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DEPARTMENT OF ADMINISTRATIVE &  
FINANCIAL SERVICES  
BUREAU OF GENERAL SERVICES  
77 STATE HOUSE STATION  
AUGUSTA, MAINE  
04333-0077

ALEXANDER E. PORTEOUS  
COMMISSIONER

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INTERIM DIRECTOR

March 29, 2018

Ms. Kathleen E. Tarbuck, P.E.  
Environmental Engineer  
Maine Dept. of Environmental Protection  
17 State House Station  
Augusta, ME 04333-0017

Re: Juniper Ridge Landfill Amendment Application #S-020700-WD-BL-A  
Comments on Draft Amendment License for Continued Acceptance of In-State MSW

Dear Kathy:

Enclosed please find the Comments of the Bureau of General Services and NEWSME Landfill Operations, LLC on the Draft Amendment License and a redlined version of the draft Order with the Applicants' recommended changes.

Thank you for your continued attention to our Amendment Application.

Sincerely,

Gilbert M. Bilodeau  
Gilbert M. Bilodeau, Interim Director  
Bureau of General Services

Brian Oliver  
Brian Oliver, Vice President  
NEWSME Landfill Operations, LLC

Enclosure

BGS and NEWSME Comments on Draft DEP MSW Amendment Order  
March 29, 2018

The following highlights the primary comments and concerns the Applicants have regarding the draft Department Order issued on March 23. These comments should be read along with the attached redline of the draft Order, which provides additional commentary on, and recommended changes, to the draft Order.

1. No other practicable alternative for the stranded Maine MSW will be available at the end of the very limited time frame suggested in the draft Order. As established in the Applicants' responses to staff comments:
  - ecomaine is full.
  - ecomaine has notified certain existing customers that effective April 1 it has no room for them.
  - MMWAC is full.
  - Fiberight's licensed capacity is fully contracted for.
  - PERC has confirmed multiple times that its MSW processing capacity has been reduced by 100,000 tons per year, and that it cannot operate viably at more than 210,000 tons per year on a regular basis.
  - Construction of another incinerator is prohibited by Maine's commercial solid waste disposal facility ban. Thus, there has been no replacement for the in-state incineration capacity that MERC represented when it closed in 2012.
  - No mixed material processing facility (like Fiberight) could be designed, licensed, and constructed in the limited time frame of the draft Order. MRC has been working on its project since 2012, six years ago, and its start date is still uncertain.
  - The Applicants cannot force more recycling; it is beyond their control. This authority resides with the Legislature to mandate recycling.
  - PTW-NEWSME have entered into agreements to divert substantial amounts of MSW tonnage to PERC and CRM (collectively, well in excess of 100,000 tons), assuming approval of the amendment Order for 81,800 tons of capacity at JRL. But these agreements are coterminous with the term of JRL amendment license. Thus, if the term of the license ends after 1 year, so do these agreements.

Given the above and all of the evidence in the record demonstrating the Applicants consistency with the hierarchy, the Applicants request that the term of the MSW amendment license be until December 31, 2023. This is conterminous with any extended PERC agreement, and allows sufficient time for both PERC and CRM to achieve a sustainable operating status. Additionally, this allows other solutions to potentially emerge within this term.

## 2. Compliance with waste management hierarchy.

In the Department's analysis of compliance with the hierarchy, the draft Order states: "The 2013 amendment license #S-020700-WD-BC-A states in Finding 5(B)(3) on page 25 that "alternative waste management options exist for this MSW that are better aligned with the hierarchy." What those options were was not explained in the 2013 amendment order. The paragraph further states: "The 2013 amendment also included requirements for ongoing steps to be taken by JRL to meet the condition of no MSW by March 31, 2018." But what those ongoing steps were was not explained in the 2013 amendment order.

Moreover, the burden for identifying solutions for MSW diversion does not, and cannot, rest solely on NEWSME (or Casella). Neither entity generates the MSW; its source is Maine residents and commercial entities. The solutions for MSW management need to be collaborative between the State and industry. By statute, the Department is responsible for preparing and implementing a State Waste Management and Recycling Plan to be updated every five years.

In the context of the Department's draft findings, and the inclusion of Condition 6 in the draft Order, it could be interpreted that the staff believes that NEWSME has done nothing over the past four years to take steps or pursue non-landfill options to manage in-state MSW. That is simply not the case. NEWSME has pursued numerous options and taken many steps, including:

**PERC.** In anticipation of the expiration of PERC's 30-year disposal contracts, NEWSME staff have been working on a regular basis with PERC's owners since 2014 to assure an adequate source of inbound MSW and a cost-effective disposal site for PERC's residues after March 31, 2018.

Working with PERC has involved a considerable amount of NEWSME staff resources. The result, a PERC-Casella disposal agreement for post March 31, 2018, which represents by far the largest amount of contracted MSW that PERC will be relying on, and far in excess of the existing PERC-Casella agreement that will expire on March 31. Clearly, without PERC's continued operation, a critically important option for diversion of MSW from landfilling would be lost. PERC's continued operation, with a new and reduced operating regime and no long term Power Purchase Agreement at high rates, is uncharted territory. DEP Staff's suggested limited term of the draft license does not take this adequately into account.

**Fiberight.** Prior to selecting Hampden as the site for this facility, NEWSME staff met several times with the MRC to discuss locating that facility at the Juniper Ridge Landfill. NEWSME incurred consulting expense and allocated NEWSME staff time to research and prepare specific locations at the JRL site where this could occur.

In late 2017, Casella's Pine Tree Waste hauling division executed an agreement with Coastal Resources Management (Fiberight) to deliver in-state commercial MSW in addition to the residential MSW that had been contracted with MRC member municipalities.

However, NEWSME cannot utilize this facility to divert MSW from landfill disposal until Fiberight is operational. When that will occur is still uncertain. DEP Staff's suggested short term of the draft license does not take this into account.

**Exeter Agri-Energy.** NEWSME, Pine Tree Waste, and Casella Organics have been meeting with Exeter staff over the last several years to work cooperatively to increase the amount of food waste being delivered to the anaerobic digester, and to provide a cost-effective disposal option for de-packaging residues. There is a letter of support from Exeter Agri-Energy in the JRL amendment application describing this cooperative interaction.

NEWSME certainly understood from the 2013 amendment order that other management options for the in-state MSW at issue higher in the hierarchy should be considered to the maximum extent practicable. However, NEWSME never understood then, and does not believe that it was required then, or now, to actually develop (i.e., permit, construct and operate) non-landfill options that were not then, or are not now, in existence. Nothing in the hierarchy rules requires those project development obligations to be assumed by the applicant.

Nevertheless, given the high degree of uncertainty regarding the management of MSW post-March 31, 2018, the high degree of uncertainty about which non-landfill options would be ready to accept MSW on April 1, 2018, and the recognized need to be able to serve its customers that generated MSW, NEWSME did research and evaluate another new MSW management alternative: a mixed material process facility that would process and remove recyclables from trash that had already been subject to Zero-Sort (single-stream) recycling.

NEWSME looked at siting an MSW mixed material process facility on or near the JRL site. Over a period of approximately 8 months, NEWSME considered several design variations of a 200,000 tpy facility. The final design concept was to separate mixed recyclables from 200,000 tons of MSW received at or near the JRL site through two 60 ton per hour processing lines. Approximately 25% of the MSW would be separated as recyclables and loaded into compacting trailers for delivery to Casella's Zero-Sort Facility in Lewiston, Maine for final separation. Approximately 75% of the MSW would be landfilled. Since China Sword entered the equation, the percentage removal of recyclables could be lower than the 25% modelled for the above project concept.

NEWSME decided not to move forward with this project as it was not economical.

The DEP staff was aware that NEWSME was exploring this option because it was discussed in a meeting that occurred in July 2017. NEWSME inquired whether a mixed material processing facility that did not produce an energy fuel would be required to meet the no-

less-than 50% recycling requirement in statute. Since this facility would be processing discarded MSW that had already been subject to generator-separated recyclables (e.g., Casella's Zero-Sort), achieving 50% recycling on the remaining trash would be impossible.

3. The draft Order appears to limit consideration regarding the Westbrook transfer station to MSW received from former Maine Energy municipalities under long-term contracts. But all residential and commercial Maine MSW received at the Westbrook transfer station must be provided for at another end destination in Maine. There were many commercial customers with significant volumes of commercial MSW that used MERC and this commercial volume was included as part of the original 81,800 tons approved in the 2013 license. NEWSME has an obligation to serve these commercial customers as well.
4. The draft Order fails to provide for the management of all of the Maine MSW received at the Westbrook transfer station, ignoring the requirements of the Department's own license for this facility:

S-022074-WH-G-M (minor revision increasing the size of the Westbrook transfer station building) 4 SEP 12, 6. Description of Proposed Facility Modifications, A. Solid Waste Transfer Building: "... Incoming loads of MSW, CDD, and Zero-Sort recyclables will be deposited on the tipping floor and will be divided by waste type. Each waste type will be loaded into a transfer trailer staged in the trailer bay, and once full, the transfer trailers will be tightly tarped and parked in the paved transfer trailer parking area for transport to a disposal facility or to an off-site processing facility. ... The facility will not allow any burning or disposal of materials on site. ... The storage of all waste materials will be within the confines of the solid waste transfer building or in the loaded, tightly tarped trailers parked on the paved trailer parking area. Loaded trailers will be removed within 72 hours of being filled."

5. Use of MSW in the JRL closure has been precluded by the draft Order's short license term; the closure of JRL will not begin until the expiration of the approval. The DEP staff initiated consideration of this topic at the first pre-application meeting: DEP staff asked the Applicants for technical and operational reasons for continued disposal of non-bypassed MSW at JRL. At the Department's request, the Applicants provided information on this topic in the initial application, in the December 14, 2017 Supplement, and in the March 1, 2018 Applicants' response to staff comments.
6. Service providers and customers involved in the management of MSW require and are entitled to some reasonable degree of predictability and certainty in the arrangements and expectations of how those services will be provided. The limited one-year extension period, with the possibility of another 6-month extension, simply perpetuates the considerable uncertainty, with the attendant distraction and diversion of resources, that the service providers have been struggling with over the last several years. Rather than helping Maine's solid waste management system to function efficiently and productively, the

extremely limited time frame that has been proposed in the draft Order means that no one can plan beyond one year.

7. The draft Order does not provide for the use of MSW in the phased closure of the current licensed capacity over the entire closure anticipated. MSW is a suitable, reliable, and available solid waste for bringing the site to final waste grades prior to installation of the closure cap. Contaminated soil, while suitable, is not necessarily available on a consistent basis when required. Front-end-process-residue (FEPR) from PERC is very suitable for this purpose, but, as explained by the PERC plant manager at a recent briefing at the Legislature (at which the DEP staff was present), PERC no longer produces an appreciable amount of FEPR; most of this material is now combusted in the boiler. PERC ash would be a suitable closure waste material, but its use is dedicated to treatment plant sludge odor control and daily cover in the active face of the landfill.

Without the use of MSW to achieve final grades in the phased JRL closure, virgin soil may be used. This would be at a higher cost, would consume a natural resource, and would consume vital landfill disposal capacity.

The Applicant has demonstrated, and the Department agrees, that the use of MSW during final filling, grading, and phased final landfill closure is advantageous to landfill operations. During the five-year extension, the Department will have the opportunity to review this use in at least two planned capping events to further evaluate its effectiveness. Based on this review, the Department technical staff may consider whether the use of non-bypass in-state MSW could continue to be used for closure operations.

