State of Maine
Department of Environmental Protection
Bureau of Remediation and Waste Management

Memorandum

TO: Lane Gould, State of Maine Department of Administrative and Financial Services/Bureau of General Services
Brian Pierce, P.E., Sevee & Maher Engineers, Inc.
Wayne Boyd, NEWSME Landfill Operations, LLC

FROM: Vera Maheu, Project Manager
Maine DEP, Solid Materials Management Unit

DATE: November 6, 2026

SUBJECT: Juniper Ridge Landfill, Phase II Expansion Application Review

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The Department's Bureau of Remediation and Waste Management has completed a review of the following document:

> *Phase II Expansion Application, Juniper Ridge Landfill, Old Town, Maine* (Application), dated November 2025, prepared by Sevee & Maher Engineers for State of Maine Bureau of General Services (BGS) as owner and NEWSME Landfill Operations, LLC (NEWSME) as operator.

The proposed Juniper Ridge Landfill (JRL) Phase II Expansion consists of 57 acres to be developed in a phased manner, bringing the total landfill acreage to 179. The project includes approximately 15 additional acres of perimeter access roadways, dikes, and detention ponds. The proposed schedule includes construction of the first cell in 2027 so it can be utilized by early 2028. The Phase II Expansion is estimated to have a 10 to 12-year life with a disposal capacity of 11.9 million cubic yards. The Phase II Expansion will be located on the northern slope of the current expansion.

The proposed primary and secondary liner system consists of the following, from the top down:

Leachate Collection System
- 12-inch drainage sand with 6-inch or larger perforated high density polyethylene (HDPE) pipe
- Drainage geocomposite

Primary Liner System
- 80-mil HDPE textured geomembrane
- Geosynthetic clay liner (GCL)
- 12-inch compacted soil (i.e. clay)

Leak Detection System
- 12-inch drainage sand with 6-inch perforated HDPE pipe
- Drainage geocomposite

Secondary Liner System

- 60-mil HDPE textured geomembrane
- 12-inch compacted soil (i.e. clay)

Augmented Secondary Liner

Under certain portions, the secondary liner will be substituted with the following:

- 60-mil HDPE textured geomembrane
- GCL
- 12-inch compacted soil (i.e. clay), and
- 12-inch of imported compacted soil

Underdrain System

In areas where cell base grade is below the phreatic surface, an underdrain system will be installed beneath the secondary liner (36.2 acres):

- 12-inch drainage sand with 4-inch perforated HDPE pipe

The following comments are submitted based on an a Bureau of Remediation and Waste Management review of Volumes I, II, III, and IV of the Application, as well as the Public Benefit Determination, S-020700-W5-CV-N, dated March 23, 2026. Please note that Volume V (Natural Resources Protection Act and Section 404-Clean Water Act) of the Application is being reviewed by the Bureau of Land Resources. For ease of reference, pages are given as the corresponding electronic file pdf page.

Volume I – Maine Solid Waste Management Rules (Chapter 400, Chapter 401, Chapter and Chapter 2)

1. Section 1.1 Overview (V1, page 1-1; pdf page 16). The reference at the end of the first paragraph in this section regarding the Operating Services Agreement should be Appendix A-2 rather than Appendix A-21.

2. Section 3.4.5 Internal Access Roads (V1, page 3-6; pdf page 34). The first paragraph indicates that internal site access roads are shown in Figure 1-1, but this figure does not show the proposed internal access roads. Per Chapter 400.4.D, please provide a map showing major haul routes to and from the facility as well as the location of and circulation patterns of internal site access roads.

3. Section 3.4.5 Internal Access Roads (V1, page 3-7; pdf page 35). The last paragraph of this section references the existing access road from Route 11. Please clarify if this should be Route 16.

4. Section 3.6.3 Sound Level Assessment (V1, page 3-12; pdf page 40). This section states that the sound level estimates for the proposed perfluoroalkyl and polyfluoroalkyl substances (PFAS) plant were incorporated into the site modeling. Subsequent to the submittal of the Application, it is now proposed that the PFAS control plant will be located at the Pine Tree Solid Waste Facility

in Hampden. Information should be submitted on how this change may affect the sound level assessment.

5. Section 3.6.5 Federal Aviation Administration (V1, page 3-17; pdf page 45). The fifth bullet point references a trial for the use of non-lethal hazing devices for birds, and that the authorization for the trial was granted by the Department on June 25, 2025. Please provide the Department with documentation on the effectiveness of the non-lethal hazing devices, along with a statement on whether or not NEWSME intends to continue to use these devices. If so, then Department approval is required and the Operations Manual needs to be updated.

