

STATE OF MAINE DEPARTMENT OF ADMINISTRATIVE & FINANCIAL SERVICES BUREAU OF GENERAL SERVICES BURTON M. CROSS BUILDING 4TH FLOOR, 77 STATE HOUSE STATION AUGUSTA, MAINE 04333-0077

PAUL R. LEPAGE GOVERNOR ALEC PORTEOUS COMMISSIONER

GILBERT M. BILODEAU INTERIM DIRECTOR

November 27, 2017

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

Re: Juniper Ridge Landfill (JRL) Amendment Application for License #S-020700-WD-BC-A Continued Acceptance of In-State MSW

Dear Kathy:

The Maine Bureau of General Services (BGS) and NEWSME Landfill Operations, LLC (NEWSME) hereby apply to extend beyond March 31, 2018 the date for annual acceptance of up to 81,800 tons of in-state Municipal Solid Waste (MSW) into existing JRL as approved by Department Order #S-020700-WD-BC-A, Condition 10 (as revised in Board Order #S-020700-WD-BG-Z) (MSW Amendment License). The extension would last until the approved disposal capacity in existing JRL has been exhausted. This request does not apply to the JRL expansion capacity approved by the Board on June 1, 2017. We are submitting an original and two copies of this amendment application; we also will supply you with an electronic copy. Enclosed is a check in the amount of \$10,956 to cover the applicable processing and licensing fee.

This extension will serve to meet the ongoing need of primarily southern Maine communities, formerly contracted with Maine Energy Recovery Company, as an environmentally safe and secure method for handling in-state MSW. The amount of MSW accepted into JRL has been reduced, reused, recycled, composted, and/or processed to the maximum extent practicable by NEWSME as demonstrated each year in JRL's Annual Report, which includes a summary of the specific activities NEWSME has taken to divert MSW from JRL. NEWSME is committed to continuing to manage the MSW under its control consistent with the State's Solid Waste Management Hierarchy (Hierarchy) set for in 38 M.R.S. § 2101.

Other than the date extension described above, no other changes to the MSW Amendment License are proposed; the remaining MSW Amendment License conditions will continue to be complied with to effectively operate JRL in conformance with its current licenses and the Hierarchy.

BGS and NEWSME look forward to an expeditious Department review and approval process.

Should you have any questions, please feel free to contact us.

Sincerely,

Gilbert M. Bilodeau, Interim Director Bureau of General Services

Brian Oliver, Vice President NEWSME Landfill Operations, LLC

| <u>FOR DEP USE ONLY</u> | 하철 수황에는 의견을 가지 않는 것이 같아. 가지 않는 것이다. 것을 것으로 한다. 가지 말을 것 같아. 것이 가지 않는 것이다. 것이다. 것을 것으로 한다. 것은 것을 것 같아. 것이 같아. |
|--|---|
| ATS ID: Seq: DEP ID: | Received by DEP: |
| Bureau: <u>S</u> Type of Application: <u>Activity: A</u> | Fees Paid: |
| Project Analyst: | Check No.: |

APPLICATION FOR A SOLID WASTE PROJECT AMENDMENT

This form shall be used to request approval, pursuant to 38 MRSA, Section 1301 <u>et seq.</u>, and Maine's Solid Waste Management Regulations, of any proposal to significantly increase the capacity of a solid waste facility; to significantly alter the siting, design, construction or operation of the facility; or significantly alter the nature of an activity to an extent that would require the Department to modify any findings with respect to any of the licensing criteria.

| PLEASE TYPE OR PRINT | |
|---|-------------------------|
| State of Maine, acting through the Department of Administrative and Financial Services, Bureau of General Services (BGS), Owner of | |
| Company Name: Juniper Ridge Landfill | Telephone: 207-624-7360 |
| Applicant's Last Name: Barden | First Name: Michael |
| Contact Person: Michael Barden | Telephone: 207-624-7436 |

Address Information

| Applicant Names: | State of Maine Bureau (Owner) | of General Services | NEWSME Landfill Oper (Operator) | ations LLC |
|--------------------|----------------------------------|---------------------|------------------------------------|-------------------------|
| Telephone: 207-624 | -7436 | | Telephone: <u>207-862-42</u> | 00 ext 225 |
| Mailing Address: 7 | 7 State House Station | | Mailing Address: <u>(NE</u> | WSME) 2828 Bennoch Road |
| Street Address: | | | Street Address: | |
| Town: Augusta | State: ME | Zip: 04333 | Town: Old Town | State: ME Zip: 04446 |

Address: Billing

Project Description:

| Name: NEWSME Landfill Operations, LLC | |
|---------------------------------------|--|
|---------------------------------------|--|

Mailing Address: 110 Main St., Suite 1308

Street Address: _____

Town: Saco State: ME Zip: 04072

Site/Activity Information

- <u>Amendment</u>

Location: Juniper Ridge Landfill Old Town, ME Directions: 0.1 mile west of Interstate 95 Exit 199 off Route 16

PLEASE SEE PAGE 2 - SIGNATURE REQUIRED

SIGNATURE OF APPLICANT

By signing this application, the applicant certifies that he or she has: (1) published the public notice form once in a newspaper circulated in the area where the project is located, (2) sent a copy of the public notice form to the owners of property abutting the land upon which the project is located, (3) sent a copy of the public notice form to the chief municipal officer and chair of the municipal planning board of the municipality in which the project is located (4) filed a complete copy of this application in the municipal office of the municipality in which the project is located, (5) reviewed the instructions contained in this application form, and (6) reviewed the appropriate state laws that relate to the proposed project.

I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I, the property owner or lessee, authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

DATE: 11/14/17

NAME (Applicant)

(If other than applicant, attach letter of agent authorization.)

PLEASE SEE ATTACHED FEE SCHEDULE TO DETERMINE THE APPLICATION FEE FOR FOR AN AMENDMENT TO YOUR FACILITY LICENSE.

TITLE

INSTRUCTIONS

- 1. Please contact DEP Solid Waste staff to determine if your project is a minor revision or amendment and to answer any questions that arise at any point during the application or review process.
- 2. <u>Pre-Application meeting</u>. Applicants proposing to amend a license are encouraged to meet with DEP staff to discuss the proposed project. The meetings can help avoid unnecessary expense and processing delays.
- 3. <u>Fill out the application completely.</u> INCOMPLETE APPLICATIONS WILL BE RETURNED, CAUSING UNNECESSARY DELAYS IN THE REVIEW PROCESS.
- 4. Publish the PUBLIC NOTICE OF INTENT TO FILE FORM once in a newspaper circulated in the area where the project is located. (A form for this is attached to this application.) The notice should appear in the newspaper within 30 days prior to filing the application with the DEP.
- 5. Send by certified mail, a copy of the PUBLIC NOTICE OF INTENT TO FILE FORM to all the owners of property abutting the project. Their names and addresses can be obtained from town tax maps or local public officials. Abutters must receive notice within 30 days prior to filing the application with the DEP. If your project abuts a road or other public or private right of way, the person on the opposite side of the right of way must be notified.
- 6. Send by certified mail, a copy of the PUBLIC NOTICE OF INTENT TO FILE FORM to the chief municipal officer and chairperson of the planning board in the municipality where the project is to be located. Send one complete copy of the application to the Municipal Office of the town within which the project is located. If the project is located in an unorganized area, send the PUBLIC NOTICE and application to the appropriate Office of the County Commissioners and the Maine Land Use Regulation Commission, State House Station 22, Augusta, Maine 04333. The notice must be filed in the municipal office within 30 days prior to filing with the DEP. The application must be filed in the municipal office at the time of filing with the DEP.
- 7. Consult with DEP staff to determine how many copies of the completed application form and supporting reports must be submitted to the Department. In general, three copies of site plans, drawings, soil maps, or other data on sheets larger than 8½" x 14" copies must be submitted unless the staff determines that fewer copies are needed. ALL PLANS SHOULD BE FOLDED TO SIZE 8½" x 11" unless otherwise indicated by the DEP's staff. Any part of the application which has been prepared by a P.E., C.G. or C.S.S. must be stamped and signed by that person. If the applicant is a corporation, a certificate of good-standing from the Secretary of State must be included.
- 8. <u>Send the application</u> along with all attachments and a check for the fee made payable to "Treasurer, State of Maine" to: Maine Department of Environmental Protection, Bureau of Remediation and Waste Management, 17 State House Station, Augusta, Maine 04333-0017.
- 9. <u>Keep a copy</u> of the completed application for your files. This copy will be helpful in speeding up communications with the DEP staff if any questions arise during the review of the project.
- 10. <u>Upon the approval</u> by the Department of Environmental Protection, a permit will be issued and sent to the applicant. The applicant should read the permit carefully in order to become familiar with any conditions. Failure to comply with conditions of approval may lead to enforcement action or the revocation of a permit.

PUBLIC NOTICE OF INTENT TO FILE

Please take notice that the State of Maine, acting through the Department of Administrative and Financial Services, Bureau of General Services, Station #77, Augusta, Maine 04333-0077 (tel. 207-624-7436), as owner, and NEWSME Landfill Operations, LLC ("NEWSME"), 358 Emerson Mill Road, Hampden, Maine 04444 (tel. 207 862-4200), as operator, are intending to file a license amendment application with the Maine Department of Environmental Protection (DEP) on or about November 27, 2017, pursuant to the provisions of 38 M.R.S. §§ 1301 et seq., Chapter 400 of Maine's Solid Waste Management Regulations, and the DEP's Chapter 2 Rules Concerning the Processing of Applications.

The application is for an Amendment of License Amendment #S-020700-WD-BC-A of the Juniper Ridge Landfill to remove the date of March 31, 2018 from Condition 10 of that License. The Juniper Ridge Landfill is owned by the State of Maine and operated by NEWSME. The facility mailing address is 2828 Bennoch Road, Old Town, Maine 04468.

According to Department regulations, interested parties must be publicly notified, written comments invited, and if justified, an opportunity for public hearing given. A request for a public hearing or for the Board of Environmental Protection to assume jurisdiction over this application, must be received by the Department, in writing, no later than 20 days after the application is accepted by the Department as complete for processing.

The application and supporting documentation are available for review at the Bureau of Remediation and Waste Management (BRWM) at the DEP's Augusta office, during normal working hours. A copy of the application and supporting documentation will also be sent to, and may be seen at, the municipal offices in Old Town and Alton, Maine and at the Penobscot Indian Nation, Penobscot Indian Island Reservation, Maine.

Send all correspondence pertaining to this amendment application by email to Kathy Tarbuck at (kathy.tarbuck@maine.gov) or by regular mail to: Maine Department of Environmental Protection, Bureau of Remediation and Waste Management, 17 State House Station, Augusta, Maine 04333-0017 (207 287-2651 or 1-800-452-1942).

REQUIRED INFORMATION

- 1. Existing DEP permit number: <u>#S-020700-WD-BC-A</u>
- 2. DEP Project Analyst for original application (if known): Kathy Tarbuck
- 3. Description of Proposed Change:

This application is for an Amendment of License Amendment #S-020700-WD-BC-A of the Juniper Ridge Landfill

to remove the date of March 31, 2018 from Condition 10 of that license.

(Attach additional sheet(s) if necessary.)

- 4. **Provide all documentation necessary to support the proposed change.** This documentation shall include, as appropriate, revised site plans, construction drawings, operations manual and technical data.
- 5. List supporting attachments: See Attached Document Titled AMENDMENT APPLICATION TO LICENSE

#S-020700-WD-BC-A CONTINUED ACCEPTANCE OF IN-STATE MUNICIPAL SOLID WASTE submitted by

STATE OF MAINE BUREAU OF GENERAL SERVICES as Owner, and NEWSME LANDFILL OPERATIONS,

LLC as Operator November 2017

JUNIPER RIDGE LANDFILL

AMENDMENT APPLICATION TO LICENSE #S-020700-WD-BC-A CONTINUED ACCEPTANCE OF IN-STATE MUNICIPAL SOLID WASTE

Submitted by:

STATE OF MAINE BUREAU OF GENERAL SERVICES As Owner and

NEWSME LANDFILL OPERATIONS, LLC, as Operator

November 2017

TABLE OF CONTENTS

| Section No. | Title | Page No. |
|-------------|---|----------|
| | | |
| 1.0 INTROD | UCTION | 1-1 |
| 1.1 | Background | 1-2 |
| 1.2 | Description of Proposed Amendment | |
| 1.3 | Application Content | 1-3 |
| 2.0 FINDING | S FROM MSW AMENDMENT #S-020700-WD-BC-A | 2-1 |
| 2.1 | Amendment Finding 4. Sources of MSW | |
| 2.2 | Amendment Finding 5. Solid Waste Management Hierarchy | |
| 2.3 | Amendment Finding 6. Air Quality | |
| 2.4 | Amendment Finding 7. Traffic Movement | |
| 2.5 | Amendment Finding 8. Landfill Design and Operations | |
| | 2.5.1 Landfill Cell Development and Geotechnical Properties | |
| | 2.5.2 Waste Placement, Compaction, and Capacity Consumption | |
| | 2.5.3 Cover | |
| | 2.5.4 Leachate Management | |
| | 2.5.5 Litter Control | |
| | 2.5.6 Vector Control | |
| | 2.5.7 Environmental Monitoring | |
| | 2.5.8 Acceptable Solid Waste, Waste Characterization, and Hazardo | |
| | Waste Exclusion | |
| | 2.5.9 Facility Access / Hours of Operation | |
| 2.6 | 2.5.10 Hot Loads Finding 9. Existing Uses and Scenic Character | |
| 2.0 | Amendment Finding 10. Title, Right, or Interest | |
| 2.1 | 2.7.1 Public Notice of Intent to File | |
| | 2.7.2 Pre-Application Meeting | |
| 2.8 | Amendment Finding 11. Financial Ability | |
| 2.0 | Amendment Finding 12. Technical Ability | |
| - | | |
| 3.0 CONCLU | JSION | 3-1 |

LIST OF APPENDICES

| APPENDIX 1 | JRL AMENDMENT APPLICATION TO ACCEPT MUNICIPAL SOLID WASTE FROM MAINE SOURCES; SEPTEMBER 2012 (UPDATED DECEMBER 2012) |
|------------|--|
| APPENDIX 2 | #S-020700-WD-BC-A; DECEMBER 20, 2013 (MSW AMENDMENT) & #S-020700-WD-BG-Z; JUNE 19, 2014 (BOARD ORDER) |
| APPENDIX 3 | #S-020700-WD-BF-C; FEBRUARY 27, 2014 (CONDITION COMPLIANCE) |
| APPENDIX 4 | JRL SUMMARY OF MSW DIVERSION EFFORTS |
| APPENDIX 5 | MANAGEMENT OF MAINE MUNICIPAL SOLID WASTE |
| APPENDIX 6 | PUBLIC NOTICE, LIST OF JRL ABUTTERS AND OLD TOWN LANDFILL ADVISORY COMMITTEE MEMBERS |
| APPENDIX 7 | FINANCIAL ABILITY / ASSURANCE |
| APPENDIX 8 | CIVIL & CRIMINAL DISCLOSURES / COMPLIANCE |
| APPENDIX 9 | LETTERS OF SUPPORT |

LIST OF TABLES

| Table | No. Title | <u>Page No.</u> |
|-------|--|-----------------|
| 1 | CONTRACTED MUNICIPALITIES THAT UTILIZE JRL FOR MSW DISPOSA | , |
| 2 | CWS' ANNUAL MAINE MSW DIVERSION FROM DISPOSAL AT JRL AN TOTAL MSW DISPOSAL AT JRL, EXCLUDING BYPASS | ND |

LIST OF FIGURES

| <u>Figure</u> | No. Title | Page No. |
|---------------|--|----------|
| 1 | BREAKDOWN OF WASTES ACCEPTED AT JRL IN 2016 | 2-4 |
| 2 | NON-RECYCLED MAINE MSW NEEDING DISPOSAL COMPARED WITH N | ION- |
| | LANDFILL MAINE MSW MANAGEMENT AVAILABILITY | 2-9 |
| 3 | AIRSPACE UTILIZATION AT BOTH JRL AND MAINE MUNICIPAL LANDF | ILLS |
| | ACCEPTING MSW | 2-11 |
| 4 | TYPICAL CLOSURE SECTION THROUGH CAP 1 SHOWING TYPICAL M | NSW |
| | FILL LOCATIONS | 2-15 |

JUNIPER RIDGE LANDFILL AMENDMENT APPLICATION TO LICENSE #S-020700-WD-BC-A CONTINUED ACCEPTANCE OF IN-STATE MUNICIPAL SOLID WASTE

1.0 INTRODUCTION

Maine Bureau of General Services (BGS),¹ as the owner of Juniper Ridge Landfill (JRL), and NEWSME Landfill Operations, LLC (NEWSME), as operator of the JRL in Old Town, Maine, have prepared this amendment application (Application) for submission to the Maine Department of Environmental Protection (MEDEP) to extend beyond March 31, 2018 the date for annual acceptance of up to 81,800 tons of Municipal Solid Waste (MSW) into existing JRL as approved by Department Order #S-020700-WD-BC-A, Condition 10, as revised in Board Order #S-020700-WD-BG-Z² (Order denying appeals). This approval is referenced herein as the MSW Amendment. The extension would last until the approved disposal capacity in existing JRL has been exhausted. This request does not apply to the JRL expansion capacity approved by the Board on June 1, 2017.

This extension will serve to meet the ongoing need of primarily southern Maine communities, formerly contracted with Maine Energy Recovery Company, as an environmentally safe and secure method for handling MSW. The amount of MSW accepted into JRL has been reduced, reused, recycled, composted, and/or processed to the maximum extent practicable by NEWSME as demonstrated each year in JRL's Annual Report, which includes a summary of the specific activities NEWSME has taken to divert MSW disposal from JRL. NEWSME is committed to continuing to manage the MSW under its control consistent with the State's Solid Waste Management Hierarchy (Hierarchy) set for in 38 M.R.S.A. 2101.

¹ Pursuant to P.L. 2011, Chapter 655, Sec. GG-69, on July 1, 2012 the Bureau of General Services in the Department of Administrative and Financial Services became the owner and licensee of JRL. Prior to July 1, the State Planning Office owned JRL and held its licenses. The State Planning Office was abolished on July 1, 2012.

² Condition 10 of Department Order #S-020700-WD-BC-A states: "The term of this license is limited to a period of time during which licensed disposal capacity remains available for disposal within the horizontal and vertical boundaries approved in Department license #S-20700-WD-N-A, or until March 31, 2016, whichever comes sooner. This condition does not limit the applicant to accept MSW bypass after March 31, 2016 provided that such acceptance is consistent with the relevant terms of Department license #S-20700-WD-N-A and the soft layer license." On appeal, the Board modified Condition 10 extending the date for acceptance of MSW to March 31, 2018.

Other than the date extension described above, no other changes to the MSW Amendment (located in Appendix 2 of this Application) are proposed; the remaining MSW Amendment conditions will continue to be complied with to effectively operate the landfill in conformance with its current licenses and the Hierarchy.

1.1 Background

On July 28, 1993, James River Paper Company, Inc. received approval (MEDEP license #S-020700-7A-A-N) from the Maine Board of Environmental Projection (BEP) to construct and operate a new secure landfill, called the West Old Town Landfill (WOTL), for disposal of the pulp and papermaking residuals generated at its Old Town mill. James River Paper Company, Inc. became Fort James Operating Company (Fort James) in 1997. In November 2000, Fort James was acquired by Georgia-Pacific Corporation. On October 21, 2003, MEDEP issued conditional approval for the transfer of licenses for the WOTL from Fort James to the SPO (MEDEP licenses #S-020700-WR-M-T and #L-019015-TH-C-T); the transfer became effective when the sale of the WOTL to SPO occurred on February 5, 2004. On February 5, 2004, SPO also finalized an Operating Services Agreement (OSA) with NEWSME, for the operation of the WOTL. On April 9, 2004, MEDEP approved the amendment application (MEDEP license #S-020700-N-A) for a vertical increase in the final elevation of the landfill and the disposal of additional waste streams. The amendment license was appealed to and upheld by both the Board of Environmental Protection (BEP) in 2004 and the Penobscot County Superior Court in 2006.³

On December 20, 2013, the MEDEP approved the MSW Amendment (MEDEP license #S-020700-WD-BC-A, see Appendix 2) for acceptance of up to 81,800 tons of MSW, annually, through March 31, 2016. The license was appealed to the BEP and Condition 10 was revised in

³ In 2005, WOTL became known as the Juniper Ridge Landfill. The OSA states, in part, that NEWSME is responsible for all costs associated with operating JRL, and for obtaining any permits needed. As explained in Finding of Fact #3 of the MSW Amendment, references to the applicant in licenses for construction or operation of JRL refer to both BGS and Casella Waste Systems, Inc., (CWS), the ultimate parent company of NEWSME, or NEWSME (or a successor operator.)

Board Order #S-020700-WD-BG-Z to March 31, 2018. Since the Condition Compliance Approval, #S-020700-WD-BF-C, in February of 2014 (see Appendix 3), NEWSME has disposed of a total of 164,333 tons of MSW in JRL, excluding MSW bypassed from a Maine incinerator (PERC), while diverting more than 855,689 tons of MSW to other solid waste facilities in the State of Maine.

1.2 Description of Proposed Amendment

With this amendment application, BGS and NEWSME request that Condition 10 of Department Order #S-020700-WD-BC-A be modified to the following:

"The term of this license will be the period of time during which licensed disposal capacity remains available within the horizontal and vertical boundaries of existing JRL approved in the Department license #S-20700-WD-N-A⁴. This condition does not limit the authority of the applicant to accept MSW bypass provided that such acceptance is consistent with the relevant terms of Department licenses #S-020700-WD-N-A and S-020700-WD-BI-N."

No other changes to conditions of the original 2013 MSW Amendment are proposed; the remaining MSW Amendment conditions will continue to apply and be complied with by the applicants (see, for example, Condition Compliance Order dated February 27, 2014 in Appendix 3). Details are currently being finalized to extend the Disposal Agreement ("Casella/PERC Agreement") beyond March 31, 2018.

1.3 Application Content

The remainder of this MSW Amendment Application includes additional specific information to demonstrate consistency with findings and conditions of the existing MSW Amendment, ongoing compliance by JRL during the acceptance of MSW with Section 400.4.N of the Rules

⁴ License #S-020700-WD-N-A, issued April 9, 2004, pertains to the originally licensed 68-acre footprint, consisting of 10.28 million cubic yards of total capacity. The requested extension of the MSW deadline date for existing JRL does not affect or apply to the recently issued license, #S-20700-WD-BI-N, for the JRL Expansion.

addressing the Hierarchy, and the other applicable sections of the Rules as discussed with the MEDEP during pre-application meetings held on September 19 and October 13, 2017.

The Application also describes how MSW will be used in the operations of existing JRL to maximize the use of the facility's remaining disposal capacity. Additionally, to underscore the need to continue to accept MSW at JRL, this MSW Amendment Application includes an assessment of the potential shortfall beginning March 31, 2018 in the availability of existing and planned solid waste management facilities to manage all the MSW generated within the State. This assessment is based on data provided in the Maine Solid Waste Generation and Disposal Capacity Report issued January 2017 (MEDEP, 2015 annual report data) and assumptions about the amount of MSW disposal capacity at Maine facilities based on data from those facilities' 2015 annual reports, and permitted or planned availability from published sources. This assessment supports the acceptance of MSW at existing JRL beyond March 31, 2018 as an important part of methods that are necessary in the State to manage Maine's MSW.

2.0 FINDINGS FROM MSW AMENDMENT #S-020700-WD-BC-A

Aside from the change in date by which MSW can be accepted at existing JRL, the findings contained in the MSW Amendment approval will remain unchanged as a result of the approval of this MSW Amendment Application. Regarding the Hierarchy findings, this MSW Amendment Application describes the operating history of JRL, CWS' statewide recycling and composting programs, and CWS' efforts to divert MSW from JRL to the maximum extent practicable, demonstrating that the continued acceptance of up to 81,800 tons of MSW annually at JRL under the conditions of the MSW Amendment (except for the termination date in Condition 10) will conform to the requirements of Section 400.4.N of the Rules. Below is a summary of the current information provided as a basis to demonstrate that each finding in the MSW Amendment will not change because of the removal of the limitation date that non-bypass MSW can be accepted in the existing JRL.

2.1 Amendment Finding 4. Sources of MSW

No significant alteration to this finding is required with this Amendment approval since the findings summarized are still valid beyond March 31, 2018.

The current waste-shed of municipalities under contract with CWS or affiliates that currently utilize JRL for MSW disposal is summarized in Table 1. In addition, there are several commercial customers throughout Maine currently utilizing JRL for MSW disposal.

TABLE 1

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

CONTRACTED MUNICIPALITIES THAT UTILIZE JRL FOR MSW DISPOSAL, 2017

* **Bold** denotes those communities under long-term contract that formerly utilized Maine Energy Recovery Company

2.2 Amendment Finding 5. Solid Waste Management Hierarchy

The Applicants will continue to accept MSW into existing JRL consistent with the requirements for compliance with the Hierarchy as contained in Section 400.4.N of the Rules. As has been accomplished since the MSW Amendment approval in 2013, the Applicants will continue to promote and encourage waste reduction measures and maximization of waste diversion efforts of the users of JRL to the maximum extent practicable in accordance with the conditions set forth in the MSW Amendment and the requirements of Section 400.4.N.⁵ These efforts are and will continue to be undertaken in the context of the available state recycling and reuse infrastructure, and willingness or ability of waste generators to utilize this infrastructure (i.e., availability, handling logistics, transportation, and costs.) The extent to which municipalities, home owners, and businesses participate in these recycling services is not within the control of BGS or NEWSME, or CWS, or any of its Maine divisions for that matter. Those are decisions

⁵ At the time, the MSW Amendment Application was permitted, Section 400.4.N of the Rules had not been codified.

that are made by municipal officials, businesses, and individuals. However, as an integrated solid waste management company, CWS promotes, engages in, and encourages generators to manage their solid waste by taking advantage of opportunities to reduce, reuse, recycle, or compost their waste using environmentally sound material management methods consistent with the Hierarchy.

Table 2 below demonstrates that since February of 2014 when the MSW Amendment Condition Compliance was approved, the Applicants have diverted MSW from landfilling at JRL to the maximum extent practicable with far more MSW under their control diverted than disposed at JRL. As required by Condition 5 of the MSW Amendment, NEWSME included in its annual reports for 2014, 2015, and 2016 a summary of its efforts to divert MSW from landfilling at JRL. These summaries have provided a transparent view into diversion efforts undertaken each year and are included in Appendix 4 of the Application.

TABLE 2

CWS' ANNUAL MAINE MSW DIVERSION FROM DISPOSAL AT JRL AND TOTAL MSW DISPOSAL AT JRL, EXCLUDING BYPASS

| Year | MSW Diverted from disposal at JRL | Non-Bypass MSW Disposed at JRL |
|------|-----------------------------------|--------------------------------|
| | (tons) | (tons) |
| 2014 | 228,179 | 36,878 |
| 2015 | 306,745 | 57,521 |
| 2016 | 320,765 | 69,934 |

As seen in Figure 1 below, this non-bypass MSW disposed at JRL in 2016 accounted for only 10% of the current waste accepted.



FIGURE 1: BREAKDOWN OF WASTES ACCEPTED AT JRL IN 2016

CWS' zero-sort® system allows generators to commingle all recyclable materials, requiring no source separation. Sorting and baling are performed at the materials recovery facilities primarily by automated equipment. CWS has found the benefits of zero-sort® to include: increased ease and convenience, reduction in disposal costs due to reduction in volume, increase in range of materials that can be recycled, and faster, more efficient collection of materials. In 2014, CWS invested in a new materials recovery facility in Lewiston. The non-recyclable processing residuals from this facility are primarily directed to Maine incinerators rather than being disposed at Juniper Ridge. In 2015, CWS' Maine-based zero-sort® initiatives grew to include 62 municipalities and 3,480 businesses, resulting in over 28,000 tons of material recycled through this program. CWS also brokers a good deal of fiber, and collects and/or bales material for recycling facilities at its Maine transfer stations. CWS also directs a significant amount of MSW within its control to Maine incinerators and other Maine landfills, as detailed in the summary of its efforts to divert MSW from landfilling at JRL for 2014, 2015, and 2016, located in Appendix 4.

Municipal and industrial wastewater treatment plant sludges and residuals are land-applied or composted to the maximum extent practicable rather than landfilled. The majority of these materials have already been processed by the generators. Casella Organics provides for direct land application of nutrient-containing residuals, and its Hawk Ridge Compost Facility in Unity annually maximizes its input of biosolids. Remaining materials either do not meet regulatory requirements or are of sufficient volume that landfilling is the preferred option.

CWS has also begun initial trials with food waste diversion through efforts by its subsidiary Pine Tree Waste, Inc., including a project with the Town of Scarborough in 2017 consisting of curbside collection of 180 residences with disposal at Exeter Agri-Energy through ecomaine. Options for food waste collection and diversion continue to be explored. See Appendix 9 for correspondence from Exeter Agri-Energy in support of this application.

The communities listed in bold in Section 2.1, Table 1 above formerly disposed of their MSW at the Maine Energy Recovery Company (MERC), and remain under contract for disposal with CWS through 2027, with the exception of the City of Biddeford, whose contract runs to 2022. These communities, with CWS' support, have been successful to date in providing MSW recycling services to residents that reduce the amount of MSW disposed at JRL. As a specific example, the City of Biddeford, where MERC was located, had a recycling rate in excess of 53% in 2016, far exceeding the state average.

Additionally, despite the somewhat stagnant MSW recycling rate for the State as a whole (40% in 2011, 37% in 2015), CWS has successfully increased its Maine MSW recycling volumes during the same time period. This has been managed through growth in CWS' zero-sort® program, steady collection and successful marketing of fiber materials, and efforts CWS has made on behalf of municipalities to replace shortfalls in MSW sent to the PERC incinerator of required MSW volumes from Municipal Review Committee (MRC) Charter Municipalities lost due to increased municipal recycling efforts with CWS' zero-sort® program. As a snapshot comparison state-wide, in 2015, the reported Maine MSW recycled or composted was 439,950

tons.⁶ CWS programs facilitated some 161,570 tons⁷ of comparable Maine MSW recycling, or more than 36% of the total volume recycled in Maine.

Wastes disposed at Juniper Ridge are reduced to the maximum extent practicable by the various programs CWS has in place to manage waste using techniques higher on the Hierarchy. The vast majority of wastes disposed at Juniper Ridge have been subject to reduction, recycling, and processing initiatives, in addition to wastes which are landfilled for which there currently exist no better management options. Review of the post-March 31, 2018 State-wide management availability for MSW generated in the State illustrates that the relatively small portion of the overall Maine MSW disposal capacity requested at JRL is necessary to meet the needs of the State of Maine and aligns with the Hierarchy, given the likely continued availability shortfall as described below.

In 2013, the MSW Amendment Finding 5(B)(3) identified on page 25: "... that alternative waste management options exist for this MSW that are better aligned with the hierarchy." However, beginning on March 31, 2018, significant changes in Maine's solid waste management infrastructure are scheduled to occur that are likely to result in the State not having the capacity to handle all the MSW generated within its borders. These changes are:

- Expiration of existing MSW disposal contracts between municipalities and PERC.
- Expiration of the existing disposal agreements between PERC and CWS, including:
 - 30,000 tons per year of former Maine Energy MSW delivered by CWS to PERC (referenced in Condition 7 of the MSW Amendment).
- Potential changes in the operational structure of PERC following the expiration of the existing above-market power sales agreement with the local utility, resulting in:

⁶ Maine Solid Waste Generation and Disposal Capacity Report; Calendar Year 2015; January 2017, includes paper, cardboard, plastics, metals, glass and textiles, other MSW recycled (electronics, white goods, tires), and MSW composted (includes leaf & yard rakings, food scraps.)

⁷ Total excludes 122,200 tons of land-applied biosolids, but includes recyclable materials not included in the JRL diversion numbers illustrated in Appendix 4, for direct comparison purposes.

- reduction in Maine MSW processed to approximately 210,000 tons per year, resulting in:
 - Reduction in disposal volumes of PERC residues (ash, FEPR, OBW, bypassed MSW) at JRL⁸
- Anticipated start-up of the Fiberight MSW processing facility in Hampden, Maine.
- Expiration of the approval for JRL to accept non-bypassed MSW for disposal.

The above changes, all of which are set to occur on the same day, March 31, 2018, pose considerable uncertainty for municipalities and businesses that require reliable and predictable management service with regard to the MSW that they generate. The Applicants have evaluated various scenarios for the alternative management of MSW generated in Maine post-March 2018 and in all cases, without approval of the requested extension of existing JRL accepting non-bypass MSW beyond March 31, 2018, some amount of MSW will be stranded (i.e., there will be a shortfall in management options for MSW produced in Maine.)

The evaluation utilized data obtained from the Maine Solid Waste Generation and Disposal Capacity reports issued 2013 (2011 data), 2015 (2012 data), 2016 (2014 data), and 2017 (2015 data), data from the Maine Materials Management Plans issued in 2014 (2012 data), and 2016 Annual Reports from Maine Incinerators and Landfills (2016 data.) Non-recycled MSW totals were derived from the Maine Solid Waste Generation and Disposal Capacity reports and the Maine Materials Management Plans by taking the total stated MSW generation, not including CDD, and subtracting the annual total stated MSW recycled and composted. For 2016, non-recycled MSW totals were derived by adding MSW disposal totals from Maine incinerators and landfills. The 2016 data does not include Maine MSW disposed outside of Maine, as that total was not available. 2011-2015 data from the State reports did include Maine MSW disposed outside of Maine.

⁸ Wastewater treatment plant sludge received at JRL is mixed with MSW and incinerator ash for bulking purposes to promote material strength and stability, and as a potential reduction in the generation of hydrogen sulfide. The reduction in volume of PERC residues, including ash, makes the volume of MSW received at JRL even more important.

As stated, this evaluation was undertaken to determine the availability of alternative MSW management options after March 31, 2018 that were assumed in the 2013 Amendment Order.⁹ This evaluation of post-2018 MSW management options includes assumptions about the amount of MSW disposal capacity available at facilities, based on data from those facilities' 2015 Annual Reports, and for the "best case" evaluation, the planned capacity available from published sources for the PERC and Fiberight facilities. This evaluation is shown in summary on Figure 2, and the data used in this evaluation contained in Appendix 5. Based on the current disposal capacity at the two other active Maine incinerators (ecomaine and MMWAC) not affected by the March 31, 2018 date, and a conservative estimate of future planned disposal capacity, assuming both the PERC incinerator and the Fiberight facility will be operating at stated availabilities post-2018 (210,000 tpy, and 105,000 tpy, respectively), there will likely remain a significant shortfall in management options for MSW produced in Maine.¹⁰ In fact, since the closure of the Maine Energy Recovery Company facility in 2012, there has been a continual shortfall in MSW management options, positively identifying the need for continued disposal of Maine MSW at JRL. This has not changed since the original MSW Amendment approval in 2013, and is not projected to change post-2018.

⁹ Note this analysis goes beyond the requirements of Chapter 400.4.N of the Rules, because it goes beyond the MSW which is "sufficiently within the control of the applicant to manage or facilitate."

¹⁰ The 81,800 tons of disposal capacity supplied by JRL compares with the projected post-March of 2018 need of 757,014 tons (2015 values) of State management capacity and disposal availability projections of 555,000 tons assuming both Fiberight and PERC operate at stated capacities. If either or both of these facilities operate at less than their stated availability the need for disposal capacity increases.



* Data from 2016 MEDEP annual reports for Maine Incinerators and Landfills, does not include Maine MSW disposed out of State.

** Projected data assumed same as last full dataset (2015). PERC availability post-2018 at 210,000 tpy, and Fiberight availability at 105,000 tpy as stated by both entities.

FIGURE 2: NON-RECYCLED MAINE MSW NEEDING DISPOSAL COMPARED WITH NON-LANDFILL MAINE MSW MANAGEMENT AVAILABILITY

In the 2013 Order's findings of fact Section 5.B.3, paragraph 7, MEDEP stated that the "...acceptance of unprocessed MSW in addition to bypass and soft layer material for construction would unnecessarily consume valuable State-owned landfill capacity which should be conserved for wastes that cannot be managed at facilities at higher levels in the hierarchy, and that alternative waste management options exist for this MSW that are better aligned with

the hierarchy." Since issuance of the 2013 MSW Amendment license, NEWSME has found that the acceptance of MSW at JRL is beneficial to site operations and does not unnecessarily consume capacity. NEWSME proposes utilizing the MSW accepted at JRL for two main purposes, both of which are very important to proper landfill operations and closure, and consistent with effectively using available landfill space. From a technical standpoint, MSW is a prime source of bulking material utilized to stabilize sludge, with potential reduction in hydrogen sulfide generation as an added benefit. Additionally, just as MSW is an ideal soft layer material when a new cell is constructed, it is also an ideal material for bringing interim grades to final grade, prior to placement of the final cover system, which is similar in construction to the cell liner system. These uses are detailed in Section 2.5.2 below. Neither of these activities limits the disposal capacity available for the other types of wastes disposed of at JRL.

Recognizing that State-owned landfill capacity is very valuable, NEWSME has operated JRL to maximize use of this capacity. From the commencement of accepting non-bypass MSW at JRL in 2014, through 2016, the average airspace utilization factor (AUF¹¹) for JRL was 0.88. During that same time-period, there were five municipal landfills across the State that also accepted MSW materials; their average compaction rate was 0.55, or 61% less than JRL's rate. A year over year comparison can be seen in Figure 3 below. This difference in AUF amounts to the ability of JRL to place an additional 668 lbs of waste per cubic yard of landfill capacity utilized, compared to the Maine Municipal landfills, proving the efforts of NEWSME to prevent unnecessary consumption of valuable State-owned landfill space by maximizing use. With such a difference in AUF at JRL when compared to municipal landfills across the State, JRL is better suited for MSW needing disposal via landfilling, saving valuable landfill space across the State by maximizing airspace utilization. Maximizing use of landfill space by diligent operations at JRL will continue as a result of this Amendment Application.

¹¹ AUF is calculated based on weight per volume, or in this case, tons of waste able to be placed in a single cubic yard of landfill airspace.



FIGURE 3: AIRSPACE UTILIZATION AT BOTH JRL AND MAINE MUNICIPAL LANDFILLS ACCEPTING MSW

2.3 Amendment Finding 6. Air Quality

There is no significant alteration to this finding with this Amendment Approval.

Practices successfully employed as described in the 2012 MSW Amendment Application, Sections 2.5, 3.5, and 4.8, located in Appendix 1 of this Application, to address air quality will continue to be employed. The current JRL Air License permanently licenses Flare #4 and existing backup flares #2 and #3. The Thiopaq® system that is currently operating controls sulfur dioxide (SO²) emissions to within air license requirements. As part of the air license amendment process, JRL submitted modeling results using EPA-approved models demonstrating that SO² emissions from the flares at the proposed licensed rates will not cause or contribute to ambient air quality impacts above health-based ambient air quality standards, including EPA's new NO² and SO² standards promulgated in 2010, and EPA's new CO standard promulgated in 2011. The flares also oxidize the methane present in the landfill gas, resulting in reduced GHG emissions from the facility. A comparison of the emission rates between Maine incinerators and low emission landfills, such as JRL, indicates that overall emissions from the landfill are lower than from waste-to-energy facilities. The analysis that supports this conclusion is contained in Attachment 9 of the 2012 MSW Amendment Application, located in Appendix 1.

To manage odor at JRL, NEWSME employs a number of methods that have proven to be effective. These include operating the active gas collection system, which collects and treats the gas by combustion with an on-site flare, and daily cover practices. In addition, the frequent placement of intermediate cover has proven to be very effective in conjunction with the gas collection system at controlling odors at the site. NEWSME also operates a misting system to control odors around the active filling areas of JRL. The misting system uses a fine mist of water mixed with a biodegradable odor control agent to mitigate odors that may be generated during active operations. Odor from FEPR, MSW, and sludge is also controlled through covering those materials with soil and soil-like material such as ash and wood fines. At the end of each operating day any active filling surface not having received cover as part of the daily filling process is covered in order to further reduce odor potential. NEWSME works diligently to minimize the amount of open operational area at JRL in order to reduce the potential for odor production. This practice is given increased emphasis in the warm summer months when odor generation is typically at its highest. JRL maintains an odor complaint hotline and gas monitors around the site. These activities will remain in place to detect any site odor that may be generated during operations and aid in response to any odor complaints. Odor management practices have been highly effective as evidenced by only four odor complaints as of November 1st in calendar year 2017; a significant decrease from a peak of two-hundred-forty-one in 2007.

An updated evaluation of projected landfill gas generation rates was provided with the 2012 MSW Amendment Application. This evaluation included a conservative projection of proposed maximum gas generation with the addition of MSW acceptance figured through the end of permitted capacity of the approximately 10 million cubic yards under License #S-020700-WD-N-A and at an annual rate of 123,000 tons of non-bypass MSW annually, through the remaining life of the current licensed landfill, as was proposed in the Application. The extension of the date that MSW is accepted at JRL, at a significantly reduced rate (81,800 versus 123,000 tons),

will not increase the anticipated amount of landfill gas generated at the facility as projected in the MSW Amendment application. Therefore, the Department's findings and conclusions in its approval regarding air emissions are not affected by this application.

The extension of the date that MSW is accepted at JRL will not affect the approach and procedures currently used to install the active gas collection system within the waste mass. The system will continue to consist of horizontal collection trenches followed by installation of vertical gas extraction wells. The spacing of the horizontal trenches and vertical wells will continue to be included in the detailed design packages submitted to MEDEP to comply with Condition 15.A of the amendment site license #S-020700-WD-N-A. The most recent gas design package for JRL was submitted in February of 2017 for Cell 10, the last cell in existing JRL.

2.4 Amendment Finding 7. Traffic Movement

There is no significant change to this finding with this Amendment approval. Waste volumes, and therefore traffic, will not change.

A detailed assessment of traffic movement is located in Section 2.4 of the 2012 MSW Amendment Application, located in Appendix 1. No increase in waste volumes being delivered to the site will occur as a result of the proposed change in this Application; therefore, there will be no change in truck traffic as a result. The primary waste haul route to JRL for the MSW will be along I-95 to the Route 16 (Bennoch Road) interchange, then, Route 16 west to the JRL Access Road; the same as current routes. The JRL access road from Route 16 is located approximately 0.1 mile west of the I-95 interchange. The existing primary access roads allow for continuous uninterrupted traffic movement without posing a danger to pedestrians or other vehicles. The existing on-site traffic patterns are clearly defined. All site internal access roads are maintained, including plowing in the winter and dust control in the summer.

2.5 Amendment Finding 8. Landfill Design and Operations

As concluded in the 2012 MSW Amendment Application, acceptance of this volume of MSW at JRL will not affect the landfill cell development plans, slope configurations, final waste grades, or closure design for JRL as currently licensed.

2.5.1 Landfill Cell Development and Geotechnical Properties

The landfill design and individual cell configurations will not change as result of the proposed revision, as discussed in Sections 3.1 and 3.2 of the 2012 MSW Amendment Application. As described in Section 3.2 of the 2012 MSW Amendment Application, the original 2003 slope stability evaluation included initial landfill operations that involved mixing sludge previously disposed in the JRL. That analysis assumed a mixed waste density of 74 pounds per cubic foot (pcf) and shear strength of 30 degrees, which supported the overall amended landfill final grading plan. The subsequent stability evaluations completed for each detailed cell design report used a waste density of 74 pcf and shear strength of 32 degrees. The results of these stability evaluations illustrated that the MEDEP-required minimum slope stability safety factors were met or exceeded for the waste deposited. No signs of slope instability have been detected at JRL since NEWSME received the Amendment to operate in 2004. MSW has typical strength and density properties that are consistent with the values that have been used to support both the license amendment and the individual cell development plans.

2.5.2 Waste Placement, Compaction, and Capacity Consumption

Continued MSW acceptance during final filling, grading, and phased final closure of the capacity at JRL under the Amendment will be advantageous to operations. Capacity consumption will not increase from what was presented in Section 3.3 of the original MSW Amendment Application, located in Appendix 1. Additionally, waste placement and compaction techniques will remain unchanged as presented in Sections 4.4 and 4.5 of the MSW Amendment Application. MSW will be utilized to bring interim grades to final grades during the closure process, as seen in Figure 4 below. Generally, the interim grades are the outer waste side-slope grades, which have settled since their original construction as part of previous waste filling. MSW is a very suitable "select waste" material for this purpose because of its physical characteristics; it is easily compacted and non-bulky, making it a good "soft layer" material to be



placed in these locations before construction of the final cap. Given the timing of closure construction (during the summer months), bypassed MSW from PERC or other incinerators in Maine is unlikely to be available and cannot be relied upon for a consistent source of the necessary select waste.

Following receipt of all necessary approvals for the JRL expansion, NEWSME will construct Cell 11 in the spring/summer of 2018. Upon approval for commencement of waste placement in Cell 11, waste received at JRL, except for non-bypassed MSW, will be disposed in the expansion cells such as Cell 11. Non-bypassed MSW will be placed and mixed with other approved wastes (e.g. treatment plant sludge and combustion ashes for bulking purposes) in the remaining capacity in existing Cell 10, and used to reach final waste grades during the phased closure of Cells 1 through 10 of JRL. Operations (e.g., hours of operation; offloading waste; compaction; daily cover; odor, vector, and litter control) can and will be properly managed with JRL personnel and equipment.

As an example, the first final cover area, which consists of about 15 acres on the northwest side of the current JRL Cell 9 is planned to be constructed in 2019. Currently, this area is covered with intermediate plastic, and will require about 133,500 cubic yards of slope fill to bring the current interim grades up to the final permitted grades. At the current airspace utilization factor of 0.9 tons/cy, filling and shaping these void spaces to be capped would require about 120,150 tons of material for this first phase of capping. Final covering of JRL is intended to occur in four separate capping events over four different years, alternating with expansion cell construction. Each capping area will require MSW placement prior to the cover construction described above. The exact amount is not known at this time since the total amount is based on interim settlement that occurs within the closure areas prior to the construction of the final cover. Based on the amount of MSW needed for the first phase of closure, it's anticipated that approximately 7,900 tons of MSW will be needed per acre of closure area.

In addition to the use of MSW for slope fill prior to completion of final cover, MSW is a valuable material when used for sludge bulking. JRL's three-year average sludge intake between 2014 and 2016 was about 48,000 tons annually. Generally, to bulk the sludge, two to three parts bulking waste to one part sludge is necessary. Using both MSW and ash in bulking operations

works well, assisting in increased stability, as well as reducing the potential for hydrogen sulfide generation. With the uncertainty of the future configuration of the PERC facility, there is concern about the volume of ash receipt post-March 2018, making the continued receipt of MSW at JRL all the more important as a sludge bulking material.

The amount of available capacity within the licensed foot-print (Cells 1 through 10) of JRL after March 31, 2018 is projected at about 1,220,000 cubic yards. Assuming Cell 11 construction is completed and can accept non-MSW wastes at the end of October 2018, to allow for soft layer placement, the projected capacity of the existing JRL cells available once Cell 11 is operational would be around 800,000 cubic yards or 720,000 tons. This capacity would be reserved for the placement of MSW, and sludge and MSW, until this capacity has been fully utilized.

2.5.3 Cover

Cover practices will also remain consistent as a result of continued MSW acceptance, as detailed in Section 4.6 of the 2012 MSW Amendment Application, located in Appendix 1. Cover is placed daily over all areas receiving MSW, front-end process residue (FEPR), and other wastes with odor generating potential. The purpose of the daily cover is to control and minimize odors, windblown litter, and discourage attraction of vectors. Daily cover used at JRL predominately consists of certain waste materials typically referred to as Alternate Daily Cover (ADC). ADC used at JRL includes, but is not limited to, ash, biomass fines, processed construction demolition debris (CDD) wood fines, wood chips, short-paper-fiber, contaminated soil, or other approved soil-like materials. Intermediate cover is placed on areas that have reached interim grades where no additional waste will be placed for a period of six months or longer. The intermediate cover used at JRL is geosynthetic membrane (typically 40-mil thickness.) NEWSME has found this material to be very effective in controlling odors and minimizing air intrusion into the active gas collection system. Prior to placing this intermediate cover, NEWSME places a layer of wood fines over the outer waste surface as a bedding layer for the intermediate geomembrane. Typically, the membrane is booted to the gas extraction wells. Eighteen inches of soil-based material having a minimum of 35 percent fines and no rocks greater than 4 inches in diameter can also be used as intermediate cover. If soil is used, it is placed, compacted, seeded, and mulched in accordance with MEDEP BMPs.

2.5.4 Leachate Management

Continued MSW acceptance is not anticipated to change the leachate generation rates, quality, or handling procedures, as detailed in Sections 3.4 and 4.7 of the 2012 MSW Amendment Application, located in Appendix 1.

2.5.5 Litter Control

As with current practice, to minimize windblown litter, the MSW will be compacted as it is placed in JRL and then covered with either daily cover, or other non-litter producing waste shortly thereafter, as detailed in Section 4.9 of the 2012 MSW Amendment Application, located in Appendix 1. Litter control fencing is also placed at the perimeter of each cell. To date, windblown litter at JRL has been a minor issue and has been effectively controlled with the procedures described.

2.5.6 Vector Control

As with current practice, as detailed in Section 4.11 of the 2012 MSW Amendment Application, located in Appendix 1, vectors will be controlled by diligent placement of daily and intermediate cover. JRL maintains a depredation permit as well and this technique will continue to be utilized to control vectors. If necessary, additional techniques will be implemented to help control birds in the active waste placement area. JRL also maintains a contract with a local pest control company to control rodents at the facility.

2.5.7 Environmental Monitoring

Environmental monitoring will remain unchanged as discussed in Section 4.10 of the 2012 MSW Amendment Application, located in Appendix 1, and detailed in the Environmental Monitoring Plan located in the JRL Operations Manual. The purposes of the monitoring program are as follows:

- to routinely characterize and evaluate groundwater and surface water, in the vicinity of the Landfill;
- to evaluate the performance of the primary liner systems including routine characterization of the landfill cells' and leachate pond's underdrain water and the leachate pond's leak detection fluid (if present); and

• to routinely characterize and evaluate the quality and quantity of leachate generated at the site.

2.5.8 Acceptable Solid Waste, Waste Characterization, and Hazardous Waste Exclusion

Waste acceptance, characterization, and hazardous waste exclusion will remain unchanged, as described in Sections 2.7 & 4.1 of the 2012 MSW Amendment Application, located in Appendix 1. A copy of the Waste Characterization and Acceptance plan is located in the Operations Manual.

2.5.9 Facility Access / Hours of Operation

Facility access and hours of operation will remain unchanged, as described in Section 4.2 of the 2012 MSW Amendment Application, located in Appendix 1.

2.5.10 Hot Loads

Mechanisms in place, as detailed in the Operations Manual and described in Section 4.3 of the 2012 MSW Amendment Application located in Appendix 1, for handling hot loads, will remain unchanged.

2.6 Finding 9. Existing Uses and Scenic Character

There is no significant alteration to this finding with this Amendment approval, as detailed in Department Order # #S-020700-WD-BC-A, Finding 9.

2.7 Amendment Finding 10. Title, Right, or Interest

There is no significant alteration to this finding with this Amendment approval, as detailed in Section 2.1 of the 2012 MSW Amendment Application, located in Appendix 1.

2.7.1 Public Notice of Intent to File

On November 17, 2017, the Public Notice of Intent to File this amendment application was sent by certified mail to the JRL abutters, the Old Town City Manager, the Old Town Planning Board Chairman, the Town of Alton Selectmen, and the Penobscot Nation, and Edward Spencer (an appellant to the 2013 Amendment). This notice was also sent by certified mail to the members of the Juniper Ridge Landfill Advisory Committee. A copy of the Public Notice, the JRL abutters, and Juniper Ridge Landfill Advisory Committee members who received the public notice, and the certified mail receipts for the public notices are provided in Appendix 6.

The Notice of Intent to File an Application was published in the *Bangor Daily News* on November 21, 2017. A copy of the published notice is provided in Appendix 6.

2.7.2 Pre-Application Meeting

Pre-application meetings were held on September 19, and October 13, 2017 with the MEDEP. At this meeting, the project concept and Application contents were discussed and the required contents of the Application were confirmed between BGS, NEWSME, and the MEDEP.

2.8 Amendment Finding 11. Financial Ability

There is no significant alteration to this finding with this Amendment approval, as detailed in Section 2.2 of the 2012 MSW Amendment Application, located in Appendix 1.

See updated financial ability and financial assurance information contained in Appendix 7.

2.9 Amendment Finding 12. Technical Ability

There is no significant alteration to this finding with this Amendment approval, as detailed in Section 2.3 of the 2012 MSW Amendment Application, located in Appendix 1.

See updated civil and criminal disclosure statements and compliance record in Appendix 8.

3.0 CONCLUSION

The proposed continuance of MSW acceptance at existing JRL will serve to meet the ongoing need of Maine communities and businesses to have an environmentally safe and secure method for handling MSW not practicably handled by other management methods. The Applicants will manage the acceptance of this waste in accordance with the current conditions outlined in Department Order #S-020700-WD-BC-A and reduce, recycle, and divert the amount of MSW under their control to the maximum extent practicable as described herein, to be in conformance with Section 400.4.N of the Rules.

In Appendix 9, letters of support for this Amendment Application approval are included from several municipalities and other waste entities.

In addition, it should be noted that on November 13, 2017, an agreement was executed between Coastal Resources of Maine LLC (CRM), as under contract with MRC, and Pine Tree Waste, Inc. (PTW), a subsidiary of CWS, for MSW disposal.

Aside from the change in date by which MSW can be accepted at JRL, the findings from the MSW Amendment will remain unchanged as a result of the approval of this Amendment.

APPENDIX 1

JRL AMENDMENT APPLICATION TO ACCEPT MUNICIPAL SOLID WASTE FROM MAINE SOURCES; SEPTEMBER 2012, UPDATED DECEMBER 2012


STATE OF MAINE DEPARTMENT OF ADMINISTRATIVE & FINANCIAL SERVICES BUREAU OF GENERAL SERVICES BURTON M. CROSS BUILDING 4TH FLOOR, 77 STATE HOUSE STATION AUGUSTA, MAINE 04333-0077

PAUL R. LEPAGE GOVERNOR H. SAWIN MILLETT, JR COMMISSIONER DONALD L. McCORMACK DIRECTOR

December 20, 2012

Michael T. Parker Division of Solid Waste Management Dept. of Environmental Protection 17 State House Station Augusta, ME 04333-0017

RE: Juniper Ridge Landfill Revision to Application #S-20700-WD-BC-A

Dear Mike:

The Maine Bureau of General Services (BGS) and NEWSME Landfill Operations, LLC (NEWSME) filed the above-referenced license amendment application September 12, 2012 to accept Municipal Solid Waste (MSW) at Juniper Ridge Landfill (JRL) from customers using the Maine Energy waste-to-energy incinerator in Biddeford when Maine Energy closes. The Department accepted the application as complete for processing on October 3, 2012. Since the filing of the application and the Department's completeness determination, Casella Waste Systems (CWS), NEWSME's ultimate parent company, and the Penobscot Energy Recovery Company (PERC) have entered into an agreement, executed on October 29, 2012 (Agreement), which resolves multiple issues between them. A key aspect of the CWS-PERC Agreement is that no less than 30,000 tons annually of in-state MSW from customers of Maine Energy that otherwise would be sent to JRL under the pending application, will be supplied by CWS to PERC, provided BGS/NEWSME receive a final, non-appealable permit to accept MSW at JRL. Because of the CWS-PERC Agreement, we are filing this revision to the pending application to reflect the positive impact of the Agreement, as well as make other minor changes to the application (e.g., correct typos, minor clarifications and the like). It is noteworthy that the revisions included in the attached updated application will result in fewer impacts at JRL.

Among the beneficial aspects of the CWS-PERC Agreement are the following:

- The diversion of MSW from Maine Energy customers to PERC will reduce the tonnage of MSW sent to JRL by at least 30,000 tons per year as compared to the original application.
- This diversion will mean a reduction in truck traffic by approximately 1100 truck trips per year.
- A slight extension in JRL life, by approximately three months.
- PERC has stated that this additional 30,000 tons of in-state MSW will generate approximately \$450,000 of additional revenue for PERC and its partners annually because it will displace outof-state sources that pay significantly lower disposal fees to PERC.

- A recycling section in the Agreement provides for a robust recycling opportunity for PERC charter municipalities. If a PERC charter municipality increases its MSW recycling above an historical baseline and delivers those recycling tons to a CWS facility, CWS will backfill the MSW shortfall tonnage to PERC. This would be over and above the 30,000 tons of in-state MSW tons referred to above that will be diverted to PERC once a final permit is issued to JRL for this application. This provision keeps PERC full and allows the PERC charter municipalities to aggressively pursue recycling without suffering any Guaranteed Annual Tonnage (GAT) penalties, thereby removing an impediment to increased recycling rates for these communities.
- BGS and NEWSME have reduced the amount of in-state MSW to be disposed at JRL in this application by 30,000 tons, from 123,000 tons (the original application) to 93,000 tons per year (revised application).

In summary, with the inclusion of the benefits from the PERC Agreement, the revised application further demonstrates JRL's compliance with Maine's solid waste standards and consistency with Maine's solid waste management hierarchy.

As Staff have requested, we are providing a copy of this letter to all persons who have submitted comments on the application thus far or have requested intervenor status (i.e., the Department's Interested Persons list). In addition, we are sending a clean copy of this revised application and a redlined version (showing all the changes from the original version) to all parties who received a copy of the original application. We understand that the Department will be posting copies of both the clean and the redlined versions on the Department's website for the Juniper Ridge Landfill where interested persons may view it.

Please feel free to contact us if you have any questions. My point of contact on this is Michael Barden at 624-7436

Respectfully,

uf Mcch

Donald J. McCormack, Director Bureau of General Services

Brian Oliver, Vice President NEWSME Landfill Operations, LLC

cc: Interested persons list

Enclosures

JUNIPER RIDGE LANDFILL

AMENDMENT APPLICATION TO ACCEPT MUNICIPAL SOLID WASTE FROM MAINE SOURCES

Submitted by:

STATE OF MAINE BUREAU OF GENERAL SERVICES as Owner

and

NEWSME LANDFILL OPERATIONS, LLC, as Operator

September 2012 Updated December 2012







TABLE OF CONTENTS

| Section | n No. Title | Page No. |
|---------------------|--|----------|
| 1 0 IN ⁻ | TRODUCTION | 1-1 |
| 1.1 | Background | |
| 1.2 | Description of Proposed Amendment and Application Content | |
| 2.0 C⊦ | APTER 400 AND CHAPTER 2 GENERAL LICENSING CRITERIA | 2-1 |
| 2.1 | Title, Right & Interest | |
| 2.1 | 1.1 Public Notice of Intent to File | 2-1 |
| 2.1 | 1.2 Pre-Application Meeting | 2-1 |
| | 1.3 Pre-Submission Meetings | 2-1 |
| | 1.4 Certificate of Good Corporate Standing | |
| 2.2 | Financial Ability | 2-2 |
| 2.3 | Technical Ability | |
| 2.4 | Traffic Movement | |
| 2.4 | ······································ | |
| | 4.2 Haul Routes | |
| | 4.3 Congested Locations/Weight Limitations | |
| | 4.4 MEDOT Accident Inventory | |
| | 4.5 Sight Distances | |
| 2.5 | No Unreasonable Adverse Effect on Air Quality | |
| 2.6 | Recycling and Source Reduction | |
| 2.7 | Hazardous and Special Waste Exclusion Plan | |
| 2.8 | Criminal and Civil Disclosure | 2-13 |
| | SIGN CONSIDERATIONS | |
| 3.1 | Liner Design and Configuration | |
| 3.2 | Waste Geotechnical Property Assessment | |
| 3.3 | Landfill Capacity Consumption | |
| 3.4 | Leachate Management | |
| - | 4.1 Leachate Generation Estimates and Leachate Collection System | 0 |
| | 4.2 Leachate Quality | |
| | 4.3 Leachate Disposal Location | |
| 3.5 | Gas Management | 3-7 |
| 4.0 LA | NDFILL OPERATIONS | |
| 4.1 | Acceptable Solid Waste and Waste Characterization | |
| 4.2 | Facility Access Site/Hours of Operations | |
| 4.3 | Hot Loads | |
| 4.4 | Landfill Cell Development Plans | |
| 4.5 | Waste Placement and Compaction | |
| 4.6 | Cover | |
| 4.7 | Leachate Management | 4-5 |

TABLE OF CONTENTS (cont'd)

| Section | No. | Title | Page No. |
|----------------------------|---|--|------------|
| 4.8 4.9 4.10 4.11 | Litter Control Environmenta | and Odor Control al Monitoring | 4-6 4-7 |
| 5.0 COI | NCLUSION | | 5-1 |
| LIST OF | F ATTACHME | NTS | |
| ATTAC ATTAC ATTAC | HMENT 1 HMENT 2 HMENT 3 HMENT 4 HMENT 5 | SITE DEEDS PUBLIC NOTICE, LIST OF JRL ABUTTERS AND OLD TOWN ADVISORY COMMITTEE MEMBERS, AND BGS AGENT LET DOCUMENTATION OF GOOD CORPORATE STANDING NEWSME FINANCIAL CAPACITY MDOT ACCIDENT DATA | |
| - | HMENT 6 | SUMMARY OF TRI-COUNTY RECYCLING PROGRAMS AND SUMMARY OF WASTE DIVERSION RATES FOR COMMUNIT HAVE ZERO-SORT® RECYCLING PROGRAMS | |
| | HMENT 7 HMENT 8 | CIVIL AND CRIMINAL DISCLOSURE LEACHATE TREATMENT AGREEMENTS AND PRETR STANDARDS FOR THE CITY OF BREWER MAINE | EATMENT |
| ATTAC | HMENT 9 | LANDFILL GAS COLLECTION RATE SENSITIVITY ANALY COMPARISON OF WTI EMISSIONS TO LANDFILL EMISSION | |
| - | HMENT 10 HMENT 11 | SUMMARY OF ENVIRONMENTAL MONITORING PROGRAM SUMMARY TABLES 1-2.1, 2-1.1, AND 3-1.1 USING AVER THREE YEAR WASTE TONNAGE | |

LIST OF FIGURES

| Figur | e No. Title | Page No. |
|--------------|---|------------------------------------|
| 1-1 | SUMMARY OF CURRENT AND FUTURE WASTE COMPOSITION | 1-3 |
| | LIST OF TABLES | |
| Table | No. Title | Page No. |
| 1-1 1-2 | WASTE TYPES PROPOSED IN THE 2003 AMENDMENT APPLICATION COMPARISON OF WASTE TYPES AND PERCENTAGE BEFORE AND A | |
| 2-1 | PROPOSED AMENDMENT TRUCK TRAFFIC CURRENT VERSUS ESTIMATED TRUCK COUNTS | |
| 2-1 2-2 | ACCIDENT RATE SUMMARY | 2-6 |
| 2-3 3-1 | COMMUNITIES WHERE CASELLA PROVIDES RECYCLING SERVICES COMPARISON OF WEIGHTED-AVERAGE WASTE DENSITY | |
| 3-2 1-2.1 | SUMMARY OF JRL LEACHATE TEST RESULTS COMPARISON OF WASTE TYPES AND PERCENTAGES BEFORE AND AFTER | |
| 2-1.1 | TRUCK TRAFFIC CURRENT VERSUS ESTIMATED TRUCK COUNTS USING | (ATTACHMENT 11) |
| 3-1.1 | COMPARISON OF WEIGHTED-AVERAGE WASTE DENSITY USING | (ATTACHMENT 11) (ATTACHMENT 11) |

JUNIPER RIDGE LANDFILL AMENDMENT APPLICATION TO ACCEPT MUNICIPAL SOLID WASTE FROM MAINE SOURCES

1.0 INTRODUCTION

Maine Bureau of General Services (BGS),¹ as the owner of Juniper Ridge Landfill (JRL), and NEWSME Landfill Operations, LLC (NEWSME), as operator of the JRL in Old Town, Maine, have prepared this amendment application (Application) for submission to the Maine Department of Environmental Protection (MEDEP) to remove the restriction and limitations placed on in-state municipal solid waste (MSW) disposal at the JRL. These restrictions and limitations are: (1) the source of MSW can only be by-passed material as set forth in Conditions 16.A and 16.C of MEDEP Order #S-020700-WD-N-A, or (2) the use of MSW, (i.e., in the soft layer) as approved by MEDEP Order #S-020700-WD-W-M.

This request for an amendment is occasioned by the August 1, 2012 execution of a landmark agreement between Maine Energy Recovery Company, LP (Maine Energy), the owner of the Maine Energy Incinerator (MEI), and the City of Biddeford (Biddeford) to sell, shut down and decommission the MEI facility. The Agreement is the culmination of years of controversy, strategic discussions, and negotiations over the location and operation of MEI within Biddeford, and the City expects a significant increase in economic opportunities and job creation to result from this conveyance and facility closure.

The closure of MEI is also aligned with a number of other waste management objectives for the State of Maine. First, it decreases the amount of out-of–state waste imported into the State since about 66 percent of the material handled by MEI originates from beyond Maine borders. In 2011, this represented approximately 170,000 tons of solid waste which will be pushed back to the out-of-state market. Second, this change further allows NEWSME's ultimate parent company, Casella Waste Systems, Inc. (CWS), to promote recycling programs which help the

S:\Casella\OldTownLandfill\JR Waste Vol Review\Docs\R\Amendment Application\Final\December2012S supplement\Final\2012JR_MSW_AmendmentApp1220Final.doc Sevee & Maher Engineers, Inc. December 19, 2012

¹ Pursuant to P.L. 2011, Chapter 655, Sec. GG-69, on July 1, 2012 the Bureau of General Services in the Department of Administrative and Financial Services became the owner and licensee of JRL. Prior to July 1, the State Planning Office owned JRL and held its licenses. The State Planning Office was abolished on July 1, 2012.

State achieve its recycling goals. For example, as part of the agreement to close MEI, CWS will be providing the City of Biddeford with curb-side recycling services. CWS is also in the preliminary stages of developing a Zero-Sort[®] recycling facility in Lewiston Maine. This facility will provide an outlet for recycled materials, further reducing the amount of MSW requiring disposal. Finally, CWS has reached an agreement with the Penobscot Energy Recovery Corporation (PERC) which requires CWS to divert at least 30,000 tons of in-state MSW that was previously taken to MEI to the PERC facility in Orrington. The supply of this MSW to PERC is contingent on JRL receiving a final, non-appealable permit to accept in-state MSW pursuant to this application. As a result, BGS and NEWSME are revising the pending Application to reduce the amount of in-state MSW that may be disposed of at JRL by 30,000 tons, from 123,000 to 93,000 tons. These initiatives are in addition to the significant role CWS and its subsidiary companies already play in recycling MSW and other waste streams in Maine and the rest of the Northeast. These and other CWS recycling activities are discussed in greater detail in this application.

