#### STATE OF MAINE **DEPARTMENT OF ENVIRONMENTAL PROTECTION**



PAUL R. LEPAGE **GOVERNOR** 

February 15, 2018

Michael Barden Department of Economic & Community Development 59 State House Station Augusta, ME 04333-0059

Don Meagher NEWSME Landfill Operations, LLC 2828 Bennoch Road Old Town, ME 04468

RE: Application #S-020700-WD-BL-A, Juniper Ridge Landfill Amendment for Continued Acceptance of In-State Municipal Solid Waste - Comments

Dear Mr. Barden and Mr. Meagher:

The Department has reviewed your application associated with Department license #S-020700-WD-BL-A. The State of Maine Bureau of General Services, as owner of the Juniper Ridge Landfill, and NEWSME Landfill Operations, LLC, as operator of the Juniper Ridge Landfill, request approval to remove the municipal solid waste (MSW) acceptance date of March 31, 2018 for the disposal of no more than 81,800 tons per year of in-state, non-bypass MSW at the Juniper Ridge Landfill in Department license #S-020700-WD-BC-A, Condition 10, as revised in Board of Environmental Protection Order #S-020700-WD-BG-Z. The Department's comments, resulting from the review of both the Application, dated November 2017, and the supplemental information, dated December 2017, are appended as an attachment to this letter.

The Application submittal was reviewed for conformance with the requirements in the Department's rules; including, but not limited to, 06-096 C.M.R. ch. 400, Solid Waste Management Rules: General Provisions (last amended April 6, 2015). A number of the Department's comments request additional information in order to assess whether the proposal in the Application meets Maine's solid waste management hierarchy, as stated in the following rule excerpt:

# 4.N. Solid Waste Management Hierarchy

(2) **Submissions**. The application must include evidence that affirmatively demonstrates that the purpose and practices of the solid waste facility are consistent with the solid waste management hierarchy including, but not limited to:

AUGUSTA 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017 (207) 287-7688 FAX: (207) 287-7826 (207) 941-4570 FAX: (207) 941-4584

BANGOR 106 HOGAN ROAD, SUITE 6 BANGOR, MAINE 04401

PORTLAND 312 CANCO ROAD PORTLAND, MAINE 04103 (207) 822-6300 FAX: (207) 822-6303 (207) 764-0477 FAX: (207) 760-3143

PRESQUE ISLE 1235 CENTRAL DRIVE, SKYWAY PARK PRESQUE ISLE, MAINE 04769



PAUL MERCER COMMISSIONER (a) Solid waste disposal facility. Notwithstanding the provisions of section 6 of this Chapter, evidence that demonstrates that the waste has been reduced, reused, recycled, composted, and/or processed to the maximum extent practicable prior to incineration or landfilling, in order to maximize the amount of material recycled and reused, and to minimize the amount of waste being disposed. Such evidence shall include, but is not limited to, a description of the reduction, reuse, recycling, composting and/or processing programs/efforts that the waste is or will be subject to, and that are sufficiently within the control of the applicant to manage or facilitate, including relevant metrics to evaluate effectiveness; and a description of ongoing efforts to increase the effectiveness of these programs/efforts.

For the purposes of this section, reducing, reusing, recycling, composting and/or processing waste to the "maximum extent practicable" prior to disposal means handling the greatest amount of waste possible through means as high on the solid waste management hierarchy as possible, resulting in maximizing waste diversion and minimizing the amount of waste disposed, without causing unreasonable increases in facility operating costs or unreasonable impacts on other aspects of the facility's operation. Determination of the "maximum extent practicable" includes consideration of the availability and cost of technologies and services, transportation and handling logistics, and overall costs that may be associated with various waste handling methods.

As you prepare your response to the attached comments, please contact me at (207) 287-7743 or <u>kathy.tarbuck@maine.gov</u> if you have any questions.

Sincerely,

Mathy Tarbur

Kathy Tarbuck, P.E. Bureau of Remediation and Waste Management

ec: David Burns, DEP, Director, Bureau of Remediation and Waste Management Victoria Eleftheriou, DEP, Director, Division of Technical Services John Banks, Penobscot Nation Bill Mayo, Manager, City of Old Town Town of Alton Laura Sanborn, Chair, Landfill Advisory Committee Thomas Doyle, Esq., Pierce Atwood Gilbert Bilodeau, BGS Brian Oliver, NEWSME

# ATTACHMENT: Department Comments on Application #S-020700-WD-BL-A, JRL Amendment for Continued Acceptance of In-State Municipal Solid Waste

The following comments from the Department are organized in two parts: comments on the Application and comments on the Application Supplement. The comments follow the sequence of information presented in the above noted submittals and, as a result, a few of the comments contain overlapping subject matter. For context, please refer to the cover letter when reviewing the comments relating to the solid waste hierarchy.