6. Section 3.7.1 Gas Emissions (V1, page 3-19; pdf page 47). The end of the third paragraph should state that Proposed Flare #5 (*not Flare #4*) will be located approximately 75 feet west of Flare #4.

7. Section 3.7.2 Hydrogen Sulfide Monitoring (V1, page 3-20; pdf page 48). The second paragraph states that JRL maintains four, single point on- and off-site monitors for hydrogen sulfide and provides locations. The Odor Control Plan (V4, pdf page 717) indicates that five monitors are maintained. Please clarify the number, type, and location of the hydrogen sulfide monitors.

8. Section 3.12 Utilities (V1, page 3-25; pdf page 53). This section states that leachate will be treated for PFAS at the facility's MEDEP approved on-site leachate treatment plant (to be designed, constructed, and operational prior to Phase II Expansion operations). The proposed PFAS facility's location has been updated to the Pine Tree Solid Waste Facility in Hampden through letters to the MEDEP dated September 18, 2026 and October 5, 2026. MEDEP comments on the proposed PFAS treatment facility will occur through the licensing action for the Pine Tree Solid Waste Facility.

9. Section 11.0 Variance 2 (V1, page 11-1; pdf page 68). This section states that a variance to "the maximum allowable compacted lift thickness is 9 inches" is requested under the same justification as described above [in reference to variance 1]. This statement is not explicit in what the variance is, but it is assumed that it is to increase the lift thickness from 9 inches to 12 inches.

10. Appendix H – Sound Level Assessment Report Introduction (V1, page 2-1; pdf page 1022). In this section and elsewhere in the report, the PFAS control building is discussed. That is no longer proposed on-site. Information should be provided on the effect of removing the proposed operations from the sound assessment. See Comment 4 above.

11. Appendix I Visual Impact Assessment (V1, Viewshed page 23; pdf page 1078). Section 6.3.2 states that the Glenburn and Orono construction and demolition debris landfills are closed. Please note these facilities are still operational (only the municipal solid waste landfills are closed).

12. Appendix K Stormwater Management Plan

    a. Table 4-1 (V1, page 4-3; pdf page 1173). This section states that "as designed, peak runoff rates for the post-development conditions at the site during storms of intensities up to and including the 25-year/24-hour storm event will be less than the peak runoff rates for the site's pre-development conditions." However, for point 5 the pre-development and post-development flows are equal. Clarification should be provided.
    b. Watershed flows were evaluated for 2-yr, 10-yr, and 25-year/24-hr storm events per the regulations. It is noted that the proposed detention pond spillways were designed to pass the 100-year/24-hr storm event. (V1, page 5-4 to page 5-6; pdf pages 1177-1179). Although not required by the regulations, was the 100-year/24-hr storm data utilized for other stormwater flow designs?

13. Appendix M Leachate Disposal Contracts (V1, pdf page 1793). If NEWSME enters into updated leachate disposal contracts, these should be submitted to the MEDEP for documentation.

14. Appendix O Current Stormwater Pollution Prevention (SWPP) Plan (V1, page 7; pdf page 1814). The SWPP was last updated in April 2025. On the next update, the Pollution Prevention Team table will need revising, as at least one person listed no longer works at JRL.

Volume II – Site Assessment Report

15. Table 3-1 Well/Piezometer Installation Details (V2, page 3-6; pdf page 28). Non-potable bedrock water supply well PW-ADC is not designated as an open borehole. Is this well screened? Several other bedrock wells in this table that are designated as open boreholes have Slotted Screen Interval information. This is confusing given that "open borehole" implies that there is no screen installed. Please confirm that the information in the table is correct.

16. Section 5.3.2 Bedrock Groundwater Seepage Rates (V2, page 5-14; pdf page 76). The Department was not able to reproduce the calculation of the two principal bedrock horizontal hydraulic conductivity values provided in this section and was also unable to find the effective conductivity relationship referred to from Freeze and Cherry, 1979. Attempts to reproduce these calculations using information from the application yielded slightly different values: 6.45E-05 cm/sec and 1.90E-05 cm/sec. However, these are very close to the values presented by SME in the application: 7.8E-5 cm/sec and 2.3E-5 cm/sec. Although unable to reproduce the results exactly, the Department is comfortable with the values presented in the application and the selected vertical hydraulic conductivity of the bedrock.

17. Section 5.5.1 Private Groundwater Supply Wells (V2, page 5-19; pdf page 81). This section refers to the "nearest groundwater supply well identified in the

MGS database…" being approximately 2,500 feet from the Phase II expansion. It is important to note that the MGS well database is not comprehensive and that other wells may exist in the area. Please confirm that all water supply wells in the vicinity of the facility have been identified and were considered.