This proposed amendment will not materially change the types and overall quantity of wastes accepted at JRL, nor its operations or projected life. MSW disposed at JRL will be offset by a decrease in the amount of residuals (ash and front-end processing residue, or FEPR, and oversized bulky waste), by-pass generated by MEI that are currently disposed at JRL, and the instate MSW that will now be shipped to PERC instead of JRL. Figure 1-1 shows the amount and relative percentages of the various waste types taken to JRL before and after the proposed change.

The amendment requested herein to JRL's license will allow uninterrupted waste disposal services to the State of Maine communities and businesses which currently utilize MEI. The in-State MSW that is currently accepted at MEI will be re-directed to the Pine Tree Waste transfer station in Westbrook where it will be consolidated into larger trailers and sent to JRL or PERC.²

² CWS has restructured its routing in southern Maine to deliver only in-state waste to the Westbrook facility at this time. Should CWS accept out-of -state waste at the Westbrook facility in the future as permitted, procedures will be put in place to segregate out-of-state MSW to ensure that it will not be delivered to JRL.

FIGURE 1-1(revised December 2012)



SUMMARY OF CURRENT AND FUTURE WASTE COMPOSITION

S:\Casella\OldTownLandfill\JR Waste Vol Review\Docs\R\Amendment Application\Final\December2012S supplement\Final\2012JR_MSW_AmendmentApp1220Final.doc Sevee & Maher Engineers, Inc. December 19, 2012

1.1 Background

This section provides a brief overview of JRL's permitting history and how the disposal of MSW has factored into that history.

CWS, through its subsidiary NEWSME, operates JRL under an Operating Services Agreement (OSA) that was entered into between the State of Maine and CWS as a result of the following chronology of events:

June 13, 2003: As provided for in the Legislative Resolve that authorized the acquisition of the Georgia-Pacific landfill, the Maine State Planning Office issued a Request for Proposals (RFP) for the selection of the operator of the West Old Town landfill (today called JRL).

July 9, 2003: CWS submitted a bid submittal in response to SPO's RFP.

August 18, 2003: SPO selects CWS as facility operator of the landfill.

October 21, 2003: MEDEP issued conditional approval for the transfer of licenses for the WOTL from Fort James to the SPO (MEDEP licenses #S-020700-WR-M-T and #L-019015-TH-C-T); the transfer became effective when the sale of the WOTL to SPO occurred on February 5, 2004.

October 30, 2003: NEWSME applied for an amendment to the existing Board Order for the West Old Town Landfill. That application contained the following table which identified the acceptance of at least the following wastes: front end process residue, oversized bulky waste, municipal solid waste, construction and demolition debris, ash related wastes, and water/treatment sludge.

TABLE 1-1

| Type of Waste | Anticipated Tonnage |
|---------------------------------------|---------------------|
| Front End process Residue (FEPR) | 120,000 |
| Oversized Bulky Wastes (OBW) | 20,000 |
| Municipal Solid Wastes (MSW) | 40,000 |
| Construct and Demolition Debris (CDD) | 190,000 |
| Ash Related Wastes | 70,000 |
| Water/Wastewater Treatment Sludge | 50,000 |
| Miscellaneous Wastes | 50,000 |
| Anticipated Annual Tons: | 540,000 |
| Anticipated Annual Cubic Yards | 640,000 |

WASTE TYPES PROPOSED IN THE 2003 AMENDMENT APPLICATION

February 5, 2004: SPO, the State of Maine, and NEWSME executed the OSA for the operation of the WOTL.

April 9, 2004: MEDEP approved the amendment application (MEDEP license #S-020700-N-A) for a vertical increase in the final elevation of landfill and the disposal of additional waste streams (the "amendment license"). The amendment license was appealed to and upheld by both the BEP in 2004 and the Penobscot County Superior Court in 2006.³

Condition 16 of the amendment license addresses the acceptance of MSW for disposal at JRL, and is the subject of this Application.

Condition 16.A states that the operator of JRL "shall not dispose of unprocessed MSW from any source other than bypass from the following sources: PERC incinerator in Orrington and the Maine Energy incinerator in Biddeford; waste delivered under an interruptible contract with PERC; or waste delivered in excess of processing capacity at other MSW incinerators in Maine." The amount of MSW bypass that can be accepted at JRL is not specified in Condition 16.A; however, Condition 16.C limits the total amount of "(a) unprocessed MSW incinerator MSW incinerator MSW incinerated at Maine Energy, and (b) MSW bypassed from Maine Energy for disposal at the JRL

1-5 S:\Casella\OldTownLandfill\JR Waste Vol Review\Docs\R\Amendment Application\Final\December2012S supplement\Final\2012JR_MSW_AmendmentApp1220Final.doc Sevee & Maher Engineers, Inc. December 19, 2012

³ In 2005, WOTL became known as the Juniper Ridge Landfill. The OSA states, in part, that NEWSME is responsible for all costs associated with operating JRL, and for obtaining any permits needed. As explained in Finding of Fact #3 of the amendment license, references to the applicant in licenses for construction or operation of JRL often refer to both SPO and CWS or NEWSME (or a subsequent operator).

and at Pine Tree Landfill's Secure III Landfill Expansion to no more than 310,000 tons in any calendar year, unless changes in conditions and circumstances occur that cause the Department to revise this cap."

The origin of the "bypass only" limitation at JRL was a nearly identical condition in the license of the Pine Tree Landfill (PTL). In March of 2001, PTL applied for a license modification to accept MSW in response to a request from the Penobscot Energy Recovery Company to contract with PTL for disposal of by-passed MSW from PERC. PERC was required as a condition of its operating license to provide for alternate disposal of bypass but at the time had no such provision. At the time of PERC's request to PTL, MSW was not provided for in PTL's license, bypass or otherwise.

Despite the application having been prompted by PERC's request, PERC and the Municipal Review Committee objected to the PTL application. Regional Waste Systems (now ecomaine) also objected to the application. In order to accommodate these objections, and in the interest of expediting the provision for a necessary site for incinerators needing alternate disposal of bypass, PTL voluntarily agreed to limit disposal of MSW at PTL to MSW bypass from Maine incinerators. PTL in fact provided this MSW bypass service for three of Maine's four MSW incinerators. Prior to JRL, PTL was the only Maine landfill licensed to accept MSW that was limited in this fashion.

During the review of the Amendment Application for the West Old Town Landfill, the MEDEP staff asked NEWSME to agree to the same "bypass only" and numerical limitations regarding MEI since that was in the PTL license and NEWSME had proposed to accept the same Maine waste streams that were currently being disposed at PTL at the time of the Amendment Application. NEWSME agreed to that request since there were no discussions at the time regarding permanent closure of MEI. Those discussions did not occur until the first Task Force convened in 2005 by State Government.

On September 10, 2010, MEDEP approved Minor Revision, #S-020700-WD-W-M that allowed MSW to be used as the "soft layer" of JRL. The minor revision specifically addressed Condition 16.C of the amendment license and allowed a change in the annual limit of the

amount of unprocessed MSW bypass that could be accepted at JRL so that MSW bypass could be used in the "soft layer required to be placed within four to five feet of the landfill liner." Per that license revision, this four to five feet of MSW bypass placed in the soft layer is not counted toward the 310,000-ton limit in Condition 16.C of the 2004 amendment license.

As demonstrated by this summary, the acceptance of MSW at JRL was included in the original amendment application. As shown on Table 1-1, MSW and FEPR made up approximately 30 percent of the anticipated total waste stream proposed for disposal at the JRL in the amendment application. Under this amendment proposal, MSW and FEPR will be approximately 21 percent of the anticipated total waste stream proposed for disposal at the JRL. The limitation placed on the acceptance of MSW per Conditions 16A and 16C of the amendment license related to the MEI facility. NEWSME agreed to that request since there were no discussions at the time regarding closure of MEI. Now, of course there is an agreement to sell and close MEI.

1.2 Description of Proposed Amendment and Application Content

The proposed amendment (the Proposed Amendment) consists of JRL accepting MSW, generated only within the State of Maine, without requiring that the MSW be (1) "bypassed" material⁴ or (2) used as the soft layer during cell construction.⁵ This amendment will not significantly change the site operations or landfill life because the amount of residuals generated by MEI is approximately the same as the amount of Maine MSW anticipated to be placed in JRL once MEI closes.⁶ As part of this application, BGS and NEWSME agree to accept no more MSW at JRL than 93,000 tons annually. This is the annual average of in-state MSW accepted at MEI combined with bypass and soft layer MSW from MEI sent to JRL over the past 3 years minus the 30,000 tons of MSW that will be sent to PERC. This three year average will allow for the historical tonnage fluctuations at MEI due to the economy, tourism, waste generation, etc.

⁴Condition 16.A, MEDEP Order #S-020700-WD-N-A

⁵ Order #S-020700-WD-W-M

⁶ This is demonstrated in this application by comparing the impact on landfill activities associated with the amount of MSW handled by MEI, and residual and by-pass from MEI that were disposed at JRL in 2011 with the hypothetical scenario of all the in-state MSW associated with MEI in 2011 being disposed at JRL.

In 2011, about 704,000 tons of waste and alternate daily cover (ADC) were placed or recycled in JRL, including approximately 93,900 tons of residuals (front end process residue (FEPR), and ash and bulky waste) and 22,400 tons of bypass and soft layer MSW from communities which use the MEI facility, totaling approximately 116,300 tons. The annual average of these combined materials over the last three years is 131,000 tons with 106,600 tons being residuals and 24,400 tons being bypass and soft layer MSW. NEWSME is proposing to replace this bypass, soft layer MSW and residuals with in-state MSW that is currently being disposed at MEI less the 30,000 tons of MSW that will instead be shipped to PERC. The total number of tons of in-state MSW delivered to MEI in 2011 was 89,400. Add to that the total number of bypass and soft layer MSW tons delivered to JRL in 2011, and the total MSW tons that would have been delivered to JRL, had MEI been closed, would have been 111,800. If for comparison purposes these tons are adjusted to reflect the 30,000 tons of in-state MSW which CWS will redirect to the PERC facility, the 2011 tonnage taken to JRL had MEI been closed would have been 81,800. The annual average of in-state MSW going to MEI combined with bypass and soft layer MSW from MEI sent to JRL over the past 3 years has been 123,000 tons. If this figure is revised to reflect the 30,000 tons of in-state MSW which CWS will redirect to the PERC facility, the annual three year average would be 93,000 tons. Therefore, if one compares the 2011 residuals and bypass/soft layer MSW tons of 116,300 from MEI (above) with the in-state MEI and bypass/soft layer MSW tons of 81,800 JRL would have accepted 34,500 fewer tons of instate waste from MEI in 2011. If one uses the 3-year averages for residuals and bypass/fluff layer MSW tons of 131,000 compared to the in-state MEI and bypass/fluff layer MSW tons of 93,000 tons, then JRL would have accepted approximately 38,000 fewer tons per year of wastes from MEI communities. A portion of this in-state MSW will still be used for the soft layer of base cells, as needed.

Table 1-2 presents the various types and percentages of waste handled by JRL in 2011 and shows how these percentages would have changed as a result of eliminating the MEI wastes and accepting in-state MSW. The MSW will be commingled with the other waste types received by JRL as is currently the disposal practice for MSW bypass waste.

TABLE 1-2

| | 2011 Wastes to JRL | | Estimated Future Wastes to JRL including MEI In-State MSW | |
|---|--------------------|---------------------|---|---------------------|
| Waste Stream Disposed or Recycled at JRL | Tons ¹ | Percent of Total | Tons ¹ | Percent of Total |
| Construction and Demolition Debris (CDD) | 149,800 | 21 | 149,800 | 22 |
| Front-End Process Residue (FEPR) | 103,300 | 15 | 60,500 | 9 |
| MSW Incinerator Ash | 105,500 | 15 | 55,600 | 8 |
| Oversized Bulky Wastes | 98,900 | 14 | 97,800 | 15 |
| Municipal Solid Waste (MSW) Bypass and Soft Layer | 22,400 | 3 | 22,400 | 3 |
| MŚW ² | | | 59,400 | 9 |
| Fines for Cover | 125,300 | 18 | 125,300 | 19 |
| Other Wastes & Operation Materials | 98,800 | 14 | 98,800 | 15 |
| TOTAL | 704,000 | | 669,600 | |

COMPARISON OF WASTE TYPES AND PERCENTAGE BEFORE AND AFTER PROPOSED AMENDMENT

Note:

1. All tonnages have been rounded to the nearest 100 tons and, in the case of estimated future wastes, represent estimates based on 2011 tonnages.

2. MSW will continue to be utilized as a soft-layer application so the estimated net increase in MSW accepted at the site will be about 59,400 tons.

3. Operation materials include tire chips and gravel.

As illustrated, the total tonnage of material deposited and recycled at JRL is anticipated to decrease by about five percent⁷ as compared to what was actually disposed or recycled in 2011. Therefore, the design for JRL containment and collection systems, and landfill configurations, will not change. The landfill life under the current permit will be extended by approximately three months. Section 3.0 of this application discusses the bases for these conclusions regarding design.

For the same reason, site operation will not change in any material manner. However, NEWSME recognizes that the relative increase in MSW has the potential to generate more odors, vectors, and windblown litter than the current mix of materials. Section 4.0 of this application presents the current and additional site operational controls that will be used to minimize/control these potential issues.

1-9 S:\Casella\OldTownLandfill\JR Waste Vol Review\Docs\R\Amendment Application\Final\December2012S supplement\Final\2012JR_MSW_AmendmentApp1220Final.doc Sevee & Maher Engineers, Inc. December 19, 2012

⁷ For comparison purposes included in Attachment 11, at Table 1-2.1 is a similar analysis using the three year averages of from 2009, 2010, and 2011 for the various MEI related wastes, including the FEPR, ash and by-pass and soft layer MSW. The results are similar to those presented in Table 1-2

Finally, based on previous concerns about traffic related to site operation, an evaluation of the impact of the proposed amendment on site traffic has also been completed and is contained in Section 2.4 of the application. The proposed amendment will decrease the truck traffic to and from the site.

2.0 CHAPTER 400 AND CHAPTER 2 GENERAL LICENSING CRITERIA

2.1 Title, Right & Interest

JRL is located on an approximate 780-acre parcel owned by the State of Maine (State), located east of Route 43 and west of Route 16 in Old Town, Maine. The SPO deed for JRL is recorded in Book 9188, Page 152 at the Penobscot County Registry of Deeds. A copy of the deed is included in Attachment 1.

<u>2.1.1 Public Notice of Intent to File</u>. On August 29, 2012, the Public Notice of Intent to File an Application was sent by certified mail to the JRL abutters, the Old Town City Manager, the Old Town Planning Board Chairman, the Town of Alton Selectmen, and the Penobscot Nation. This notice was also sent by certified mail to the members of the Juniper Ridge Landfill Advisory Board. A copy of the Public Notice, the JRL abutters, and Juniper Ridge Landfill Advisory Board members who received the public notice, and the certified mail receipts for the public notices are provided in Attachment 2.

The Notice of Intent to File an Application was published in the *Bangor Daily News* on August 30, 2012. A copy of the published notice is provided in Attachment 2.

<u>2.1.2 Pre-Application Meeting</u>. A pre-application meeting was held on August 22, 2012 with the MEDEP. At this meeting, the project concept and Application contents were discussed and the required contents of the Application were confirmed between BGS, NEWSME, and the MEDEP.

<u>2.1.3 Pre-Submission Meetings</u>. A pre-submission meeting was held with the MEDEP on September 6, 2012 to review the contents of the Application.

<u>2.1.4 Certificate of Good Corporate Standing</u>. A copy of information obtained from the Secretary of State's CEC database demonstrating NEWSME's good corporate standing is included in Attachment 3.

2.2 Financial Ability

NEWSME is responsible for all costs associated with design, construction, operation, and closure of the JRL. NEWSME (whose sole member is a wholly-owned subsidiary of CWS) has the financial ability to carry out these activities in a manner consistent with all applicable regulatory requirements. Ongoing activities at the JRL are financed by revenues generated from the operation of JRL. CWS maintains a secure credit facility administered by the Bank of America N.A. which is available to support NEWSME with operation of JRL if necessary. Included in Attachment 4 is a letter from Bank of America N.A. attesting to the satisfactory relationship it has maintained with CWS since 1995, and indicating the status of CWS' current credit facility.

2.3 Technical Ability

NEWSME has management and staff available who are well qualified to operate and care for the JRL. NEWSME engages qualified consultants as necessary to undertake design and construction of the JRL and provide operational guidance in a manner consistent with State environmental requirements. NEWSME and/or other related companies also owned by CWS have managed the JRL facility since April 2004. NEWSME has met all of its obligations under the current JRL license and continues to operate the JRL in conformance with the MEDEP's regulations and the JRL license.

CWS is a vertically-integrated solid waste, recycling, and resource management services company. It provides resource management expertise and services to residential, commercial, municipal, and industrial customers, primarily in the areas of solid waste collection, transfer, disposal, recycling, and organics services. CWS operates in six states - Vermont, New Hampshire, New York, Massachusetts, Maine, and Pennsylvania, with headquarters located in Rutland, Vermont.

As of May 31, 2012, CWS owned and/or operated 32 solid waste collection operations, 31 transfer stations, 17 recycling facilities, nine Subtitle D landfills, four landfill gas-to-energy facilities, one landfill permitted to accept construction and demolition, or C&D materials, and one waste-to-energy facility (which it has since sold to the City of Biddeford to be shut down and decommissioned).

CWS is also a leader in reduction of greenhouse gas emissions. Between 2005 and 2010, CWS slashed its company-wide greenhouse gas emissions by 45 percent. This reduction is equivalent to taking approximately 182,000 cars off the road. In January 2012, CWS' achievement was recognized by Environmental Protection Agency (U.S.EPA), the Association of Climate Change Officers (ACCO), the Center for Climate and Energy Solutions (C2ES), and The Climate Registry (TCR) with a Climate Leadership Award for Excellence in GHG Management. CWS was recognized alongside such sustainability leaders as SC Johnson, Cummins, and Campbell Soup Company.

CWS' commitment to fighting climate change goes back to 2003, when the company became the first solid waste and recycling services company in the nation to become a member of the U.S.EPA Climate Leaders Program. The Climate Leaders Program was an industry-government partnership that worked to develop long-term comprehensive climate change strategies.

In 2010, CWS began reporting through the Carbon Disclosure Project, a globally-recognized non-profit initiative to promote transparency and consistency in greenhouse gas reporting. In the report, CWS discloses our greenhouse gas emissions, as well as our strategy for responding to carbon-related risks and opportunities. CWS' report can be found at <u>www.carbondisclosureproject.net</u>.

CWS achieved its reduction by installing landfill gas collection systems where previously there were none, beginning to convert its vehicle fleet to run on compressed natural gas, and implementing various energy efficiency measures. In the coming years, CWS will pursue

additional low emission landfill practices, continue its clean vehicle fleet conversion program, and commit to company-wide energy efficiency improvements and practices.

NEWSME retains Sevee & Maher Engineers, Inc. (SME) of Cumberland, Maine, to complete engineering designs for JRL, evaluate on-going water quality monitoring, and prepare applications for the facility. SME is a professional engineering and hydrogeologic consulting firm with a staff of approximately 40 people, including 18 professional engineers. In addition to SME, NEWSME retains Sanborn and Head Associates (SHA) of Concord, New Hampshire to assist with the JRL gas design and air permitting for the JRL facility.

2.4 Traffic Movement

The primary waste haul route to JRL for the MSW will be along I-95 to the Route 16 (Bennoch Road) interchange; then, Route 16 west to the JRL Access Road, similar to the current waste haul routes from MEI. The JRL access road from Route 16 is located approximately 0.1 mile west of the I-95 interchange. The primary waste haul routes for the waste generated in the vicinity of JRL will not change as a result of this revision. The existing primary access roads allow for continuous uninterrupted traffic movement without posing a danger to pedestrians or other vehicles. The existing on-site traffic patterns are clearly defined. All site internal access roads are maintained, including plowing in the winter and dust control in the summer.

<u>2.4.1 Estimate of Number, Weight, and Types of Vehicles</u>. Trucks using JRL are primarily tractor-trailer units with gross vehicle weights of less than 100,000 pounds. A comparison of 2011 truck trips to JRL to the future site truck trips with the change in the waste composition is provided in Table 2-1. The future trips were calculated based on actual 2011 waste tonnages adjusted for the decrease in the residuals from MEI and the increase in MSW as shown in Table 1-2, and average truck weights for the individual waste types obtained from the 2011 JRL scale data. The future truck trips figure assumes the elimination of the waste currently delivered from MEI; and the proposed MSW delivered to the site annually

using 2011 data.⁸ Note that current MEI waste streams (ash and FEPR) are denser materials and therefore truck trailers are not filled to capacity in order to avoid exceeding weight limitations. MSW is a less dense material and therefore more trailer capacity is used during transportation. The truck count calculations indicate that, based on a 6-day work week, JRL currently receives on average, 91 tractor-trailer units per day. As shown on Table 2-1, the proposed change will decrease the overall annual truck trips to the site.

TABLE 2-1

TRUCK TRAFFIC CURRENT VERSUS ESTIMATED TRUCK COUNTS

| | 2011 Truck Count | Future Truck Count |
|---|------------------|--------------------|
| | | |
| Construction and Demolition Debris | | |
| (CDD) | 6,908 | 6,908 |
| Front End Process Residue MEI ¹ | 1,552 | 0 |
| Front End Process Residue PERC ¹ | 2,166 | 2,166 |
| MSW Incinerator Ash ¹ | 3,535 | 1,843 |
| Oversized Bulk Waste ¹ | 3,899 | 3,856 |
| Municipal Solid Waste ¹ | 813 | 2,975 |
| Fines for Cover | 4,571 | 4,571 |
| Other Wastes and Operations Material | 5,083 | 5,083 |
| Total Loads per Year | 28,527 | 27,402 |
| Total Loads per Day ² | 91 | 88 |

Notes:

 Average waste loads used in the analysis (tons/load) FEPR MEI=27.6 FEPR PERC=27.9, MSW=27.5, Ash MEI=29.5 Ash PERC 30.2, OBW 25.4.

2. Number of trailer loads per day based on a six-day week. The daily truck count is rounded to the nearest truck.

<u>2.4.2 Haul Routes</u>. The primary access road into JRL is located approximately 0.1 miles west of Interstate 95 Exit 199 off Route 16. The access road is a 30-foot-wide paved road entering the JRL property from Route 16. The road provides access to all portions of the existing JRL (active and closed) site monitoring wells, leachate storage tank, and stormwater ponds. A portion of the facility access road is on a right-of-way through University of Maine land.

<u>2.4.3 Congested Locations/Weight Limitations</u>. There are no congested locations along the primary waste haul route to JRL that would be affected by the proposed increase in MSW

⁸ For comparison purposes included in Attachment, 11 at Table 2-1.1 is a similar analysis using the three year averages from 2009, 2010, and 2011 for the various MEI related wastes, including the FEPR, ash, by-pass, and soft layer MSW and the projected waste trips using the 3 year average of the MSW handled by MEI (i.e.,123,000 minus the 30,000 tons that will be diverted to PERC). The results are similar to those presented in Table 2-1.

volume. Essentially all truck traffic accesses JRL by way of Interstate 95 thereby minimizing congestion to state highways and secondary roads leading to the site. The Interstate 95 vehicle weight limit is 100,000 pounds. The distance traveled on Route 16 to the JRL access turnoff is 0.1 miles and is not subject to load limits during spring thaw periods.

<u>2.4.4 MEDOT Accident Inventory</u>. Accident records for the most recent available three-year period (i.e., 2008 through 2010) were obtained from the Crash Records Section of the Maine Department of Transportation (MEDOT) Traffic Engineering Division. A review of the accident summaries, outlined in Table 2-2, indicate that there were nine accidents during the study period. There are no locations in the study area (Route 16 and the I-95 interchange) classified as "High Crash" locations (HCLs) using MEDOT criteria. MEDOT defines a HCL as an intersection or roadway link that *both* experiences more than eight accidents over a three-year period and exhibits a critical rate factor (CRF) of 1.0 or more over a three-year period. The CRF is a statistical measure of an intersection or link's accident experience as compared to locations with similar geographic, traffic, and geometric characteristics. A copy of the MEDOT accident data is presented in Attachment 5.

TABLE 2-2

| | Location | Number of Collisions | CRF | HCL |
|--------|------------------------------------|-------------------------|------|-----|
| Link | | | | |
| 41324- | Route 16 (I-95 to 1.20 miles west) | 3 | 0.00 | No |
| 39199 | | | | |
| 65215- | Route 16 (I-95 Overpass) | 3 | 1.41 | No |
| 64506 | | | | |
| 41214- | I-95 NB Off Ramp | 2 | 5.78 | No |
| 65214 | | | | |
| 64502- | I-95 SB On Ramp | 1 | 1.39 | No |
| 41323 | | | | |

ACCIDENT RATE SUMMARY

<u>2.4.5 Sight Distances</u>. Available sight distance from the JRL access drive at Route 16 to the west exceeds 1,000 feet and the available site distance to the east exceeds 1,000 feet. The posted speed limit on Route 16 is 40 miles per hour. The minimum desired sight distance is 360 feet, measured 10 feet from the existing edge of pavement utilizing a height of eye of 42 inches and a height of the approaching object of 51 inches. Normal practice for driveways serving a significant amount of truck traffic is to increase the minimum sight distance by

approximately 50 percent, thereby resulting in a minimum desirable sight distance of 540 feet. On previous site development projects (e.g., the 2003-4 vertical increase amendment), the MEDOT has determined that an entrance permit is not required for the JRL roadway entrance on to Route 16. Since there are no changes in the use nor are any physical changes to the entrance proposed, a MEDOT entrance permit should not be required.

2.5 No Unreasonable Adverse Effect on Air Quality

The proposed MSW change is not expected to have an adverse effect on air quality. NEWSME has active measures in place to control gas and odor at the JRL. The proposed disposal of increased volume of MSW at JRL will not result in emissions greater than what was projected as part of the 2003-4 Amendment application. Section 4.9 of this Application addresses the anticipated changes in landfill gas generation due to the proposed change. Currently the landfill gas emissions are collected and controlled using candle stick flares. The site and the flares are approved by the MEDEP Air Bureau.

JRL's air license has been amended to license existing Flare #4 at a new location on site and the existing two backup flares (Flares #2 and #3) at their current locations. These flares minimize odors by combusting the landfill gas which contains total reduced sulfur compounds (TRS). The combustion process converts TRS to sulfur dioxide, which is significantly less odorous than TRS. The air license amendment will require JRL to install and operate additional TRS emissions control equipment to reduce SO2 emission rates from the existing Flares. As part of the air license amendment application process, JRL submitted modeling results using U.S.EPA-approved models demonstrating that SO2 emissions from the flares at the proposed licensed rates will not cause or contribute to ambient air quality impacts above health-based ambient air quality standards, including U.S.EPA's new NO2 and SO2 standards promulgated in 2010 and U.S.EPA's new CO standard promulgated in 2011.

The flares also oxidize the methane present in the landfill gas resulting in reduced GHG emissions from the facility. A comparison of the emission rates between MEI and low emission landfills such as JRL indicates that overall emissions from the landfill are lower than from the

waste to energy facility. The analysis that supports this conclusion is contained in Attachment 9.

CWS and its subsidiary Ecogas LLC are currently in the process of developing an approximately seven mile pipeline to transport the gas to the University of Maine Orono campus where it will be used as a heating fuel, displacing fossil fuel use on campus. This will further reduce emissions at the facility.

2.6 Recycling and Source Reduction

Although 38 M.R.S. § 1310-N(5-A) (recycling and source reduction determination) is not applicable to this application (since this application is not for a new landfill or expansion of an existing landfill), during the original amendment application review to address public comments on the need for additional recycling rather than additional disposal capacity, NEWSME submitted a summary of the recycling initiatives included in the RFP and OSA. Additional information on both the recycling efforts for both CWS/NEWSME and the SPO was included in the recent applications for public benefit determination for the proposed expansion of the JRL (SPO 2011). This information is incorporated by reference.

An update on CWS' and NEWSME's recycling and source reduction programs and initiatives are discussed here. The 2004 MEDEP amendment license (p. 50) found that JRL would accept only solid waste that is subject to recycling and source reduction programs at least as effective as those imposed by State law. This proposed amendment is consistent with this finding, and the commitment made by CWS in the OSA to use its best efforts to operate JRL consistent with the recycling and source reduction provisions of State law, and in accordance with the State's solid waste management hierarchy.⁹

2-8 S:\Casella\OldTownLandfill\JR Waste Vol Review\Docs\R\Amendment Application\Final\December2012S supplement\Final\2012JR_MSW_AmendmentApp1220Final.doc Sevee & Maher Engineers, Inc. December 19, 2012

⁹ The Applicants note that in its March 3, 2011 decision denying the PERC/MRC appeal of the Commissioner's decision allowing MSW bypass for the JRL soft layer, the Board of Environmental Protection found that "the hierarchy is a policy that guides decisions on waste management planning and implementation; the hierarchy is not a regulatory standard that is applied to individual waste facility licensing decisions of a technical nature." Id at p. 18.

First and foremost, the closure of MEI will mean that approximately 170,000 tons of out-of-state MSW will remain out-of-state because it will no longer be brought to MEI to be processed. This is a significant waste source reduction benefit for Maine.

Second, the 14 Tri-County municipalities which have contracts with MEI for waste disposal all currently have in-place recycling programs that handle various materials contained in MSW. Each community addresses recycling in its waste handling ordinance. A description of the material each community recycles is contained in Attachment 6. These programs reduce the amount of MSW currently incinerated at MEI and, once MEI is closed, that will be disposed at JRL. The acceptance of these communities' residual MSW at the JRL will not affect these programs and there is no contract language in their agreements with CWS that limit their ability to continue to expand their recycling programs. In fact, CWS is expanding some of their programs, and its recycling assets to promote additional recycling in the State as described below.

Third, consistent with the commitment made by CWS in the OSA, CWS has developed and continues to implement state-of-the-art-recycling, source separation, and beneficial re-use programs in the State to address both the recycling and source reduction goals of the State. In 2011, CWS facilities and programs recycled, beneficially reused, or composted, a total of 490,400 tons of waste materials over a broad spectrum of waste types and at numerous geographic locations in Maine. This recycling and re-use includes: 145,300 tons of recyclables related to processing construction and demolition debris at its KTI facility in Lewiston Maine; 235,400 tons from programs managed by New England Organics including its Hawk Ridge Compost Facility in Unity, Maine, and 109,500 tons of MSW recyclables from Maine businesses and communities. CWS subsidiary Pine Tree Waste, Inc. (PTW) was the first Maine-based business approved by the MEDEP as an electronic waste consolidator, and continues consolidation activities and residential drop-off services at nine owned and/or operated locations throughout the State. These efforts ensure that waste accepted at JRL has been subject to recycling and reuse efforts to the maximum practical extent.

Fourth, in its agreement with Biddeford relating to the sale of MEI, CWS or its subsidiary will be initiating its Zero Sort® recycling program in Biddeford to increase the MSW recycling rate in

that City. The Biddeford program will be similar to other programs CWS has implemented in 37 communities within the State. Casella's Zero-Sort™ system allows residents and businesses to commingle all recyclable materials such as glass, paper, plastic, and metal, requiring no source separation. All sorting and baling is conducted at the materials recovery facilities by automated equipment. CWS has found the benefits of Zero Sort ® recycling include: increased ease and convenience to residents due to lack of sorting; reductions in disposal costs; increases in the range of materials (particularly grades of plastic) that can be recycled; and faster collection of materials, resulting in collection and transportation savings. All of these advantages encourage more people to participate in recycling, and ultimately give communities the opportunity to recycle larger amounts and more items, reducing the amount of MSW which must be managed by alternate means, such as incineration or land-filling. For example in the Town of Brunswick, where CWS subsidiary Pine Tree Waste, Inc. operates a Zero Sort ® collection program, the Town has seen a 30+ percent reduction in the MSW disposal volumes taken to its landfill because of the Zero Sort ® program. Examples of the amount of MSW diverted by the Zero Sort ® recycling programs in a number of Maine and New England communities is shown on the graph contained in Attachment 6. They typically are in the range of 40 percent.

Fifth, CWS is currently working to expand its Zero-Sort ® program and is in direct negotiations with several Maine communities in this regard. At this time, CWS has constructed and operates single stream recycling and consolidation operations at its West Bath and Waterville transfer stations, at the Old Town transfer station, which CWS operates for the City of Old Town, and at its Casella Recycling (formerly FCR Goodman) facility in Scarborough (which will ultimately be relocated to the Westbrook Transfer Station). CWS also owns and operates fully automated collection vehicles in South Portland, Scarborough, and Westbrook to handle single stream recycling in the communities served by ecomaine. In 2011, CWS handled about 13,300 tons of single-stream recyclables through those four facilities, and collected at the CWS facilities are shipped to its Casella Recycling processing facility in Charlestown, Massachusetts.

Sixth, CWS is currently negotiating with the City of Lewiston to construct a Zero Sort® processing facility in the City. This facility would handle the recycled materials currently sent to Charlestown, and be the catalyst to further expand the recycling effort in the State of Maine and

assist the State in achieving its recycling goals. The project represents a capital investment of approximately \$4million, would create 25 new jobs with an annual payroll of about \$1 million.

Seventh, in addition to the Zero-Sort ® recycling programs, CWS also collects and handles source-separated recyclables for a number of communities and over 1,100 commercial customers in the State. The communities for which CWS is currently providing recycling services are included in Table 2-3.

TABLE 2-3

COMMUNITIES WHERE CASELLA PROVIDES RECYCLING SERVICES

| Communities | Communities |
|----------------------|-------------------|
| Abbott | Lisbon |
| Albany | Long Island |
| Alfred | Mechanic Falls |
| Alna | Milford |
| Arundel | Mount Desert Area |
| Andover | Newfield |
| Auburn | North Yarmouth |
| Bath | Northport |
| Bethel/Newry/Hanover | Orrington |
| Bingham | Otisfield |
| Bowdoin | Phippsburg |
| Bowdoinham | Pownal |
| Brewer | Raymond |
| Brunswick | Richmond |
| Casco/Naples | Sabattus |
| Chebeague Island | Scarborough |
| Cumberland | Sebago |
| Demark | South Portland |
| Dresden | Stoneham |
| Durham | Thomaston Area |
| Falmouth | Topsham |
| Frye Island | Waterford |
| Gray | West Bath |
| Greenwood/Woodstock | West Paris |
| Holden | Westbrook |
| Hermon | Westport Island |
| Hampden | Windham |
| Islesboro | Wiscasset |
| Lamoine | Woolwich |
| Lewiston | |

CWS also provides Zero-sort recycling services at the University of Maine Orono campus.

CWS handled a total of about 109,500 tons of recyclables from these communities, businesses, and institutions in 2011. These programs and activities all result in a reduction in the amount of MSW wastes taken to JRL and other disposal facilities in Maine.

With these programs, NEWSME has kept its commitment to the State to operate JRL to be consistent with local, regional, and State waste collection, storage, and transportation.

Finally, the agreement CWS recently reached with PERC is yet another commitment to align the JRL operations with the State's solid waste hierarchy. The agreement requires CWS to supply the PERC incinerator in Orrington with specified tonnages of MSW to fuel its operations, including at least 30,000 tons per year of in-state MSW from customers that formerly delivered their MSW to MEI.¹⁰ Absent this agreement, this additional tonnage would otherwise be delivered to JRL. We understand from PERC that this latter MSW tonnage commitment alone is estimated to generate approximately \$450,000 of additional revenue annually for PERC and its partners because it will displace out-of state sources at PERC that pay significantly lower disposal fees.

The agreement with PERC also authorizes CWS to market its ZeroSort® Recycling System to PERC's Charter Municipalities on an ongoing basis. If a PERC Charter Municipality increases its recycling above an historical baseline and delivers these recycling tons to CWS, then CWS will backfill that MSW shortfall tonnage to PERC. This would be over and above the 30,000 tons of in-state MSW tons referred to above that would be diverted to PERC once a final permit is issued to JRL for this application. By maintaining the guaranteed tonnages PERC counts on from its charter members, this recycling provision ensures that increased recycling through CWS will not negatively impact the operations of PERC. It also protects the charter members from incurring a financial penalty as a result of an MSW shortfall, due to additional recycling with CWS, and encourages a more robust recycling climate.

¹⁰ This commitment to deliver no less than 30,000 tons of in-state MSW from sources that formerly delivered MSW to MEI is subject to and conditioned on a final, non-appealable permit from DEP to dispose of MSW at JRL in accordance with the terms of this application.

The new agreement replaces prior agreements between CWS and PERC, but still includes a requirement that CWS or any affiliate of CWS must deliver any MSW that it collects from within any PERC Charter Municipality to PERC and not to any other facility (including JRL) without the prior written request from PERC to do so. CWS is not aware of any other solid waste company in the PERC service area that operates under that limitation.

With all of these programs, CWS has expanded and increased its commitment to the State to manage JRL consistent with the recycling and source reduction provisions of State law and are a clear demonstration of CWS' continuing commitment to supporting Maine's solid waste management hierarchy.

2.7 Hazardous and Special Waste Exclusion Plan

Only non-hazardous solid waste permitted by MEDEP is accepted for handling at JRL. In order to assure that only non-hazardous waste is delivered to the facility, NEWSME complies with applicable federal and state laws regarding the detection and identification of special waste, biomedical waste, and hazardous waste. NEWSME maintains a Waste Characterization and Acceptance Plan (Plan) for the detection, identification, handling, storage, transportation, and disposal of any and all wastes that may be delivered to the facility. The Plan identifies the types of wastes that have a blanket permit approved for disposal at JRL, the testing requirements and frequency of testing. MSW is an approved waste category contained in the Plan. The Plan is contained in Appendix E of the JRL's Operation Manual.

2.8 Criminal and Civil Disclosure

Pursuant to Chapter 400, Section 12, a Criminal and Civil Disclosure Statement has been prepared for NEWSME, and BGS, and are included as Attachment 7.

3.0 DESIGN CONSIDERATIONS

Sevee & Maher Engineers, Inc. (SME), and Sanborn Head and Associates (SHA) have evaluated the applicable technical components of the proposed amendment and conclude that implementing the proposed reallocation of waste type percentage to allow MSW to replace existing MEI waste streams will not compromise the physical integrity and/or function of the JRL and its systems, as described in amendment license #S-020700-WD-N-A. The liner, leachate, and gas containment and control systems were all designed in conformance with the criteria contained in the MEDEP's Regulations for landfills that accept MSW, or co-mingle MSW with other special wastes such as MSW incinerator ash. Considered as part of this evaluation was the: waste geotechnical behavior as it relates to landfill cell development, waste slope configuration, landfill capacity consumption, leachate generation, and gas management. Other aspects of JRL siting and development, such as landfill base and final grades, and site monitoring, will not change as a result of the acceptance of additional MSW.

3.1 Liner Design and Configuration

The JRL liner system consists of the following components:

- an 80-mil HDPE textured geomembrane;
- a geosynthetic clay liner (GCL); and
- one foot of compacted clay with a maximum hydraulic conductivity of 1x10⁻⁷ cm/sec.

This liner system meets the liner design standard specified in Chapter 401.2.D.1.a of the Regulations for landfills accepting both MSW and special wastes. Beneath this liner system is an additional foot of compacted clay with a hydraulic conductivity of 1×10^{-7} cm/sec. The additional foot of clay is included in the design, as an extra layer of conservatism to meet and exceed the time of travel performance standard specified in Chapter 401.1.C.1.c of the Regulations. This proposed amendment changes none of the criteria used to establish the current liner system. As identified in Chapter 401.4.C.1.a.i since the JRL liner system complies with the design requirements specified by the Regulations, and JRL has a Waste

Characterization Plan, the facility meets the requirements for co-disposing MSW ash and MSW within the landfill.

3.2 Waste Geotechnical Property Assessment

Replacing the currently accepted MEI-related wastes with additional MSW at JRL will not affect the landfill cell development plans, slope configurations, final waste grades, or closure design for JRL as currently licensed. The original amendment application for JRL included an evaluation of slope stability for the approved landfill final waste grades (Wardwell 2003). Updated stability evaluations have also been included with each detailed cell design report submitted to MEDEP since 2003 to comply with Condition 15.A of the amendment license. The most recent evaluation was submitted to support the Cell 8 design (SME 2012).

The landfill and individual cell configurations will not change as result of the proposed revision. The 2003 slope stability evaluation included initial landfill operations that involved mixing sludge previously disposed in JRL by its prior owner, Fort James. That analysis assumed a mixed waste density of 74 pounds per cubic foot (pcf) and shear strength of 30 degrees. That analysis supported the overall amended landfill final grading plan. The subsequent stability evaluations completed for each detailed cell design report uses a waste density of 74 pcf and shear strength of 32 degrees. The results of these stability evaluations showed that MEDEP required minimum slope stability regulatory safety factors were met or exceeded for the waste deposit. No signs of slope instability have been detected at JRL since SPO/NEWSME received the amendment license to operate in 2004. Since MSW has typical strength and density properties which are consistent with the values that have been used to support both the original license amendment and the individual cell development plans, this proposed minor change in the overall waste percentages, as shown on Table 1-2, will not require changes in the landfill configuration to maintain landfill stability in conformance with the requirements of Chapter 401.2.F.(1). Consistent with the current practice, the Design Report that is submitted with the detailed design of each cell will contain an updated stability analysis using shear strengths and densities reflective of the waste placed in the landfill.

3.3 Landfill Capacity Consumption

The proposed change in the overall waste percentages will not have a significant change on the inplace waste density and hence the landfill capacity consumption. Table 3-1 compares the weighted-average waste density for the current waste percentages (using 2011 figures) to the 2011 waste tonnages adjusted for the decrease in the residuals from MEI and an increase in MSW as shown on Table 1-2¹¹ using individual waste types, tonnages and in-place unit weights. This analysis is conservative since it doesn't account for the commingling of wastes, waste consolidation associated with load, and secondary decomposition of the wastes, all which result in higher in-place waste densities than shown on this table and discussed below.

TABLE 3-1

| | 2011 Wastes to JRL | | | Estimated Future Wastes to JRL including MEI In-State MSW | | |
|--|--------------------|---|--------------------------------------|---|--|--------------------------------------|
| Waste Stream Disposed or Recycled at JRL | Tons | In-place Waste Density (Ibs/cu yd) | Calculated Cubic Yard Consumed | Tons | In-place Waste Density (Ibs/cu yd) | Calculated Cubic Yard Consumed |
| Construction and Demolition Debris (CDD) | 149,800 | 1,000 | 299,600 | 149,800 | 1,000 | 299,600 |
| Front-End Process Residue (FEPR) | 103,300 | 1,500 | 137,733 | 60,500 | 1,500 | 80,667 |
| MSW Incinerator Ash | 105,500 | 1,200 | 175,833 | 55,600 | 1,200 | 92,667 |
| Oversized Bulky Wastes | 98,900 | 800 | 247,250 | 97,800 | 800 | 244,500 |
| Municipal Solid Waste (MSW) Bypass and Soft Layer | 22,400 | 1,500 | 29,867 | 22,400 | 1,500 | 29,867 |
| MŚW | | | | 59,400 | 1500 | 79,200 |
| Fines for Cover | 125,300 | 1000 | 250,600 | 125,300 | 1000 | 250,600 |
| Other Wastes & Operation Materials | 98,800 | 1000 | 197,600 | 98,800 | 1000 | 197,600 |
| TOTAL | 704,000 | | 1,338,483 | 669,600 | | 1,274,700 |
| Weighted-Average Waste Density (Tons/cu yd) | | 0.53 | | | 0.53 | |

COMPARISON OF WEIGHTED-AVERAGE WASTE DENSITY

¹¹For comparison purposes included in Attachment 11, at Table 3-1.1 is a similar analysis using the three year averages from 2009, 2010, and 2011 for the various MEI related wastes, including the FEPR, ash and by-pass and soft layer MSW in place of the values presented under the heading of 2011 waste to JRL, and the estimated future waste to JRL using the 3 year average of the MSW handled by MEI (i.e. 123,000 minus the 30,000 tons which will be diverted to PERC). The results are similar to those presented in Table 3-1.

The actual 3-year running average <u>in-place</u> waste density at JRL in the active fill area is about 0.91 tons per cubic yard, which is greater than the 0.86 tons per cubic yard figure that SPO used in its evaluation of remaining JRL capacity. As the above analysis demonstrates, the proposed change in the overall waste composition from this amendment application would result in similar weighted average waste densities. Hence, no appreciable changes would be anticipated in the current in-place waste density. Given that the remaining permitted capacity at the site at the end of 2011 was approximately 5,867,000 cubic yards, the remaining landfill life at the end of 2011 would be 7.9 years or until the fall of 2019. This would require new expansion capacity at JRL to be built by the end of 2018 to be available for disposal by fall 2019¹².

3.4 Leachate Management

In 2011, the total amount of leachate generated at the facility was 10,916,259 gallons. This amount of leachate was collected from approximately 42 acres of landfill cells. The leachate generated at the facility is collected using four separate leachate sumps inside the operational cells. From the sumps, the leachate is pumped to an on-site leachate storage tank. From the tank, the leachate is hauled to the Old Town Fuel and Fiber treatment plant in Old Town, Maine for treatment. The Brewer, Maine wastewater treatment plant is a back-up facility to treat the leachate. The proposed change in the waste percentages is not anticipated to change the leachate generation rates, or quality. It will also not change the leachate management system piping or layout since the system is currently designed based on the properties of MSW.

<u>3.4.1 Leachate Generation Estimates and Leachate Collection Systems Design</u>. Leachate generation rates used to design the existing leachate piping layout have been based on leachate generation estimates developed using the U.S.EPA's Hydrologic Evaluation of Landfill Performance (HELP) Model Version 3. This model requires a number of input parameters such

3-4 S:\Casella\OldTownLandfill\JR Waste Vol Review\Docs\R\Amendment Application\Final\December2012S supplement\Final\2012JR_MSW_AmendmentApp1220Final.doc Sevee & Maher Engineers, Inc. December 19, 2012

¹² This is about 8 or 9 months later than estimated in the recent public benefit determination for the Expansion, which has existing JRL running out of capacity in approximately 2017-18. This slight change in when the additional capacity will be needed can be attributed to the better than anticipated inplace densities achieved by NEWSME operational techniques, capacity gained due to settlement, and the assumed diversion from JRL of an additional 30,000 tons of in-state MSW to PERC from former MEI sources.

as the waste thickness and composition. For JRL, the models are completed assuming MSW waste properties. This provides a conservative assumption of the precipitation impingement rates for seepage through the waste and into the leachate collection layer located above the primary liner. This impingement rate is used to establish the leachate pipe spacing, and the hydraulic properties of the leachate collection layer. Since the waste properties of MSW have been used in this modeling, the proposed change in the tonnage of MSW accepted will not change the design or function of the landfill's leachate collection system for the existing cells or any cell that will be constructed in the future.¹³

<u>3.4.2 Leachate Quality</u>. The additional MSW is not expected to change the leachate quality currently generated at JRL. Included in Table 3-2 is a comparison of the leachate quality of a typical MSW landfill with the leachate quality taken from Cell 4 pump station at JRL.

<u>3.4.3 Leachate Disposal Location</u>. Leachate generated at JRL is treated at the Old Town Fuel and Fiber, (OTFF) wastewater treatment plant with back up wastewater treatment capacity supplied by the Brewer, Maine wastewater treatment plant. Included in Attachment 8 are the Agreements inplace that allow JRL to dispose of leachate at the OTFF facility, and JRL's Industrial Discharge Permit for the Brewer, Maine wastewater treatment plant. The leachate disposal and treatment will not be affected by the proposed change in the amount of MSW accepted at the facility.

¹³ These calculations are contained in the detailed design packages submitted to MEDEP to comply with Condition 15.A of the amendment license. The last package was submitted in March of 2012 for Cell 8.

TABLE 3-2

SUMMARY OF JRL LEACHATE TEST RESULTS

| Parameter | Typical Concentration of MSW Landfill Leachate ¹ | JRL Cell 4 (LT-C4L) Mean Value ⁴ |
|--------------------------------|--|--|
| Ammonia (as N) | 50 - 2,200 | 620 |
| Arsenic | 0.01 - 1 | 0.1 |
| Barium | NR ³ | 1.6 |
| BOD | 20 - 57,000 | 1,400 |
| Cadmium | 0.0001 - 0.4 | 0.0024 |
| Calcium | 10 - 7,200 | 930 |
| Chloride | 150 - 4,500 | 18,000 |
| Chromium (total) | 0.02 - 1.5 | 0.069 |
| COD | 140 - 152,000 | 3,500 |
| Copper | 0.005 - 10 | 0.015 |
| Cyanide | NR ³ | 0.008 |
| DO | NR ³ | 4 |
| Iron | 3 - 5,500 | 27 |
| Lead | 0.001 - 5 | 0.046 |
| Magnesium | 30 - 15,000 | 410 |
| Manganese | 0.03 - 1,400 | 3.7 |
| Mercury | 0.00005 - 0.16 | 0.0002 |
| Nickel | 0.015 - 1.3 | 0.11 |
| Nitrate (as N) | 0.1 - 10 | 18 |
| pH | 4.5-9.0 | 7.2 |
| Phosphorus | 0.1 - 23 | 0.99 |
| Potassium | 50 - 3,700 | 1,800 |
| Selenium | NR ³ | 0.016 |
| Silver | NR ³ | 0.028 |
| Sodium | 70 - 7,700 | 2,400 |
| Vanadium | NR ³ | 0.023 |
| Specific conductance (mhos/cm) | 2,500-35,000 | 25,000 |
| Sulfate | 8 - 7,750 | 150 |
| TOC | 30 - 29,000 | 880 |
| Total Kjeldahl Nitrogen (as N) | 2.6 - 945 | 790 |
| Bicarb (CaCO3) | NR ³ | 3,000 |
| Total alkalinity (as CaCO3) | 730 - 15,500 | 3,300 |
| Total hardness (as CaCO3) | 500 - 10,000 ² | 4,500 |
| TDS | 3,000 - 50,000 ^{2,} | 17,000 |
| TSS | 3,000 - 50,000 ² | 95 |
| Zinc | 0.03 - 1,000 | 0.33 |
| Temperature | NR ³ | 66.2 |
| Eh (mv) | NR ³ | 120 |

Notes

- Source: Kjeldsen, et. al.; "Present and Long-Term Composition of MSW Landfill Leachate: A Review; Critical Reviews in Environmental Science and Technology, 32(4): 297-336 (2002); 1. unless otherwise noted. Units ppm unless noted.
- Values are those reported for "Total Solids," no TDS or TSS values were identified.
 NR indicates that No "Typical Range" was reported in reference document.
- 3. 4.
- Mean values incorporate available data through 2011. Units ppm unless noted.

3-6 S:\Casella\OldTownLandfill\JR Waste Vol Review\Docs\R\Amendment Application\Final\December2012S supplement\Final\2012JR_MSW_AmendmentApp1220Final.doc Sevee & Maher Engineers, Inc. December 19, 2012

3.5 Gas Management

JRL has an active gas management system that collects and flares landfill gas generated by the landfilled waste. In 2011, a total of 1,019 million standard cubic feet at an average methane concentration of 41.6 percent of landfill gas was collected and treated. Projections and the basis for the design of the active gas collection system were included in the amendment license application. That analysis, performed by SHA, included an estimate of the maximum design landfill gas flow rate developed by way of using of the U.S.EPA's LandGem model (SHA 2003). This estimate has been used to size the landfill gas collection and transport systems. With the development of each detailed cell design, as required by Condition 15.A of the amendment license, SHA uses this design to prepare detailed gas management plans for each cell. The amendment license application identified a maximum design gas flow rate of 3,980 scfm assuming a methane content of the gas of 50 percent.

Since that analysis was made, SHA has completed several additional landfill gas generation modeling efforts and has been able to compare actual gas flow rates at the facility to the original projections. Included in Attachment 9 is an updated evaluation of projected landfill gas generation rates for the landfill. This evaluation includes a projection of proposed maximum gas generation with the additional tonnage of MSW anticipated as a result of this amendment. The updated evaluation indicates the change in the waste composition is estimated to cause the maximum landfill gas generation rate to occur in 2018 at a rate of approximately 3,420 scfm assuming a methane content of 50 percent.¹⁴ Therefore, the percentage change in the composition of the waste mass will not affect the approach and procedures currently used to install the active gas collection system within the waste mass. The system will continue to consist of horizontal collection trenches followed by installation of vertical gas extraction wells.

¹⁴ The 3,420 scfm value represents the median value SHA calculated based on a number of assumptions for gas generation constants used in the modeling effort. SHA has determined from the comparison of actual flow rates to projected that the median value is the best approximation for estimating future generation rates. The 3,420 projection is about 140 scfm higher than a projection without the proposed revision of the waste composition (see SHA report in Attachment 3).
The spacing of the horizontal trenches and vertical wells will continue to be included in the detailed design packages submitted to MEDEP to comply with Condition 15.A of the amendment license. The last gas design package for JRL was submitted in March of 2012 for Cell 8.

4.0 LANDFILL OPERATIONS

This section describes the various components of the landfill operations and an evaluation of the effect of the amendment on the various aspects of site operations. Where changes will be required to the Site's Operation Manual these changes will be made as part of the annual update to the manual, which are included with the JRL's Annual Report.

4.1 Acceptable Solid Waste and Waste Characterization

Wastes accepted at JRL are covered under several broad categories, for which blanket permits or approvals have been granted by MEDEP. These materials include MSW, with current limitations placed on the source of the material (i.e., by-pass). There are also a number of individual permits issued for specific special wastes. A list of the generator, type of waste, and JRL permit number may be found in Appendix D of the Operations Manual.

4.2 Facility Access/Hours of Operations

Access to the facility is achieved through a gated primary access road that enters the site from Route 16 in Alton, Maine. The paved access road is approximately 2 miles in length between Route 16 and the entrance into the permitted boundary of the Landfill. NEWSME has located a scale and attendant facilities at the entrance to the Landfill that is currently occupied seven days a week.

The gate at the entrance to the Landfill is closed and locked during extended periods when wastes are not being delivered to the facility. The access road is maintained by NEWSME personnel or its contractor and will remain passable at all times. Only authorized employees of NEWSME and certain contractors have unrestricted access to the Landfill facility. All others are required to receive clearance through NEWSME Administration or the Scale House Attendant. All required signs are posted at the entrance to the facility near the scale house. The normal hours of operation at the facility are:

| Monday through F | riday 6:00 AM - 8:00 PM |
|------------------|-------------------------|
|------------------|-------------------------|

• Saturday & Sunday 7:00 AM – 4:00 PM

Some waste streams (e.g., PERC ash) may require 24-hour per day disposal service. Delivery of these wastes, and minimum Landfill operations to place these wastes, may occur outside of the standard hours of operations.

NEWSME maintains the site's internal access roads to prevent the accumulation of dust, mud, and waste on public roads. Maintenance activities include applying water and/or calcium chloride to the internal gravel roadways to prevent dust generation and maintaining gravel roadway surfaces to prevent mud accumulation on public roads.

With the exception of trucks carrying C&D debris and MSW, only waste hauling vehicles with pre-approved manifests from the Environmental Compliance Manger will be allowed access to the Landfill. Waste hauling vehicles carrying C&D debris and MSW will be monitored by the scale house and Landfill operators upon entry to the Landfill and during off-loading in order to assure that no unacceptable wastes are in the C&D or MSW loads. Any unacceptable materials will be segregated and the EMC contacted on how to address the materials.

4.3 Hot Loads

In the event that a hot load is delivered to the JRL, the waste will be managed in accordance with Chapter 401, Section 4 (C) (4) of the Maine Solid Waste Rules. A separate gravel or ash pad area will be sited within the confines of the operating Cell in order to properly manage hot loads. The material will be offloaded onto the pad then spread into a thin layer for cooling purposes. Burning material will be extinguished immediately by applying a water spray as necessary or covering with soil-based material to smother the flames. Once the material has cooled, it will be transferred to the active disposal area of the Cell to be co-mingled with the other wastes.

4.4 Landfill Cell Development Plans

With the construction of Cell 8 during the 2012 construction season, all but 12 acres of the permitted JRL footprint will have been utilized. Cell 8 has capacity for 1,390,000 cubic yards. The proposed change in waste percentages is not expected to significantly alter the landfill capacity utilization rate since the overall tonnage accepted will remain similar to the amount currently accepted, and the wastes will be commingled. The other operational characteristics of the cells, such as waste lift height, temporary cover placement and sequence, and the installation of the gas management system will remain the same. The individual landfill cell development plans will continue to be prepared in the manner that has been the facility's practice of preparing them at the time the detail design drawings are completed for the cells. These plans will to be included in the detailed design packages submitted to MEDEP to comply with Condition 15.A of the amendment license. The most recent submittal occurred in March of 2012 for Cell 8.

4.5 Waste Placement and Compaction

The MSW placement for the soft layer at JRL will be done in a manner similar to the current bypass MSW with the waste unloaded directly into JRL as directed by the landfill operator. Truck travel over the base of JRL is allowed only in areas where more than five feet of soft layer waste has been placed. As the active waste cell is filled, waste is placed in JRL in a manner that enables the operator to commingle the waste. Waste loads are evenly distributed throughout the working landfilling area. Wastes are placed and spread in layers one to two feet thick using solid waste compactors, bulldozers, and/or wheeled loaders to optimize waste density and compaction effort.

A minimum of three successive compactor passes are made over each waste lift. Additional passes are made if necessary to acquire the proper compaction. As waste is placed and compacted, the landfill sideslopes are created using appropriate stable waste. Outer sideslopes of the waste are graded at 2.5 feet horizontal to 1 foot vertical (2.5H:1V) using ash, fines or other approved material. Temporary interior waste sideslopes can be graded at 2 feet horizontal to 1 foot vertical (2H:1V) with ash and fines, or other fine grain materials placed on

the waste to minimize litter and odors. The operating procedures for placing the waste follow the outline in Section 7.7 of the JRL Operations Manual (JRL 2010). The proposed change in the waste composition will not change these procedures.

Upon delivery at JRL, the MSW will have a slightly lower truck density than the existing MEI residues that will be displaced. However, this lower truck density will not have a significant effect on overall capacity utilization rates as described above because: 1) the compaction by landfill equipment will increase the density of the MSW; 2) comingling of MSW with other waste streams (e.g., treatment sludge) fills the voids of the MSW, further increasing in-place density; and 3) decomposition of the MSW over time (which does not occur with ash and to only a limited extent with FEPR) will further reduce the volume of the MSW. The organic fraction of the MSW, initially in solid form (food waste, paper, wood) will decompose to methane and water, both of which will be collected from the landfill and not occupy capacity volume.

4.6 Cover

Two types of cover are utilized at JRL as part of landfill operations, daily and intermediate. Prior to placement of any cover, the waste surface is inspected by the operator for proper compaction, grade, and ability to shed water. Waste surfaces not properly graded or compacted are corrected through additional compaction and re-grading and/or by reinforcing soft areas by addition/mixing with drier, more stable waste. Prior to placement of intermediate cover, the final waste grade is sloped to promote runoff to the landfill's stormwater controls in order that the runoff is collected and conveyed from the waste area as quickly and efficiently as practical. JRL is constructed with stormwater diversion berms, diversion ditches, riprap down spouts, and lined ditches to control runoff and minimize erosion.

<u>Daily Cover</u>. Cover is placed daily over all areas receiving MSW, front-end process residue (FEPR), and other wastes with odor generating potential. The purpose of the daily cover is to control and minimize odors, windblown litter, and discourage attraction of birds. Daily cover used at JRL predominately consists of certain waste materials typically referred to as Alternate Daily Cover (ADC). ADC used at JRL includes, but is not limited to, ash, biomass fines, processed construction demolition debris (CDD), wood fines, wood chips, short-paper-fiber,

contaminated soil, or other approved soil-like materials. The amount of daily cover material needed in site operations has typically ranged between 30 and 35 percent of material placed in the landfill on a weight basis. With the proposed change in the waste percentages, assuming a total of approximately 173,000 tons of MSW, FEPR, and sludges needing daily cover applications, the amount of ADC required is between 52,000 to 61,000 tons annually. As shown on Table 1-2 adequate quantities of ADC exist to meet this demand. If on a short-term basis adequate ADCs are not available to cover the wastes, on-site soil materials, such as soil, can also be used as daily cover. NEWSME is also evaluating the effectiveness of using temporary tarps as an alternate daily cover if adequate quantities of ADC are not available. The daily covering will not be affected by the proposed change in waste percentages.

Intermediate Cover. Intermediate cover is placed on areas that have reached interim grades where no additional waste will be placed for a period of six months or longer. The intermediate cover used at JRL is geosynthetic membrane (typically 40-mil thickness). NEWSME has found this material to be very effective in controlling odors and minimizing air intrusion into the active gas collection system. Prior to placing this intermediate cover, NEWSME places a layer of fines over the outer waste surface as a bedding layer for the geomembrane. Typically, the membrane is booted to the gas extraction wells. Eighteen inches of soil-based material having a minimum of 35 percent fines and no rocks greater than four inches in diameter can also be used as intermediate cover. If soil is used, it is be placed, compacted, seeded, and mulched in accordance with MEDEP BMPs. Intermediate cover will not be affected by the proposed change in waste percentages.

4.7 Leachate Management

As described in Section 3.3 the additional MSW will have no impact on the site's leachate management systems since the systems are designed based on the characteristics of MSW. There no changes are proposed to these systems.

4.8 Landfill Gas and Odor Control

Waste types received at JRL with the highest potential for gas generation and odor production are MSW, FEPR, organic wastewater sludge, and CDD. The increase in MSW volume will add to the volume of odor producing wastes. To manage odor at JRL, NEWSME employs a number of methods which have shown to be effective. These include operating the active gas collection system which collects and treats the gas by combustion with an on-site flare, and daily covering practices. In addition, the frequent placement of intermediate cover has proven to be very effective in conjunction with the gas collection system at controlling odors at the site. NEWSME also operates a fogging system to control odors around the active filling areas of JRL. The fogging system uses a fine mist of water mixed with a chemical odor control agent to mitigate odors that may be generated during active operations.

The active operating area will undergo little, if any, change as result of the additional MSW and thus will not diminish the effect of the in-place odor control procedures. Odor from FEPR, MSW, and sludge is also controlled through covering those materials with soil and soil-like material such as ash and wood fines. At the end of each operating day, any active filling surface not having received cover as part of the daily filling process is covered in order to further reduce odor potential. NEWSME works diligently to minimize the amount of open operational area at JRL in order to reduce the potential for odor production. The practice is given increased emphasis in the warm summer months when the potential for odor generation is typically at its highest. JRL maintains an odor complaint hotline and odor monitors around the site. These activities will remain in place to detect any site odor that may be generated during operations and aid in response to any odor complaints. Odor management practices have been highly effective as evidenced by a total of two odor complaints as of July 1st in calendar year 2012.

4.9 Litter Control

NEWSME acknowledges that additional MSW has the potential to become an increased source of windblown litter at JRL. To minimize windblown litter, the MSW will be compacted as it is placed in JRL and then covered with either daily cover or other non-litter producing waste shortly thereafter. Litter control fencing is also placed at the perimeter of each cell. To date, windblown litter at JRL has been a minor issue and has been effectively controlled with the procedures described. NEWSME is prepared to address the potential for increase in windblown litter associated with the additional MSW by using either portable or fixed litter control fencing directly in the vicinity of the working landfill face, if necessary. The fencing would be placed on the prevailing downwind side of the waste placement operations. NEWSME is also prepared to clean litter from the area surrounding the landfill on a regular basis.

4.10 Environmental Monitoring

Included in Attachment H of the Operations Manual is the Environmental Monitoring Plan. The plan includes the sampling of 23 monitoring wells, 10 underdrains, 5 surface water locations and one leachate location. These locations are described in Attachment 10. The purposes of the Landfill monitoring program are as follows:

- to routinely characterize and evaluate groundwater and surface water, in the vicinity of the Landfill;
- to evaluate the performance of the primary liner systems including routine characterization of the landfill cell's and leachate pond's underdrain water and the leachate pond's leak detection fluid (if present); and
- to routinely characterize and evaluate the quality and quantity of leachate generated at the site.

Leachate samples are collected three times a year (tri-annually) during the spring, summer, and fall seasons and tested for a suite of parameters as identified in Chapter 405 of the Regulations. The specific parameters included in the monitoring program as included in Attachment 10. The acceptance of additional MSW will not change the proposed environmental monitoring program.

4.11 Vector Control

The acceptance of additional MSW increases the potential for vectors. The principal technique that will be used at the site to control vectors will be the diligent placement of daily and intermediate cover. If this isn't adequate to control vectors such as seagulls, the site maintains a depredation permit and this technique will be used to control the birds. If necessary, JRL will also implement other techniques to control birds at the landfill such as installation of fencing and stringing overhead wires in the active operating areas. This technique deters birds from landing in the active filling areas. JRL also maintains a contract with Modern Pest Control to control the potential for rodents at the facility.

5.0 CONCLUSION

This proposed increase in MSW tonnage at JRL results from the sale and closure of MEI pursuant to a landmark agreement reached between Maine Energy and the City of Biddeford whereby Maine Energy will sell the controversial facility to the City and decommission it. Approval of this proposed amendment to JRL's license will result in approximately 93,000 tons per year of MSW being taken to JRL.

Fortunately, the redirection of MSW from MEI to JRL will have *de minimis*, if any, measurable impacts, and it remains consistent with the State's solid waste management hierarchy for the following reasons.

First, the closure of MEI will leave approximately 170,000 tons of out-of-state MSW currently processed and combusted at MEI beyond Maine's borders, thereby resulting in significant source reduction for Maine's waste management system.

Second, the in-state MSW volume from the MEI communities is currently and will continue to be reduced to the maximum extent practicable by the aggressive recycling activities described in Section 2.6 of the application. The recently executed CWS agreement with PERC authorizes CWS to market its ZeroSort® Recycling System to PERC's Charter Municipalities on an ongoing basis.

