

Comments for the Public Record
Asking the Commissioner to
DENY APPROVAL

August 27, 2024 | Jacquelyn Elliott

Subject: Sevee & Meher Engineers August 9, 2024 Response to Questions and Comments
Application for Determination of Public Benefit
Juniper Ridge Landfill
In the Matter of:

Application for a Public Benefit Determination pursuant to 38 M.R.S. § 1310-N(3-A) and 1310-AA, and Chapter 400, Section 5 MEDEP Solid Waste Management Rules for the Proposed Expansion of Juniper Ridge Landfill in Old Town owned by the Maine Department of Administrative and Financial Services' Bureau of General Services and operated by NEWSME Landfill Operations, LLC under a 30-year Operating Services Agreement, dated February 5, 2004

Please accept these comments contributing to the public record for Sevee & Meher Engineers August 9, 2024 response to the Maine Department of Environmental Services' (DEP) July 30, 2024 request for more information on the Application for Determination of Public Benefit in the matter of a proposed expansion of the Juniper Ridge Landfill.

Excerpted from SME's August 9, 2024 response to DEP's July 30, 2024 request for more information:

2. Section 1.7.1 Changes in Maine Legislation. The application notes that if sludge acceptance volumes remain consistent with 2020 through 2023 data, JRL anticipates receiving approximately 83,200 tons of municipal and industrial sludges per year. As you may be aware, Maine Regional Conversion Facility, LLC is constructing a 200 wet tons per day sludge dewatering facility in Norridgewock. The facility is expected to be operational by late 2025. Additionally, it is our understanding that Casella Waste Systems (CWS) is partnering with Viridi Energy to reopen and expand an anaerobic digester facility in Brunswick which could reduce the volume of sludge delivery to JRL by 90 percent. Please explain how these initiatives could affect the amount of sludge and CDD bulking materials accepted at JRL. (emphasis added)

"SME's Response: 83,200 tons of sludge represents approximately 94,800 cubic yards (CY) of waste, or landfill volume. If the two technologies are successful in achieving a 90 percent reduction by volume, that would be a reduction of 85,300 CY of waste delivered to the landfill. As discussed on page 1-14 of the PBD, the sludge is mixed at a ratio of one part sludge to four parts bulky waste in order to provide structural stability to the landfill.

A substantial reduction of sludge could negate the need for any out of state bulking material to mix with the waste. According to their **2023 Annual Report to the Maine Department of Environmental Protection (MEDEP), the ReSource Lewiston facility (ReSource) received 53,270 tons of waste from in-state sources,** which represented **30 percent of their total 179,008 tons** of material. **ReSource shipped 78,532 tons of CDD residual to JRL.** Assuming the 30 percent ratio remains the same, JRL would only receive about 23,560 tons of CDD residual from ReSource, a reduction of 54,972 tons.

Using the overall compaction factor of 0.82 stated in the PBD, this would be approximately 67,000 CY of waste. Adding the loss of sludge and loss of CDD residual from ReSource gives an overall reduction of about 152,300 CY of waste, or about 14.5 percent of the total annual waste volume delivered to the landfill.

Since all processing facilities have planned maintenance shutdowns and occasionally experience unplanned shutdowns, **JRL will continue to receive some volume of wet sludge.** During these times, **JRL will continue to be the option of last resort for Maine's sludge.** **If the processing facilities work as intended, and ignoring the sludge sent during shutdowns, this might mean a best-case increase in Phase II Expansion to a total of about 13 years.** **If the processing facilities do not achieve their planned schedules and/or the technologies do not function as effectively** as stated, the increased **duration of the Phase II Expansion could be substantially less.**

There **would not be any volume reduction from any loss of fines shipped from ReSource to JRL,** as that would need to be **replaced with virgin soil** as previously described in Question 1, **or virgin gravel,** as described more completely in Question 8. Assuming it could be accepted in accordance with MEDEP rules and JRL licenses, it is **anticipated that the same relative amount of bulky wastes would continue to be sent to JRL from the current sources,** consistent with current waste disposal practices.” (emphasis added)

Please note: Current regulation that allows Casella to account CDD fines utilized as alternate daily cover as recycling defies the reality, that this practice consumes landfill capacity.

The management and disposal of biosolids holds a prominent place in discussions around the future for Juniper Ridge Landfill and the perception is that Juniper Ridge is the identified “solution” for the present and the future that could include various approaches such as de-watering to conserve disposal capacity and a recognition that contamination with per – and poly fluoroalkyl substances hold concerns that should be addressed. Maine’s sludge disposal capacity and municipal waste water treatment facilities (WWTF) are under considerable pressure environmentally and economically.

“Likewise, the disposal of municipal WWTP sludge from 53,023 tons in 2018 to 94,271 tons in 2022 has also increased the fill rate at JRL . . . the overall trend

is a marked increase in material accepted for disposal . . . the overall trend is a marked increase in material accepted for disposal . . . Investing in sludge dewatering facilities and/or focusing on PFAS treatment and destruction technology as identified in the Bureau of General Service’s Study to Assess Treatment Alternatives for Reducing PFAS in Leachate from State Owned Landfills may be a far more sustainable option in the long run than continuing to landfill larger amounts of CDD in order to accommodate landfilling of sludge. The current trajectory of sludge and CDD disposal encourages the expansion and use of landfilling, and without alternative options, Maine’s landfills will likely fill up more quickly than originally planned for.” (Maine Department of Environmental Protection 2024 Maine Materials Management Plan Pp. 37, 38, 39. Emphasis added)