18. Section 6.2 Improvement Allowances (V2, page 6-6; pdf page 90) and Section 6.3.3. Time of Travel Results (V2, page 6-10; pdf page 94). These sections add an additional 3.8 years of travel time for imported soil below the liner system. Chapter 401.2.C.2: Time of Travel Calculations says that "*Imported soils used for base preparation below liner systems may be used to account for up to three years in the time of travel calculations for purposes of assessing the need for improvement allowances*…" All calculated travel times to sensitive receptors are greater than 6 years, excluding the additional travel time through the imported soil layer.

19. Section 7.1.3 Groundwater Monitoring Locations Around the Phase II Expansion (V2, page 7-4; pdf page 99). This section discusses abandonment of wells within the Phase II expansion footprint. Wells that are currently monitored will be abandoned in accordance with Chapter 405 - removal of all well material and pressure grouting of the hole. For wells not in the current monitoring program, the application says: "any wells and piezometers located within the Phase II Expansion that are not currently monitored under the existing EMP will be abandoned following proper removal and sealing requirements…" Please clarify what this means. Ideally, the wells will also be abandoned in accordance with Chapter 405. At a minimum, they should be pressure-grouted since they will ultimately be located beneath the landfill.

Volume III – Design Report

20. Section 1.1 Project Description (V3, page 1-2; pdf page 7). This section states that infrastructure to be constructed includes a per- and polyfluoroalkyl substances (PFAS) leachate treatment plant. It is understood that the proposed PFAS plant will be located at Pine Tree Solid Waste Facility and not JRL and that JRL has submitted additional information to the MEDEP in letters dated September 18, 2026 and October 5, 2026.

21. Section 2.1.1 Primary and Secondary Liner Design Criteria (V3, page 2-3; pdf page 14). There appears to be a typo mid-page after "The soils used in the secondary liner……", as the next sentence states "The soil for the primary liner will be placed such that:" It is assumed that this second sentence should state that the soil for the <u>secondary</u> liner will be placed such that….

22. Section 2.1.1 Primary and Secondary Liner Design Criteria (V3, page 2-3; pdf page 14). There appears to be a typo near the bottom of the page where it states the alternative design analysis… is described more fully in Section 3.1.2 of this report. Section 3.12 should be referenced.

23. Section 2.1.3 Base Preparation Below Liner Systems (V3, page 2-4; pdf page 15). The Application states that the fill will be placed in lifts of 12 inches. The regulations (Chapter 401.2.D.3, page 12) state the maximum allowable compacted lift thickness for base preparation is 9 inches. See also Table 3-2 (V3, page 3-4; pdf page 27) for 12-inch lift statements. Clarification should be provided.

24. Section 2.25 Leachate Storage Structures (V3, page 2-9; pdf page 20). This section states that a second 921,000-gallon leachate storage tank will be installed to provide pre-treatment storage prior to a PFAS treatment system and a third tank installed for post-treatment. Clarification should be provided whether the second and third tanks will be installed since the PFAS treatment has now been proposed to be constructed off-site at the Pine Tree Solid Waste Facility.

25. Section 3 Landfill System Design.

    a. Table 3-5 Gas Management System (V3, page 3-7; pdf page 30). The horizontal gas collection trenches have a proposed minimum pipe slope. A minimum slope percent for the gas collection transport and header pipes should also be included in last row of the table.
    b. Table 3-6. Cover Systems (V3, page 3-8; pdf page 31). Daily cover includes foam as an alternative daily cover. Clarification should be provided if foam is still utilized for daily cover.

26. Section 3.3 Leachate Management

    a. In the first paragraph (V3, page 3-20; pdf page 43), PFAS tanks are noted for leachate management and treatment, but as previously mentioned, the PFAS treatment is now proposed to occur off-site at the Pine Tree Solid Waste Facility.
    b. In the fourth sentence of the first paragraph (V3, page 3-20; pdf page 43) the sentence appears to be incomplete: “After treatment, the leachate will be pumped to a post-treatment storage tank and then trucked to either the wastewater treatment plant at the Old Town Mill, which is currently owned by ND Paper, **to the,** or other permitted wastewater treatment facilities”.
    c. Chapter 401.2.F.4.e.iii.b requires a contingency for leachate disposal limitations at contracted treatment facilities, including a letter of intent or service contracts for proposed contingencies. ND Paper is noted as the primary disposal facility in the application (V3, page 3-23; pdf page 46), but it is understood that additional contracts will be submitted, including a primary and a contingency. Updated contracts should be submitted, as appropriate.