8. The draft Order notes that the amount of non-bypassed in-state MSW disposed at JRL increased over the three-year period (2014, 2015, 2016) reported in the facility's annual report. First, it should be noted that the annual license limit of 81,800 tons was never reached. Second, 2014 was a partial year; disposal of this MSW did not begin until March 2014. Third, more of this in-state MSW was delivered temporarily in 2014 and 2015 to other landfills, which are not always available. Although this represented diversion from disposal at JRL, it does not constitute any benefit to the hierarchy, as other landfills are on the same level of the hierarchy as JRL.
9. The applicants propose that Conclusion 8 be modified as follows:

The applicant has demonstrated that considerable uncertainty exists in the municipal solid waste landscape in Maine and will likely continue for a number of years. These uncertainties include, but are not limited to: the wholesale price of electricity, which affects the revenues of MSW incinerators that generate and sell power; internationally evolving recycling quality control standards that may affect recycling processing facility operations, marketing of recyclables, and the cost of recycling to municipalities and businesses; the start-up schedule of new MSW processing facilities (i.e., Fiberight) and the sustainability of a new operating regime at PERC. This warrants an extension of up

to 81,800 tons per year of non-bypass, in-state MSW at JRL and the Department concludes that an extension of up to 81,800 tons per year of non-bypass, in-state MSW at JRL until December 31, 2023 is reasonable and consistent with the hierarchy.

During the five-year extension (until December 31, 2023), BGS and NEWSME will continue to work with facilities in Maine that provide non-landfill management of MSW, including, but not limited to, PERC, Fiberight, the MRC, and Exeter Agri-Energy to determine if there are cost-effective measures that could be implemented that would reduce or eliminate the continued need for non-bypass MSW disposal at JRL. NEWSME will summarize those efforts in the JRL annual report.



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

STATE OF MAINE, ACTING THROUGH )	SOLID WASTE LICENSE
THE BUREAU OF GENERAL SERVICES )	
OLD TOWN, PENOBCOT COUNTY, ME )	
JUNIPER RIDGE LANDFILL )	
#S-020700-WD-BL-A )	
(PARTIAL APPROVAL WITH CONDITIONS) )	AMENDMENT

Pursuant to the provisions of the *Maine Hazardous Waste, Septage and Solid Waste Management Act*, 38 Maine Revised Statutes (M.R.S.) §§ 1301 to 1319-Y; *Solid Waste Management Hierarchy*, 38 M.R.S. § 2101; the *Rule Concerning the Processing of Applications and Other Administrative Matters*, 06-096 Code of Maine Rules (C.M.R.) ch. 2 (last amended October 19, 2015); the *Solid Waste Management Rules: General Provisions*, 06-096 C.M.R. ch. 400 (last amended April 6, 2015), *Landfill Siting, Design and Operation*, 06-096 C.M.R. ch. 401 (last amended April 12, 2015), and *Water Quality Monitoring, Leachate Monitoring, and Waste Characterization*, 06-096 C.M.R. ch. 405 (last amended April 12, 2015) (collectively, the Rules), the Department of Environmental Protection (Department) has considered the application of the State of Maine acting through the Bureau of General Services, with all supportive data, agency review comments, and other related materials on file, and FINDS THE FOLLOWING FACTS:

1. APPLICATION SUMMARY

A. Application

The State of Maine, acting through the Bureau of General Services (BGS), has applied for Maine Hazardous Waste, Septage and Solid Waste Management Act 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 non-bypass, in-state municipal solid waste (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 Juniper Ridge Landfill (JRL) is located in Old Town, Maine. The northern edge of the JRL property parcel is on the Alton/Old Town border and a portion of the access road is located in Alton.

BGS, as the owner of JRL, and NEWSME Landfill Operations, LLC (NEWSME), as the operator of JRL, prepared the amendment application.

B. History

The following is a relevant historical summary and does not include all licensing actions:

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THE BUREAU OF GENERAL SERVICES )  
OLD TOWN, PENOBCOT COUNTY, ME )  
JUNIPER RIDGE LANDFILL )  
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SOLID WASTE LICENSE

AMENDMENT

- (1) On July 28, 1993, James River Paper Company, Inc. was issued a license to construct and operate a 68-acre secure landfill, known as the West Old Town Landfill, to dispose of the James River Paper Company's pulp and papermaking residuals (license #S-020700-7A-A-N). The project impacted 1.31 acres of freshwater wetland. The compensation package included preservation of 27.92 acres of land adjacent to the facility and the restoration and enhancement of 1.76 acres of wetland within the preserved parcel.
- (2) On October 21, 2003, the Department issued conditional approval for the transfer of licenses for the West Old Town Landfill, from the Fort James Operating Company, to the State of Maine, State Planning Office (SPO) (including license #S-020700-WR-M-T); the transfer became effective when the sale of the landfill to the State of Maine, acting by and through SPO, occurred on February 5, 2004.
- (3) On February 5, 2004, the State of Maine, acting by and through the SPO, and Casella Waste Systems, Inc. (Casella) entered into an Operating Services Agreement (OSA) for the operation of the West Old Town Landfill.
- (4) On April 9, 2004, the Department approved an amendment application (license #S-020700-WD-N-A) for a vertical increase in the final elevation of the landfill and the disposal of additional waste streams.
- (5) In 2006, the West Old Town Landfill became known as the Juniper Ridge Landfill.
- (6) Pursuant to PL 2011, ch. 655, § GG-69, on July 1, 2012, the BGS, within the Department of Administrative and Financial Services (DAFS), became the state agency acting as the owner and licensee of JRL. The Department of Economic and Community Development is the manager of JRL. NEWSME, a wholly-owned indirect subsidiary of Casella, operates the landfill for the State of Maine, acting through the Bureau of General Services.
- (7) On December 20, 2013, the Department approved an amendment application (license #S-020700-WD-BC-A) for the disposal of 81,800 tons/year of MSW at JRL, limited to the period of time during which licensed disposal capacity remains available within the approved horizontal and vertical boundaries of the landfill or March 31, 2016, whichever is earlier.

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- (8) On June 19, 2014, the Board of Environmental Protection (Board) issued a Denial of Appeals (license #S-020700-WD-BG-Z) which modified condition 10 in #S-020700-WD-BC-A to change the date from March 31, 2016 to March 31, 2018.

### C. Terms and Acronyms

The following terms and acronyms can be found in this license and are listed in Table I for ease of reference:

**Table 1: License Terms and Acronyms**

applicant	Refers to both BGS and NEWSME (or a successor operator)
Application	Refers to the November 2017 application, the March 1, 2018 Supplemental Information on Solid Waste Management Hierarchy, and associated submittals
Board	Maine Board of Environmental Protection
BGS	Bureau of General Services
Casella	Casella Waste Systems, Inc.
CDD	Construction and Demolition Debris
C.M.R.	Code of Maine Rules
CRM	Coastal Resources of Maine, LLC. CRM refers to the solid waste processing facility in Hampden which was established by Fiberight as a special purpose entity and is managed entirely by Fiberight
Department	Maine Department of Environmental Protection
H <sub>2</sub> S	Hydrogen Sulfide
JRL	The Juniper Ridge Landfill
MERC	The former Maine Energy Recovery Company, an incinerator previously operated in Biddeford, Maine
MMWAC	Mid-Maine Waste Action Corporation
MRC	Municipal Review Committee, Inc.
M.R.S.	Maine Revised Statutes
MSW	Municipal Solid Waste
MSW Bypass	Any MSW that is destined for disposal or processing at a solid waste incinerator, but that cannot be disposed of or processed at that incinerator because of the incinerator's malfunction, insufficient capacity, inability to process or burn, down-time, or any other comparable reason as approved by the Department
NEWSME	NEWSME Landfill Operations, LLC
OSA	Operating Service Agreement
PERC	Penobscot Energy Recovery Company
Rules	The Department's Solid Waste Management Rules, including 06-096 C.M.R. chs. 400, 401, and 405

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Soft Layer	A protective layer of waste above the liner and leachate collection systems
State Plan	Maine Materials Management Plan: 2014 State Waste Management and Recycling Plan Update & 2015 Waste Generation and Disposal Capacity Report, January 2017, prepared by the Maine Department of Environmental Protection

D. Summary of Proposal

The proposed application includes a request to remove the date in the existing amendment license, #S-020700-WD-BC-A, to allow continued acceptance of no more than 81,800 tons per year of non-bypass, in-state MSW at JRL beyond the currently licensed March 31, 2018 date. The request is applicable to the existing landfill operations and does not extend to the recently licensed landfill expansion.

Condition 10 of Department license #S-020700-WD-BC-A states the following, pertaining to the approval of disposal of no more than 81,800 tons per year of MSW at JRL:

10. The term of this license is limited to the period of time during which licensed disposal capacity remains available for disposal within the horizontal and vertical boundaries approved in Department license #S-020700-WD-N-A, or until March 31, 2016, whichever comes sooner. This condition does not limit the authority of the applicant to accept MSW bypass after March 31, 2016 provided that such acceptance is consistent with the relevant terms of Department license #S-020700-WD-N-A and the soft layer license.

Board Order #S-020700-WD-BG-Z, Denial of Appeals, states:

- Condition #10 is modified to change the date from March 31, 2016 to March 31, 2018.

The applicant states that an approved amendment will serve to meet the ongoing need of primarily southern Maine communities, formerly contracted with Maine Energy Recovery Company (MERC), as a disposal option and asserts that there is a potential shortfall beginning March 31, 2018 in the availability of existing and planned solid waste facilities to manage the MSW generated within the State.

The solid waste application, dated November 2017, along with a supplement titled "Information on Solid Waste Management Hierarchy" dated December 14, 2017

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OLD TOWN, PENOBCOT COUNTY, ME	)	
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(Application), was accepted as complete for processing on December 15, 2017. The Department commented on the Application in a February 15, 2018 review letter. On March 1, 2018 BGS and NEWSME submitted a response to comments. A follow-up comment letter by the Department was dated March 12, 2018, and BGS and NEWSME responded to the follow-up comments on March 16, 2018.

E. Ownership and Operation of the Juniper Ridge Landfill

The State of Maine, acting through BGS, owns JRL. Casella is the operator of the landfill through NEWSME, a wholly-owned indirect subsidiary of Casella. The terms and conditions of NEWSME's operation of the landfill are established by the OSA between the State of Maine and Casella dated February 5, 2004, and amended on July 24, 2006, ~~and November 2, 2006, and December 21, 2015.~~

In accordance with the OSA, Casella is required to pay all costs associated with the development, operation, closure and post-closure care of the landfill. In addition, Casella is required by the OSA to establish and maintain financial assurances for the landfill sufficient to meet the closure and post-closure care provisions of the applicable Rules, assume liability for the landfill under both the current and future conditions, and assure that adequate disposal capacity is provided for the wastes currently disposed in the landfill for at least a 20-year period. Resolve 2003, Chapter 93 requires contract terms and conditions to be "revenue-neutral to the State and as the office [former Executive Department, State Planning Office] determines are advisable and in the public interest."

The OSA is a contract between the State of Maine, acting through BGS, and Casella. The Board and Department are not parties to the OSA. Section 4.1 of the OSA includes language that specifies that the State shall work with Casella in maintaining in the State's name the existing permit, amendments, and all permits, licenses, statutory amendments and legislation, approvals and authorizations reasonably requested by Casella and agreed to by the State for the operation of the landfill in accordance with the terms of the OSA.

Reference to the "applicant" in this license determination refers to both BGS, as the owner of JRL, and NEWSME, as the current operator, acting as an agent on behalf of BGS in accordance with the terms in the OSA.

2. PUBLIC PARTICIPATION

A. Pre-Application Meetings

STATE OF MAINE, ACTING THROUGH	6	SOLID WASTE LICENSE
THE BUREAU OF GENERAL SERVICES	)	
OLD TOWN, PENOBCSCOT COUNTY, ME	)	
JUNIPER RIDGE LANDFILL	)	
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Pre-application meetings were held on September 19 and October 13, 2017, attended by the applicant and the Department. Although the meetings were not explicitly required by 06-096 C.M.R. ch. 2, § 10, discussions centered on the proposal concept and required application contents.

B. Notice of Intent to File

A Notice of Intent to File an application was published in the Bangor Daily News on November 21, 2017, in addition to being mailed to the abutters and prior appellants, the Old Town and Alton municipal offices, the Landfill Advisory Committee and the Penobscot Nation. The notice and mailing of the notice fulfilled the public and local participation requirement of 38 M.R.S. § 1310-S(1), the citizen's advisory committee notification requirement of 38 M.R.S. § 1310-N(12), and the public notice requirements of 06-096 C.M.R. ch. 2, § 14.