If a PERC Charter Municipality increases its recycling above an historical baseline and delivers these recycling tons to CWS, then CWS will backfill that MSW shortfall tonnage to PERC. This is over and above the additional 30,000 tons of in-state MSW from former MEI sources diverted from JRL to PERC discussed elsewhere in this application. By maintaining the guaranteed tonnages PERC counts on from its charter members, this recycling provision ensures that increased recycling through CWS will not impact the operations of PERC. It also protects the charter members from incurring a financial penalty as a result of an MSW shortfall, due to additional recycling with CWS, and encourages a more robust recycling climate.

Third, CWS has agreed to divert for incineration at PERC at least 30,000 tons of in-state MSW from former MEI sources that it would otherwise seek to dispose of at JRL. As a result of this commitment, BGS and NEWSME have revised this application by reducing the total amount of

MSW to be disposed of at JRL from 123,000 tons to 93,000 tons. PERC has stated that this 30,000 tons of in-state MSW diverted to it will replace current out-of-state sources taken to the PERC facility. PERC also states that this latter commitment alone is estimated to generate approximately \$450,000 of additional revenue annually for PERC and its partners because it will displace out-of-state sources that pay significantly lower disposal fees at PERC.

Finally, the proposed change in the quantity of MSW accepted at JRL will not result in a change in the design or operations of JRL. The additional MSW percentage will be more than offset by the reduction in the residuals generated by MEI, which are currently taken to JRL. The site truck traffic will slightly decrease as a result of this amendment, and the life of the landfill is expected to be slightly longer. Although NEWSME recognizes that additional MSW has potential to generate odor, windblown litter, and to attract vectors, JRL effectively controls all three issues for the current landfill operation and the same odor, litter and vector controls, with the modifications described in this application, are expected to mitigate and address any potential issues.

REFERENCES

JRL 2010. Juniper Ridge Landfill Operations Manual, Revised May 2010.

REW, 2003. Evaluation of Waste Stability & Settlement West Old Town Landfill License Amendment Application Vertical Increase & Change in Operations, report prepared by Richard E. Wardwell, P.E., Ph.D., October 2003.

SHA, 2003. Design Report Active Landfill Gas Collection System West Old Town Landfill, Old Town, Maine, report prepared by Sanborn, Head & Associates, Inc., October 2003.

SME, 2003. West Old Town Landfill License Amendment Application Vertical Increase and Change in Landfill Operations, prepared by Sevee & Maher Engineers, Inc., October 2003.

SME, 2012. Design Report Juniper Ridge Landfill Cell 8 Construction and Landfill Operations Infrastructure Modifications, report prepared by Sevee & Maher Engineers, Inc.

SPO, 2011. Application for Public Benefit Determination for the Proposed Expansion of the Juniper Ridge Landfill in Old Town, Maine, submitted by State Planning Office, September 2011.

ATTACHMENT 1

SITE DEEDS

Exhibit A

Parcel Description

Four parcels located at Old Town, Penobscot County, Maine, and described as follows (individually referred to as "Parcel" and collectively referred to as "Parcels"):

PARCEL ONE: A certain parcel of land with any buildings thereon, situated on the northeast side of Route 43, 3.4 + miles west of the intersection of Route 43 and Route 95, in the city of Old Town, County of Penobscot, State of Maine and being more particularly described as follows:

1) BEGINNING at a 3/4 inch rebar located on the northeast side of Route 43, at the northwest corner of land now or formerly of Scott E. Bergquist as described in deed recorded at the Penobscot County Registry of Deeds in Book 3608, Page 247. Said rebar is also located at the southwest corner of the "Cadorette Parcel" as shown on plan entitled "Perkins & Cadorette Parcels, Standard Boundary Survey (with exceptions)" by Squaw Bay Corp. of Cumberland, Maine, June, 1995, Ronald M. Carpentier, PLS #2042, recorded at the Penobscot County Registry of Deeds, Plan Book D46-95, to which reference is hereby made;

2) THENCE South 82° 12' 30" East, 1445.38 feet along the land of said Bergquist to a cedar post and the land now or formerly of James River Paper Company, Inc. as described in the deed recorded at the Penobscot County Registry of Deeds in Book 4870, Page 200;

3) THENCE North 4° 27' 20" East, 809.31 feet along the land of said James River Paper Company, Inc. to a point;

4) THENCE North 5° 59' 05" East, 15.69 feet along the land of said James River Paper Company, Inc. to a 5/8 inch rebar with plastic survey cap marked "RMC NO. 2042" and the land now or formerly of Alfred Perkins and Florine Perkins as described in the deed recorded at the Penobscot County Registry of Deeds in Book 1448, Page 22;

5) THENCE North 82° 46' 26" West, 2014.87 feet along the land of said Perkins to a 5/8 inch rebar with plastic survey cap marked "RMC NO. 2042" and the sideline of Route 43;

6) THENCE South 29° 43' 31" East, 1013.29 feet along Route 43 to a 3/4 inch rebar and point of beginning.

The above-described parcel contains 32.4 acres.

[W0206492.1]

Being the same premises described in a Warranty Deed given by Francis R. Cadorette and Rhonda B. Cadorette to James River Paper Company, Inc., dated June 13, 1995, and recorded in said Registry in Book 5878, Page 272.

PARCEL TWO: A certain parcel of land with any buildings thereon situated on the northeast side of Route 43, 3.4+ miles west of the intersection of Route 43 and Route 95, in the City of Old Town, County of Penobscot, State of Maine, and being more particularly described as follows:

COMMENCING at a 5/8 inch rebar with survey cap marked "RMC NO. 2042" located at the intersection of the northeast sideline of Route 43, and the southerly boundary line of land now or formerly of Alfred Perkins and Florine Perkins as described in deed recorded at the Penobscot County Registry of Deeds in Book 1448, Page 22. Said rebar is also located at the northwest corner of the "Cadorette Parcel" as shown on plan entitled "Perkins & Cadorette Parcels, Standard Boundary Survey (with exceptions)" by Squaw Bay Corp. of Cumberland, Maine, June, 1995, Ronald M. Carpentier, PLS #2042. to be recorded at the Penobscot County Registry of Deeds to which reference is hereby made. Thence South 82° 46' 26" East, 1485.52 feet along the Cadorette parcel to the point of Beginning.

- 1) THENCE from the Point of Beginning South 82°46'26" East, 529.45 feet along the Cadorette Parcel to a 5/8 inch rebar with plastic survey cap marked "RMC NO. 2042" and the land now or formerly of James River Paper Company, Inc., as described in the deed recorded at the Penobscot County Registry of Deeds in Book 4870, Page 200;
- 2) THENCE North 5° 59' 05" East, 828.72 feet along the land of said James River Paper Company, Inc. to a cedar post and the land of Alfred J. Meister as described in the deed recorded at the Penobscot County Registry of Deeds in Book 3738, Page 197;
- 3) THENCE North 84° 06' 52" West, 529.33 feet along the land of said Meister to a 5/8 inch rebar with plastic survey cap marked "RMC NO, 2042" and the land now or formerly of said Perkins;
- 4) THENCE South 5° 59' 05" West, 816.33 feet along the land of said Perkins to a 5/8 inch rebar with plastic survey cap marked "RMC NO. 2042" and the Point of Beginning.

The above-described parcel contains 10 acres.

Being the same premises described in a Warranty Deed given by Alfred K. Perkins and Florine J. Perkins to James River Paper Company, Inc. dated June 13, 1995, and recorded in said Registry of Deeds in Book 5878, Page 278.

{W0206492.1}

PARCEL THREE: Lots 1 through 9 and 14 through 22, inclusive, as shown on the survey "Tyron Tree Farm" dated February 23, 1988, recorded in the Penobscot County Registry of Deeds in Plan file C26-88, together with a strip of land fifty (50) feet wide leading from Bennoch Road to the northerly line of Lot 11 on said plan, which strip was conveyed to Patten Corporation – Downeast by deed of Lyman B. Feero and Rosalita Feero, dated June 4, 1988, and recorded in said Registry in Book 4244, Page 5, and together with a right of way for all purposes over the roads fifty (50) feet wide, the centerlines of which are shown on said plan, leading from the northerly line of Lot 11 to the lots hereby conveyed. This right of way includes, but is not limited to, the right to install, use, maintain, repair and replace utility lines, poles and cables.

Together with all right, title and interest in and to that portion of the discontinued roadway lying northerly of the above described Parcel Three and southerly of the Town of Alton southerly line.

Being the same premises described in a Warranty Deed given by James River Corporation to James River Paper Company, Inc. dated July 10, 1991, and recorded in said Registry in Book 4870, Page 200.

Exceptions

The Parcels are conveyed subject to the following exceptions:

ALL PARCELS:

- 1. State of Maine, Department of Environmental Protection, Site Location Findings of Fact and Order, dated August 24, 1995, and recorded in the Penobscot County Registry of Deeds in Book 5939, Page 147.
- 2. Declarations of Covenants and Restrictions by James River Paper Company, Inc., dated December 20, 1993, recorded in said Registry in Book 5518, Page 67; Corrected Declaration of Covenants and Restrictions, dated January 20, 1994, recorded in said Registry in Book 5549, Page 162; and Amendment to Declaration of Covenants and Restrictions, dated November 30, 1995, recorded in said Registry in Book 6044, Page 118.

PARCELS ONE AND TWO ONLY:

{W0206492.1}

- 1. Such state of facts as shown on the plan entitled "Cadorette House Lots, Route 43, Old Town, Maine," prepared by Squaw Bay Corp., dated June 1995, and recorded in said Registry in Plan 1996-59.
- 2. Such statement of facts as shown on the plan entitled "Perkins & Cadorette Parcels, Route 43, Old Town, Maine," prepared by Squaw Bay Corp., dated June 1995, recorded in said Registry in Plan D46-95.

PARCEL THREE ONLY:

- 1. Rights of way acquired by the University of Maine System by deeds dated July 27, 1989, and recorded in said Registry in Book 4490, Page 322 and Book 4490, Page 325.
- 2. Restrictions and conditions set forth in the deed from Pattern Corporation to James River Corporation recorded in said Registry in Book 4654, Page 310.
- 3. Rights of way reserved in the deed form Camillis G. Kidder to Napoleon Parady, dated January 10, 1910, and recorded in said Registry in Book 750, Page 407.
- 4. Order of the Grantee of Maine, Department of Environmental Protection, dated October 3, 1988, recorded in said Registry in Book 4345, Page 19.
- 5. Such statement of facts, including easements and rights of way, as shown on the plan entitled "Tryon Tree Farm, Patten Corporation-Downeast," prepared by Raymond S. Silsby, dated February 23, 1988, and recorded in said Registry in C26-88.

NOTICE OF SOLID WASTE DISPOSAL FACILITY

Pursuant to Maine Department of Environmental Protection Solid Waste Management Regulation, Chapter 400 Appendix C.11, Grantor provides the following notice:

The Premises contains an active secure solid waste disposal facility (the "Facility"). The Facility was licensed by the Maine Board of Environmental Protection on July 28, 1993. The Facility began operations on December 2, 1996. The Facility is 68 acres and is located southern quadrant of Parcel Three of the Premises. The following non-hazardous wastes have been placed in the Facility to a maximum depth of approximately 30 feet:

- pulp and papermill wastewater treatment plant sludge,
- lime wastes and grit,
- woodwastes and inert debris,
- small quantities of soil and sawdust contaminated with process chemicals that are non-hazardous,
- virgin oily contaminated debris,
- soil rags, oil filters, absorbent materials, crushed grease drums and waste grease,
- sand from sand filters,

-

• • • •

- non-hazardous sand from sand blasting, multifuel fly ash and bottom ash from the Lincoln Pulp and Papermills, and wood ash from the City of Old Town ••
- ---

{W0206492.1}

QUITCLAIM DEED With Right of First Refusal

THE STATE OF MAINE, acting by and through its State Planning Office, with a mailing address of 38 State House Station, Augusta, Maine, 04333, for consideration, the receipt and sufficiency of which is hereby acknowledged, RELEASES to UNITED CEREBRAL PALSY of NORTHEASTERN MAINE, a nonprofit corporation having a place of business at Evergreen Woods, 700 Mount Hope Ave. Suite 320, Bangor, Maine 04401, pursuant to Resolves 2007, ch.117, sec. 1.

THAT CERTAIN LOT OR PARCEL OF LAND, TOGETHER WITH ALL

IMPROVEMENTS THEREON, situated in the town of Old Town, County of Penobscot, State of Maine, bounded and described in Schedule A, attached hereto and incorporated herein (the Premises).

As a part of the consideration paid for the deed from Grantor to Grantee, the Grantee, its successors and assigns, do hereby grant a Right of First Refusal to purchase the Premises as described on Schedule A, attached hereto and incorporated herein, upon the following terms and conditions, to wit:

1. The Grantee agrees that no transfer or sale of the Premises or any interest therein to any third party will occur without first offering to sell the Premises to the Grantor for a price (hereinafter the "Offering Price") to be determined under the provisions of this Agreement.

2. At such time as Grantee receives a binding bona fide offer to purchase or acquire in any manner or means the Premises or any portion thereof or interest therein, which such offer Grantee has accepted, Grantee shall offer to sell the same to the Grantor upon the same terms and conditions.

3. Any offer made by the Grantee to the Grantor pursuant to this Agreement shall be carried out in accordance with the following procedures:

- A. The Grantee shall provide to the Grantor: 1) written notice stating its intent to sell the Premises (hereinafter "Notice"); and 2) a true, correct and complete copy of the binding bona fide third party offer to purchase the Premises.
- B. Upon receipt of Notice, the Grantor shall have (60) days to notify the Grantee in writing of Grantor's election to either purchase the Premises in accordance with the provisions of Paragraph 3.A, or to decline to purchase the Premises.

4. Nothing in this agreement shall be construed to prevent the Grantee from notifying the Grantor directly of Grantee's interest in transferring of the Premises to the Grantor, without the existence of any third party offer to purchase the Premises. If offered to the Grantor pursuant to this Paragraph 4, the purchase price shall be determined by an appraisal of the Premises to be conducted by an appraiser jointly selected by the Grantor and Grantee and to be paid for by the parties. The appraisal shall be completed within sixty (60) days of the date of determination of the appraiser by both parties and a copy thereof shall be provided by the appraiser to both parties within seven (7) days of completion. Upon receipt of the appraisal, Grantor and Grantee shall have thirty (30) days to accept the appraised value of the Premises as the purchase price or to otherwise mutually agree upon a purchase price. If either Grantor or Grantee do not accept the

Page 1 of 5

appraised value of the Premises as the purchase price, Grantor shall not be obligated to purchase the Premises pursuant to this Paragraph.

5. In the event that the Grantor elects to purchase the Premises, the deed shall be delivered and the consideration paid at the offices of the Grantor in Augusta, Maine at 9 o'clock a.m. on or before the 45th day after the date of mailing of notice of election to purchase by the Grantor to the Grantee or, if a Saturday, Sunday or holiday, on the next business day thereafter, and the deed shall convey a good and clear record and merchantable title to the Premises free of all encumbrances, and the Premises shall be in the same condition as it was at the time of the acceptance of such offer and as otherwise, reasonable wear and tear and use thereof excepted. The date, time and place of the closing may be amended by written mutual agreement of the parties.

6. The Grantee may sell the Premises to the third party purchaser who has made the binding bona fide offer referred to in Paragraph 3 above (hereinafter "the Purchaser"), only in the event that the Grantor declines to match the third party purchaser's binding offer. Any transfer to the third party purchaser shall be in accordance with the terms of the binding bona fide offer.

7. Any notices required by this Agreement shall be in writing and shall be deemed delivered upon receipt if delivered in hand or mailed, postage prepaid by certified mail, or by any commercially available carrier or entity that requires a signed and dated receipt upon delivery, addressed as follows:

| Grantor: | State of Maine |
|----------|------------------------|
| | State Planning Office |
| | 38 State House Station |
| | Augusta, Maine, 04333 |
| | Attn: Director |
| | |

Grantee: United Cerebral Palsy of Northeastern Maine Evergreen Woods 700 Mount Hope Ave. Suite 320 Bangor, Maine 04401 Attn: Executive Director

or at such other address as to which either party has provided notice to the other in accordance with this Agreement.

IN WITNESS WHEREOF, the STATE OF MAINE has caused the forgoing instrument to be executed this 1/4/ day of December, 2007.

STATE OF MAINE State Planning Office

:Furnan By: Martha E. Freeman

Page 2 of 5

STATE OF MAINE Kennebec County, ss.

December 11,2004 Date:

Then personally appeared the above-named MARTHA E. FREEMAN and acknowledged the foregoing to be her free act and deed in her said capacity and the free act and deed of the State of Maine.

Before me,

nte Print Name: LINDA 10 .

Notary Public/Attorney at Law My Commission Expires: ______ Seal

CONTINUED NEXT PAGE

LINDA C. LAPLANTE Notary Public, Maine My Contimission Expires September 13, 2003



BY ACCEPTANCE OF THIS DEED, the Grantee accepts the above covenants, restrictions, and terms of said Quitclaim Deed with Right of First Refusal, and said covenants, restrictions and Right of First Refusal shall be binding upon the Grantee, its successors and assigns.

M Mast WITNE

UNITED CEREBRAL PALSY OF NORTHEASTERN MAINE

By: Print Name: Bobbi Jo Yeager Its: Executive Director

STATE OF MAINE Penobscot, ss.

Date: 12/12/07

Then personally appeared the above-named <u>Bobb</u>: Jo Yeager and acknowledged the foregoing to be his/her free act and deed in his/her said capacity and the free act and deed of United Cerebral Palsy of Northeastern Maine.

Before me,

MALL Print Name: Debra

Print Name: <u>Debra S Casuppell</u> Notary Public/Attorney at Law My Commission Expires: <u>5-18-2013</u> Seal



SCHEDULE A

A certain lot or parcel of land with buildings and other improvements thereon, situate in the City of Old Town, County of Penobscot, State of Maine, being generally located on the northeasterly side of Route 43, so called, approximately 1.85 miles from the point where said Route 43 is intersected by the centerline of Interstate Route 95, so called, more particularly bounded and described as follows:

beginning at an iron rebar marked #2042 found in 2007 on the said northeasterly sideline of Route 43 at the northwesterly corner of PARCEL ONE described in a deed from Fort James Operating Company to The State of Maine, acting by and through its Executive Department, State Planning Office recorded at the Penobscot County Registry of Deeds in Volume 9188, Page 152, being also the southwesterly corner of land described in a deed to Alfred & Florine Perkins recorded at said registry in Vol. 1448, Page 22;

thence by and along said sideline of Route 43, S 48° 02' 10" E, a distance of 592.3 feet to a ³/₄" iron rebar with plastic cap marked PLS 1211 set in 2007;

thence, N 59° 15' 20" E, a distance of 490.3 feet to another ³/₄" iron rebar with plastic cap similarly marked set in 2007;

thence, N 48° 05' 00" W, a distance of 386.5 feet to another ³/₄" iron rebar similarly marked set in 2007 on the northerly line of said parcel described as PARCEL ONE in Vol. 9188, Page 152;

thence by and along the northerly line of said PARCEL ONE, being also along the southerly line of said Perkins, S 78° 53' 10"W, 585.2 feet to the point of beginning.

The above-described parcel encompasses 5.26 acres and is a portion of the premises described in said deed from Fort James Operating Company to the State of Maine recorded in Vol. 9188, Page 188.

Bearings referenced herein are oriented to grid north determined by GPS means during a survey in 2007 conducted by Plisga & Day, Land Surveyors, Bangor, Maine.

Also including in this conveyance any land held by the grantor existing between the southwesterly line of the above-described parcel and the centerline of said Route 43 where the sidelines are extended on the same bearings.

Maine Real Estate Transfer Tax Paid

PENOBSCOT COUNTY, MAINE

Page 5 of 5

ATTACHMENT 2

PUBLIC NOTICE, LIST OF JRL ABUTTERS AND OLD TOWN LANDFILL ADVISORY COMMITTEE MEMBERS, AND BGS AGENT LETTER

PUBLIC NOTICE OF INTENT TO FILE

Please take notice that the State of Maine, acting through the Department of Administrative and Financial Services, Bureau of General Services, 77 State House Station, Augusta, Maine 04333 (Tel: (207) 624-7360), and NEWSME Landfill Operations, LLC, 2828 Bennoch Road, Old Town, Maine 04446 (Tel: (207) 862-4200 ext. 225) are intending to file an application with the Maine Department of Environmental Protection (DEP) on or about September 10, 2012, pursuant to the provisions of 38 M.R.S. §§ 1301 et seq. and Maine's Solid Waste Management Regulations.

The application is for an amendment of the license for the Juniper Ridge Landfill located in Old Town, Maine to accept municipal solid waste from sources within the State of Maine as a result of the anticipated closure of the Maine Energy facility in Biddeford. The Juniper Ridge Landfill is owned by the State of Maine and operated by NEWSME Landfill Operations, LLC. The facility mailing address is 2828 Bennoch Road, Old Town, Maine 04468.

According to Department regulations, interested parties must be publicly notified, written comments invited and, if justified, an opportunity for a public hearing given. A request for a public hearing or for the Board of Environmental Protection to assume jurisdiction over this application must be received by the Department, in writing, no later than 20 days after the application is accepted by the Department as complete for processing.

The application and supporting documentation are available for review at the Department's Bureau of Remediation and Waste Management Bangor and Augusta offices during normal working hours. A copy of the application and supporting documentation may also be seen at the municipal offices in Old Town and Alton, Maine and at the Penobscot Indian Nation.

Send all correspondence to: Michael Parker (<u>michael.t.parker@maine.gov</u>), Maine Department of Environmental Protection, Solid Waste Program, 17 State House Station, Augusta, Maine 04333-0017 (Tel: 207-287-7704 or 1-800-452-1942).

August 29, 2012

JUNIPER RIDGE LANDFILL TAX MAP AND ABUTTERS LIST

TOWN OF ALTON

| Tasanee Lolonga | Mr. Charles Tringale III | Kathryn Pelletier |
|-----------------------------------|----------------------------|--------------------------------|
| 157 Massapoag Ave | 250 Old Stage Coach Rd. | 198 Old Stage Coach Rd. |
| N. Easton, MA 02356 | Alton ME 04468 | Alton, ME 04468 |
| Map 8 – Lot 104 | Map 8 – Lot 114 | Map 8 – Lot 119 |
| Mr. Karl Held | Anthony and Cindy Madden | Anthony & Cynthia Brown |
| 2351 Cochran Road | P.O. Box 499 | 11 Chamberlain Road |
| Dallas, GA 30132 | Milford, ME 04461 | Seymour, CT 06483 |
| Map 8 – Lot 106 | Map 8 – Lot 116 | Map 8 – Lot 121 |
| Win & Nancy Chaiyabhat | Town of Alton | NEWSME Landfill Operations LLC |
| P.O. Box 34 | 3352 Bennoch Road | c/o Harding & Carbone |
| Searsport, ME 04974 | Alton, ME 04468 | 3903 Bellaire Blvd |
| Map 8 – Lots 108, 109, 111, & 112 | Map 8 – Lot 117.1 | Houston, TX 77025 |
| | | Map 8 – Lot 102 |
| Harry Feero | Challis Randall | Ruth Dalton |
| 1118 Southgate Rd. | 220 Old Stagecoach Road | 206 Old Stagecoach Road |
| Argyle, ME 04468 | Aton, ME 04468 | Alton, ME 04468 |
| Map 8 – Lot 107 | Map 8 – Lot 117 | Map 8 – Lot 119.1 |
| Jesse Pekkala | Mr. Kenneth Gray | Mary St. Louis/ |
| PO Box 471 | PO Box 357 | Cynthia and Anthony Brown |
| Telluride, CO 81435 | Old Town, ME 04468 | P.O. Box 394 |
| Map 8 – Lot 113 | Map 8 – Lot 118 | Stillwater, ME 04489 |
| | | Map 8 – Lot 121.1 |
| George and Joyce Feero | State of Maine | NEWSME Landfill Operations LLC |
| 2835 Bennoch Road | Bureau of General Services | c/o Harding & Carbone |
| Alton, ME 04468 | 77 State House Station | 3903 Bellaire Blvd |
| Map 8 – Lot 99 | Augusta, ME 04333-0077 | Houston, TX 77025 |
| | Map 8 – Lot 100 | Map 8 – Lot 101 |

CITY OF OLD TOWN

| University of Maine System | Scott E Bergquist | Thomas Dunn & Karen Bertolino |
|---------------------------------|----------------------------------|-------------------------------|
| 16 Central Street | 497 West Old Town Road | 579 West Old Town Road |
| Bangor, ME 04401 | Old Town, ME 04468 | Old Town, ME 04468 |
| Map 3 – Lot 1A | Map 3 – Lot 6B | Map 2 – Lot 46 |
| SSR, LLC | Raymond A Perkins | Gregg P & Evlynn L Wallace |
| PO Box 435 | 55 Old Brooklyn Turnpike | 526 West Old Town Road |
| Stillwater, ME 04489 | Windham, CT 06280 | Old Town, ME 04468 |
| Map 3 – Lots 45B, 50A, 54B, 58B | Map 2 – Lot 52 | Map 2 – Lot 54 |
| Herbert A Robertson JR | Robyn Emmons | |
| 163 Clewleyville Road | 8 Pheasant Hill Trailer Park | |
| Eddington ME 04428 | Milford, ME 04461 | |
| Map 3 – Lot 41C | Map 2 – Lot 55 | |
| NEWSME Landfill Operations LLC | Lawrence H Steeves – Heirs | |
| c/o Harding & Carbone | 986 South Street | |
| 3903 Bellaire Blvd | Roslindale, MA 02131 | |
| Houston, TX 77025 | Map 2 – Lot 47 | |
| Map 3 – Lot 15 | | |
| Robert W & Wendy Hall | United Cerebral Palsy | |
| 631 West Old Town Road | 700 Mount Hope Avenue | |
| Old Town, ME 04468 | Bangor, ME 04401 | |
| Map 2 – Lot 44 | Map 2 – Lot 53 | |
| Angela D Cyr | Laurent J & Barbara L Beauregard | |
| 449 West Old Town Road | 273 Washington Street | |
| Old Town, ME 04468 | Brewer, ME 04412 | |
| Map 3 – Lot 7A | Map 2 – Lots 40 and 41 | |



LANDFILL ADVISORY COMMITTEE

2012

| Peter Dufour Chairman | 230 West Old Town Road Old Town | 827-2751 992-3324 hmgc@juno.com |
|--------------------------|------------------------------------|---|
| Ted Shina | 769 West Old Town Road Old Town | 827-5655 745-8186 tshina@aol.com |
| Ralph Leonard | 96 Sargent Drive Old Town | 827-2442 |
| Clyde Grant | 181 Oak Street Old Town | 827-7865 |
| Laura Sanborn | 2845 Bennoch Road Alton | 745-8151 hIsanborn@aol.com |
| Dana Snowman | 120 Old Stagecoach Road Alton | 827-7344 ds824@midmaine.com |
| Bill Thompson P.I.N. | 12 Wabanaki Way Indian Island | 827-7776 Bill.Thompson@penobscotnation.org |

DOCUMENTATION OF DISTRIBUTION OF NOTICE AND APPLICATION SUBMITTALS

Legal Notices PUBLIC NOTICE OF INTENT TO FILE

Please take notice that the State of Maine, acting through the Department of Administrative and Financial Services, Bureau of General Services, 77 State House Station, Augusta, Maine 04333 (Tel: (207) 624-7360), and NEWSME Landfill Operations, LLC, 2828 Bennoch Road, Old Town, Maine 04446 (Tel: (207) 862-4200 ext. 225) are intending to file an application with the Maine Department of Environmental Protection (DEP) on or about September 10, 2012, pursuant to the provisions of 38 M.R.S. §§ 1301 <u>et seq.</u> and Maine's Solid Waste Management Regulations.

The application is for an amendment of the license for the Juniper Ridge Landfill located in Old Town, Maine to accept municipal solid waste from sources within the State of Maine as a result of the anticipated closure of the Maine Energy facility in Biddeford. The Juniper Ridge Landfill is owned by the State of Maine and operated by NEWSME Landfill Operations, LLC. The facility mailing address is 2828 Bennoch Road, Old Town, Maine 04468.

According to Department regulations, interested parties must be publicly notified, written comments invited and, if justified, an opportunity for a public hearing given. A request for a public hearing or for the Board of Environmental Protection to assume jurisdiction over this application must be received by the Department, in writing, no later than 20 days after the application is accepted by the Department as complete for processing.

The application and supporting documentation are available for review at the Department's Bureau of Remediation and Waste Management Bangor and Augusta offices during normal working hours. A copy of the application and supporting documentation may also be seen at the municipal offices in Old Town and Alton, Maine and at the Penobscot Indian Nation.

Send all correspondence to: Michael Parker (<u>michael.t.parker@maine.gov</u>), Maine Department of Environmental Protection, Solid Waste Program, 17 State House Station, Augusta, Maine 04333-0017 (Tel: 207-287-7704 or 1-800-452-1942).

August 29, 2012 Published August 30, 2012

| | | side a state of the second state of the | |
|---|---|---|---|
| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: | A. Signature | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: George and Toyce Feero 2835 Bennoch Rd- | A. Signature X Jerry Addresse B. Received by (Printed Name) C. Date of Deliver C. |
| 497 West Old Town R oad Old Town, ME 04468 | 3. Service Type X Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes | Alton, ME 04468 | 3. Service Type Image: Certified Mail Express Mail Registered Return Receipt for Merchandis Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes |
| 2. Article Number (Transfer from service label) | 075 7070 0005 703P P749 | 2. Article Number (Transfer from service label) | 12 1010 0002 1036 6543 |
| PS Form 3811, February 2004 Domestic R | eturn Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Domestic F | Return Receipt 102595-02-M-15 |

,

| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
|--|---|--|--|
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. I. Article Addressed to: Challis Randall 220 Old Stagecoach Road | A. Signature X Ullian Annell Agent Addressee B. Received by (Printed Name) C. Date of Delivery Utilian Kaya Jack D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: Raymond Perkins 55 Old Brooklytn Turnpike | se X h alter a Address |
| Alton, ME 04468 | 3. Service Type A Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes | Winebam, CT 06280 | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandi Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) |
| 2. Article Number (Transfer from service label) | 075 7070 0005 703P P35P | 2. Article Number (Transfer from service label) | <u> 2015 1010 0005 103P P3P4</u> |
| PS Form 3811, February 2004 Domestic F | ieturn Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Do | omestic Return Receipt 102595-02-94-1 |

| | | | · · · · · · · · · · · · · · · · · · · |
|--|--|--|---|
| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. | A. Signature A. Signature Agent D. Addressee B. Received by (Printed Name) C. Date of Delivery | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. | A. Signature A. Signature B. Heperved by (Printed Name) C. Date of Delive S/31//: |
| 1. Article Addressed to: Herbert A. Robertson, Jr. 163 Clewleyville Road | D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No | 1. Article Addressed to: | D. Is delivery address different from item 1? If YES, enter delivery address below: Set No |
| Eddington, ME 04428 | 3. Service Type A. Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes | Stillwater, ME 04489 | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandi Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes |
| 2. Article Number (Transfer from service label) | 1075 7070 0005 7036 6393 | 2. Article Number (Transfer from service label) 7 | 175 7070 0005 703F F202 |
| PS Form 3811, February 2004 Domestic F | eturn Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Domestic F | Return Receipt 102595-02-M-18 |

| | | · . | |
|--|--|---|---|
| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailplece, or on the front if space permits. 1. Article Addressed to: | A. Signature | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: | A. Signature X / ANCY A. Sunce: Agent B. Received by Printed Name) C. Date of Deliver Addressed C. Date of Deliver C. Date of Deliver C. Date of Deliver Addressed C. Date of Deliver Addressed S-3/-/2 D. Is delivery address different from Item 1? Yes If YES, enter delivery address below: No |
| University of Maine System 16 Central Street Bangor, ME 04401 | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. | United Cerebral Palsy 700 Mount Hope Avenue Bangor, ME 04401 | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandis Insured Mail C.O.D. |
| | 4. Restricted Delivery? (Extra Fee) | | 4. Restricted Delivery? (Extra Fee) |
| 2. Article Number 70121 (Transfer from service label) | 010 0002 1036 6536 | 2. Article Number (Transfer from service label) 701.2 | 1010 0002 1036 6529 |
| PS Form 3811, February 2004 Domestic F | Return Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Domestic R | etum Receipt 102595-02-M-15 |

| - 100 - 170 - 170 - 170 - 170 - 170 - 170 - 170 - 170 - 170 - 170 - 170 - 170 - 170 - 170 - 170 - 170 - 170 - 1 | | | |
|--|--|--|---|
| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. | A. Signature X B. Fiecelved by (Printed Name) C. Date of Delivery C. Date of Delivery | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. | A. Signature X. A. Signature B. Received by (<i>Printed Name</i>) VFMAY HDL D. Is delivery address different from item 1? U Yes |
| 1. Article Addressed to: Thomas Dunn Karen Bertolino | If YES, enter delivery address below: | 1. Article Addressed to: | If YES, enter delivery address below: No |
| 579 West Old Town Road | | Robert W. & Wendy Hall 631 West Old Town Road | |
| Old Town, ME 04458 | 3. Service Type Image: Service Type </td <td>Old Town, ME 04468</td> <td>3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandis Insured Mail C.O.D.</td> | Old Town, ME 04468 | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandis Insured Mail C.O.D. |
| | 4. Restricted Delivery? (Extra Fee) | | 4. Restricted Delivery? (Extra Fee) |
| 2. Article Number 703 (Transfer from service label) | rs roro ooos roar esar | 2. Article Number (Transfer from service label) | ,075 7070 0005 703F P533 |
| PS Form 3811, February 2004 Domestic R | eturn Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Domestic | Return Receipt 102595-02-M-15 |

,

| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | C | COMPLETE THIS SECTION ON DELIVERY | |
|--|---|--|-----------------|--|--|
| aurent J & Barbara L, Beauregard Laurent J & Barbara L, Beauregard Addressed to: Attach the back of the mailpiece, or on the front if space permits. Attach this card to the back of the mailpiece, or on the front if space permits. Attach this card to the back of the mailpiece, or on the front if space permits. Attach this card to the back of the mailpiece, or on the front if space permits. Attach this card to the back of the mailpiece, or on the front if space permits. Attach this card to the back of the mailpiece, or on the front if space permits. Attach this card to the back of the mailpiece, or on the front if space permits. Attach this card to the back of the back | · · · · · · · · · · · · · · · · · · · | d. reverse J. B. Received by (Printed Name) (C. Datu | | | |
| | | 1. Article Addressed to: Gregg P. & Evlynn L. Wallace 526 West Old Town Road | | If YES, enter delivery address below: No | |
| | Certified Mail Express Mail Registered Registered Return Receipt for Merchandise | Old Town, ME-04468 | | Service Type Certified Mail Express Mail Registered Return Receipt for Merchandis Insured Mail C.O.D. | |
| | 4. Restricted Delivery? (Extra Fee) Yes | | | 4. Restricted Delivery? (Extra Fee) Yes | |
| 2. Article Number/ (Transfer from service label) | DTS TOTO 0005 TO3P PTPT | 2. Article Number (Transfer from service label) | 701; | 2 1010 0002 1036 6444 | |
| PS Form 3811, February 2004 Domestic F | leturn Receipt 102595-02-M-1540 | PS Form 3811, February 2004 | Domestic Return | n Receipt 102595-02-M-1 | |
| | | | | | |

| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
|--|--|--|--|
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: | A. Signature X Mary Addressee B. Received by (<i>Printed Name</i>). C. Date of Pelivery Mary Fours Is delivery address different from item 1? If YES, enter delivery address below: X Mary Address below: | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. A* ch this card to the back of the mailpiece, the front if space permits. viticle Addressed to: | A. Signature A. Signature Addresse B. Received by (Printed Name) C. Date of Deliver C. Date of Delive |
| Mary St. Louis / Cynthia and Anthony E P.O. Box 394 Stillwater, ME 04489 | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandise | Mr. Kenneth Gray PO Box 357 Old Town, ME 04468 | 3. Service Type |
| | | | |
| | 4. Restricted Delivery? (Extra Fee) Yes | s f | 4. Restricted Delivery? (Extra Fee) |
| 2. Article Number (Transfer from service label) 70 | 12 1010 0002 1036 6475 | 2. Article Number 7 (Transfer from service label) | 075 7070 0005 7036 8580 |
| PS Form 3811, February 2004 Domestic Re | tum Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Domestic Re | eturn Receipt 102595-02-M-15 |
| | · · · | | n na |

| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
|--|--|--|---|
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. | A. Signature Manuel Charles Agent B. Received by (Printed Name) C. Data of Delivery C. Data of Delivery | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. | A. Signature A. Signature Agent Addresse B. Received by (Printed Name) STEEVES D. Is delivery address different from item 1? Yes |
| 1. Article Addressed to: Win & Nancy Chaiyabhat PO Box 34 Searsport, ME 04974 | If YES, enter delivery address below: In No | 1. Article Addressed to: Lawrence Steeves Heirs 986 South Street Roslindale MA 02131 | If YES, enter delivery address below: 🖬 No |
| | 3. Service Type 3. Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. | | Service Type Certified Mail Express Mail Registered Receipt for Merchandis Insured Mail C.O.D. |
| | 4. Restricted Delivery? (Extra Fee) | | 4. Restricted Delivery? (Extra Fee) |
| 2. Article Number (Transfer from service label) | 1075 7070 0005 703P P745 | 2. Article Number (Transfer from service label) | 1075 7070´0005 703P PASO |
| PS Form 3811, February 2004 Domestic | Return Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Domestic | Return Receipt 102595-02-M-16 |

| | | Manager 2017년 1월 1997년 1월 1997 | |
|--|---|--|---|
| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailplece, or on the front if space permits. | A. Signature | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the revers so that we can return the card to you. Attach this card to the back of the mailpie or on the front if space permits. | se X A Third Matthe Agent B. Received by (Printed Name) C. Date of Deliver |
| 1. Article Addressed to: | If YES, enter delivery address below: | 1. Article Addressed to: | If YES, enter delivery address below: |
| Harry Feero 1118 Southgate Road Argyle, ME 04468 | Tanymy Feerk | Anthony & Cindy Madden PO Box 499 Milford, ME 04461 | |
| | 3. Service Type A Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. | | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandis Insured Mail C.O.D. |
| | 4. Restricted Delivery? (Extra Fee) | · · · · · · · · · · · · · · · · · · · | 4. Restricted Delivery? (Extra Fee) |
| 2. Article Number- (Transfer from service label) | 2075 7070 0005 703P P54P | 2. Article Number (Transfer from service label) | 2015 1010 0005 7036 P33 9 |
| PS Form 3811, February 2004 Domestic | Return Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Do | mestic Return Receipt 102595-02-M-15 |

.

| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
|---|---|---|--|
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailplece, or on the front if space permits. Article Addressed to: Mit tent Held 2351 Cochran Road Dallar, 5A 30132 | A. Signature X Zan Male Agent Addressee B. Received by (<i>Printed Name</i>) Kan Held D. Is delivery address different from item 1? If YES, enter delivery address below: No | so that we can return the card to you. Attach this card to the back of the mailplece, or on the front if space permits. 1. Article Addressed to: Bureay of General Service JT State House Station | |
| | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes | Haddastal) IIIZ IO | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandis Insured Mail C.O.D. |
| 2. Article Number / (Transfer from service label) | ,075 7070 0005 703P P50A | 2. Article Number 7[(Transfer from service label) | 4. Restricted Delivery? (Extra Fee) D Yes JJ2 J0J0 0002 J036 6550 |
| | eturn Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Domestic | Return Receipt 102595-02-M-15- |

| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
|--|---|--|--|
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. | A. Signature A. Signature A. Agent Addressee S. Received by (<i>Printed Name</i>) A. Addressee C. Date of Delivery A. J. // D. Is delivery address different from item 1? Yes | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. | A. Signature X Light C, Junn GAgent B. Received by (Printed Name) Relph E. Leoner G/1/2 |
| 1. Article Addressed to: | If YES, enter delivery address below: | 1. Article Addressed to: | D. Is delivery address different from item 1? / //Yes If YES, enter delivery address below: INO |
| Ms. Laura Sanborn 2845 Bennoch Road | | Mr. Ralph Leonard 96 Sargent Drive | |
| Alton, ME 04468 | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. | Old Town, ME 04468 | Service Type Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. |
| | 4. Restricted Delivery? (Extra Fee) | | 4. Restricted Delivery? (Extra Fee) |
| | JTS TOTO 0005 TO3P P340 | 2. Article Number (Transfer from service label) | 2075 7070 0005 703P P305 |
| S Form 3811, February 2004 Domestic | Return Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Domestic | Return Receipt 102595-02-M-154 |

. .

| SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
|--|---|---|--|
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: | A. Signature A. Signature A. Signature A. Agent A. Agent A. Addressee B. Received by (<i>Printed Name</i>) C. Date of Delivery C. Da | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: | A, Signature A, Signature Addresse B. Received by (<i>Printed Name</i>) Addresse D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No |
| Mr. Clyde Grant 181 Oak Street Old Town, ME 04468 | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes | Mr. Bill Thempson Penobscot Indian Nation 12 Wabanaki Way Indian Island, ME 04458 | 3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandis Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes |
| 2. Article Number/ (Transfer from service label) 7[| JTS TOTO 0005 TO3P P523 | 2. Article Number (Transfer from service label) | 12 1010 0002 1036 6499 |
| PS Form 3811, February 2004 Domestic Re | etum Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Domestic F | leturn Receipt 102595-02-M-15/ |
| | | (| |
|--|---|--|---|
| ENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece or on the front if space permits. Article Addressed to: | B. Received by (Printed Name) C. Data of Delivery | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mallpiece, or on the front if space permits. 1. Article Addressed to: | A. Signature Agent A. Signature Agent B. Received by (<i>Printed Name</i>) C. Date of Deliver C. Jate of De |
| City of Old Town 265 Main Street Old Town, ME 04468 | 3. Service Type X Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes | Penobscot Indian Nation 12 Wabanaki Way Indian Island, ME 04468 | 3. Service Type A Certified Mail Express Mail Registered Return Receipt for Merchandis Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes |
| 2. Article Number (Transfer from service label) | 7012 1010 0002 1036 6451 | 2. Article Number (Transfer from service label) | 7012 1010 0002 1036 6482 |
| | nestic Return Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Domestic | c Return Receipt 102595-02-M-15 |

.

| NDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY | SENDER: COMPLETE THIS SECTION | COMPLETE THIS SECTION ON DELIVERY |
|---|---|--|---|
| Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. | A. Signature A. Chu Graduessee B. Received by (Printed Name) A. C. Date of Delivery A. A. Signature C. Date of Delivery A. A. Signature C. Date of Delivery A. A. Signature D. Is delivery address different from item 1? Yes | Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. | A. Signature A. Signature Agent D. Is delivery address different from item 1? Yes |
| 1. Article Addressed to: Dana Snowman 120 Old Stagecoach Road | If YES, enter delivery address below: No | 1. Article Addressed to: Mr. Peter Dufour 230 West Old Town Road | If YES, enter delivery address below: No |
| Alton, ME 04468 | 3. Service Type A. Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes | Old Town, ME 04468 | 3. Service Type 4. Restricted Delivery? (Extra Fee) |
| 2. Article Number (Transfer from service label) | ,075 7070 0005 7036 6473 | 2. Article Number (Transfer from service label) | 015 7070 0005 703P P555 |
| PS Form 3811, February 2004 Domestic | Return Receipt 102595-02-M-1540 | PS Form 3811, February 2004 Domestic | Return Receipt 102595-02-M-15 |











Our records indicate that the following shipment has been delivered:

| Invoice number: | 12043 |
|-------------------------------|--------------------------|
| Reference: | 12043 |
| Ship (P/U) date: | Sep 10, 2012 |
| Delivery date: | Sep 11, 2012 11:15 AM |
| Sign for by: | K.DUNTON |
| Delivery location: | OLD TOWN, ME |
| Delivered to: | Receptionist/Front Desk |
| Service type: | FedEx Priority Overnight |
| Packaging type: | FedEx Pak |
| Number of pieces: | 1 |
| Weight: | 2.00 lb. |
| Special handling/Services: | Deliver Weekday |
| Tracking number: | 798928678135 |

| Shipper Information Mike Booth | Recipient Information City of Old Town |
|-----------------------------------|---|
| Sevee & Maher Engineers, Inc. | 265 MAIN ST |
| 4 Blanchard Rd. | OLD TOWN ME |
| P.O. Box 85A | US |
| Cumberland ME | 04468 |
| US | |
| 04021 | |

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 10:24 AM CDT on 09/11/2012.

To learn more about FedEx Express, please visit our website at $\underline{\texttt{fedex.com}}$.

All weights are estimated.

Our records indicate that the following shipment has been delivered:

| Invoice number: | 12043 |
|-------------------------------|--------------------------|
| Reference: | 12043 |
| Ship (P/U) date: | Sep 10, 2012 |
| Delivery date: | Sep 11, 2012 11:18 AM |
| Sign for by: | J.HANSON |
| Delivery location: | INDIAN ISLAND, ME |
| Delivered to: | Receptionist/Front Desk |
| Service type: | FedEx Priority Overnight |
| Packaging type: | FedEx Pak |
| Number of pieces: | 1 |
| Weight: | 2.00 lb. |
| Special handling/Services: | Deliver Weekday |
| Tracking number: | 798928545623 |

| Shipper Information | Recipient Information |
|--------------------------|-------------------------|
| Mike Booth | Penobscot Indian Nation |
| Sevee & Maher Engineers, | Penobscot Indian Nation |
| Inc. | 12 WABANAKI WAY |
| 4 Blanchard Rd. | INDIAN ISLAND |
| P.O. Box 85A | ME |
| Cumberland | US |
| ME | 04468 |
| US | |
| 04021 | |

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 10:21 AM CDT on 09/11/2012.

To learn more about FedEx Express, please visit our website at $\underline{\texttt{fedex.com}}.$

All weights are estimated.

Our records indicate that the following shipment has been delivered:

| Door Tag number: | DT103190512630 |
|-------------------------------|--------------------------|
| Invoice number: | 12043 |
| Reference: | 12043 |
| Ship (P/U) date: | Sep 10, 2012 |
| Delivery date: | Sep 11, 2012 11:57 AM |
| Sign for by: | K.ROSSI |
| Delivery location: | OLD TOWN, ME |
| Delivered to: | Receptionist/Front Desk |
| Service type: | FedEx Priority Overnight |
| Packaging type: | FedEx Pak |
| Number of pieces: | 1 |
| Weight: | 2.00 lb. |
| Special handling/Services: | Deliver Weekday |
| Tracking number: | 798928647971 |
| | |
| Shipper Information | Recipient Information |
| | Marma of Alton |

| Mike Booth | Town of Alton |
|--------------------------|-----------------|
| Sevee & Maher Engineers, | Town of Alton |
| Inc. | 3352 BENNOCH RD |
| 4 Blanchard Rd. | OLD TOWN |
| P.O. Box 85A | ME |
| Cumberland | US |
| ME | 04468 |
| US | |
| 04021 | |

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 11:03 AM CDT on 09/11/2012.

To learn more about FedEx Express, please visit our website at $\underline{\texttt{fedex.com}}$.



STATE OF MAINE DEPARTMENT OF ADMINISTRATIVE & FINANCIAL SERVICES BUREAU OF GENERAL SERVICES BURTON M. CROSS BUILDING 4TH FLOOR, 77 STATE HOUSE STATION AUGUSTA, MAINE 04333-0077

PAUL R. LEPAGE GOVERNOR

H. SAWIN MILLETT, JR COMMISSIONER

DONALD L. McCORMACK DIRECTOR

August 24, 2012

Ms. Cynthia W. Darling Division of Solid Waste Management Bureau of Remediation and Waste Management Maine Department of Environmental Protection 106 Hogan Road Bangor, Maine 04401

Re: Applications related to the Juniper Ridge Landfill

Dear Ms. Darling:

Please accept this letter as authorization for the Maine Department of Environmental Protection (the "Department") to accept NEWSME Landfill Operations, LLC, as the agent for the Bureau of General Services with regard to all applications submitted to the Department related to the Juniper Ridge Landfill. The contact at NEWSME is Don Meagher, whose home number is 207-862-4200 ext. 230 and mailing address is Pine Tree & Juniper Ridge Landfills, Casella Waste Systems, 358 Emerson Mill Road, Hampden, Maine 04444.

Please call 207-624-7314 if you have any questions regarding this letter.

Sincerely,

nc (1

Donald L. McCormack, Director Bureau of General Services

ATTACHMENT 3

DOCUMENTATION OF GOOD CORPORATE STANDING

State of Maine



Department of the Secretary of State

I, the Secretary of State of Maine, certify that according to the provisions of the Constitution and Laws of the State of Maine, the Department of the Secretary of State is the legal custodian of the Great Seal of the State of Maine which is hereunto affixed and that the paper to which this is attached is a true copy from the records of this Department.



In testimony whereof, I have caused the Great Seal of the State of Maine to be hereunto affixed. Given under my hand at Augusta, Maine, this twenty-seventh day of August 2012.

Charles E. Summers, Jr. Secretary of State

Additional Addresses

| Legal Name | Title | Name | Charter # | Status |
|------------------------------------|--------------|-----------------|------------|---------------|
| NEWSME LANDFILL | Registered | | 20040538DC | GOOD STANDING |
| OPERATIONS LLC | Agent | | | |
| Home Office Address (of foreign en | ntity) Other | Mailing Address | | |

ATTACHMENT 4

NEWSME FINANCIAL CAPACITY



April 25, 2012

Maine Department of Environmental Protection Bureau of Remediation and Waste Management 17 State House Station Augusta, ME 04333

RE: NEWSME Landfill Operations, LLC / Casella Waste Systems, Inc. Financial Capability

Dear Sir / Madam:

We understand that you require a bank reference for Casella Waste Systems, Inc. (the "Company") and its wholly owned subsidiary, NEWSME Landfill Operations, LLC.

The Company has maintained a banking relationship with us since 1995. It is well known to us and has maintained its relationship with us in a satisfactory manner.

In addition, Bank of America, N.A. is the administrative agent for a secured credit facility of approximately \$227.5 million provided to the Company and its subsidiaries by a group of lenders (the "Credit Facility"). The amount available under the Credit Facility is currently approximately \$124.6 million. The Company may utilize the Credit Facility for direct borrowings and standby letters of credit subject to the conditions that (a) the Company not be in default under the terms of the Credit Facility and (b) the Company's representations and warranties contained in the agreement governing the Credit Facility be true and correct in all material respects as of the date of the borrowing.

Please note that the information set forth in this letter is subject to change without notice, and is provided in strict confidence, without any responsibility or liability on the part of Bank of America, N.A., its affiliates or any of its or its affiliates' directors, officers or employees. Bank of America, N.A. undertakes no responsibility to update the information set forth in this letter.

Very truly yours,

BANK OF AMERICA, N.A.

Maria F. Maia Managing Director

ATTACHMENT 5

MDOT ACCIDENT DATA



Crash Summary Report

| | Report Selections and Input Parameters | | | | | | | | | | |
|---|---|--|-------------------|---|--|--|--|--|--|--|--|
| REPORT SELECTIONS | | | | | | | | | | | |
| Crash Summary I | Section Detail | Crash Summary II | 1320 Included | 1320 & Driver Report Included | | | | | | | |
| REPORT DESCRIPTION Bennoch Rd area | | | | | | | | | | | |
| REPORT PARAMETERS | | | | | | | | | | | |
| | | 10 | | | | | | | | | |
| Year 2008, Start Month 1 | through Year 2010 End Month | 1: 12 | | | | | | | | | |
| Year 2008, Start Month 1 Route: 0016X | through Year 2010 End Month Start Node: 39199 | 1: 12 Start Offset: 0 | Exc | clude First Node | | | | | | | |
| | - | | | clude First Node clude Last Node | | | | | | | |
| | Start Node: 39199 | Start Offset: 0 | | | | | | | | | |
| Route: 0016X | Start Node: 39199 End Node: 41213 | Start Offset: 0 End Offset: 0 | Exc | clude Last Node | | | | | | | |
| Route: 0016X | Start Node: 39199 End Node: 41213 Start Node: 41324 | Start Offset: 0 End Offset: 0 Start Offset: 0 | Exc Exc Exc | clude Last Node | | | | | | | |
| Route: 0016X Route: 19A1892 | Start Node: 39199 End Node: 41213 Start Node: 41324 End Node: 41323 | Start Offset:0End Offset:0Start Offset:0End Offset:0 | | clude Last Node clude First Node clude Last Node | | | | | | | |
| Route: 0016X Route: 19A1892 | Start Node: 39199 End Node: 41213 Start Node: 41324 End Node: 41323 Start Node: 64506 | Start Offset:0End Offset:0Start Offset:0End Offset:0Start Offset:0 | | clude Last Node clude First Node clude Last Node clude First Node | | | | | | | |
| Route: 0016X Route: 19A1892 Route: 3201740 | Start Node: 39199 End Node: 41213 Start Node: 41324 End Node: 41323 Start Node: 64506 End Node: 64507 | Start Offset:0End Offset:0Start Offset:0End Offset:0Start Offset:0End Offset:0End Offset:0 | | clude Last Node clude First Node clude Last Node clude First Node clude Last Node | | | | | | | |
| Route: 0016X Route: 19A1892 Route: 3201740 | Start Node: 39199 End Node: 41213 Start Node: 41324 End Node: 41323 Start Node: 64506 End Node: 64507 Start Node: 41212 | Start Offset:0End Offset:0Start Offset:0End Offset:0Start Offset:0End Offset:0Start Offset:0Start Offset:0Start Offset:0 | | clude Last Node clude First Node clude Last Node clude First Node clude Last Node clude First Node | | | | | | | |

| Crash Summary r | | | | | | | | | | | | | | |
|-----------------|--------------------|--|-----|---------|---|--------|-------|------|----|--------------|---------------------------------|---------------------|----------|------|
| Nodes | | | | | | | | | | | | | | |
| Node | Route - MP | Node Description | U/R | Total | | Injury | у Сга | shes | | Percent | Annual M C | rash | Critical | CRF |
| | | | | Crashes | κ | Α | в | С | PD | Injury | Ent-Veh F | Rate | Rate | |
| 39199 | 0016X - 180.88 | 1906134 ALT,RTE 16,BROWN BR | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 1.002 wide Crash Rate | 0.00 0.10 | 0.40 | 0.00 |
| 41324 | 0016X - 182.08 | TL - Alton, Old Town | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 0.996 wide Crash Rate | 0.00 0.04 | 0.17 | 0.00 |
| 64506 | 0016X - 182.11 | Int of BENNOCH RD, RD INV 3201740 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 0.462 wide Crash Rate | 0.00 0.04 | 0.12 | 0.00 |
| 65215 | 0016X - 182.26 | Int of BENNOCH RD, RD INV 3201917 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 0.608 wide Crash Rate | 0.00 0.04 | 0.15 | 0.00 |
| 41213 | 0016X - 182.28 | Int of BENNOCH RD, RAMP OFF TO BENNOCH RD | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 0.920 wide Crash Rate | 0.00 0.04 | 0.17 | 0.00 |
| 64507 | 19A1892 - 0.03 | Int of RAMP ON FROM BENNOCH RD, RD INV 3201740 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 0.478 wide Crash Rate | 0.00 0.04 | 0.12 | 0.00 |
| 41323 | 19A1892 - 0.22 | Int of 195 SB, RAMP ON FROM BENNOCH RD | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 2.183 wide Crash Rate | 0.00 0.04 | 0.16 | 0.00 |
| 64507 | 3201740 - 0.03 | Int of RAMP ON FROM BENNOCH RD, RD INV 3201740 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 0.478 wide Crash Rate | 0.00 0.04 | 0.12 | 0.00 |
| 41212 | 19B1892 - 0 | Int of I 95, RAMP OFF TO BENNOCH RD | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 1.971 wide Crash Rate | 0.00 0.04 | 0.17 | 0.00 |
| 65214 | 19B1892 - 0.16 | Int of RAMP OFF TO BENNOCH RD, RD INV 3201917 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 0.296 wide Crash Rate | 0.00 0.04 | 0.02 | 0.00 |
| Study Y | 'ears: 3.00 | NODE TOTA | LS: | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 9.394 | 0.00 | 0.13 | 0.00 |

Crash Summary I

Crash Summary I

| | | | | | | | Section | າຣ | | | | | | | | | |
|--------------------------------|--------------------------|------------------------|-------------------------------|-----------------------------------|----------|---|---------|----|------|--------|-------|----|----------------|------------------------------------|-----------------------------|----------|---------|
| Start | End | Element | Offset | Route - MP | SectionU | | Total | | Inju | iry Cr | ashes | | Percent | Annual | Crash | Critical | CRF |
| Node | Node | | Begin - End | | Length | | Crashes | Κ | Α | В | С | PD | Injury | HMVM | Rate | Rate | <u></u> |
| | | 219447 6,BROWN BR | 0 - 1.20 | 0016X - 180.88 ST RTE 16 | 1.20 | 1 | 3 | 0 | . 0 | 0 | 1 | 2 | 33.3 Statew | 0.01282 vide Crash Rate | 78.00 : 147.17 | 293.52 | 0.00 |
| | | 2748137 RD INV 3201 | 0 - 0.03 740 | 0016X - 182.08 ST RTE 16 | 0.03 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 Statew | 0.00028 vide Crash Rate | 0.00 147.17 | 629.60 | 0.00 |
| 65215 Int of BENN | 64506 NOCH RD, | 2784225 RD INV 3201 | 0 - 0.15 ₉₁₇ | 0016X - 182.11 ST RTE 16 | 0.15 | 1 | 3 | 0 | 0 | 0 | 2 | 1 | 66.7 Statew | 0.00139 vide Crash Rate | 721.36 | 511.53 | 1.41 |
| 41213 Int of BENI RD | 65215 NOCH RD, | 2784224 RAMP OFF T | 0 - 0.02 O BENNOCH | 0016X - 182.26 ST RTE 16 | 0.02 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 Statew | 0.00018 <i>v</i> ide Crash Rate | 0.00 : 147.17 | 572.56 | 0.00 |
| 64507 Int of RAM 3201740 | 41324 P ON FRO | 2748139 M BENNOCH | 0 - 0.03 RD, RD INV | 19A1892 - 0 RD INV 19 A1892 | 0.03 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 0.00007 wide Crash Ra | 0.00 te: 61.19 | -901.46 | 0.00 |
| 41323 Int of 1 95 S | 64507 BB, RAMP | 2748138 ON FROM BE | 0 - 0.19 NNOCH RD | 19A1892 - 0.03 RD INV 19 A1892 | 0.19 | 1 | 1 | 0 | 0 | 0 | .0 | 1 | 0.0 State | 0.00091 wide Crash Ra | 366.91 te: 61.19 | 263.72 | 1.39 |
| 64506 Int of BENN | 64507 NOCH RD, | 2748141 RD INV 3201 | 0 - 0.03 740 | 3201740 - 0 RD INV 3201740 | 0.03 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 0.00007 wide Crash Ra | 0.00 te: 61.19 | -876.47 | 0.00 |
| 41212 Int of I 95, | 65214 RAMP OFF | 2784222 TO BENNO | 0 - 0.16 CH RD | 19B1892 - 0 RD INV 19 B1892 | 0.16 | 1 | 2 | 0 | 0 | 1 | 0 | 1 | 50.0 State | 0.00047 wide Crash Ra | 1409.32 te: 61.19 | 243.76 | 5.78 |
| | | 2784223 BENNOCH R | 0 - 0.02 D, RD INV | 19B1892 - 0.16 RD INV 19 B1892 | 0.02 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 0.00003 wide Crash Ra | 0.00 te: 61.19 | -3380.83 | 0.00 |
| 65214 Int of RAM 3201917 | 65215 P OFF TO | 2784808 BENNOCH R | 0 - 0.02 D, RD INV | 3201917 - 0 RD INV 3201917 | 0.02 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 State | 0.00003 wide Crash Ra | | -3493.62 | 0.00 |
| Study Y | ears: 3 | .00 | | Section Totals: | 1.85 | | 9 | 0 | 0 | 1 | 3 | 5 | 44.4 | 0.01625 | 184.58 | 265.97 | 0.69 |
| | | | | Grand Totals: | 1.85 | | 9 | 0 | 0 | 1 | 3 | 5 | 44.4 | 0.01625 | 184.58 | 301.18 | 0.61 |

Crash Summary

| | | | | | | Sect | ion D | etails | | | | | | |
|-------|-------|---------|-------------|---------------------------------------|---------|------|-------|--------|-------|----|--------------|--|------------|--------|
| Start | End | Element | Offset | Route - MP | Total | | Inju | iry Cr | ashes | | Crash Report | Crash Date | Crash | Injury |
| Node | Node | | Begin - End | · · · · · · · · · · · · · · · · · · · | Crashes | Κ | Α | В | С | PD | | ······································ | Mile Point | Degree |
| 39199 | 41324 | 219447 | 0 - 1.20 | 0016X - 180.88 | 3 | 0 | 0 | 0 | 1 | 2 | 2009-10890 | 05/06/2009 | 180.98 | С |
| | | | | | | | | | | | 2008-7481 | 02/08/2008 | 181.08 | PD |
| | | | | | | | | | | | 2009-7717 | 04/03/2009 | 181.38 | PD |
| 64506 | 41324 | 2748137 | 0 - 0.03 | 0016X - 182.08 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| 65215 | 64506 | 2784225 | 0 - 0.15 | 0016X - 182.11 | 3 | 0 | Ō | 0 | 2 | 1 | 2009-26074 | 10/14/2009 | 182.13 | С |
| | | | | | | | | | | | 2010-28181 | 12/06/2010 | 182.13 | PD |
| | | | | | | | | | | | 2009-26073 | 10/14/2009 | 182.15 | С |
| 41213 | 65215 | 2784224 | 0 - 0.02 | 0016X - 182.26 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| 64507 | 41324 | 2748139 | 0 - 0.03 | 19A1892 - 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| 41323 | 64507 | 2748138 | 0 - 0.19 | 19A1892 - 0.03 | 1 | 0 | 0 | 0 | 0 | 1 | 2009-2621 | 01/28/2009 | 0.20 | PD |
| 64506 | 64507 | 2748141 | 0 - 0.03 | 3201740 - 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| 41212 | 65214 | 2784222 | 0 - 0.16 | 19B1892 - 0 | 2 | 0 | 0 | 1 | 0 | 1 | 2010-11363 | 06/08/2010 | 0.01 | В |
| | | | | | | | | | | | 2008-14856 | 06/08/2008 | 0.02 | PD |
| 65214 | 41213 | 2784223 | 0 - 0.02 | 19B1892 - 0.16 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| 65214 | 65215 | 2784808 | 0 - 0.02 | 3201917 - 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| | | | | Totals | : 9 | 0 | 0 | 1 | 3 | 5 | | | | |

Maine Department Of Transportation - Traffic Engineering, Crash Records Section Crash Summary II - Characteristics

| | | | | | | | | | | Cr | ashes | s by D | ay an | d Ho | ur | | | | | | | | | | | |
|-------------|----|---|---|----|---|----|---|---|---|----|-------|--------|--------|------|----|---|---|---|----|---|---|---|----|----|----|-----|
| | | | | | | AM | | | | | ł | Hour o | of Day | | | | | | РМ | | | | | | | |
| Day Of Week | 12 | 1 | 2 | 3, | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | Un | Tot |
| SUNDAY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MONDAY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| TUESDAY | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| WEDNESDAY | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| THURSDAY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FRIDAY | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| SATURDAY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |

| С | rashes | by Ye | ar and M | lonth | V | /ehicle Co | unts by Type | |
|-----------|--------|-------|----------|-------|---|------------|---|-------|
| Month | 2008 | 2009 | 2010 | Total | Unit Type | Total | Unit Type | Total |
| JANUARY | 0 | 1 | 0 | 1 | 1-2 Door | 0 | 32-3 Axle Tractor with Tandem Axle Semi | 0 |
| | 0 | • | U | I | 2-4 Door | 4 | 33-3 Axle Tractor with Tridem Axle Semi | 0 |
| FEBRUARY | 1 | 0 | 0 | 1 | 3-Convertible | 0 | 35-3 Axle Tractor with Single Axle Semi & 2 | 0 |
| MARCH | 0 | 0 | 0 | 0 | 4-Station Wagon | 0 | Axle Trailer | |
| | 0 | | - | 4 | 5-Van | 1 | 36-3 Axle Tractor with Tandem Axle Semi & 2 Axle Trailer | 0 |
| APRIL | 0 | 1 | 0 | 1 | 6-Pickup Truck | 2 | | 0 |
| MAY | 0 | 1 | 0 | 1 | 7-SUV | 2 | 37-5 Axle Semi; Split Trailer Tandem | 0 |
| JUNE | 1 | 0 | 1 | 2 | 10-Truck Tractor Only (Bobtail) | 0 | 38-6 Axle Semi; Split Trailer Tandem with Center Axle | 0 |
| | • | - | • | 2 | 12-School Bus | 0 | 39-6 Axle; Standard Trailer Tandem with Center | · 0 |
| JULY | 0 | 0 | 0 | 0 | 13-Motor Home | 0 | Axle | v |
| AUGUST | 0 | 0 | 0 | 0 | 14-Motorcycle | 1 | 40-4 Axle Single Unit | 0 |
| SEPTEMBER | 0 | 0 | 0 | 0 | 15-Moped | 0 | 42-4 Axle Tractor with Tandem Axle Semi | 0 |
| | - | - | | 0 | 16-Motor Bike | 0 | 50-Any Other Axle Configuration | 0 |
| OCTOBER | 0 | 2 | 0 | 2 | 17-Bicycle | 0 | 60-Other Unit | 0 |
| NOVEMBER | 0 | 0 | 0 | 0 | 18-Snowmobile | 0 | 70-ATV | 0 |
| DECEMBER | 0 | 0 | 4 | 1 | 20-2 Axle Single Unit with Dual Tires | 0 | 81-2 Axle Bus | 0 |
| | | | 1 | I | 21-2 Axle Tractor with Single Axle Semi | 0 | 82-3 Axle Bus | 0 |
| Total | 2 | 5 | 2 | 9 | 22-2 Axle Tractor with Tandem Axle Semi | 0 | 98-Farm Vehicles / Tractors | 0 |
| | | | | | 25-2 Axle Tractor with Single Axle Semi & 2 | 2 0 | 99-Unknown | 0 |
| | | | | | Axle Trailer | | Total | 10 |
| | | | | | 30-3 Axle Single Unit | 0 | | 10 |
| | | | | | 31-3 Axle Tractor with Single Axle Semi | 0 | | |