27. Section 3.5.1 Cell Development Plan (V3, pages 3-25 to 3-30; pdf pages 48-53). The proposed Cell Development Plan includes the following cells and sizes: Cell 18 at 15.3 acres, Cell 19 at 11.2 acres, Cell 20 at 16.9 acres, Cell

21 at 7.6 acres, and Cell 22 at 5.6 acres. Cells 18 and 20 are large areas. In the previous Expansion, a larger Cell was resized into smaller cells. Clarification should be provided if there is consideration that any of the proposed cells will be resized to a different configuration.

28. Section 3.6 Phased Final Cover System (V3, pages 3-31 to 3-13; pdf pages 53-54). The description of the final cover system does not include a GCL, as shown in the drawings submitted with the Application. Please confirm if a GCL will be included in the final cover system.

29. Section 3.10 Test Pad Submissions (V3, page 3-33; pdf page 56). This section states that the "first 50,000 square feet of soils placed in the first cell or first cover area will be used as a test pad", placement in lifts "each with a compacted thickness of 12 inches", "if it becomes necessary to locate a new borrow source, new test pads will be conducted for both liner and cap placement", and after data and collection results are compiled and discussed "the soil placement and compaction techniques will be employed for the remainder of the project". Clarification should be provided that each cell and cover project will have a test pad due to the regulatory requirements and potential of different soil characteristics in various areas of the borrow source over the course of the entire expansion project.

30. Section 3.11 Special Construction Requirements (V3, page 3-34; pdf page 57). This section states that the augmented liner will consist of two 12-inch layers of compacted clay barrier soil. This should be noted as being included as part of the Test Pad submission, as the rules currently require lifts of 9 inches.

31. Section 3.12.1 Alternative Liner Design (Base Liner system) (V3, pages 3-34 to 3-41; pdf pages 59-64). An alternative liner design for the base liner system was proposed, including use of thicker geomembranes and the addition of a drainage geocomposite beyond the rule requirements, and also with a soil hydraulic conductivity and soil depth under the secondary liner system both slightly less than the rule requirement. Based on review of the information submitted, MEDEP has concluded that JRL has demonstrated that the proposed alternative liner design has a technical equivalency to the minimum design standards.

32. Section 4.5 Contaminant Transport Analysis (V3, page 4-5; pdf page 77). This section refers to the same 3.8-year travel time discussed in Comment 17.

33. Section 7.0 Construction Contract Bid Documents (V3, page 7-1; pdf page 86). This section states that contract bid documents for Cell 18 will be submitted on receipt of Application approval. Sample bid documents, including technical specifications and construction quality assurance manual were included with this application, along with the geotechnical evaluation and design drawings. Per Chapter 401.2.J, page 24 "The applicant may provide draft construction contract bid documents at the time the application is filed and subsequently

submit final detailed construction contract bid documents to the Department for review and approval on a schedule approved by the Department." Prior to construction, final contract bid documents should be submitted to the MEDEP for review.

34. Appendix A Design Drawings (pdf page 93)

    a. Drawings C-101, C-102, C-107, and C-311 (pdf pages 95, 96, 101, and 122) were replaced with drawings submitted September 18, 2026 to remove the PFAS facility. This is noted in these comments for documentation purposes.
    b. Drawing C-105 (pdf page 99). The reference for the Leak Detection Sample Sump (typ) on the North end between Cells 22 and 20 should reference Drawing 303 rather than 301. Clarification should be provided.
    c. Drawing C-107 (pdf page 101). The tank foundation drain connects to the existing tank foundation drain. It does not appear to be clear where this tank foundation drain goes. A brief narrative on where the tank foundation drain goes should be submitted for clarity.
    d. Drawing C-304 (pdf page 115). Section B-B' is identified on the permanent pump station (Cell 18) – Foundation Plan but is not referenced elsewhere. Clarification should be provided.
    e. Drawing C-308 (pdf page 119). The Pipe Inlet/Outlet Details does not appear to have defined A or B measurements (not included in the table). Clarification should be provided.
    f. Drawing C-309 (pdf page 120). Final Cover Riprap Downspout Detail references "final cover system (typ) see detail this dwg". The reference should be Sheet C-306. Clarification should be provided.

35. Appendix B – QA/QC Plan

    a. Section 7.3 Geocomposite Deployment (V3, page 7-4; pdf page 184) The following requirement should also be added to the list in this section, based on the specifications in 02272, Section 3.03(E)(5): the geocomposite shall not be left exposed more than thirty (30) days (or less if recommended by the manufacturer) without being covered by backfill unless a letter is provided by the material supplier indicating the material can be left exposed for a longer time period.
    b. Section 7.7 Geonet Protection (V3 page 7-5; pdf page 185) This section states that "soil should never be placed in direct contact with geocomposite". Clarification should be provided, as geocomposite will be in contact with sand material and this section also states that "all lifts of soil material shall be in conformance with the guidelines given."
    c. Section 8.4 GCL Deployment (V3, page 8-5; pdf page 190). Item 6 states "The installer shall deploy no more GCL material than can be covered with geomembrane by the end of that working day". An instruction for deploying GCL to minimize any chance of precipitation should also be noted.