C. Public Hearing Requests

The Department received 19 timely requests for a public hearing in late December 2017 and early January 2018. According to 06-096 C.M.R. ch. 2 § 7(B) of the Department's Rules Concerning the Processing of Applications and Other Administrative Matters, "the Department will hold a hearing in those instances where the Department determines there is credible conflicting technical information regarding a licensing criterion and it is likely that a hearing will assist the Department in understanding the evidence." The hearing requests included many statements that the proposal goes against the State's Solid Waste Management Hierarchy. Additional concerns included that out-of-state waste continues to be accepted, MSW was not originally allowed when the State took over the facility and shouldn't continue, Casella has a history of unveiling additional plans immediately after obtaining approvals, the environment will be harmed, the State's interest should be considered not just Casella's, contracts involving Casella should be made available, and disagreement over the State's available solid waste capacity assertions in the Application. Two additional submittals did not include hearing requests, but included comments. One commenter stated concern with the proposal and the second stated support for the Application.

After review of the submitted requests for a public hearing, the Department determined that the requests received did not contain credible conflicting technical information regarding licensing criteria to support holding a public hearing; however, the Department held a public meeting to provide an opportunity for comments to be presented on the Application in a public forum.

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D. Public Meeting and Comments Submitted

The Department held a public meeting on the Application on February 28, 2018 in Bangor, Maine pursuant to 38 M.R.S. § 345-A and 06-096 C.M.R. ch. 2, § 8. The public meeting was noticed in the Bangor Daily News on February 17, 2018 and posted on the Department's website with interested persons being separately notified. Approximately 100 people attended the public meeting and approximately 40 total speakers commented on the Application, either in support, in opposition, or neither for nor against.-

**Commented [A1]:** This section does not reflect the many comments oral and written submitted in support of the application at the February 28 public meeting, and before and after.

Additional written comments were received over the course of the licensing process. The comments received during the public meeting and subsequent to the meeting included: support for the application from PERC, Fiberight, MRC and representatives of many MRC communities because it advances the hierarchy, fear over the possibility of stranded waste after March 31, 2018, recognition of Casella's MSW diversion efforts and the importance of a landfill like JRL to the hierarchy, concern for the environment and surrounding area, JRL has had time to find other viable options for MSW waste disposal from the former MERC communities, the hierarchy requirements will not be met, JRL's MSW capacity is needed for the MRC communities due to the status of the Coastal Resources of Maine, LLC's (CRM) facility and waste transportation costs, landfilling should be the last option considered and shouldn't necessarily be the easiest and least expensive, the State's landfill space should be conserved, JRL will continue to request acceptance of MSW if it's allowed through this licensing process, and more should be done to recycle. A number of the comments received are further expanded on in Findings of Fact ("Finding") 8.

E. Draft License Comment Period

A draft license was made available for comment on March 23, 2018 through notification to the applicant and interested persons. The draft license was posted on the Department's website and the 5-working day comment period closed on March 30; 2018. *[Additional language to be inserted after draft comment period]*

3. TITLE, RIGHT OR INTEREST

The applicant must demonstrate sufficient title, right, or interest in all of the property which is proposed for use pursuant to 06-096 C.M.R. ch. 400, § 4(A). The applicant has provided evidence of the State's title to the property pursuant to the Rules by submitting the documentation provided in the 2012 application for amendment #S-020700-WD-B-C:

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the appropriate site and quitclaim deeds for the parcels of land on which the landfill is located. The Department therefore finds that the applicant has demonstrated sufficient title, right, or interest in the existing landfill property.

#### 4. FINANCIAL ABILITY AND FINANCIAL ASSURANCE

State law at 38 M.R.S. § 1310-Y requires the applicant to provide assurance of its financial ability to satisfy the estimated costs for corrective action and assurance of financial capacity to satisfy the estimated costs of closure and post closure care; however, 38 M.R.S. § 1310-Y applies to privately owned solid waste facilities. The Department's rules at 06-096 C.M.R. ch. 400, § 4(B)(1) and § 11 require financial ability and financial assurance for the operation, maintenance, closure and post-closure care of a solid waste facility; however, as a State-owned facility, it is not subject to the requirements of § 11 to provide financial assurance sufficient to ensure that funds are available to pay for the anticipated costs of compliance with all facility closure, post-closure maintenance, post-closure monitoring requirements, and corrective action.

Although not all of the financial requirements of the State laws and Rules apply to the State owned JRL, Casella maintains financial assurance as required by the OSA. Ongoing activities at JRL are funded by revenues generated from the operation of the landfill (i.e., tipping fees). The applicant provided a letter dated September 8, 2017 from the Bank of America, N.A. stating that Casella maintains a Revolving Credit Facility and has adequate financial resources with all accounts in good standing. Casella maintains surety bonds as financial assurance for final closure and post-closure care costs for the entire developed site for a 30-year period. The closure and post-closure care costs are updated yearly with updates of costs by an independent third party and the documentation of any changes made to the funding agreement are submitted in the facility's Annual Report. The most recent updated surety bond documentation was submitted to the Department in an August 11, 2017 letter with attachments.

The Department finds that financial ability and financial assurance is maintained by NEWSME as the current operator of JRL to operate, maintain, close, and accomplish post-closure care in a manner consistent with applicable State law and Rule requirements, provided NEWSME submits the appropriate financial assurance package updates to the Department on an annual basis.

#### 5. TECHNICAL ABILITY

The applicant must have the technical ability to design, construct, operate, maintain, close, and accomplish post-closure care in a manner consistent with State environmental

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standards, as well as meeting the civil or criminal record standards in 06-096 C.M.R. ch. 400, § 12.

A. Technical Experience

NEWSME has managed JRL since April 2004 and employs qualified management and staff at the facility, along with utilizing qualified consultants as appropriate. NEWSME's parent company, Casella also provides expertise in solid waste, recycling, and resource management.

The Department finds that the combination of BGS staff, NEWSME operations and management personnel, and the consultants retained by the applicant have the technical ability to operate JRL in a manner consistent with the applicable State law and Rule requirements.

B. Civil or Criminal Record

Finding 9 of this license contains the information on civil and criminal disclosure.

6. PROVISIONS FOR TRAFFIC MOVEMENT

The applicant must make adequate provisions for safe and uncongested traffic movement of all types into, out of, and within the proposed solid waste facility as set forth in 06-096 C.M.R. ch. 400, § 4(D)(1).

Traffic movement is not expected to significantly change with the proposed amendment since the request does not include an increase in the volume of MSW delivered to the site from what is currently licensed. A traffic assessment was provided in the 2012 application for amendment #S-020700-WD-B-C for disposal of MSW at the facility and reviewed by the Department during issuance of that amendment. The primary waste haul route to JRL will remain as currently established: I-95, to the Route 16 Bennoch Road interchange (exit 199), then Route 16 West for 0.1 miles to JRL's site access road. The internal roads currently allow for continuous traffic flow to minimize danger to pedestrians or other vehicles. The site access and internal site roads are maintained by NEWSME, including winter plowing and summer dust control.

The Department finds that the applicant has demonstrated that the roads and intersections in the vicinity of JRL have the ability to safely and appropriately handle all of the traffic

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attributable to the handling of MSW into, out of, and within the facility pursuant to the applicable State law and Rule requirements.

#### 7. NO UNREASONABLE ADVERSE EFFECT ON AIR QUALITY

The solid waste facility may not unreasonably adversely affect air quality pursuant to 06-096 C.M.R. ch. 400, § 4(G)(1). The facility must obtain an air emission license, if required; control fugitive dust and nuisance odor; and prohibit open burning of solid waste other than clean or painted wood waste. The proposed amendment is not expected to change the findings of JRL's air emission license or negatively impact JRL's current approved practices regarding fugitive dust and nuisance odor control.

##### A. Air Emission License

Air emission license renewal #A-921-70-B-R was issued on October 7, 2014 for the existing landfill facility with findings that emissions from the source will receive Best Practical Treatment, will not violate applicable emissions standards, and will not violate applicable ambient air quality standards in conjunction with emissions from other sources. The air emission license renewal includes State and federal emission limits and operational requirements associated with landfill gas collection and control, as well as monitoring and reporting requirements.

The 2014 air emission license renewal addresses control of landfill gas emissions through use of a landfill gas collection and control system, with the extracted and collected landfill gas passing through a Thiopaq® sulfur removal system, then being combusted in either the main flare (Flare #4) or back-up flares prior to release to the atmosphere. In addition to monitoring air emissions from the control equipment, as well as control equipment parameters, the facility is also required by the Federal New Source Performance Standards (NSPS) to perform periodic gas surface scans on the landfill.

The Department finds that the applicant has an air emission license, as required by State law and the Rules.

##### B. Fugitive Dust

The measures to control dust at the landfill will continue to include utilization of water spray trucks to wet secondary roads during dry weather and making use of a road sweeper to remove dirt buildup on paved roadways. Calcium chloride may be utilized on an as-needed basis, primarily on internal cell access roads.

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On the landfill's active working area, MSW and other acceptable wastes are off-loaded and covered with daily cover material which minimizes the potential for airborne dust from the disposed material.

The Department finds that the dust control measures in place at the landfill are sufficient to control fugitive dust as required by State law and the Rules.

C. Nuisance Odors and H<sub>2</sub>S

The proposed amendment is not expected to increase the landfill gas generated at the facility above what was previously projected. The facility manages odors through the operation of an active gas collection and control system which collects, treats via the Thiopaq® sulfur removal system, and combusts the gas through the flares; daily cover practices; the placement of intermediate and final cover; and a misting system to control odors around the active filling areas at the landfill. The facility's current Operations Manual includes the facility's Odor Complaint Management and Response Plan to manage landfill-related odors and limit off-site odor migration.

Due to the composition and characteristics of the waste, MSW has the potential for odor generation as the waste is transported to the facility and off-loaded in the active area, as well as during the production of landfill gases, including odorous H<sub>2</sub>S, as the waste in the landfill decomposes. Measures for minimization of odor associated with incoming odorous waste streams such as MSW include placement within a small area in the active cell, waste compaction, and placement of a cover layer of non-odorous material above the disposed waste at the end of each day. The facility also utilizes odor neutralizing spray systems, as needed, including a mobile mounted unit within the active cell, a trailer spray system for incoming and outgoing trailer loads, and a perimeter misting system. The facility minimizes odor from landfill gas produced due to waste degradation by the installation of daily cover, intermediate cover and final cover over non-active portions of the landfill and the operation of the facility's landfill collection and control system. An evaluation provided in the 2012 application for amendment #S-020700-WD-BC-A included projected landfill gas generation rates with an MSW acceptance rate that was slightly above the current 81,800 tons per year acceptance rate and it was determined that the collection and control system was appropriate for minimizing air emissions.

The facility maintains an odor complaint hotline, four gas monitors off-site, and two gas monitors on-site. Odor complaints for calendar year 2017 totaled 14, most occurring in the last two months of the year possibly due to intermediate

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cover damage from a late October wind storm. Each complaint was followed-up by NEWSME personnel. The gas monitors measure H<sub>2</sub>S concentrations through real-time data collection and an established response procedure is in place when specific H<sub>2</sub>S thresholds have been monitored. The monitoring data is also utilized when responding to odor complaints.

The Department finds that the applicant has odor control mechanisms sufficient to control nuisance odors from the landfill as required by State law and the Rules.

## 8. SOLID WASTE MANAGEMENT HIERARCHY

#### A. Applicable Requirements

As stated in 38 M.R.S. § 1310-N(1)(D) and 06-096 C.M.R. ch. 400, § 4(N)(1), the purpose and practices of the solid waste facility must be consistent with the State's solid waste management hierarchy (hierarchy) set forth in 38 M.R.S. § 2101(1), which reads as follows:

Priorities. It is the policy of the State to plan for and implement an integrated approach to solid waste management for solid waste generated in the State and solid waste imported into this State, which must be based on the following order of priority:

- A. Reduction of waste generated at the source, including both amount and toxicity of the waste;
  - B. Reuse of waste;
  - C. Recycling of waste;
  - D. Composting of biodegradable waste;
  - E. Waste processing that reduces the volume of waste needing land disposal; including incineration; and
  - F. Land disposal of waste.