# **Comments on the MSW Amendment Application Dated November 2017**

1. Page 2-2, Table 1. BGS and NEWSME should state the specific options that are available for the communities listed in Table 1 if JRL is not allowed to continue accepting MSW. Table 1 lists 30 contracted municipalities that utilize JRL for MSW disposal: Fourteen of these communities are noted as having long-term MSW contracts with JRL, and sixteen of these do not. The Application narrative is not clear on the waste disposal plan for these municipalities if the amendment is not approved.

When the original amendment application was approved in 2013, the Department envisioned that BGS and NEWSME would have adequate time to plan for and establish waste options that are more consistent with Maine's solid waste management hierarchy (see Finding of Fact #5, Department license #S-020700-WD-BC-A). If this request is approved, it is unclear what efforts will be undertaken going forward that will result in a different outcome once the remaining capacity in JRL is fully utilized. This information should be provided in order for the Department to carefully review cost comparisons of the options and to evaluate the analysis utilizing the requirements of Maine's solid waste management hierarchy.

- 2. Pages 2-2 through 2-8, Section 2.2 Amendment Finding 5, Solid Waste Management Hierarchy. BGS and NEWSME should specify whether any of the former MERC communities listed in Table 1 take recyclables to the CWS Zero-Sort® Recycling Facility in Lewiston.
- 3. Page 2-3, Table 2. BGS and NEWSME should provide the amount of non-bypass MSW disposed at JRL that originates from the former MERC communities in order for the Department to have a clear understanding of the final disposition of this non-bypass MSW.
- 4. MSW Management Post-March 2018
  - a. Page 2-7. BGS and NEWSME should provide additional information regarding the following statement: "[t]he Applicants have evaluated various scenarios for the alternative management of MSW generated in Maine post-March 2018 and in all cases, without approval of the requested extension of existing JRL accepting non-bypass MSW beyond March 31, 2018, some amount of MSW will be stranded (i.e., there will

be a shortfall in management options for MSW produced in Maine.)" It is still unclear that there are no other outlets for the MSW. Other outlets may include, but are not limited to: waste processing facilities in Maine or out-of-state, incinerators in Maine or out-of-state, etc. BGS and NEWSME should clearly define what is meant by "stranded" waste and provide justification to support this statement.

- b. Page 2-8. BGS and NEWSME should provide confirmation of the stated capacity of PERC and Fiberight after March 31, 2018. It is our understanding that PERC can operate at 310,000 tons per year and Fiberight at 145,000 tons per year.
- 5. Technical Aspects
  - a. Page 2-10 and Figure 3 on Page 2-11. The statement was made comparing compaction rates at five municipal landfills to JRL. The specific municipal landfills should be identified along with their individual compaction rates, as only the average compaction rate for all five was presented.
  - b. Page 2-10 states that "MSW is a prime source of bulking material utilized to stabilize sludge, with potential reduction in hydrogen sulfide generation as an added benefit." A discussion of why MSW is an effective bulking material and how it may be beneficial in reducing hydrogen sulfide generation should be included.
  - c. Page 2-13 states that the proposed volume of MSW will not increase the anticipated amount of landfill gas generated at the facility. A better explanation of why this is the case should be included.
  - d. Pages 2-14 through 2-16. It is stated that MSW is a very suitable "select waste" material for filling in areas that have settled. Additional information should be provided to address the potential for settlement of the proposed MSW "fill" prior to capping, including how much the newly placed MSW "fill" is expected to settle and how that fits into the proposed final cover schedule, whether this would be an ongoing fill and settle situation which may extend the dates of final cover placement, and whether the final cover placement schedule would be met if the MSW date is extended.
  - e. Page 2-16. A discussion of the value of MSW used as bulking material was given, but information on what was previously utilized for bulking sludge at JRL in the years prior to acceptance of MSW (2004 through 2014) should be provided. For example, is there a fundamental change in quantities or properties that necessitates the use of MSW as compared to previously utilized bulking materials?
  - f. Page 2-17. The statement is made: "With the uncertainty of the future configuration of PERC, there is concern about the volume of ash receipt post-March 2018." Further discussion of that uncertainty should be provided, including the anticipated reduction in ash from PERC's operation.

- 6. Appendix 1. An updated summary of recycling efforts should be provided for each former MERC community. Attachment 6 of Appendix 1 outlines the recycling information submitted with the Amendment Application in 2012.
- 7. Appendix 4. The Annual Reports included in Appendix 4 for 2014 through 2016 state the following under Section 5.A regarding the Casella Zero-Sort® Recycling Facility in Lewiston: "The company has made a significant investment in recycling processing in locating this facility in Maine..." Clarification should be provided on whether significant annual investments are made or whether this repeated statement refers to the one-time investment when the facility was constructed.

