
From: murfer
Sent: Monday, May 03, 2021 8:09 PM
To: Eleftheriou, Victoria H
Subject: comments on draft license

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Dear DEP,

Thank you for the opportunity to respond the draft license provided by e-mail by Deputy Director Eleftheriou.

There are many concerns and objections to the draft license for proposed landfill expansion which are detailed in the following comments. Some of these concerns have been e-mailed to the Department over the past few months.

The proposed draft license does not alleviate or mitigate the issues or concerns raised in those e-mails which are included below.

E-Mail of Feb. 21, 2021

Dear DEP Commissioner Loyzim,

I have recently contacted Victoria Eleftheriou at DEP regarding my concern with the proposed landfill expansion at Norridgewock. Ms. Eleftheriou was helpful and responsive to my inquiries.

The more I learn about the proposed expansion, the more concerned I am about it. Ms. Eleftheriou provided me with information that indicates that about 30 million gallons of the leachate from the current landfill are discharged into the Kennebec River annually at the Sappi in Hinkley/Fairfield (85%) and Madison (15%). An earlier article about leachate from a landfill indicated 9700 parts per trillion of PFS/PFO in the leachate going into the Kennebec River.

As you know, the Kennebec River, serves as a source for wells and ponds that provide drinking water to communities downstream of the discharge sites in Madison and Hinkley/Fairfield. The 'forever chemical' bills that are currently under consideration by the legislature are deigned to protect drinking water of schools and communities.

It seems that the appropriate intervention to accomplish this essential action is to treat the discharge water that has concentrated levels of the forever chemicals before it enters public waterways (the Kennebec River). And it seems appropriate that the cost of the water treatment is the responsibility of the discharger, which in this case is the owner of the commercial landfill. It also seems that out of state 'special waste', 35% of the total, is adding significantly to the problem.

The proposed landfill expansion in Norridgewock does not provide significant public benefit in it's current state. Taxpayers will bear the costs of cleaning this water, if it is cleaned at all. And not cleaning this water is not right for current and future Mainers. I believe the public benefit decision and the proposed landfill expansion needs to be revisited by Maine DEP.

E-mial of March 7, 2021

Hi Commissioner Loyzim,

Thank you for this information. I am interested in updates from Ms. Eleftheriou. I have also looked into efforts of New York state to address these issues and have compiled a list (below) of web links that discuss and detail some their efforts.

From New York State's landfill website:

<https://www.dec.ny.gov/chemical/23682.html>

The minimum liner required for an MSW landfill is a [double composite liner](#) with primary and secondary leachate collection and removal systems. The double composite liner system allows for the performance of the system to be regularly evaluated to ensure adequate protection of groundwater resources.

Article detailing New York states drinking water mandatory water testing program:

<https://fingerlakes1.com/2020/07/31/nys-adopts-strict-limits-on-pfoa-pfos-and-14-dioxane-contamination-in-water-systems-could-come-with-high-costs/>

“Costs do matter,” Martin said. “The idea that there was no explanation available ... about how many lives would be saved by this intervention strikes me as an odd methodology.”

Kraut (left) then responded: “There is no cost-benefit with respected to lives, but there is a cost to private regulated parties.”

Kraut said the DOH has estimated that compliance expenses for water systems serving fewer than 3,300 people would average \$400,000 in one-time capital costs and \$25,000 in annual operating costs. Systems serving more than 10,000 people could expect to pay \$15 million in capital costs and \$750,000 in annual operating costs.

The state has already launched legal efforts to require the companies found to have caused the PFOA, PFOS and 1,4-dioxane contamination to pay cleanup costs.

But if corporations or arms of government cannot be held responsible to cover the full costs of compliance, water ratepayers will have to make up the difference. That could amount to billions of dollars and sticker shock for water ratepayers.

<https://www.napolilaw.com/wp-content/uploads/3-1-19-NYSASWM-Newsletter-PJN-and-Michelle-Greene.pdf>

Article about implications of landfill leachate on drinking water in New York

<https://www.wastedive.com/news/new-york-dec-testing-53-inactive-landfill-sites-for-pfas/524686/>

article about testing old landfills for forever chemicals

<https://www.nysac.org/files/PFAS%20%20Landfills.pdf>

New York State Association of Counties power-point on the effect of landfill leachate on water sources

I am also interested in updates of Governor Mills task-force on addressing PFO in our environment. Is there a web site that provides this information.

Thank you for your leadership and have a good day Commissioner Loyzim,
Ed

E-mail of March 13, 2021

Dear Commissioner Loyzim,

I have read the report of Governor Mills task force on managing PFAS in Maine, Jan. 2020, and have noted excerpts below.