36. Appendix C – Construction Specifications

    a. Section III Table Section A General Contractor's Bid Values (V3, page III-3; pdf page 212). Item 4 appears to have a typographic error "Cell 18 Ber". It is assumed to be Cell 18 Berm Construction Area Cut to Fill, Place, and Compact.
    b. Section B Technical Specifications 02200 Earthwork, Section 1.05 Quality Assurance. Borrow Source Characterization Testing Table. (V3, page 02200-3; pdf page 325).
        I. The Sand testing does not include Moisture Content testing for the Underdrain and Leak Detection Sand. Chapter 401, Appendix A includes Moisture Content. An explanation should be provided.
        II. Footnote 4 states that historic testing of the source for calcium carbonate content is sufficient provided material came from the same source. Calcium carbonate tests on borrow material should be performed minimally prior to Cell construction. If the source changes, then additional calcium carbonate testing would be required.
    c. Section B Technical Specifications 02200 Earthwork, Section 3.14 (A) Field Quality Control. Borrow Source Construction Testing Table 3-1. (V3, page 02200-15; pdf page 337). The frequency for sand moisture content testing is listed as 1/2500 cy. Chapter 401, Appendix A states the frequency as 1/500 cy. Clarification should be provided.
    d. Section B Technical Specifications 02200 Earthwork, Section 3.14 (B) Field Quality Control. In Place Construction Testing Table 3-2. (V3, page 02200-16; pdf page 338).
        I. Under Drainage Sand, the Density test has a footnote #2 reference, but it appears that footnote number #1 should be separated into two notes and that Drainage Sand Density Test should refer to 'Underdrain and Leak Detection Sand layers only' (rather than Clay Barrier soils only). Clarification should be provided.
        II. The Drainage Sand testing does not include Moisture Content for the Underdrain and Leak Detection Sand. Chapter 401, Appendix A includes Moisture Content. An explanation should be provided.
    e. Section B Technical Specifications 02272 Geotextiles and Drainage Geocomposite, Section 2.01 (D)(6) (V3 page 02272-6; pdf page 353). The table notes for the drainage geocomposite properties including the following language under a number of the items "(PROJECT SPECIFIC FOR EACH CELL)". The requirements should be provided for Cell 18, i.e. minimum transmissivity at a specific pressure and gradient, pressure at which the test should be performed, and the hydraulic gradient at which to be tested.

37. Appendix E – Design Calculations.

    a. Pipe Strength Calculation – Force Main (V3, pdf pages 660 and 665). The objective for the calculations lists a 6-inch solid HDPE pipe for the force main, but the conclusion is for a 6-inch by 10-inch dual contained HDPE

pipe. Please clarify if this calculation is for a 6-inch by 10-inch dual contained HDPE pipe, as would be required for a force main.

b. Leachate Collection Pipe Sizing and Spacing (V3, pdf pages 705-735). Calculations were provided for 6-inch and 8-inch leachate collection pipes, based on infiltration into the waste and runoff over open waste for each of the proposed cells. Clarification should be provided as to which size pipe will be used in each cell.
c. Pipe Spacing Calculations – Leachate Collection Cell 22 (V3, pdf page 731). The other design pages state what the spacing of pipe will be as compared to the calculated results of L. For this sheet L = 495 and the comment just says spacing of pipes in Cell 22 will be less than 495' (<<<495') in area where grade is 7.7% or greater. Clarification should be provided on what the proposed length of spacing is for this scenario in Cell 22 and not just the resulting L calculation.
d. Leachate Tank Storage Capacity (V3, pdf page 787). For this evaluation, #8 in the analysis section appears to be missing an item in the equation. The analysis equation should read: "8. Additional Tank Capacity Required (Start Volume + Design Storage + **25% Additional Capacity** – Existing Tank Storage Capacity) =". For this equation, the bold language shown above is missing; however, the resulting numbers shown in the evaluation are correct (the additional capacity was taken into account mathematically).

38. Appendix F – Geotechnical Evaluation, Section 4.5 Analysis & Results, Table 4-2 (V3, page 4-5; pdf page 971). The static factors of safety in the table for the construction/operation period for waste (circular) are listed as 1.28 for all three of the cross-sections and the MEDEP required minimum is 1.3. The narrative states that each slope stability factor of safety was calculated to be equal to or greater than the minimum values required by the rules. An explanation should be provided.