Maine Department Of Transportation - Traffic Engineering, Crash Records Section Crash Summary II - Characteristics

| Apparent Contributing Factor | Dr 1 | Dr 2 | Dr 3 | Dr 4 | Dr 5 | Other | Total |
|------------------------------------|------|------|------|------|------|-------|-------|
| No Improper Action | 5 | 1 | 0 | 0 | 0 | 0 | 6 |
| Failure to Yield Right of Way | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Illegal Unsafe Speed | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Following Too Close | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Disregard Traffic Control Device | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driving Left of Center Not Passing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improper Passing, Overtaking | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improper Unsafe Lane Change | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improper Parking Start, Stop | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improper Turn | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unsafe Backing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No Signal or Improper Signal | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Impeding Traffic | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Driver Inattention, Distraction | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Driver Inexperience | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrian Violation Error | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Physical Impairment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vision Obscured, Windshield Glass | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vision Obscured, Sun, Headlights | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Vision Obscurement | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Human Violation Factor | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hit and Run | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Defective Brakes | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Defective Tire, Tire Failure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Defective Lights | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Defective Suspension | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Defective Steering | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Vehicle Defect or Factor | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 9 | 1 | 0 | 0 | 0 | 0 | 10 |

Crashes by Apparent Contributing Factor And Driver

| Apparent Physical Condition | Dr 1 | Dr 2 | Dr 3 | Dr 4 | Dr 5 | Other | Total |
|--------------------------------|------|------|------|------|------|-------|-------|
| Normal | 9 | 1 | 0 | 0 | 0 | 0 | 10 |
| Under the Influence | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Had Been Drinking | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Had Been Using Drugs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asleep | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fatigued | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ill | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Handicapped | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 9 | 1 | 0 | 0 | 0 | 0 | 10 |

Driver Age by Unit Type

| Age | Driver | Bicycle | SnowMobile | Pedestrian | ATV | Total |
|----------|--------|---------|------------|------------|-----|-------|
| 09-Under | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-14 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15-19 | 1 | 0 | 0 | 0 | 0 | 1 |
| 20-24 | 3 | 0 | 0 | 0 | 0 | 3 |
| 25-29 | 1 | 0 | 0 | 0 | 0 | 1 |
| 30-39 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40-49 | 2 | 0 | 0 | 0 | 0 | 2 |
| 50-59 | 2 | 0 | 0 | 0 | 0 | 2 |
| 60-69 | 1 | 0 | 0 | 0 | 0 | 1 |
| 70-79 | 0 | 0 | 0 | 0 | 0 | 0 |
| 80-Over | 0 | 0 | 0 | 0 | 0 | 0 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 10 | 0 | 0 | 0 | 0 | 10 |

Maine Department Of Transportation - Traffic Engineering, Crash Records Section Crash Summary II - Characteristics

| Fixed Object Struck | · |
|--|-------|
| Fixed Object Struck | Total |
| 1-Construction, Barricades Equipment, etc. | 0 |
| 2-Traffic Signal | 0 |
| 3-R.R. Crossing Device | 0 |
| 4-Light Pole | 0 |
| 5-Utility Pole (Tel. Electrical) | 0 |
| 6-Sign Structure Post | 0 |
| 7-Mail Boxes or Posts | 0 |
| 8-Other Poles, posts or supports | 0 |
| 9-Fire Hydrant/Parking Meter | 0 |
| 10-Tree or Shrubbery | 0 |
| 11-Crash Cushion | 0 |
| 12-Median Safety Barrier | 0 |
| 13-Bridge Piers (including protective guard rails) | 0 |
| 14-Other Guardrails | 4 |
| 15-Fencing (not median barrier) | 0 |
| 16-Culvert Headwall | 0 |
| 17-Embankment, Ditch, Curb | 0 |
| 18-Building, Wall | 0 |
| 19-Rock Outcrops or Ledge | 0 |
| 20-Other | 1 |
| 21-Gate or Cable | 0 |
| 22-Pressure Ridge | 0 |
| Total | 5 |

| Traffic Control Devices | |
|-----------------------------------|-------|
| Traffic Control Device | Total |
| 1-Traffic Signals (Stop & Go) | 0 |
| 2-Traffic Flashing | 0 |
| 3-Overhead Flashers | 0 |
| 4-Stop Signs - All Approaches | 0 |
| 5-Stop Signs - Other | 0 |
| 6-Yield Sign | 0 |
| 7-Curve Warning Sign | 0 |
| 8-Officer, Flagman, School Patrol | 0 |
| 9-School Bus Stop Arm | 0 |
| 10-School Zone Sign | 0 |
| 11-R.R. Crossing Device | 0 |
| 12-No Passing Zone | 0 |
| 13-None | 9 |
| 14-Other | 0 |
| Total | 9 |

| Inj | Injury Data | | | | | | | | | |
|---------------|-------------------|-----------------------|--|--|--|--|--|--|--|--|
| Severity Code | Injury Crashes | Number Of Injuries | | | | | | | | |
| К | 0 | 0 | | | | | | | | |
| A | 0 | 0 | | | | | | | | |
| В | 1 | 1 | | | | | | | | |
| С | 3 | 3 | | | | | | | | |
| PD | 5 | 0 | | | | | | | | |
| Total | 9 | 4 | | | | | | | | |

| Road Character | Tota |
|---------------------------|------|
| 1-Level Straight | 5 |
| 2-Level Curved | 2 |
| 3-On Grade Straight | 2 |
| 4-On Grade Curved | 0 |
| 5-Top of Hill Straight | 0 |
| 6-Top of Hill Curved | 0 |
| 7-Bottom of Hill Straight | 0 |
| 8-Bottom of Hill Curved | 0 |
| 9-Other | 0 |
| Total | 9 |

| Light | |
|----------------------------|-------|
| Light | Total |
| 1-Dawn (Morning) | 0 |
| 2-Daylight | 5 |
| 3-Dusk (Evening) | 0 |
| 4-Dark (Street Lights On) | 1 |
| 5-Dark (No Street Lights) | 3 |
| 6-Dark (Street Lights Off) | 0 |
| 7-Other | 0 |
| Total | 9 |

Crash Summary II - Characteristics

Crashes by Crash Type and Type of Location

| Crash Type | Straight Road | Curved Road | Three Leg Intersection | Four Leg Intersection | Five Leg Intersection | Driveways | Bridges | Interchanges | Other | Total |
|-----------------------|------------------|----------------|---------------------------|--------------------------|--------------------------|-----------|---------|--------------|-------|-------|
| Object in Road | 2 | Ó | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 4 |
| Rear End / Sideswipe | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Head-on / Sideswipe | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Intersection Movement | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pedestrians | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Train | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ran Off Road | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| All Other Animal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bike | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jackknife | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rollover | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fire | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Submersion | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rock Thrown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bear | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Deer | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Moose | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 9 |

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

| Weather Light | Debris | Dry | lce, Packed Snow, Not Sanded | ice, Packed Snow, Sanded | Muddy | Oily | Other | Snow Slush, Not Sanded | Snow, Slush, Sanded | Wet | Total |
|--------------------------|--------|-----|------------------------------------|--------------------------------|-------|------|-------|---------------------------|------------------------|-----|-------|
| Blowing Sand or Dust | | | | | | | | | | | |
| Dark (No Street Lights) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights Off) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights On) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dawn (Morning) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daylight | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dusk (Evening) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Clear | | | | | | | | | | | |
| Dark (No Street Lights) | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Dark (Street Lights Off) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights On) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dawn (Morning) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daylight | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Dusk (Evening) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cloudy | | | | | | | | | | | |
| Dark (No Street Lights) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights Off) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights On) | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Dawn (Morning) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daylight | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Dusk (Evening) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fog, Smog, Smoke | | | | | | | | | | | |
| Dark (No Street Lights) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights Off) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights On) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dawn (Morning) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daylight | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dusk (Evening) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

| Weather | Debris | Dry | lce, Packed Snow, Not | lce, Packed Snow, | Muddy | Oily | Other | Snow Slush, | | Wet | Total |
|----------------------------|--------|-----|--------------------------|----------------------|-------|------|-------|-------------|--------|-----|--------|
| Light | 200110 | 2.9 | Sanded | Sanded | maaay | Ony | Not S | Not Sanded | Sanded | Wet | 1 Otdi |
| Other | | | | | | | | | | | |
| Dark (No Street Lights) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights Off) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights On) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dawn (Morning) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daylight | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | . 0 |
| Dusk (Evening) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rain | | | | | | | | | | | |
| Dark (No Street Lights) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights Off) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights On) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dawn (Morning) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daylight | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Dusk (Evening) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Severe Cross Winds | | | | | | | | | | | |
| Dark (No Street Lights) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights Off) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights On) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dawn (Morning) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daylight | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dusk (Evening) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sleet, Hail, Freezing Rain | | | | | | | | | | | |
| Dark (No Street Lights) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights Off) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights On) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dawn (Morning) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daylight | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dusk (Evening) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

| Weather Light | Debris | Dry | lce, Packed Snow, Not Sanded | lce, Packed Snow, Sanded | Muddy | Oily | Other | Snow Slush, Not Sanded | Snow, Slush, Sanded | Wet | Total |
|--------------------------|--------|-----|------------------------------------|--------------------------------|-------|------|-------|---------------------------|------------------------|-----|-------|
| Snow | | | | | | | | | | | |
| Dark (No Street Lights) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights Off) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dark (Street Lights On) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dawn (Morning) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Daylight | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| Dusk (Evening) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 4 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 9 |

ATTACHMENT 6

SUMMARY OF TRI-COUNTY RECYCLING PROGRAMS AND CWS SUMMARY OF WASTE DIVERSION RATES FOR COMMUNITIES THAT HAVE ZERO-SORT® RECYCLING PROGRAMS

| Community | Recycling Program | RECYCLED MATERIALS - NO LONGER IN WASTE STREAM |
|-------------------|-------------------|--|
| Acton | YES | CORRUGATED CARDBOARD, NEWSPAPER, MAGAZINES, GLASS, METAL, ALUMINUM, TIN, HIGH DENSITY POLYETHYLENE PLASTICS, POLYETHYLENE TERAPHTHELATE PLASTICS, OTHER MATERIALS, TIRES |
| Alfred | YES | PLASTIC #1-7, GLASS , TIN, ALUMINUM, CORRUGATED CARDBOARD, NEWSPAPER & MAGAZINE, MIXED PAPER, PRESSBOARD, FLOURESCENT TUBES, WOOD |
| Biddeford | YES | RECYCLING CENTER - PAPER, CARDBOARD, MILK JUGS, PLASTIC # 1 & 2, TIN CANS, GLASS, STEEL, AUTOMOTIVE BATTERIES, BRUSH, LEAVES, GRASS, TIRES, OIL. TRANSFER STATION - LARGE ITEMS, DEMO DEBRIS |
| Buxton | YES | METAL CANS, ALUMINUM, GLASS, OPAQUE #2 PLASTIC, COLORED #2 PLASTIC, NEWSPAPER & MAGAZINE, CORRUGATED CARDBOARD, BOXBOARD, OFFICE PAPER & JUNK MAIL |
| Cornish | YES | CORRUGATED CARDBOARD, NEWSPAPER, RESIDENTIAL MIXED PAPER, METAL, ALUMINUM, TIN CANS, OTHER MATERIALS |
| Dayton | YES / SINGLE SORT | CARDBOARD, NEWSPAPER, BOOKS, SHOPPING BAGS, PLASTIC # 1-7, CANS, POTS & PANS, GLASS, FOIL, AEROSOL CANS, UNIVERSAL WASTE, FUEL, PAINT, ANTIFREEZE |
| Kennebunk | YES / TWO SORT | CARDBOARD, PAPER, BOOKS, MAGAZINES, PLASTIC # 1-7, GLASS, TIN CANS, ALUMINUM |
| Kennebunkport | YES / SINGLE SORT | PAPER, METAL TIN & ALUMINUM CANS, PLASTIC # 1-7, GLASS |
| North Berwick | YES | GLASS, TIN CANS, ALUMINUM CANS, NEWSPAPER & PHONE BOOKS, CORRUGATED CARDBOARD, WASTE OIL, SCRAP METAL, MIXED PAPER, MAGAZINES, BOOKS, BULKY WASTE |
| Old Orchard Beach | YES | CORRUGATED CARDBOARD, NEWSPAPER, GLASS, METAL, TIN, OTHER MATERIALS, YARD WASTE, CONSTRUCTION/DEMOLITION DEBRIS, TIRES, WOOD WASTE |
| Sanford | YES / SINGLE SORT | ALL PAPER, PLASTIC # 1-7, TIN CANS, ALUMINUM, POTS & PANS, GLASS |
| Shapleigh | YES | OFFICE PAPER, CORRUGATED CARDBOARD, NEWSPAPER, RESIDENTIAL MIXED PAPER, GLASS, METAL. |
| South Berwick | YES | PLASTIC # 1-7, ALUMINUM CANS, TIN CANS, GLASS, CARDBOARD, MIXED PAPER, METAL, WOOD, BRUSH, CONSTRUCTION/DEMOLITION DEBRIS |
| Wells | YES | CARDBOARD, PAPER, BOTTLES & CANS, PLASTIC # 1-7, OIL, GRASS, LEAVES, WOOD PALLETS |

Examples of Recycling Rates



Diversion %

Recycling has reduced the overall disposal costs of solid waste management in all the communities we serve.

ATTACHMENT 7

CIVIL AND CRIMINAL DISCLOSURE

State of Maine Department of Environmental Protection Disclosure Statement for NEWSME Landfill Operations LLC

August 2012

 Applicant:
 NEWSME Landfill Operations LLC.

 Immediate/Ultimate Parent Company:
 New England Waste Services of ME, Inc.

Criminal and Civil Record Disclosure is required by owner, operator or any person having a legal interest in the applicant or the facility and shall disclose whether said owner, operator or person 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. Such an adjudication or finding can be by means of a court order or consent decree, or by means of an administrative order or agreement.

Disclosure is required by:

Officers, Directors, Partners

All persons or business concerns having managerial or executive authority *and* having more than 5 percent of the equity in or debt of that business.

All persons or business concerns having a 25 percent or greater financial interest in the applicant.

Managerial person with operational responsibility of the facility

Corporate Disclosure:

A disclosure concerning the applicant is attached hereto.

Officers, Directors and Partners of NEWSME Landfill Operations LLC:

DIRECTORS

John W. CasellaDouglas R. CasellaEdwin JohnsonDirectorDirectorDirector

OFFICERS John W. Casella President Secretary

Edwin Johnson Vice President Treasurer

Douglas R. Casella Vice President PERSONS with MANAGERIAL / EXECUTIVE AUTHORITY:

Regional Vice President: Brian Oliver

EQUITY / DEBT OWNERSHIP:

One Hundred Percent of the Equity in NEWSME Landfill Operations LLC is held by New England Waste Services of ME, Inc. A disclosure form is attached with respect to New England Waste Services of ME, Inc.

Submitted to the Department of Environmental Conservation for the State of Maine, as required by the General Provisions of Chapter 400 of the Maine Department of Environmental Protection Regulations.

Dated this Day of August, 2012

Summer

John W. Casella, President and Secretary NEWSME Landfill Operations LLC

STATE OF VERMONT COUNTY OF RUTLAND

On the 27th day of August, 2012, personally appeared John W. Casella, President and Secretary of NEWSME Landfill Operations LLC and acknowledged the foregoing to be his free act and deed and the free act and deed of NEWSME Landfill Operations LLC.

luf treels

SHELLEY S. FIELD Notary Public, State of Vermont My Commission Expires Feb. 10, 2015

| | Maine Disclosure Form | | | | | | |
|--|--|--|--|--|--|--|--|
| Name | NEWSME Landfill Operations LLC | | | | | | |
| Business Address | 358 Emerson Mill Road, Hampden, ME | | | | | | |
| Home Address (if app.) | Not Applicable | | | | | | |
| Date of Birth | Incorporated September 18, 2003 | | | | | | |
| Social Security or Tax ID | 20-0735025 | | | | | | |
| Criminal Convictions | No * If yes – Give date and explanation of conviction, together with t State in which the conviction occurred | | | | | | |
| | XXXXX | | | | | | |
| Civil Violations | Explain any adjudicated civil violation(s) of environmental laws or rules administered by the State, other states, the United States or another country is the 5 years immediately preceding the filing of this application. | | | | | | |
| Explanation | None Adjudicated | | | | | | |
| Consent Decrees and Administrative Orders | List and explain administrative orders and consent decrees entered into by or administrative orders for violations of environmental laws administered by the Department, the State, other States, the United States or another country in the 5 years immediately preceding the filing of this application. | | | | | | |
| | None. | | | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement action not already provided in which disclosing entity or person is a party and wh concerns environmental laws administered by the Department or State. | | | | | | |
| Civil Proceedings: | None. | | | | | | |
| Other Information | List any agencies outside the State of Maine that have regulatory responsibilities over the applicant in connection with its collection, transportation, treatment, storage or disposal of solid or hazardous wastes and any other information required by the Department of the Attorney General that relates to the enforcement history or character of the applicant. | | | | | | |
| | Army Corps of Engineers U.S. Environmental Protection Agency | | | | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity Interest | None. | | | | | | |

State of Maine

Department of Environmental Protection Disclosure Statement for New England Waste Services of ME, Inc.

August 2012

Applicant: NEWSME Landfill Operations LLC

Criminal and Civil Record Disclosure is required by owner, operator or any person having a legal interest in the applicant or the facility and shall disclose whether said owner, operator or person 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. Such an adjudication or finding can be by means of a court order or consent decree, or by means of an administrative order or agreement.

Disclosure is required by:

Officers, Directors, Partners

All persons or business concerns having managerial or executive authority *and* having more than 5 percent of the equity in or debt of that business.

All persons or business concerns having a 25 percent or greater financial interest in the applicant.

Managerial person with operational responsibility of the facility

Corporate Disclosure:

A disclosure concerning the applicant is attached hereto.

Officers, Directors and Partners of New England Waste Services of ME, Inc:

DIRECTORS

John W. Casella Douglas R. Casella Director

OFFICERS

John W. Casella President Secretary Brian Oliver Vice President

Edwin Johnson Vice President Treasurer Jay Kilbourn Vice President

Douglas R. Casella Vice President

PERSONS with MANAGERIAL / EXECUTIVE AUTHORITY:

Regional Vice President: Brian Oliver

EQUITY / DEBT OWNERSHIP:

One Hundred Percent of the Equity in New England Waste Services of ME, Inc. is held by Casella Waste Systems, Inc. A disclosure form is attached with respect to Casella Waste Systems, Inc.

Submitted to the Department of Environmental Conservation for the State of Maine, as required by the General Provisions of Chapter 400 of the Maine Department of Environmental Protection Regulations.

Dated this May of August, 2012

John W. Casella, President and Secretary New England-Waste Services of ME, Inc.

STATE OF VERMONT COUNTY OF RUTLAND

On the Orthday of August, 2012, personally appeared John W. Casella, President and Secretary of New England Waste Services of ME, Inc. and acknowledged the foregoing to be his free act and deed and the free act and deed of New England Waste Services of ME, Inc.

onelley f:

Notary Public

SHELLEY S. FIELD Notary Public, State of Vermont My Commission Expires Feb. 10, 2015

| Name | New England Waste Services of ME, Inc. | | | | | | |
|---|--|---|--|--|--|--|--|
| Business Address | 135 Presumpscot Street, Unit #1, Portland, ME 04102 | | | | | | |
| Home Address (if app.) | Not Applicable | | | | | | |
| Date of Birth | Incorporated October 11, 1974 | | | | | | |
| Social Security or Tax ID | | | | | | | |
| Criminal Convictions | No * If yes – Give date and explanation of conviction, together with the State in which the conviction occurred | | | | | | |
| | XXXXX | | | | | | |
| Civil Violations | adminis | any adjudicated civil violation(s) of environmental laws or rules stered by the State, other states, the United States or another country in ears immediately preceding the filing of this application. | | | | | |
| Explanation | | djudicated | | | | | |
| Consent Decrees and Administrative Orders | adminis Departr | d explain administrative orders and consent decrees entered into by or strative orders for violations of environmental laws administered by the nent, the State, other States, the United States or another country in the immediately preceding the filing of this application. | | | | | |
| | None | | | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement action not already provided in which disclosing entity or person is a party and which concerns environmental laws administered by the Department or State. | | | | | | |
| Civil Proceeding | | see attached | | | | | |
| Other Information | List any agencies outside the State of Maine that have regulatory responsibilities over the applicant in connection with its collection, transportation, treatment, storage or disposal of solid or hazardous wastes and any other information required by the Department of the Attorney General that relates to the enforcement history or character of the applicant. | | | | | | |
| | Army Corps of Engineers U.S. Environmental Protection Agency Pennsylvania Department of Environmental Protection New York State Department of Environmental Conservation Vermont Agency of Natural Resources New Hampshire Department of Environmental Services Massachusetts Department of Environmental Protection Rhode Island Department of Environmental Management Connecticut Department of Environmental Protection The Department of Motor Vehicles in the following states: PA, NY, VT, NH, MA, RI, CT | | | | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity InterestNew England Waste Services of ME, Inc. is the owner of: NEWSME Landfill Operations LLC (Applicant) and EcoGas 25 Greens Hill Lane Rutland, VT 05701 | | | | | | | |

| | | Maine Disclosure Form | | | | | | | |
|--|--|---|--|--|--|--|--|--|--|
| Name | Douglas R. Casella | | | | | | | | |
| Business Address | 25 Gree | 25 Greens Hill Lane, Rutland, Vermont 05701 | | | | | | | |
| Home Address (if app.) | 3 Stone Hollow Road Mendon, Vermont 05701 | | | | | | | | |
| Date of Birth | 06/23/1 | 06/23/1956 | | | | | | | |
| Social Security or Tax ID | 009-44- | -9325 | | | | | | | |
| Criminal Convictions | No | * If yes – Give date and explanation of conviction, together with the State in which the conviction occurred | | | | | | | |
| | XXXXX | | | | | | | | |
| Civil Violations | Explain any adjudicated civil violation(s) of environmental laws or rules administered by the State, other states, the United States or another in the 5 years immediately preceding the filing of this application. | | | | | | | | |
| Explanation | No Vio | | | | | | | | |
| Consent Decrees and Administrative Orders | List and explain administrative orders and consent decrees entered into by a administrative orders for violations of environmental laws administered by Department, the State, other States, the United States or another country in 5 years immediately preceding the filing of this application. | | | | | | | | |
| | None | | | | | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement action not already provided in which disclosing entity or person is a party and which concerns environmental laws administered by the Department or State. | | | | | | | | |
| | None | | | | | | | | |
| Other Information | respons transpo any oth relates | y agencies outside the State of Maine that have regulatory sibilities over the applicant in connection with its collection, rtation, treatment, storage or disposal of solid or hazardous wastes and er information required by the Department of the Attorney General that to the enforcement history or character of the applicant. | | | | | | | |
| | See Ap | plicant Disclosure | | | | | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity Interest | stores c | rest equal or exceeding 5% of any entity that collects, transports, treats, or disposes of solid or hazardous waste, per Chapter 400, Maine nent of Environmental Protection Regulations. | | | | | | | |
| | Date | 130/2012 Douglas R. Casella | | | | | | | |

STATE OF VERMONT COUNTY OF RUTLAND

On the 3^{H} day of August, 2012, personally appeared Douglas R. Casella personally appeared and acknowledged the foregoing to be his free act and deed.

t My Commission Expires 2/2015

Notary Public

| Name | Edwin Johnson | | | | | | |
|--|--|---|---|--|--|--|--|
| Business Address | | 25 Greens Hill Lane, Rutland, Vermont 05701 | | | | | |
| Home Address (if app.) | | | | | | | |
| Date of Birth | 09/01/ | 1956 | | | | | |
| Social Security or Tax ID | 263-27-8396 | | | | | | |
| Criminal Convictions | No | | | | | | |
| | XXXXX | | | | | | |
| Civil Violations | admini | stered by the State, o | ril violation(s) of environmental laws or rules other states, the United States or another in the 5 g the filing of this application. | | | | |
| Explanation | None | | | | | | |
| Consent Decrees and Administrative Orders | admini Depart | strative orders for vie ment, the State, other | tive orders and consent decrees entered into by or olations of environmental laws administered by the r States, the United States or another country in the ing the filing of this application. | | | | |
| | None | | | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement action not already provided in which disclosing entity or person is a party and which concerns environmental laws administered by the Department or State. | | | | | | |
| | None | | | | | | |
| Other Information | respons transpo any oth relates | sibilities over the app ortation, treatment, st her information requi to the enforcement h | the State of Maine that have regulatory oblicant in connection with its collection, orage or disposal of solid or hazardous wastes and red by the Department of the Attorney General that istory or character of the applicant. | | | | |
| | See Ap | plicant Disclosure | | | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity Interest | stores of | or disposes of solid o | ing 5% of any entity that collects, transports, treats, r hazardous waste, per Chapter 400, Maine tal Protection Regulations. | | | | |
| | 8 | 2712012 | Sall- | | | | |
| | Date | p llo-it | Signature | | | | |
| | | | Edwin Johnson | | | | |

Maine Disclosure Form

STATE OF VERMONT COUNTY OF RUTLAND

On the 27th day of August, 2012, personally appeared Edwin Johnson and acknowledged the foregoing to be his free act and deed.

Notary Public

SHELLEY S. FIELD Notary Public, State of Vermont My Commission Expires Feb. 10, 2015

{Johnson Personal.1}Page 1 of 1
| Name | Lohn W | | e Disclosure Form | | | |
|--|--|--|---|--|--|--|
| Business Address | John W. Casella 25 Greens Hill Lane, Rutland, Vermont 05701 | | | | | |
| Home Address (if app.) | | | | | | |
| · · · · · · | 67 Ives Avenue, Rutland, Vermont 05701 | | | | | |
| Date of Birth | 12/05/1 | | | | | |
| Social Security or Tax ID | 008-40- | | | | | |
| Criminal Convictions | No * If yes – Give date and explanation of conviction, together with the State in which the conviction occurred | | | | | |
| | XXXXX | XXXXX | | | | |
| Civil Violations | adminis | Explain any adjudicated civil violation(s) of environmental laws or rules administered by the State, other states, the United States or another in the 5 years immediately preceding the filing of this application. | | | | |
| Explanation | None | initeditately preceding | , the ming of this application. | | | |
| Consent Decrees and Administrative Orders | List and explain administrative orders and consent decrees entered into by or administrative orders for violations of environmental laws administered by the Department, the State, other States, the United States or another country in the 5 years immediately preceding the filing of this application. | | | | | |
| | None | | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement action not already provided in which disclosing entity or person is a party and which concerns environmental laws administered by the Department or State. None | | | | | |
| Other Information | List any agencies outside the State of Maine that have regulatory responsibilities over the applicant in connection with its collection, transportation, treatment, storage or disposal of solid or hazardous wastes and any other information required by the Department of the Attorney General that relates to the enforcement history or character of the applicant. | | | | | |
| | See Ap | plicant Disclosure | | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity Interest | stores o | r disposes of solid or | ng 5% of any entity that collects, transports, treats, hazardous waste, per Chapter 400, Maine al Protection Regulations. | | | |
| | | 8/27/2012 | ZUDAMMAX | | | |
| | Date | | Signature | | | |
| | | | John W. Casella | | | |

STATE OF VERMONT COUNTY OF RUTLAND

On the 2H day of August, 2012, personally appeared John W. Casella and acknowledged the foregoing to be his free act and deed.

Notary Public

SHELLEY S. FIELD Notary Public, State of Vermont My Commission Expires Feb. 10, 2015

{JCasella Personal.1}Page 1 of 1

| | ····· | | sclosure Form | | | | |
|---|--|--|--|--|--|--|--|
| Name | Brian G. Oliver | | | | | | |
| Business Address | 110 Main Street, Suite 1308, Saco, Maine 04072 | | | | | | |
| Home Address (if app.) | 10 Dunn Estates Drive, Scarborough Maine 04074 | | | | | | |
| Date of Birth | ~~~ | 07-23-1961 | | | | | |
| Social Security or Tax ID | 008-48- | 008-48-5376 | | | | | |
| Criminal Convictions | No | | d explanation of conviction, together with the | | | | |
| | | State in which the conv | Iction occurred | | | | |
| | | <u> </u> | | | | | |
| Civil Violations | adminis | Explain any adjudicated civil violation(s) of environmental laws or rules administered by the State, other states, the United States or another in the 5 years immediately preceding the filing of this application. | | | | | |
| Explanation | None | mildadely proceeding the | ining of this upproution. | | | | |
| Consent Decrees and | | l explain administrative o | rders and consent decrees entered into by or | | | | |
| Administrative Orders | adminis Departr | List and explain administrative orders and consent decrees entered into by or administrative orders for violations of environmental laws administered by the Department, the State, other States, the United States or another country in the 5 years immediately preceding the filing of this application. | | | | | |
| | None | <u></u> | ***** | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement action not already provided in which disclosing entity or person is a party and which concerns environmental laws administered by the Department or State. | | | | | | |
| | None | | | | | | |
| Other Information | List any agencies outside the State of Maine that have regulatory responsibilities over the applicant in connection with its collection, transportation, treatment, storage or disposal of solid or hazardous wastes and any other information required by the Department of the Attorney General that relates to the enforcement history or character of the applicant. See Applicant Disclosure | | | | | | |
| | | | | | | | |
| Entities in Which Person | | | | | | | |
| or Entity Executing | | | | | | | |
| Disclosure has 5% or Greater Equity Interest | None | | | | | | |
| | | 8129/12 | B&Q= | | | | |
| | Date | | Signature | | | | |
| | | | Brian G. Oliver | | | | |
| | | | <u></u> | | | | |

Maine Disclosure Form

STATE OF MAINE COUNTY OF YORK

| On the <u>29th</u> day of <u>August</u> | 2012, | personally | appear | ed Brian G | . Oliver and |
|---|-------|------------|-------------|------------|--------------|
| acknowledged the foregoing to be his free act and | deed. | | $\langle $ | | 0 |
| | | Lur | m | marti | لل ا |

Notary Public

Peggy S. Martel, Notary Public State of Maine My Commission Expires on 4/18/2017

| | | Mai | ne Disclosure Form | | | |
|--|--|--|--------------------|--|--|--|
| Name | Jonathan Kilbourn | | | | | |
| Business Address | 13 Presumpscot Street, Unit #1, Portland, Maine 04103 | | | | | |
| Home Address (if app.) | | 14 Bourne Street, Kennebunk, Maine 04043 | | | | |
| Date of Birth | 05/08/1 | | | | | |
| Social Security or Tax ID | 019-36- | 019-36-9320 | | | | |
| Criminal Convictions | No * If yes – Give date and explanation of conviction, together with the State in which the conviction occurred | | | | | |
| | XXXXX | | | | | |
| Civil Violations | adminis | Explain any adjudicated civil violation(s) of environmental laws or rules administered by the State, other states, the United States or another in the 5 years immediately preceding the filing of this application. | | | | |
| Explanation | None | | | | | |
| Consent Decrees and Administrative Orders | List and explain administrative orders and consent decrees entered into by or administrative orders for violations of environmental laws administered by the Department, the State, other States, the United States or another country in the 5 years immediately preceding the filing of this application. | | | | | |
| a | None | | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement action not already provided in which disclosing entity or person is a party and which concerns environmental laws administered by the Department or State. | | | | | |
| | None | | | | | |
| Other Information | List any agencies outside the State of Maine that have regulatory responsibilities over the applicant in connection with its collection, transportation, treatment, storage or disposal of solid or hazardous w any other information required by the Department of the Attorney G relates to the enforcement history or character of the applicant.See Applicant Disclosure | | | | | |
| | 1 | | | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity Interest | None | | \bigcap | | | |
| | August | 29, 2012 | 6.1 | | | |
| | Date | | Signature | | | |
| | Jonathan Kilbourn | | | | | |

Maine Disclosure Form

STATE OF MAINE COUNTY OF YORK

On the 29th day of August 2012, personally appeared Jay Kilbourn and acknowledged the foregoing to be his free act and deed.

David A. Verty Notary Public My commission expires November 26, 2016

(00003618.1)Page 1 of 1

| Name of Entity Cited | Location of Alleged Violation | Name of Citing Entity | Type of Notice | Date of Inspection or Incident | Date of Violation/Order | Nature of Violation/Alleged Violation | Disposition | Penalty |
|---|--|---|------------------------------------|-----------------------------------|-------------------------|---|---|-------------------|
| Casella Waste Management, Inc. dba New England Organics (should be New England Waste Services of ME, Inc.) | Roberts Farm Field, Weathersfield, VT | VTDEC Environmental Enforcement Division | Enforcement Action | November 12, 2007 | March 4, 2009 | NEO brokered certified granulated biosolid pelletized fertilizer generated by New England Fertilizer Company (NFCO) in Quincy, MA to the Roberts Farm in Weathersfield, VT. On November 12th ANR responded to odor complaints and allege that NEO "unlawfully disposed of solid waste outside a certified facility and caused a nuisance to the public". | NEWSME/NEO contacted ANR counsel on March 12, 2009 to discuss and request to meet. On March 19, 2009, ANR forwarded Investigation file. NEWSME/NEO met with ANR on June 9, 2009; NEO is to provide ANR with additional information in writing. On October 7, 2009 we received a letter from ANR that no further action will be taken. | one |
| New England Waste Services of ME, Inc. (aka Pinetree Landfill) | Pinetree Landfill, Hampden, ME | Town of Hermon, Maine | Administrative Show Cause Order | Not Applicable | July 23, 2009 | On July 23, 2009 the Town of Hermon, Maine issued an Administrative Show Cause Order to Pinetree Landfill alleging that the facility was in violation of the Wastewater Discharge Permit #S018 and the Sewer Use Ordinance of the Town of Hermon. | On August 26, 2009 PTLF representatives met with the Town of Hermon and Bangor WWTF to discuss concerns about impacts to the sewer system, including; flows, concentrations of H2S at Odlin Rd Pump Station and cost of maintenance. PTLF met with Hermon and Bangor WWTF again on October 26, 2009. The Town worked with PTLF to develop BMPs and entered into a MOU to resolve the matter; PTLF agreed to pay for sewer system improvements. | one |
| New England Waste Services of ME, Inc. (aka Pinetree Landfill) | Pinetree Landfill, Hampden, ME | Town of Brewer, Maine WWTF | Notice of Violation | February 1, 2010 | April 1, 2010 | NOV issued to PTLF for leachate analysis above allowable arsenic level | Analysis level was 0.102 mg/L which was 0.002 mg/L above the limit of 0.1 mg/L, although the overall average was 0.0951 mg/L. We responded in writing on April 6, 2010; within 10 days of issuance as required in the NOV. | one anticipated. |
| New England Waste Services of ME, Inc. (aka Pinetree Landfill) | Pinetree Landfill, Hampden, ME | Bangor WWTF | Notice of Violation | June 22, 2012 | June 29, 2012 | Notice of Violation was issued by the Bangor WWTF to NEWSME for releasing a load of tank bottom sludge from the leachate storage tank during routine leachate tank cleaning June 20-21, 2012. | Response submitted. See Response to July 9, 2012 Administrative Re Order below. | esolution Pending |
| New England Waste Services of ME, Inc. (aka Pinetree Landfill) | Pinetree Landfill, Hampden, ME | Town of Hermon, Me | Administrative Order | May 2, 2011 | July 9, 2012 | Administrative Order (AO) issued to NEWSME (Pinetree Landfill) by the Town of Hermon for allegedly releasing a slug of tank bottom sludge during routine leachate tank cleaning. Leachate from the landfill is piped to the Bangor WWTF via Hermon sewer system. | Repsonse was submitted on July 20, 2012 - PTL disagreed with the Re allegations outlined in the AO; no maintenance activiities resulted in any release of sludge. Any discharge to the Hermon WWTF was landfill leachate, any and all sludge from the cleaning was disposed of at the Juniper Ridge Landfill. Copies of disposal tickets were provided with the response. The Town of Hermon responded stating that they disagreed with the PTL's position that the conditions of the AO remain fully active; they requested that the submission of the Standard Operating Procedures that indicates how any release will be prevented during future maintnenance activities bt submitted by August 10th, 2012. PTL staff met with the Town of Hermon on August 6th, 2012. | esolution Pending |

Criminal or Civil Record for the Bureau of General Services

August 24, 2012

All applicants for a new or amended license, or transfer of a solid waste license, shall submit, at the time of application, a disclosure statement with the Department containing information, as described in Maine Department of Environmental Protection's Solid Waste Management Rules, Chapter 400, Section 12.

1. The facility, known as Juniper Ridge Landfill, is owned by the State of Maine, through the Bureau of General Services, 77 State House Station, Augusta, Maine 04333-0077. The State's Federal Employer Identification number is 016000001. The Director of the Bureau of General Services is Donald McCormack, 77 State House Station, Augusta, Maine 04333-0077

2. The Bureau of General Services does not hold an equity interest in any company which collects, transports, treats, stores or disposes of solid or hazardous waste.

3. The Bureau of General Services has no felony conviction or criminal convictions of environmental laws of any state or county.

4. The Bureau of General Services has no adjudicated civil violations of environmental laws.

5. The Bureau of General Services is not a party to any ongoing court proceedings, consent agreements or enforcement actions concerning environmental laws administered by the DEP or the State.

6. The U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency have regulatory responsibility over the Agency in connection with the disposal of solid waste at the Juniper Ridge Landfill site.

7. Neither the DEP nor the Maine Attorney General's Office has requested information, other than listed here, relating to the character of the Bureau of General Services.

8. The applicant has not entered into any administrative consent agreements or consent decrees for violations of environmental laws.

ATTACHMENT 8

LEACHATE TREATMENT AGREEMENTS AND PRETREATMENT STANDARDS FOR THE CITY OF BREWER MAINE

AMENDMENT TO LEACHATE DISPOSAL AGREEMENT

This Amendment to Leachate Disposal Agreement ("Amendment"), made and entered into as of this 2nd day of November, 2006 by and between RED SHIELD ENVIRONMENTAL, LLC, a Delaware limited liability company ("Red Shield"), and NEW ENGLAND WASTE SERVICES OF ME, LANDFILL OPERATION COMPANY, LLC ("NEWSMELOC"), a Maine limited liability company with a place of business in Saco, Maine.

WITNESSETH:

WHEREAS, NEWSMELOC and Fort James Operating Company ("FJ") entered into a Leachate Disposal Agreement (the "Agreement"), dated as of February 5, 2004;

WHEREAS, FJ has ceased operation of the WTP (as defined in the Agreement) and, on or about this date, is conveying the WTP and certain other assets of FJ located in Old Town, Maine to the State of Maine, acting by and through the Maine Rural Development Authority (the "State"), which in turn, on or about this date, is conveying such assets to Red Shield; and

WHEREAS, in order to induce Casella Waste Systems, Inc., an affiliate of NEWSMELOC, to enter into certain agreements in connection with such asset transfers, all of FJ's rights and obligations under the Agreement have been assigned to and assumed by Red Shield, under an assignment and assumption agreement of near or even date herewith, to which assignment and assumption NEWSMELOC hereby consents; and

WHEREAS, the parties are willing to agree to certain amendments to the Agreement;

NOW, THEREFORE, in consideration of the terms and conditions of this Amendment and the mutual benefits to be derived, the parties hereto agree as follows:

1. The recitals and identification of the parties to this Amendment set forth above are incorporated by this reference as though fully set forth herein.

2. The Agreement is hereby amended to cause all references to "leachate" to mean "the liquid or semi-solid residue from waste deposited at the Landfill and (i) either collected within a liner system to be installed at the Landfill, or (ii) otherwise collected at the Landfill for disposal."

1

 $\frac{1}{2}$

3. The first recital of the Agreement is hereby amended and restated in its entirety as follows:

WHEREAS, FJ owns and intends in the future to operate a certain Wastewater Treatment Plant located at the FJ paper mill in Old Town, Maine (the "WTP"), that is intended to provide for the treatment and disposal of wastewater pursuant to duly issued and valid licenses and permits; and

4. The definition of Landfill Sale Agreement is hereby amended to mean the Amended and Restated Agreement Regarding Solid Waste Disposal Facility Acquisition and Operation dated February 5, 2004, as amended by the First Amendment to the Amended and Restated Agreement Regarding Solid Waste Disposal Facility Acquisition and Operation of near or even date herewith.

5. The fifth recital if the Agreement is hereby amended by deleting the words "to the WTP" therefrom.

6. Section 1.1 of the Agreement is hereby amended and restated in its entirety as follows:

1.1 During the term of the capacity commitments under Section 5.1 of the Landfill Sale Agreement, FJ or its successors and assigns or successor owners, shall provide at least one source for treatment of leachate produced at the Landfill (the "Source" or "Sources"), for a five-year rolling average of up to fifteen million (15,000,000) gallons of leachate per year (the "Disposal Average"), which may include by way of example and not in limitation, processing at its WTP subject to the conditions specified herein, processing at the Old Town waste water treatment facility, and/or processing at the Brewer waste water treatment facility; provided, however, that in no event shall FJ be obligated to provide one or more sources of treatment for more than seventeen million five hundred thousand (17,500,000) gallons of leachate in any single year.

The Disposal Average will be calculated over a rolling five-year period. At the end of each five-year period, any unused capacity shall be credited to NEWSMELOC for the following rolling five-year period, and FJ shall bill NEWSMELOC for the disposal of any leachate in excess of the Disposal Average for the cost incurred by FJ with respect to such excess.

7. Section 1.2 of the Agreement is hereby amended and restated in its entirety as follows:

1.2 Each owner and/or operator of a Source shall only be required to receive and treat leachate from the Landfill at such Source in accordance with all applicable laws, regulations, permits, approvals and the provisions set forth herein during the term of this Agreement.

8. Section 1.3 of the Agreement is hereby amended by replacing the word "WTP" with the following: "Source designated by FJ from time to time and at any time, at NEWSMELOC's sole cost and expense, subject, however, to the reimbursement provisions hereof,".

9. Section 1.4 of the Agreement is hereby amended and restated in its entirety as follows:

1.4 NEWSMELOC shall exercise its best and most diligent efforts to cooperate with FJ to establish a leachate disposal agreement with the City of Old Town as one of the Sources.

10. Section 3.1 of the Agreement is hereby amended to read in its entirety as follows:

3.1 There shall be no fee for the treatment of Landfill leachate at the WTP. Effective as of the earlier of (a) the Start Date (as defined in a certain "Old Town Leachate Agreement" by and among Red Shield, NEWSMELOC, and the City of Old Town, of near or even date hereof), or (b) fifty-six (56) days following the date hereof, FJ shall reimburse NEWSMELOC for the cost of disposal fees assessed to, and incurred by NEWSMELOC for the disposal of leachate at the other Sources designated by FJ, not including transportation costs, testing costs, costs of pretreating leachate, or other costs (the "Additional Costs"); provided, however, that in the event the Additional Costs at Sources other than WTP exceed the Additional Costs NEWSMELOC would incur to dispose of leachate at the WTP, under the terms of this Agreement, FJ shall reimburse NEWSMELOC for the difference within thirty (30) days after receipt of NEWSMELOC's invoice thereof. For the year ending on the first anniversary of the Start Date, the disposal fee for which FJ shall reimburse NEWSMELOC shall not exceed \$300,000 plus fifty percent (50%) of any incremental disposal costs (in excess of \$300,000) and any Additional Costs incurred by NEWSMELOC that exceed the Additional Costs NEWSMELOC would incur to dispose of leachate at the WTP.

11. Articles 4, 5 and 6 of the Agreement shall only apply to the disposal of leachate at WTP.

12. Section 4.4.8 of the Agreement is hereby deleted in its entirety.

3

13. The Agreement is hereby amended by inserting Article 6A after Article 6 as follows:

ARTICLE 6A. RULES AND REQUIREMENTS AT OTHER SOURCES

NEWSMELOC shall comply with, observe and perform at its sole cost and expense, subject to section 3.1 of the Agreement, as amended hereby, the requirements of each other Source regarding leachate disposal procedures, limitations on leachate, and leachate sampling and monitoring requirements, including, without limitation, any chemical pretreatment of the leachate.

14. Section 7.3 of the Agreement is hereby amended by replacing the words "accept and treat leachate from NEWSMELOC" in the third line with the following "dispose, or cause to be disposed, leachate from NEWSMELOC, at any and all Sources,".

15. The Agreement is hereby amended by inserting the following section:

12.3 Either party may terminate this Agreement in the event that NEWSMELOC is recirculating all of the leachate produced at the Landfill, and has obtained all permits, licenses, and approvals necessary in order to do so.

16. Section 14.7 of the Agreement is hereby amended to read in its entirety as follows:

14.7 This Agreement shall not be assigned by either party without the written consent of the other, which consent shall not be unreasonably withheld or delayed. Notwithstanding the preceding sentence, however, this Agreement may be assigned by NEWSMELOC without consent to any entity controlling, controlled by, or under common control with NEWSMELOC, provided, however, that such entity shall by virtue of such assignment assume all of the liabilities, obligations and commitments of NEWSMELOC hereunder and provided further that NEWSMELOC shall not be relieved of any such liabilities, obligations and commitments hereunder.

17. The Agreement is hereby amended by deleting in its entirety the "Acknowledgement of Arbitration" provision therefrom.

18. Notwithstanding anything in the Agreement to the contrary, Red Shield shall have the unrestricted right to mortgage and pledge its rights under the

4

Agreement without the State's consent, and encumber the Agreement with any type of security interest to secure debt, or other similar instrument creating a lien or other encumbrance on Red Shield's interest in the Agreement, regardless of the priority thereof (hereinafter, "Security Interest," and each lender with a Security Interest, a "Lender"), any assignment thereof and any modification or amendment of any of the terms thereof, including, without limitation, any extension, renewal or refinancing of any indebtedness secured thereby or an additional advance secured by any Security Interest or any additional Security Interest given to secure the same. A Lender, or its designee, or any purchaser in foreclosure proceedings (including, without limitation, an entity formed by a Lender) may become a legal owner of Red Shield's interest under the Agreement through such foreclosure proceedings or by assignment of Red Shield's interest under the Agreement in lieu of foreclosure. A Lender may enforce its rights under its Security Interest and acquire title to Red Shield's interest in the Agreement in any lawful way. The parties agree that nothing in the Agreement shall be deemed to impose any liability or obligation on (i) any mortgagee or secured party that may at any time hold a mortgage lien on or a security interest in the Agreement, or (ii) any party that becomes a mortgagee in possession, secured party in possession or receiver with respect to the Agreement. With respect to a party that is assigned the rights under the Agreement through a mortgage foreclosure, secured party sale or deed or bill of sale in lieu thereof, such party shall assume the obligations and liabilities under the Agreement first arising as of the date of such assignment.

19. In all other respects, the Agreement shall remain in full force and effect in accordance with its terms.

[Signature page follows]

IN WITNESS WHEREOF, the undersigned have caused this Amendment to be executed and delivered by their duly authorized representatives as of the day and year first above written.

> NEW ENGLAND WASTE SERVICES OF ME, LANDFILL OPERATING COMPANY, LLC

By: Name: Knan Olovy Title:

RED SHIELD ENVIRONMENTAL, LLC

By: Name: Edword 7. Pastrusti Title: chamin

ASSIGNMENT AND ASSUMPTION OF LEASES AND CONTRACTS

THIS ASSIGNMENT AND ASSUMPTION OF LEASES AND CONTRACTS ("Agreement") is made effective as of this 3/2 day of October, 2008 ("Effective Date"), by and among **Red Shield Environmental**, LLC, a Delaware limited liability company ("<u>Red Shield</u>"), **RSE Pulp & Chemical**, LLC, a Delaware limited liability company (together with Red Shield, "Assignors"), and **Red Shield Acquisition**, LLC, a Delaware limited liability company ("<u>Assignes</u>").

RECITALS

WHEREAS, Assignors filed a voluntary petition for relief under Chapter 11 of the Bankruptcy Code on June 27, 2008 and, since that time, Assignors have remained in possession of their property and continued to operate their businesses pursuant to Sections 1107 and 1108 of the Bankruptcy Code; and

WHEREAS, Assignors, intending to sell substantially all of their business assets and to assign certain of their contractual and Lease obligations to Assignee, entered into an Asset Purchase Agreement, dated as of October 22, 2008, by and among Assignors and Assignee (the "Asset Purchase Agreement"); and

WHEREAS, pursuant to the Asset Purchase Agreement, Assignors desire to assign to Assignee their entire interest in and to the Assumed Contracts and the Leases listed on Schedule 2.1(a) of the Asset Purchase Agreement as of the Closing (the "<u>Assumed Leases</u>"), all of which are further described on <u>Exhibit A</u> attached hereto and made a part hereof, and Assignee desires to accept such assignment and to assume all liabilities and obligations of each Assignor under the Assumed Contracts and Assumed Leases, in each case only to the extent arising and relating to the period from and after the Effective Date, consistent with the terms of the Asset Purchase Agreement; and

WHEREAS, capitalized terms used herein without definition shall have the meanings ascribed to such terms in the Asset Purchase Agreement.

NOW, THEREFORE, in consideration of the covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. <u>Assignment</u>. Assignors, for themselves, their successors and assigns, hereby irrevocably convey, sell, assign, set over and transfer unto Assignee as of the Effective Date, all of Assignors' right, title and interest in and to the Assumed Contracts and Assumed Leases, the receipt and delivery of each of which is expressly acknowledged by Assignee; such assignment is being made pursuant to the terms of, and subject to the limitations set forth in, the Asset Purchase Agreement.

2. <u>Assumption</u>. In accordance with the Asset Purchase Agreement and the Assumed Contracts and Assumed Leases, Assignee, for itself, its successors and assigns, hereby assumes and agrees to observe, keep, carry out, perform and satisfy all Assumed Liabilities under the Assumed Contracts and Assumed Leases from and after the Effective Date (the "Assumed <u>Obligations</u>"). Assignee and Assignors hereby covenant and agree that Assignee shall be directly liable under each Assumed Contract and Assumed Lease for the payment, performance, observance and satisfaction of all of the Assumed Obligations when and in the manner required by each Assumed Contract and Assumed Lease in the same manner as if Assignee had originally been named as an original party under each Assumed Contract and Assumed Lease and had executed and delivered the same. Without limiting the foregoing, Assignee acknowledges that, to the extent any payments are required to cure defaults under the Assumed Contracts and Leases in accordance with 11 U.S.C. § 365, Assignee shall be solely responsible for the making of such payments.

3. <u>Indemnification</u>. Assignee shall defend, indemnify and hold Assignors harmless from and against any and all damages, losses, liabilities, judgments, suits, actions, causes of action, equitable proceedings, claims, demands, costs and expenses (including, without limitation, reasonable attorneys' fees and charges) arising out of, as a result of or incidental to any failure by Assignee for whatever reason to observe, keep, carry out, perform and satisfy any or all of the Assumed Obligations as, with and in the manner required by the Assumed Contracts and Assumed Leases.

4. <u>Further Assurances</u>. Assignors, at Assignee's expense, agree to execute all papers and perform such other acts, as Assignee may deem necessary to secure for Assignee the rights herein assigned.

5. <u>Headings</u>. The headings used herein are inserted for convenience of reference only and shall not define, limit, extend or describe the scope of this Agreement or affect the construction or interpretation hereof.

6. <u>Binding Effect</u>. This Agreement shall be binding upon, and shall inure to the benefit of and be enforceable by, the parties hereto and their respective successors and permitted assigns.

7. <u>Complete Agreement; Purchase Agreement Controls</u>. This Agreement and the Asset Purchase Agreement set forth the entire agreement by and between Assignors and Assignee concerning the subject matter hereof; provided, however, nothing in this Agreement shall expand upon or limit any right, benefit, responsibility, liability or obligation of Assignee or Assignors arising under the Asset Purchase Agreement, which Asset Purchase Agreement shall govern as to the representations and warranties of the parties with respect to the Assumed Contracts and Assumed Leases transferred pursuant to this Agreement. In the event of a conflict between the provisions of this Agreement, on the one hand, and the provisions of the Asset Purchase Agreement shall control.

8. <u>Governing Law; Jurisdiction</u>. This Agreement shall be governed, construed and interpreted by, and in accordance with, the laws of the State of Maine, excluding choice of law rules or rulings. This Agreement is subject to any order of the Bankruptcy Court applicable hereto.

9. <u>Counterparts; Facsimile Signatures</u>. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall

constitute one and the same instrument. This Agreement may be executed and delivered by facsimile.

[Signatures are on the following page]

IN WITNESS WHEREOF, this Agreement has been duly executed by each of the parties hereto with the intention that this Agreement be effective as of the Effective Date.

RED SHIELD ENVIRONMENTAL, LLC

By:_

Name: Edward T. Paslawski Title: Manager

RSE PULP & CHEMICAL, LLC

By:

Name: Edward T. Paslawski Title: Manager

RED SHIELD ACQUISITION, LLC

By: ____

Name: Lynn Tilton Title: Sole Manager IN WITNESS WHEREOF, this Agreement has been duly executed by each of the parties hereto with the intention that this Agreement be effective as of the Effective Date.

RED SHIELD ENVIRONMENTAL, LLC

By:_____

Name: Edward T. Paslawski Title: Manager

RSE PULP & CHEMICAL, LLC

By:_____ Name: Edward T. Paslawski Title: Manager

RED SHIELD ACQUISITION ALC By: Name: Hynn Tilton Title: Sole Manager

EXHIBIT A

ASSUMED CONTRACTS AND ASSUMED LEASES

- 1. Labor Agreement between Red Shield Environmental, LLC (Old Town, Maine) and United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union (USW) AFL-CIO, CLC, on behalf of its Local Union #4-0080 (November 2, 2006 September 30, 2011).
- 2. NEWSME, LLC (Landfill)
 - A) Amendment and Restatement of Agreement Regarding Solid Waste Disposal Facility Acquisition and Operation, dated February 5, 2004, as amended from time to time.
 - B) Fuel Supply Agreement, dated as of November 2, 2006.
 - C) Old Town Leachate Disposal Agreement, dated as of November 2, 2006.
 - D) Leachate Disposal Agreement, dated as of February 5, 2004, as amended by Amendment to Leachate Disposal Agreement, dated as of November 2, 2006.
- 3. Central National Gottesman, Inc.

Woodpulp Sales Agency Agreement, dated as of April 13, 2007.

4. Linde Inc./BOC (Oxygen)

Product Agreement, dated by last signature as of August 14, 2007.

5. Nalco Company (Waste Treatment)

Recovery Boiler Leak Indication Agreement, dated September 7, 2007.

6. PP&L Great Works, LLC (Water and Power)

Facilities Agreement dated as of March 2, 2000 as amended from time to time.

No defaults; no cure costs. Related Agreements (Non-Executory) being conveyed to Purchaser: Separation Agreement dated as of March 2, 2000. Reciprocal Easement Agreement dated February 28, 2000.

7. PPL EnergyPlus, LLC

Standby Facilities Use Agreement dated November 2, 2006.

8. Independent Consultant Agreement between The Net Works and Red Shield Environmental, LLC dated December 7, 2006.

- 9. The Net Works Statement of Work for WSI EmailPlus between Red Shield Environmental, LLC and The Net Works dated December 7, 2006.
- Consent to Software License Assignment and Release Letter Agreement between ABB Inc., Georgia-Pacific Corporation and Red Shield Environmental, LLC dated November 1, 206.
- 11. Telecommunications Service Agreement between Red Shield Environmental, LLC and Mid-Maine Communications.
- 12. Contract for the Acquisition and Implementation of SAP Business One between N'ware Technologies, Inc. and RSE Pulp & Chemical, LLC dated March 27, 2007.
- 13. License Upgrade for SAP Business One between N'ware Technologies and RSE Pulp & Chemical, LLC dated October 29, 2007.
- 14. SAP Business One Software License Agreement between SAP America, Inc. and RSE Pulp & Chemical, LLC dated May 31, 2007.
- 15. End user Software License Agreement and Maintenance Agreement between Ceecom, Inc. and RSE Pulp & Chemical, LLC.
- 16. Software License Agreement, dated March 4, 2008, by and between Capstone Technology Corporation and Sellers.

10

Page 1 of 15 Permit No.37-2679-07

INDUSTRIAL WASTEWATER DISCHARGE PERMIT

In accordance with the provisions of the Sewer and Pretreatment Ordinance, Chapter 31 of the City Ordinances:

NEWSME, LLC 2828 Bennoch Road Alton, ME 04468

is hereby authorized to discharge leachate from the above identified facility into the City of Brewer's Water Pollution Control Facility in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in this permit.

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of this permit.

This permit shall become effective on March 3, 2008 and shall expire at midnight on March 2, 2013.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after this expiration date an application must be filed for reissuance of this permit a minimum of 90 days prior to the above expiration date. If the permittee makes timely application for reissuance, but the City does not reissue a permit prior to the expiration date, the permittee shall have the right to continue to discharge under the terms and conditions of the most recent expired permit for a period of time not to exceed 90 days.

This permit may be appealed to the Brewer City Council within 30 days of the date of issue.

Kennethle bocke By: Director of Environmental Services

Pretreatment Coordinator

Kenneth W. Locke

Lucien J. Colburn

Issued this Third day of March, 2008.

Page 2 of 15

Industry Name____

Permit No.<u>37-2679-07</u>

Part 1 - APPLICABLE EFFLUENT LIMITATIONS

NEWSME, LLC

SECTION 1 - EFFLUENT DISCHARGE LIMITS

- A. The City of Brewer's Treatment Facility will be considered as the primary secondary discharge location.
- B. During the effective period of this permit, the permittee is required to contact the City of Brewer's Water Pollution Control Facility for **authorization** from the Director or his representative to discharge leachate into the designated disposal point at the City of Brewer's Water Pollution Control Facility. The leachate will have to be sampled and analyzed by the City of Brewer the first day that leachate is trucked to the Water Pollution Control Facility.

Description of Designated Disposal Point:

The leachate will be discharged into the #1 Primary Clarifier at the head end of the treatment facility. A permanent 6" line is installed in the Clarifier launder to discharge leachate below the water surface to help eliminate odors during receiving of leachate. The disposal point may be changed by the Water Pollution Control Facility when it deems necessary. (At the discretion of the Brewer WPCF, delivery of leachate may be stopped at any time due to excess municipal flow, operational problems that may cause interference or passthrough, or any leachate condition that may jeopardize the biological system.(ie:excess volume, high ammonia content, toxicity due to odor control chemicals, etc.)

Any other discharge is prohibited

C. During the effective period of this permit, the discharge from designated disposal point shall not exceed the following effluent limitations. In addition, the discharge shall comply with all other applicable regulations and standards contained in Chapter 31 of the City Ordinances and all current EPA pretreatment requirements for Industrial users.

Page 3 of 15

Industry Name____

NEWSME, LLC

Permit No.<u>37-2679-07</u>

EFFLUENT LIMITATIONS

LOCAL LIMITS

<u>Parameter</u>

Discharge Limits

| D ! | · |
|------------|------------------|
| Arsenic | <u>0.10</u> mg/l |
| Cadmium | 0.14 mg/l |
| Chromium | 2.64 mg/l |
| Copper | 2.59 mg/l |
| Cyanide | 0.25 mg/1 |
| Lead | 0.26 mg/l |
| Mercury | 0.02 mg/1 |
| Molybdenum | 0.77 mg/l |
| Nickel | <u>2.59</u> mg/l |
| Selenium | 10.01 mg/1 |
| Silver | 0.66 mg/l |
| Zinc | MAHL |

- D. The permittee shall not discharge leachate into the designated disposal point;
 - (1) Having a pH lower than 5.5 or higher than 11.0, or having any other corrosive property capable of causing damage or hazards to structures, equipment or personnel of the sewer system. (If at any time, an odor masking or eliminating agent (ex. Shock) is used in any application, the Brewer WPCF will be notified prior to shipping any leachate. The Brewer WPCF will also receive prior notification any time caustic or acid is used to clean leachate collection lines, equipment, or tank on the truck or at the landfill.)
 - (2) Having a temperature higher than 105°F
 - (3) Causing interference with the Brewer Water Pollution Control Facility. Interference shall mean a discharge which alone or in conjunction with a discharge or discharges from other sources, both (1) inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, its use or disposal; and (2) therefore is a cause of а any requirements of the POTW's MEPDES permit violation of (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State and local regulations): Section 405 of the Clean Water Act, The Solid Waste Disposal Act (SWDA) (also referred to as RCRA, and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the (SWDA), the Clean Air Act, the

Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Page 4 of 15

Industry Name <u>NEWSME, LLC</u>

Permit No.<u>37-2679-07</u>

- (4) Causing a Pass Through of the Brewer Water Pollution Control Facility. A Pass Through shall mean a discharge that exits the POTW into the receiving waters in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's MEPDES permit (including an increase in the magnitude or duration of the violation).
- (5)Containing petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.
- (6)Containing any pollutant including oxygen demanding pollutants (e.g., BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference or pass through.
- (7)Containing pollutants which result in the presence of toxic gases, vapors or fumes within the Brewer WPCF in a quantity that may cause acute worker health and safety problems.
- (8)Containing any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquids, solids or gases, and any material having a flash point of 140°F or below.
- (9)Containing any grease or oils of petroleum origin, whether emulsified or not, in excess of 100 mg/l or containing substances which may solidify or become viscous between $32^{\circ}F$ and $140^{\circ}F$.
- (10)Containing any sand, shavings, metal, glass, rags, plastics, wood, or any other substance capable of causing obstructions or interference with the operation of the treatment facility.

Page 5 of 15

Industry Name NEWSME,

Permit NO.<u>37-2679-07</u>

PART 2 - MONITORING AND REPORTING REQUIREMENTS

LLC

SECTION 1 - MONITORING REQUIREMENTS

A. For the effective period of this permit the permittee shall monitor leachate for the following:

| Parameter | (units) | Location | Frequency | Type Notes |
|----------------------------|------------------|------------|-------------|-------------|
| Conductance | (umhos/cm) | (1) | | |
| Flow | (gpd) | (1) | X 3 months | Comp (2) |
| pH | (stu) | (1) | X 3 months | (7) |
| BOD | | (1) | X 3 months | Grab (2)(3) |
| COD | (mg/l) (mg/l) | (1) | X 3 months | Comp (2) |
| Hardness | | (1) | X 3 months | Comp (2) |
| TDS | (mg/l) | (1) | X 3 months | Comp (2) |
| TSS | (mg/l) | (1) | X 3 months | Comp (2) |
| | (mg/1) | (1) | X 3 months | Comp (2) |
| Oil & Grease Alkalinity | | (1) | X 3 months | Grab (2)(4) |
| Arsenic | (mg/l) | (1) | X 3 months | Comp (2) |
| Barium | (mg/l) | (1) | X 3 months | Comp (2) |
| Cadmium | (mg/l) | (1) | X 3 months | Comp (2) |
| Calcium | (mg/l) | (1) | X 3 months | Comp (2) |
| Chloride | (mg/l) | (1) | X 3 months | Comp (2) |
| Chromium | (mg/l) | (1) | X 3 months | Comp (2) |
| Copper | (mg/l) (mg/l) | (1) | X 3 months | Comp (2) |
| Cyanide | (mg/l) | (1) | X 3 months | Comp (2) |
| Iron | (mg/l) | (1) | X 3 months | Grab (2)(5) |
| Lead | (mg/l) | (1) | X 3 months | Comp (2) |
| Magnesium | (mg/1) | (1) | X 3 months | Comp (2) |
| Manganese | (mg/l) | (1) | X 3 months | Comp (2) |
| Mercury * | (mg/1) | (1) | X 3 month | Comp (2) |
| Molybdenum | (mg/l) | (1) | X 3 months | Comp (2) |
| Nickel | (mg/1) | (1) | x 3 months | Comp (2) |
| Phosphorus | (mg/1) | (1) | X 3 months | Comp (2) |
| Selenium | (mg/l) | (1) (1) | X 3 months | Comp (2) |
| Silver | (mg/1) | (1) | X 3 months | Comp (2) |
| Sodium | (mg/l) | (1) | X 3 months | Comp (2) |
| Sulfate | (mg/l) | (1) | X 3 months | Comp (2) |
| Vanadium | (mg/l) | (1) | X 3 months | Comp (2) |
| Zinc | (mg/l) | (1) | X 3 months | Comp (2) |
| | (mg/1) | (1) | X 3 months | Comp (2) |
| Volatile Orga | anics | (1) | V 26+1 | Comp/(6) |
| | (mg/l) | (- / | X 36 months | Grab |
| Semi-Volatile | e Órganics | (1) | X 36 months | Grab (6) |
| | | ····· | A SO MONUNS | Grab |

Page 6 of 15

| Industry Name | NEWSME, | LLC | Permit No. <u>3</u> | <u>7–2679–07</u> |
|------------------|---------|-----|---------------------|------------------|
| Ammonia Nitrogen | (mg/l) | (1) | X 3 months | Grab (2) |
| Organic Nitrogen | (mg/l) | (1) | X 3 months | Grab (2) |
| TKN | (mg/l) | (1) | X 3 months | Grab (2) |

Notes:

- (1) Samples are collected from the leachate storage tank as it is pumped to the tank truck before it is delivered to the treatment plant. One quarterly sample will be collected by Brewer WPCF personnel in conjunction with NEWSME Landfill Operations, LLC (to be paid for by NEWSME Landfill Operations, LLC) during the annual inspection of the site. (Only if leachate is hauled into Brewer during any calendar year)
- (2) Definitions of sample types can be found in Part 4 Section 1 of this permit.
- (3) The pH will be sampled for each tanker and recorded.
- (4) The Oil & Grease is a quarterly test.
- (4) Mercury samples will be collected using EPA Method 1669, and tested using EPA Method 1631.
- (5) A grab sample for Cyanide will be randomly be collected from one tanker.
- (6) These parameters will be monitored quarterly semiannually.
- (7) The combined volume of the tankers delivered will be totaled to provide the calculated flow for the sampling period.
- (8) Volatile Organics and Semi-Volatile Organics may will be tested decreased from 4x/yr to 2x/yr. if results in the first year of the permit are Non-detect, or below water quality standards.
- B. All handling and preservation of collected samples and laboratory analysis of samples shall be performed in accordance with 40 CFR, Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

SECTION 2 - REPORTING REQUIREMENTS

A. Monitoring Reports Quarterly reports are required for all parameters listed. Reports are due on the 15th day of the month following the end of the quarter. The reports are due on April 15, July 15, October 15 and January 15. (If leachate is hauled to the Brewer WPCF, the last two testing quarter lab analyses will be sent to Brewer for review, prior to leachate acceptance.)