Managing PFAS in Maine

Final Report from the Maine PFAS Task Force

January 2020

Excerpts:

Pg. 5-6 “More recent testing has shown drinking water may be contaminated by many different sources, such as landfills, waste residuals and septage spreading sites, air emissions from manufacturing facilities, and the discharge of AFFF for firefighting.”

Pg. 9 “ As a result of this, many fields licensed for land spreading could not be used in 2019 and thousands of cubic yards of residuals were disposed at landfills.”

“65% of the residual samples tested in 2019 exceeded the screening level for PFOA and 93% exceeded for PFOS;”

pg. 10 “Recognizing the financial burden PFAS has placed on some of Maine's wastewater treatment facilities, in 2019 Maine DEP:”

pg. 13 “In Maine's most recent recent PFAS sampling round conducted in 2019, 17 of the 36 public water systems included in the program declined to participate, in several cases that they wished to wait until testing was required rather than participating in the voluntary sampling program. Based on this result, it will be necessary to create a requirement for Community Water Systems to sample for PFAS to assess potential risks requirement for Community Water Systems to sample for PFAS to assess potential risks to all of Maine's citizens that receive their water from Community Water Systems.”

pg. 16 “PFAS has already had a significant financial impact in Maine and is likely to impose an even greater cost as Maine moves forward to remediate the current contamination and reduce future contamination. Unfortunately, due to the accumulating evidence about adverse health effects, there are significant risks to delaying action.”

pg. 17 “Municipalities spent hundreds of thousands of dollars more than they budgeted for in 2019 to test for PFAS and to send wastewater sludge to landfills instead of using it as a soil amendment.”

pg. 17 “... and by the end of 2019 its estimated that \$1,794,173 from the Drinking Water Revolving Fund will have been used for the installation of PFAS drinking water treatment systems.”

pg. 17-18 “Identifying and preventing exposure of Maine citizens to PFAS contaminates in Maine has the potential to impose an unsustainable burden on state and private resources.”

pg. 21 “One Task Force member recommends that existing authorities granted to DEP and wastewater treatment plant operators should be used to the greatest extent possible to identify and control commercial or industrial PFAS discharges to sewer systems.”

pg. 21 “One member recommends that releases of PFAS should be subject to DEP permitting and reporting requirements like other compounds designated as hazardous matter. This would potentially include requirements for wastewater discharge licenses, air emissions licenses, and waste handling licenses.”

pg. 26 “ Conclusion- These recommendations reflect a commitment to determine where the PFAS contaminants exist in Maine due to current and historic activities, and to put in place a strategy to protect people from exposure.”

I strongly agree with the conclusion of the Task Force that Maine and Maine's DEP needs a strategy to protect people from exposure to PFAS. I am not aware that such a comprehensive strategy is currently in place. I further believe that no landfill expansions should be granted by DEP until such a strategy has been established.

I would appreciate your view on this and where Maine is at with regard to the state's PFAS mitigation strategy.

Thank you for your consideration and for your leadership of environmental protection Commissioner Loyzim,
Ed

E-mail of March 17, 2021

Dear Commissioner Loyzim and Deputy Eleftheriou,

I have reviewed the information regarding the out of state special waste that is transported into Maine for the year 2019.

Thank you, Ms. Eleftheriou, for providing the links to this information.

According to the annual report from the Crossroads Landfill 16,309 tons of public municipal sludge from Massachusetts was landfilled at Crossroads in 2019. I think the State of Maine has a right and an obligation to ensure that out of state sludge has been treated (see link below) for PFAS before it crosses our state border. Maine has a right/obligation to keep untreated material with high levels of unsafe compounds, in this case sludge with PFAS, out of Maine.

Further, I believe we have a right/obligation to require sludge from our waste treatment plants to be treated for PFAS before it is landfilled. The costs of this treatment should be borne by the entities that put their material into the treatment plant. In this way, the water that is subsequently discharged into our public water/ rivers will be cleaner and safer. And the costs will be borne by those responsible for the compounds which need to be mitigated. This will contribute to safer drinking water and fish restoration of our rivers. It will also partly fulfill the Governor Mills PFAS taskforce's conclusion to implement a strategy to protect Maine from the adverse health impacts of PFAS in our environment.

Further, I believe no landfill expansions should be approved by our Department of Environmental Protection until these, or similar strategies are in place.

Below is a link to an article addresses these issues.

<https://www.wwdmag.com/contaminants/destroying-pfas-sludge>

Water and Waste Digest, March 11, 2021

Destroying PFAS in Sludge

Thank you for your stewardship of our environment.