In addition, 38 M.R.S. § 2101(2) establishes that “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.”

The Department's rule at 06-096 C.M.R. ch. 400, § 4(N)(2)(a) states that for a solid waste disposal facility, the applicant must affirmatively demonstrate consistency with the hierarchy, including the following:

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 purpose of 06-096 C.M.R. ch. 400, § 4(N):

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.

State law also imposes limits on the origin of wastes accepted at a State-owned solid waste facility. In accordance with 38 M.R.S. § 1310-N(11);

a solid waste facility owned by the State may not be licensed to accept waste that is not waste generated within the State. For the purposes of this subsection, "waste generated within the State" includes residue and bypass generated by incineration, processing and recycling facilities within the State or waste, whether generated within the State or outside of the State, if it is used for daily cover, frost protection or stability or is generated within 30 miles of the solid waste disposal facility.

## B. Application Information

The applicant has proposed to remove the March 31, 2018 licensed date restriction on the allowance to accept 81,800 tons per year of non-bypass, in-state MSW in license #S-020700-WD-BC-A, issued in 2013. The applicant addressed

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the requirements of the hierarchy for managing MSW and the current MSW disposal capacity at Maine facilities in Section 2.2 of the Application.

(1) Sources of MSW and Past Amounts

The applicant states that the findings on the sources of MSW in the 2013 amendment application would not be significantly altered with the removal of the March 31, 2018 date. The waste proposed is consistent with the MSW accepted over the last four years. The contracted municipalities that utilized JRL for MSW disposal in 2017 are shown in Table 2 below, as presented in the table on page 2-2 of the Application.

**Table 2:**  
**Contracted Municipalities that Utilize JRL for MSW Disposal, 2017\***

Communities Utilizing JRL for Direct MSW Disposal		
<b>Town of Alfred</b>	Town of Arrowsic	<b>Town of Acton</b>
Town of Arundel	<b>City of Biddeford</b>	Town of Bowdoinham
<b>Town of Buxton</b>	Town of Casco/Naples	<b>Town of Cornish</b>
<b>Town of Dayton</b>	Town of Denmark	Town of Dresden
Town of Durham	Town of Frye Island	Town of Harpswell
<b>Town of Kennebunk</b>	<b>Town of Kennebunkport</b>	Town of Long Island
Town of Newfield	<b>Town of North Berwick</b>	<b>City of Old Orchard Beach</b>
Town of Phippsburg	<b>Town of Sanford</b>	<b>Town of Shapleigh</b>
Town of Sebago	<b>Town of South Berwick</b>	Town of Topsham
<b>Town of Wells</b>	City of Westbrook	Town of York

\* **Bold** denotes those communities under long-term contracts that formerly used Maine Energy Recovery Company (MERC).

There are 14 communities under long-term contracts with JRL that formerly utilized MERC as a disposal option. These contracts extend to 2025, with the exception of the City of Biddeford whose contract runs to 2022. In the response to comments, the applicant states that the sole reason for the prior amendment application, which resulted in the 2013 Department license to accept non-bypass MSW at JRL, was the closure of the MERC incinerator. The response to comments also includes the statement that in 2016, the 14 communities under long-term contract that formerly used MERC for MSW disposal generated 22,827 tons of residential MSW which was disposed at either JRL or the Penobscot Energy Recovery Company (PERC) incinerator facility in Orrington.

**Commented [A2]:** This, of course, does not address the Commercial MSW that is generated in the Table 2 communities and elsewhere in Maine that needs a disposal home, as reported in the Applicant's responses to comments. Such commercial MSW tonnage used MERC and is part of the original 81,800 tons approved in the 2013 license, and still needs a disposal home.

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In addition to the 14 former MERC communities, there are also 16 additional Southern Maine communities with MSW handling and disposal contracts with JRL, as well as commercial customers throughout Maine currently utilizing JRL for MSW disposal. Table 3 shows the total MSW disposal at JRL, excluding bypass, in a three-year period, excerpted from the table on page 2-3 of the Application.

**Table 3: Total MSW Disposal at JRL, Excluding Bypass**

Year	Non-Bypass MSW Disposed at JRL (tons)
2014	36,878
2015	57,521
2016	69,934

The Department notes that the amount of non-bypass, in-state MSW disposed of at JRL is less than the 81,800 tons per year approved by Department Order #S-020700-WD-BC-A. Over this three-year period, JRL has disposed of only 67% of the amount of in-state MSW approved for disposal at JRL. As shown by Table 3 MSW disposed of at JRL has increased each year, but has remained below the 81,800 tons per year approved by the Department Order. In 2014 and 2015, the Applicants diverted MSW temporarily to other landfills, which are not always available, and are no higher on the hierarchy than JRL. The Applicants have no control over the amount of MSW generated in Maine, and that amount has increased over these years. and The Department notes that not all of the municipalities and commercial entities with JRL disposal contracts appear to be former long-term contracted MERC customers. The 2013 Department amendment order did not limit the non-bypassed MSW disposal at JRL to only municipalities that were former long-term contracted MERC customers. In addition, there were many commercial customers with significant volumes of commercial MSW that used MERC and this commercial volume was included as part of the original 81,800 tons approved in the 2013 license. NEWSME has an obligation to serve these commercial customers as well.

(2) Reduction, Reuse, and Recycling Programs and MSW Diversion Efforts

The Application states that the applicant will continue to promote and encourage waste reduction measures and the maximization of waste diversion efforts of the users of JRL to the maximum extent practicable in accordance with the Rules and licensing requirements. Casella, as an

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integrated solid waste management company, is involved in state recycling and reuse infrastructure, along with handling logistics and transportation. However, BGS, NEWSME, and Casella's subsidiaries do not have control over the extent to which municipalities, homeowners, and businesses utilize these recycling services.

For the last few years, the applicant states that they have diverted MSW from landfilling at JRL to disposal at various other outlets, as seen in Table 4, which also includes the amount of non-bypass, in-state MSW disposed at JRL for comparison. Table 4 is based on the table in Appendix 4 of the Application.

**Table 4: Maine MSW Diversion from Disposal at JRL, Diversion Locations, and MSW Disposed at JRL**

MSW Diversion from JRL (Tons)	2014	2015	2016
Maine Recyclables Processed at Casella's Zero-Sort® Program	25,026	28,688	35,851
Cardboard Recycling			
Brokered	37,385	53,244	55,903
Collected/Baled	12,840	29,071	27,288
ecomaine			
Lewiston Zero-Sort® Processing Residue - Incinerator	97	329	-
MSW - Incinerator	42,506	41,130	45,837
Single-stream Recyclables	-	11,430	11,934
MMWAC Incinerator			
Lewiston Zero-Sort® Processing Residue	-	1,742	2,777
MSW	147	32,212	35,384
PERC Incinerator	89,902	89,054	79,443
Bath Landfill	388	6,097	5,740
Brunswick Landfill	10,144	528	3,474
Fort Fairfield Landfill	7,249	10,500	11,204
Norridgewock Landfill	2,495	2,720	2,549
<b>Total Maine MSW Disposal Diverted from JRL</b>	<b>228,179</b>	<b>306,725</b>	<b>317,384*</b>
<b>Total Maine Non-bypass, In-state MSW disposed of at JRL</b>	<b>36,878</b>	<b>57,521</b>	<b>69,934</b>

\* Corrected from number in error in the Application.

The Department notes that some of the MSW outlets identified in the table above as taking "diverted" waste may be the result of contracts for waste disposal that would not have been destined for JRL at any point due to location and transportation costs.

**Commented [A3]:** This is not entirely accurate. Much of this MSW is licensed to go to JRL and could be disposed there. Casella made the conscious decision to move this tonnage to other outlets. Thus, these tons were diverted.

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Casella's Zero-Sort® Program allows commingling of all recyclable materials, requiring no sorting or separating. In 2014, a new materials recovery facility in Lewiston was opened by Casella. The benefits of this type of facility include increased ease and convenience, reduction in disposal costs due to reduction in volume, increase in range of recycled materials, and more efficient collection of materials. The number of Maine municipalities participating in Casella's Zero-Sort® Program along with the corresponding year has been: 52 (2014), 62 (2015), and 64 (2016). In 2016, 18 of the 30 municipalities listed in Table 2 utilized Casella for their recycling. The number of Maine businesses participating in Casella's Zero-Sort® Program along with the corresponding year has been: 3,200 (2014), 3,482 (2015), and 3,381 (2016). Casella also brokers and collects and/or bales cardboard at its Maine transfer stations for recycling.

Casella continues to evaluate options for food waste collection and diversion. Casella conducted an 8-month pilot project in 2017 with the Town of Scarborough which included curbside collection with disposal at Exeter Agri-Energy through ecomaine although transportation costs were deemed cost prohibitive.

The former MERC communities have reported a range of recycling rates resulting in an average of 39.96%, similar to the State average. Some communities exceed the state average, such as the City of Biddeford with a reported recycling rate in excess of 53% in 2016. The lowest reported recycling rate is 19.49%.

Additionally, Casella notes that they have served to increase MSW recycling rates over the past few years. The application states that waste disposed at JRL is reduced to the maximum extent practicable by Casella's various programs.

The Department notes that Casella has a diversity of waste management programs, including reduction and recycling that have managed more MSW from 2014 to 2016, but has also increased MSW disposal at JRL from 2014 to 2016. As noted earlier, the Applicants have no control over the amount of MSW generated in Maine, and generation of MSW has increased in Maine over these years. At the same time, the incineration capacity lost at the end of 2013 when Maine Energy closed, has not been replaced. Further, the Department notes that some of the MSW that Casella specifies as being diverted from JRL is already destined and

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~~contracted to other Maine facilities. Therefore, the Department finds that it is not appropriate to define these practices as diversion from JRL but rather as obligations to transport waste to the most suitable facility based on logistical, economic, contractual and other factors. The Department finds that these waste reduction and recycling programs performed by Casella do result in diversion of MSW that could otherwise be landfilled at JRL.~~

**Commented [A4]:** Again, not entirely accurate. Much of this tonnage is MSW that is licensed to be accepted at JRL, but Casella made a conscious decision to divert from JRL and dispose of elsewhere. This is all very much consistent with the hierarchy.

(3) Existing Maine Waste Management Facilities Capacities and Potential Shortfalls

The applicant asserts that beginning March 31, 2018, scheduled changes in Maine's solid waste management infrastructure are likely to result in the State not having the capacity for Maine generated MSW and waste may be "stranded" unless JRL is allowed to continue to accept in-state MSW.

The changes identified to occur on March 31, 2018 include:

- a. The expiration of existing MSW disposal contracts between MRC municipalities and PERC;
- b. The expiration of the existing disposal agreements between PERC and Casella (30,000 tons per year of former MERC MSW);
- c. Potential changes to PERC's operational structure due to the expiration of the existing above-market power sales agreement with the local utility, possibly resulting in reduction in MSW processed to approximately 210,000 tons per year and reduction in disposal volumes of PERC residue;
- d. The operational status of the CRM's MSW processing facility in Hampden; and
- e. The expiration of the approval for JRL to accept non-bypass MSW for disposal.

The applicant states that with conservative estimates of future planned disposal capacity at PERC and CRM's facility post-2018 (210,000 tons per year and 105,000 tons per year, respectively) and the known capacity at ecomaine and MMWAC, there will likely be a continual shortfall in management options at a higher level on the hierarchy than landfills for MSW generated in Maine, which has not changed since the closure of

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MERC in 2012. Table 5, below, was included in Appendix 5 of the Application to corroborate the shortfall concept.