“Likewise, in a December 15, 2023 report prepared for the MEDEP regarding biosolids management in Maine, an Evaluation of Biosolids Management in Maine and Recommendations for the Future (Biosolids Report), which is included in Appendix B, consulting firm Brown and Caldwell concluded “[i]f JRL is not expanded, the state faces a dire situation for solid waste generally in Maine.”² With respect to biosolids, the same report noted that ‘there is no current or proposed alternative outlet in the state that would be able to accept the tonnage¹ currently handled at JRL,’ which it stated was nearly 90 percent of the biosolids generated in Maine.” (Sevee & Maher Engineers, Inc. Application for Public Benefit Determination June 2024 Pp. 1, 2 Executive Summary. Emphasis added)

There is perhaps some additional context for this issue. Casella’s operations at their NCES landfill in Bethlehem, New Hampshire have been under scrutiny by New Hampshire Department of Environmental Services (DES) for deficiencies² that have required action for multiple incidents³ of leachate on the liner system exceeding regulation. Part of Casella’s response to that situation has been to identify the Anson-Madison Maine waste water treatment⁴ facility as a destination for excess leachate from their Bethlehem NCES landfill. Does this arrangement impact the amount of sludge disposed at the already over-burdened Juniper Ridge Landfill? If not, why not? If Juniper Ridge is a destination for sludge from Casella’s response to DES’s requirements, how will this influence Casella’s annual request from the DEP for importation of oversize bulky waste (OBW) it ostensibly utilizes to stabilize sludge disposal? Following are figures for leachate hauled from Casella’s NCES landfill to the Anson-Madison WWTF filed with DES for Q2 2024:

¹ December 15, 2023 An evaluation of Biosolids Management in Maine and Recommendations for the Future (page 2); <https://www.maine.gov/tools/whatsnew/attach.php?id=12198306&an=1> .

² https://drive.google.com/file/d/106Gz0akSOXbiH5-0fCVdC94zjiGhLwa0/view?usp=drive_link

³ <https://www4.des.state.nh.us/DESONeStop/SWFDetail.aspx?ID=0002831>

⁴ https://drive.google.com/file/d/1IBUOfXwRX6jm99W5ncenhEpkAgX2V15/view?usp=drive_link

NORTH COUNTRY ENVIRONMENTAL SERVICES INC

Destination Report

Transactions from 4/01/2024 through 4/30/2024

MAD - ANSON-MADISON ME WWTF Total Gallons: 211,849

NORTH COUNTRY ENVIRONMENTAL SERVICES INC

Destination Report

Transactions from 5/01/2024 through 5/31/2024

MAD - ANSON-MADISON ME WWTF Total Gallons: 391,724

NORTH COUNTRY ENVIRONMENTAL SERVICES INC

Destination Report

Transactions from 6/01/2024 through 6/30/2024

MAD - ANSON-MADISON ME WWTF Total Gallons: 334,694

To date, DEP does not require that Casella remove PFAS from the leachate generated at Juniper Ridge before it is treated and the effluent discharged to the Penobscot River. Alone, **this is reason enough to deny approval of Casella's PBD application.** Landfills and leachate are threats⁵ to surface and ground water.⁶ How is Casella effectively and independently verifiably meeting requirements to protect Maine's water resources?

Title 38, Chapter 13, § 1310-N, licensing criteria⁷ for solid waste facilities states:

"The facility will not pollute any water of the State, contaminate the ambient air, constitute a hazard to health or welfare or create a nuisance; . . . The department may not issue a license for a solid waste facility if it finds that the proposed facility will cause an unreasonable threat to the quality of a classified body of surface water, and,...The department may not issue a license for a solid waste disposal facility when it finds that the proposed facility overlies a significant sand and gravel aquifer or when the department finds that the proposed facility poses an unreasonable threat to the quality of a significant and gravel aquifer it does not overlie, or to an underlying fractured aquifer." **Title 38, Chapter 13, § 1310-N**

⁵ March 14, 2023, *Proposed PFAS National Primary Drinking Water Regulation*:

<https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>

⁶ Overton, Penelope, February 20, 2024, Portland Press Herald, *Forever chemical in landfills threaten groundwater, streams and rivers*: <https://www.pressherald.com/2024/02/20/forever-chemicals-in-landfills-threaten-groundwater-streams-and-rivers/>

⁷ Title 38: Waters and Navigation Chapter 13: Waste Management § 1-A: Solid Waste Article 3: Solid Waste Facility Siting: <https://legislature.maine.gov/statutes/38/title38sec1310-N.html>

Additionally, if Casella's leachate from its NCES landfill is being treated at the Anson-Madison WWTF and the resultant biosolids are disposed at Juniper Ridge, that is increasing the toxic load discharged to the Penobscot River and further sacrifices Maine's citizens' rights to clean water. Allowing Casella to utilize Maine's precious landfill disposal capacity, whether at Juniper Ridge or elsewhere, for the **toxic residuals from its mismanagement of their NCES landfill** cannot be endorsed. In particular, if disposal is at Juniper Ridge, it magnifies the on-going environmental injustice from Casella's operations and has serious implications for determining the public benefit of any proposed expansion and **provides additional argument as to why the Commissioner must DENY the current PBD Application and AVOID PROLONGING ENVIRONMENTAL INJUSTICE that disrespects citizens' "right[s] to be protected from environmental pollution and to live in and enjoy a clean and healthful environment . . ."** (38 M.R.S. § 1310-AA(3)(E) in accordance with Chapter 400 Section 5.E.(5))

Overarching the current crisis pushing for expansion of Juniper Ridge is the failure of decision makers and others with authority to plan. We need laws and regulation to employ methods on the front-end of the waste management system that rethink, reduce, reuse, and diminish the volume and toxicity of what must be disposed. The State has a moral obligation to provide sustainable waste management policy and practice that protects the rights for all Maine citizens to live in safe communities with clean water and clean air. Waste is a choice we make whether it be resources or lives.

Thank you for considering my comments.

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