gallons per day of leachate from the landfill to be discharged through the wastewater treatment facility into the Kennebec River, several miles upriver from the landfill. Leachate is also sent to the SAPPI mill wastewater treatment facility, where it receives minimal treatment prior to discharge into the Kennebec between Skowhegan and Hinkley. Leachate from the landfill is not treated for PFAS compounds prior to discharge into the Kennebec.

Testing of landfill leachate for hazardous compounds prior to discharge is only required three times per year for most chemicals, only once per year for mercury. It does not appear any testing would be required for PFAS/PFOS, pharmaceuticals, dioxins, or other hazardous compounds that could be present in leachate from the special waste landfill.

The license application for leaves many unanswered questions regarding whether the landfill expansion will impact aquifers and local drinking water supplies. There is inadequate information on how groundwater travels in the soft clay under the proposed expansion site, especially as greater volumes of waste are concentrated in these locations. No independent review of the hydrogeology of the area has been conducted, with much of the mapping and information provided by WM not updated since the early 1990's and lacking accurate information on location of residential wells that could be impacted if leaks occur.

During the Public hearing, a representative for Waste Management speaking on aquifer impact and hydrogeology stated that the closest the Kennebec river would come to the new landfill would be between a mile and a mile and a half. In fact, the new landfill would be located significantly closer to the river than the current landfill, and closer than claimed by WM. Based on my review of the maps, the Kennebec appears to come within half a mile of the new landfill.

The proposed location of new landfill is surrounded by water within a mile on all sides. To the north are wetlands and Bombazee Brook, and the Kennebec River, to the north and east. Mill Stream is located to the northwest, west, and south of the proposed landfill, within 1/4 mile or less of the proposed new site. Building the landfill would require destruction of 10 acres of wetlands.

The application is not clear whether there are adequate stormwater management systems planned for the new landfill. Wetlands serve to regulate and control flooding. It is not clear if removing a major wetland will impact water movement in cases of major storms. Historic floods in this area have resulted in significant movement of stream and riverbeds. The license application does not address how the surrounding waters will be protected from contamination in cases of major storms and floods.

In the late 1980's the old Norridgewock landfill by this site was the site of a major subsidence event, where the pile of (mostly out-of-state) waste collapsed. Local wells were destroyed and sewage fungus and other contaminants were found in Mill stream.

The geology of this area has been historically unstable. Piling tons of waste over the land could result in mass movement of earth materials, such as landslides, mud slides, slumps, earth flows, subsidence or debris flows can impact groundwater movement. The application does not address the threat of subsidence as the weight of the material disposed in the new landfill could disrupt the underlying geology. Licensing a landfill surrounded on all sides by wetlands, streams, and a river, and taking in large volumes of wet wastes like hazardous sludge, creates a serious risk of contaminating that water if there was another subsidence event, major storm, flood, or fire.

A year and a half of well monitoring in a period of severe drought is not necessarily representative of long term water levels or water flow patterns. Independent review of hydrogeology and long term study of water flow patterns and well monitoring is needed to accurately evaluate the impact of the proposed landfill on aquifers. The application does not appear to show that the company has demonstrated compliance with licensing criteria that No Unreasonable Risk That a Discharge to a Significant Ground Water Aquifer Will Occur.

#### Waste Hierarchy and Out-of-State Waste

According to WM representatives speaking at the Public hearing, the company would agree to a level of no more than 35% out-of-state waste coming into the new landfill. The company representative explained the calculation would be based on the total capacity of the landfill, and not calculated on monthly or annual volumes of waste.

Using a calculation based on total capacity, instead of monthly or yearly quantities, makes the limit very difficult to determine until the landfill is already full. Using this method of calculating out-of-state waste could result in a significant increase in the total amount of imported waste being dumped in the landfill in the early years of operating. By increasing capacity, WM would significantly increase the volume of out-of-state waste it could take in. There is nothing to prevent the company under this calculation model from taking in 90% imported waste the first five years, with an unenforceable plan to fill remaining landfill space with Maine generated waste. It's also unclear what would be defined as out-of-state waste. If WM takes in waste that was generated out of state, but processed in Maine, would those wastes then qualify as Maine waste and not count against WM's limit on imported waste?

Crossroads landfill has previously been licensed to take in medical waste. Trucks from the medical waste processing facility Oxus have been seen going to the Norridgewock facility. Medical and laboratory waste is imported from surrounding states and Canada for processing by Oxus in Pittsfield, Maine. If the medical waste is generated outside of Maine, but processed in this state, is it now considered Maine generated waste? It is not clear from the application whether WM's new landfill will be licensed to take medical or lab waste, and if so, how much.

Approving this new landfill site will create new capacity for out of state waste, specifically special waste that is prohibited from landfill disposal in the states where it is generated. Adding major landfill capacity with no enforceable limits on growth will only serve to make it more profitable to landfill of materials in Maine instead of taking potentially more costly steps of composting, recycling, and developing other methods of materials management. The application does not demonstrate how the the company would be in compliance with the licensing criteria requirement of compliance with the Solid Waste Management Hierarchy.

The process for licensing the expansion is being done in a way that has made it difficult for local people to meaningfully participate in the decision-making process. The fact that one community is serving as the only special waste landfill in the entire state (and one of only a couple in New England) and the only commercial landfill in the state, points to an occurrence of distributive injustice. There is a history of disregard for consideration of impacts on environmental justice in the licensing of the current landfills in Norridgewock (for a more complete history see attached document by Rachel Culley, "Norridgewock's Dump: A David and Goliath Story. The Creation and Growth of the Largest Commercial Landfill in Maine.")

Holding the public hearing through Zoom, and requiring a video connection to participate, created barriers to people participating in the hearing process. Many of the people most impacted by living near this waste facility are older people, are living with disabilities and major health problems, and are low-income families who lack access to the high-speed wireless video technology required to participate in the hearing. While an option was offered for people to make an appointment with the town manager to attend the virtual hearing at the town office, that was not a real option for people with health conditions and older people who are following government and doctor's advice to stay home. Local people impacted by this licensing decision have been unable to participate due to lack of access to technology combined with inability to attend the remote hearing at a public building in a relatively small room, during a time that the State of Maine is under Stay at Home Orders.

Maine statute makes clear that in order for the DEP to license a landfill expansion, the Department must find that the facility will provide substantial public benefit, and determine that the landfill operations will not pollute any water of the State, contaminate the ambient air, create a nuisance, or constitute a hazard to health or welfare.

The WM landfill expansion application does not provide adequate information to demonstrate that the proposed waste facility will not pollute groundwater, contaminate ambient air, create a nuisance, or constitute a hazard to health or welfare. Based on this lack of information, combined with clear indications that the proposed expansion would threaten groundwater, air quality, and the well-being of neighbors, the license should be denied. A new application should be required in order to allow additional time to gather data necessary to determine the true impact of the proposed waste facility on groundwater, air quality, the state waste hierarchy, and the safety of the local community, and to allow meaningful public participation for people in the local community most impacted by this licensing decision.

Thank you for your consideration of these matters.

Sincerely,  
Hillary Lister

16 Chapel St.  
Augusta, ME 04330

[hillarylister@mainematters.net](mailto:hillarylister@mainematters.net)