B. The City of Brewer Water Pollution Control Facility will accept analytical results collected from one of the quarterly analysis that the permittee is required to complete. (If deemed necessary by the WPCF, the Permittee will assess the need for compliance schedules in accordance with 40 CFR 403.8 (f) (1) (iv). (If deemed necessary by the WPCF, the Permittee will assess the need for a slug control plan in accordance with 40 CFR 403.8 (f) (2) (v).

Page 7 of 15

Industry Name <u>NEWSME, LLC</u>

Permit NO.<u>37-2679-07</u>

- C. If the permittee monitors any pollutants more frequently than required by this permit and such monitoring is performed using testing and sampling procedures approved hereunder, the results of such monitoring shall be submitted to the City's Water Pollution Control Facility with the next quarterly report after the results become available.
- D. All reports required by this permit shall be submitted to the City of Brewer's Water Pollution Control Facility at the following address, or such other person and address as the City may designate:

City of Brewer Water Pollution Control Facility Attn.: Lucien Colburn, Pretreatment Coordinator 37 Oak Street Brewer, Maine 04412

or City of Brewer Water Pollution Control Facility Attn.: Kenneth Locke, Director of Environmental Services 37 Oak Street Brewer, Maine 04412

Part 3 - SPECIAL CONDITIONS

SECTION 1 - ADDITIONAL/SPECIAL MONITORING REQUIREMENTS

- A. Forward a copy of the existing or modified spill prevention and control plan to the Brewer WPCF Director.
- B. If results indicate that a violation has occurred of

pollutants that are limited in the permit the permittee must notify the City of Brewer's WPCF Director within 24 hours of becoming aware of the violation. The permittee must repeat the sampling and pollutant analysis and submit, in writing, the results of this second analysis within 30 days of becoming aware of the violation.

Page 8 of 15

Industry Name <u>NEWSME</u>, LLC

Permit No.<u>37-2679-07</u>

PART 4 - STANDARD CONDITIONS

SECTION 1 - DEFINITIONS

Unless the context indicates otherwise, the meaning of the terms and abbreviations used in this permit shall be as defined in the City's Sewer and Pretreatment Ordinance, Chapter 31 of the City of Brewer Ordinances and as it may be amended from time to time. Terms not defined by the City of Brewer's Sewer and Pretreatment Ordinance shall be as defined in the Pretreatment Regulations of the U.S. EPA, found in CFR 40, Part 403. Terms not defined by either of the above-described sources shall have their customary dictionary meaning.

- A. Grab sample, for monitoring requirements, is defined as an individual sample which is taken from a Wastestream(s) on a one time basis without regard to the flow in the Wastestream(s) and without consideration of time.
- B. Composite sample: The sample resulting from the combination of individual wastewater samples taken at selected intervals based on an increment of either flow or time.
- C. Daily maximum effluent limit is defined as the maximum allowable discharge of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of a concentration, the daily discharge is the flow weighted average measurement of the pollutant derived from all measurements taken that day.
- D. Monthly average effluent limit is defined as the arithmetic average of all daily determinations of concentration made during a calendar month.
- E. Sanitary Sewage (same as Domestic Sewage) is defined as water and water-carried wastes normally discharged into

sanitary sewers from dwellings, including single family homes, multi-family homes and motels, from office buildings, factories and institutions, but not including storm water drainage or surface water drainage and not including industrial wastes as defined in the Sewer/Pretreatment Ordinance (Chapter 31) and as same may be amended from time to time.

Page 9 of 15

Industry Name<u>NEWSME, LLC</u>

Permit No.<u>37-2679-07</u>

SECTION 2 - GENERAL CONDITIONS

A. <u>Duty to Comply</u>

L.

The permittee must comply with all conditions of this permit. Failure to comply with the requirements of these regulations will be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, as the same may be provided by law, injunctive relief, termination of sewer service and summary abatements.

B. <u>Duty to Mitigate</u>

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment from noncompliance with this permit, including additional monitoring to determine the impact of the discharge.

C. <u>Permit Action</u>

This permit may be modified, revoked and reissued, or terminated for causes including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- d. Information indicating that the permitted discharge poses a threat to human health or welfare;
- e. Upon the request of the permittee, provided such request does not create a violation of any existing applicable

requirements, standards, laws, or rules and regulations;

- f. Material or substantial alterations or additions to the discharger's operation or level of production which were not covered in the effective permit;
- g. To incorporate any existing, new or revised Federal, State, or Local Pretreatment Standards or requirements which the City is required to incorporate into this permit by any State and/or Federal agency.

Page 10 of 15

Industry Name <u>NEWSME, LLC</u> Permit No.<u>37-2679-07</u>

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

D. <u>Property and Contract Rights</u>

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights.

E. <u>Termination</u>

This Industrial Wastewater Discharge Permit shall be subject to the terms and conditions of a contract between the parties, as well as the terms and conditions of the permit.

F. Limitation on Transfer

This permit is not transferable to any other owner without the written approval of the Superintendent of the City of Brewer's Water Pollution Control Facility. Application for discharge permit must be submitted by the new owner within thirty (30) days of transfer of ownership.

G. <u>Dilution</u>

The permittee shall not in any way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

SECTION 3 - OPERATION & MAINTENANCE OF POLLUTION CONTROLS

A. <u>Proper Operation & Maintenance</u>

The permittee shall at all times properly operate and maintain all systems of treatment and control which are used by the permittee to achieve compliance with the conditions of this permit.

Page 11 of 15

Industry Name <u>NEWSME, LCC</u>

Permit No.<u>37-2679-0</u>7

B. Duty to Halt or Reduce Activity

Upon reduction, loss or failure of any pretreatment equipment, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until operation of the equipment is restored or an alternate, equally effective method of pretreatment is used. The permittee shall notify the POTW prior to any alternate method used. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

C. <u>Removed Substances</u>

Solids, sludges, filter backwash, or other pollutants removed in the course of pretreatment shall be disposed of in accordance section 405 of the Clean Water Act and subtitles C and D of the Resource Conservation Recovery Act. When requested, the permittee shall submit a plan for such disposal to the Director of the Water Pollution Control Facility within 30 days of said request.

SECTION 4 - MONITORING AND RECORDS

A. <u>Representative Sampling</u>

Samples and measurements shall be representative of the leachate and shall be done on a day of normal to maximum process operation. All samples shall be taken at the monitoring point specified in this permit.

B. <u>Inspection and Entry</u>

The permittee shall allow the Director of the Brewer Water Pollution Control Facility, or an authorized representative, to:

Enter upon the permittee's premises where a regulated facility or activity is located, or where records must be kept under the conditions of this permit;

Have access to and copy any records that must be kept under the conditions of this permit;

Page 12 of 15

Industry Name <u>NEWSME, LLC</u> Permit No.<u>37-2679-07</u>

Inspect facilities, equipment, practices, or operations regulated or required under this permit;

Sample or monitor, for the purpose of assuring permit compliance, any substances or parameters at any location;

Inspect any production, manufacturing, fabricating or storage area where pollutants, regulated under this permit, could be discharged to the sewer system or POTW.

C. <u>Retention of Records</u>

- 1. The permittee shall retain the records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings, copies of all reports required by this permit, for a period of at least 3 years from the date of the sample, measurement or report. This period may be extended by written request of the Director of the Water Pollution Control Facility at anytime.
- 2. All records that pertain to matters that are the subject of enforcement activities brought by the City of Brewer of which the permittee receives written notice shall be retained and preserved by the permittee until all enforcement and any appeal activities have concluded.

D. <u>Record Contents</u>

Records of sampling information shall include:

- The date, exact place, time and methods of sampling or measurements, and sampling preservation;

- Who performed the sampling or measurements;
- The date(s) analyses were performed;
- Who performed the analyses;
- The analytical techniques or methods used; and
- The results of such analyses.

Page 13 of 15

Industry Name<u>NEWSME, LLC</u>

Permit No.<u>37-2679-07</u>

E. <u>Signatory Requirements</u>

All reports and information submitted to the City of Brewer's Water Pollution Control Facility shall be signed and certified as indicated below.

- 1. All permit applications shall be signed as follows:
 - By a principal executive officer of at least the level of Environmental Compliance Manager.
- 2. All other correspondence, reports and self monitoring reports shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - The authorization is made in writing by the person described above.
 - The authorization specifies either an individual or person having responsibility for the overall operation of the regulated operation or facility.
- 3. Certification. Any person signing a document required by this permit shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Page 14 of 15

Industry Name <u>NEWSME</u>, LLC

Permit No.<u>37-2679-07</u>

F. <u>Falsifying Information</u>

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under criminal law proceedings as well as being subjected to civil penalties and injunctive relief, as the same may be permitted by law.

SECTION 5 - ADDITIONAL REPORTING REQUIREMENTS

A. <u>Planned Changes</u>

The permittee shall give notice to the Director of the Brewer Water Pollution Control Facility 90 days prior to any facility expansion or process modifications which result in a new or substantially increased discharge or a change in the nature of the discharge. A substantial change shall be defined as any 10 percent increment deviation from existing production or waste generation levels.

B. <u>Duty to Provide Information</u>

The permittee shall furnish to the City of Brewer Water Pollution Control Facility, within a reasonable time, any information requested by the Brewer WPCF to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

SECTION 6 - ENFORCEMENT

The permittee will be subject to Civil Penalties of up to \$1,000.00 dollars per day per permit violation. In addition, the permittee violating any of the provisions of this permit, or causing a deposit or obstruction, or causing or contributing to damage to or otherwise inhibiting the City of Brewer's Water Pollution Control system, or causing or contributing to a violation of the City's MEPDES permit shall be liable to the City of Brewer for any expense, loss, or damage caused or contributed to by such a violation or discharge. Refusal to pay the assessed costs shall constitute a violation of this permit. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of a fine of up to \$10,000.00 dollars per violation, or by imprisonment, or both. The permittee may also be subject to sanctions under State and/or Federal law.

Page 15 of 15

NEWSME Landfill Operations, LLC hereby acknowledges that it's Environmental Compliance Manager has read and understands the Terms and conditions of this Industrial Wastewater Discharge Permit.

Date: 3/3/08

NEWSME Landfill Operations, LLC

By:

It's Environmental Compliance Manager Duly Authorized

ATTACHMENT 9

LANDFILL GAS COLLECTION RATE SENSITIVITY ANALYSIS AND COMPARISON OF WTI EMISSIONS TO LANDFILL EMISSIONS



LANDFILL GAS COLLECTION RATE SENSITIVITY ANALYSIS JUNIPER RIDGE LANDFILL Old Town, Maine

Prepared for NEWSME Landfill Operations, LLC File No. 3151.00 December 2012


TABLE OF CONTENTS

| EXEC | UTIVE SUMMARY | I |
|------|-------------------------------|----|
| 1.0 | INTRODUCTION | .1 |
| 2.0 | FACILITY DESCRIPTION | .1 |
| 3.0 | MODEL INPUTS | .2 |
| 4.0 | GAS COLLECTION RATE ESTIMATES | .3 |
| 5.0 | LIMITATIONS | .3 |

TABLES

| Table 1 | Landfill Gas Collection Rate Sensitivity Analysis: High, Median, & Low Estimates |
|---------|--|
| | from Multiple Sets of Modeling Results |

FIGURES

| Figure 1 | Landfill Gas Collection Rate Sensitivity Analysis: High, Median, & Low Estimates |
|----------|--|
| | from Multiple Sets of Modeling Results |
| | |

Figure 2 Median Estimates for LFG Collection Rates With and Without Waste Diverted from Maine Energy

APPENDICES

- Appendix A Waste Acceptance Rates Summary
- Appendix B Landfill Gas Generation Rate Estimates
- Appendix C Landfill Gas Collection Rate Estimates

EXECUTIVE SUMMARY

Sanborn, Head & Associates, Inc. performed a landfill gas (LFG) collection rate sensitivity analysis on behalf of NEWSME Landfill Operations, LLC for the Juniper Ridge Landfill (JRL) in Old Town, Maine. LFG generation rate estimates were developed using the USEPA's *Landfill Gas Emissions Model, Version 3.02* (LandGEM).

Modeling was based on the currently-permitted landfill capacity (approximately 10 million cubic yards or 8.6 million tons) and waste acceptance through 2018, assuming a change in the waste stream resulting from waste diverted to JRL from Maine Energy Recovery Company (Maine Energy) in Biddeford, Maine.

Based on data provided by Sevee & Maher Engineers (SME), we modeled an increase in the proportion of municipal solid waste (MSW) in the waste stream at JRL beginning in 2013. In this scenario, JRL would accept approximately 93,000 tons per year (tpy) of MSW, while the total waste accepted would decrease from the current waste acceptance rate of approximately 710,000 tpy to a projected waste acceptance rate of approximately 681,000 tpy.

The median landfill gas projections indicate a maximum landfill gas collection rate of approximately 3,420 scfm of LFG with 50 percent methane during 2018. The results of the modeling are presented in Figure 1 and Table 1. Figure 2 shows a comparison of the modeling results with the projected LFG collection rates without the diverted Maine Energy waste.

Given the uncertainty associated with projecting LFG collection rates, Figure 1 presents a range of collection rates based on various modeling runs. Our analysis evaluated the sensitivity of the estimated landfill gas collection rates to changes in degradable waste composition; and to changes in the LandGEM input parameters: methane generation rate, k, and methane generation potential, L_0 .

The high and low LFG collection rate estimates are useful for presenting a range of possible LFG collection rates, while the median estimates are typically considered the best set of projections for planning purposes. The sensitivity analysis demonstrates good correlation between the median modeled LFG collection rates and measured values at JRL from 2006 to 2011. The correlation between modeled and measured values strengthens the argument for using the median estimates for planning purposes, such as beneficial energy use options, permitting, or gas collection system pipe sizing.

This LFG collection rate sensitivity analysis is subject to change if there are changes to the waste acceptance projections or if leachate recirculation is implemented.

1.0 INTRODUCTION

On behalf of NEWSME Landfill Operations, LLC (NEWSME), Sanborn, Head & Associates, Inc. (Sanborn Head) prepared this landfill gas (LFG) collection rate sensitivity analysis for the Juniper Ridge Landfill (JRL) in Old Town, Maine. LFG generation rate estimates were based on modeling using the U.S. Environmental Protection Agency's (USEPA's) *Landfill Gas Emissions Model, Version 3.02* (LandGEM). These LFG generation rate estimates were combined with the estimated LFG collection efficiency to estimate LFG collection rates.

LandGEM uses the first order decay equation identified in 40 Code of Federal Regulations (CFR) Part 60.754 to estimate uncontrolled gas emissions from landfills. The equation is a function of waste acceptance rates, methane generation rate (k), and methane generation potential (L_0). For this analysis, Sanborn Head performed a limited sensitivity analysis of the LandGEM results to changes in degradable waste composition and to changes in the parameters k and L_0 .

Waste acceptance rate records and projections for the JRL, presented in Table A-1, were provided by NEWSME and Sevee & Maher Engineers (SME). For this analysis, we considered some waste accepted at the JRL, such as ash, to be nondegradable. We input waste acceptance rates, both the waste in place and projected waste acceptance, to LandGEM for two waste acceptance scenarios: (1) Total waste accepted, and (2) Degradable waste accepted.

Sanborn Head reviewed various sets of LandGEM modeling parameters (k and L_0) from different sources, as discussed below. These parameters were input to LandGEM for each waste acceptance scenario, resulting in multiple sets of LandGEM modeling results.

LFG generation rates were multiplied by the estimated LFG collection efficiency to estimate LFG collection rates. The landfill gas collection efficiency was estimated as discussed below.

2.0 FACILITY DESCRIPTION

The JRL is owned by the State of Maine and operated by NEWSME. The licensed footprint of the landfill, including accessory structures, is approximately 68 acres on a 780-acre parcel of land. The JRL is located on the western side of Interstate 95 in Old Town, Maine and is accessible from State Route 16 in Alton, Maine.

The Maine Department of Environmental Protection (Maine DEP) originally licensed JRL on July 28, 1993. At that time, the landfill was owned by the Fort James Operating Company, and was licensed as a 15-cell landfill for the disposal of pulp and papermaking residuals generated from a paper mill in Old Town, Maine. Under the current permit, JRL accepts approximately 2,000 tons per day of construction and demolition debris; residues and a limited quantity of municipal solid waste bypass from municipal solid waste incinerators located in the State of Maine; water and wastewater treatment plant sludge; and lesser amounts of miscellaneous non-hazardous wastes. Active filling in the 68-acre, 15-cell landfill area has been ongoing since November 1993, with current landfill operations

SANBORN HEAD

occurring in Cell 7. Intermediate and intermediate-final cover has been placed in Cells 1 through 6. The permitted capacity of JRL is approximately 10,000,000 cubic yards.

Although not yet required to do so by the New Source Performance Standard (NSPS) for municipal solid waste (MSW) landfills in 40 CFR Part 60, Subpart WWW, which has been adopted by the Maine DEP in Chapter 143 of its regulations, NEWSME has installed an active gas collection and control system (GCCS) at the JRL. The objectives of the GCCS are to reduce emissions of air toxics and to limit the potential for odors. The GCCS is designed to actively collect LFG while maintaining anaerobic conditions within the landfill by limiting air intrusion into the waste. The GCCS is monitored using equipment that measures and records the LFG volumetric extraction rate; and the concentration of methane, oxygen, carbon dioxide, and balance gases (primarily nitrogen) contained in the LFG.

The JRL GCCS is regularly expanded by adding gas extraction points and related infrastructure. LFG is currently managed in Cells 1 through 6 using horizontal gas collection trenches (GCTs) constructed in the waste. Gas flow through the GCTs is controlled by wellhead assemblies mounted on condensate traps located at the low points of each trench. Vertical extraction wells have also been installed, and the design intent is for additional vertical extraction wells to be installed as the outer slopes of the cells are filled to final grades. The vacuum applied at each extraction location may be adjusted with a manually controlled valve on the extraction location wellhead.

LFG in the GCCS is delivered to a 106.5 million British thermal units per hour (MMBtu/hr) utility flare (Flare No. 4). Flare No. 4 was approved by the Maine DEP in November 2008 to replace previously installed flares. Flares No. 2 and No. 3 operate as backup LFG control devices and do not operate simultaneously with Flare No. 4.

3.0 MODEL INPUTS

Inputs to the LandGEM model include waste acceptance rates (described above) and values for k and L_0 . The various k and L_0 values considered include the following:

- NEWSVT Landfill: k of 0.06 year⁻¹ and L₀ of 130 cubic meters per megagram (m³/Mg);
- NCES Landfill: k of 0.08 year⁻¹ and L₀ of 135 m³/Mg;
- SCS: k of 0.12 year⁻¹ and L₀ of 110 m³/Mg;
- NSPS: k of 0.05 year⁻¹ and L₀ of 170 m³/Mg;
- EMCON/OWT: k of 0.13 year-1 and L₀ of 100 m³/Mg;
- Crossroads: k of 0.10 year⁻¹ and L₀ of 110 m³/Mg; and
- AP-42: k of 0.04 year⁻¹ and L₀ of 100 m³/Mg.

Appendix B includes a narrative that summarizes the various sets of k and L_0 values used for the two models, and provides references for where the values originated.

4.0 GAS COLLECTION RATE ESTIMATES

LFG collection rate estimates are obtained through a two step process. The first step is to incorporate the waste acceptance rates, degradable waste fractions, and k and L_0 values into LandGEM to obtain estimates of LFG generation. The second step is to apply an efficiency factor for LFG extraction.

LFG generation rate estimates and LandGEM model results are presented in Appendix B. Table B-1 presents the LFG generation rate estimates based on the total-waste-accepted scenario. Table B-2 presents the LFG generation rate estimates based on the degradablewaste-accepted scenario.

LFG collection rate estimates are presented in Appendix C. Appendix C also includes a brief review of typical collection efficiencies and the assumptions associated with the LFG collection efficiency estimate for the JRL. Tables C-1 and C-2 and Figures C-1 and C-2 present results of the individual modeling scenarios. Table C-1 presents the LFG collection rate estimates based on the total-waste-accepted scenario. Table C-2 presents the LFG collection rate estimates based on the degradable-waste-accepted scenario.

Figures C-1 and C-2 are graphical representations of the results presented in Tables C-1 and C-2, respectively.

Table 1 and Figure 1 present summaries of the results of the various modeling scenarios by presenting the yearly high, median, and low estimates for LFG collection rates. When applied to the total mass of waste accepted, values for k of 0.07 year⁻¹ and L_0 of 85 m³/Mg appear to provide a good curve fit for the median estimates.

Figure 2 shows a comparison of the modeling results with the projected LFG collection rates without the diverted Maine Energy waste. Modeling based on diverting waste from Maine Energy increased the peak median estimate from 3,306 to 3,418 scfm of LFG with 50 percent methane.

5.0 LIMITATIONS

Factors contributing to the uncertainty of LFG collection rate projections include:

- LandGEM modeling being a simplification of the waste degradation process (e.g., assuming a uniform waste stream [L₀] and uniform rate of waste degradation [k]);
- Potential changes to the estimated rate of future waste acceptance, and the types of waste to be accepted [L₀]);
- Potential changes to landfill operations (e.g., changes that could affect the moisture content of the waste, and therefore the rate of waste degradation [k]); and

• Other factors that affect the rate of gas generation (e.g., microbial activity, weather).

Although the median estimates are typically considered the best set of projections for planning purposes, because of the uncertainty associated with projecting LFG collection rates, the high and low estimates are also generally considered useful for presenting a range of possible LFG collection rates.

This LFG collection rate analysis is subject to change should there be changes to the waste acceptance rate projections or the projected waste composition at the JRL. An alteration in the design capacity at the JRL, for example, would change the results of this analysis.

Also, if leachate recirculation were to be implemented at the JRL, we expect that there would be a significant increase in the methane generation rate, and our projections would be correspondingly affected. Studies performed at landfills that have added moisture to the waste, including leachate recirculation, could be used to perform an LFG collection rate analysis for a leachate-recirculation scenario at the JRL.

RANDATA\3100s\3151.00\Originals\2012 Gas Projections\Currently Permitted Footprint, Maine Energy Waste\Dec 2012 Update\20121220 Gas Generation Report.docx

TABLES



Table 1. Landfill Gas Collection Rate Sensitivity Analysis High, Median & Low Estimates from Multiple Sets of Modeling Results With Waste Diverted from Maine Energy

Juniper Ridge Landfill Old Town, Maine

| | High Estimate for | Median Estimate for | Low Estimate for |
|------|---------------------|---------------------|---------------------|
| Year | LFG Collection Rate | LFG Collection Rate | LFG Collection Rate |
| | (scfm) | (scfm) | (scfm) |
| 2006 | 592 | 376 | 143 |
| 2007 | 1,206 | 712 | 258 |
| 2008 | 1,683 | 958 | 352 |
| 2009 | 2,293 | 1,275 | 475 |
| 2010 | 2,719 | 1,494 | 573 |
| 2011 | 3,330 | 1,823 | 710 |
| 2012 | 3,869 | 2,099 | 838 |
| 2013 | 4,349 | 2,350 | 963 |
| 2014 | 4,740 | 2,599 | 1,092 |
| 2015 | 5,087 | 2,829 | 1,215 |
| 2016 | 5,394 | 3,045 | 1,334 |
| 2017 | 5,667 | 3,241 | 1,448 |
| 2018 | 5,909 | 3,418 | 1,558 |
| 2019 | 5,797 | 3,346 | 1,583 |
| 2020 | 5,351 | 3,059 | 1,521 |
| 2021 | 4,940 | 2,866 | 1,462 |
| 2022 | 4,692 | 2,686 | 1,404 |
| 2023 | 4,464 | 2,518 | 1,349 |
| 2024 | 4,246 | 2,361 | 1,296 |
| 2025 | 4,039 | 2,246 | 1,246 |
| 2026 | 3,842 | 2,106 | 1,197 |
| 2027 | 3,654 | 1,934 | 1,100 |
| 2028 | 3,476 | 1,780 | 966 |
| 2029 | 3,307 | 1,615 | 848 |
| 2030 | 3,145 | 1,467 | 745 |
| 2031 | 2,992 | 1,340 | 654 |
| 2032 | 2,846 | 1,225 | 574 |
| 2033 | 2,707 | 1,139 | 504 |
| 2034 | 2,575 | 1,063 | 443 |
| 2035 | 2,450 | 991 | 389 |

Notes:

- 1. Unless otherwise noted, gas generation rate estimates are based on the assumption that waste accepted at the JRL is degradable. It should also be noted that NEWSME considers some waste accepted at the site to be nondegradable. Gas generation rate estimates based both on including and excluding waste considered nondegradable were used to estimate gas collection rates presented in this table.
- 2. Yearly high, median, and low values are from multiple sets of modeling results based on various sets of LandGEM input paramters (i.e., sets of k & Lo) and two waste acceptance scenarios (total waste accepted and degradable waste accepted).
- 3. We assumed that with a properly designed and operated LFG extraction system, and adequate intermediate and/or final cover, 85 percent of the LFG generated at the JRL is collected.

FIGURES

SANBORN 📗 HEAD

Figure 1. Landfill Gas Collection Rate Sensitivity Analysis High, Median & Low Estimates from Multiple Sets of Modeling Results With Waste Diverted from Maine Energy



Sanborn, Head & Associates, Inc.

Figure 2. Median Estimates for LFG Collection Rates With and Without Waste Diverted from Maine Energy

Juniper Ridge Landfill Old Town, Maine

| Year | Median Estimates for LFG Collection Rate Without Diverted Maine Energy Waste (scfm, at 50% CH ₄) | Median Estimates for LFG Collection Rate With Diverted Maine Energy Waste (scfm, at 50% CH ₄) |
|------|---|--|
| 2006 | 376 | |
| 2007 | 712 | |
| 2008 | 931 | |
| 2009 | 1,129 | |
| 2010 | 1,376 | |
| 2011 | 1,733 | |
| 2012 | 2,048 | |
| 2013 | 2,326 | 2,350 |
| 2014 | 2,572 | 2,599 |
| 2015 | 2,793 | 2,829 |
| 2016 | 3,007 | 3,045 |
| 2017 | 3,200 | 3,241 |
| 2018 | 3,306 | 3,418 |
| 2019 | 3,032 | 3,346 |
| 2020 | 2,855 | 3,059 |
| 2021 | 2,720 | 2,866 |

Notes:

- 1. LFG collection rate estimates without diverted Maine Energy Waste are from a study performed by Sanborn Head in 2007, and were included in the JRL Air License Application submitted in August 2011.
- 2. LFG collection rate estimates with diverted Maine Energy waste assume that JRL would accept 93,000 tons per year of MSW (diverted from Maine Energy), while the total waste accepted would decrease from the current waste acceptance rate of approximately 710,000 tons per year (tpy) to a projected waste acceptance rate of approximately 681,000 tpy.



-----Median Estimates for LFG Collection Rate Without Diverted Maine Energy Waste (scfm, at 50% CH4)

Median Estimates for LFG Collection Rate With Diverted Maine Energy Waste (scfm, at 50% CH4)

★ Measured Flow Rates

S:\RANDATA\3100s\3151.00\Originals\2012 Gas Projections\Currently Permitted Footprint, Maine Energy Waste\Dec 2012 Update\20121220 JRL Collection Rate.xls

APPENDIX A

WASTE ACCEPTANCE RATE SUMMARY



APPENDIX A WASTE ACCEPTANCE RATES SUMMARY

Disposal records indicate that degradable and nondegradable wastes have been placed in the Juniper Ridge Landfill (JRL). There is a provision in the NSPS for subtracting nondegradable solid waste from the total mass of waste in a landfill when estimating emissions.¹ Therefore, to consider a range of scenarios that may represent the site conditions, waste acceptance scenarios that include and exclude nondegradable waste were considered. The mass of waste received at the JRL through 2011 and projected waste receipts from 2012 through 2018 were considered.

Table A-1 provides a summary of the estimated actual and projected annual waste acceptance rates for the JRL. Table A-1 presents two waste acceptance scenarios:

- Total Waste Accepted; and
- Degradable Waste Accepted.

Both waste acceptance scenarios are used in LandGEM² to model landfill gas (LFG) generation rates. LandGEM estimates are greater when the total-waste-accepted scenario is used. Excluding the nondegradable waste reduces the estimate for LFG generation.

Annual waste acceptance data is maintained by NEWSME. For 1997 through 2002, Sanborn Head and Sevee & Maher Engineers, Inc. (SME) used waste acceptance records provided by NEWSME to estimate gas production potential. For 2003 through 2011, NEWSME provided waste acceptance records. Future annual waste acceptance projections were provided by SME.³

Table A-1 includes a column that indicates the yearly estimated percentage of degradable waste.

S:\RANDATA\3100s\3151.00\Originals\2012 Gas Projections\Currently Permitted Footprint, Maine Energy Waste\Dec 2012 Update\20121220 Appendix A Narrative.docx

SANBORN 📗 HEAD

Section 60.754 (a)(1) of the NSPS states, "The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for mass of solid waste in that section if documentation of the nature and amount of such waste is maintained."

² LandGEM - U.S. Environmental Protection Agency's (USEPA's) Landfill Gas Emissions Model, Version 3.02.

³ Waste acceptance projections were provided by SME on December 19, 2012.

Table A-1.Annual Waste Acceptance Rates SummaryWith Waste Diverted from Maine Energy

| Olu TOWI, Manie | | | | | | | | |
|-----------------|----------------|----------------|-----------------|------------------|------------------|--|--|--|
| Year | Waste Accepted | Waste Accepted | Degadable Waste | Degradable Waste | Degradable Waste | | | |
| | (tons) | (Megagrams) | (%) | (tons) | (Megagrams) | | | |
| 1997 | 26,369 | 23,917 | 84.6 | 22,299 | 20,226 | | | |
| 1998 | 32,525 | 29,500 | 81.0 | 26,339 | 23,890 | | | |
| 1999 | 34,486 | 31,279 | 84.6 | 29,168 | 26,455 | | | |
| 2000 | 41,549 | 37,685 | 77.7 | 32,286 | 29,283 | | | |
| 2001 | 41,569 | 37,703 | 73.4 | 30,532 | 27,692 | | | |
| 2002 | 47,690 | 43,255 | 81.5 | 38,846 | 35,233 | | | |
| 2003 | 46,906 | 42,544 | 81.5 | 38,240 | 34,684 | | | |
| 2004 | 53,905 | 48,892 | 55.5 | 29,917 | 27,135 | | | |
| 2005 | 248,974 | 225,819 | 56.8 | 141,433 | 128,279 | | | |
| 2006 | 525,758 | 476,863 | 56.4 | 296,271 | 268,718 | | | |
| 2007 | 472,645 | 428,689 | 54.3 | 256,597 | 232,734 | | | |
| 2008 | 617,782 | 560,329 | 54.2 | 334,726 | 303,597 | | | |
| 2009 | 528,622 | 479,460 | 54.3 | 287,026 | 260,332 | | | |
| 2010 | 708,303 | 642,431 | 55.4 | 392,579 | 356,069 | | | |
| 2011 | 706,506 | 640,801 | 54.1 | 382,140 | 346,601 | | | |
| 2012 | 707,405 | 641,616 | 54.8 | 387,360 | 351,336 | | | |
| 2013 | 681,000 | 617,667 | 60.1 | 409,056 | 371,014 | | | |
| 2014 | 681,000 | 617,667 | 60.1 | 409,056 | 371,014 | | | |
| 2015 | 681,000 | 617,667 | 60.1 | 409,056 | 371,014 | | | |
| 2016 | 681,000 | 617,667 | 60.1 | 409,056 | 371,014 | | | |
| 2017 | 681,000 | 617,667 | 60.1 | 409,056 | 371,014 | | | |
| 2018 | 354,005 | 321,083 | 60.1 | 212,640 | 192,864 | | | |
| Total | 8,600,000 | 7,800,200 | | 4,983,678 | 4,520,196 | | | |

Juniper Ridge Landfill Old Town. Maine

Notes:

1. Megagrams = 0.907 x tons.

 JRL's permitted capacity is approximately 10,000,000 cubic yards. Based on estimated compaction density of 0.86 tons/cubic yard, the total waste that may be accepted in the JRL is 8,600,000 tons.

3. The 1997 through 2002 waste acceptance rates and percent of each waste type accepted were provided to Sanborn Head by SME.

4. The 2003 through 2011 waste acceptance rates and percent of each waste type accepted were provided to Sanborn Head by NEWSME.

5. The projected waste acceptance rate for 2012 was estimated using the average of the waste acceptance rate from 2010 and 2011.

- 6. The projected waste acceptance rates for 2013 and beyond were provided to Sanborn Head by SME based on a scenario with waste diverted to JRL from the Maine Energy Recovery Company in Biddeford, Maine beginning in 2013.
- 7. The estimated percent of waste types accepted were used to estimate degradable waste portions at the JRL.

APPENDIX B

LANDFILL GAS GENERATION RATE ESTIMATES

SANBORN || HEAD

APPENDIX B LANDFILL GAS GENERATION ESTIMATES

Sanborn Head estimated potential landfill gas (LFG) generation rates for the Juniper Ridge Landfill (JRL) using LandGEM 3.02. LandGEM uses the first order decay equation identified in 40 Code of Federal Regulations (CFR) Part 60.754. Model inputs include:

- default or user-defined values for landfill gas concentrations (i.e., percent methane, etc.) and for model parameters (i.e., methane generation rate [k] and potential methane generation capacity [L₀]); and
- site-specific information related to the type and amount of in-place waste and projected acceptance rates.

Default values and parameters are published in the New Source Performance Standard (NSPS) for MSW landfills (40 CFR 60, Subpart WWW) and in the USEPA's *Compilation of Air Pollutant Emission Factors, AP-42.* The USEPA developed two sets of available defaults (NSPS and AP-42) based on testing at landfills throughout the United States. Based on information included in the LandGEM User's Manual, the NSPS default values generally overestimate the volume of landfill gas generated during biodegradation of putrescible wastes. The LandGEM User's Manual also indicates that AP-42 default values more closely reflect actual expected emissions from a landfill. The LandGEM User's Manual states:

The (NSPS) default values in the model provide emission estimates that would reflect the expected maximum emissions and generally would be used only for determining the applicability of the regulations to a landfill. To estimate actual emissions in the absence of site-specific data, a second set of default values (the AP-42 defaults) is provided in the model. ...The AP-42 default values provide emission estimates that should reflect typical landfill emissions and are the values suggested for use in developing estimates for state inventories.

Sanborn Head used user-defined model values for k and L_0 from several sources including calibration projects performed by Sanborn Head; a memorandum written by David Burns of the Maine Department of Environmental Protection (Maine DEP) to Steve Farrar of the Maine DEP entitled "West Old Town Landfill (WOTL), Gas Management System Design," dated December 19, 2003; and a paper by OWT/Emcon entitled "Landfill Gas Generation Modeling, A Reality Check," from the Solid Waste Association of North America's (SWANA's) 26th Annual Landfill Gas Symposium Proceedings, March 2003.

Two sets of user-defined model parameters were provided by Sanborn Head. Sanborn Head performed limited calibrations of LFG generation rates at the New England Waste Services of Vermont, Inc. (NEWSVT) Landfill in Coventry, Vermont (NEWSVT: k=0.06 yr⁻¹ and L₀ =130 m³/Mg) and the North Country Environmental Services, Inc. (NCES) Landfill in Bethlehem, New Hampshire (NCES: k=0.08 yr⁻¹ and L₀ =135 m³/Mg).

SANBORN III HEAD

Two sets of user-defined model parameters derived from studies performed by SCS Engineers, Inc. (SCS) were reported in the memorandum from Mr. Burns. One set of parameters was derived from studies of landfills throughout New England (SCS, Northeastern U.S. Landfills: $k=0.12 \text{ yr}^{-1}$ and $L_0 = 110 \text{ m}^3/\text{Mg}$) and the second set was derived from a study of the Crossroads Landfill in Norridgewock, Maine (Crossroads-Phase $11: k=0.10 \text{ yr}^{-1}$ and $L_0 = 110 \text{ m}^3/\text{Mg}$).

One set of model parameters was obtained from an OWT/Emcon technical paper. The paper reviewed data collected at three landfills in the U.S. The model parameters were developed to fit actual gas production at the landfill with the highest gas production rate of the three landfills (EMCON/OWT: $k = 0.13 \text{ yr}^{-1}$ and $L_0 = 100 \text{ m}^3/\text{Mg}$).

The following table summarizes the various sets of LandGEM model parameters used in this collection rate analysis.

| Source | k (yr-1) | L ₀ (m ³ /Mg) |
|--|----------|-------------------------------------|
| NEWSVT Landfill ^{2a} | 0.06 | 130 |
| NCES Landfil ^{2a} | 0.08 | 135 |
| SCS, Northeastern U.S. Landfills ^{2b} | 0.12 | 110 |
| NSPS ^{2c} | 0.05 | 170 |
| EMCON/OWT ^{2d} | 0.13 | 100 |
| Crossroads - Phase 11 ^{2b} | 0.10 | 110 |
| AP-42 ² c | 0.04 | 100 |

Notes:

- 1. The landfill gas generation rates were estimated with the USEPA's LandGEM Version 3.02 using waste acceptance records provided by NEWSME for the JRL and the values shown for methane generation rate, k (year⁻¹) and potential methane generation capacity, L_0 (m³/Mg).
- 2. Model parameters used in LandGEM were obtained as follows:
 - a. NEWSVT Landfill and NCES Landfill values are from calibration projects performed by Sanborn Head.
 - b. SCS, Northeastern U.S. Landfills and Crossroads-Phase 11 values for k and L_o were included in information obtained from a memo written by David Burns of the Maine DEP to Steve Farrar of the Maine DEP entitled "West Old Town Landfill (WOTL), Gas Management System Design," dated December 19, 2003.
 - c. NSPS and AP-42 values for k and L_0 are provided as default values in LandGEM.
 - d. EMCON/OWT values for k and L_0 were obtained from "Landfill Gas Generation Modeling, A Reality Check," from SWANA's 26th Annual Landfill Gas Symposium Proceedings, March 2003.

NEWSME provided Sanborn Head with the waste acceptance rate data that was input to the LandGEM model for waste accepted at the JRL through 2011. Future annual waste acceptance projections were provided by SME. Waste acceptance rates can be found in Appendix A.

LandGEM estimates were prepared for the JRL facility based on two waste acceptance scenarios:

- Total Waste Accepted; and
- Degradable Waste Accepted.

The LFG generation rate estimates based on total waste accepted are presented in Table B-1. The LFG generation rate estimates based on degradable waste accepted are presented in Table B-2.

S:\RANDATA\3100s\3151.00\Originals\2012 Gas Projections\Currently Permitted Footprint, Maine Energy Waste\Dec 2012 Update\20121220 Appendix B Narrative.docx

Table B-1. Landfill Gas Generation Rate Estimates Modeling based on Total Waste Accepted With Waste Diverted from Maine Energy

Juniper Ridge Landfill Old Town, Maine

| | Various sources for modeling parameters k and L _o | | | | | | | |
|------|--|--------------------------------|--|--------------------|-------------------------|--|---------------------|--|
| year | NEWSVT Landfill ^{2a} | NCES Landfill ^{2a} | SCS, Northeastern U.S. Landfills ^{2b} | NSPS ^{2c} | EMCON/OWT ^{2d} | Crossroads - Phase 11 ^{2b} | AP-42 ^{2c} | |
| | scfm | scfm | scfm | scfm | scfm | scfm | scfm | |
| 1997 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1998 | 24 | 33 | 40 | 27 | 39 | 34 | 13 | |
| 1999 | 53 | 72 | 85 | 58 | 83 | 72 | 28 | |
| 2000 | 82 | 110 | 128 | 90 | 125 | 110 | 43 | |
| 2001 | 116 | 155 | 177 | 128 | 172 | 152 | 61 | |
| 2002 | 147 | 196 | 220 | 164 | 213 | 191 | 79 | |
| 2003 | 183 | 241 | 268 | 204 | 258 | 234 | 99 | |
| 2004 | 216 | 282 | 309 | 242 | 297 | 272 | 117 | |
| 2005 | 253 | 329 | 357 | 285 | 341 | 315 | 138 | |
| 2006 | 469 | 620 | 696 | 523 | 672 | 605 | 252 | |
| 2007 | 928 | 1,240 | 1,419 | 1,030 | 1,376 | 1,221 | 494 | |
| 2008 | 1,311 | 1,745 | 1,980 | 1,459 | 1,915 | 1,711 | 701 | |
| 2009 | 1,807 | 2,396 | 2,698 | 2,013 | 2,606 | 2,340 | 969 | |
| 2010 | 2,191 | 2,883 | 3,199 | 2,451 | 3,079 | 2,795 | 1,185 | |
| 2011 | 2,719 | 3,561 | 3,918 | 3,049 | 3,763 | 3,438 | 1,477 | |
| 2012 | 3,214 | 4,184 | 4,552 | 3,616 | 4,361 | 4,016 | 1,758 | |
| 2013 | 3,682 | 4,761 | 5,116 | 4,156 | 4,887 | 4,541 | 2,027 | |
| 2014 | 4,098 | 5,260 | 5,576 | 4,643 | 5,310 | 4,982 | 2,274 | |
| 2015 | 4,489 | 5,721 | 5,985 | 5,107 | 5,681 | 5,381 | 2,511 | |
| 2016 | 4,858 | 6,146 | 6,346 | 5,548 | 6,007 | 5,742 | 2,739 | |
| 2017 | 5,205 | 6,538 | 6,667 | 5,967 | 6,293 | 6,069 | 2,957 | |
| 2018 | 5,533 | 6,900 | 6,952 | 6,366 | 6,544 | 6,365 | 3,168 | |
| 2019 | 5,538 | 6,820 | 6,706 | 6,414 | 6,276 | 6,213 | 3,213 | |
| 2020 | 5,215 | 6,295 | 5,948 | 6,101 | 5,511 | 5,622 | 3,087 | |
| 2021 | 4,912 | 5,811 | 5,275 | 5,804 | 4,839 | 5,087 | 2,966 | |
| 2022 | 4,626 | 5,364 | 4,679 | 5,521 | 4,249 | 4,603 | 2,850 | |
| 2023 | 4,356 | 4,952 | 4,150 | 5,251 | 3,731 | 4,165 | 2,738 | |
| 2024 | 4,103 | 4,571 | 3,680 | 4,995 | 3,276 | 3,768 | 2,630 | |
| 2025 | 3,864 | 4,220 | 3,264 | 4,752 | 2,877 | 3,410 | 2,527 | |
| 2026 | 3,639 | 3,895 | 2,895 | 4,520 | 2,526 | 3,085 | 2,428 | |
| 2027 | 3,427 | 3,596 | 2,568 | 4,299 | 2,218 | 2,792 | 2,333 | |
| 2028 | 3,227 | 3,319 | 2,277 | 4,090 | 1,948 | 2,526 | 2,242 | |
| 2029 | 3,039 | 3,064 | 2,020 | 3,890 | 1,710 | 2,286 | 2,154 | |
| 2030 | 2,862 | 2,829 | 1,791 | 3,701 | 1,502 | 2,068 | 2,069 | |
| 2031 | 2,696 | 2,611 | 1,589 | 3,520 | 1,319 | 1,871 | 1,988 | |
| 2032 | 2,539 | 2,410 | 1,409 | 3,348 | 1,158 | 1,693 | 1,910 | |
| 2033 | 2,391 | 2,225 | 1,250 | 3,185 | 1,017 | 1,532 | 1,835 | |
| 2034 | 2,252 | 2,054 | 1,108 | 3,030 | 893 | 1,386 | 1,763 | |
| 2035 | 2,120 | 1,896 | 983 | 2,882 | 784 | 1,254 | 1,694 | |

Notes:

- 1. Unless otherwise noted, gas generation rate estimates are based on the assumption that waste accepted at the JRL is degradable. The gas generation modeling results presented in this table were based on the total-waste-accepted scenario (i.e., the tonnages modeled included waste that may be considered nondegradable).
- The landfill gas generation rates were estimated with the USEPA's LandGEM Version 3.02 using waste acceptance records and projections for the JRL and the following values for methane generation rate, k (year¹) and potential methane generation capacity, Lo (m³/Mg):
 - a. NEWSVT Landfill: k=0.06 yr⁻¹ and Lo=130 m³/Mg and NCES Landfill: k=0.08 yr⁻¹ and Lo=135 m³/Mg. These values are from calibration projects performed by Sanborn Head.
 - b. SCS, Northeastern U.S. Landfills: $k=0.12 \text{ yr}^{-1}$ and Lo = 110 m³/Mg and Crossroads Phase 11: $k=0.10 \text{ yr}^{-1}$ and Lo=110 m³/Mg. These values were included in information obtained from a memo written by David Burns of the Maine DEP to Steve Farrar of the Maine DEP entitled "West Old Town Landfill (WOTL), Gas Management System Design," dated December 19, 2003.
 - c. NSPS: k=0.05 yr $^{-1}$ and Lo=170 m $^3/Mg$ and AP-42: k=0.04 yr $^{-1}$ and Lo=100 m $^3/Mg$. These values are provided as default values in LandGEM.
 - d. EMCON/OWT: k= 0.13 yr⁻¹ and Lo=100 m³/Mg. These values were obtained from "Landfill Gas Generation Modeling, A Reality Check," from SWANA's 26th Annual Landfill Gas Symposium Proceedings, March 2003.

Table B-2. Landfill Gas Generation Rate Estimates Modeling based on Degradable Waste Accepted With Waste Diverted from Maine Energy

Juniper Ridge Landfill Old Town, Maine

| | Various sources for modeling parameters k and L_o | | | | | | | |
|------|---|--------------------------------|--|--------------------|-------------------------|--|---------------------|--|
| year | NEWSVT Landfill ^{2a} | NCES Landfill ^{2a} | SCS, Northeastern U.S. Landfills ^{2b} | NSPS ^{2c} | EMCON/OWT ^{2d} | Crossroads - Phase 11 ^{2b} | AP-42 ^{2c} | |
| | scfm | scfm | scfm | scfm | scfm | scfm | scfm | |
| 1997 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1998 | 21 | 28 | 34 | 23 | 33 | 29 | 11 | |
| 1999 | 44 | 60 | 70 | 48 | 69 | 60 | 23 | |
| 2000 | 68 | 92 | 107 | 75 | 104 | 91 | 36 | |
| 2001 | 94 | 126 | 144 | 104 | 140 | 124 | 50 | |
| 2002 | 117 | 155 | 174 | 130 | 168 | 151 | 63 | |
| 2003 | 146 | 192 | 214 | 163 | 206 | 187 | 79 | |
| 2004 | 173 | 226 | 248 | 194 | 238 | 218 | 94 | |
| 2005 | 191 | 247 | 266 | 215 | 254 | 236 | 105 | |
| 2006 | 310 | 408 | 451 | 348 | 434 | 395 | 168 | |
| 2007 | 566 | 752 | 852 | 631 | 824 | 737 | 304 | |
| 2008 | 771 | 1,021 | 1,147 | 860 | 1,108 | 996 | 415 | |
| 2009 | 1,036 | 1,367 | 1,528 | 1,157 | 1,473 | 1,330 | 559 | |
| 2010 | 1,241 | 1,627 | 1,793 | 1,392 | 1,723 | 1,572 | 674 | |
| 2011 | 1,532 | 2,000 | 2,189 | 1,721 | 2,100 | 1,926 | 836 | |
| 2012 | 1,797 | 2,332 | 2,524 | 2,025 | 2,415 | 2,232 | 986 | |
| 2013 | 2,051 | 2,645 | 2,830 | 2,318 | 2,700 | 2,517 | 1,133 | |
| 2014 | 2,310 | 2,961 | 3,133 | 2,620 | 2,983 | 2,802 | 1,284 | |
| 2015 | 2,554 | 3,253 | 3,403 | 2,906 | 3,231 | 3,059 | 1,430 | |
| 2016 | 2,784 | 3,522 | 3,642 | 3,179 | 3,449 | 3,293 | 1,570 | |
| 2017 | 3,000 | 3,771 | 3,854 | 3,438 | 3,640 | 3,504 | 1,704 | |
| 2018 | 3,204 | 4,001 | 4,042 | 3,685 | 3,808 | 3,695 | 1,833 | |
| 2019 | 3,214 | 3,963 | 3,909 | 3,721 | 3,662 | 3,616 | 1,863 | |
| 2020 | 3,027 | 3,658 | 3,467 | 3,539 | 3,215 | 3,272 | 1,790 | |
| 2021 | 2,851 | 3,377 | 3,075 | 3,367 | 2,823 | 2,961 | 1,720 | |
| 2022 | 2,685 | 3,117 | 2,728 | 3,202 | 2,479 | 2,679 | 1,652 | |
| 2023 | 2,528 | 2,878 | 2,419 | 3,046 | 2,177 | 2,424 | 1,587 | |
| 2024 | 2,381 | 2,656 | 2,146 | 2,898 | 1,912 | 2,193 | 1,525 | |
| 2025 | 2,242 | 2,452 | 1,903 | 2,756 | 1,679 | 1,985 | 1,465 | |
| 2026 | 2,112 | 2,264 | 1,688 | 2,622 | 1,474 | 1,796 | 1,408 | |
| 2027 | 1,989 | 2,090 | 1,497 | 2,494 | 1,294 | 1,625 | 1,353 | |
| 2028 | 1,873 | 1,929 | 1,328 | 2,372 | 1,137 | 1,470 | 1,300 | |
| 2029 | 1,764 | 1,781 | 1,177 | 2,257 | 998 | 1,330 | 1,249 | |
| 2030 | 1,661 | 1,644 | 1,044 | 2,147 | 876 | 1,204 | 1,200 | |
| 2031 | 1,565 | 1,517 | 926 | 2,042 | 769 | 1,089 | 1,153 | |
| 2032 | 1,473 | 1,401 | 822 | 1,942 | 676 | 985 | 1,108 | |
| 2033 | 1,388 | 1,293 | 729 | 1,848 | 593 | 892 | 1,064 | |
| 2034 | 1,307 | 1.194 | 646 | 1,757 | 521 | 807 | 1,022 | |
| 2035 | 1,231 | 1.102 | 573 | 1,672 | 457 | 730 | 982 | |

Notes:

1. Unless otherwise noted, gas generation rate estimates are based on the assumption that waste accepted at the JRL is degradable. The gas generation modeling results presented in this table were based on waste accepted at the landfill that is considered degradable (i.e., an estimated percentage of nondegradable waste was removed).

 The landfill gas generation rates were estimated with the USEPA's LandGEM Version 3.02 using waste acceptance records and projections for the JRL and the following values for methane generation rate, k (year¹) and potential methane generation capacity, Lo (m³/Mg):

- a. NEWSVT Landfill: k=0.06 yr⁻¹ and Lo=130 m³/Mg and NCES Landfill: k=0.08 yr⁻¹ and Lo=135 m³/Mg. These values are from calibration projects performed by Sanborn Head.
- b. SCS, Northeastern U.S. Landfills: k=0.12 yr⁻¹ and Lo = 110 m³/Mg and Crossroads Phase 11: k=0.10 yr⁻¹and Lo=110 m³/Mg. These values were included in information obtained from a memo written by David Burns of the Maine DEP to Steve Farrar of the Maine DEP entitled "West Old Town Landfill (WOTL), Gas Management System Design," dated December 19, 2003.
- c. NSPS: k=0.05 yr 1 and Lo=170 m $^3/Mg$ and AP-42: k=0.04 yr 1 and Lo=100 m $^3/Mg$. These values are provided as default values in LandGEM.
- d. EMCON/OWT: k= 0.13 yr¹ and Lo=100 m³/Mg. These values were obtained from "Landfill Gas Generation Modeling, A Reality Check," from SWANA's 26th Annual Landfill Gas Symposium Proceedings, March 2003.

APPENDIX C

LANDFILL GAS COLLECTION RATE ESTIMATES

SANBORN

APPENDIX C LANDFILL GAS COLLECTION RATE ESTIMATES

Landfill gas (LFG) collection rates are estimated for the Juniper Ridge Landfill based on the yearly estimates for LFG generation presented in Appendix B and on estimated LFG collection efficiency. The U.S. Environmental Protection Agency's (USEPA's) Compilation of Air Pollutant Emission Factors (AP-42) states that 75 percent is a commonly assumed LFG collection efficiency, and that higher collection efficiencies (e.g., 85 percent) may be achieved at sites designed to control gas emissions.

The USEPA's Federal Register for Mandatory Reporting of Greenhouse Gases, Volume 74, No. 209, Subpart HH indicates that for landfills with an active gas collection system, 75 percent collection efficiency may be used for areas with an intermediate soil cover and 95 percent may be used for areas with a final cover.

We have assumed that with a properly designed and operated LFG extraction system and adequate intermediate and/or final cover, 85 percent of the LFG generated at the JRL may be collected.

LFG collection rate estimates are calculated by multiplying the LFG generation rate estimates from the LandGEM model with the estimated 85 percent collection efficiency. The LFG collection rate estimates are presented in Table C-1 (Modeling based on Total Waste Accepted) and Table C-2 (Modeling based on Degradable Waste Accepted).

S:\RANDATA\3100s\3151.00\Originals\2012 Gas Projections\Currently Permitted Footprint, Maine Energy Waste\Dec 2012 Update\20121220 Appendix C Narrative.docx

SANBORN III HEAD

Table C-1. Landfill Gas Collection Rate Estimates Modeling based on Total Waste Accepted With Waste Diverted from Maine Energy

Juniper Ridge Landfill Old Town, Maine

| | | Various sources for modeling parameters k and $L_{ m o}$ | | | | | | |
|------|---|--|--|---|------------------------------|-----------------------------------|--|-------------------------------|
| Year | Gas Collection & Control System Capture Efficiency (%) | NEWSVT Landfill ^{2a} (scfm) | NCES Landfill ^{2a} (scfm) | SCS, Northeastern U.S. Landfills ^{2b} (scfm) | NSPS ^{2c} (scfm) | EMCON/OWT ^{2d} (scfm) | Crossroads - Phase 11 ^{2b} (scfm) | AP-42 ^{2c} (scfm) |
| 2006 | 85 | 398 | 527 | 592 | 445 | 571 | 514 | 214 |
| 2007 | 85 | 789 | 1,054 | 1,206 | 876 | 1,170 | 1,038 | 420 |
| 2008 | 85 | 1,115 | 1,483 | 1,683 | 1,240 | 1,628 | 1,454 | 596 |
| 2009 | 85 | 1,536 | 2,036 | 2,293 | 1,711 | 2,215 | 1,989 | 824 |
| 2010 | 85 | 1,862 | 2,450 | 2,719 | 2,083 | 2,617 | 2,376 | 1,007 |
| 2011 | 85 | 2,311 | 3,027 | 3,330 | 2,591 | 3,198 | 2,922 | 1,256 |
| 2012 | 85 | 2,732 | 3,557 | 3,869 | 3,073 | 3,706 | 3,414 | 1,494 |
| 2013 | 85 | 3,130 | 4,047 | 4,349 | 3,533 | 4,154 | 3,860 | 1,723 |
| 2014 | 85 | 3,483 | 4,471 | 4,740 | 3,947 | 4,513 | 4,235 | 1,933 |
| 2015 | 85 | 3,816 | 4,862 | 5,087 | 4,341 | 4,829 | 4,574 | 2.134 |
| 2016 | 85 | 4,129 | 5,224 | 5,394 | 4,715 | 5,106 | 4,881 | 2,328 |
| 2017 | 85 | 4,425 | 5,557 | 5,667 | 5,072 | 5,349 | 5,159 | 2,514 |
| 2018 | 85 | 4,703 | 5,865 | 5,909 | 5,411 | 5,563 | 5,410 | 2,692 |
| 2019 | 85 | 4,707 | 5,797 | 5,700 | 5,452 | 5,334 | 5,281 | 2,731 |
| 2020 | 85 | 4,433 | 5,351 | 5,055 | 5,186 | 4,684 | 4,779 | 2,624 |
| 2021 | 85 | 4,175 | 4,940 | 4,484 | 4,933 | 4,113 | 4,324 | 2,521 |
| 2022 | 85 | 3,932 | 4,560 | 3,977 | 4,692 | 3,612 | 3,912 | 2,422 |
| 2023 | 85 | 3,703 | 4,209 | 3,527 | 4,464 | 3,171 | 3,540 | 2,327 |
| 2024 | 85 | 3,487 | 3,886 | 3,128 | 4,246 | 2,785 | 3,203 | 2,236 |
| 2025 | 85 | 3,284 | 3,587 | 2,775 | 4,039 | 2,445 | 2,898 | 2,148 |
| 2026 | 85 | 3,093 | 3,311 | 2,461 | 3,842 | 2,147 | 2,623 | 2,064 |
| 2027 | 85 | 2,913 | 3,056 | 2,183 | 3,654 | 1,885 | 2,373 | 1,983 |
| 2028 | 85 | 2,743 | 2,822 | 1,936 | 3,476 | 1,656 | 2,147 | 1,905 |
| 2029 | 85 | 2,583 | 2,605 | 1,717 | 3,307 | 1,454 | 1,943 | 1,831 |
| 2030 | 85 | 2,433 | 2,404 | 1,523 | 3,145 | 1,277 | 1,758 | 1,759 |
| 2031 | 85 | 2,291 | 2,219 | 1,350 | 2,992 | 1,121 | 1,591 | 1,690 |
| 2032 | 85 | 2,158 | 2,049 | 1,198 | 2,846 | 984 | 1,439 | 1,624 |
| 2033 | 85 | 2,032 | 1,891 | 1,062 | 2,707 | 864 | 1,302 | 1,560 |
| 2034 | 85 | 1,914 | 1,746 | 942 | 2,575 | 759 | 1,178 | 1,499 |
| 2035 | 85 | 1,802 | 1,612 | 836 | 2,450 | 666 | 1,066 | 1,440 |

Notes:

1. Unless otherwise noted, gas generation rate estimates are based on the assumption that waste accepted at the JRL is degradable. The gas generation modeling results presented in this table were based on the total-waste-accepted scenario (i.e., the tonnages modeled included waste that may be considered nondegradable).

 The landfill gas generation rates were estimated with the USEPA's LandGEM Version 3.02 using waste acceptance records and projections for the JRL and the following values for methane generation rate, k (year⁻¹) and potential methane generation capacity, Lo (m³/Mg):

a. NEWSVT Landfill: k=0.06 yr1 and Lo=130 m3/Mg and NCES Landfill: k=0.08 yr1 and Lo=135 m3/Mg. These values are from calibration projects performed by Sanborn Head.

b. SCS, Northeastern U.S. Landfills: k=0.12 yr¹ and Lo = 110 m³/Mg and Crossroads - Phase 11: k=0.10 yr¹ and Lo=110 m³/Mg. These values were included in information obtained from a memo written by David Burns of the Maine DEP to Steve Farrar of the Maine DEP entitled "West Old Town Landfill (WOTL), Gas Management System Design," dated December 19, 2003.

c. NSPS: k=0.05 yr⁻¹ and Lo=170 m³/Mg and AP-42: k=0.04 yr⁻¹ and Lo=100 m³/Mg. These values are provided as default values in LandGEM.

d. EMCON/OWT: k= 0.13 yr¹ and Lo=100 m³/Mg. These values were obtained from "Landfill Gas Generation Modeling, A Reality Check," from SWANA's 26th Annual Landfill Gas Symposium Proceedings, March 2003.

3. We assumed that with a properly designed and operated LFG extraction system and adequate intermediate and/or final cover, 85 percent of the LFG generated at the JRL is collected.

Figure C-1. Landfill Gas Collection Rate Estimates Modeling based on Total Waste Accepted With Waste Diverted from Maine Energy



S:\RANDATA\3100s\3151.00\Originals\2012 Gas Projections\Currently Permitted Footprint, Maine Energy Waste\Dec 2012 Update\20121220 JRL Collection Rate.xls

Sanborn, Head & Associates, Inc.

Table C-2. Landfill Gas Collection Rate Estimates Modeling based on Degradable Waste Accepted With Waste Diverted from Maine Energy

Juniper Ridge Landfill Old Town, Maine

| | 1 | Various sources for modeling parameters k and L $_{ m o}$ | | | | | | |
|---------|---|---|--|---|------------------------------|-----------------------------------|--|-------------------------------|
| | 1 | <u> </u> | T | | es for modeling par | | | I |
| Year | Gas Collection & Control System Capture Efficiency (%) | NEWSVT Landfill ^{2a} (scfm) | NCES Landfill ^{2a} (scfm) | SCS, Northeastern U.S. Landfills ^{2b} (scfm) | NSPS ^{2c} (scfm) | EMCON/OWT ^{2d} (scfm) | Crossroads - Phase 11 ^{2b} (scfm) | AP-42 ^{2c} (scfm) |
| 2006 | 85 | 264 | 346 | 384 | 296 | 369 | 335 | 143 |
| 2007 | 85 | 482 | 640 | 724 | 536 | 701 | 626 | 258 |
| 2008 | 85 | 655 | 867 | 975 | 731 | 941 | 846 | 352 |
| 2009 | 85 | 880 | 1,162 | 1,299 | 984 | 1,252 | 1,131 | 475 |
| 2010 | 85 | 1,055 | 1,383 | 1,524 | 1,183 | 1,464 | 1,336 | 573 |
| 2011 | 85 | 1,302 | 1,700 | 1,861 | 1,463 | 1,785 | 1,637 | 710 |
| 2012 | 85 | 1,527 | 1,982 | 2,146 | 1,721 | 2,053 | 1,897 | 838 |
| 2013 | 85 | 1,743 | 2,248 | 2,405 | 1,970 | 2,295 | 2,139 | 963 |
| 2014 | 85 | 1,963 | 2,517 | 2,663 | 2,227 | 2,535 | 2,381 | 1,092 |
| 2015 | 85 | 2,171 | 2,765 | 2,893 | 2,470 | 2,746 | 2,601 | 1,215 |
| 2016 | 85 | 2,366 | 2,994 | 3,096 | 2,702 | 2,931 | 2,799 | 1,334 |
| 2017 | 85 | 2,550 | 3,205 | 3,276 | 2,922 | 3,094 | 2,978 | 1,448 |
| 2018 | 85 | 2,723 | 3,400 | 3,436 | 3,132 | 3,237 | 3,141 | 1,558 |
| 2019 | 85 | 2,732 | 3,369 | 3,323 | 3,163 | 3,113 | 3,074 | 1,583 |
| 2020 | 85 | 2,573 | 3,110 | 2,947 | 3,008 | 2,733 | 2,781 | 1,521 |
| 2021 | 85 | 2,423 | 2,871 | 2,614 | 2,862 | 2,400 | 2,517 | 1,462 |
| 2022 | 85 | 2,282 | 2,650 | 2,318 | 2,722 | 2,107 | 2,277 | 1,404 |
| 2023 | 85 | 2,149 | 2,446 | 2,056 | 2,589 | 1,850 | 2,060 | 1,349 |
| 2024 | 85 | 2,024 | 2,258 | 1,824 | 2,463 | 1,625 | 1,864 | 1,296 |
| 2025 | 85 | 1,906 | 2,084 | 1,617 | 2,343 | 1,427 | 1,687 | 1,246 |
| 2026 | 85 | 1,795 | 1,924 | 1,435 | 2,229 | 1,253 | 1,526 | 1,197 |
| 2027 | 85 | 1,691 | 1,776 | 1,272 | 2,120 | 1,100 | 1,381 | 1,150 |
| 2028 | 85 | 1,592 | 1,640 | 1,128 | 2,017 | 966 | 1,250 | 1,105 |
| 2029 | 85 | 1,499 | 1,514 | 1,001 | 1,918 | 848 | 1,131 | 1,061 |
| 2030 | 85 | 1,412 | 1,397 | 888 | 1,825 | 745 | 1,023 | 1,020 |
| 2031 | 85 | 1,330 | 1,290 | 787 | 1,736 | 654 | 926 | 980 |
| 2032 | 85 | 1,252 | 1,191 | 698 | 1,651 | 574 | 838 | 941 |
| 2033 | 85 | 1,179 | 1,099 | 619 | 1,570 | 504 | 758 | 904 |
| 2034 | 85 | 1,111 | 1,015 | 549 | 1,494 | 443 | 686 | 869 |
| 2035 | 85 | 1,046 | 937 | 487 | 1,421 | 389 | 621 | 835 |

Notes:

1. Unless otherwise noted, gas generation rate estimates are based on the assumption that waste accepted at the JRL is degradable. The gas generation modeling results presented in this table were based on waste accepted at the landfill that is considered degradable (i.e., an estimated percentage of nondegradable waste was removed).

 The landfill gas generation rates were estimated with the USEPA's LandGEM Version 3.02 using waste acceptance records and projections for the JRL and the following values for methane generation rate, k (year¹) and potential methane generation capacity, Lo (m³/Mg):

a. NEWSVT Landfill: k=0.06 yr⁻¹ and Lo=130 m³/Mg and NCES Landfill: k=0.08 yr⁻¹ and Lo=135 m³/Mg. These values are from calibration projects performed by Sanborn Head.

b. SCS, Northeastern U.S. Landfills: k=0.12 yr⁻¹ and Lo = 110 m³/Mg and Crossroads - Phase 11: k=0.10 yr⁻¹ and Lo=110 m³/Mg. These values were included in information obtained from a memo written by David Burns of the Maine DEP to Steve Farrar of the Maine DEP entitled "West Old Town Landfill (WOTL), Gas Management System Design," dated December 19, 2003.

c. NSPS: k=0.05 yr⁻¹ and Lo=170 m³/Mg and AP-42: k=0.04 yr⁻¹ and Lo=100 m³/Mg. These values are provided as default values in LandGEM.

d. EMCON/OWT: k= 0.13 yr¹ and Lo=100 m³/Mg. These values were obtained from "Landfill Gas Generation Modeling, A Reality Check," from SWANA's 26th Annual Landfill Gas Symposium Proceedings, March 2003.

3. We assumed that with a properly designed and operated LFG extraction system and adequate intermediate and/or final cover, 85 percent of the LFG generated at the JRL is collected.

Figure C-2. Landfill Gas Collection Rate Estimates Modeling based on Degradable Waste Accepted With Waste Diverted from Maine Energy



Juniper Ridge Landfill Old Town, Maine

S:\RANDATA\3100s\3151.00\Originals\2012 Gas Projections\Currently Permitted Footprint, Maine Energy Waste\Dec 2012 Update\20121220 JRL Collection Rate.xls

Landfill Gas Collection Rate (scfm, at 50% methane)

Sanborn, Head & Associates, Inc.