**Table 5: Management of Maine Municipal Solid Waste (Tons)**

	2011	2012	2013	2014	2015	Projected 2018 <sup>(3)</sup>
MSW Generation <sup>(1)</sup> (not including CDD <sup>(2)</sup> )	1,398,429	1,307,787	1,161,579	1,187,265	1,196,964	1,196,964
MSW Recycled & Composted <sup>(1)</sup> (not including CDD)	553,778	554,225	480,456	430,215	439,950	439,950
Total MSW Disposal (Landfill & Incineration)	751,187	753,562	681,123	757,050	757,014	757,014
Disposal/Management Availability in Maine: Non-Landfill <sup>(4)</sup>	854,000	854,000	544,000	544,000	544,000	555,000

<sup>(1)</sup> Maine Solid Waste Generation and Disposal Capacity Report or Materials Management Plan: Calendar year 2011; page 10 (calculated), Calendar Year 2012-2013, Table 3; Calendar Year 2014-2015, Table 2

(2) CDD = Construction and Demolition Debris

<sup>(3)</sup> Data projected to be same as last full dataset (2015) for comparison

(4) Permitted capacity at Maine operating incinerators through 2015, stated future capacity at Maine incinerators and CRM in 2018

The above numbers (2013 through 2015) for non-landfill capacity are taken from the State Plan which specifies a capacity of 170,000 tons per year at ecomaine, 70,000 tons per year at MMWAC and 304,000 tons per year at PERC for a total of 544,000 tons. The projected non-landfill capacity was calculated by BGS and NEWSME in the application as 170,000 ton per year at ecomaine, 70,000 tons per year at MMWAC, 210,000 tons per year at PERC and 105,000 tons per year at CRM for a total of 555,000 tons. The Department has independently calculated the future non-landfill capacity as 170,000 ton per year at ecomaine, 70,000 tons per year at MMWAC, 210,000 tons per year at PERC and 145,000 tons per year at CRM for a total of 595,000 tons. Absent other information, the Department considers the projected non-landfill capacity to be 595,000 tons per year once PERC successfully achieves a stable operating capacity and CRM has been constructed and achieves commercial operations. Because PERC does not yet have an operating history at its reduced capacity and new operating regime, and CRM has no

**Commented [A5]:** The Department should recognize, however, that significant volumes of MSW to be sent to these facilities will come from agreements with Pine Tree Waste-NEWSME that are conditioned on approval of this order and are only conterminous with the term of this Order. If this order expires, so do those agreements.

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operational history at all, it is not known with any certainty when those facilities will reach their projected capacities.

In the response to comments, the applicant provided copies of two written agreements that Casella has entered into with other Maine waste management facilities. One contract includes an agreement between CRM and Pine Tree Waste, Inc. (a subsidiary of Casella) for Pine Tree Waste, Inc. to deliver 40,000 tons per year of MSW to the CRM facility (20,000 tons from commercial businesses from an identified geographic area and 20,000 tons from the West Bath and Waterville transfer stations). The other contract includes an agreement with PERC, NEWSME, and Pine Tree Waste, Inc. to deliver 30,000 tons per year of MSW to PERC. As clarified in the follow-up response to comments, the originally agreed upon 30,000 tons of former MERC disposed MSW is part of the larger approximate tons listed in Section 2.3 of the agreement (within Category 3, 50,000 tons of in-state MSW as part of the 130,000 total tons). Both the CRM and PERC agreements are contingent on the authorization to accept no less than 81,800 tons per year of non-bypass, in-state MSW by March 31, 2018. The term of the CRM agreement is eight years or coterminous with the term of this order, whichever is shorter. The term of the PERC agreement is to March 31, 2019, but may be extended at the option of Pine Tree and NEWSME to the earlier of December 31, 2023 or the point at which JRL is no longer authorized to accept 81,800 tons per year of Maine MSW.

In the follow-up response to comments, a draft swap agreement between MRC, Waste Management Disposal Services of Maine, Inc. (WMDSM) in Norridgewock and Casella was described further, with the potential for a waste swap on a one to one (1:1) tonnage basis at agreed tip fees. Casella's Pine Tree Waste, Inc. hauling company would deliver waste that is collected in packer and container trucks from MRC communities located within the greater Bangor area to JRL and Pine Tree Waste, Inc. would, in turn, deliver an equivalent amount of Maine MSW from Casella transfer stations located closer to the WMDSM Crossroads landfill in Norridgewock (i.e., Waterville and Westbrook). If the draft waste swap agreement is finalized, it should not change the amount of MSW being disposed of at the respective landfills, but would reduce the truck miles needed to transport the MSW, reducing overall fuel use and emissions.

(4) Technical Uses for MSW

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The applicant states that the acceptance of MSW at JRL is beneficial to site operations and does not unnecessarily consume capacity that would be better utilized by waste that cannot be managed at facilities at higher levels in the hierarchy. The two main beneficial uses of MSW for landfill operations and closure were identified as use as a bulking material to stabilize sludge and use to bring interim grades to final grade prior to placement of the final cover system. In the response to comments, the applicant stated that prior to 2014, JRL received ash and front end process residue (FEPR) from MERC which were used as bulking material. The closure of MERC changed the quantities of these materials received, necessitating different bulking material be utilized, such as MSW. It was also stated that effective bulking material to stabilize sludge includes virgin soil material or CDD/CDD fines; however, the use of CDD or CDD fines provides an opportunity for increased H<sub>2</sub>S production from the breakdown of sheetrock in the material. The applicant provided cost estimates to treat the H<sub>2</sub>S production if these materials were used as bulking materials.

Additionally, the applicant asserts that JRL operations utilize a higher compaction rate than the average of five other municipal landfills across the state. The average compaction rate for JRL is 0.88 (airspace utilization factor, tons of waste placed in a single cubic yard of landfill space), as compared to the compaction range of five municipal landfills from 2014 to 2016 of 0.2 to 1.07 with an average compaction rate of 0.55. The applicant states that this difference in compaction rate results in the ability of JRL to place an additional 668 pounds of waste per cubic yard of landfill capacity utilized, as compared to the average compaction rate of the five municipal landfills, proving the efforts of the applicant to prevent unnecessary consumption of valuable landfill space. The information used for this analysis is from information supplied by reports published by the MEDEP.

#### (5) Cost Considerations

As stated in Finding 8(A) above, the hierarchy requirements contain the determination of reducing, reusing, recycling, composting and/or processing waste to the maximum extent practicable, which 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. In the Supplemental Information on Solid Waste Management Hierarchy portion of the Application submitted by the applicant on December 14, 2017 and follow-

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up responses to comments, the applicant addresses three potential scenarios where additional MSW could theoretically be diverted from JRL and the practicability of the scenarios in terms of cost. The three scenarios are: additional diversion to ecomaine and/or MMWAC; additional diversion to PERC or CRM's facility; and additional separation or processing of the MSW to remove recyclables or organics. Information was also provided on the alternatives and cost implications of not using MSW in site operations and potential disposal of the MSW at other landfill facilities. Not using MSW in site operations will increase the cost of JRL's operations.

The applicant states that the southern Maine incinerators (ecomaine and MMWAC) are already at capacity so further diversion of MSW to them is not practicable and therefore, cost considerations are secondary. Both ecomaine and MMWAC have entered into contracts with municipalities previously contracted with PERC, which with their current existing long-term contracts, put both facility's operations at or exceeding capacity. Additionally, documentation has been provided that ecomaine has notified existing "spot market" waste haulers, such as Oceanside and Troiano, that ecomaine will not be able to serve them after March 31, 2018.

The agreements Casella has executed with PERC and CRM have been negotiated to supply the two entities with a specific amount of waste, contingent on Department authorization to accept no less than 81,800 tons per year of non-bypass, in-state MSW to meet the ongoing need of primarily southern Maine communities. The applicant states that for Casella and its Pine Tree Waste, Inc. subsidiary as the supplier of the waste, the agreements have a cost limitation related to how much can be paid in tipping or disposal fees while still covering expenses for collecting, consolidating and transporting the MSW to the receiving facility. The applicant states that both CRM's facility and PERC could accept additional volumes of material, but to cover their operational costs and make a profit as commercial entities, the necessary disposal tipping fee would be so high as to preclude Casella's ability to cover the cost of waste handling and management. Restating, it is asserted that it would be uneconomical for the applicant to divert additional MSW to either CRM's facility or PERC at the significantly higher tipping fees those receiving facilities would require, and those receiving facilities would not accept additional MSW at the tip fee the applicant would be able to pay.

The applicant states that the ability to provide additional separation or processing to remove recyclables or organics from MSW consolidated at

**Commented [A6]:** This MSW, approximately 28,000 to 29,000 tons per year in total, needs a disposal home. See Exhibit 9 of the Applicants' March 1 Response to DEP Comments.

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any transfer station is limited by operational safety considerations, and design, permitting, and construction of such a facility. The majority of the former MERC communities utilize Casella's Westbrook transfer station for the mixed MSW remaining following the individuals' and business' use of their communities recycling programs and/or Casella's Zero-Sort® Program. In order to further separate potentially recyclable materials, the facility would need to be modified from a transfer station to a materials recycling and processing facility, resulting in a number of cost factors that would not financially support a conversion. In the response to comments, the applicant states that organics separation would require an initial estimated capital investment of \$1.5 million and organics separation would cost approximately \$20.00 more per ton than MSW transfer and disposal on a 20-year amortizable basis. An additional \$1.0 million capital investment was estimated for the conversion of the transfer station to a recycle sorting facility.

The applicant addressed the higher cost of utilizing material as an alternative to MSW such as CDD fines, virgin soil or woodchips for landfill closure pre-grading and shaping, as well as for sludge bulking material. As an example, in the response to comments, the applicant estimated that purchasing grading materials at a cost of \$10.50 to \$13.00 per cubic yard would result in an additional cost in the range of \$1.4 to 1.7 million if all 133,500 cubic yards of fill required to achieve final closure grades in the Phase 1 closure area of approximately 15 acres was purchased. A portion of this expense may be able to be reduced by utilizing waste where a deeper fill depth is required. As an alternative to purchasing material for landfill closure grading and shaping, landfill final grades could be reduced, but this would decrease the facility's permitted disposal capacity, potentially resulting in increased cost per ton for the remaining materials disposed in order to fund closure cost requirements. The applicant estimated that if soils were purchased to bulk the sludge at 1.25 parts soil for each part sludge bulked, this would likely require about 47,000 cubic yards of soil at a cost of \$10.50 per yard, with potential costs of approximately \$500,000 per year. This cost can be offset by using MSW as the bulking agent.

The applicant also addressed the cost of disposal at other Maine landfills other than the local hauling that already occurs to these landfills. The statement was made that "while not a requirement of achieving compliance with the hierarchy, [the applicant has] reviewed the availability of alternative landfills to provide capacity for MSW." Augusta, Bath, Brunswick, and Presque-Isle municipal landfills accept

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MSW, but primarily from within their own municipalities. The Tri-Community Sanitary Recycling and Sanitary Landfill accepts MSW from beyond their communities, but transportation is cost-prohibitive since the facility is located in Aroostook County. The ecomaine landfill is operated only for their own use. WMDSM's Crossroads Landfill in Norridgewock has capacity but the applicant stated disposal fees at Norridgewock and transportation costs would preclude Casella from the ability to cover the cost of waste handling and management from the Southern Maine communities. However, there is a draft "waste swap" agreement, as described above in Finding 8(B)(3), but it only addresses a 1:1 tonnage swap among MRC, WMDSM and Casella for waste expected to be delivered to each facility, so that the equivalent amount of in-state waste is delivered without consideration of its Maine location of origin (i.e., up to 81,800 tons at JRL and 105,000 tons of CRM bridge capacity MSW at Waste Management, Inc.). The draft agreement does not cover waste amounts in excess of a 1:1 "swap."

C. Comments Received

The Department received written comments from various individuals and entities over the course of the licensing process, as well as verbal comments received at the public meeting.