39. Appendix I – Landfill Gas Design

a. Technical Specifications Phase II Landfill Gas System Expansion, Section 02200 Earthwork, 3.2 (G) Excavation in Waste (V3, page 02200-3; pdf page 1383) states that Contractor shall provide odor control during construction activities. An explanation should be provided regarding the expected odor control options for use.
b. Landfill Gas Operations & Maintenance (O&M) Manual
    I. Section 3.6 Blower/Flare Station/RNG Facility (V3, page 7; pdf page 1419). This section states there is one Flare (#4) maintained and operated by NEWSME for LFG from the entire landfill. There should be inclusion of the two back-up flares if there is a potential for them to operate. Flare #2 and Flare #3 are listed in Section 3.0 Existing GCCS Description (V3, page 2; pdf page 1333) and Attachment 1, Compliance Assurance Monitoring (V3, pdf page 1439). Additionally, proposed Flare #5 will need to be added to the O&M Manual when installed, prior to operations.

II. Section 4.6 Temperature (V3, page 10; pdf page 1422). This section states that JRL has obtained approval from MEDEP to operate "some gas extraction locations at an alternative operating temperature of 150F". Clarification should be made to the language that only the specific gas locations that have been approved in writing from MEDEP may operate at the higher operating value.

40. Appendix K – Cell 18 Design Drawings

a. Drawing C-103 Base Grading Plan (V3, pdf page 1637). The inverts of the proposed 24" diameter corrugated pipe on the eastern side of Cell 18 should be verified and revised, if necessary. It appears that the inv on the Cell 18 side is 161 and the inv on the detention pond 11R side is 162, and they are both denoted as out.
b. Drawing C-303 Sections and Details (V3, pdf page 1647). The berm side of each detail does not specifically have an identifier for the geosynthetics, only the soils, but the geosynthetics continue up the berm side. Clarification should be provided if deemed necessary.
c. Drawing C-304 Section and Details (V3, pdf page 1648) refers to Liner to Building Connection on drawing C-305, but Drawing C-305 does not have that detail. Clarification should be provided.
d. Drawing C-304 Section and Details (V3, pdf page 1648) indicates a B-B' section but does not identify it elsewhere on the Drawing.
e. Drawing C-308 Erosion Control Notes and Details (V3, pdf page 1652) Pipe Inlet/Outlet Details. In the associated table, there does not appear to be measurements for lengths A and B (although A and B are listed as pipes). Clarification should be provided.

Volume IV – Operations Manual

41. Section 1.1 Site History of the Operations Manual (V4, page 1-3; pdf page 8) states that a PFAS treatment plant will be installed. The PFAS treatment has now been proposed at Pine Tree Solid Waste Facility through letters September 18, 2026 and October 5, 2026. Revisions to this section should be made in the next update.

42. Section 6.0 JRL Development Plans (V4, page 6-2; pdf page 25). This section states that NEWSME anticipates that construction of the first Phase II Expansion cell (i.e. Cell 18) of the five planned cells in 2027. Based on the timeframe for license processing, the construction of Cell 18 may not meet a potential commencement in 2027. Clarification should be provided on how a different timeframe will revise the proposed schedule.

43. Section 7.1 Acceptable Solid Wastes and Waste Characterization (V4, page 7-1; pdf page 27) references Coastal Resources of Maine (CRM). The solid waste processing facility in Hampden is now owned by Municipal Waste Solutions (MWS).

44. Table 7-1 Summary of Waste Accepted at the Juniper Ridge Landfill (V4, page 7-2; pdf page 28). Previous versions of the waste table listed dried paint residue and related debris, filter press cake and collagen scrapings, and filter media-ambient sources. If these waste types will be accepted into the proposed expansion area, then they should be added to the table.

45. Section 7.8.1 Daily Cover (V4, page 7-7; pdf page 33). This section includes that daily cover consists of materials specifically listed, including soil equivalent foam applied at the manufacturers' recommended thickness. Clarification should be provided whether foam is still an option for use at the landfill.

46. Section 7.10 Leachate Management (V4, page 7-9; pdf page 35) states that leachate will be loaded into tank trucks and transported to the ND Pater WWTP in Old Town (or to AMSD as a back-up disposal site) for proper treatment. If the disposal sites for JRL's leachate change, then the Operations Manual should be updated.

47. Section 7.11 Landfill Gas Management (V4, page 7-9; pdf page 35). This section mentions one operating flare and one proposed flare. The status of the previously available smaller back-up flares (#2 and #3) should be clarified.