# **Comments on the MSW Amendment Application Supplement Dated December 14, 2017**

- 8. Additional Diversion to Southern Maine Waste Incinerators. Additional information should be submitted supporting the conclusion that ecomaine and MMWAC are currently exceeding their rated capacity and further diversion of MSW to these incinerators is not feasible. In addition to providing the below information, written confirmation should be provided from ecomaine and MMWAC either stating that they cannot take any additional waste from the southern Maine communities or indicating the additional quantity they are able to process.
  - a. ecomaine. It is the Department's understanding that excess MSW delivered to ecomaine during high volume periods is temporarily stockpiled in bunkers at the landfill and covered with daily cover until it can be backhauled and incinerated during lower volume periods. This operational approach needs to be considered during an analysis of ecomaine's potential to accept additional MSW. If it is possible for ecomaine to accept additional MSW, information should be provided regarding the capacity they can accept and on the costs associated with the transport and processing of MSW to ecomaine compared to the costs associated with the transport and placement of MSW at JRL.
  - b. MMWAC. JRL's Annual Reports for 2014 through 2016 specify that Casella's Pine Tree Waste has a "verbal agreement with MMWAC to deliver spot market MSW during winter months upon request from the incinerator." During 2016, Casella delivered 35,384 tons of MSW to MMWAC. BGS and NEWSME should specify how much of this waste is from former MERC communities. Additionally, BGS and NEWSME should identify the maximum quantity of MSW that MMWAC can accept during the winter months in order for the Department to have a clear understanding of MMWAC's availability to take additional MSW. If it is possible for MMWAC to accept additional MSW, information should be provided regarding the capacity they can accept and on the costs associated with the transport and processing of MSW to MMWAC compared to the costs associated with the transport and placement of MSW at JRL.

- c. Other. Any other known barriers that may impede the ability of ecomaine and MMWAC to take additional MSW or for Casella to deliver MSW to ecomaine and MMWAC should be specifically outlined.
- 9. Additional Diversion to the PERC or Fiberight Facilities
  - a. The executed agreement for Pine Tree Waste, Inc. to supply 40,000 tons annually of Maine MSW to Fiberight should be provided to the Department. Additionally, the extended agreement with PERC to supply 30,000 tons annually of former MERC-disposed MSW, plus additional commercial MSW, noted as being under negotiation, should be provided to the Department when finalized.
  - b. The actual costs associated with tipping fees at both PERC and Fiberight and associated differences in transportation costs, in addition to the fixed prices associated with the long-term disposal agreements with the southern Maine communities should be provided in order for the Department to have a clear understanding of the financial limitations to take additional MSW to these facilities. BGS and NEWSME noted that it is uneconomical for them "to divert additional MSW to either of these facilities at the significantly higher tipping fees they would require, and they would not accept additional MSW at the tip fee the Applicant would be able to pay." Additional clarification should be provided to define what is meant by the tip fee the Applicant would be able to pay.
  - c. If it is possible for PERC to accept additional MSW beyond the tentatively agreedupon 30,000 tons, written confirmation from PERC should be provided regarding the additional capacity they can accept and at what cost.
- 10. Additional Separation or Processing to Remove Recyclables or Organics
  - a. The current recycling rates for the contracted municipalities that are identified in Table 1 of the Application should be provided in order for the Department to have a better understanding of the quantitative efforts of these communities to remove recyclables or organics prior to being handled at Casella Waste System's Westbrook Transfer Station. The Department understands that the recycling programs within these contracted municipalities are not altogether within the control of BGS and NEWSME; however, it is noted that Casella Waste Systems, Inc. "works with these communities to expand their programs upon request." Although one example was mentioned regarding Casella Waste Systems, Inc. (CWS) providing assistance to the Town of Scarborough in the implementation of a proposed organics recycling program, specific information regarding this and other programs should be provided. It is unclear if the Scarborough reference is to the executed pilot program or a subsequent program, and it is unclear in what other programs CWS has participated.
  - b. The estimated cost and limitations associated with converting the Westbrook Transfer Station to further separate potentially recyclable materials should be provided in order

for the Department to have a better understanding of the limitations with such a conversion.

- 11. Alternatives and Costs Associated with Not Using MSW in Site Operations
  - a. The costs to purchase material for landfill grading and bulking should be provided. Additionally, the costs associated with additional landfill gas sulfur treatment if wastewater treatment plant sludge could not be bulked with MSW should be provided since BGS and NEWSME specify that the mixing of wastewater treatment plant sludge with construction and demolition debris (CDD) and CDD fines would cause an increase in hydrogen sulfide generation at JRL.
  - b. The statement is made "[s]hould this Application be denied, and thus MSW were no longer available for use in these applications, operations at the facility would change. This waste stream would need to be replaced with an alternative material, such as CDD fines, virgin soil, or woodchips." Information should be provided about operations prior to 2014 when MSW was not accepted at JRL and how the issues raised in this submittal, including the costs of landfill grading and bulking material and hydrogen sulfide generation mitigation, were addressed at that time. In addition, BGS and NEWSME should clearly state how operations have materially changed since that time such that this request is necessary.
- 12. Other

Information relating to out-of-state processing facilities including their capacity to process additional MSW should be provided. BGS and NEWSME should evaluate the availability of out-of-state processing facilities within a distance similar to the distance from the farthest southern Maine community to JRL. Additionally, the estimated costs associated with MSW transport and each facility tipping fee should be provided. If available, any other limitations to utilizing these facilities should be identified.