E-mail of April 2, 2021

Dear Commissioner Loyzim and Deputy Eleftheriou,

I've included a link for another article, this one from today's Guardian, discussing the issues of PFAs in drinking water, and the implications for state regulatory agencies. I was heartened to read of Gov. Mills letter to our Federal Congressional Delegation asking for their assistance from the federal government with this. I agree with Governor Mills that this is a national problem.

"The Governor called for, among other things, adding PFAS to the federal list of hazardous substances, setting maximum contaminant levels in drinking water and investing in research to study how the chemicals are taken up by plants and animals in agricultural settings." Morning Sentinel 4/1/21.

By extension, wastewater sludge should be classified as a hazardous substance since it contains high levels of PFAS, and landfill expansion permits should not allow out of state wastewater sludge,

due to this.

<https://www.theguardian.com/us-news/2021/apr/02/pfas-testing-forever-chemicals-pittsboro-north-carolina>

Thank you for your protection of our environment and our drinking water.
Sincerely,
Ed

As you can see from the e-mails above I have concerns with the material coming from out of state into current landfill and the proposed landfill expansion. I believe that a significant proportion of the waste from out of state contains high levels of PFAS. The draft license calls for wastes that "are similar to the accepted wastes currently allowed in the existing Phase 8 landfill" (pg. 4 of draft license). From the previous e-mail it is clear that Governor Mills believes that PFAS are hazardous substances. Thus, the acceptance of a similar waste stream in the phase 14 expansion will include what our Governor and Congressional delegation considers hazardous waste.

It is my view that this position of the Governor and Congressional Delegation regarding PFAS as hazardous substances makes the determination of public benefit in need of review. The draft license acknowledges this by stating, "However, a public benefit determination may be revised by the Department in accordance with 06-096...if the Department finds that a material change in the underlying facts or circumstances upon which a public benefit determination was based or has occurred or is proposed..." (page 6 of the draft license). The position of the Governor and Maine's Congressional Delegation is a material change.

The draft states that the waste pile that will eventually reach 470 in height above the surrounding terrain. This will have an unreasonable adverse effect on the natural environment. I also believe that it is not appropriate or in the public's benefit to eliminate a wetland and wildlife habitat and to conclude that this is a reasonable adverse effect to the environment. I think the idea of enhancing a natural environment in another area as compensation for the damage done to the proposed site does not make sense (draft license pg. 19).

I have learned that a significant amount of the out of state waste includes 'friable asbestos'. The proposed draft license does not directly address the problems with associated with this. The draft license references "Fugitive Dust" (page 29 draft license) and concludes that "wind susceptible loads such as ashes could be covered with wetter waste streams or daily cover. Further, if wastes cannot be placed safely, "the driver and/or generator will be notified and other arrangements made, such as rescheduling, disposal elsewhere, or temporary storage in the Container Storage Area." Friable asbestos can cause a lot of problems in the environment and the proposal put forth in the draft license is inadequate.

The draft license addresses the smell issue associated with the landfill with a section on Nuisance Odor (pg. 29 draft license). First, I contend that the smell that comes from the landfill is far more than a nuisance. It is a significant quality of life issue that is inadequately addressed in the draft license. The Department's stance on this is confusing. The draft license reads, "The Department finds that WMDSM has proposed odor control mechanisms adequate to control nuisance odors from the proposed Phase 14 expansion as required by State law and the Rules provided that the Site operations Manual is revised and submitted to the Department prior to waste placement in the proposed Phase 14 expansion to include provisions for conducting daily odor surveys within the community, daily discussions regarding odor concerns if any, and an odor complaint response

procedure (Pg. 30-31 draft license, my underlines). The draft license seems to admit that the smell issue is unresolved, that the odor control mechanisms are not adequate, and offers a process that does not currently exist and offers no real hope for adequacy for this significant quality of life issue.

The draft license contends that surface waters, groundwater, and aquifer will not be harmed by the landfill expansion (pages 31-34 of draft license) There is no reference in the draft license to the impact of PFAS on any of these waters. This is inappropriate. Governor Mills task force on PFAS , noted in earlier e-mails, makes numerous references to the impacts of wastewater and sludge on the quality of the water. The draft landfill license allows for a waste stream that is similar to the current waste stream. This waste stream includes tons of out of state sludge and for the dumping of millions of gallons of leachate into the Kennebec River. Both of these contain high levels of PFAS. There is nothing in this draft license that addresses this pressing issue or that offers a strategy for safely dealing with this as the Governor's Task Force on PFAS calls for. The landfill expansion should not go forward without a clear strategy for mitigating the hazards of PFAS in our water, soil and overall environment.