48. Section 7.16.4 Emergency Notification Procedures (V4, page 7-16; pdf page 42). The Department recommends using area codes with all phone numbers.

49. Section 7.23 Additional Requirement for Disposal of Asbestos (V4 page 7-18; pdf page 44). This section states that the non-friable asbestos is handled properly and deposited in the landfill. It is the MEDEP's understanding that asbestos disposal occurs in accordance with the requirements of Chapter 401.4.C.21; however, this handling and disposal process should be summarized and included in the Operations Manual when the Manual is updated.

50. Section 2.0 Waste Characterization Process (First Time Wastes) (V4, page 1 of 5; pdf page 482). The third bullet point states that waste must be analyzed by a certified laboratory. Per Chapter 405.1.D, laboratory analysis must be performed by a laboratory certified by the State of Maine, Department of Health and Human Services.

51. Appendix G Waste Characterization and Acceptance Plan (V4, pdf page 486). The Waste Characterization and Acceptance Flow Diagram, Special Waste Characterization Profile form, and the Analysis Required table (showing the appropriate permit number, date issued, waste type, analysis required, sampling frequency, and notes) that were present in previous versions of the Operations Manual are missing. These should be added back into the Operations Manual.

52. Appendix I Environmental Monitoring Plan (V4, page 3-1; pdf page 507). The last paragraph on this page states "… groundwater elevation at the sample

location will be measured and converted to water level elevation." Please clarify if this should state that groundwater level will be measured and converted to groundwater elevation.

53. Appendix I Environmental Monitoring Plan, Table 3-2 (V4, page 3-6; pdf page 512). This table includes future Underdrain and Leak Detection monitoring locations for the Phase II Expansion. The table lists locations LF-UD-19+20, LF-UD-20+22, LF-LD-19+20S, and LF-LD-20N+22. Though these UD and LD locations have slightly different sample location names, the location descriptions for LF-UD-19+20/LD-LD-19+20S and LF-UD-20+22/LF-LD-20N+22 are the same. The Department recommends that sample locations that represent a similar landfill area be assigned similar names.

54. Appendix I Environmental Monitoring Plan (V4, page 4-1; pdf page 522). The last paragraph provides information on various analytical testing methodologies, including publication dates. The Department recommends adding language such as "or the most recent revision".

55. Appendix I Environmental Monitoring Plan (V4, page 4-3; pdf page 524). The PFAS method referenced in Table 4-2 should be changed from U.S. EPA 2633 to U.S. EPA 1633.

56. Appendix I Environmental Monitoring Plan (V4, page 5-4; pdf page 529). Procedure for Wells Where Water Level Drawdown Stabilizes. This section provides the stabilization criteria for low-flow sampling. The typical stabilization criteria, as outlined in the EPA LOW-FLOW (MINIMAL DRAWDOWN) GROUND-WATER SAMPLING PROCEDURES, EPA/540/S-95/504, April 1996, for Specific Conductance is +/- 3% and for Dissolved Oxygen is +/- 10%. The Department agrees that when DO readings drop below 1 mg/L, +/- 0.1 mg/L is a reasonable secondary stabilization criterion. Eh is included in the field parameters in Tables 4-1, 4-2, and 4-3, but no stabilization criteria are provided for Eh. The typical low flow stabilization criterion for Eh is +/- 10 mV. Same comment for EMP Appendix C: Low-Flow Groundwater Sampling Assessment and Sampling Procedure, pdf page 565.

57. Appendix I Environmental Monitoring Plan (V4, page 5-9; pdf page 534). Table 5-3 Sample Handling, Preservation, and Holding Time-Water and Leachate. If it is likely that EPA Methods 537.1 and 1633 will both be used, the Department recommends adding both methods to the table, with the appropriate container types, preservation, and hold times displayed for each method.

58. Complaint Record Form (V4, pdf page 714). The contact for the Department should be updated from Dominique DiSpirito to Vera Maheu.

59. Odor Control Plan (V4, pdf page 717). Item 1 under Control of Odors Associated with Leachate Storage & Transport references a leachate storage pond. It is the Department's understanding that while the pond structure is still

in place, it is no longer used for the storage of leachate. Please confirm and update as appropriate.

60. Appendix M Facility Notification Procedures, Attachment A, Contact Information (V4, pdf pages 732, 733, and 735). During the next Operations Manual update, the MEDEP Solid Waste contact should be revised from Dominique DiSpirito to Vera Maheu with the appropriate phone number.

61. Leak Response Action Plan, Section 3.3 (V4, page 3-1; pdf page 788). The first paragraph has an incomplete sentence. Please revise as appropriate.