Non-GHG emissions are lower at landfills too

As we work to reduce GHG emissions, it is important to also monitor changes in other emissions such as nitrogen oxides (NOx) and carbon monoxide (CO), both of which contribute to the formation of smog. The table below indicates the degree to which WTE produces more NOx and CO than Juniper Ridge.

The UMO pipeline project – which will deliver LFG to the University of Maine Orono campus to be used as heating fuel – will further improve the JRL numbers, by displacing fossil fuel use on campus.

| | NOx | СО |
|---|-------|-------|
| WTE creates times more emissions than JRL | 45.6x | 3.3x |
| WTE creates times more emissions than JRL-UMO | 62.8x | 15.0x |

*Data Source: The WTE values are from EPA's Compilation of Pollutant Emission Factors, Table 2.1-8. For JRL, we used the AP-42 default value for the methane (CH4) generation potential of waste (100 m3/Mg) and the heat content of LFG at 50% CH4 (500 Btu/scf) to estimate the MMBtu/ton available from waste, and applied emission factors for the JRL flare and UMO Boiler.

What do we mean by Low Emission Landfill?

The Low Emission Landfill (LELF) integrates a variety of technologies and operating standards to minimize emissions from disposed waste. One of the most important components of the LELF is comprehensive gas collection and control system, installed on an accelerated timeline to ensure effective coverage throughout the gas-generating life of the waste. Placement of geosynthetic cover helps to maximize collection and minimize emissions while also reducing leachate generation.

Juniper Ridge has other features to ensure optimal performance. For example, the facility's proposed gas treatment system will include state-of-the art gas scrubbing technology to remove contaminants from the collected gas, offering a level of treatment that many landfill operators would find cost-prohibitive. Furthermore, given the proximity of the UMO campus, JRL is ideally situated with a productive end-use for the landfill gas it generates.

Greatest emission reductions come from recycling

The difference between emission rates for landfills and waste-to-energy facilities is minor compared to

the huge greenhouse gas benefits that can be realized through recycling. According to EPA, over 54% of Municipal Solid Waste (MSW) consists of potentially recyclable materials such as paper, glass, metal, and plastic.

Using the EPA's Waste Reduction Model (WARM), we see that achieving a 50% diversion rate can reduce GHG emissions by 1.435 MgCO2e. Compared to this, the 0.012 Mg difference between waste to energy and landfills is minimal.

The GHG benefit is large because recycling reduces the





need to extract, process, and transport virgin materials such as timber, metal ore, and other raw resources. Combined, these activities far exceed the energy required to fuel recycling vehicles and power material recovery facilities.

From the perspective of low-carbon resource management and mitigating global climate change, finding sustainable ways to develop recycling infrastructure and promote recycling behavior is much more significant than deciding which type of disposal infrastructure to employ.



In the coming months we will focus on expanding our Zero-Sort[®] service offerings in Maine. We take great pride in the effectiveness of our recycling platforms, which improves the environmental and economic efficiency of recycling and, most importantly, increases participation by making recycling simple and convenient. By switching to Zero-Sort and Pay-As-You-Throw, Brewer, Maine increased its recycling rate from 4% to 30%. Communities in Massachusetts have achieved up to 42% with Zero-Sort.

Conclusion

Well-designed and -operated landfills are capable of achieving better greenhouse gas performance than waste-to-energy facilities. However even the best disposal facility will never attain the same level of GHG reduction as recycling. The most effective resource management hierarchy will leave the question of disposal technology up to local conditions, and focus primarily on the development of robust recycling infrastructure and markets.

About Casella: Casella has been committed to reducing GHG emissions from resource management since 2003, when we joined the EPA Climate Leaders program as the only charter member in our industry. Between 2005 and 2010 we **reduced our greenhouse gas emissions by 45%.** This is equivalent to taking 175,000 cars off the road or planting 192,000 acres of pine forest each year. In recognition of our achievement, we received a **2012 Climate Leadership Award** from the EPA, the Climate Registry, the Center for Climate and Energy Solutions, and the Association of Climate Change Officers. We have also been recognized as the **2008 EPA Landfill Methane Outreach Project Partner of the Year.** In 2010, we **diverted over 890,000 tons of recyclables and organics** from disposal.



ATTACHMENT 10

SUMMARY OF ENVIRONMENTAL MONITORING PROGRAM

represent groundwater in the soils at the base of the stream. Information on the geologic formation in which each monitoring well is screened, as well as the distance below ground of each screened interval, is listed in Table 2-1.

TABLE 2-1

GROUNDWATER MONITORING LOCATIONS

| Monitoring Well | Position Relative to Landfill | Screen Depth Interval (feet-BGS) | Geologic Formation Screened | |
|-------------------------|---|--|-----------------------------------|--|
| MW-204 | Downgradient | 13.8 – 18.8 | Till | |
| MW-206 | Upgradient | 15.0 - 20.0 | Till | |
| MW-207 | Upgradient | 25.0 - 30.0 | Bedrock | |
| MW11-207R | Upgradient | 39.5 - 44.5 | Bedrock | |
| MW-212 | Upgradient | 12.0 – 17.0 | Till | |
| MW-223A | Downgradient | 28.0 - 33.0 | Bedrock | |
| MW-223B | Downgradient | 12.6 – 17.6 | Till | |
| MW-227 | Downgradient | 15.0 - 20.0 | Till | |
| MW-301 | Downgradient | 162.7 – 182.7 | Bedrock | |
| MW-302R | Side-gradient | 19.5 – 29.5 | Bedrock | |
| MW-303 | Upgradient | 34.7 – 44.7 | Till | |
| MW-304A | Upgradient | 29.5 - 39.5 | Bedrock | |
| MW-401A | Downgradient | 98.8 - 108.8 | Bedrock | |
| MW-401B | Downgradient | 10.0 - 20.0 | Till | |
| MW-402A | Downgradient | 95.5 - 105.5 | Bedrock | |
| MW-402B | Downgradient | 12.0 - 22.0 | Till | |
| DP-4 | Downgradient (In proximity of leachate pond) | 18.5 – 24.5 | Till | |
| P-04-02 | Downgradient (In proximity of leachate pond) | (32.11 – 37.11) ¹ | Till | |
| P-04-04 | Downgradient (In proximity of leachate pond) | (27.21 – 32.21) ¹ | Till | |
| MW04-102 | Downgradient (In proximity of leachate pond) | 10 – 15 | Till | |
| MW04-105 | Downgradient (In proximity of leachate pond) | 14.8 – 19.8 | Till | |
| MW04-109R | Downgradient (In proximity of leachate pond) | 15.0 – 20.0 | Till | |
| MW-216BR | Downgradient | 14.6 – 19.6 | Till | |
| MW09-901 | Downgradient | 15.0 – 20.0 | Till | |
| PWS10-1 ² | Downgradient | about 12 to 18 inches | Stream Alluvium | |
| PWS10-2 ² | Downgradient | about 12 to 18 inches | Stream Alluvium | |
| PWS10-3 ² | Downgradient | about 12 to 18 inches | Stream Alluvium | |
| <u>Note</u> 1. Scree | ned interval for P-04-02 and P- | 04-04 are from top (| | |

1. Screened interval for P-04-02 and P-04-04 are from top of PVC well.

2. New probes installed for each sample event.

TABLE 2-2

| Location Designation | Water Body Description | Position Relative To Landfill | |
|-------------------------|---|-------------------------------------|--|
| SW-1 | Unnamed tributary of Pushaw Stream | Downgradient | |
| SW-2 | Unnamed tributary of Pushaw Stream | Upgradient | |
| SW-3 | Unnamed tributary of Pushaw Stream | Downgradient | |
| SW-DP1 | Stormwater Detention Pond #1 | Detention pond | |
| SW-DP6 | Stormwater Detention Pond #6 | Detention pond | |
| LF-UD-1 | Cell 1 underdrain at MH #5 | Underdrain | |
| LF-UD-2 | Cell 2 underdrain at MH #5 | Underdrain | |
| LF-UD-3A | Cell 3A underdrain at MH #5 | Underdrain | |
| LF-UD-3B | Cell 3B underdrain at MH #5 | Underdrain | |
| LF-UD-4 | Cell 4 underdrain at MH #5 | Underdrain | |
| LF-UD-5-6 | Cell 5 & Cell 6 Underdrain (combined flow) | Underdrain | |
| LF-UD-6 | Cell 6 Underdrain | Underdrain | |
| LF-UD-7 | Cell 7 underdrain at MH #5 | Underdrain | |
| LP-LD-1 | Leachate pond leak detection at MH #1 | Leachate pond leak detection | |
| LP-UD-1 | Leachate pond underdrain south end at MH #7 | Leachate pond underdrain | |
| LP-UD-2 | Leachate pond underdrain north end at MH #7 | Leachate pond underdrain | |
| LF-COMP | LF-COMP Composite sample of LF-UD-1 and LF-UD- 2 when water level in manhole covers both of these inlet pipes at MH #5 | | |
| LP-COMP | Composite sample of LP-UD-1 and LP-UD- | | |
| LT-C4L | Leachate – Cell 4 pump station | Leachate | |

SURFACE WATER, LEACHATE, UNDERDRAIN, AND LEAK DETECTION MONITORING LOCATIONS

2.3 Surface Water Locations

Surface water samples were collected at five locations in 2011. SW-1, SW-2, and SW-3 are collected at the unnamed tributary to Pushaw Stream. SW-1 and SW-3 are located downgradient of the landfill while SW-2 is located upgradient of the landfill. SW-DP1 and SW-DP6 are collected at Detention Pond #1 and Detention Pond #6, respectively.

2.4 Leachate Sample Location

During 2011, leachate samples were collected from the Cell 4 leachate pump station designated as LT-C4L. The location of LT-C4L is shown on Figure 1-3. Use of the leachate pond as the primary onsite leachate storage structure was discontinued with the construction of Cell 4 during the summer of 2008, resulting in elimination of the pond's pump station sampling



paf

- HYDROGEN SULFIDE MONITOR LOCATION B N 477352.97 E 930685.56

<u>NOTE</u>

MW-207 DECOMMISSIONED AFTER APRIL 2011 SAMPLING EVENT.

LEGEND

- $\mathbf{\mathbf{\Theta}}$ GROUNDWATER SAMPLING LOCATION
- \triangle SURFACE WATER SAMPLING LOCATION
- GAS MONITORING LOCATION
- HYDROGEN SULFIDE MONITORING LOCATION
- ∇ POOR WATER SAMPLE LOCATION



TABLE 4-1

2010 ANALYTICAL PROGRAM

| Water Quality | | PQL ¹ | |
|---|----------------------------------|------------------|--|
| Parameter | Method | (mg/l) | |
| TDS | STM 2540C | 10 | |
| TSS | STM 2540C STM 2540D | | |
| Tannins/Lignins | STM 2540D STM 5550B | 4 0.2 | |
| | | 0.2 | |
| Ammonia (NH3-N) | STM 4500 NH3 E | 0.5 | |
| Arsenic (As) | SW846/6010B/3010A | 0.005 | |
| Calcium (Ca) | SW846/6010B/3010A | 0.3 | |
| Iron (Fe) | SW846/6010B/3010A | 0.05 | |
| Magnesium (Mg) | SW846/6010B/3010A | 0.3 | |
| Manganese (Mn) | SW846/6010B/3010A | 0.05 | |
| Potassium (K) | SW846/6010B/3010A | 0.3 | |
| Sodium (Na) | SW846/6010B/3010A | 0.3 | |
| Total Organic Carbon (TOC) | SW846/9060A | 2.0 | |
| Chloride (CI ⁻) | SW846/E300/9056 | 1.0 | |
| Sulfate (SO ₄) | SW846/E300/9056 | 2.0 | |
| Nitrate (NO ₃ -N) | SW846/E300/9056 | 0.3 | |
| Bicarbonate (HCO ₃) | STM 2320B | 1.5 | |
| Volatile Organic Compounds (VOCs) ³ | U.S.EPA 8260B | 0.001 – 0.01 | |
| Chemical Oxygen Demand (COD) | Hach 8000 | 10 | |
| Sulfide ⁸ | SW846/9030B | 2.5 | |
| Total Kjeldahl Nitrogen (TKN) ⁴ | STM 4500 NH ₃ E | 0.5 | |
| Total Phosphorous ⁵ | U.S.EPA 365.3 | 0.04 | |
| BOD ⁶ | STM 5210B | 5 | |
| Cadmium (Cd) | SW846/6010B/3010A | 0.0006 | |
| Copper (Cu) | SW846/6010B/3010A | 0.003 | |
| Nickel (Ni) | SW846/6010B/3010A | 0.005 | |
| Field Parameters | | | |
| Groundwater Elevation | Field Measurement | NA | |
| Specific Conductance | Field Measurement | NA | |
| Dissolved Oxygen | Field Measurement | NA | |
| pH | Field Measurement | NA | |
| Temperature | Field Measurement | NA | |
| Turbidity | Field Measurement (APHA 2130) | NA | |
| Monitoring Well Pumping Rate | Field Measurement | NA | |
| Surface Water Flow Rate | Field Measurement | NA | |
| Field Observations | Field Observations | NĂ | |
| Total Alkalinity | Field Measurement | 5 | |

Notes: 1. Practical Quantitation Limits (PQLs) have been defined by U.S.EPA as up to 10 times the method or 1. It is stated as a provided by the state and instrument detection limit and therefore may vary between laboratories.

NA = Not Applicable. VOCs are the 47 organic constituents listed in Appendix I of 40 CFR Part 258. PQLs for VOCs are reported 2. 3. as µg/L.

4. Monitoring wells and leachate only.

5. Surface waters and underdrain only.

Surface waters and underdrain only. Surface waters only (excluding detention ponds and underdrains). During spring sample event, MW-401B, LF-UD-1, LF-UD-2, LF-UD-3, LF-UD-3B, LF-UD-4, LF-UD-5, LP-UD-1, LP-UD-2, DP-4, P-04-02, and MW-204 are analyzed for VOC compounds. Leachate is analyzed 6. 7. for VOC compounds during all three monitoring events.

8. Sulfide is done on leachate only in May.

<u>Method Reference</u>: The analytical methods selected are presented in <u>Test Methods for Evaluating Solid Waste</u>, OSWER, SW-846, Third Edition, as revised; Methods for <u>Chemical Analysis of Water and Wastes</u>, EMSL, EPA-600/4-79-020, revised March 1983; and <u>Standard Methods for the Examination of Water and Wastewater</u>, APHA 19th Edition, 1995. Equivalent and appropriate analytical methods may be substituted with Juniper Ridge Landfill approval, e.g. manual for automated and vice versa.

P:\Casella\OldTownLandfill\GeneralSiteInfo\Docs\R\2010\2010 (09)cas-wot-emp-rpt.doc Sevee & Maher Engineers, Inc. April 2005 (Revised April 2010)

ATTACHMENT 11

SUMMARY TABLES USING AVERAGES OF THREE YEAR WASTE TONNAGE

| | Analysis Using 3 Year Averages | | | |
|--|---|-----------------------------------|--|---------------------|
| | With MEI Operating @ 3 Year Averages of MEI Related Wastes ⁴ | | Estimated Future Wastes to JRL including @ 3 Year Average Minus 30,000 MSW to PERC | |
| Waste Stream Disposed or Recycled at JRL | Tons ¹ | Percent of Total | Tons ¹ | Percent of Total |
| Construction and Demolition Debris (CDD) | 149,800 | 21% | 149,800 | 22% |
| Front-End Process Residue (FEPR) | 115,700 | 16% | 60,500 | 9% |
| MSW Incinerator Ash | 105,300 | 14% | 55,600 | 8% |
| Oversized Bulky Wastes | 99,000 | 14% | 97,800 | 14% |
| Municipal Solid Waste (MSW) Bypass and Soft Layer | 27,800 | 4% | 24,500 | 4% |
| MSW ² | | | 68,500 | 10% |
| Fines for Cover | 125,300 | 17% | 125,300 | 18% |
| Other Wastes & Operation Materials ³ | 98,800 | 14% | 98,800 | 15% |
| TOTAL | 721,700 | | 680,800 | |
| Note: 1. All tonnages have been rounded to the nearest 100 tons 2. MSW will continue to be utilized as a soft-layer | include 3 ye | SW Incinerator ar average fror | | V by-pass |

2. MSW will continue to be utilized as a soft-layer application so the estimated net increase in MSW accepted at the site will be about 89,400 tons.

3. Operation materials include tire chips and

gravel.

Table 2-1.1

Truck Traffic

Current Versus Estimated Truck Counts using Three Year Average Waste Volumes from Maine Energy

| Waste Stream Disposed or Recycled at JRL | With MEI Operating @ 3 Year Averages for MEI Related Wastes ³ | Estimated Future Wastes to JRL including @ 3 Year Average Minus 30,000 MSW to PERC |
|---|---|---|
| Construction and Demolition Debris (CDD) | 6,908 | 6,908 |
| Front End Process Residue MEI ¹ | 1,999 | 0 |
| Front End Process Residue PERC ¹ | 2,166 | 2,166 |
| MSW Incinerator Ash ¹ | 3,527 | 1,843 |
| Oversized Bulk Waste ¹ | 3,903 | 3,856 |
| Municipal Solid Waste ¹ | 1,011 | 3,382 |
| Fines for Cover | 4,571 | 4,571 |
| Other Wastes and Operations Material ³ | 5,083 | 5,083 |
| Total Loads per Year | 29,168 | 27,809 |
| Total Loads per Day ² | 93 | 89 |

Notes:

 Average waste loads used in the analysis (tons/load) FEPR MEI=27.6 FEPR PERC=27.9, MSW=27.5, Ash MEI=29.5 Ash PERC 30.2, OBW 25.4.
 Number of trailer loads per day based on a six-day week. Total loads rounded to the nearest whole truck

3. FEPR, MSW Incinerator ash, and MSW by-pass include 3 year average from MEI.
Table 3-1.1

 Comparison of Weighted -Average Waste Density Using Three Year Average Volumes from Maine Energy

| | With MEI Operating @ 3 Year Averages for MEI Related Wastes ² | | | With MEI Shut Down & 30,000 MSW going to PERC @ 3 Year Averages | | |
|--|---|---|--------------------------------------|--|---|--------------------------------------|
| Waste Stream Disposed or Recycled at JRL | Tons ¹ | In-place Waste Density (Ibs/cu yd) | Calculated Cubic Yard Consumed | Tons ¹ | In-place Waste Density (Ibs/cu yd) | Calculated Cubic Yard Consumed |
| Construction and Demolition Debris (CDD) | 149,800 | 1,000 | 299,600 | 149,800 | 1,000 | 299,600 |
| Front-End Process Residue (FEPR) | 115,700 | 1,500 | 154,267 | 60,500 | 1,500 | 80,667 |
| MSW Incinerator Ash | 105,300 | 1,200 | 175,500 | 55,600 | 1,200 | 92,667 |
| Oversized Bulky Wastes | 99,000 | 800 | 247,500 | 97,800 | 800 | 244,500 |
| Municipal Solid Waste (MSW) Bypass and Soft Layer | 27,800 | 1,500 | 37,067 | 24,500 | 1,500 | 32,667 |
| MSW | | | | 68,500 | 1,500 | 91,333 |
| Fines for Cover | 125,300 | 1,000 | 250,600 | 125,300 | 1,000 | 250,600 |
| Other Wastes & Operation Materials ³ | 98,800 | 1,000 | 197,600 | 98,800 | 1,000 | 197,600 |
| TOTAL | 721,700 | | 1,362,134 | 680,800 | | 1,289,634 |
| Weighted-Average Waste Density (Tons/cu yd) | | 0.53 | | | 0.53 | |
| Note: 1. All tonnages have been rounded to the 2. FEPR, MSW, incinerator ash, and MSW by-pas 3. Operation materials include tire chips and gra | s waste incl | | ages for MEI. | | | |

APPENDIX 2

#S-020700-WD-BC-A; DECEMBER 20, 2013 (MSW AMENDMENT) & #S-020700-WD-BG-Z; JUNE 19, 2014 (BOARD ORDER)



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

DEPARTMENT ORDER

STATE OF MAINE, ACTING THROUGH THE BUREAU OF GENERAL SERVICES OLD TOWN, PENOBSCOT COUNTY, MAINE JUNIPER RIDGE LANDFILL #S-020700-WD-BC-A (APPROVAL WITH CONDITIONS) MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

Pursuant to the provisions of the Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S. §§1301 to 1319-Y; and the Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2, (last amended May 29, 2013), the Rules Concerning the Conduct of Licensing Hearings, 06-096 CMR 3 (last amended March 4, 2013), Solid Waste Management Rules: General Provisions, 06-096 CMR 400 (last amended July 20, 2010) and Landfill Siting, Design and Operation, and 06-096 CMR 401 (last amended July 20, 2010), the Department of Environmental Protection ("Department") has considered the application of THE STATE OF MAINE, ACTING THROUGH THE BUREAU OF GENERAL SERVICES ("BGS" or "applicant") with its supportive data, staff review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. ACRONYMS, TERMS AND ABBREVIATIONS USED IN THIS DOCUMENT

| amendment license | #S-020700-WD-N-A, issued April 9, 2004 |
|-------------------|---|
| applicant | jointly, BGS (owner of JRL) and NEWSME (as contracted operator |
| | of JRL) |
| Board | Board of Environmental Protection |
| BGS | Bureau of General Services, within DAFS, the state agency |
| | designated as owner of JRL for the State of Maine |
| Casella | Casella Waste Systems, Inc. |
| Casella/PERC | the Disposal Agreement, dated October 1, 2012, by and among |
| agreement | PERC; USA Energy Group, LLC; ESOCO Orrington, LLC; Casella;, |
| | Pine Tree Waste, Inc.; and New England Waste Services of ME, Inc. |
| DAFS | Maine Department of Administrative and Financial Services |
| Department | Maine Department of Environmental Protection |
| EPA | United States Environmental Protection Agency |
| FEPR | front end process residue, generated by PERC and Maine Energy |
| JRL | Juniper Ridge Landfill, located in Old Town, Maine |
| LD | legislative document |
| LFG | landfill gas |
| MEDOT | Maine Department of Transportation |

Table 1: acronyms, terms and abbreviations used

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

| Maine Energy | the Maine Energy Recovery Company incinerator, located in Biddeford, Maine |
|--------------------|--|
| MMWAC | Mid-Maine Waste Action Corporation, which operates an incinerator in Auburn, Maine |
| MRC | Municipal Review Committee, Inc. |
| MRC Charter | the 187 Maine municipalities represented by MRC that have contracts |
| Municipalities | with PERC for disposal of their solid waste |
| MSW | municipal solid waste |
| NEWSME Operations | NEWSME Landfill Operations, LLC, a subsidiary of Casella and the operator of JRL |
| OOS | out-of-state, as in "OOS waste" |
| OTFF | Old Town Fuel and Fiber, located in Old Town, Maine |
| OSA | the Operating Services Agreement between SPO and Casella, dated February 4, 2004 (and its 2 amendments) |
| pcf | pounds per cubic foot |
| PERC | the Penobscot Energy Recovery Company, LP incinerator, located in Orrington, Maine |
| RFP | Request for Proposals for operation of JRL, issued by SPO on June 13, 2003 |
| soft layer license | Department license #S-020700-WD-W-M, issued September 19, 2010 |
| SPO | Maine State Planning Office, acting for the State of Maine |
| waste hierarchy | the solid waste management hierarchy; see 38 M.R.S. §2101 |

2

)

2. APPLICATION SUMMARY

- 2.A. <u>Application</u>: The applicant has applied for an amendment to Department license #S-020700-WD-N-A, dated April 9, 2004, to remove the restriction and limitations placed on the disposal of in-state municipal solid waste ("MSW") at the Juniper Ridge Landfill ("JRL"). Specifically, the applicant seeks approval to dispose up to 93,000 tons per year of in-state MSW in the landfill.
- 2.B. <u>History</u>: On October 21, 2003, the Department issued conditional approval for the transfer of licenses for the West Old Town Landfill, developed and operated by Georgia-Pacific Corporation, to the Maine State Planning Office ("SPO") (Department licenses #S-020700-WR-M-T and #L-019015-TH-C-T); the transfer became effective when the sale of the landfill to SPO occurred on February 5, 2004. On February 5, 2004, SPO also finalized an Operating Services Agreement ("OSA") with Casella Waste Systems, Inc. ("Casella"), for the operation of the West Old Town Landfill. On April 9, 2004, the Department approved an amendment application (Department license #S-020700-WD-N-A) for a vertical increase in the final elevation of the landfill and the disposal of additional waste

| STATE OF MAINE, ACTING THROUGH THE | |
|------------------------------------|---|
| BUREAU OF GENERAL SERVICES | |
| OLD TOWN, PENOBSCOT COUNTY, MAINE | |
| JUNIPER RIDGE LANDFILL | |
| #S-020700-WD-BC-A | ſ |
| (APPROVAL WITH CONDITIONS) | |

AMENDMENT

streams ("the amendment license"). The amendment license included conditions pertaining to the acceptance of MSW bypass; see Finding of Fact #4, below. Pursuant to PL 2011, Chapter 655, Section GG-69, on July 1, 2012, BGS, within in the Department of Administrative and Financial Services ("DAFS"), became the state agency acting as the owner and licensee of JRL. The SPO was abolished on July 1, 2012.

3

)

))

)

2.C. <u>Summary of Proposal</u>: The applicant is proposing to allow disposal at JRL of up to 93,000 tons per year of in-state MSW, exclusive of the requirement that the MSW be from a Maine incinerator and be bypass or used as the soft layer during cell construction. The request to dispose of up to 93,000 tons per year of MSW represents the 2009-2011 average amount of in-state MSW disposed at Maine Energy less the 30,000 tons of MSW that will instead be shipped to PERC. Disposal of this MSW at Maine Energy has ended as the result of the agreement entered into by the Maine Energy Recovery Company, LP, the owner of the Maine Energy Incinerator ("Maine Energy"), and the City of Biddeford to sell, shut down, and decommission the Maine Energy facility. This agreement took effect on November 30, 2012, and Maine Energy ceased operations at the end of 2012.

The application was filed on September 12, 2012, seeking to dispose of the amount of in-state MSW at JRL equivalent to the amount of in-state MSW that was previously contracted for disposal at Maine Energy, which was approximately 123,000 tons per year. This is the annual average of in-state MSW accepted at Maine Energy, combined with bypass and soft layer MSW from Maine Energy transported to JRL over the three-year period from 2009 through 2011. The application was accepted as complete for processing on October 3, 2012.

Subsequent to the Department accepting the application as complete for processing, Casella executed an agreement with the Penobscot Energy Recovery Company, LP ("PERC"), to deliver at least 30,000 tons of in-state MSW per year to the PERC incinerator in Orrington, subject to the approval of this application. Accordingly, on December 20, 2012, the applicant amended the pending application to reduce the cap on in-state MSW that could be disposed at JRL from 123,000 to 93,000 tons per year.

2.D. Public Participation:

The application was accepted as complete for processing on October 3, 2012. Pursuant to the provisions of 06-096 CMR 2.7(A) and 2.17(A), the applicant and

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

other persons had until October 23, 2012 to request a public hearing on the application or request that the Board of Environmental Protection ("Board") assume jurisdiction of the application. By October 23, the Department had received over 100 written comments on the application, including 10 requests for a public hearing. The comments were submitted from a wide geographical range within Maine, with the majority coming from the Biddeford and Saco area, and the Old Town region.

4

)

)

Most comments received from the Biddeford and Saco area were in favor of the application, as the closure and sale of the Maine Energy incinerator was initially contingent upon the Department's approval of the application. The purchase and sales agreement between Maine Energy and the City of Biddeford was subsequently modified to remove this contingency.

Comments from a number of residents in the Old Town area opposed the application, citing the potential for increased truck traffic, odors from the waste landfill, increased generation of greenhouse gases, inconsistency with the State's solid waste management hierarchy (the "waste hierarchy"), importation of out-of-state ("OOS") waste, and litter and vector issues.

On October 24, 2012, the Commissioner exercised her discretion, pursuant to 06-096 CMR 2.7.B, to hold a public hearing on the application and designated a Hearing Officer. On November 15, 2012, the Hearing Officer notified interested persons that they could seek to intervene in the hearing process. The Department received 13 petitions for leave to intervene.

2.D.1. <u>First Procedural Order</u>: In the First Procedural Order, dated January 15, 2013, pursuant to 5 M.R.S. §9054 (*Chapter 375 – Maine Administrative Procedures Act*), the Hearing Officer granted leave to intervene to the following entities: the City of Old Town, the City of Saco, the City of Biddeford, Old Town Fuel and Fiber ("OTFF"), PERC, the Municipal Review Committee ("MRC"), ecomaine, Mid-Maine Waste Action Corporation ("MMWAC"), Ed Spencer; Wanda and David Lincoln, Laura and Harry Sanborn, and Ralph Coffman. The petitions to intervene filed by Ralph Coffman representing Citizens Against Genocide by Toxic Waste Dump and Paul Therrien as a person, were denied, as they failed to demonstrate that they might be substantially and directly affected by the proceeding, or that they are an agency of federal, state or municipal government.

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

AMENDMENT

2.D.2. <u>Pre-Hearing Conference</u>: The hearing officer held a pre-hearing conference on January 30, 2013 that was attended by the applicant, the intervenors, Department staff and an assistant attorney general; a transcript of the pre-hearing conference is part of the record for the project. At the pre-hearing conference, the location and dates for the hearing were established. Due to the state-wide interest in the application, Augusta was chosen as a central location for all the parties. The public hearing was scheduled for April 9 and 10, 2013, and included a public comment session to be held during the evening of April 9, 2013.

5

)

)

)

2.D.3. <u>Second Procedural Order</u>: In the Second Procedural Order, dated February 14, 2013, the Hearing Officer outlined the responsibilities of the parties, the Hearing Officer and Department staff; filing requirements; submission of exhibits; the statutory and regulatory framework and relevant review criteria; consolidation of parties; the order of presentation of evidence; and deadlines. To avoid repetition, and to allow for an efficient presentation of evidence, the Hearing Officer ordered the consolidation of the following individuals living in Old Town and Alton near JRL: Laura and Harry Sanborn, Wanda and David Lincoln, Ed Spencer and Ralph Coffman. The City of Biddeford and the City of Saco were also consolidated as intervenors. The Hearing Officer required the submission of written pre-filed testimony.

- 2.D.4. <u>Third Procedural Order</u>: The Third Procedural Order, dated March 15, 2013, included the Hearing Officer's rulings on the objections to pre-filed testimony raised by the applicant. That Order was appealed to the Commissioner, who issued an Order on April 1, 2013 as to the admissibility of certain pre-filed testimony.
- 2.D.5. <u>Public Hearing</u>: A public hearing was held on April 9 and 10, 2013, in Augusta. Before the hearing, OTFF requested and was permitted to withdraw from the proceedings as an intervenor. A public comment session was held during the evening of April 9, 2013, and the Department accepted written public comments from interested persons through April 30, 2012. The parties were permitted an opportunity to file closing briefs and reply briefs.

| STATE OF MAINE, ACTING THROUGH THE | 6 |
|------------------------------------|---|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| #S-020700-WD-BC-A |) |
| (APPROVAL WITH CONDITIONS) |) |

3.

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

DESCRIPTION OF SPO/BGS/CASELLA RELATIONSHIPS

As described in Finding of Fact #2.B, above, the BGS is owner of JRL and is the applicant for this application. Casella is the long-term operator of the landfill. Actual operations are by NEWSME Landfill Operations LLC ("NEWSME Operations"), a company in which a Casella subsidiary holds the sole membership interest. The terms and conditions of NEWSME Operations' operation of the landfill are established by the OSA between SPO and Casella, dated February 5, 2004, and amended on July 24, 2006 and November 2, 2006.

While the State of Maine, acting through BGS, retains ownership of the landfill, in accordance with Resolve 2003, Chapter 93 and the OSA, Casella/NEWSME Operations is required to pay all costs associated with the development, operation, closure and postclosure care of the landfill and the proposed expansion. In addition, Casella/NEWSME Operations is required by the OSA to establish and maintain financial assurance for the landfill and any future expansion sufficient to meet the closure and post-closure care provisions of the applicable solid waste management regulations, assume liability for the landfill and the expansion described in the OSA under both the current (including past actions by Georgia-Pacific Corporation) 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.

The Department finds that the OSA is a contract between the State of Maine, acting by and through BGS, and Casella. The Department also finds that reference to the applicant in this determination refers to both BGS and Casella/NEWSME Operations (or a successor operator).

4. SOURCES OF MSW

4.A. <u>Background on acceptance of MSW at JRL</u>: An issue at the hearing was the history of the disposal of MSW at JRL. Casella's response to the RFP¹ issued by SPO for operation of JRL included Table 5, which anticipated the following sources of MSW might be delivered to JRL for disposal: approximately 90,000 tons per year of front-end process residue ("FEPR"); approximately 15,000 – 167,000 tons per year of MSW, including bypass, from PERC and Maine Energy; and up to 200,000 tons per year of non-contracted in-state MSW "that may require disposal because the current disposal facility is no longer available or financially viable, and is not disposed of at a facility higher in the State.

¹ See Exhibit 4 of the applicant's January 18, 2013 response to comments on this application for Casella's Proposal, dated July 9, 2003

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

Hierarchy." The OSA does not specifically define MSW as an excluded waste, and sets an initial tipping fee of \$58 per ton, which is adjusted annually per the Consumer Price Index, for "municipal solid waste, including municipal solid waste designated as "bypass" on an infrequent basis." However, the definition of excluded waste in the OSA does include "any waste as of the date of Casella's response to the RFP under contract for delivery to another disposal facility or processing facility unless agreed to in writing by such facility's waste generator or responsible party" and "any other waste or material excluded from disposal in the Landfill by applicable laws or regulations, or excluded by any of the terms and conditions of any permits, licenses, authorizations or approvals obtained with respect to the construction or operation of the Landfill . . .".

7

)

)

)

During processing of amendment application # S-020700-WD-N-A, Casella proffered to extend to the operation of JRL the limitations on the acceptance of MSW at its Pine Tree Landfill in Hampden, Maine that are included in Department license #S-001987-WD-QA-M (Corrected Copy), issued on August 21, 2002 to Pine Tree Landfill. Those limitations on the acceptance of MSW are explained in Finding of Fact #13 and stated in Special Condition #16 of the amendment license. Subsequently, JRL received Department approval (Department license #S-020700-WD-W-M² ("soft layer license"), issued September 19, 2010) to modify Special Condition #16.C of the amendment license to accept MSW bypass above the limits set in the amendment license by an amount sufficient to install the "soft layer" in new cells, as required by 06-096 CMR 401.2(D)(4)(a)(vii).

Currently JRL may accept for disposal only MSW that is bypass³ from a Maine incinerator. In addition, a limit of 310,000 tons per year⁴ was set as the total quantity of unprocessed MSW that could be accepted for disposal between the 3 facilities: Maine Energy, Pine Tree Landfill and JRL. Pine Tree Landfill is now closed, and Maine Energy ceased accepting waste in December 2012. Special Condition #16.C of the amendment license sets the 310,000 tons per year limit, and includes language that the Department may revise the cap if changes in conditions or circumstances occur. The soft layer license allows JRL to accept an

² An appeal of Department license #S-020700-WD-W-M was denied by the Board on March 3, 2011, and a Petition to Revoke, Modify or Suspend Department license #S-020700-WD-W-M was withdrawn by PERC and MRC shortly before its consideration by the Board.

³ "Bypass" is defined in 06-096 CMR 400.1(V)

⁴ This limit was placed on the Pine Tree Landfill to address concerns raised during the processing of the Pine Tree Landfill MSW bypass application that Casella's ownership of both Maine Energy and Pine Tree Landfill could result in Maine Energy accepting (and subsequently bypassing) waste considerably in excess of Maine Energy's capacity, and was then carried forward when Casella was chosen as operator of JRL.

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

amount of MSW bypass (from any Maine incinerator) over the limitations established in the amendment license, up to the amount that has been determined by the Department to be the quantity needed to install a soft layer on a newly constructed landfill cell.

8

)

)

)

)

Since both the amendment license and the soft layer license allow only the disposal of MSW bypass, JRL is precluded by its licenses from accepting MSW other than bypass from a Maine incinerator until this license becomes effective. Likewise, JRL is precluded by the terms of the OSA from accepting this waste until it has a license from the Department to accept MSW that is not bypass from a Maine incinerator.

4.B. <u>Application, including applicant's responses to issues raised during review</u>: The applicant initially proposed to dispose of the amount of in-state MSW at JRL equivalent to the amount of in-state MSW that was previously disposed of at Maine Energy, which was approximately 123,000 tons per year. The applicant stated this is the annual average of in-state MSW that was accepted at Maine Energy, combined with bypass and soft layer MSW from Maine Energy that was delivered to JRL over the three-year period from 2009 through 2011. The applicant states the average amount of OOS waste received at Maine Energy for the same three-year period was 170,000 tons. The OOS portion of the MSW previously received at Maine Energy has been redirected to other facilities outside Maine, and is not part of this application.

On December 20, 2012, the applicant submitted a revised application as a result of a Disposal Agreement, dated October 1, 2012 ("Casella/PERC agreement"), reached between Casella, PERC, and other companies associated with them, that would provide, in part, for the disposal of no less than 30,000 tons of MSW from former Maine Energy customers at the PERC incinerator.

While BGS is not a party to the Casella/PERC agreement, the applicant reduced the amount of MSW proposed in the application for disposal at JRL from 123,000 tons to 93,000 tons per year. A copy of the Casella/PERC agreement, with financial figures redacted, was submitted by the applicant and admitted into the application record.

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

 $1 > 2 \leq i \}$

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

A summary of the amount and source (in-state/OOS) of MSW Casella will provide to PERC, as listed in the Casella/PERC agreement, is as follows:

9

| Category 1 MSW | Deliver no less than 10,000 tons of in-state MSW that has historically been collected by Casella and delivered to PERC under the Waste Disposal Agreement and solid waste obtained from commercial sources within the Charter Municipalities. |
|----------------|--|
| Category 2 MSW | Deliver no less than 10,000 tons of in-state MSW that is not: (i) Category 1 MSW, (ii) MSW historically under contract for delivery to PERC, and (iii) in-state solid waste originating within any Charter Municipality regardless of whether such in-state solid waste is "commercial" or "residential" MSW. |
| Category 3 MSW | Deliver no less than 30,000 tons of in-state MSW from sources that previously delivered MSW to Maine Energy. |
| Category 4 MSW | Deliver no less than 17,500 tons of OOS MSW |
| Category 5 MSW | Make reasonable effort to deliver 32,500 tons of OOS MSW, as needed by PERC |

Table 2: Summary of Casella/PERC Agreement Categories of MSW

Of the waste categories listed above, 'Categories 2, 3, and 5 MSW are new contractual obligations captured under the Casella/PERC agreement. The other categories include wastes already codified under other contracts between Casella and PERC. The October 1, 2012 Casella/PERC agreement brings together all contracts under one agreement. Brian Oliver of Casella testified that the 30,000 tons of Category 3 MSW would allow PERC to displace a like amount of OOS MSW and provide a steady supply of waste to PERC, particularly during the winter months when MSW generation is lower.

In response to comments by intervenors that the Casella/PERC agreement may result in 50,000 tons (sum of Category 4 MSW and Category 5 MSW) of the 170,000 tons of OOS MSW that previously was disposed at Maine Energy coming back into Maine, Mr. Oliver stated that Casella has been contractually obligated to deliver the 17,500 tons of Category 4 MSW since 2001 and Casella is just another vendor of the Category 5 MSW; PERC is free to contract with other OOS sources for this waste. In conclusion, Mr. Oliver states that there is no connection between the roughly 170,000 tons of OOS MSW that previously went to Maine Energy and the need for waste at PERC.

| STATE OF MAINE, ACTING THROUGH THE | 10 |
|------------------------------------|----|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| #S-020700-WD-BC-A |) |
| (APPROVAL WITH CONDITIONS) |) |

AMENDMENT

In response to comments by intervenors and interested persons that this application should be denied to maintain the status quo with respect to MSW disposal, the applicant states that the status quo was changed when Maine Energy closed, and that the in-state MSW that previously was disposed at Maine Energy must be disposed elsewhere. The applicant argues that ecomaine and MMWAC are asking that the Department preclude JRL as a disposal option by finding, in the name of the waste hierarchy, that JRL is "somehow different from other landfills".

4.C. Summary of comments from intervenors and interested persons: Several intervenors and interested persons opposed to the application commented that, in their analysis of the Casella/PERC agreement, the OOS waste that previously was disposed at Maine Energy would be sent to PERC, resulting in no less than 50,000 tons of OOS waste being delivered to PERC by Casella³. Further, intervenors and interested persons opposed to the application noted that nothing prevents Casella from importing additional amounts OOS waste for PERC beyond the 50,000 tons in the agreement. Many intervenors and interested persons opposed to the application expressed concern that approval of this application could result in OOS MSW being disposed at JRL if it was first delivered to a transfer station. processing facility, or recycling facility in Maine. Both ecomaine and MMWAC, as well as other commentors, argued that approval for the disposal of up to 93,000 tons of MSW at JRL would result in unfair competition for "raw" in-state MSW. They argued that JRL would provide a new option for solid waste disposal, at a rate considerably less than incinerators can charge, in part, because of "expenses inherent in complying with the solid waste management hierarchy". They also argued that the application did not focus on only MSW contracted for disposal at Maine Energy when it closed, but on an equivalent amount of that MSW. Intervenors and interested persons in favor of the application commented that JRL is a State-owned landfill that was licensed to provide capacity for Maine waste; and that the Casella/PERC agreement, with its provisions for additional recycling options, will not become fully effective unless this application is approved.

4.D. Department analysis and findings:

4.D.1. <u>Bypass</u>: In response to intervenor comments that MSW other than bypass from an incinerator has already gone to JRL, the Department clarifies that certain MSW bypass was transported directly to JRL from transfer stations with Maine Energy contracts. As stated in the Board's draft dismissal of a

⁵ This is the sum of Category 4 MSW and Category 5 MSW in the Casella/PERC agreement.

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

Petition to Revoke, Modify or Suspend the soft layer license⁶, when Maine Energy bypass began going to JRL in 2009 instead of Pine Tree Landfill, the Department found it important to ensure that OOS MSW delivered to Maine Energy was not included in bypass shipped from Maine Energy to JRL at the end of each week when the tipping floor was cleared of MSW. The Department suggested that Casella's internal accounting of waste contracted to Maine Energy include a calculation of the waste that would need to be bypassed each week during the peak generation months, and that Casella arrange for delivery of that amount of MSW directly to JRL from Maine transfer stations, thus ensuring that only in-state MSW bypass was delivered to JRL. This waste makes up the Category 2 waste in the Casella/PERC agreement.

 $11 \cdot$

)

)

)

4.D.2. <u>Maine Energy wastes</u>: As shown in the table below compiled by the Department from the annual reports submitted to the Department, the three-year averages (2009 – 2011) of in-state MSW received at Maine Energy, plus in-state bypass contracted to Maine Energy that was received at JRL is 125,395 tons. The 123,000 tons initially proposed by the applicant was reached by subtracting the amount of bypass generated directly at Maine Energy from the total amount of bypass accepted at JRL since the bypass generated at Maine Energy is included in the total amount of bypass received at JRL and must be subtracted to avoid accounting for it twice.

| Year | In-State Waste Received at Maine Energy (tons) | Maine Energy Bypass Received at JRL (tons) | Total In-State MSW Received at Maine Energy & JRL | OOS Waste Received at Maine Energy (tons) |
|-------------------|---|---|--|--|
| 2009 | 115,377 | 21,559 | 136,936 | 175,962 |
| 2010 | 89,970 | 37,539 | 127,509 | 185,960 |
| 2011 | 89,385 | 22,355 | 111,740 | 169,891 |
| 3-Year Average | 98,244 | 27,151 | 125,395 | 177,181 |

Table 3: MSW Deliveries to Maine Energy and JRL

⁶ See Finding of Fact #7.C of the Board's draft dismissal order; the petition was withdrawn by PERC and MRC on August 29, 2011, before the Board met on September 1, 2011 to consider the draft dismissal order.

| STATE OF MAINE, ACTING THROUGH THE | 12 |
|------------------------------------|----|
| BUREAU OF GENERAL SERVICES | |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| #S-020700-WD-BC-A |) |
| (APPROVAL WITH CONDITIONS) |) |

AMENDMENT

The Department finds the applicant has demonstrated the accuracy of the amount of in-state MSW attributed to Maine Energy.

The Department's analysis of data from annual reports submitted for Maine Energy and JRL for 2012 show that in-state MSW received at Maine Energy and JRL further declined to 84,121 tons. If the 2011 tonnage is adjusted to reflect the 30,000 tons of in-state MSW which Casella will redirect to the PERC facility as discussed in Finding of Fact #4, the 2011 tonnage taken to JRL had Maine Energy been closed would have been 81,800. The Department finds, therefore, that the applicant has adequately justified disposal of no more than 81,800 tons per year of Maine MSW at JRL, and that it would be appropriate to limit annual disposal of in-state MSW at JRL to no more than 81,800 tons. The Department further finds that the 81,800 tons per year limit includes any MSW used in the soft layer required by 06-096 CMR 401.2(D)(4)(a)(vii), and that soft layer MSW is not limited to MSW bypass after the effective date of this license. The Department also finds that, since both Maine Energy and PTL are now closed, the utility of the 310,000 tons per year limit is gone, and Special Condition #16.C of the amendment license is moot. The Department finds that JRL may have capacity and continue to operate for some period of time following expiration of this license. Notwithstanding the provisions of this license, MSW bypass may be accepted at JRL after March 31, 2016 provided that such acceptance is consistent with the relevant terms of Department license #S-20700-WD-N-A and the soft layer license.

The Department finds that the three-year average for the tonnage of residues (FEPR, ash and bulky waste) and bypass associated with the operation of the Maine Energy facility was approximately 107,375 tons. Maine Energy had a contract with JRL for the disposal of its residues. Thus, based on the three-year averages for 2009-2011 of both MSW (125,395 tons) and residues and bypass disposed of at JRL (107,375 tons), approval of the annual disposal of no more than 81,800 tons of MSW would result in an average of 52,726 fewer tons of waste per year going to JRL. The Department further finds that, although the generation of MSW in Maine clearly fluctuates, its analyses of MSW generated in 2011 and 2012 demonstrate that approval of this application will decrease both the volume of MSW and the overall volume of wastes disposed at JRL prior to the closure of Maine Energy.

| STATE OF MAINE, ACTING THROUGH THE 1 | 13 |
|--------------------------------------|----|
| BUREAU OF GENERAL SERVICES) |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE) |) |
| JUNIPER RIDGE LANDFILL) |) |
| #S-020700-WD-BC-A |) |
| (APPROVAL WITH CONDITIONS)) |) |

AMENDMENT

4.D.3. <u>Casella/PERC Agreement</u>: In addition to the Casella/PERC agreement signed on October 1, 2012, Casella and PERC signed an interim agreement on January 1, 2013, with a term that ended April 30, 2013, for the disposal of the portion of the Maine Energy MSW that PERC can operationally handle. Provisions of the Casella/PERC agreement advantageous to the MRC municipalities, such as ZeroSort[®] recycling and backfill of MRC municipalities' Guaranteed Annual Tonnage if increased recycling rates cause them to deliver less than their guaranteed volume of MSW, that were not part of the interim agreement are in effect through the terms of the Casella/PERC agreement.

The Department's analysis shows that the three-year average (2009 – 2011) of OOS waste received at PERC, based on the annual reports filed by PERC, is 90,170 tons. The 30,000 tons of in-state MSW previously disposed at Maine Energy (Category 3 MSW in the Casella/PERC agreement) would displace an equal amount of OOS MSW. Additionally, the Department notes that while PERC would prefer having access to greater amounts of in-state MSW beyond the 30,000 tons contained in the Casella/PERC agreement, most MSW generated in Maine is under longterm contract with a selected disposal facility. Having contractual access to markets for both in-state and OOS markets for MSW keeps the PERC facility running at the capacity it needs to meet its energy obligations without having to stockpile large amounts of MSW at the facility. Casella is prohibited under the terms of the Casella/PERC agreement from delivery of MSW generated within any MRC Charter Municipality to any facility other than PERC (except at the written request of PERC). Therefore, the Department also finds that the applicant may not accept MSW for disposal at JRL that is under contract for disposal at another facility without the other facility's written approval.

The Casella/PERC Agreement includes language that conditions the provisions for Category 3 waste (the 30,000 tons per year of MSW previously disposed at Maine Energy) "...upon the receipt by Casella of a final, non-appealable permit allowing Casella to dispose of municipal solid waste at the Juniper Ridge Landfill". The Department finds that, because the time to meet the "final, non-appealable permit" condition is unknown, prior to the acceptance of MSW under the terms of this license, the applicant must provide documentation to the Department that contractual provisions are in effect for the disposal of at least 30,000 tons per year of former Maine Energy MSW at one or more Maine solid waste facilities that are not landfill(s). MSW (other than bypass from a Maine

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

AMENDMENT

incinerator) may not be accepted at JRL unless and until such contractual provisions are in effect. The Department further finds that the 30,000 ton annual allotment must be prorated for all periods less than a calendar year.

14

)

)

)

The Department also finds that, while the disposal of OOS waste as defined in statute and rule at JRL is prohibited under the terms of the OSA (and that prohibition is referenced in the licenses issued to JRL by the Department), a state is constitutionally prohibited from using its regulatory authority to restrict import of OOS waste to commercial facilities within the state. Thus, the Department may not otherwise restrict the disposal of OOS waste at PERC. However, the Department finds that Casella is required to continue to pursue the diversion of in-state MSW from JRL to displace OOS waste disposed at PERC and the other Maine incinerators, with the goal of diverting as much MSW as practicable from landfilling. These efforts should include evaluating changes to the Casella/PERC agreement to allow Category 5 MSW to include in-state MSW. The Department further finds that Casella must report the result of this evaluation to the Department. The Department also finds that any PERC delivery shortfalls of MSW in MRC Charter Municipalities that are backfilled at PERC by Casella in accordance with the terms of the Casella/PERC Agreement must be backfilled with in-state MSW from the volume approved for disposal under the terms of this license.

4.D.4. <u>Other Disposal Facilities</u>: In response to the issue raised during the public hearing process related to the need for JRL to accept the in-state portion of MSW historically disposed at Maine Energy since arrangements for disposal of this waste were made (and continue) after the closure of Maine Energy in December 2012, the Department finds that the Maine Energy MSW is currently accepted primarily on an interim basis at the North Country Landfill in Bethlehem, New Hampshire, and at PERC.

While both the applicant and ecomaine testified that they attempted to negotiate contracts to divert MSW from former Maine Energy municipalities to ecomaine, the applicant testified that it has been unable to settle on terms that would be acceptable to the former Maine Energy municipalities.

| STATE OF MAINE, ACTING THROUGH THE | 15 |
|------------------------------------|----|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| #S-020700-WD-BC-A | Ĵ |
| (APPROVAL WITH CONDITIONS) |) |

AMENDMENT

4.D.5. <u>Flow Control</u>: The Department finds it does not have the authority to direct the Maine Energy MSW to existing disposal facilities, including the three remaining Maine incinerators. Flow control authority for MSW lies with municipalities (not the State), pursuant to the home rule powers granted to municipalities by the Constitution of Maine, and through the provisions of 38 M.R.S. §1304-B (*Delivery of Solid Wastes to Specific Waste Facilities*). Under 38 M.R.S. §1304-B, municipalities are required to provide for disposal services for domestic and commercial solid waste generated within each municipality, and "…municipalities are expressly authorized to enact ordinances that control solid waste collection, its transportation or its delivery to a specific facility, when the purpose and effect of such an ordinance is to gain management control over solid waste and enable the reclamation of resources, including energy, from these wastes."

The Department further finds each municipality is free to select a disposal option for its MSW based on the criteria of its choice. As covered in detail elsewhere within this finding of fact, 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, and that the Department does not have the authority to direct the MSW go to any specific facility. Likewise, the Department finds that it must review JRL applications for conformance with the same regulations as any other facility.

With regard to the allegation that JRL will offer a better price to the former Maine Energy municipalities than ecomaine or MMWAC can afford, the Department finds that the OSA sets a ceiling for tipping fees at JRL. Thus, the Department finds that the appropriate state agency from which to request a change in the tipping fees at JRL is BGS.

4.D.6. <u>Processing:</u> The Department finds that intervenors and interested persons are correct that residues and bypass from facilities licensed to process or recycle MSW would be in-state MSW. 38 M.R.S. §1310-N(11) reads as follows:

"11. Waste generated within the State. Consistent with the Legislature's findings in Section 1302, a solid waste disposal facility owned by the State may not be licensed to accept waste that is not waste generated within the State. For 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,

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

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."

16

)

)

Currently, the only facility that processes MSW is PERC. This processed MSW is FEPR, and has been accepted at JRL since the amendment license was issued in 2004. An application for a single sort recycling facility to be located at the Lewiston transfer station property is expected to be submitted. (As clarified during the April 9, 2013 session of the public hearing on this application. Casella plans to handle in-state recyclables at the Lewiston facility, and expects to transport any non-recyclables generated at the facility to MMWAC.) In response to concerns from intervenors and interested persons that OOS MSW handled at a transfer station in Maine would become "waste generated within the State" and therefore acceptable for disposal at JRL under this license, the Department also finds that simply accepting MSW for storage and handling at a transfer station would not render OOS waste into Maine waste. Likewise, the Department finds that simply removing components of MSW such as wood, metals, or glass from out-of state, or mixed source, MSW such as happens during normal operation of a transfer station will not render the remaining MSW "waste generated within the State". However, to address concerns that OOS waste may be disposed at JRL under the provisions of 38 M.R.S.A. § 1310-N(11), the Department finds that JRL may not accept residues from additional in-state processing or recycling facilities, other than those currently delivering residues to JRL as of the effective date of this license, that receive OOS waste.

The applicant acknowledged during the public hearing that the route of one customer of Casella's Pine Tree Waste transfer station in Westbrook, Maine briefly crosses the border into New Hampshire, and thus some OOS waste may be delivered to this transfer station; Casella stated it can store this OOS waste separately for transport to a disposal facility outside Maine. The Department finds that it will require the Pine Tree Waste transfer station in Westbrook (Department license #S-022074-WH-G-M) to modify its operations manual to address the segregation of OOS waste. The state of origin for wastes delivered to transfer stations is already required to be reported in every facility's annual reports.

| STATE OF MAINE, ACTING THROUGH THE | 17 | MAINE HAZARDOUS |
|------------------------------------|-----|--------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE, SEPTAGE AND |
| OLD TOWN, PENOBSCOT COUNTY, MAINE | .) | SOLID WASTE |
| JUNIPER RIDGE LANDFILL |) ' | MANAGEMENT ACT |
| #S-020700-WD-BC-A |) | |
| (APPROVAL WITH CONDITIONS) |) | AMENDMENT |

5. SOLID WASTE MANAGEMENT HIERARCHY

5.A. Application of the waste hierarchy as a licensing review criterion:

- 5.A.1. <u>Background:</u> 38 M.R.S. §2101 establishes that it is the policy of the State to "plan for and implement an integrated approach to solid waste management" through an order of priority that places waste reduction, reuse, recycling, composting, and processing before land disposal, to be used as a guiding principle in "making decisions related to solid waste management". The Second Procedural Order related to the hearing concerning this application, issued by the Department on February 14, 2013, included a list of "Relevant Review Criteria" which constitute a part of the legal framework for the Department's licensing decision on this matter. The relevant review criteria specifically included 38 M.R.S. §2101 *Solid Waste Management Hierarchy*.
- 5.A.2. <u>Application, including applicant's responses to issues raised during</u> <u>review:</u> The applicant has expressed that it is "fully supportive of Maine's solid waste management hierarchy", but objected to the use of the waste hierarchy as a review standard in this licensing proceeding on the basis that it "would violate the applicant's constitutional due process rights, is unlawfully vague, and creates impermissible delegation issues."⁸

Specifically, it was argued that the plain language of the statute demonstrates that the waste hierarchy is not a permitting standard but a guiding principle to be used in the development of policy, laws and rules related to solid waste management. In support of its position, the applicant points to the following statement made in the March 3, 2011 Board Order denying the appeal of the Department's soft layer license: "The hierarchy is a policy that guides decisions on waste management planning and implementation; the hierarchy is not a regulatory standard that applies to individual waste facility licensing decisions of a technical nature." Further, the applicant pointed out in response to comments that 38 M.R.S. §1302 establishes that the provisions of that chapter of law (*Chapter 13 – Waste Management*) be "construed liberally to address the findings and accomplish the policies in this section", that the waste hierarchy actually appears in *Chapter 24*.

⁸ Thomas R. Doyle, letter to Michael T. Parker, 28 Feb. 2013.

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

AMENDMENT

The applicant commented that rigid application of the waste hierarchy as a permitting standard would result in inconsistency; would be unworkable as a practical matter, potentially impacting numerous existing contractual arrangements among private parties; and would result in a lack of competition and higher costs for municipalities. The applicant further commented that there are no specific standards to inform decisions concerning when to require movement from one step in the waste hierarchy to the next, and that the Department's case-by-case decision making based on individual circumstances would force the agency to set policy on an ad-hoc basis in the absence of applicable rules.

18

))

))

5.A.3. <u>Summary of comments from intervenors and interested persons</u>: A number of intervenors and interested persons argued that the waste hierarchy should apply as a permitting standard in the case of this application. It was maintained that the waste hierarchy is not merely guidance for decision making but is "the foundation of State solid waste policy and is the foremost criteria [sic] that should be applied to this application." Further, it was argued that the statutory waste hierarchy is incorporated as a licensing standard by reference to "Solid Waste Laws" in the Department's *Solid Waste Management Rules* (06-096 CMR 400, last amended: July 20, 2010).

Several parties disagreed with the applicant's conclusion concerning the Board's statement in its March 3, 2011 Board Order related to JRL quoted above. Their comments included that the application at hand is much more than just a "licensing decision of a technical nature" and therefore should be reviewed within the context of the waste hierarchy. It was commented that 38 M.R.S. §1302 (*Declaration of Policy*) "declares that the provisions of this chapter (*Chapter 13 – Waste Management*) shall be construed liberally to address the findings and accomplish the policies in this section". They also noted that the Legislature has repeatedly acted to support and reinforce the waste hierarchy in a variety of different ways.

Comments were made in the context of the waste hierarchy discussion concerning the value of JRL as a State asset and the importance of applying the waste hierarchy as a licensing standard in this instance. Also, it was commented that the RFP and the resulting OSA regarding operation of JRL specifically required Casella to "respect" and "use its best efforts" to achieve the goals of the waste hierarchy. It was further commented that this application is not "necessary" to the management of Maine's MSW.

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

AMENDMENT

5.A.4. Department analysis and findings: As described above, the Second Procedural Order issued by the Department on February 14, 2013, related to conduct of the hearing on this application, included the waste hierarchy as a "Relevant Review Criterion". 38 M.R.S. §2101 (Solid Waste Management Hierarchy) states: "It is the policy of the State to use the order of priority in this subsection as a guiding principle in making decisions related to solid waste management."

19

))

)

Y

There are no specific regulatory standards in place related directly and exclusively to the waste hierarchy per se. The Department uses the waste hierarchy to guide its decisions on waste management planning and implementation, in conjunction with the explicit regulatory standards applied to the technical, and other, issues inherent in the proposal. Although not every solid waste application raises issues in connection with the waste hierarchy, JRL is a state-owned landfill operated under the terms of the OSA. Section 2.13 of the OSA pertaining to the Waste Management Hierarchy includes a series of specific requirements beginning with, "Casella agrees to use its best efforts to achieve the following goals: a) to operate the Landfill following the State's solid waste management hierarchy."

The Department finds that the waste hierarchy is a foundation of the State's solid waste policy and that it is a key issue concerning this application. The Department continues to find that it was appropriate in this case to allow evidence into the record concerning the waste hierarchy as it relates to this application, and for the Department to consider that evidence in making its licensing decision.

Both the RFP and the OSA regarding operation of JRL include provisions related to operation of the landfill in a manner that is consistent with the waste hierarchy. Commentors expressed the viewpoint that the waste hierarchy should be applied as a review criterion because JRL is a valuable State asset, and allowing it to accept unprocessed MSW as proposed in the application does not make best or appropriate use of this asset.

The Department finds that direct responsibility for ensuring compliance with all terms of the OSA rests with the State of Maine, BGS as owner of the landfill. The Department finds, however, that although it is not a party to the OSA, it is in a position to enforce the terms of the OSA, but only to the extent that they may coincide with, or relate to, the Department's

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

standards such that they have been incorporated into Department licenses or other legally binding documents. In view of the fact that Casella made an agreement with the State to operate JRL in conformance with the waste hierarchy, it is appropriate for the Department to consider this application in the context of the hierarchy.

20

)

)

)

)

)

5.B. <u>Content of the application relative to the waste hierarchy:</u>

5.B.1. <u>Application, including applicant's responses to issues raised during</u> <u>review:</u> The applicant's proposal is to accept for disposal no more than 93,000 tons of in-state MSW annually at JRL. As discussed in Finding of Fact # 4 above, the proposed tonnage limitation represents the annual average of in-state MSW previously accepted at Maine Energy plus the bypass and soft layer MSW from Maine Energy that was sent to JRL over the past three years, minus 30,000 tons that is proposed to be diverted to PERC in accordance with the Casella/PERC Agreement.

Notwithstanding its objection to use of the waste hierarchy as a licensing standard in this proceeding, the applicant provided information concerning the application's conformity with 38 M.R.S. §2101. The applicant asserts that the proposal put forward substantially reduces the amount of OOS MSW imported into Maine. Based on 2011 data, it was anticipated that approximately 200,000 tons of MSW, previously imported into Maine, would no longer be delivered to Maine facilities. Of this amount, 170,000 tons was previously sent to Maine Energy, and 30,000 tons represents the minimum volume of OOS MSW currently disposed at PERC that will be displaced by in-state MSW delivered by Casella as a result of the Casella/PERC Agreement.

The application presents information indicating that the shutdown of Maine Energy will reduce the amount of incinerator residues (ash, FEPR and oversized bulky waste) generated in Maine by approximately 106,000 tons per year, resulting in an overall 5% annual waste tonnage decrease at JRL and extension of the life of the landfill by about three months.

The applicant contends that the proposal will substantially promote recycling through expansion of Casella's Zero-Sort® Recycling program. As part of the Casella/PERC Agreement, this program can be marketed to the 187 MRC Charter Municipalities. Casella also proposes to extend Zero-Sort® to the Cities of Biddeford and Old Town, and other Maine municipalities. Testimony by Casella indicates that communities using

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

Zero-Sort® regularly see recycling rates increase by 40%. The Casella/PERC Agreement provides that Casella will replace with in-state MSW any PERC delivery shortfalls in MRC Charter Municipalities that have increased their recycling activity through Casella's program, and will not divert the MSW flow from any MRC Charter Municipality to any other facility without PERC's consent; actions that are intended to ensure PERC's viability by stabilizing its fuel supply, and thus promoting incineration and support of the waste hierarchy. These provisions also protect MRC Charter Municipalities from financial penalties resulting from MSW delivery shortfalls and provide increased tipping revenues to PERC.

21

)

)

The application describes other ongoing recycling and reuse efforts by Casella including the construction of a Zero-Sort® processing facility in Lewiston, the recycling/reuse of construction and demolition debris at the KTI processing facility in Lewiston, and biosolids composting at the Hawk Ridge facility in Unity.

5.B.2. <u>Summary of comments from intervenors and interested persons</u>: A number of intervenors and interested persons testified and provided comment in general support of the application. Beneficiaries of the Casella/PERC Agreement expressed support specifically with regard to the anticipated benefits of the Casella/PERC Agreement as outlined in the application, including the opportunity for enhanced recycling programs in the MRC Charter Municipalities without penalties for waste volume shortfalls.

PERC commented that the Casella/PERC Agreement provides it with long-term, stable delivery of solid waste that will allow it to operate near or at capacity year-round, and with an additional source of revenue.

Several commentors made the point that the proposal was consistent with the State's solid waste management policy, including the waste hierarchy, because of the recycling programs being implemented by Casella at other facilities owned by the company in Maine, the significant amount of OOS waste (170,000 tons) previously accepted by Maine Energy no longer coming to Maine, and the Casella/PERC Agreement term providing that at least 30,000 tons of the 123,000 tons of in-state waste previously disposed at Maine Energy would be delivered to PERC instead of JRL.

| STATE OF MAINE, ACTING THROUGH THE | 22 |
|------------------------------------|----|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| #S-020700-WD-BC-A |) |
| (APPROVAL WITH CONDITIONS) |) |

AMENDMENT

Most commentors from the Biddeford/Saco area expressed their viewpoint that JRL is a State owned landfill and should be available to address the disposal needs of residents statewide, including those communities that previously took their waste to Maine Energy.

A number of intervenors and interested persons argued that the application is inconsistent with the provisions of the waste hierarchy in that the MSW proposed for disposal at JRL should only be landfilled after all other options at a higher level in the waste hierarchy have been employed. It was suggested that the application should be denied and that MSW disposal at JRL should continue to be allowed only as provided in the current JRL licenses (i.e. as "bypass" from any of the existing Maine incinerators, or as "soft layer" material in cell construction). It was further suggested that MSW disposal at JRL be permitted only as a "last resort". Waste-to-energy facility intervenors argued that instead of disposal at JRL, MSW could be further reduced, reused, recycled and/or composted; incinerated; or disposed at landfills currently licensed to accept it.

Laura and Harry Sanborn proposed that the 123,000 tons of in-state generated MSW previously disposed at Maine Energy, 93,000 tons of which is proposed in the application to be disposed at JRL, be diverted to the most "advantageous" locations in order to minimize truck traffic, fuel use, carbon dioxide emissions, and costs; and to maximize revenue to PERC.

A number of parties commented that Casella was aware of its obligation to operate JRL in a manner consistent with the waste hierarchy since both the RFP for operation of the landfill and the resulting OSA included language to that effect.