Comments were provided that focused around the timeframe already given to JRL to find an alternative disposal method for the Southern Maine MSW. These comments included: JRL had five years to plan for the MSW acceptance end date of March 31, 2018 and should have figured out an alternative disposal plan for the waste; Old Town residents shouldn't be penalized for the lack of Casella planning; and based on past actions, Casella will most likely come in for an amendment to continue any date extensions and to request MSW acceptance in the landfill expansion. Additionally, others stated that if granted, the continued MSW acceptance could prolong the active areas of the existing landfill since all other waste could be put in the expansion and only MSW put in the existing landfill, keeping it open longer than necessary. It was also presented that JRL is asking to accept in a year the same amount of waste that two municipal landfills dispose of, but JRL claims it is a "relatively small portion" of the overall Maine MSW disposal capacity.

Other comments focused on the issue that the intent of the 2013 amendment license was to be a "temporary" allowance due to the closing of MERC and not an ongoing situation. Comments were made that the landfill's operation and licensing history never included MSW acceptance except for the short-term

**Commented [A7]:** This section focuses disproportionately on the comments of opponents, and provides only lip service to those of supporters, even though supporters outnumbered opponents by a 2 to 1 margin at the February 28 public meeting and written comments were about evenly distributed among supporters and opponents throughout this proceeding.

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allowance. A number of commenters stated that continuance of MSW acceptance may increase pollution of the area, the river, and the watershed.

Comments were provided stating that landfill options should be made harder to utilize, which would then force usage of options higher on the hierarchy; that the assertion of "stranded waste" is overstated; that other options should be required; that JRL has a lower tipping fee set by the OSA which undercuts other disposal options; and that granting the amendment would give Casella hauler subsidiaries an unfair advantage to disposal capacity that other haulers would not be able to access.

Numerous comments were made in support of the amendment application. Supportive comments came from PERC, Fibright, MRC, and representatives of many MRC communities, the city of Old Town and several private haulers because the application advances the hierarchy. Other supporters expressed concern over the possibility of stranded waste after March 31, 2018 and saw approval of the application as a reasonable solution to this problem. Other supporters recognized Casella's considerable MSW diversion efforts, its community and philanthropic contributions, and the importance of a landfill like JRL to the hierarchy. Many of these comments stated that the amendment is needed to assist the 115 MRC communities in the short term, for transportation infrastructure and financial reasons, prior to CRM's facility coming on-line. It was also presented that JRL is a well-run facility and Casella is involved in multiple recycling options.

A few commenters mentioned that if an extension is granted, the extension shouldn't be open ended, but should be very specific for the short-term only. Examples were given to possibly allow only one or two year extensions with prescriptive requirements.

#### D. Department Analysis

With respect to the hierarchy requirements, the Department considered the proposed amendment application request and related documents, the intent of the 2013 amendment, the comments received, the overall current and future MSW capacity in Maine, the current and future operating status of Maine's waste management facilities, cost considerations and various options. The following presents the Department's analysis.

- (1) Amendment #S-020700-WD-BC-A (issued 2013)

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The intent of the 2013 amendment was for MERC waste to be disposed of at JRL temporarily as stated on page 15 “the Department finds that the applicant has adequately demonstrated the need for disposal of 81,800 tons per year of MSW on a temporary basis.” On page 25, it is stated that regarding the limiting of time for MSW acceptance to March 31, 2016 (revised to March 31, 2018 in the Board Order) that “this limitation is appropriate to ensure that activities at JRL support, and do not subvert, the waste management hierarchy.” On page 41, it is noted that the “acceptance of additional unprocessed MSW at JRL in addition to bypass and soft layer material for cell construction is consistent with the hierarchy provided that limitations are placed upon such activity to ensure that other waste management options will be implemented for former Maine Energy MSW. Such limitations include a volume limit, a time limit, and requirements for delivery of some MSW to a facility at a higher level on the hierarchy.”

The 2013 amendment license #S-020700-WD-BC-A states in Finding 5(B)(3) on page 25 that “alternative waste management options exist for this MSW that are better aligned with the hierarchy.” The 2013 amendment also included requirements for ongoing steps to be taken by JRL to meet the condition of no MSW by March 31, 2018.

Condition 5 of the 2013 amendment license #S-020700-WD-BC-A required the following:

5. Casella shall continue to plan for, and will make its best effort to divert MSW from landfilling at JRL to the greatest extent practicable. JRL shall include in each annual report a summary of its efforts to meet this diversion requirement. This summary shall include, but not be limited to:
  - 5.A. A list and description of all diversion options evaluated and/or pursued by Casella, including currently operating Maine waste-to-energy facilities as options;
  - 5.B. A narrative detailing the specific efforts made by Casella to implement diversion options; and,

**Commented [A8]:** The Department did not identify what those options were in 2013. MERC closed and its in-state incineration capacity has not been and cannot be replaced, and the amount of MSW generated in Maine, which the applicant has no control over, has increased slightly over this time period, while recycling rates have remained stagnant. The applicant assists residents and businesses in recycling, but cannot force them to recycle.

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- 5.C. A narrative describing the results of Casella's evaluation/pursuit of MSW diversion options, including the volume of waste and diversion destination of MSW successfully diverted, and/or the specific reasons that MSW was not diverted to other destination options.

The Department notes that JRL did include the summary required in its 2014, 2015 and 2016 annual facility reports. The information included, in part, a summary of operations regarding Casella's Zero-Sort® Program, information relating to MSW delivered to Maine incinerators and information relating to MSW delivered to Maine landfills including JRL.

At the time of issuance of the 2013 amendment license #S-020700-WD-BC-A, Maine's solid waste management hierarchy was in statute as a policy, but not as a specific licensing criterion. However, the hierarchy was used as a consideration for the date limitation in Condition 10. The findings of the 2013 amendment are of utmost importance now that the hierarchy is a license criterion.

(2) Casella Recycling Programs

The Department notes that Casella-owned facilities have active recycling and reuse programs that divert waste from JRL. However, the Department also notes that MSW tonnage brought to JRL has increased from 2014 through 2016 (36,878 tons to 69,934 tons) and that the MSW tonnage allowed by the 2013 amendment was based on the needs of former MERC communities. In 2016, the 14 communities under long-term contract with Casella that formerly used MERC for MSW disposal generated 22,827 tons of residential MSW.

Although recycling is encouraged by Casella and Casella maintains and manages recycling infrastructure, MSW disposed at JRL has increased without a corresponding increase in the annual generation of MSW in Maine. For example, the State Plan specifies that from 2015 to 2016, the "[o]verall disposal of MSW rose slightly from 757,014 to 759,638 tons; the per capita disposal amount also rose slightly from 0.569 to 0.571 tons per person in 2016." This slight increase in Maine's MSW disposal amount does not equate to the relative increase in MSW disposal at JRL

**Commented [A9]:** Neither JRL nor the Applicants received any comments from the DEP or any other person on any of these annual summaries.

**Commented [A10]:** See earlier comments on this point. MSW generation, which the applicant does not control in any event, has slightly increased over these years, and the in-state MSW incineration capacity that MERC represented has not been replaced.

**Commented [A11]:** This statement does not recognize that all MSW (including Commercial MSW), not just long-term contracted residential tonnage, must be managed. Commercial and residential MSW tonnage made up the 81,800 tons approved in 2013. See also earlier comments on this point.

**Commented [A12]:** But there has been an increase in annual generation of Maine MSW, and the applicant does not control whether and how much residents and businesses recycle.

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from 2015 to 2016 (57,521 to 69,934 tons). NEWSME explained that the reason for the increase in MSW disposed at JRL is that MSW was delivered temporarily in 2014 and 2015 to other landfills, which are not always available. Although this represented diversion from disposal at JRL, it is neutral with respect to the hierarchy, as other landfills are on the same level of the hierarchy as JRL.

**Commented [A13]:** See the three comments immediately above, as well as earlier comments on this point.

#### (3) Currently Available Capacity in Maine for Management of MSW

As of 2018, Maine's solid waste disposal facilities include three waste-to-energy plants, five municipally-owned landfills, one state-owned landfill and one commercially-owned landfill. The State Plan specifies that the total remaining licensed capacity of the seven abovementioned landfills, as of 2016, is 8,043,980 cubic yards although some of this capacity includes landfill space that has not been built. The total available capacity, as of pre-March 31, 2018, at Maine's waste-to-energy plants is approximately 550,000 tons per year with PERC having an average annual processing capacity of 310,000 tons; MMWAC having an average annual processing capacity of 70,000 tons and ecomaine having an average annual processing capacity of 170,000 tons. Solid waste disposal facilities not included in the capacity consideration include generator-owned and CDD or woodwaste landfills.

#### (4) Future Available Capacity in Maine for Management of MSW

At the conclusion of 2018, Maine's solid waste management facilities will include three waste-to-energy plants, one processing facility, five municipally-owned landfills, one state-owned landfill and one commercially-owned landfill. The total available capacity at some point post-March 31, 2018 at Maine's waste-to-energy and processing plants will be 595,000 tons per year with PERC having an average annual processing capacity of 210,000 tons; MMWAC having an average annual processing capacity of 70,000 tons; ecomaine having an average annual processing capacity of 170,000 tons and CRM having an average annual processing capacity of 145,000 tons. Based on 2016 annual report data, Maine's municipal and regional MSW landfills received approximately 87,000 tons of MSW and the commercially-owned landfill received approximately 85,000 tons of MSW. Solid waste disposal facilities not included in the capacity consideration include generator-owned and CDD or woodwaste landfills.

**Commented [A14]:** What is the relevance of other landfills, which, as landfills, are at the same hierarchy level as JRL, in any hierarchy analysis?

This information shows that the municipal and regional landfills experienced an approximate 7% increase in MSW disposal tonnage in 2016. The only commercial landfill also experienced an increase year over year (approx. 4%) in MSW tonnage disposed. This underscores the fact that increased MSW generation, when recycling remains stagnant, there is a decline in historical incineration capacity, and no new incineration capacity can occur, results in increased disposal.

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PERC. Post-March 31, 2018, PERC will reduce their operating level from 310,000 tons per year to 210,000 tons per year. PERC notes in a March 9, 2018 Letter to Casella that the “planned reduction to this level is already being implemented. While PERC may be able to process increased volumes from time to time, low electrical and tipping fee revenues will not support the viability of the plant at significantly higher [MSW] processing levels at this time.”

CRM. Construction of the CRM facility is currently underway with the commissioning of the materials recovery facility (MRF) portion expected during the second quarter of 2018. When fully commissioned, the MRF will operate at 55,000 equivalent annual tons. In parallel with the MRF commissioning, the “wet end” of the facility will be constructed and will be fully commissioned during the fourth quarter of 2018. Once fully commissioned, the CRM facility will process the entire 105,000 tons committed to the project by MRC municipalities. The CRM facility has an average annual design capacity of 145,000 tons.

The Department notes that PERC has not operated previously in this new operating mode or at this reduced operating capacity and that CRM does not yet have any operating history. Therefore, it will likely take more than a year to determine the amount of material to be processed at each facility, and whether these stated capacities are achievable and sustainable.

(5) Agreements Among Maine Waste Management Facilities

The following summarizes the agreements between a number of Maine’s waste management facilities, as presented to the Department, either through submittal of the actual written agreements or through a summary of information submitted regarding the actual agreements.

- a. The agreement for waste delivery services between Pine Tree Waste, Inc. and CRM includes 20,000 tons per year commercial MSW and 20,000 tons per year municipal from the West Bath and Waterville transfer stations delivered by Pine Tree Waste, Inc. to CRM’s facility once it is able to accept and process waste. Pine Tree Waste, Inc. will pay CRM an agreed upon tipping fee. There is a clause for cost to CRM, if it is necessary and allowed, for CRM to directly bypass non-Pine Tree Waste, Inc. MSW from CRM to JRL and for CRM to pay a tipping fee. At this time, JRL is not licensed to accept bypass waste from CRM. The agreement includes a condition that CRM shall support the JRL amendment

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application and the agreement is contingent on the Department's authorization to accept no less than 81,800 tons per year of non-bypass, in-state MSW. The term of the agreement is for eight years or co-terminous with the duration of approval to take no less than 81,800 tons per year of Maine MSW at JRL, whichever is shorter, unless the agreement is earlier terminated as provided.