62. Archaea Energy Gas Treatment System Monitoring and SSM Plan (V4, page 5 of 19; pdf page 860). Section 3.1.1 makes reference to treated landfill gas being loaded onto trucks. Department Order S-020700-WD-CO-M states the trucking operation equipment will be decommissioned and removed from the site upon completion of the pipeline extension. Please provide a timeline for the completion of the pipeline and decommissioning of the trucking operation equipment.

63. Archaea Energy Gas Treatment System Monitoring and SSM Plan (V4, page 5 of 19; pdf page 860). The second to last paragraph on the page states: "Archaea Energy, the owner of Juniper…". This should be updated to Juniper RNG to avoid confusion with the overall Juniper Ridge Landfill site.

64. Archaea Energy Gas Treatment System Monitoring and SSM Plan (V4, page 12 of 19; pdf page 867). Section 8.1, item 3 of the startup procedure states: "Ensure that the system is ready to start by one or more of the following". Please clarify if all items listed are required to be verified prior to starting up the facility.

65. Archaea Energy Gas Treatment System Monitoring and SSM Plan (V4, page 13 of 19; pdf page 868). In Section 8.2 the phrase "of an affected source of portion" appears twice in the sentence.

66. The Archaea Energy Integrated Contingency Plan: Preparedness, Prevention, and Contingency (PPC) Plan/Emergency Action Plan (EAP)/Spill Prevention Control and Countermeasure (SPCC) Plan found in the April 2026 revision of the Juniper Ridge Landfill Expansion Operations Manual should be added to the Operations Manual for the proposed expansion.

67. Additional information is needed to show compliance with Public Law 2025, Chapter 651 (the Department notes that some of this information was provided in the June 2026 Environmental Monitoring Plan (EMP), but it is also requested here in order to provide for a complete Operations Manual for the proposed expansion):

    a. Tables 4-1 and 4-2 Detection Monitoring Cells 1-10 and 11-22 Parameters for Analysis, footnote 10 (V4, page 4-2 and 4-3; pdf page 523-524) should

be updated to include information on monitoring of residential water supply wells by U.S. EPA Method 537.1, as found in Table 4-1 of the June 2026 EMP. Additionally, Section 5.5 Residential Well Sampling Procedure, from the June 2026 EMP, should be incorporated into the Operations Manual for the proposed expansion.

b. In accordance with 38 M.R.S. § 1310-N (10-D), a solid waste facility may not dispose of sludge at that facility unless the sludge has been characterized by the entity that generated the sludge, including analysis for PFAS. The required waste characterization plan for sludge(s) must be updated in the Operations Manual, including the requested table listed in Comment 50 above.

68. Per Chapter 405.2.C, detection and assessment parameters to be analyzed at a landfill must be based upon those found to be present during characterization of the leachate generated by the solid waste facility. A site characterization monitoring program must be conducted at any new, expanded or existing active, inactive or closed solid waste landfill at which water quality monitoring is required, to establish the parameters to be monitored, and their concentrations as currently found in ground and surface water in the vicinity of the solid waste facility. Historical documentation shows PFAS compounds present in the JRL leachate. Please provide the Department with a site characterization monitoring proposal for wells associated with the proposed expansion area, to include the analysis of PFAS. Per Chapter 405.2.C.1.g, parameters consistently undetected in results from its groundwater monitoring network may be deleted from detection monitoring upon approval by the Department. The EMP must be updated to incorporate the requested PFAS testing.

Volume V - Natural Resources Protection Act (NRPA) Tier 3 Wetland Application (*Bureau of Land Resources review process*)

S-020700-W5-CV-N, Public Benefit Determination (PBD), March 23, 2026.

69. Condition #2. Please provide an update on the construction/operation of Casella's mattress recycling facility in Scarborough, licensed under Department Order S-100023.

70. Condition #3(D). Please provide the Department with a proposed implementation plan and schedule to significantly decrease, by 2030, the amount of municipal wastewater treatment plant sludge, construction and demolition debris, and oversized bulky waste to be disposed of in the proposed expansion area.

71. Condition #3(G). Please update the proposed expansion Operations Manual to include two additional surface scans per year of the landfill intermediate cover, with the scans conducted during periods of low barometric pressure if

possible, for the determination of fugitive landfill gas. The update should include the proposed scan method and details on conducting necessary repairs.

72. Condition #3(H). Please provide the Department with information regarding the system by which residents of the project community will be notified, in near real time, of significant landfill events. Details of this system should be added to the proposed expansion Operations Manual.

Please provide responses to these comments within 30 days of receipt.

Please contact me at vera.a.maheu@maine.gov or 207-451-2294 should you have any questions or concerns.

Cc: Kathy Tarbuck, P.E., MEDEP
Sean Dougherty, L.G., MEDEP