Several parties commented that the potential source reduction and recycling benefits put forward by Casella in connection with the application are, in fact, not dependent upon approval of the application for implementation, and could go forward in the absence of a license. Diversion of 170,000 tons per year of OOS MSW that previously was disposed at Maine Energy has already occurred with the closure of Maine Energy, and continuation of that "source reduction" advantage is not contingent upon approval of this application. It was further maintained that approval of the pending application is also not necessary for Casella to continue to market and implement the various recycling programs (e.g. Zero-Sort®) described in the application.

| STATE OF MAINE, ACTING THROUGH THE | |
|------------------------------------|--|
| BUREAU OF GENERAL SERVICES | |
| OLD TOWN, PENOBSCOT COUNTY, MAINE | |
| JUNIPER RIDGE LANDFILL | |
| #S-020700-WD-BC-A | |
| (APPROVAL WITH CONDITIONS) | |

AMENDMENT

It was pointed out that a significant volume of the waste subject to some of the recycling and reuse programs cited by Casella originates out-of-state and therefore does not positively contribute to the management of Maine's waste streams. It was further commented that residues from the in-state processing of these out-of-state generated wastes are consuming Maine landfill capacity, including capacity at the State-owned JRL. Interested persons expressed concern that although the reason stated for submission of the application was to provide for disposal of MSW previously delivered to Maine Energy, the specific licensing request was for an amount of MSW equivalent to the amount previously delivered to Maine Energy. This fact raised questions with interested persons concerning what the origin of the MSW to be disposed at JRL would actually be, and if it meant the additional disposal of more waste that may have originated out-of-state.

23

)

))

))

5.B.3. <u>Department analysis and findings</u>: As discussed above, the Department looks to the unique circumstances specific to JRL as a state-owned landfill operated under the OSA, which contains a section of operating requirements addressing the Waste Management Hierarchy. Although strict application of the hierarchy in all solid waste facility licensing decisions would not be appropriate, in regard to this particular application, given that Casella has agreed to operate JRL in accordance with the solid waste hierarchy and given that the applicant contends that its application conforms to the hierarchy, the Department finds that it is appropriate to consider the solid waste hierarchy in its review of this license, and in setting conditions for the granting of this license.

The Casella/PERC Agreement, proposed to come into effect if the pending application is approved, includes a provision requiring the delivery of at least 30,000 tons annually (of the 123,000 in-state tons previously delivered to Maine Energy) of in-state MSW to PERC. PERC supports this diversion of MSW from JRL to its facility, stating that it will provide PERC with long-term, stable delivery of MSW that will allow it to operate near or at capacity year-round, and will provide an additional source of revenue. Casella testified that although it had negotiated with other Maine incinerators to divert additional MSW tonnage, an agreement could not be reached on the terms of such MSW delivery that was acceptable to the former Maine Energy municipalities.

The Department is supportive of the diversion of this MSW tonnage from landfilling to incineration consistent with the waste hierarchy. The

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

AMENDMENT

Department finds however, that limiting further disposal of MSW at JRL would better align the operation of JRL with the goals of the waste hierarchy, and that Casella should continue to pursue the establishment of arrangements that would accomplish that additional diversion. The Department also finds that the applicant must minimize to the greatest extent practicable the amount of MSW disposed at JRL, and must include in each annual report a summary of its efforts to avoid the disposal of MSW at JRL.

24

))

)

)

)

In response to intervenor comments suggesting that the Department require MSW diversion to the most "advantageous" locations rather than disposal at JRL, the Department finds again that it does not have the authority to direct waste to specific facilities.

The source reduction and recycling benefits put forward by Casella in the application are not reliant upon the issuance of a Department license for implementation, and could go forward in the absence of a license. Similarly, the 170,000 tons of OOS waste previously disposed at Maine Energy was diverted to out-of-state facilities following Maine Energy's closure in December 2012. That diversion has already occurred and is in no way affected by the outcome of this licensing proceeding. The Department's analysis of the application indicates that the applicant has treated the closure of Maine Energy, the diversion of the aforementioned OOS MSW, the provisions of the Casella/PERC Agreement, and other source reduction and recycling activities undertaken by Casella at their other solid waste facilities in Maine as a package that creates the overall context for this application, and has put forward its assessment of the benefits of that package as related to the waste hierarchy. These contractual arrangements involving other licensed solid waste facilities are consistent with state-wide objectives under the waste management hierarchy. They do not, however, support the hierarchy directly and specifically at the facility at issue in this application.

The Department finds that some of the recycling programs put forward in the application as examples of Casella's support of the waste hierarchy handle significant quantities of out-of-state generated waste, not directly supporting Maine waste management goals. Further, residues from the instate processing of out-of-state generated waste are consuming capacity at JRL, and that although the applicant has tied the request to accept additional MSW at JRL to the closure of Maine Energy, the application

| BUREAU OF GENERAL SERVICES)OLD TOWN, PENOBSCOT COUNTY, MAINE)JUNIPER RIDGE LANDFILL)#S-020700-WD-BC-A)(APPROVAL WITH CONDITIONS)) | STATE OF MAINE, ACTING THROUGH THE | 2 |
|---|------------------------------------|---|
| JUNIPER RIDGE LANDFILL) #S-020700-WD-BC-A | BUREAU OF GENERAL SERVICES |) |
| #S-020700-WD-BC-A | OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| | JUNIPER RIDGE LANDFILL |) |
| (APPROVAL WITH CONDITIONS)) | #S-020700-WD-BC-A |) |
| | (APPROVAL WITH CONDITIONS) |) |

AMENDMENT

actually requests approval to dispose of a volume of MSW equivalent to previous Maine Energy in-state volume.

25

JRL presents a unique situation in which the facility is state-owned, was conceived to serve the interests of the State, and is operated under the terms of the OSA between the State of Maine and Casella. This OSA specifically requires that Casella "use its best efforts . . . to operate the Landfill following the State's solid waste management hierarchy. ..." As a state-owned landfill, JRL is operated to meet the disposal needs of generators statewide, such that its operation and competitive influence have the potential to directly affect the operations of other Maine waste facilities. The Department finds that the acceptance of unprocessed MSW in addition to bypass and soft layer material for construction would unnecessarily consume valuable State-owned landfill capacity which should be conserved for wastes that cannot be managed at facilities at a higher level in the hierarchy, and that alternative waste management options exist for this MSW that are better aligned with the hierarchy. Therefore, the Department finds that the hierarchy requires that limitations be placed upon the acceptance of this MSW.

Therefore, the Department finds that the term of this license will be limited to the period of time during which licensed disposal capacity remains available for MSW disposal within the horizontal and vertical boundaries approved in Department license #S-20700-WD-N-A, or March 31, 2016, whichever occurs sooner. This limitation is appropriate to ensure that activities at JRL support, and do not subvert, the waste management hierarchy.

6. AIR QUALITY

6.A. <u>Application, including applicant's responses to issues raised during review:</u> The increase in volume of MSW accepted at JRL will add to the volume of odor producing wastes. To prevent and control odors, the applicant will continue to employ the following existing practices: the use of deodorizers and odor neutralizers, the use of daily and intermediate cover materials, and the use of the active gas collection system and its associated flare. The active gas collection system consists of both vertical wells and horizontal collector pipes, which are installed as the waste is placed. The applicant stated during the hearing that the timing and placement of both vertical wells and horizontal collectors can be adjusted if generation of landfill gas ("LFG") and associated odors changes as a result of accepting up to 93,000 tons of MSW per year. In response to issues with

| STATE OF MAINE, ACTING THROUGH THE | 2 |
|------------------------------------|---|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| #S-020700-WD-BC-A |) |
| (APPROVAL WITH CONDITIONS) |) |

AMENDMENT

landfill gas emissions raised by intervenors and interested persons (see paragraph B, below), the applicant submitted testimony regarding the overall efficiency of the existing gas collection system and noted that many of the recommendations contained in the journal articles referenced by Mr. Spencer to minimize the release of landfill gases have already been implemented at JRL. JRL aggressively installs horizontal gas collection piping as waste is placed in a cell. Synthetic geomembrane material is used as cover on over 90% of the area under intermediate cover. NEWSME conducts routine surface methane emission scans to assure the integrity and effectiveness of the landfill cover material and gas collection system. All of these practices are at the forefront of industry operating standards and ensure extremely high instantaneous (89.5%) and lifetime (86.9%) gas collection efficiencies.

26

Again, the applicant testified that the proposed change in the composition of the waste mass will not result in a change in the procedures currently used to collect LFG and control odors at JRL. In support of this conclusion, the applicant stated that the projections and calculations included in the original amendment application resulted in a maximum design gas flow rate of 3,980 standard cubic feet per minute (scfm) for the LFG collection system. The updated evaluation of projected LFG generation rates submitted with the application, using actual flow rates from JRL and the proposed changes in waste composition, demonstrated that the maximum LFG generation rate will occur in 2018 at a rate of approximately 3,420 scfm. This calculated generation rate is significantly below the design flow rate for the LFG collection system.

Additionally, using actual data from JRL and the projected changes in waste composition presented in the application, the applicant compared LFG collection rates for JRL both with and without the MSW that previously went to Maine Energy. This comparison showed that there would be a slight increase in the median estimate for LFG collection as a result of the proposed change in the waste composition, with the largest projected difference occurring in 2019.

The applicant submitted rebuttal testimony to Ed Spencer's testimony regarding greenhouse gas emissions from landfills. Specifically, the applicant addressed the four published papers submitted by Mr. Spencer in support of his testimony. The applicant's rebuttal is summarized as follows:

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

AMENDMENT

6.A.1. In citing Bogner, et al. (2007)⁹, Mr. Spencer stated that lifetime collection efficiencies may be as low as 20%. The applicant rebuts that this statement is not stated in its full context. Bogner, et al. go on to further state that collection efficiencies of greater than 90% can be achieved through several best practices such as early installation of LFG collection infrastructure, including horizontal collectors, and frequent monitoring and maintenance of gas collection pipes and cover materials. These practices are already in place at JRL.

27

)

))

6.A.2. In citing Anderson (2007)¹⁰, Mr. Spencer again states that lifetime collection efficiencies may be as low as 19%. The applicant rebuts that Anderson's calculated efficiency was based on the assumptions that no gas collection occurred until five years after initial waste placement, moisture was intentionally added to areas not yet under active gas collection (thereby increasing gas production), collection efficiencies of 50% are only achieved upon closure of the landfill and gas collection is removed before gas generation has subsided. None of these assumptions are true at JRL. Horizontal LFG collection pipes are installed as waste is placed in each cell, synthetic geomembrane material is used as cover over 90% of the area under intermediate cover and the operator conducts periodic surface methane emission scans to ensure the integrity and effectiveness of the cover materials and gas collection system.

- 6.A.3. In citing Kaplan, et al. (2009)¹¹, Mr. Spencer's claim is based on the same assumptions used by Anderson (2007); no gas collection early in waste placement cycle, gas collection limited to 20 years, etc. These assumptions are not applicable to JRL and therefore the reduced collection efficiency numbers should not be considered.
- 6.A.4. The Sierra Club report (2010)¹² cited by Mr. Spencer evaluated net greenhouse gas emissions from landfill-gas-to-energy facilities and included recommendations for reducing fugitive methane emissions

⁹ See Bogner, J., et al. 2007. "Waste Management" in Climate Change 2007: Mitigation. Cambridge University Press, United Kingdom.

¹⁰ See Anderson, P. 2007. Comments on the California Air Resources Board on Landfills' Responsibility for Anthropogenic Greenhouse Gases and the Appropriate Response to Those Facts. Center for a Competitive Waste Industry; Madison, Wisconsin.

¹¹ See Kaplan, P., et al. 2009. "Is it Better to Burn or Bury Waste for Clean Electricity Generation?" *Environmental Science and Technology* 43(6): 1711-1717.

¹² See Sierra Club Report on Landfill-Gas-to-Energy. 2010. Sierra Club LFGTE Task Force. Sierra Club, San Francisco, CA.

| STATE OF MAINE, ACTING THROUGH THE | 28 | MAINE HAZARDOUS |
|------------------------------------|----|--------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE, SEPTAGE AND |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | SOLID WASTE |
| JUNIPER RIDGE LANDFILL |) | MANAGEMENT ACT |
| #S-020700-WD-BC-A |) | |
| (APPROVAL WITH CONDITIONS) |) | AMENDMENT |

(Appendix B of the report). The applicant notes that JRL does not have a landfill-gas-to-energy facility and has already implemented the recommendations for reducing fugitive methane emissions.

Finally, the applicant submitted the results of its assessment of the collection efficiency of the LFG management system in place at JRL, inputting the best management practices used at the facility and actual data of the amount of LFG collected. Two different efficiency measures were calculated; instantaneous, using the method described by the U.S. Environmental Protection Agency ("EPA") in 40 CFR Part 98, Subpart HH, and lifetime, using the method described in Anderson (2007). The calculated instantaneous collection efficiency was 89.8%. The calculated lifetime collection efficiency was 86.9%.

The applicant notes that on November 26, 2012, the Department issued a new air license (#A-921-77-2-A) to JRL. It licensed existing Flare #4 in a new location at JRL and the existing backup flares (Flares #2 and #3) at their existing locations. These flares minimize odors by combusting the LFG that contains total reduced sulfur compounds (principally hydrogen sulfide). Combustion by the flare also reduces the greenhouse gas potential of LFG by converting methane to carbon dioxide and water. As part of the licensing process, the Department required modeling results using EPA approval models demonstrating that JRL will meet the latest federal ambient air quality standards, including for nitrogen oxides and sulfur dioxide, promulgated in 2010, and for carbon monoxide, promulgated in 2011. The Department received no formal comments on the draft license during the three public comment periods, and the license was not appealed.

6.B. Summary of comments from intervenors and interested persons: As part of their pre-filed testimony, intervenors Ed Spencer, and Laura and Harry Sanborn submitted data regarding the generation of greenhouse gases and odors associated with the operation of the landfill, citing increased emissions from both increased vehicular traffic and the landfill itself as a result of accepting the MSW proposed in the application. As stated in the Third Procedural Order, dated March 15, 2013, the Hearing Officer found that testimony related to greenhouse gases and odors associated with vehicular traffic was not a regulatory criterion and struck this testimony from the record. Under appeal from Laura and Harry Sanborn, the Commissioner upheld the Hearing Officers decision, except that testimony submitted regarding the potential for increased generation of LFG, which includes greenhouse gases, and odors from the landfill was allowed into the record. Mr. Spencer's testimony included technical journal articles regarding generation of LFG, differences in greenhouse gases associated with incineration and landfills, and collection efficiencies of LFG collection systems. Mr. Spencer testified on the findings presented in the four papers listed in paragraph A, above, related to

| STATE OF MAINE, ACTING THROUGH THE | 29 |
|------------------------------------|----|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| #S-020700-WD-BC-A |) |
| (APPROVAL WITH CONDITIONS) |) |

AMENDMENT

production and collection of greenhouse gases, including LFG. He summarized his testimony as follows:

- There are no field measurements of the efficiency of landfill gas collection systems.
- EPA's assumed 75% gas collection efficiency has no factual basis, is based upon fundamentally incorrect definitions, and uses biased selection from unsupported and self-serving guesses as the basis for its assumption.
- The best evidence of typical lifetime capture rates based upon correct definitions does not support a value greater than 20%, as further attested to by the International Panel on Climate Change.
- Correcting the capture rate from 75% to 20% increases landfills' responsibility for anthropogenic greenhouse gas emissions from approximately 2%-3% to 8%-9% or more.
- Because gas collection is actually very poor, the case for diverting decomposable discards from the landfill becomes clear.

Other commentors expressed general concern that approval of this application could result in odor issues, but acknowledged that JRL is currently able to control odors from the facility. Wanda and David Lincoln stated that they are subjected to odorous fumes from the landfill throughout the year and are the most aggrieved or impacted residents in Old Town due to their proximity to the landfill. The City of Old Town testified it is concerned that the disposal of more odor-generating MSW in JRL, along with a decline in the amount of more innocuous wastes such as incinerator ash disposed, could become an issue if the application is approved. The City acknowledged that the applicant is responsive to odor complaints and noted that as long as the current odor control measures remain in place, the City is satisfied that odors will not be an issue.

6.C. <u>Department analysis and findings:</u> The Department's analysis shows that accepting additional MSW as proposed in the application will increase the quantity of LFG generated at the landfill. However, the Department finds that the applicant currently has in place an active gas collection program that effectively minimizes the release of LFG and associated odors. Further, the installation of vertical wells and horizontal collectors may be modified as conditions warrant based on changes to LFG generation as a result of the proposed change in waste composition at JRL. During calendar year 2011, the applicant's LFG collection system consisted of 130 collection wells and horizontal collectors. The Department finds that while some intervenors and interested persons stated that odor has been a problem over the course of operating the landfill, the applicant's

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL ~ |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

AMENDMENT

odor control practices have resulted in a reduction in odor complaints from 241 in 2007 to 7 in 2012. The Department notes that the amendment license requires the applicant to evaluate the sizing and the installation timing of the active gas extraction system components and evaluate the effectiveness of the system. The 2011 annual report, submitted April 27, 2012, contained the results of the LFG monitoring conducted for 2011. Gas monitoring of the groundwater monitoring wells, underdrain outfalls, and leachate collection and leak detection systems showed no methane or hydrogen sulfide were detected above the equipment detection limit and that carbon dioxide was detected in only one monitoring well. In addition, the results from quarterly surface scans of the landfill for methane were used to seal any areas where methane exceedances were noted. These exceedances occurred mostly frequently around penetrations of the intermediate cover system, primarily at piping boots. The results of the most recent evaluation were included in this application. After a thorough review of the LFG sensitivity analysis, the Department finds that there is good correlation between the modeled LFG collection rates and the actual rates measured at JRL from 2006 to 2011. The Department reached the same conclusion during review of the recent application to the Bureau of Air Quality. The Department concluded in Department license #A-921-77-2-A, issued November 26, 2012, that the emissions from JRL: will receive Best Practical Treatment, will not violate applicable emission standards, and will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

30

)

))

))

The Department therefore finds that the disposal of up to 81,800 tons per year of MSW at JRL will not unreasonably adversely affect air quality.

7. TRAFFIC MOVEMENT

7.A. <u>Application, including applicant's responses to issues raised during review</u>: 06-096 CMR 400.4(D)(1) requires that an applicant for a solid waste facility make adequate provisions for safe and uncongested traffic movement of all types into, out of, and within a solid waste facility. The primary waste haul route for the MSW proposed in this application will continue to be along I-95 to Exit 199 (the Route 16 exit). The JRL access road from Route 16 is located approximately 0.1 mile west of the I-95 interchange. These routes are able to safely accommodate the number, weight, and types of vehicles transporting waste to and from JRL. There are no congested locations along the primary haul route to JRL that would be affected by the proposed increase in MSW, and sight distances remain adequate. The existing primary access roads allow for continuous uninterrupted traffic movement without posing a danger to pedestrians or other vehicles.

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

AMENDMENT

The applicant submitted a comparison between truck trips to JRL in 2011 and the predicted site truck trips with the proposed change in the waste composition. The future trips were calculated based on actual 2011 waste tonnages adjusted for the elimination of residues from the Maine Energy facility and the increase in MSW and average truck weights for the individual waste types obtained from the 2011 JRL scale data. The truck count calculations indicate that, based on a 6-day work week, JRL currently receives, on average, 91 tractor-trailer units per day. Based on the proposed changes, the predicted number of tractor-trailer units would decrease to 88 units per day.

31

))

)

)

)

There are no proposed changes to the entrance and exit design for the landfill that would affect sight distances in any direction or the provisions for safe turning of vehicles in this application. In addition, the applicant submitted accident records for the most recent available three-year period (2008 through 2010) that was obtained from the Crash Records Section of the Maine Department of Transportation ("MEDOT") Traffic Engineering Division. A review of the accident summaries indicates that there were nine accidents during the study period. There are no locations in the study area (Route 16 and the I-95 interchange) classified as "High Crash" locations (using MEDOT criteria).

In response to testimony from Laura and Harry Sanborn that adoption of one of the proposed alternative scenarios for disposal of the MSW previously disposed at Maine Energy (see Paragraph B, below) may result in reduced noise from truck traffic, the applicant responded that noise from truck traffic is exempt from regulation¹³. Additionally, the applicant noted that while the Sanborns' alternatives could result in less truck traffic to and from JRL, the Sanborns make no argument that the applicants' proposed decrease in traffic with approval of this application would result in failure to meet the regulatory standards of 06-096 CMR 400.4(D)(1).

7.B. <u>Summary of comments from intervenors and interested persons</u>: The pre-filed testimony of Laura and Harry Sanborn presented several alternative scenarios whereby the in-state waste formerly disposed at Maine Energy and the 50,000 tons of OOS waste¹⁴ could be diverted to the remaining two Maine incinerators, thereby reducing or eliminating the need for ecomaine or MMWAC to import OOS waste. Included in the analyses of the scenarios were calculations for total annual miles driven to the receiving facilities based on tons of waste, round trip mileage and tons per load.

¹³ See 06-096 CMR 400.4(F)(2)(e)(i).

¹⁴ The sum of Category 4 and Category 5 MSW included in the Casella/PERC agreement.

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

• In the "least favorable" scenario (the Sanborns' summary of the proposal contained in this application), 30,000 tons of MSW previously disposed at Maine Energy and 50,000 tons of OOS waste would be delivered to PERC and 93,000 tons of MSW would be delivered to JRL, resulting in 2,106,109 total annual miles driven by delivery trucks.

32

)

)

)

)

)

- In the "most favorable scenario", as presented by the Sanborns, the 123,000 tons of in-state MSW previously disposed at Maine Energy would be apportioned to PERC, ecomaine and MMWAC based on their historic intake of OOS waste, with the remaining 29,000 tons of MSW going to JRL. In the Sanborns' analysis the three incinerators would need no OOS MSW to operate at capacity. The Sanborns concluded this scenario would result in 1,373,098 total annual miles driven by delivery trucks.
- A third "compromise scenario" was presented by the Sanborns, whereby 91,000 tons of in-state MSW previously disposed at Maine Energy would be sent to PERC and 32,000 tons of in-state MSW previously disposed at Maine Energy would be sent to JRL, negating PERC's need for OOS waste to meet its capacity needs. The Sanborns concluded this scenario would result in 1,405,164 total annual miles driven by delivery trucks.

The City of Old Town commented that while the application states the total number of trucks per year will decrease, the number of trucks transporting MSW could increase from 813 in 2011 to 2,975 per year in the future under this proposal. The City of Old Town asked the Department to place a condition in this license on the number of trips per year, or truckloads per year or day, allowed to enter JRL.

Ed Spencer commented that since the closure of Maine Energy at the end of 2012, residents living near JRL have noticed a reduction in truck traffic, and are thus exposed to less noise, smell and litter.

7.C. <u>Department analysis and findings:</u> In the Third Procedural Order, dated March 15, 2013, the Hearing Officer found that testimony related to vehicular traffic was not a regulatory criterion and struck this testimony from the record. Under appeal from one of the intervenors, the Commissioner found that changes from the amendment license in the length of a truck trip may be the subject of evidence at the hearing and granted the appeal of this item.

The Department therefore evaluated the truck trip lengths provided in the Sanborns' testimony. In its evaluation of the "least favorable" and "compromise"

| STATE OF MAINE, ACTING THROUGH THE | |
|------------------------------------|--|
| BUREAU OF GENERAL SERVICES | |
| OLD TOWN, PENOBSCOT COUNTY, MAINE | |
| JUNIPER RIDGE LANDFILL | |
| #S-020700-WD-BC-A | |
| (APPROVAL WITH CONDITIONS) | |

AMENDMENT

scenarios presented in the Sanborns' testimony, the Department noted that the net reduction in total miles driven is approximately 35, 812 miles, or about 2.5% fewer miles per year, if MSW traveled from Maine Energy to PERC instead of JRL. In its evaluation of the same data provided by the Sanborns for the two scenarios, the Department notes that the "total annual miles" driven from Maine Energy to PERC and to JRL are almost mirror images. (As noted in Finding of Fact #5, the Categories 4 and 5 MSW in the Casella/PERC agreement consist of MSW that has historically come to PERC, and is not part of the OOS MSW that previously went to Maine Energy.) The Department also notes that the difference in the travel distance between Maine Energy and PERC, and Maine Energy and JRL is approximately 11 miles. Approximately four miles more of the trip from Maine Energy to PERC than to JRL would be non-interstate travel. The Department finds that, as noted elsewhere in this finding, the applicant has demonstrated that the amount of traffic associated with operation of JRL will decrease with approval of this application, and the applicant has demonstrated adequate provisions exist for safe and uncongested traffic movement attributable to JRL. The Department also finds that distance traveled is not a regulatory criterion, and thus can be considered only in a comparative way. As stated in Findings of Fact #4 and #5, the Department does not have the authority to direct MSW to any specific disposal facility, and thus did not evaluate the "most favorable" scenario since it would require waste be directed to incinerators Casella has been unable to negotiate contracts for MSW previously disposed at Maine Energy.

33

)

)

The Department finds that the submission requirements of 06-096 CMR 400.4(D) for traffic movement apply to roads and intersections in the vicinity of the proposed facility, or in this case the modification to an existing facility, and require that the facility be able to safely and conveniently handle the traffic attributable to the facility. The Department's analysis shows that the estimated truck count data for this application submitted by the applicant is accurate, and that the proposal would not increase overall traffic at JRL. The Department further finds that JRL has demonstrated since the amendment license was issued in April 2004 that it can meet the traffic standards. Therefore, the Department finds that the applicant continues to make adequate provisions for safe and uncongested traffic movement of all types into, out of, and within the facility.

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

34

)

)

)

)

)

8. LANDFILL DESIGN AND OPERATIONS

8.A. <u>Geotechnical stability:</u>

8.A.1. Application, including applicant's responses to issues raised during review: The applicant states the landfill and individual cell configurations will not change as result of the proposed revision. The JRL application that was approved by the amendment license included an evaluation of slope stability for the approved landfill final waste grades. Updated stability evaluations have also been included with each detailed cell design report submitted to the Department since 2003 to comply with Condition #15.A of the amendment license. The 2003 slope stability evaluation included initial landfill operations that involved mixing sludge previously disposed in JRL by its prior owner, Fort James. That analysis assumed a mixed waste density of 74 pounds per cubic foot ("pcf") and shear strength of 30 degrees. That analysis supported the overall amended landfill final grading plan. The subsequent stability evaluations completed for each detailed cell design report used a waste density of 74 pcf and shear strength of 32 degrees. The results of these stability evaluations showed that the safety factors for slope stability were met or exceeded for the waste placed in the landfill. Since MSW has typical strength and density properties which are consistent with the values that have been used to support the original license amendment and the individual cell development plans, this proposed minor change in the overall waste percentages will not require changes in the landfill configuration to meet both the operational and closure factors of safety for the landfill.

8.A.2. <u>Department analysis and findings:</u> The Department's analysis shows that the change in the composition of the waste will not result in any changes in the factors of safety for the construction, operation and post-closure periods. A detailed assessment of the stability evaluations was conducted most recently in 2012 as part of the Department's review of the Cell 8 design submittals. That assessment found the assumptions and calculations used in evaluating the stability of the landfill during the construction, operation and post-closure periods under both static and seismic conditions were valid. The Department finds that the applicant has demonstrated that the landfill will meet or exceed the minimum required factors of safety during construction, operation and the postclosure periods under both static and seismic conditions.
| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

8.B. Leachate Management:

8.B.1. <u>Application, including applicant's responses to issues raised during</u> <u>review</u>: The applicant does not propose any changes to the liner, or to the leachate collection, conveyance, or storage systems as a result of accepting up to 93,000 tons per year of MSW. Pursuant to an agreement with OTFF, JRL leachate will continue to be treated by the OTFF wastewater treatment plant. As a back-up, the applicant also has a pre-treatment permit to treat leachate at the City of Brewer's wastewater treatment plant. The applicant's leachate modeling conducted under the provisions of the amendment license inputted the properties of MSW in the calculations. Since the waste properties of MSW were used in this modeling, the proposed change in the tonnage of MSW accepted will not change the design or function of the landfill's leachate collection system for the existing cells or any cell that will be constructed in the future.

35

))

)

))

The applicant also submitted data on potential changes in leachate quality associated with the disposal of up to 93,000 tons per year of MSW. Specifically, the applicant compared the mean of several parameters currently found in leachate generated by JRL to a range of values of those same parameters in leachate compiled from several MSW landfills as published in a journal article. With few exceptions, the values for the JRL leachate fell within the range of values stated in the study.

8.B.2. <u>Summary of comments from intervenors and interested persons</u>: The City of Old Town commented that the values in the journal article presented by the applicant had wide ranges and that some of the parameters listed in the journal article exceeded the limits allowed in the wastewater discharge permits held by the facilities that treat the leachate generated by JRL. These facilities include OTTF and the City of Brewer. By way of example, the published range of values for arsenic was 0.01 to 1.0 ppm, the mean value for JRL leachate was 0.10 ppm and effluent limitation for the City of Brewer is 0.10 ppm.

The City of Old Town also testified that the Industrial Wastewater Discharge Permit executed between NEWSME and the City of Brewer was set to expire on March 2, 2013. The City of Brewer's wastewater treatment plant was identified by the applicant as its secondary disposal option for leachate generated by JRL. The City also was concerned that the change in the composition of the waste at JRL will result in leachate that may result in violations of the effluent limits of the City of Brewer

| STATE OF MAINE, ACTING THROUGH THE | 36 |
|------------------------------------|----|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| #S-020700-WD-BC-A |) |
| (APPROVAL WITH CONDITIONS) |) |

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

and OTFF waste discharge licenses. The City requested that the Department review the leachate parameters to ensure that adequate disposal options exist for the leachate generated by JRL under this proposal. Similarly, commenting as an interested person, OTFF expressed the same concern regarding changes in waste composition affecting leachate quantity and quality and requested that the Department condition any approval to require the applicant to compensate OTFF for any changes in leachate quantity or quality.

8.B.3. <u>Department analysis and findings:</u> The Department finds that in a review of the applicant's data, staff within the Division of Water Quality Management noted that "currently the OTFF facility is operating at less than half the licensed capacity of their wastewater treatment facility, which includes the acceptance of approximately 10-11 million gallons of leachate from the JRL. Although it is not possible to quantify nor qualify exactly what will happen to the leachate with the modifications that are proposed, any likely changes in leachate quality or quantity would be able to be handled by the OTFF wastewater treatment facility due to the type of treatment being provided combined with the capacity remaining at the plant."

Independent of the review noted above, Division of Technical Services staff conducted a comparative analysis of leachate data using several years of data from JRL and two landfills in Maine (Waste Management – Crossroads Landfill and Tri-Community Landfill) that currently accept MSW and similar wastes as JRL. The analysis compared the low, high, and mean values for the three facilities against the limits in the OTTF agreement with JRL, concluding that "…although some of the values, even for a single facility, can vary greatly, none of the results exceed even 25% of the limits established in the Agreement. Based on this data, we do not expect to see changes in the leachate quality, with the proposed addition of MSW at the JRL that would cause the facility to exceed these limits."

The Department's review found that an Industrial Wastewater Discharge Permit was issued to NEWSME, LLC by the City of Brewer on November 3, 2012. The permit became effective on March 3, 2013, resulting in no lapse in a secondary disposal option for leachate. The permit will expire on March 2, 2018.

The Department's analysis also shows that the quantity and quality of leachate associated with this proposal will not change as a result of this STATE OF MAINE, ACTING THROUGH THE BUREAU OF GENERAL SERVICES OLD TOWN, PENOBSCOT COUNTY, MAINE JUNIPER RIDGE LANDFILL #S-020700-WD-BC-A (APPROVAL WITH CONDITIONS)

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

application; that the Department is not a party to the leachate disposal agreement between the applicant and OTTF; and that it not within the Department's purview to require the applicant to compensate OTFF for changes in leachate quantity or quality.

37

)

)

)

)

)

The Department finds that the applicant has made adequate provisions for the collection and management of leachate.

8.C. Litter Control:

- 8.C.1. <u>Application, including applicant's responses to issues raised during</u> <u>review:</u> The applicant states that additional MSW has the potential to become an increased source of windblown litter at JRL. To minimize windblown litter, MSW will be compacted as it is placed in JRL and then covered with either daily cover or other non-litter producing waste shortly thereafter. Litter control fencing is also routinely placed at the perimeter of each cell. Windblown litter at JRL has been effectively controlled with the procedures described above. Additionally, the applicant may use either portable or fixed litter control fencing directly in the vicinity of the working landfill face as necessary to control litter. The fencing would be placed on the prevailing downwind side of the waste placement operations.
- 8.C.2. <u>Summary of comments from intervenors and interested persons</u>: The City of Old Town commented that the proportional increase in raw MSW being delivered to JRL may result in additional wind-blown litter. The City stated that if the Department's review finds that the applicant's actions are sufficient, the City will be satisfied that the litter control practices proposed by the applicant, including daily and intermediate cover and litter control fencing, are adequate.
- 8.C.3. <u>Department analysis and findings</u>: The Department finds that the litter control procedures in place at JRL have been effective at controlling litter and provide for routine maintenance and general cleanliness of the entire facility site. Further, no modifications to the existing litter control procedures are necessary based on the proposed application. The Department finds that the applicant has made adequate provisions for the control of litter.

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

8.D. <u>Vector Control:</u>

8.D.1. <u>Application, including applicant's responses to issues raised during</u> <u>review:</u> The applicant stated that the acceptance of additional MSW may also increase the potential for vectors. The principal technique that will be used at the site to control vectors will be the placement of daily and intermediate cover. The site maintains a depredation permit that can be used to control the birds. If necessary, JRL will also implement other techniques to control birds at the landfill such as installation of fencing and stringing overhead wires in the active operating areas. This technique deters birds from landing in the active filling areas. JRL also maintains a contract with Modern Pest Control to control the potential for rodents at the facility.

38

)

)

- 8.D.2. <u>Summary of comments from intervenors and interested persons</u>: The City of Old Town commented that the proportional increase in raw MSW delivered to JRL may result in an increase in vectors such as birds and rodents. The City stated that if the Department's review finds that the applicant's actions are sufficient, the City will be satisfied that the vector control practices proposed by the applicant are adequate.
- 8.D.3. <u>Department analysis and findings:</u> The Department finds that the vector control procedures in place at JRL have been effective at minimizing vectors and has provided for routine maintenance and general cleanliness of the entire facility site. Further, no modifications to the existing vector control procedures are necessary based on the proposed application.

9. EXISTING USES AND SCENIC CHARACTER

9.A. <u>Application, including applicant's responses to issues raised during review:</u> The applicant did not propose any changes to the siting or operation of the facility (such as an increase in the height of the landfill, the use of additional equipment or a change in the hours of operation) that would modify any findings of fact in previous Department licenses.

In response to testimony from the Sanborns that they can see and hear every truck entering JRL, the applicant testified that 06-096 CMR 400.4(F)(2)(e) exempts truck noise while operating on public ways.

9.B. <u>Summary of comments from intervenors and interested persons</u>: The City of Old Town, and Laura and Harry Sanborn both cited noise from truck traffic as a

| STATE OF MAINE, ACTING THROUGH THE | 39 | MAINE HAZARDOUS |
|------------------------------------|----|--------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE, SEPTAGE AND |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | SOLID WASTE |
| JUNIPER RIDGE LANDFILL |) | MANAGEMENT ACT |
| #S-020700-WD-BC-A |) | |
| (APPROVAL WITH CONDITIONS) |) | AMENDMENT |
| | | |

potential issue, both with the pending application and ongoing operations at JRL. Specifically, the City of Old Town noted the standard hours of operation stated in the application, highlighting the statement that some deliveries may occur outside of the standard hours, and asked that the applicant stay within the standard hours to the greatest extent possible. In addition, the Sanborns testified that they hear every truck entering and leaving the landfill, many with loud exhaust systems and using engine brakes. Further, they testified that trucks sometimes arrive as early as 3:00 AM and as late as 12:00 AM on every day of the week.

9.C. <u>Department analysis and findings:</u> The Department does not have the authority to regulate the use of engine brakes on public ways. Law enforcement officers and municipalities have the authority to regulate "unnecessary noise". The Town of Alton has signage posted on Route 16 near the interstate exit ramp on the use of engine brakes. The Department's review shows the applicant complied with the first part of Condition #21 of the amendment license, which required that a noise study be completed once operation of Cell 3 began. (The last part of Condition #21 requires an additional noise study be completed once operation of Cell 9 begins.) The hourly sound levels from all sources of regulated noise were well below the regulatory limits, as was the ambient noise level. The Department finds that disposal of up to 81,800 tons per year of MSW will not increase truck traffic into and out of JRL, that the proposal will not increase noise levels at JRL, and thus JRL continues to meet the noise standards of 06-096 CMR 400.4(F)(2).

10. TITLE, RIGHT OR INTEREST

The State of Maine, acting through the SPO, acquired the landfill property on February 5, 2004. In accordance with Condition #2 of Department license #S-20700-WR-M-T, dated October 21, 2003, SPO submitted a copy of the deed to the landfill property within 30 days of its entry in the Penobscot County Registry of Deeds.

Consistent with PL 2011, Chapter 655, Section GG-69, effective July 1, 2012, all rights, duties, authorities, responsibilities and related assets and liabilities, if any, assigned to the Executive Department, SPO pursuant to Resolve 2003, Chapter 93 and Resolve 2011, Chapter 90 were assigned to and must be exercised by BGS. In addition, all real property acquired by the Executive Department, SPO, pursuant to PL 1995, Chapter 464, Resolve 2003, Chapter 93 and Resolve 2011, Chapter 90 was transferred to the DAFS' BGS.

The Department finds that the applicant has sufficient title, right or interest in all of the property which is proposed for continued use.

| STATE OF MAINE, ACTING THROUGH THE | |
|------------------------------------|--|
| BUREAU OF GENERAL SERVICES | |
| OLD TOWN, PENOBSCOT COUNTY, MAINE | |
| JUNIPER RIDGE LANDFILL | |
| #S-020700-WD-BC-A | |
| (APPROVAL WITH CONDITIONS) | |

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

11. FINANCIAL ABILITY

06-096 CMR 400.4(B)(1)(a) requires that an applicant must have the financial ability to design, construct, operate, maintain, close and accomplish post-closure care of a solid waste facility in a manner consistent with all applicable requirements. Under the terms of the OSA, Casella/NEWSME Operations is responsible for all costs associated with design, construction, operation, maintenance, closure and post closure of JRL. Revenues generated from the daily operation of JRL are used for ongoing activities and expenditures. In addition, Casella has a secured credit facility of approximately \$227 million administered by Bank of America, N.A. A letter dated April 25, 2012 from Bank of America, N.A. documenting sufficient amount of funds and the uses for which the funds may be utilized, was submitted with the application.

40

))

)

))

The Department finds that the applicant has demonstrated the financial ability to design, construct, operate, maintain, close and accomplish post-closure care of JRL in a manner consistent with all applicable requirements.

12. TECHNICAL ABILITY

12.A. <u>Description of Experience:</u> 06-096 CMR 400.4(C)(1)(a) requires that an applicant have the technical ability to design, construct, operate, maintain, close and accomplish post-closure care of a solid waste facility in a manner consistent with state environmental requirements, including the Maine Solid Waste Laws and the Solid Waste Management Rules. The applicant has extensive experience in the field of waste management. It provides resource management expertise and services to residential, commercial, municipal, and industrial customers, primarily in the areas of solid waste collection, transfer, disposal, recycling, and organics services, operating in six states: Vermont, New Hampshire, New York, Massachusetts, Maine, and Pennsylvania. Personnel operating JRL are well-trained and experienced in all aspects of landfill operations. In addition, the applicant has retained Sevee & Maher Engineers, Inc., a firm specializing in landfill design and operations, and Sanborn Head Associates to assist with LFG collection and odor control.

The Department finds that the applicant has demonstrated the technical ability to develop the project in a manner consistent with state environmental requirements, including the Maine Solid Waste Law and the Maine Solid Waste Management Rules.

12.B. <u>Civil/Criminal disclosure statement:</u> The applicant provided a current civil and criminal disclosure statement prepared in accordance with 06-096 CMR 400.12

| STATE OF MAINE, ACTING THROUGH THE | 41 |
|------------------------------------|----|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| #S-020700-WD-BC-A |) |
| (APPROVAL WITH CONDITIONS) |) |

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

for BGS and Casella, including subsidiaries and the individuals required to disclosure under the regulations. Included in the disclosure was a summary of documented compliance violations and resolutions, if applicable, for the past five years. Five civil violations were listed, four in Maine and one in Vermont, all of which named New England Waste Services of Maine, Inc. as the violator. The four violations in Maine occurred as a result of operations of the leachate conveyance systems at the now-closed Pine Tree Landfill in Hampden, Maine. The Vermont violation was resolved in 2009. Three of the Maine violations have been resolved to the satisfaction of the regulatory entities: the Cities of Bangor and Brewer and the Town of Hermon. The final Maine violation is pending resolution.

The Department finds that the applicant filed an accurate Criminal/Civil Record, prepared in accordance with o6-096 CMR 400.12. The Department further finds that the applicant has shown that past violations of certain environmental laws, as described in the disclosure statement, will not prevent the applicant from operating JRL in compliance with Maine laws and regulations.

13. ALL OTHER

All other Findings of Fact, Conclusions, and Conditions remain as approved in the amendment license, and subsequent modifications.

BASED on the above Finding of Facts, the Department makes the following CONCLUSIONS:

- 1. The acceptance of up to 81,800 tons per year of in-state MSW can be handled at JRL using the same procedures as the MSW incinerator bypass currently licensed for disposal. The disposal of up to 81,800 tons per year of in-state MSW will not pollute any waters of the State, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance, provided the sources of MSW are limited as described in the findings of fact, and the landfill is operated in accordance with the facility's approved operations manual.
- 2. 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.

STATE OF MAINE, ACTING THROUGH THE 42 BUREAU OF GENERAL SERVICES OLD TOWN, PENOBSCOT COUNTY, MAINE) JUNIPER RIDGE LANDFILL #S-020700-WD-BC-A (APPROVAL WITH CONDITIONS)

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

The applicant has made adequate provisions for traffic movement of all types into, out of 3. . . and within the facility site

)

)

)

)

- The applicant has made sufficient provisions for management of leachate generated at 4. JRL, and for control of litter and vectors. No changes to the operations manual are required to accept up to 81,800 tons per year of MSW.
- 5. The applicant has demonstrated that JRL will continue to meet or exceed the regulatory for geotechnical stability of the landfill with the acceptance of up to 81,800 tons per year of MSW.
- 6. The continued operation of JRL will not have an unreasonable adverse effect on existing uses or scenic character.
- 7. The applicant has provided adequate evidence of title, right or interest in the parcel of property containing the existing landfill.
- 8. The applicant has provided adequate evidence of financial capacity and technical ability to continue operation of JRL and to meet air and water pollution control standards.
- 9. There is no reason to withhold this license based on the disclosure statement.

THEREFORE, the Department APPROVES the disposal of no more than 81,800 tons per year of MSW at JRL as described in the noted application of the STATE OF MAINE, ACTING THROUGH THE BUREAU OF GENERAL SERVICES, SUBJECT TO THE ATTACHED CONDITIONS and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy attached as Appendix A.

- The invalidity or unenforceability of any provision, or part thereof, of this license shall 2. not affect the remainder of the provision or any other provisions. This license shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
- The applicant shall not accept MSW for disposal at JRL that was generated OOS. 3.
- 4. The applicant shall not accept MSW for disposal at JRL that is under contract for disposal at another facility without the other facility's written approval.

| STATE OF MAINE, ACTING THROUGH THE | 43 |
|------------------------------------|----|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL | Ĵ |
| #S-020700-WD-BC-A |) |
| (APPROVAL WITH CONDITIONS) |) |

9.

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

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,
- 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.
- 6. Prior to acceptance of MSW at JRL under the terms of this license, Casella shall modify the terms of the Casella/PERC Agreement, to allow the 32,500 tons per year of Category 5 MSW to be a combination of OOS and in-state MSW, unless Casella justifies, to the Department's satisfaction, a rationale for leaving the current Category 5 definition in place.
- 7. Prior to the acceptance of MSW under the terms of this license, the applicant shall provide documentation to the Department that contractual provisions are in effect for the disposal of at least 30,000 tons per year of former Maine Energy MSW at one or more Maine disposal facilities that are not landfill(s). MSW (other than bypass from a Maine incinerator) may not be accepted at JRL under the terms of this license unless and until such contractual provisions are in effect.
- 8. JRL shall not accept residues from additional in-state processing or recycling facilities (i.e. facilities other than those delivering residues to JRL as of the effective date of this license) that receive OOS waste.
 - Any PERC delivery shortfalls of MSW in MRC Charter Municipalities that are backfilled at PERC by Casella in accordance with the terms of the Casella/PERC Agreement shall be backfilled with in-state MSW from the MSW approved for disposal at JRL under the terms of this license.

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BC-A |
| (APPROVAL WITH CONDITIONS) |

12 sectors

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

AMENDMENT

handersen die

44

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-20700-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-20700-WD-N-A and the soft layer license.

11. All other Findings of Fact, Conclusions and Conditions not otherwise addressed herein remain as approved in Department license #S-20700-WD-N-A, and subsequent modifications, and are incorporated herein.

DONE AND DATED AT AUGUSTA, MAINE, THIS

20th DAY

OF Vecenther, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: // Patricia W. Aho, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

Date of initial receipt of application: <u>September 15, 2012</u> Date of application acceptance: <u>October 3, 2012</u>

Date filed with Board of Environmental Protection:



XMP75125/mtp

Appendix A

STANDARD CONDITIONS TO ALL SOLID WASTE FACILITY LICENSES

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL. VIOLATIONS OF THE CONDITIONS UNDER WHICH A LICENSE IS ISSUED SHALL CONSTITUTE A VIOLATION OF THAT LICENSE AGAINST WHICH ENFORCEMENT ACTION MAY BE TAKEN, INCLUDING REVOCATION.

- 1. Approval of Variations from Plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed by the license. Any consequential variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- 2. Compliance with All Applicable Laws. The licensee shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- 3. Compliance with All Terms and Conditions of Approval. The licensee shall submit all reports and information requested by the Department demonstrating that the licensee has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- 4. Transfer of License. The licensee may not transfer the solid waste facility license or any portion thereof without approval of the Department.
- 5. Initiation of Construction or Development Within Two Years. If the construction or operation of the solid waste facility is not begun within two years of issuance of within 2 years after any administrative and judicial appeals have been resolved, the license lapses and the licensee must reapply to the Department for a new license unless otherwise approved by the Department.
- 6. Approval Included in Contract Bids. A copy of the approval must be included in or attached to all contract bid specifications for the solid waste facility.
- 7. Approval Shown to Contractors. Contractors must be shown the license by the license before commencing work on the solid waste facility.
- 8. Background of key individuals. A licensee may not knowingly hire as an officer, director or key solid waste facility employee, or knowingly acquire an equity interest or debt interest in, any person convicted of a felony or found to have violated a State or federal environmental law or rule without first obtaining the approval of the Department.
- 9. Fees. The licensee must comply with annual license and annual reporting fee requirements of the Department's rules.
- 10. Recycling and Source Reduction Determination for Solid Waste Disposal Facilities. This condition does not apply to the expansion of a commercial solid waste disposal facility that accepts only special waste for landfilling.

1

The solid waste disposal facility shall only accept solid waste that is subject to recycling and source reduction programs, voluntary or otherwise, at least as effective as those imposed by 38 MRSA Chapter 13.

11. Deed Requirements for Solid Waste Disposal Facilities. Whenever any lot of land on which an active, inactive, or closed solid waste disposal facility is located is being transferred by deed, the following must be expressly stated in the deed:

A. The type of facility located on the lot and the dates of its establishment and closure.

B. A description of the location and the composition, extent, and depth of the waste deposited.

C. The disposal location coordinates of asbestos wastes must be identified.

المناك بالأخريك المراجع والمراجع



DEP INFORMATION SHEET Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. <u>ADMINISTRATIVE APPEALS TO THE BOARD</u>

LEGAL REFERENCES

The laws concerning the DEP's Organization and Powers, 38 M.R.S.A. §§ 341-D(4) & 346, the Maine Administrative Procedure Act, 5 M.R.S.A. § 11001, and the DEP's Rules Concerning the Processing of Applications and Other Administrative Matters ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted: OCF/90-1/r95/r98/r99/r00/r04/r12

Appealing a Commissioner's Licensing Decision March 2012 Page 2 of 3

- 1. Aggrieved Status. The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
- -2. The findings, conclusions or conditions objected to or believed to be in error. Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
 - 3. The basis of the objections or challenge. If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
 - 4. *The remedy sought*. This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
 - 5. All the matters to be contested. The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
- 6. *Request for hearing*. The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
- 7. New or additional evidence to be offered. The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

- 1. Be familiar with all relevant material in the DEP record. A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
- 2. Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal. DEP staff will provide this information on request and answer questions regarding applicable requirements.
- 3. The filing of an appeal does not operate as a stay to any decision. If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

Appealing a Commissioner's Licensing Decision March 2012 Page 3 of 3

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.



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

BOARD ORDER

IN THE MATTER OF

| STATE OF MAINE, ACTING THROUGH THE |) | APPEALS OF SOLID |
|--|---|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

Pursuant to the provisions of the Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S. §§1301 to 1319-Y; and the Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2, (last amended August 25, 2013), the Rules Concerning the Conduct of Licensing Hearings, 06-096 CMR 3 (last amended March 4, 2013), the Solid Waste Management Rules: General Provisions, 06-096 CMR 400 (last amended July 20, 2010) and Landfill Siting, Design and Operation, and 06-096 CMR 401 (last amended July 20, 2010), the Board of Environmental Protection ("Board") has considered the appeal filed jointly by the applicant, the State of Maine Bureau of General Services ("BGS") and the contracted operator of Juniper Ridge Landfill ("JRL"), NEWSME Landfill Operations, LLC ("NEWSME") (referred to jointly as "appellant Permittee) and the appeal filed individually by Edward S. Spencer ("appellant Spencer") of the Department's approval of the disposal of no more than 81,800 tons per year of municipal solid waste ("MSW") at JRL. Based upon materials filed in support of the appeals, the responses to the appeals, and other related materials in the Department's files, the Board finds the following facts:

1. ACRONYMS, TERMS AND ABBREVIATIONS USED IN THIS DOCUMENT

| 2004 amendment application or license | Department license #S-020700-WD-N-A, issued April 9, 2004 |
|--|---|
| appellant Spencer | Edward S. Spencer, residing at 1140 Kirkland Road in Old Town, Maine |
| appellant Permittee, or permittee | jointly, BGS (owner of JRL) and NEWSME (as contracted operator of JRL) |
| Board | Board of Environmental Protection |
| BGS | Bureau of General Services, within DAFS, the state agency designated as owner of JRL for the State of Maine |
| Casella | Casella Waste Systems, Inc. |
| Casella/PERC agreement | the Disposal Agreement, dated October 1, 2012, by and among PERC; USA Energy Group, LLC; ESOCO Orrington, LLC; Casella; Pine Tree Waste, Inc.; and New England Waste Services of ME, Inc. |
| Department | Maine Department of Environmental Protection |
| FEPR | front end process residue, generated by PERC and Maine Energy |
| GHG | Greenhouses gas(es), including carbon dioxide and methane |

| STATE OF MAINE, ACTING THROUGH THE |
|--|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| LICENSE AMENDMENT |
| #S-020700-WD-BG-Z (Denials of Appeals) |

FINDINGS OF FACT AND ORDER ON APPEALS

| JRL | Juniper Ridge Landfill, located in Old Town, Maine |
|--------------------|---|
| LD | legislative document |
| Maine Energy | the former Maine Energy Recovery Company incinerator owned and operated by Casella, located in Biddeford, Maine |
| MMWAC | Mid-Maine Waste Action Corporation, which operates an incinerator in Auburn, Maine |
| MRC | Municipal Review Committee, Inc. |
| MSW | municipal solid waste |
| NEWSME | NEWSME Landfill Operations, LLC, a subsidiary of Casella and the operator of JRL |
| OSA | the Operating Services Agreement between SPO and Casella, dated February 4, 2004 (and its 2 amendments) |
| PERC | the Penobscot Energy Recovery Company, LP incinerator, located in Orrington, Maine and owned by USA Energy Group, LLC; Set PERC Investments, LLC; and MRC |
| soft layer license | Department license #S-020700-WD-W-M, issued September 19, 2010 |
| SPO | Maine State Planning Office, acting for the State of Maine |
| subject permit | Department license #S-020700-WD-BC-A, issued December 20, 2013; this is the license that is the subject of this appeal |
| waste hierarchy | the solid waste management hierarchy; see 38 M.R.S. §2101 |
| WTE intervenors | jointly, ecomaine and MMWAC |

2

)))

))

2. PROCEDURAL HISTORY

On September 15, 2012, the permittee filed an application to remove the restrictions and limitations placed on the disposal of in-state MSW at JRL as set forth in Special Conditions #16.A and #16.C of Department of Environmental Protection ("Department") license #S-020700-WD-N-A, issued April 9, 2004 ("2004 amendment license"), and as approved in Department license #S-020700-WD-W-M, issued September 19, 2010 ("soft layer license"). Specifically, the permittee sought approval to dispose of up to 123,000 tons per year of in-state MSW in JRL. The application was accepted as complete for processing on October 3, 2012. Pursuant to the provisions of 06-096 CMR 2.7(A) and 2.17(A), the permittee and other persons had until October 23, 2012 to request a public hearing on the application or request that the Board assume jurisdiction of the application. On October 24, 2012, the Commissioner exercised her discretion, pursuant to 06-096 CMR 2.7(B), to hold a public hearing on the application. The Department granted leave to intervene to the following entities: the City of Old Town, the City of Saco, the City of Biddeford, Old Town Fuel and Fiber, Penobscot Energy Recovery Company, LP ("PERC"), the Municipal Review Committee ("MRC"), ecomaine, Mid-Maine Waste Action Corporation ("MMWAC"), Ed Spencer; Wanda and David Lincoln, Laura and Harry Sanborn, and Ralph Coffman. On December 20, 2012, the permittee

| STATE OF MAINE, ACTING THROUGH THE | 3 | APPEALS OF SOLID |
|--|---|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

amended the pending application to reduce the amount of in-state MSW proposed for disposal at JRL from 123,000 to 93,000 tons per year, with the remaining 30,000 tons being disposed of at PERC per the Casella/PERC agreement dated October 1, 2012. The Department established the Relevant Review Criteria for the application in both the First Procedural Order and the Second Procedural Order, issued on January 15, 2013 and February 14, 2013, respectively. The Department held a public hearing on April 9 and 10, 2013. Public comment on the application was accepted by the Department throughout the course of its review of the application until the record closed on April 30, 2013. A draft Department order was issued on November 14, 2013 for public comment. After consideration of the comments received, on December 20, 2013 the Department issued conditional approval of the disposal of no more than 81,800 tons per year of MSW at JRL (Department license #S-020700-WD-BC-A; hereinafter the "subject permit").

Two timely appeals to the Board were filed on January 21, 2014 by the permittee and Mr. Spencer. Appellant Spencer requested that the Board limit the amount of MSW accepted for disposal to 25,000 tons per year and that all MSW disposed of at JRL be subject to maximum recycling and source reduction efforts. Appellant Permittee requested that the Board amend the subject permit to license the disposal of 93,000 tons of MSW, as requested in the application, and that the Board strike several special conditions of the subject permit.

Both appellants submitted supplemental evidence in support of their appeals. In a letter dated February 6, 2014, the Board Analyst notified the appellants and any person who submitted written comment on the application that the deadline to submit comments on the admissibility of the proposed supplemental evidence was March 10, 2014. Both of the appellants as well as ecomaine and MMWAC ("WTE intervenors") submitted comments on the proposed supplemental evidence. In a letter dated March 18, 2014, the Board Chair ruled on the admissibility of the supplemental evidence and advised all the parties that the deadline to submit comments on the merits of the appeals was April 7, 2014. Redacted versions of the appeals, including the approved supplemental evidence, were made available to the full Board and all the parties. Comments on the merits of the appeals were submitted to the Board by both of the appellants, the WTE intervenors, PERC, and the City of Old Town.

3. STANDING

BGS, as the owner and permittee, and NEWSME, as the owner's agent and operator, qualify as aggrieved persons, as defined in 06-096 CMR 2, §1(B) because they have suffered particularized injury as a result of the Department's licensing decision.

| STATE OF MAINE, ACTING THROUGH THE | 4 | APPEALS OF SOLID |
|--|---|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

Appellant Spencer, as an intervenor in the licensing proceeding and through other arguments presented in his appeal, has demonstrated that he is an aggrieved person as defined in 06-096 CMR 2, §1(B).

The Board finds that both the appellants, appellant Permittee and appellant Spencer, have demonstrated that they are aggrieved persons as defined in 06-096 CMR 2, \$1(B) and may bring these appeals before the Board.

4. **PROJECT DESCRIPTION**

The permittee's application, filed on September 12, 2012, proposed to allow disposal at JRL of up to 123,000 tons per year of in-state MSW, eliminating the existing license restrictions that MSW disposed at JRL could only be from a Maine incinerator and be bypass or used as the soft layer during cell construction.

A history of previous license amendments and revisions involving MSW are helpful to understand the context of this application. During the processing of the 2004 amendment application, Casella Waste Systems, Inc. ("Casella") proposed to extend to the operation of JRL the limitations on the acceptance of MSW at its Pine Tree Landfill in Hampden, Maine that are included in Department license #S-001987-WD-QA-M (Corrected Copy), issued on August 21, 2002 to Pine Tree Landfill. Those limitations on the acceptance of MSW are included in Special Condition #16 of the 2004 amendment license. Subsequently, JRL received Department approval in the soft layer license to modify Special Condition #16.C of the amendment license to accept MSW bypass above the limits set in the amendment license only by an amount sufficient to install the "soft layer" in new cells, as required by 06-096 CMR 401.2(D)(4)(a)(vii).

Prior to the issuance of the subject permit, JRL could accept for disposal only MSW that is bypass¹ from a Maine incinerator. Special Condition #16.A of the 2004 amendment license states: "With regards to the acceptance of MSW for disposal, consistent with its proposal, the applicant shall not dispose of unprocessed MSW from any source other than bypass from the following sources: PERC incinerator in Orrington and the Maine Energy incinerator in Biddeford; waste delivered under an interruptible contract with PERC; or waste delivered in excess of processing capacity at other MSW incinerators in Maine:" Special Condition #16.C of the 2004 amendment license states: "With regards to the acceptance of MSW for disposal, consistent with its proposal, the applicant shall limit the total amount of (a) unprocessed MSW incinerated at Maine Energy and (b) MSW bypassed from Maine Energy for disposal at the WOTL and at Pine Tree Landfill's Secure III Landfill Expansion to no more than 310,000 tons in any calendar year, unless

¹ "Bypass" is defined in 06-096 CMR 400.1(V)

| STATE OF MAINE, ACTING THROUGH THE | 5 | APPEALS OF SOLID |
|--|---|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

changes in conditions or circumstances occur that cause the Department to revise this cap;" Both Pine Tree Landfill and Maine Energy are now closed. The soft layer license allows JRL to accept an amount of MSW bypass (from any Maine incinerator) over the limitations established in the 2004 amendment license, up to the amount that has been determined by the Department to be the quantity needed to install a soft layer on a newly constructed landfill cell.

The request in this application to dispose of up to 123,000 tons per year of MSW was predicated on the agreement entered into by the Maine Energy Recovery Company, LP, the owner of the Maine Energy Incinerator ("Maine Energy"), and the City of Biddeford to sell, shut down, and decommission the Maine Energy facility. This agreement took effect on November 30, 2012, and Maine Energy ceased operations at the end of 2012. The permittee sought to dispose of the amount of in-state MSW at JRL equivalent to the amount of in-state MSW that was previously contracted for disposal at Maine Energy, which was approximately 123,000 tons per year. This was the annual average of in-state MSW accepted at Maine Energy, combined with bypass and soft layer MSW from Maine Energy transported to JRL over the three-year period from 2009 through 2011.

On October 1, 2012, Casella executed an agreement with PERC ("Casella/PERC agreement"), to deliver at least 30,000 tons of in-state MSW per year to the PERC incinerator in Orrington, subject to the approval of the application. Accordingly, on December 20, 2012, the permittee amended the pending application to reduce the cap on in-state MSW that could be disposed at JRL from 123,000 to 93,000 tons per year.

At the time the Department concluded its review of the application, the existing capacity of JRL was estimated (by the permittee) to be filled by the end of 2018. Although the permittee plans to apply for an expansion of JRL in the future, licenses issued to JRL would not carry over to the expansion, if it is approved. Also, the Casella/PERC agreement expires on March 31, 2018, unless the parties agree to extend the agreement.

5. BASIS FOR APPEALS

- 5.A. <u>Appellant Spencer's Basis for his Appeal</u>: Appellant Spencer's appeal addresses the following six areas in which he objects to actions taken during review of the application or believes the Department erred in findings, conclusions or conditions in the license:
 - 5.A.1. The Department erred when it concluded the disposal of 81,800 tons per year of unprocessed MSW in JRL complied with the solid waste management hierarchy ("waste hierarchy") and state policy;

| STATE OF MAINE, ACTING THROUGH THE | 6 |
|--|---|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| LICENSE AMENDMENT |) |
| #S-020700-WD-BG-Z (Denials of Appeals) |) |

FINDINGS OF FACT AND ORDER ON APPEALS

- 5.A.2. The Department made false comparisons in its analysis of changes in traffic volumes and waste volumes due to approval of this license;
- 5.A.3. The Department should have reopened the record after the permittee submitted its revised application;
- 5.A.4. The Department erred when it concluded approval of the disposal of 81,800 tons per year of MSW would not cause an increase in greenhouse gases ("GHG") from JRL;
- 5.A.5. The Department relied on prejudiced testimony to reach its conclusions; and
- 5.A.6. The Permittee has not demonstrated adequate financial ability.
- 5.B. <u>Appellant Permittee's Basis for its Appeal</u>: Appellant Permittee's appeal addresses the following two areas in which it objects to or believes the Department erred in findings, conclusions or conditions in the license:
 - 5.B.1. The Department's approval of 81,800 tons of MSW as opposed to the 93,000 tons requested unreasonably limits how much waste may be disposed at JRL.
 - 5.B.2. The Department erred by applying the waste hierarchy as a permitting standard to the application, and attached several special conditions to the license that have no lawful foundation.

6. REMEDIES REQUESTED

- 6.A. <u>Remedies Requested by Appellant Spencer</u>: Appellant Spencer specifically requests the following from the Board:
 - That the Department limits the amount of MSW disposed of at JRL to 25,000 tons annually. This limit would be in conformance with Special Condition #5 of the Commissioner's partial approval of the permittee's public benefit determination for a future expansion at the JRL site (Department License #S-02070-W5-AU-N, dated January 31, 2012); and
 - That all MSW disposed at JRL be subject to maximum recycling and source reduction efforts prior to disposal at JRL.
- 6.B. <u>Remedies Requested by Appellant Permittee</u>: The appellant Permittee specifically requests the following from the Board:
 - That the Board amend the subject permit to allow the disposal of 93,000 tons of MSW, as requested in the application; and

| STATE OF MAINE, ACTING THROUGH THE | 7 | APPEALS OF SOLID |
|--|---|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

• That the Board either find that the Department has no authority to apply the waste hierarchy to this application, or that the application, as proposed, is fully consistent with the waste hierarchy and strike Special Conditions #5, #8, #9 and #10² of Department license #S-020700-WD-BC-A.

7. STATUTORY FRAMEWORK

The Department attached to its First Procedural Order, dated January 15, 2013 and to its Second Procedural Order, dated February 14, 2013, the relevant review criteria for the subject permit. The following statutes were identified as applicable:

- Title 38, Chapter 2, Subchapter 1, Department of Environmental Protection Organization and Powers, 38 M.R.S. §§ 341-A 349-B, as applicable
 - Applicable provisions include, but are not limited to:
 - 38 M.R.S.A. §344
 - 38 M.R.S.A. §345-A
- Waste Management Law, 38 M.R.S. §§1301-1310-S, as applicable
 - Applicable provisions include, but are not limited to:
 - §1302
 - §1303-C
 - §1304-B
 - §1306
 - §1310-N
- Solid Waste Management and Recycling Law, 38 M.R.S. § 2101 (waste hierarchy)

8. DISCUSSION AND FINDINGS – APPELLANT SPENCER

8.A. <u>Waste Hierarchy:</u> Appellant Spencer objects to the Department's conclusion that: "The acceptance of additional unprocessed MSW at JRL in addition to bypass and soft layer material for cell construction is consistent with the waste hierarchy provided that limitations are placed upon such activity..." He argues that when MSW was being disposed at Maine Energy, it was first sorted to remove

² The applicant Permittee's appeal also asked that Special Condition #6 be struck. However, in a letter dated April 7, 2014, the applicant Permittee notified Board Chair Foley that while the permittee still believes that the Commissioner lacks the authority to impose Condition 6, and that the permittee's arguments against Condition 6 remain valid, the issue now appears to be moot because the Department found in a Condition Compliance Order issued on February 27, 2014 that Condition #6 has been met. Accordingly, the permittee said it will not be further pursuing that discrete aspect of their appeal.

| STATE OF MAINE, ACTING THROUGH THE | 8 | APPEALS OF SOLID |
|--|---|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

recyclable materials and then burned, thereby reducing the volume by up to 90%. He asserts that recyclable materials will not be removed from the 81,800 tons of raw MSW that was approved for disposal at JRL, and states: "This material has been moved to the lowest rung of the Hierarchy, which is a violation of our State Waste Policy and Hierarchy." [See Spencer Appeal at 2].

Appellant Spencer asserts that Casella knew that large quantities of MSW were never intended to be disposed of at JRL and that the 2003 SPO Request for Proposals and the ensuing OSA require the operator of JRL, NEWSME, "... to operate the Landfill following the State's solid waste management hierarchy (reduce, reuse, recycle, compost, incinerate, landfill);" [See OSA at 24]. In support of this position, appellant Spencer notes that while Casella's response to the 2003 SPO Request for Proposals anticipated the disposal of 90,000 tons per year of front-end process residue ("FEPR"), 15,000-167,000 tons of MSW, including bypass, from PERC and Maine Energy and up to 200,000 tons of noncontracted in-state MSW, none of these proffered quantities were included in the OSA or the 2004 amendment license from the Department. Appellant Spencer further asserts that Casella knew that Maine Energy would be closing and that Casella made the conscious decision to landfill the in-state portion of the MSW that formerly went to Maine Energy, demonstrating Casella's "…lack of committal to the Waste Hierarchy." [See Spencer Appeal at 4].