- b. The agreement for disposal services between Pine Tree Waste, Inc. NEWSME, and PERC (collectively, Maine Waste Processing, LLC and Penobscot Energy Recovery Company) includes delivery of various waste categories in various tonnages (20,000 tons per year from Pine Tree Commercial Waste, 10,000 tons per year from Waterville/West Bath transfer station, 50,000 tons per year from Westbrook/Naples transfer station, and 50,000 tons per year from out-of-state). There is a statement contained in the agreement for bypass if PERC cannot accept waste, that notification will occur and that Pine Tree Waste, Inc. may take the bypass to a facility of its choice. The agreement includes a condition that PERC shall support the JRL amendment application and the term of the agreement is until "the earlier of March 31, 2019 or the expiration, revocation or lapse of the Pine Tree's authorization to accept no less than 81,800 tons per year" of non-bypass, in-state MSW at JRL. The PERC agreement may be extended at the option of Pine Tree and NEWSME to the earlier of December 31, 2023 or the point at which JRL is no longer authorized to accept 81,800 tons per year of Maine MSW.
- c. The waste disposal agreement between the MRC and Waste Management Disposal Services of Maine, Inc (WMDSM) is for the exclusive disposal of MRC's bridge capacity (waste from the communities prior to the CRM facility becoming operational) and bypass at the Crossroads Landfill in Norridgewock. This agreement is for a 10-year period.
- d. The waste disposal agreement between PERC and the MRC states that in excess of 62,000 tons per year of waste might be delivered to the PERC facility under certain terms. However, the Department understands that the terms have not been finalized.
- e. The Department understands that PERC has contracted with local communities to dispose of approximately 31,000 tons per year of

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waste starting April 1, 2018, reduced from the municipal contracts they are currently operating under.

- f. The Department has received a draft swap agreement between MRC, NEWSME, Pine Tree Waste, Inc., WMDSM and CRM, with the potential for a waste swap on a 1:1 tonnage basis at agreed tip fees, as described in Finding 8(B).

As part of the review process for the proposed amendment application, the Department has taken into account the agreements that have been established to ensure the management of MSW during this ~~near-term~~ uncertainty period with Maine's solid waste infrastructure.

(6) Cost Considerations

Cost is a relevant consideration in the determination of whether solid waste has been reduced, reused, recycled, composted and/or processed to the "maximum extent practicable" prior to disposal and whether the greatest amount of solid waste has been handled through means as high on the solid waste management hierarchy as possible, resulting in maximizing waste diversion and minimizing the amount of waste disposed. BGS and NEWSME have shown an increase in financial burden if MSW is taken to another solid waste disposal facility other than JRL or if other materials are substituted for MSW in its operations. The Department has taken into account ~~these is~~ financial burdens in the analysis of near-term capacity and currently available waste management options that are higher on the hierarchy. Included as part of the Department's review was the evaluation of tipping fees established in the current agreements between various solid waste management facilities. This information was provided to the Department as part of an approved request to treat the information as confidential business information in accordance with the definition of trade secret in the *Uniform Trade Secrets Act*, 10 M.R.S. §§ 1542(4)(A) and (B).

Although the applicant evaluated the availability of MSW disposal at other solid waste landfills, the Department notes that this will not result in MSW being managed at a higher level on the solid waste management hierarchy. Therefore, this aspect of the information submitted does not change the Department's analysis.

Although estimated costs were provided for purchasing all material for filling, grading and bulking purposes in lieu of MSW, the Department

**Commented [A15]:** The "near-term uncertainty period" is longer than the year to 18 months suggested by this draft Order.

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notes that the possibility exists that other currently accepted waste material could be utilized for the same purpose. There would be an increase in costs, however, associated with landfill gas treatment.

E. Department Findings

With the respect to the hierarchy requirements, the Department makes the following findings:

- (1) Amendment #S-020700-WD-BC-A (issued 2013). The Department finds that the intent of the 2013 amendment license was for MERC waste to be disposed of at JRL temporarily and to ensure that activities at JRL support, and do not subvert, the hierarchy. The Department further finds that the amount of non-bypass, in-state MSW disposal at JRL has increased since the issuance of the 2013 amendment license and that restrictions are necessary to ensure that activities at JRL support, and do not subvert, the hierarchy.
- (2) Casella Recycling Programs. The Department finds that although recycling is encouraged by Casella and Casella maintains and manages recycling infrastructure, MSW disposed at JRL has increased without a slight corresponding increase in the annual generation of MSW in Maine.
- (3) Currently Available Capacity in Maine for Management of MSW. The Department finds that disposal capacity for Maine generated MSW, as of pre-March 31, 2018, is sufficient based on current operating conditions in Maine.
- (4) Future Available Capacity in Maine for Management of MSW. The Department finds that there is uncertainty in the future near term with the solid waste landscape in Maine until PERC's planned reduction in operating level is complete and successfully stabilized and the construction of CRM is complete and commercial operations have been achieved. The Department further finds that sufficient MSW incineration and processing capacity exists in the future provided that the PERC facility is operational at its planned reduction level of 210,000 tons per year and the CRM facility is operational at its currently contracted capacity of 105,000 tons per year or greater. The Department also finds that these solid waste management options are preferred over disposal at JRL in accordance with the hierarchy. The Department finds that it's reasonable to believe that it will take a reasonable period of time for these

**Commented [A16]:** This may have been the DEP's intent in 2013, but there was, and apparently is, no recognition that MSW generation since then increased and MERC incineration capacity has not been and cannot be replaced. After recycling, which the applicant has no control over, and additional MSW diversion to PERC, there is still significant MSW to be disposed.

**Commented [A17]:** They do not subvert; they support the hierarchy.

**Commented [A18]:** See earlier comments for why this is.

**Commented [A19]:** But there has been an increase, without any replacement of MERC incineration capacity. Also, the applicant doesn't control what gets recycled.

As noted above other disposal facilities have experienced increases as well.

**Commented [A20]:** This uncertainty is greater than the 1 ½ years suggested by this draft Order.

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waste management options to stabilize and the actual capacity of these facilities to be known.

- (5) Agreements Among Maine Waste Management Facilities. The Department finds that a number of Maine's waste management facilities have entered into, or drafted, waste agreements, including those signed by CRM and PERC with Casella entities that support the hierarchy and divert significant tons of Maine MSW from disposal at JRL. These agreements are conditioned on issuance of an order allowing no less than 81,800 tons of in-state MSW to be disposed at JRL and are, in effect, coterminous with this order.
- (6) Cost Considerations. The Department finds that given the near-term uncertainty, the applicant has demonstrated that there may be a financial burden if MSW is taken to another solid waste disposal facility other than JRL under the near-term options currently available. The Department finds that, although MSW may be technically appropriate and more economical for filling, grading and bulking purposes, there are other materials that can be utilized successfully for these purposes, but at increased costs to JRL.

The Department also finds that the applicant's proposal to remove the March 31, 2018 date resulting in acceptance of MSW until horizontal and vertical licensed disposal capacity is attained is not consistent with the applicable State laws and Rules relating to the solid waste management hierarchy, as there may be future capacity for all or some of the 81,800 tons per year of non-bypass, in-state MSW that could be directed to facilities that operate at a higher level on the hierarchy. The Department finds that the applicant has demonstrated a need in the short term to provide disposal options until December 31, 2023 due to unknowns associated with the change in operating capacity of PERC and the construction and commercial operation date of the CRM facility.

The Department further finds that based on the disposal capacity uncertainty of the PERC and CRM facilities and the associated cost considerations (i.e., tipping fees and agreements), along with the applicant's ongoing recycling and reuse efforts to divert waste from JRL to the maximum extent practicable, an short-term extension, for the 81,800 tons per year non-bypass, in-state MSW to be accepted at JRL until December 31, 2023 for one additional year beyond March 31, 2018 with the potential for a one-time extension not to exceed six months beyond the one year meets the applicable State laws and Rules relating to the solid waste management hierarchy, provided that:

**Commented [A21]:** And there also may not be that capacity. If that additional future capacity does not materialize, disposal of up to 81,800 tons at JRL should not be arbitrarily foreclosed.

**Commented [A22]:** This is coterminous with any extended PERC agreement, and allows sufficient time for both PERC and CRM to achieve a sustainable operating status. Additionally, other solutions may emerge within this term.

**Commented [A23]:** Given the current uncertainty with PERC and CRM capacity going forward, the Department should not hamstring the State with such an absolute limited extension.

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- a. During the one year extension period, scheduled to occur from March 31, 2018 to March 31, 2019, BGS and NEWSME must develop and prepare to implement measures that eliminate the need for non bypass, in-state MSW disposal at JRL. On or before March 31, 2019 these measures must be implemented; and
  - b. If warranted, based on a demonstrated need, BGS and NEWSME may submit a one time request to the Department for review and approval to extend the timeframe for a period not to exceed six months for the disposal of no greater than 30,000 tons of non bypass, in-state MSW at JRL. The Department's basis for 30,000 tons is twofold: 1) an approximate 25% reduction in tonnage annualized for six months ( $81,800/2 * 0.75$ ), which is consistent with the requirements of the solid waste management hierarchy; and 2) the average acceptance rate of non bypass, in-state MSW over the past 3 years is comparable to this rate. The 6 month extension beyond March 31, 2019 must be requested by November 30, 2018 as a Condition Compliance submittal with information detailing the need for the extension based on the then current solid waste landscape in Maine, with emphasis on the operational status of other solid waste management facilities in Maine which are higher on the hierarchy. This submittal must also include information sufficient for the Department to determine how the approved non bypass, in-state MSW under this amendment will be handled after September 30, 2019 without utilization of JRL for disposal.

**Commented [A24]:** This may be an unreasonable and impossible task. The applicants can't bring this MSW to a management method higher on the hierarchy that doesn't exist. The applicant (a disposal facility) is not responsible for creating those methods, rather to use those that exist to the maximum extent practicable.

**Commented [A25]:** What is the basis for this arbitrary number?

**9. CRIMINAL OR CIVIL RECORD**

In accordance with 38 M.R.S. § 1310-N(7) and 06-096 C.M.R. ch. 400, § 12, a license for a solid waste facility or activity may be denied if the owner or the operator or any person having a legal interest in the applicant or the facility has been convicted of any criminal law or adjudicated or otherwise found to have committed any civil violation of environmental laws or rules of the State, other states, the United States, or another country.

Civil and criminal disclosure statements dated 2017 were submitted for BGS and NEWSME as part of the application. The disclosure statements included those for NEWSME's operation of JRL, a related entity New England Waste Services of ME, Inc, and the six officers, directors, and partners of the two businesses.

In the five-year environmental compliance history submitted for New England Waste Services of ME, Inc., three notices of violations and one administrative order were listed.

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These have been addressed through responses required by the notices of violation and administrative order.

Based upon information in the application, the Department finds that the applicant filed complete disclosure statements as required by applicable State law and Rule. Based on the disclosure statements submitted and the evaluation criteria contained in 06-096 C.M.R. ch. 400, § 12(B), the Department finds no basis for denying the license.

## 10. LANDFILL DESIGN AND OPERATIONS

The applicant must address the appropriate landfill design and operations requirements set forth in 06-096 C.M.R. ch. 401.

### A. Geotechnical Properties and Landfill Cell Development

There will be no change in the landfill design and individual cell configurations due to continued acceptance of MSW. The stability evaluations have shown that the required slope stability factors have been met and no slope instability has been detected since NEWSME had been the landfill operator. The use of MSW in the waste mix does not alter the strength and density properties (shear strength of 32 degrees and waste density of 74 pounds per cubic foot) utilized to support the stability analysis and Cell Development Plans.

### B. Waste Placement, Compaction and Capacity Consumption

The applicant states that allowance of continued MSW acceptance during final filling, grading, and phased final landfill closure could be advantageous to operations. MSW has physical properties that make it a suitable "select waste" to bring interim grades up to final grade, including that it is easily compacted and non-bulky and with proper compaction the amount proposed to be placed is not expected to have substantial settling. The MSW would be placed and mixed with other approved wastes (i.e., treatment plant sludge and combustion ash for bulking purposes) in the remaining capacity in Cell 10 and used to reach final waste grades in the phased closure of Cells 1 through 10.