The section of the draft license that addresses the risk to the water aquifer is inadequate. The proposed landfill expansion will pose a significant risk to the aquifers in it's vicinity for thousands of years. There is no reference in the draft license to the life span of the engineered efforts to keep PFAS and other harmful chemicals out of the ground water aquifer. The arguments put forward are speculative and subjective. And there is no provision in the draft license for addressing ground water contamination that occurred(pg. 36-37).

The section on the solid waste management hierarchy is confusing as the solid waste hierarchy was intended to minimize the amount of waste generated in Maine that required landfilling in Maine. It did not envision the importation of out of state waste in Maine landfills. The hierarchy has no impact on out of state waste producers. This is indicated in the language of the license, when it states "it is the policy of the State to actively promote and encourage waste reduction measures from all sources and maximize waste diversion efforts by encouraging new and expanded uses of solid waste **generated in the State as a resource**" (pg. 40, my highlights). The importation of out of state waste renders the Maine solid waste hierarchy irrelevant and moot. It is clear that one of the intentions of the solid waste hierarchy was to extend the timespan of Maine's landfills. Under this proposed license, up to 35% of the waste in the proposed landfill expansion will come in from outside of Maine no matter what and the life span of the landfill will not be extended.

The section of the draft license that addresses hazardous and special waste handling is inadequate for a number of reasons. The draft license does not address the issue of PFAS, while the Governor and Maine' s Congressional Delegation are pressing to have classified as hazardous. Also, it seems that "carefully observing the waste stream during unloading and placement" and "random inspections on the landfill face" will provide a reasonable assurance that there aren't hazardous substances in the waste. Much hazardous waste must be chemical in nature and not observable to visual inspection which is what the draft license plan calls for (pg. 46-47).

The section that addresses geology and hydrology of the proposed expansion is inadequate. The draft license bases it's finding of adequacy on the direction of flow of the groundwater to keep aquifers protected. It references the presence of a groundwater divide, which it contends will preclude groundwater flow to 'the 'Significant Sand and Gravel Aquifer' located along the banks of the Kennebec River, the Town of Norridgewock water supply well, and the Kennebec River. This 'ground water divide' becomes tremendously important to maintaining the safety of 'significant sand and gravel aquifer.' This divide could change. The underground flow of water could change. There is activity in the glacial deposits which underly the proposed landfill. There are the effects of climate

change and increases in severe weather which can alter the underlying deposits. There are also the impacts of the millions of tons of waste which may very well alter the underground flow and turn the flow in the direction of the significant sand and gravel aquifer (pg 50-51).

There is also the issue of the time of travel of groundwater/liquid. The proposed license states, "The Department concluded that undetected fracture in the clay can allow rapid transport of contaminants to aquifers beneath the clay..." The draft license goes onto say, "The Department notes that although these results don't preclude the presence of fractures in the clay..." (pg. 53). This issue of rapid transmission of contaminants to the aquifer has not been adequately resolved.

The section on the liner system do not address the lifespan of the design. The proposed landfill would exist for thousands of years. The plan needs to address the lifespan of the designed liner (pg. 56-57).

The section that addresses the disposal of the leachate in the draft license is inadequate. Recirculating the leachate will result in the leachate being very contaminated by the contents of the waste pile, including with PFAS chemicals. The draft license plans for this leachate to be disposed of in wastewater treatment plants that discharge into the Kennebec River. There are no provision in the license to filter or even to measure the PFAS going into the Kennebec River. This goes against Governor's Task Force on PFAS and presents a hazard to the drinking water of downstream communities that draw their water from the Kennebec River or from the aquifers that the Kennebec River recharges. The PFAS discharged into the river will also effect the river environment and the fish that live in that river. Also, the remaining sludge from the wastewater treatment plants will need to be disposed of at a landfill, absent a strategy to mitigate the harm of PFAS as called for in the Governor's PFAS Taskforce (pg. 60-68).

The draft license lists 29 findings of facts and conclusions. The comments noted above contest these findings the subsequent conclusions. The current draft license of April 23, 2021 will lead to pollution to water and air. The measures outlined in this draft license are inadequate to bring the level of pollution to an acceptable, reasonable level. For these reasons and others, the finding of significant public benefit should be revisited and reassessed. The draft plan as presented on April 23, 2021 does not meet the needs of the people of Maine and should not be approved as presented.

The issue of solid waste disposal is a major challenge for every state and community. I appreciate the Department's continued efforts to address this major challenge.

Thank you for your work on behalf of Maine's people and environment.

Ed Anthony