An estimate of final cover for the 15-acre area on the northwest side slope is expected to require about 133,500 cubic yards (120,150 tons of material) of slope fill to bring the current interim grades up to final permitted grades. Utilizing

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MSW as this slope fill material, it is estimated that approximately 7,900 tons of MSW will be needed per acre of closure area.

The applicant states that MSW is also a suitable material for sludge bulking. JRL utilizes a ratio of two to three parts bulking waste to one part sludge, with MSW and PERC incinerator ash as the current wastes used for bulking sludge. The average three-year sludge intake between 2014 and 2016 was approximately 48,000 tons annually. JRL has stated a concern with the volume of ash received post-March 2018 due to the uncertain configuration of PERC.

Overall, the amount of available capacity within the licensed footprint of Cells 1 through 10 after March 31, 2018 is projected to be 1,220,000 cubic yards, and will be approximately 800,000 cubic yards (720,000 tons) by the end of October 2018 when construction of Cell 11 of the expansion is expect to be finalized.

C. Cover

There will be no change in cover practices due to continued acceptance of MSW. The facility currently places daily cover over all areas receiving MSW, front-end processing residue (FEPR), and other wastes with odor generating potential. Geosynthetic membrane intermediate cover is placed on areas that have reached interim grades and will be inactive for 6 months or longer. Final cover is proposed in the Cell Development Plan for every other year in a phased approach.

D. Leachate Management

The continued use of MSW is not anticipated to change the current leachate generation rates, quality, or handling procedures.

E. Litter Control

Litter will continue to be minimized with compaction of the MSW as it is placed in the landfill and placement of daily cover or other non-litter producing waste over the MSW. JRL also utilizes litter control fencing at the perimeter of each cell.

F. Vector Control

Vectors will continue to be controlled by placement of daily and intermediate cover; use of the techniques allowed in JRL's depredation permit; implementation

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of additional techniques to control birds in the active waste placement area, as necessary; and a contract with a local pest control company for rodent control.

#### G. Environmental Monitoring

Environmental monitoring will not change with the proposed amendment. JRL will continue to monitor the landfill as detailed in the approved Environmental Monitoring Plan located in the Operations Manual, including characterization and evaluation of groundwater and surface water, evaluation of the performance of the primary liner system, and characterization and evaluation of the quality and quantity of leachate.

#### H. Acceptable Solid Waste, Waste Characterization, and Hazardous Waste Exclusion

The waste acceptance, characterization, and hazardous waste exclusion will not change with the proposed amendment. JRL will continue to operate per the approved Waste Characterization and Acceptance Plan in the Operations Manual.

#### I. Facility Access/Hours of Operation

The proposed amendment will not change access to, or the hours of operation of, the landfill.

## J. Hot Loads

Any hot loads received at the landfill will continue to be handled utilizing the procedures in place as described in the Operations Manual.

The Department finds that current JRL design and operations, including the procedures and cell development plans detailed in the Operations Manual, appropriately address handling and disposal of MSW at the landfill pursuant to the requirements in 06-096 C.M.R. ch. 401. The Department further finds that utilization of MSW as grade fill and for waste bulking is a viable option, but it is not the only material available that can be utilized for these operational needs. Additional discussion of the technical aspects as related to the hierarchy can be found in Finding 8.

11. ALL OTHER

All other Findings of Fact, Conclusions and Conditions made in Department licenses #S-020700-WD-BC-A and #S-020700-WD-BG-Z remain unchanged.

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BASED on the above Findings of Fact, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS pursuant to 38 M.R.S. §§ 1310 to 1319-Y, 38 M.R.S. § 2101, and the applicable Department Rules:

1. JRL will not pollute any waters of the State, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance pursuant to 38 M.R.S. § 1310-N(1)(A) and 06-096 C.M.R. ch. 400, § 3(D); provided that:
  - A. The acceptance of up to 81,800 tons per year of non-bypass, in-state MSW at JRL is limited until ~~December 31, 2023~~March 31, 2019, except for a possible one-time six-month extension beyond March 31, 2019, based on a demonstrated need, for no greater than 30,000 tons of non-bypass, in-state MSW;
  - B. The MSW that is the subject of this license amendment is handled at JRL using the same procedures as the MSW currently licensed for disposal; and
  - C. The sources of MSW are limited as described in the Finding 4 of #S-020700-WD-BC-A and this amendment, and the landfill is operated in accordance with the facility's approved Operations Manual.
2. The applicant has complied with the public and local participation and notification requirements pursuant to 38 M.R.S. §§ 1310-S(1) and 1310-N(12) and 06-096 C.M.R. ch. 2, § 14.
3. The applicant has demonstrated sufficient title, right, or interest in all of the property which is proposed for use pursuant to 06-096 C.M.R. ch. 400, § 4(A).
4. The applicant has provided a sufficient demonstration of financial ability and assurance and technical ability to permit, design, construct, operate, close, and accomplish post-closure care of the landfill pursuant to 38 M.R.S. § 1310-Y, and 06-096 C.M.R. ch. 400, §§ 4(B)(1) and 4(C)(1); provided that NEWSME, as the current operator of JRL, submits the appropriate financial assurance package updates in accordance with the Rules on an annual basis.
5. The applicant has provided sufficient provisions for safe and uncongested traffic movement of all types into, out of, and within the landfill pursuant to 06-096 C.M.R. ch. 400, § 4(D)(1); provided the facility continues to encourage waste haulers to use I-95 as a primary hauling route.
6. The applicant has sufficiently demonstrated that the proposed amendment will not unreasonably adversely affect air quality pursuant to 06-096 C.M.R. ch. 400, § 4(G)(1).

**Commented [A26]:** Again, this date is conterminous with any extended PERC agreement. It allows sufficient time for both PERC and CRM to achieve a sustainable operating status. Additionally, other solutions may emerge within this term.

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7. Restrictions on the amount of non-bypass, in-state MSW disposed at JRL are necessary to ensure that activities at JRL support, and do not subvert, the hierarchy.
8. The applicant has demonstrated that considerable sufficient near-term uncertainty exists in the solid waste landscape in Maine and will likely continue for a number of years. These uncertainties include, but are not limited to: the wholesale price of electricity, which affects the revenues of MSW incinerators that generate and sell power; internationally evolving recycling quality control standards that may affect recycling processing facility operations, marketing of recyclables, and the cost of recycling to municipalities and businesses; the start-up schedule of new MSW processing facilities (i.e., Fiberight), and the sustainability of a new operating regimes at PERC. This warrants an short term extension of up to 81,800 tons per year of non-bypass, in-state MSW at JRL and the Department concludes that an extension of up to 81,800 tons per year of non-bypass, in-state MSW at JRL until December 31, 2023 for one additional year beyond March 31, 2018 with the potential for a one-time extension of six months beyond the one-year is reasonable and consistent with the solid waste management hierarchy pursuant to 38 M.R.S. §§ 2101 and 1310-N(1)(D) and 06-096 C.M.R. ch. 400, § 4(N)(1); provided that:
  - A. ~~During the one-year extension period, scheduled to occur from March 31, 2018 to March 31, 2019, BGS and NEWSME shall develop and prepare to implement measures that eliminate the need for non-bypass, in state MSW disposal at JRL. On or before March 31, 2019 these measures must be implemented; and~~
  - B. ~~If warranted, based on a demonstrated need, BGS and NEWSME may submit a one-time request to the Department for review and approval to extend the timeframe for a period not to exceed six months for the disposal of no greater than 30,000 tons of non-bypass, in state MSW at JRL. The six month extension beyond March 31, 2019 shall be requested by November 30, 2018 as a Condition Compliance submittal detailing the need for the extension based on the then-current solid waste landscape in Maine, with emphasis on the operational status of other solid waste management facilities in Maine which are higher on the hierarchy. This submittal must also include information sufficient for the Department to determine how the approved non-bypass, in state MSW under this amendment will be handled after September 30, 2019 without utilization of JRL for disposal.~~
9. ~~Sufficient~~ MSW incineration and processing capacity exists in the future provided that the PERC facility is operational at its planned reduction level of 210,000 tons per year and the CRM facility is operational at its currently contracted capacity of 105,000 tons per year or greater. Based on the hierarchy, these solid waste management options are preferred over disposal at JRL.

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10. The applicant has provided a civil/criminal disclosure statement demonstrating that the entities are not in violation of environmental or criminal law pursuant to 38 M.R.S. § 1310-N(7) and 06-096 C.M.R. ch. 400, § 4(C)(1)(b) and § 12.
11. The applicant has sufficiently demonstrated that the proposed amendment will meet the appropriate stability and operational requirements of 06-096 C.M.R ch. 401.

THEREFORE, the Department DENIES the noted application of the applicant as proposed to allow for the continued disposal at JRL of up to 81,800 tons per year of non-bypass, in-state MSW but APPROVES the noted application of the applicant to allow for the disposal of up to 81,800 tons per year of non-bypass, in-state MSW until December 31, 2023~~March 31, 2019~~, with the potential for a one-time extension not to exceed six months beyond the one year based on a demonstrated need for the disposal of no greater than 30,000 tons of non-bypass, in-state MSW at JRL SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. The Standard Conditions of Approval for Solid Waste, copies attached.
2. Severability. The invalidity or unenforceability of any provisions, or part thereof, of this license shall not affect the remainder of the provision or any other provision. This license shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
3. Soil Erosion. The applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in unnecessary or noticeable erosion of soils on site during operation of the landfill.
4. Financial Assurance. The applicant shall submit the appropriate financial assurance package updates in accordance with the Rules on an annual basis, including the most recent surety bond documentation.
5. BGS and NEWSME shall accept no greater than 81,800 tons per year of non-bypass, in-state MSW at JRL, limited until December 31, 2023~~March 31, 2019~~, except for a possible one-time six-month extension beyond March 31, 2019 of no greater than 30,000 tons of non-bypass, in-state MSW based on a demonstrated need as stated in Condition 7 below. The MSW restriction does not limit the authority of the applicant to accept MSW bypass and soft layer material for cell construction after December 31, 2023~~March 31, 2019~~, provided that such acceptance is consistent with the relevant terms of Department licenses #S-020700-WD-N-A and #S-020700-WD-W-M.

**Commented [A27]:** This date is conterminous with any extended PERC agreement and allows sufficient time for both PERC and CRM to achieve a sustainable operating status. Additionally, other solutions may emerge within this term.

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6. ~~During the one-year extension period, scheduled to occur from March 31, 2018 to March 31, 2019, BGS and NEWSME shall develop and prepare to implement measures that eliminate the need for non-bypass, in-state MSW disposal at JRL. On or before March 31, 2019 these measures shall be implemented.~~
7. ~~If a demonstrated need exists, BGS and NEWSME may submit a one-time request for a six-month potential additional extension to the Department for review and approval under the following conditions:~~
- A. ~~The one-time request shall be limited to no greater than 30,000 tons of non-bypass, in-state MSW over the 6-month extension period; and~~
- B. ~~The one-time request shall be submitted no later than November 30, 2018 as a Condition Compliance submittal with a specific plan detailing the need for the extension based on the then-current solid waste landscape in Maine, with emphasis on the operational status of other solid waste management facilities in Maine which are higher on the hierarchy. This submittal must also include information sufficient for the Department to determine how the approved non-bypass, in-state MSW under this amendment will be handled after September 30, 2019 without utilization of JRL for disposal.~~

**Commented [A28]:** This may be an unreasonable and impossible task. The applicants can't bring this MSW to a management method higher on the hierarchy that doesn't exist. The applicant is not responsible for creating those methods, rather to use those that exist to the maximum extent practicable.

**Commented [A29]:** Unnecessary if disposal of up to 81,800 tons of in-state MSW at JRL until December 31, 2023 is granted.

DONE AND DATED AT AUGUSTA, MAINE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
Paul Mercer, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

Date of initial receipt of application: November 27, 2017

Date of application acceptance: December 15, 2017

Date filed with the Board of Environmental Protection:

XKT82558