Appellant Spencer asserts that the applicant has not complied with the provisions of 06-096 CMR 400.3(D)(2)(b) ["...the Department must determine that the facility will be operated so that the volume of waste and the risks related to its handling and disposal have been reduced to the maximum practical extent by recycling and source reduction prior to disposal...] and 400.6(B)(1) ["The proposed solid waste disposal facility will only accept solid waste that is subject to recycling and source reduction programs, voluntary or otherwise, at least as effective as those imposed by provisions of state law."]. Appellant Spencer cites the annual reports for Maine Energy that show upwards of 2,000 tons of ferrous metal was recovered from the MSW that was sent to the Maine Energy facility from Maine sources and asserts that the MSW approved for disposal at JRL will not be subject to recycling "to the maximum practical extent" since the MSW will not be subject to recycling efforts as rigorous as those imposed when the MSW was disposed at the Maine Energy incinerator.

Finally, while appellant Spencer agrees that the Department does not have the authority to direct the Maine Energy MSW to existing disposal facilities, he argues that the Department does have the authority to determine where the Maine Energy MSW cannot go, and that it should not be allowed into JRL. In support of

| STATE OF MAINE, ACTING THROUGH THE | 9 | APPEALS OF SOLID |
|--|---|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

this position, appellant Spencer argues that such disposal at JRL is inconsistent with the hierarchy and that in the absence of the JRL option, the MSW would likely "end up at the remaining three Maine WTEs".

Appellant Permittee's Objection: Appellant Permittee argues that appellant Spencer's claim that the waste hierarchy applies in this case as a licensing standard is without merit for several reasons. It is asserted that appellant Spencer assumes that the hierarchy must necessarily apply as a permitting standard simply because it exists in statute and that his view ignores the plain language of the statute, the fact that the Department has not applied the hierarchy as a licensing standard in the past, and other legal and practical challenges. Appellant Permittee states that appellant Spencer cites two regulatory references in making his claim that are applicable only to applications for "new or expanded" solid waste disposal facilities, and that relate to compliance with certain recycling and source reduction requirements that exist separately and apart from the waste hierarchy.

Appellant Permittee argues further that with the passage of LD 1483 [An Act to Implement the Solid Waste Management Hierarchy], the Legislature addressed this matter by explicitly requiring that the Department adopt rules incorporating the waste hierarchy as a permitting standard for future applications and by not including a retroactivity provision.

Appellant Permittee asserts that appellant Spencer erroneously argues that the Commissioner should require consistency with the waste hierarchy on the basis of provisions included in the OSA and other related documents. Appellant Permittee states that the OSA is a contract between BGS and Casella to which the Department is not a party, and asserts that the OSA and other private agreements do not "establish obligations that can be enforced by the Department in a licensing proceeding." It is argued further that regardless of this fact, the application for the subject permit was consistent with the waste hierarchy.

Appellant Permittee argues that appellant Spencer misunderstands or misrepresents the history of JRL and that it has always been clear, in various documents and statements, that it would seek to dispose of MSW at JRL. It is argued further that the OSA does not prohibit the disposal of MSW at JRL, but specifically authorizes the disposal of "acceptable waste", which is any waste type licensed for disposal by the Department.

Board Response: The Board finds that the waste hierarchy is set forth at Title 38, Chapter 24, and reiterated in Chapter 13, as a guiding principle for making

| STATE OF MAINE, ACTING THROUGH THE | 10 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

decisions related to solid waste management. Furthermore, 38 M.R.S.A. §1302 provides:

"The Legislature finds and declares that it is the policy of the State to pursue and implement an integrated approach to hazardous and solid waste management, which shall be based on the following priorities: reduction of waste generated at the source, including both the amount and toxicity of the waste; waste reuse; waste recycling; waste composting; waste processing which reduces the volume of waste needing disposal, including waste-to-energy technology; and land disposal. ... The Legislature finally declares that the provisions of this chapter shall be construed liberally to address the findings and accomplish the policies in this section."

Thus, the Board finds that the solid waste hierarchy may be considered as part of a Department licensing decision regarding a solid waste disposal facility.

Chapter 400, *General Provisions*, addresses applicability of the rule to all solid waste facilities at section 2 as follows:

"It is unlawful for any person to locate, establish, construct, alter, expand or operate a solid waste facility contrary to the Maine Solid Waste Laws and these rules."

In part, "Maine Solid Waste Laws" means all the laws of the State of Maine relating to the management of solid waste. It includes the "Maine Hazardous Waste, Septage and Solid Waste Management Act," Subchapters I and IA (38 M.R.S.A section 1301 *et seq.*) and the "Solid Waste Management and Recycling Law" (38 M.R.S.A section 2101 *et seq.*) [See 06-096 CMR 400.1(FFFF)]. Therefore, the Department's rules contain provisions for the consideration of the waste hierarchy at 38 M.R.S.A. §1302 and 38 M.R.S.A §2101 when evaluating applications for operating solid waste facilities in Maine.

The waste hierarchy identifies land disposal of waste as the least preferable option for managing waste materials. It does not prohibit landfilling, and other statutory sections provide for new and expanded landfills. If the waste hierarchy were applied as a regulatory standard, no land disposal of materials could be allowed unless an applicant demonstrated that each ton proposed for disposal could not be managed with any other approach, without any consideration for cost. Neither section of Maine law setting forth the waste hierarchy includes economic considerations. For example, Maine law does not say recycling is preferable to incineration when incineration is less costly. While the Department has placed

| STATE OF MAINE, ACTING THROUGH THE | 11 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

limitations on the sources of unprocessed MSW allowed for disposal at JRL, the license conditions do not require that all other options be exhausted. In fact, the hearing record for the license reveals that a variety of other options exist for managing much, if not all of, the 81,800 tons of unprocessed MSW approved for disposal at JRL, but those options were not preferred by the applicant and their customers due to their higher cost. Under the amended license, Casella is merely required to use its "best efforts" to divert MSW from JRL to other solid waste facilities, but only "to the greatest extent practicable." The Board agrees with appellant Permittee that the hierarchy cannot be applied in absolute terms, and finds that the Department has utilized the hierarchy as a guide, not a standard.

The Board finds that the waste hierarchy is applicable as a guiding principle for the Department's consideration of the permittee's application to accept additional, unprocessed MSW. The Department appropriately established limitations on the volume and nature of wastes to be disposed at JRL, allowing for disposal of some additional MSW that cannot be readily diverted to preferable waste management strategies such as recycling, composting and incineration.

8.B. False Comparisons: Appellant Spencer asserts that the Department erred in its review of the traffic analysis submitted by the permittee. Specifically, instead of correlating traffic at JRL that was associated with Maine Energy prior to its closure and estimated future truck traffic associated with the types and volumes of waste proposed in the application, the Department should have considered the fact that truck traffic to JRL has decreased significantly since the closure of Maine Energy on December 31, 2012 and used that point as a baseline for assessing changes in traffic. Appellant Spencer states that, using the closing of Maine Energy as the baseline, the City of Old Town concluded deliveries of MSW to JRL would increase truck traffic from 813 to 2,975 annually. Likewise, appellant Spencer asserts that if the period after Maine Energy closed is used instead of the period during which it was sending waste to JRL, the Department erred in finding that "... Approval of the annual disposal of no more than 81,800 tons would result in an average of 52,726 fewer tons of waste per year going to JRL."

Next, appellant Spencer asserts that PERC misrepresents the facts related to the operation of PERC, as summarized in Finding of Fact #5.B.2 of the subject permit - "PERC commented that the Casella/PERC agreement provides it with long-term, stable delivery of solid waste that will allow it to operate near or at capacity year-round, and with an additional source of revenue." Appellant Spencer asserts this gives the impression that PERC has not been operating at or near capacity year-round and that approval of the application is essential to the ongoing operation of PERC, when his impression is that PERC has been getting enough

| STATE OF MAINE, ACTING THROUGH THE | 12 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

MSW from the MRC towns and out-of-state sources to meet its obligations to provide electricity to Bangor Hydro-Electric Company on a continuous basis. Appellant Spencer sees PERC's comment as a "...veiled threat that without this license there will be an interruption of disposal ability and power generation", and he does not see PERC's revenue streams as an issue for this license.

Appellant Permittee's Objection: The applicant Permittee argues that the traffic provisions of 06-096 CMR 400.4(D)(1) do not set a limit on truck traffic but rather require the applicant to make adequate provisions for safe and uncongested traffic movement of all types into, out of, and within the proposed solid waste facility. The rule does not limit the number of trucks able to access a landfill each day, nor require an applicant to demonstrate no net increase over prior conditions. Given that JRL met the traffic criteria of the rule when Maine Energy was operating and delivering acceptable waste to JRL, appellant Permittee asserts that the Department was correct to find that traffic would continue to move safely and conveniently into, out of and within JRL when less waste was being delivered to JRL, as proposed in the application.

The applicant Permittee also asserts that the traffic comparisons included in the application are not false, since it was appropriate to use the period before the closure of Maine Energy as the baseline because Maine Energy was operating and delivering waste to JRL at the time the application was submitted. The data used in the application was the most recent available, and presented a realistic view of how traffic patterns and counts would change from the then-current conditions.

Board Response: The Board concurs with the Department's analysis and findings regarding traffic in the December 20, 2013 conditional approval of the subject permit. The Board makes the following findings regarding the assertions related to traffic issues made by appellant Spencer:

- 1. The Department appropriately evaluated the traffic information in the application and concluded it met the regulatory standards of 06-096 CMR 400.4(D)(1), which requires an applicant to "...make adequate provisions for safe and uncongested traffic movement of all types into, out of, and within the proposed solid waste facility".
- 2. The traffic data included in the application accurately reflects current and estimated future truck counts and vehicular traffic patterns at JRL. While it is accurate that the number of trucks delivering unprocessed MSW to JRL under the terms of the subject permit will increase, appellant Spencer failed to factor in the fact

STATE OF MAINE, ACTING THROUGH THE BUREAU OF GENERAL SERVICES OLD TOWN, PENOBSCOT COUNTY, MAINE JUNIPER RIDGE LANDFILL LICENSE AMENDMENT #S-020700-WD-BG-Z (Denials of Appeals) APPEALS OF SOLID WASTE LICENSE FINDINGS OF FACT AND ORDER ON APPEALS

that trucks will no longer deliver ash, FEPR and bypass MSW from Maine Energy.

3. The Department appropriately considered the traffic and waste volume conditions that existed at the time the application was filed as the baseline.

The Board also finds that the testimony of Kevin Nordby, representing PERC, was properly admitted into the licensing record along with all other comments made on the application, that Mr. Nordby's testimony was provided during the public hearing and was thus subject to cross-examination from the other intervenors, including appellant Spencer, and that the Department accurately summarized his testimony in the subject permit.

13

)

)

)

)

8.C. <u>Public Comment Period</u>: Appellant Spencer argues that the public comment period should have been reopened after the permittee submitted a significantly revised application on December 20, 2012. Specifically, appellant Spencer states that the public comment period on the originally-submitted application closed on October 23, 2012 and was not reopened following submission of the revised application. Appellant Spencer states that since JRL is a state-owned landfill, "Casella should be required to operate in a more open and transparent manner with both state agencies and citizens".

Appellant Permittee's Objection: Appellant Permittee points out that the Department received and accepted hundreds of comments during the licensing process from the date the application was originally submitted through April 30, 2013. Appellant Permittee notes that many of the comments were submitted after the application was amended, which appellant Spencer also acknowledges. Second, after the Department provided public notice of the Commissioner's decision to hold a public hearing on the application, members of the public were afforded the opportunity to intervene and participate as full parties in accordance with 5 M.R.S. §9054. Third, at the direction of the Department, the permittee sent notice to all the parties, including the interested persons, of the submission of the amended application. Fourth, appellant Spencer does not appear to have been harmed by submission of the revised application, since he was active at each step of the proceedings and ultimately had every opportunity to present his views on the revised application. Finally, the public hearing included a public comment session which was attended by numerous members of the public.

Board Response: The Board finds that, although appellant Spencer included his assertions related to the revision of the subject permit in his False Comparisons

| STATE OF MAINE, ACTING THROUGH THE | 14 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

heading, the content of the assertions resulted in this issue being separated from the others because no comparisons were made by appellant Spencer.

The Board finds that Finding of Fact #2.D of the subject permit provides a summary of public participation in the review of this application. This finding describes opportunities for public comment on the application throughout its processing time. The Board further finds that appellant Spencer appears to confuse the requirement of 06-096 CMR 2.7(A) that specifies requests for a public hearing on an application, or that the Board assume jurisdiction, be received within 20 days of the date an application is accepted as complete for processing, with the ability to provide comments on the application after that date. The Board also finds that 06-096 CMR 2.14(B) does not require the Department to restart the process whereby parties may request a public hearing on an application, that the Board assume jurisdiction of an application or that a party be granted intervenor status based on the fact that a pending application has been amended by the applicant.

The Board also finds that the number of comments submitted, and the level of participation in the public hearing, demonstrate that the public availed itself of the opportunities to participate in the review process.

The Board finds that, specifically, appellant Spencer availed himself of the public comment opportunities in that he: requested a public hearing within the 20 day period; requested and was granted intervenor status in the public hearing; fully participated in the public hearing; provided written comments on the application, and provided comments on the draft subject permit.

The Board finds that the Department ensured that review of the application was transparent by: holding a public hearing on the amendment application, requiring the permittee to notify all interested persons of revisions made to the application after it was filed, maintaining an extensive list of interested persons for the application, continuously maintaining the Department's website created for this project, widely distributing the draft license, and agreeing to extend the deadline for commenting on the draft license.

The Board also finds that, by requiring the applicant to notify all parties of the submission of the amended application, the Department ensured that members of the public were made aware of and afforded opportunities to comment on the amended application during the entire time period that the application record was open, in that: the revision was submitted on December 20, 2012, the submission

| STATE OF MAINE, ACTING THROUGH THE | 15 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

date for pre-filed testimony was February 28, 2013, the public hearing was held on April 9 and 10, 2013 and it included a public comment session on April 9th.

Finally, the Board finds the Department committed no procedural error by accepting and processing the amended application.

8.D. <u>Greenhouse Gases:</u> Appellant Spencer objects to the Department's conclusion that "The disposal of up to 81,800 tons per year of in-state MSW will not pollute any waters of the State, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance. ...". Appellant Spencer asserts that the disposal of 81,800 tons of MSW at JRL will result in an increase in the generation and release of GHG, specifically methane. Methane, a by-product of the anaerobic decomposition of MSW, is a significantly more potent GHG than carbon dioxide. While acknowledging that the facility collects and destroys some of the GHG generated by the operation of the landfill, appellant Spencer asserts that there is still a significant, but unquantified, portion of GHG that are released to the environment from the uncovered portions of the landfill.

Second, as detailed in appellant Spencer's pre-filed testimony for the public hearing, he asserts there will be a second wave of GHG generation and release in the future (32-100 years post waste placement) when barriers fail, more moisture is added to the waste and gas collection procedures are no longer in place [See Spencer pre-filed testimony, Attachment Anderson, P., 2007].

Based on these premises, appellant Spencer suggests that capacity at JRL should be reserved for wastes with a lower potential to generate GHG, such as incinerator ash, and that wastes with a higher organic content, and therefore a higher potential to generate GHG, should be segregated out of the waste stream being landfilled.

Appellant Permittee's Objection: Appellant Permittee states that the Department's findings and conclusions regarding GHG emissions were correct. Appellant Permittee notes that, while acknowledging the disposal of additional MSW at JRL will result in an increase in the generation of GHG, the Department concluded that the permittee has made adequate provisions for the collection of GHG through existing and proposed infrastructure. Second, the modelled generation and collection efficiency rates closely correlated to the actual measured rates, again supporting the Department's conclusion. Also, appellant Permittee asserts that the Department finding reflected the recent decision of the Bureau of Air Quality's new air license for JRL.

| STATE OF MAINE, ACTING THROUGH THE | 16 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

Board Response: The Board concurs with the Department's analysis and findings regarding the air quality impacts from JRL in the subject permit. The Board makes the following findings regarding the assertions related to air quality, specifically GHG issues, made by appellant Spencer:

- 1. The Department, and now the Board, concludes the permittee demonstrated its proposal meets the regulatory standards of 06-096 CMR 400.4(G)(1), which requires an applicant to: obtain an air emission license if required, control fugitive dust and nuisance odor, and open burn only permitted wastes. Department license #A-021-77-2-A was issued on November 26, 2012. In that license, the Bureau of Air Quality found that the emissions from JRL: will receive Best Practical Treatment, will not violate applicable emission standards, and will not violate applicable ambient air quality standards in conjunction with emissions from other sources. The permittee has demonstrated it is able to control nuisance odor at JRL, including odors generated by the MSW it has accepted since the 2004 amendment license was issued in the form of MSW bypassed from Maine incinerators and the FEPR from PERC and Maine Energy.
- 2, The Department, and now the Board, concludes that the permittee demonstrated that JRL has the infrastructure to handle the slight increase in GHG expected to be generated by the additional amount of MSW proposed to be disposed at JRL. The results of monitoring routinely conducted at JRL demonstrate that there is good correlation between the modeled landfill gas collection rates, and the actual rates measured at JRL, and that landfill gas emissions into the environment are adequately controlled.
- 3. The Board finds that the JRL solid waste licenses include the following air monitoring requirements: analysis for gas in groundwater monitoring wells, underdrain outfalls, and the leachate system; continuous monitoring for hydrogen sulfide at 4 stationary monitors located at the perimeter of the facility, routine landfill surface scans, and annual evaluations of the effectiveness of the active gas extraction system. Also, the permittee conducts the quarterly methane gas monitoring program required by 06-096 CMR 401.4(C)(11) to verify the concentration of explosive gases generated by the landfill. The LFG monitoring conducted for 2011 document *de minimis* releases of GHGs, in contrast to appellant Spencer's assertion. In addition, as noted above, JRL holds a recently issued air emissions license with reporting requirements.

| STATE OF MAINE, ACTING THROUGH THE | 17 |
|--|----|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| LICENSE AMENDMENT |) |
| #S-020700-WD-BG-Z (Denials of Appeals) |) |

APPEALS OF SOLID WASTE LICENSE FINDINGS OF FACT AND ORDER ON APPEALS

- 4. The Board finds that the Department appropriately concluded, after analysis of the evidence provided by appellant Spencer and appellant Permittee, that the low GHG collection efficiency rates noted in the technical papers submitted by appellant Spencer are based on assumptions (lack of cover, total lack of or delay in installing collection infrastructure, large lateral spacing between vertical collection pipes) that do not apply to JRL. Further, the Board agrees with the Department that rebuttal testimony filed by the permittee demonstrated that, using the methodology established by EPA, an instantaneous collection efficiency at various active and inactive areas of JRL of 89.8% could be achieved. Similarly, using the model proposed by Anderson, a calculated lifetime collection efficiency of 86.9 percent was documented.
- 8.E. <u>Prejudiced Testimony:</u> Appellant Spencer objects to the fact that certain parties who participated in the licensing process were contractually obligated to either publicly support or not oppose the permittee's application to dispose of MSW at JRL, specifically pointing out both PERC and the City of Biddeford's obligations in this respect. Appellant Spencer implies that there may be other as-yet-unknown parties that provided favorable testimony under these conditions. Additionally, appellant Spencer notes that the City of Old Town, in accordance with the provisions of the Host Community Agreement, may not oppose the permittee in application proceedings before the Department without incurring a financial penalty. As such, appellant Spencer states that elected officials in Old Town may not be appropriately supporting the concerns of their constituency. Appellant Spencer suggests that in future public hearings those testifying should be asked, before they testify, if they or the entity they represent are contractually obligated to testify in support of or against license applications.

Finally, appellant Spencer takes exception to the statement, "Most comments received from the Biddeford and Saco area were in favor of the application...". Appellant Spencer asserts that there were equally vehement and negative testimony and comments submitted by residents from those areas that should have been given equal weight by the Department.

Appellant Permittee's Objection: The appellant Permittee states that contractual obligations voluntarily entered into by parties are not the same as lying under oath, as insinuated by appellant Spencer. Appellant Permittee notes that the parties appellant Spencer refers to would not have agreed to their contracts with Casella if they felt they could not honestly fulfill their responsibilities. Appellant Permittee asserts that appellant Spencer has provided

| STATE OF MAINE, ACTING THROUGH THE | 18 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

no evidence that any party submitted untruthful testimony and that, in fact, appellant Spencer does not suggest in his appeal that the Board should do anything about testimony provided in this public hearing. Appellant Permittee asserts this argument from appellant Spencer is an attempt to discredit Casella, and his suggestion for future public hearings should be ignored since a court would not enforce the provisions appellant Spencer seeks.

Board Response: The Board finds there is no provision in statute or rule administered by the Department, including this Board, which requires a party to proceedings to disclose if they are contractually obligated to testify in support of or against a license application. In accordance with 06-096-CMR 3.19(B), witnesses at the public hearing were required to state for the record their name, address, business or professional affiliation, and whether they represent another individual, firm, organization, government agency or other legal entity for the purpose of the hearing. The Board further finds that while it is widely assumed that all parties in a proceeding generally submit testimony that is biased towards that party's position, that fact does not lead one to conclude that the party has committed perjury.

The Board further finds that all intervenors, including appellant Spencer, PERC and the City of Old Town, provided pre-filed testimony, were subject to crossexamination during the public hearing, were provided the opportunity to file rebuttals of testimony provided during the public hearing, had the opportunity to cross-examine witnesses during the public hearing, and were provided the opportunity to comment on the draft license. There is no evidence in the record for the subject permit that leads the Board to conclude that any party committed perjury, or was not allowed to participate fully in the review of the application.

The Board also finds that the Department properly gave credence to and considered all the comments and testimony submitted for inclusion in the record during its review of the application. The term "most" as used by the Department in the subject permit is a factual statement related solely to the number of comments received from the Biddeford and Saco area. A full reading of the statement reads as follows: "Most comments received from the Biddeford and Saco area were in favor of the application, as the closure and sale of the Maine Energy incinerator was initially contingent upon the Department's approval of the application." The statement does not serve to diminish the intensity nor the character of the comments submitted in opposition to the application.

8.F. <u>Financial Ability:</u> Appellant Spencer asserts that the permittee did not submit sufficiently detailed information to demonstrate adequate financial ability for the

| STATE OF MAINE, ACTING THROUGH THE | 19 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

safe and responsible operation of JRL. Specifically, he notes that the permittee submitted a letter of credit from a financial institution that does not specify the group of lenders known as a "credit facility", and that the information set forth in the letter is subject to change without notice. Second, according to appellant Spencer, Casella still owes approximately \$21.4 million in principal on a loan, backed by the Finance Authority of Maine, associated with its acquiring status as operator of JRL. Given these arguments, appellant Spencer asks that a more detailed assessment of NEWSME s financial ability be conducted.

Appellant Permittee's Objection: Appellant Permittee argues that the permittee's submission demonstrating financial ability met the applicable requirements of the regulations. First, the acceptance of MSW in accordance with the application will not result in any increased costs associated with the design, construction, operation, maintenance, closure and post-closure of the landfill. Second, the letter of credit submitted with the application complied with the provisions of 06-096 CMR 400.4(B)(2)(b)(i)(a). Appellant Permittee states that there are no other issues in arrears with this matter.

Board Response: The Board concurs with the Department's analysis and findings regarding the financial ability of the permittee in the subject permit. The Board makes the following findings regarding the assertions related to financial ability issues made by appellant Spencer:

- 1. The permittee's application met the submission requirements of 06-096 CMR 400.4(B)(2). This rule does not require the level of detail from financial institutions that appellant Spencer asserts is needed.
- 2. The Department appropriately evaluated the submission of a letter from the permittee's financial institution confirming the availability of a letter of credit, although the revenues from operation of JRL are expected to fully cover the expenses associated with the continuing construction, operation, maintenance, closure and post-closure care of JRL. The Department, and now the Board, concludes it meets the regulatory standards of 06-096 CMR 400.4(B)(1), which requires an applicant to "...have the financial ability to design, construct, operate, maintain, close and (if applicable) accomplish post-closure care of the solid waste facility in a manner consistent with all applicable requirements".

3.

The status of a Finance Authority of Maine loan guarantee raised by appellant Spencer is not subject to review by the Department, or by this Board.

| STATE OF MAINE, ACTING THROUGH THE | 20 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

9. DISCUSSION AND FINDINGS – APPELLANT PERMITTEE

9.A. Amount of Waste Approved for Disposal: Appellant Permittee objects to the Department's approval of 81,800 tons of MSW instead of the 93,000 tons requested in the application. Appellant Permittee states in its appeal that it based its proposal to accept up to 93,000 tons of MSW at JRL on the annual average of in-state MSW, bypass, and soft layer MSW sent from Maine Energy to JRL during the period 2009-2011, less the 30,000 tons to be sent to PERC under the terms of the Casella/PERC agreement. Appellant Permittee argues that because waste generation fluctuates from year to year due to a variety of factors (e.g. seasonality, tourism and changes in the overall economy), use of the 3-year average for this purpose is appropriate. Appellant Permittee objects to the Department's approval of the disposal of only 81,800 tons, based solely upon 2011 data, and without explanation in the permit of the rationale for making that choice. Finally, appellant Permittee asserts that the effect of limiting JRL to 81,800 tons of MSW per year is exacerbated by special conditions on the license that are likely to further limit the acceptance of MSW.

Appellant Spencer's Objection: Appellant Spencer objects to appellant Permittee repeatedly taking credit for existing practices as if they were newly offered. He also argues that if BGS was fulfilling its responsibility as the owner of JRL, it would have advised Casella accepting "curbside MSW' violates the OSA, and would not have signed the application. Appellant Spencer argues that the 93,000 tons of MSW the appellant Permittee says is needed conflicts with the permittee's claims about the efficacy of its recycling initiatives, many of which are already in existence.

Board Response: The Board finds the Department appropriately limited the quantity of unprocessed MSW allowed for disposal at JRL to an amount consistent with recent quantities disposed.

At the time the application was submitted, total annual waste disposal quantities for Maine Energy and JRL in 2012 were not yet available. However, the Department is not precluded from considering data provided to the Department as part of the applicant's existing license obligations subsequent to application submission. The 2012 annual reports for Maine Energy and JRL indicate that quantities of MSW disposed continued to decline.

The amendment application states that 81,800 tons reflects the combined amount of in-state waste that was previously contracted for disposal at Maine Energy in 2011, minus the 30,000 tons to now be diverted to PERC. Using data reported for

| STATE OF MAINE, ACTING THROUGH THE | 21 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

the facilities for 2012, that same metric in 2012 was 54,121 tons. If the Board were to accept the arguments of appellant Permittee for using a three-year average of disposal amounts, the Department could have used the most recent 3-year average available at the time the license determination was issued (2010 - 2012), and provided a license limit of 77,790 tons. Appellant Permittee has not demonstrated why a greater amount of unprocessed MSW would require disposal at JRL than was handled by Maine Energy and JRL in recent years.

The limitation on the amount of waste approved for disposal at JRL is the result of a quantitative assessment, not the application of the waste hierarchy. In regards to Appellant Permittee's objection to the limitation of 81,800 tons per year, the Board finds that the Department has not applied the waste hierarchy as a regulatory standard to a decision of a technical nature. The Board also finds that Special Conditions #8 and #9 provide additional limits on the amount of MSW disposed at JRL, to further constrain it to the waste streams generated in Maine that were received at Maine Energy.

9.B. <u>Waste Hierarchy:</u> Appellant Permittee objects to the Department's application of the waste hierarchy as a permitting standard and specifically to the use of the waste hierarchy as the basis for several license conditions that impose, as appellant Permittee asserts, unlawful limitations on the approval. Appellant Permittee asserts that the Department has no authority to apply the waste hierarchy to their application as a permitting standard or as a term of their contract.

Appellant Permittee asserts that the plain language of the waste hierarchy demonstrates that it serves as guidance for the State's policymakers, in much the same way that a municipal comprehensive plan guides enactment of local ordinances, and is not a permitting standard to be applied to individual applications for the development and operation of solid waste facilities. Appellant Permittee argues that the use of the words "policy" and "guiding principle" throughout the language of 38 M.R.S.A. § 2101 clearly support this position.

Appellant Permittee further asserts that the Department has no authority to apply the waste hierarchy in the case of this decision and, in fact, has never applied the waste hierarchy as a permitting standard in the past. Appellant Permittee argues that the Board addressed this issue in 2011 in the context of an appeal of JRL's license modification related to a change in the MSW bypass limit (the soft layer license) by stating that: "... the hierarchy is not a regulatory standard that is
| STATE OF MAINE, ACTING THROUGH THE | 22 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

applied to individual waste facility licensing decisions of a technical nature." Appellant Permittee further asserts that there is no specific guidance in statute or rule concerning how an application should be judged within the context of the waste hierarchy, and that applying the waste hierarchy as a permitting standard forces the Department into setting policy on an *ad hoc* basis, resulting in an unconstitutional violation of due process.

Appellant Permittee asserts that the Department has applied the waste hierarchy as a permitting standard through the "back door" while acknowledging in the subject permit that there are "no specific regulatory standards . . . related directly" to the hierarchy and that "strict application of the hierarchy in all solid waste facility licensing decisions would not be appropriate." Appellant Permittee further asserts that the Department, through the subject permit, is attempting to enforce the provision of the OSA that requires that JRL be operated in a manner consistent with the waste hierarchy, thus applying a private contract term as a permitting requirement. Appellant Permittee further argues that the OSA is a private contract between Casella and BGS, to which the Department is not a party. Citing language in the subject permit, appellant Permittee asserts that the Department's stated basis for authority to apply the waste hierarchy in the case of this decision is: (1) that JRL is a state owned facility; and, (2) that the OSA requires Casella to use its best efforts to operate the landfill following the State's waste hierarchy. Appellant Permittee argues that there is nothing in statute or rule authorizing the Department to regulate JRL differently than other landfills either on the basis of its ownership or the terms of its private contracts, and that the Department offers no further explanation in the subject permit concerning its exercise of that authority.

Appellant Permittee specifically objects to the terms of Special Conditions #5, #8, #9 and #10 of the subject permit, and argues that the requirements of these conditions are based upon the Department's erroneous application of the waste hierarchy, either directly as a permitting standard or indirectly as a contractual obligation through the OSA, again raising issues of constitutionality.

Finally, appellant Permittee asserts that even if the waste hierarchy were applicable in this instance, the proposal is consistent with it. In support of this position, appellant Permittee argues that the proposal: substantially reduces the amount of out-of-state MSW imported into Maine, reduces the annual waste tonnage accepted at JRL by about 5%, promotes recycling through Casella's Zero-Sort Recycling® program, and promotes incineration through the terms of the Casella/PERC agreement.

| STATE OF MAINE, ACTING THROUGH THE | 23 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

Appellant Spencer's Objection: Appellant Spencer states that the waste hierarchy is the most significant guiding principle for this application. He asserts that, in 1989 when the State by law banned new commercial landfills, the premise was that the State would control the types of wastes that would be disposed at a State-owned landfill. Appellant Spencer argues that the waste hierarchy set the framework for determining how wastes should be managed and ultimately what should be landfilled. Appellant Spencer argues further that the requirement to abide by the tenants of the waste hierarchy was stated from very beginning, as contained in SPO's 2003 Request for Proposals, the OSA and the 2004 amendment license. Appellant Spencer asserts that Casella's statement that it "...promotes incineration..." is without merit as, except for the 30,000 tons of MSW contracted to be delivered to PERC, the remaining 220, 000 tons of MSW that formerly went to Maine Energy are now being landfilled at other Casella landfills. Finally, appellant Spencer argues that the plain language of LD 1483 (PL 2013 c. 458) makes it very clear that the waste hierarchy is to be considered by the Department in making permitting decisions.

Board Response: The Board finds the Department's consideration of the waste hierarchy is consistent with Maine law, Department rules, the Operating Services Agreement, legislative record and past practice. The license contains effective criteria to minimize the amount of unprocessed MSW disposed at JRL while allowing for some disposal that may still be needed by Maine communities as waste management markets adjust to the closure of Maine Energy.

Appellant Permittee is correct that the purpose of the waste hierarchy set forth in statute since 1989 is to guide future policymakers in drafting statutes and rules to give preference to the solid waste management options pursuant to its terms. The Department has adopted rules incorporating the principles of the hierarchy, as discussed in Section 8.A of this Order, and has applied them in licenses previously issued for JRL and other Maine landfills. The subject permit applies the waste hierarchy as set forth in Chapter 400 of the Department's rules.

JRL does differ from other solid waste disposal facilities in Maine because it is state-owned. As a state-owned landfill, it is appropriate for any license issued by one agency of the state to not create conflicts with terms of the OSA, a contract held by another agency of the state that addresses some aspects of landfill operation also overseen by the Department. The OSA is a contract with BGS that requires Casella to operate the landfill in accordance with the waste hierarchy. The OSA provides little specificity as to how this is expected to be accomplished, and yet appellant Permittee has agreed to those contract terms. The conditions in the subject permit provide specific actions to be taken by the permittee to

| STATE OF MAINE, ACTING THROUGH THE | 24 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

demonstrate how they are undertaking the efforts to support the waste hierarchy discussed in the amendment application. The Board finds that the license reinforces some provisions of the OSA, and that the Department has authority to apply the waste hierarchy to the licensing decision.

Information in the record indicates that disposal of unprocessed MSW at JRL is requested to support recycling efforts at other solid waste facilities in Maine and to provide associated cost-effective disposal. The record also indicates that there are other options for managing the tons of unprocessed MSW approved for disposal at JRL. Special Condition #5 in the subject permit is consistent with the waste hierarchy by requiring Casella to use its best efforts to divert waste to other management options. The amendment application states that the requested license would allow uninterrupted waste disposal services to the State of Maine communities and businesses which currently utilize Maine Energy. However, those communities ceased utilizing Maine Energy for disposal in December 2012, and their MSW was managed without the license amendment throughout 2013. Therefore, the Board finds the limited approval until March 31, 2016 established in Special Condition #10 is an appropriate limitation.

BASED on the above Findings of Fact, the Board makes the following CONCLUSIONS:

- 1. The appellants have standing as aggrieved persons and have made timely appeals of the subject permit.
- 2. The waste hierarchy is applicable to the subject permit.
- 3. The permittee has made adequate provisions for safe and uncongested traffic movement of all types into, out of, and within the solid waste facility.
- 4. Testimony and public comments on the application were properly admitted into the licensing record, opportunity for cross-examination of testimony was provided during the public hearing, and a draft license was issued for comment.
- 5. The Department committed no procedural error by accepting and processing the revised application. The licensing record demonstrates that intervenors and the general public fully participated in the public hearing held on the application after the revised application was submitted, and persons were allowed to provide comments on the application throughout the licensing process.

| STATE OF MAINE, ACTING THROUGH THE | 25 | APPEALS OF SOLID |
|--|----|------------------|
| BUREAU OF GENERAL SERVICES |) | WASTE LICENSE |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) | |
| JUNIPER RIDGE LANDFILL |) | FINDINGS OF FACT |
| LICENSE AMENDMENT |) | AND ORDER |
| #S-020700-WD-BG-Z (Denials of Appeals) |) | ON APPEALS |

- 6. The permittee has demonstrated that its proposal meets the air quality standards of the solid waste rules, that JRL has the infrastructure to handle GHG generated by the MSW disposal approved in the subject permit, that an air emissions license was recently issued to JRL by the Department, and that GHG from JRL are adequately monitored and controlled.
- 7. The permittee has demonstrated financial ability for its proposal.
- 8. The quantity of unprocessed MSW allowed for disposal at JRL by the subject permit was appropriately limited by the Department to an amount consistent with recent quantities disposed.
- 9. All other conclusions remain as set forth in Department Order #S-020700-WD-BC-A.

THEREFORE, the Board DENIES the appeals of Edward S. Spencer and of the Maine Bureau of General Services and NEWSME Landfill Operations, LLC. and AFFIRMS the Department's conditional approval of the amendment application filed by the State of Maine, acting through the Bureau of General Services, to allow disposal at Juniper Ridge Landfill of no more than 81,800 tons per year of municipal solid waste, as described in Department Order #S-020700-WD-BC-A, with the following modifications:

- Condition #9 is modified to read: Any PERC delivery shortfalls of MSW in MRC Charter Municipalities that are backfilled at PERC by Casella in accordance with the terms of the Casella/PERC Agreement shall be backfilled first with in-state MSW from the MSW previously designated for the Maine Energy facility and approved for disposal at JRL under the terms of this license.
- Condition #10 is modified to change the date from March 31, 2016 to March 31, 2018.

DONE AND DATED AT AUGUSTA, MAINE THIS 19 DAY OF JUNC, 2014.

BY:

Robert A. Foley, Chair J

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

| Date of initial receipt of application: | September 15, 2012 |
|--|--------------------|
| Date of application acceptance: | October 3, 2012 |
| Date filed with Board of Environmental Protection: | December 20, 2013 |
| Date of initial receipt of appeal: | January 21, 2014 |
| Date of appeal with Board of Environmental Protection: | June 19, 2014 |
| XMP77719 | |



DEP INFORMATION SHEET Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's Organization and Powers, 38 M.R.S.A. §§ 341-D(4) & 346, the Maine Administrative Procedure Act, 5 M.R.S.A. § 11001, and the DEP's Rules Concerning the Processing of Applications and Other Administrative Matters ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

- 1. Aggrieved Status. The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
- 2. The findings, conclusions or conditions objected to or believed to be in error. Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
- 3. The basis of the objections or challenge. If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
- 4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
- 5. All the matters to be contested. The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
- 6. *Request for hearing*. The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
- 7. New or additional evidence to be offered. The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

- 1. Be familiar with all relevant material in the DEP record. A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
- 2. Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal. DEP staff will provide this information on request and answer questions regarding applicable requirements.
- 3. The filing of an appeal does not operate as a stay to any decision. If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

Appealing a Commissioner's Licensing Decision Merch 2012 Page 3 of 3

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.

APPENDIX 3

#S-020700-WD-BF-C; FEBRUARY 27, 2014 (CONDITION COMPLIANCE)



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 THE BUREAU OF GENERAL SERVICES OLD TOWN, PENOBSCOT COUNTY, MAINE JUNIPER RIDGE LANDFILL #S-020700-WD-BF-C (APPROVAL WITH CONDITIONS) MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

CONDITION COMPLIANCE

Pursuant to the provisions of the *Maine Hazardous Waste, Septage and Solid Waste Management Act,* 38 M.R.S. §§1301 to 1319-Y; and the *Rules Concerning the Processing of Applications and Other Administrative Matters,* 06-096 CMR 2, (last amended May 29, 2013), the *Rules Concerning the Conduct of Licensing Hearings,* 06-096 CMR 3 (last amended March 4, 2013), *Solid Waste Management Rules: General Provisions,* 06-096 CMR 400 (last amended July 20, 2010) and *Landfill Siting, Design and Operation,* and 06-096 CMR 401 (last amended July 20, 2010), the Department of Environmental Protection ("Department") has considered the application of THE STATE OF MAINE, ACTING THROUGH THE BUREAU OF GENERAL SERVICES ("BGS" or "applicant") with its supportive data, staff review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. APPLICATION SUMMARY

- A. <u>Application</u>: The applicant has submitted documentation of compliance with Special Conditions #6 and #7 of Department Order #S-020700-WD-BC-A, dated December 20, 2013, which approved the removal of the restrictions and limitations placed on the disposal of in-state municipal solid waste ("MSW") at the Juniper Ridge Landfill ("JRL") and approved the disposal of up to 81,800 tons per year of in-state MSW in the landfill.
- B. <u>History</u>: Department Order #S-020700-WD-BC-A, dated December 20, 2013, approved the removal of the restrictions and limitations placed on the disposal of in-state MSW at JRL and approved the disposal of up to 81,800 tons per year of in-state MSW in the landfill. As part of the application, the applicant submitted an Interim Disposal Agreement ("Casella/PERC Agreement"), dated October 1, 2012, that was executed between Casella Waste Systems, Inc. ("Casella"), Penobscot Energy Recovery Company, LP ("PERC"), USA Energy Group, LLC, Pine Tree Waste, Inc., ESOCO Orrington, LLC, and New England Waste Services of ME, Inc. Section 3.3.1.e of the Casella/PERC Agreement requires Casella to make commercially reasonable efforts to deliver 32,500 tons of out-of-state ("OOS") MSW, as needed by PERC. This is also referred to as Category 5 MSW in the Casella/PERC agreement and Department Order #S-020700-WD-

| STATE OF MAINE, ACTING THROUGH THE |
|------------------------------------|
| BUREAU OF GENERAL SERVICES |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |
| JUNIPER RIDGE LANDFILL |
| #S-020700-WD-BF-C |
| (APPROVAL WITH CONDITIONS) |

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

CONDITION COMPLIANCE

BC-A. Special Conditions #6 and #7 of the Order require the applicant to submit certain documents related to Category 5 MSW of the Casella/PERC agreement specifically and contractual provisions for the disposal of at least 30,000 tons per year of MSW at one or more Maine disposal facilities that are not landfills in general.

2

)))))

)

C. <u>Summary of Proposal</u>: While Department Order #S-020700-WD-BC-A was effective as of December 20, 2013, the applicant could not accept MSW at JRL under the terms of the license until it demonstrated compliance with Special Conditions #6 and #7 of the Order. On February 13, 2014, the applicant submitted documents to the Department for review and approval as required under Special Conditions #6 and #7 of Department Order #S-020700-WD-BC-A.

2. COMPLIANCE SUBMITTALS FOR SPECIAL CONDITIONS #6 and #7

- A.1. <u>Category 5 MSW</u>: Special Condition #6 of Department Order #S-020700-WD-BC-A reads as follows:
 - "6. Prior to acceptance of MSW at JRL under the terms of this license, Casella shall modify the terms of the Casella/PERC Agreement, to allow the 32,500 tons per year of Category 5 MSW to be a combination of OOS and in-state MSW, unless Casella justifies, to the Department's satisfaction, a rationale for leaving the current Category 5 definition in place."
- A.2. <u>Applicant's response</u>: In response to this condition, the applicant submitted a letter, dated January 8, 2014, from PERC stating that the provisions of Category 5 MSW of the Casella/PERC agreement could not be modified without significantly negatively impacting existing in-state fee structures and the integrity of current delivery agreements with Municipal Review Committee ("MRC") Charter Municipalities, and thus PERC would not agree to modify the agreement. In a second letter, dated January 14, 2014, PERC further added that the Category 5 MSW provisions were developed to ensure that PERC would have access to additional tonnages of MSW <u>if needed</u> (emphasis added) and that Casella cannot deliver additional tonnages of Category 5 MSW unless requested by PERC. The letter stated that the intent of this section is that it will only be used if no in-state MSW is available to meet PERC's fuel needs. The letter again stated that modification of the agreement " would prove very detrimental to the financial viability of PERC.".
- A.3. <u>Department analysis</u>: The intent of Special Condition #6 was to ensure that as much in-state MSW as possible was directed to PERC for incineration,

| STATE OF MAINE, ACTING THROUGH THE | 3 |
|------------------------------------|---|
| BUREAU OF GENERAL SERVICES |) |
| OLD TOWN, PENOBSCOT COUNTY, MAINE |) |
| JUNIPER RIDGE LANDFILL |) |
| #S-020700-WD-BF-C |) |
| (APPROVAL WITH CONDITIONS) |) |

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

CONDITION COMPLIANCE

maximizing PERC's capacity in conjunction with its fluctuating fuel demands, providing additional benefits to generators of in-state MSW and managing MSW at a higher point in the Solid Waste Management Hierarchy. While the Department is supportive of reserving in-state disposal capacity for in-state generators, the Department acknowledges that PERC is not a party to Department Order #S-020700-WD-BC-A and that the Department has no ability to impose on PERC a change in the contract between Casella and PERC. Further, PERC's letters adequately explain that there is a business reason for not changing the contract, as requested under the provisions of Special Condition #6.

Therefore, the Department finds that the applicant has justified, to the Department's satisfaction, a rationale for leaving the current Category 5 definition in place.

The Department finds that the supporting documents submitted by the applicant do satisfactorily address the requirements of Special Condition #6 of Department Order #S-020700-WD-BC-A.

- Contractual provisions for 30,000 tons of Maine Energy MSW: Special B.1. Condition #7 of Department Order #S-020700-WD-BC-A reads as follows:
 - "7. Prior to the acceptance of MSW under the terms of this license, the applicant shall provide documentation to the Department that contractual provisions are in effect for the disposal of at least 30,000 tons per year of former Maine Energy MSW at one or more Maine disposal facilities that are not landfill(s). MSW (other than bypass from a Maine incinerator) may not be accepted at JRL under the terms of this license unless and until such contractual provisions are in effect."
- Applicant's response: In response to this condition, the applicant submitted the B.2. following:

Included with the submittal was an Interim Disposal Agreement ("Agreement"), effective January 1, 2014, entered into by and among PERC, Pine Tree Waste. Inc., and Casella. As stated in Section 1 of the Agreement, the term of the Agreement commences on January 1, 2014 and terminates on the first to occur: March 31, 2016, the receipt by Casella of a permit in the proceeding initiated pursuant to the application (S-020700-WD-BC-A) in a final, non-appealable form, or the termination of the Agreement by the non-breaching party if the other party has breached any material provision of the Agreement.

STATE OF MAINE, ACTING THROUGH THE BUREAU OF GENERAL SERVICES OLD TOWN, PENOBSCOT COUNTY, MAINE JUNIPER RIDGE LANDFILL #S-020700-WD-BF-C (APPROVAL WITH CONDITIONS) MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

CONDITION COMPLIANCE

B.3. Department analysis: The Department's analysis of the Agreement shows that the Agreement provides for the delivery of 30,000 tons per year of MSW previously disposed at Maine Energy from Casella to PERC until Casella receives a final, non-appealable permit allowing Casella to dispose of MSW at the Juniper Ridge Landfill. Upon termination of the Agreement, the Casella/PERC Agreement provides for delivery of 30,000 tons per year of MSW from Casella to PERC. The Department finds that the Agreement and the Casella/PERC Agreement maintain the requirement that the applicant will deliver at least 30,000 tons per year of former Maine Energy MSW at one or more Maine solid waste facilities that are not landfills, in this case PERC. The Department further finds that in the event the Agreement is terminated under any of the three provisions stated in the Agreement, the applicant will still be bound by the language of Special Condition #7 and will need to provide documentation of a contractual agreement that meets the provisions of the Condition.

4

)

)

)

)

)

The Department finds that the Interim Disposal Agreement, effective January 1, 2014, submitted by the applicant does satisfactorily address the requirements of Special Condition #7 of Department Order #S-020700-WD-BC-A.

3. ALL OTHER

All other Findings of Fact, Conclusions, and Conditions remain as approved in Department Order #S-020700-WD-BC-A, and subsequent modifications.

BASED on the above Finding of Facts, the Department makes the following CONCLUSIONS:

- 1. The disposal of up to 81,800 tons per year of in-state MSW in accordance with the supporting documents submitted by the applicant in conformance with Special Conditions #6 and #7 will not pollute any waters of the State, contaminate the ambient air, constitute a hazard to health or welfare, or create a nuisance.
- 2. The applicant has complied with Special Conditions #6 and #7 of Department Order #S-020700-WD-BC-A.

STATE OF MAINE, ACTING THROUGH THE BUREAU OF GENERAL SERVICES OLD TOWN, PENOBSCOT COUNTY, MAINE JUNIPER RIDGE LANDFILL #S-020700-WD-BF-C (APPROVAL WITH CONDITIONS)

MAINE HAZARDOUS WASTE, SEPTAGE AND SOLID WASTE MANAGEMENT ACT

CONDITION COMPLIANCE

THEREFORE, the Department APPROVES the noted application of the STATE OF MAINE, ACTING THROUGH THE BUREAU OF GENERAL SERVICES, SUBJECT TO THE ATTACHED CONDITIONS and all applicable standards and regulations:

5

)

)

)

)

)

1. The Standard Conditions of Approval, a copy attached as Appendix A.

- 2. The invalidity or unenforceability of any provision, or part thereof, of this license shall not affect the remainder of the provision or any other provisions. This license shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
- 3. All other Findings of Fact, Conclusions and Conditions not otherwise addressed herein remain as approved in Department license #S-20700-WD-BC-A, and subsequent modifications, and are incorporated herein.

Done and dated at Augusta, maine, this $_27^{+h}$ DAY

OF February, 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: <u>Melanuz for</u> Patricia W. Aho, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

Date of initial receipt of application: February 13, 2014 Date of application acceptance: February 20, 2014

Date filed with Board of Environmental Protection:

XMP77379/dlp

Filed

FEB 2 7 2014

State of Maine Board of Environmental Protection

APPENDIX 4

JRL SUMMARY OF MSW DIVERSION EFFORTS

Narrative for JRL 2014 Annual Report Compliance with Condition 5 of #S-020700-WD-BC-A

Best efforts by Casella to divert MSW from landfilling at JRL to the greatest extent practicable:

5.A: A list and description of all diversion options and/or pursued by Casella, including currently operating Maine waste-to-energy facilities as options.

Diversion of MSW through Recycling:

- a. Casella Zero-Sort program in Maine delivering MSW recyclables collected in Maine to the Casella processing facilities in Lewiston, ME and Charlestown, MA.
- b. Casella cardboard recycling program. Source separated cardboard collected, baled, and marketed to end use recyclers.
- c. Construction and commencement of operations of the Casella Zero-Sort processing facility in Lewiston, Maine. The company has made a significant investment in recycling processing in locating this facility in Maine with significant capacity to allow hauling companies the ability to grow their recycling offerings to divert MSW from residential, commercial and industrial sources in Maine to recycling instead of disposal at incinerators or landfills.
- d. Outreach to municipalities and businesses to participate in Casella's Zero-Sort recycling program.

Diversion of MSW to Maine Incinerators

a. <u>PERC</u>: In compliance with Condition 7 of the JRL MSW license amendment, Casella and the Penobscot Energy Recovery Company Limited Partnership entered into a January 1, 2014 Interim Disposal Agreement for Casella to deliver 30,000 tons per year of Maine MSW to the PERC incinerator in Orrington. Upon final and unappealable approval of the JRL MSW amendment, the October 1, 2012 Casella/PERC Disposal Agreement pertaining to this obligation replaced the Interim Disposal Agreement. In addition, in calendar 2014 Casella complied with the other provisions in the Casella/PERC Disposal Agreement pertaining to delivery of Maine MSW to PERC (Categories 1 and 2 MSW and all Charter Municipality MSW collected by Casella). Finally, in calendar 2014 Casella backfilled by delivery of Maine MSW recyclables collected through Casella's Zero-Sort program in PERC Charter Municipalities.

- b. <u>ecomaine</u>: In November 2014, Casella entered into a contract with ecomaine to dispose of processing residue from Casella's Zero-Sort recycling facility located in Lewiston, Maine. In addition, Casella's Pine Tree Waste hauling companies collect and deliver Maine MSW to the ecomaine incinerator and single stream recycling facility.
- c. <u>MMWAC</u>: In December 2014, Casella's Pine Tree Waste hauling division reached a verbal agreement with MMWAC to deliver spot market MSW during winter months upon request from the incinerator.

Diversion by Disposal at Other Maine Landfills Casella's Pine Tree Waste hauling companies (Bethel, Hermon, Houlton, Mechanic Falls, Old Orchard Beach, Scarborough, Waterville, and West Bath) collect and dispose of Maine MSW and deliver to Maine landfills other than Juniper Ridge: Bath, Brunswick, Fort Fairfield (Tri-Community), and Norridgewock.

5.B: A narrative detailing the specific efforts made by Casella to implement diversion options:

See narrative above.

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.

Maine MSW Recyclables Delivered to Casella Zero-Sort in Lewiston, ME and Charlestown, MA:

- a. Number of Maine municipalities participating in Casella Zero-Sort program in calendar 2014: 52
- Number of Maine businesses participating in Casella Zero-Sort program in calendar 2014: approx. 3200
- c. Tons of Maine MSW recyclables processed in Casella Zero-Sort program in calendar 2014: 25,026

New municipality contracts with Casella Zero-Sort recycling executed in calendar 2014: Bangor, Castine, Clinton, Hampden, Dayton, Livermore, Vassalboro.

<u>Casella cardboard recycling</u>: Fiber brokered and baled directly from Maine municipalities or Maine businesses in calendar 2014:

- Brokered: 37,385 tons
- Baled: 12,840 tons

Maine MSW Delivered to Maine Incinerators in 2014 (tons):

- a. <u>Total MSW Delivered to PERC</u>: 89,902
- b. <u>ecomaine</u>:
 - i. Casella Lewiston Zero-Sort processing residue: 97
 - ii. Pine Tree Waste deliveries to ecomaine incinerator and recycling facility: 42,506
- c. <u>MMWAC</u>: Spot market Maine MSW in calendar 2014: 147
- d. Maine MSW Delivered to Maine Landfills Other than Juniper Ridge in 2014:
 - a. Norridgewock Landfill: 2,495
 - b. Bath Landfill: 7,249
 - c. Brunswick Landfill: 388
 - d. Fort Fairfield Landfill: 10,144

Total Maine MSW diverted from disposal at JRL in 2014 through efforts described above:

228,179 tons

Total Maine MSW disposed at JRL in 2014:

38,516 tons¹

¹ Includes 1,638 tons of MSW Bypass from PERC in 2014.

JRL 2015 Annual Report

Compliance with Condition 5 of #S-020700-WD-BC-A

(Casella MSW Landfilling Diversion)

Best efforts by Casella to divert MSW from landfilling at JRL to the greatest extent practicable:

5.A: A list and description of all diversion options and/or pursued by Casella, including currently operating Maine waste-to-energy facilities as options.

Diversion of MSW through Recycling

- 1. Casella Zero-Sort program in Maine delivering MSW recyclables collected in Maine to the Casella processing facilities in Lewiston, ME.
- 2. Casella cardboard recycling program. Source separated cardboard collected, baled, and marketed to end use recyclers.
- 3. Operation of the Casella Zero-Sort processing facility in Lewiston, Maine. The company has made a significant investment in recycling processing in locating this facility in Maine with significant capacity to allow hauling companies the ability to grow their recycling offerings to divert MSW from residential, commercial and industrial sources in Maine to recycling instead of disposal at incinerators or landfills.
- 4. Outreach to municipalities and businesses to participate in Casella's Zero-Sort recycling program.

Diversion of MSW to Maine Incinerators

ecomaine:

In November 2014, Casella entered into a contract with ecomaine to dispose of processing residue from Casella's Zero-Sort recycling facility located in Lewiston, Maine. In addition, Casella's Pine Tree Waste hauling companies collect and deliver Maine MSW to the ecomaine incinerator and single stream recycling facility.

MMWAC:

In December 2014, Casella's Pine Tree Waste hauling division reached a verbal agreement with MMWAC to deliver spot market MSW during winter months upon request from the incinerator.

PERC:

In compliance with Condition 7 of the JRL MSW license amendment, Casella and the Penobscot Energy Recovery Company Limited Partnership entered into a January 1, 2014

Interim Disposal Agreement for Casella to deliver 30,000 tons per year of Maine MSW to the PERC incinerator in Orrington. Upon final and unappealable approval of the JRL MSW amendment, the October 1, 2012 Casella/PERC Disposal Agreement pertaining to this obligation replaced the Interim Disposal Agreement. In addition, in calendar 2015 Casella complied with the other provisions in the Casella/PERC Disposal Agreement pertaining to delivery of Maine MSW to PERC (Categories 1 and 2 MSW and all Charter Municipality MSW collected by Casella). Finally, in calendar 2015 Casella backfilled by delivery of Maine MSW recyclables collected through Casella's Zero-Sort program in PERC Charter Municipalities.

Diversion by Disposal at Other Maine Landfills

Casella's Pine Tree Waste hauling companies (Bethel, Hermon, Houlton, Mechanic Falls, Old Orchard Beach, Scarborough, Waterville, and West Bath) collect and dispose of Maine MSW and deliver to Maine landfills other than Juniper Ridge: Bath, Brunswick, Fort Fairfield (Tri-Community), and Norridgewock.

5.B: A narrative detailing the specific efforts made by Casella to implement diversion options:

See narrative description in 5.A above.

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.

Maine MSW Recyclables Delivered to Casella Zero-Sort in Lewiston, ME

- Number of Maine municipalities participating in Casella Zero-Sort program in calendar 2015: 62 (compared with 52 in 2014)
- Number of Maine businesses participating in Casella Zero-Sort program in calendar 2015: approx. 3,482 (compared with 3,200 in 2014)
- Tons of Maine MSW recyclables processed in Casella Zero-Sort program in calendar 2015: 28,688 tons (compared with 25,026 tons in 2014)

Casella cardboard recycling

Fiber brokered and baled directly from Maine municipalities or Maine businesses in calendar 2015:

- Brokered: 53,244 tons (compared with 37,385 tons in 2014)
- Baled: 29,071 (compared with 12,840 tons in 2014)

Maine MSW Delivered to Maine Incinerators in 2015

ecomaine:

- Casella Lewiston Zero-Sort processing residue: 329 tons (compared with 97 tons in 2014)
- Single-stream recyclables: 11,430 tons
- MSW: 41,130 tons (compared with 42,506 tons in 2014)

MMWAC:

- Casella Lewiston Zero-Sort processing residue: 1,742 tons (compared with 0 tons in 2014)
- MSW: 32,212 tons (compared with 11,430 tons in 2014)

PERC:

• MSW: 89,054 tons (compared with 89,902 tons in 2014)

Maine MSW Delivered to Maine Landfills Other than Juniper Ridge in 2015

- Bath Landfill: 6,097 tons (compared with 7,249 tons in 2014)
- Brunswick Landfill: 528 tons (compared with 388 tons in 2014)
- Fort Fairfield Landfill: 10,500 tons (compared with 10,144 tons in 2014)
- Norridgewock Landfill: 2,720 tons (compared with 2,495 tons in 2014)

Total Maine MSW diverted from disposal at JRL in 2015 through efforts described above

• 306,745 tons (compared with 228,179 tons in 2014)

Total Maine MSW disposed at JRL in 2015 (Including Bypass MSW)

• 62,662 tons¹ (compared with 38,516 tons² in 2014)

¹ Includes 5,141 tons of MSW Bypass from PERC in 2015.

² Includes 1,638 tons of MSW Bypass from PERC in 2014.

JRL 2016 Annual Report

Compliance with Condition 5 of #S-020700-WD-BC-A

(Casella MSW Landfilling Diversion)

Best efforts by Casella to divert MSW from landfilling at JRL to the greatest extent practicable:

5.A: A list and description of all diversion options and/or pursued by Casella, including currently operating Maine waste-to-energy facilities as options.

Diversion of MSW through Recycling

- 1. Casella Zero-Sort program in Maine delivering MSW recyclables collected in Maine to the Casella processing facility in Lewiston, ME.
- 2. Casella cardboard recycling program. Source separated cardboard collected, baled, and marketed to end use recyclers.
- 3. Operation of the Casella Zero-Sort processing facility in Lewiston, Maine. The company has made a significant investment in recycling processing in locating this facility in Maine with significant capacity to allow hauling companies the ability to grow their recycling offerings to divert MSW from residential, commercial and industrial sources in Maine to recycling instead of disposal at incinerators or landfills.
- 4. Outreach to municipalities and businesses to participate in Casella's Zero-Sort recycling program.

Diversion of MSW to Maine Incinerators

ecomaine:

Casella's Pine Tree Waste hauling companies collect and deliver Maine MSW to the ecomaine incinerator and single stream recycling facility.

MMWAC:

Casella's Pine Tree Waste hauling companies deliver spot market MSW during winter months upon request from the MMWAC incinerator, in addition to the incinerator being the primary disposal option for Lewiston MRF recycling residuals in 2016

PERC:

In compliance with Condition 7 of the JRL MSW license amendment, Casella and the Penobscot Energy Recovery Company Limited Partnership entered into a January 1, 2014 Interim Disposal Agreement for Casella to deliver 30,000 tons per year of Maine MSW to the PERC incinerator in Orrington. Upon final and un-appealable approval of the JRL MSW amendment, the October 1, 2012 Casella/PERC Disposal Agreement pertaining to this obligation replaced the Interim Disposal Agreement. In addition, in calendar 2016 Casella complied with the other provisions in the Casella/PERC Disposal Agreement pertaining to delivery of Maine MSW to PERC (Categories 1 and 2 MSW and all Charter Municipality MSW collected by Casella). Finally, in calendar 2016 Casella backfilled by delivery of Maine MSW recyclables collected through Casella's Zero-Sort program in PERC Charter Municipalities.

Diversion by Disposal at Other Maine Landfills

Casella's Pine Tree Waste hauling companies (Bethel, Hermon, Houlton, Mechanic Falls, Old Orchard Beach, Scarborough, Waterville, and West Bath) collect and dispose of Maine MSW and deliver to Maine landfills other than Juniper Ridge: Bath, Brunswick, Fort Fairfield (Tri-Community), and Norridgewock.

5.B: A narrative detailing the specific efforts made by Casella to implement diversion options:

See narrative description in 5.A above.

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.

Maine MSW Recyclables Delivered to Casella Zero-Sort in Lewiston, ME

- Number of Maine municipalities participating in Casella Zero-Sort program in calendar 2016: 64
- Number of Maine businesses participating in Casella Zero-Sort program in calendar 2016: approx. 3,381
- Tons of Maine MSW recyclables processed in Casella's Zero-Sort program in calendar 2016: 35,851 tons

Casella cardboard recycling

Fiber brokered and baled directly from Maine municipalities or Maine businesses in calendar 2016:

- Brokered: 55,903 tons
- Baled: 27,288 tons

Maine MSW Delivered to Maine Incinerators in 2016

ecomaine:

- Single-stream recyclables: 11,934 tons
- MSW: 45,837 tons

MMWAC:

- Casella Lewiston Zero-Sort processing residue: 2,777 tons
- MSW: 35,384 tons

PERC:

• MSW: 79,443 tons

Maine MSW Delivered to Maine Landfills Other than Juniper Ridge in 2016

- Bath Landfill: 5,740 tons
- Brunswick Landfill: 3,474 tons
- Fort Fairfield Landfill: 11,204 tons
- Norridgewock Landfill: 2,549 tons

Total Maine MSW diverted from disposal at JRL in 2016 through efforts described above

• 320,765 tons

Total Maine MSW disposed at JRL in 2016 (Including Bypass MSW)

• 79,427 tons

| MSW DIVERSIO | N FROM JUNIPER RIDGE LANDFILL | 2014 | 2015 | 2016 |
|-------------------|--|----------|---------|---------|
| Maine MSW Red | cyclables Delivered to Casella Zero-Sort in Lewiston, ME and Boston, MA: | | | |
| | municipalities participating in Casella Zero-Sort program: | 52 | 62 | 64 |
| | businesses participating in Casella Zero-Sort program: | 3,200 | 3.482 | 3,381 |
| | SW recyclables processed in Casella Zero-Sort program | 25,026 | 28,688 | 35,851 |
| Cardboard recy | cling: Fiber from Maine municipalities, businesses, or transfer stations (tons |): | | |
| Brokered: | | , 37,385 | 53,244 | 55,903 |
| Collected / Baled | : | 12,840 | 29,071 | 27,288 |
| Maine MSW del | ivered by Casella to Maine incinerators (tons): | | | |
| a. ecomaine: | | | | |
| i. I | Lewiston Zero-Sort processing residue: | 97 | 329 | |
| ii. S | Single-stream recyclables: | 40.500 | 11,430 | 11,934 |
| iii. N | MSW: | 42,506 | 41,130 | 45,837 |
| b. MMWAC: | | | | |
| i. l | Lewiston Zero-Sort processing residue: | - | 1,742 | 2,777 |
| ii. M | MSW: | 147 | 32,212 | 35,384 |
| c. PERC: | | 89,902 | 89,054 | 79,443 |
| Maine MSW del | ivered by Casella to Maine landfills other than Juniper Ridge (tons): | | | |
| a. Bath Landfill | | 388 | 6,097 | 5,740 |
| b. Brunswick L | andfill: | 10,144 | 528 | 3,474 |
| c. Fort Fairfield | I Landfill: | 7,249 | 10,500 | 11,204 |
| d. Norridgewoo | sk Landfill: | 2,495 | 2,720 | 2,549 |
| Total Maine MS | W diverted from disposal at JRL through efforts described above (tons): | 228,179 | 306,745 | 320,765 |
| Total Maine MS | W disposed of at JRL (tons): | 38,516 | 62.662 | 79,427 |

APPENDIX 5

MANAGEMENT OF MAINE MUNICIPAL SOLID WASTE

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

⁽¹⁾ 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⁾ Data projected to be same as last full dataset (2015) for comparison

⁽³⁾ Permitted capacity at Maine operating incinerators through 2015, stated future capacity at Maine incinerators & Fiberight in 2018

APPENDIX 6

PUBLIC NOTICE, LIST OF JRL ABUTTERS AND OLD TOWN LANDFILL ADVISORY COMMITTEE MEMBERS

| | Map No. | Lot No. | First Name | Last Name | Title | Company | Address1 | Address2 | City | State | Zip |
|---------------------------------------|---------|-----------------------|---------------------------|---------------------|-------|-----------------------------------|---|----------|----------------------|----------|--------|
| Town of Alton | | | | | | Town of Alton | 3352 Bennoch Road | | Alton | ME | 04468 |
| City of Old Town | | | | | | City of Old Town | 265 Main Street | | Old Town | ME | 04468 |
| P.I.N. | | | | | | Penobscot Indian Nation | 12 Wabanaki Way | | Indian Island | ME | 04468 |
| Mr. Edward Spencer | | | | | | | P.O. Box 12 | | | | 04489 |
| init cuntifu openeer | + - + | | | | | | P.O. BOX 12 | | Stillwater | ME | 04489 |
| Londfill Advisory | | | | | | | | | | | 1 |
| Landfill Advisory | | | | | | Landfill Advisory | | | | | 1 |
| Committee | | al an an | Bill | Thompson | | Committee | 12 Wabanaki Way | | Indian Island | ME | 04468 |
| | | | Dana | Snowman | | | 120 Old Stagecoach Road | | Alton | ME | 04468 |
| | | | Laura | Sanborn | Chair | | 2845 Bennoch Road | | Alton | ME | 04468 |
| | | | Clyde | Grant | | | 181 Oak Street | | Old Town | ME | 04468 |
| | | | Ralph | Leonard | | | 96 Sargent Drive | | Old Town | ME | 04468 |
| | | | Ted | Shina | | | | | | | |
| | ++ | | | | | | 769 West Old Town Road | | Old Town | ME | 04468 |
| | | | Chuck | Leithiser | | | 394 Fourth Street | | Old Town | ME | 04468 |
| · · · · · · · · · · · · · · · · · · · | + | | Peter | Dufour | | | 230 West Old Town Road | | Old Town | ME | 04468 |
| Old Town | | | Laurent J. and Barbara L. | | | | | | _ | | |
| | 2 | 40 &41 44 | Robert W. and Wendy | Beauregard Hall | | | 273 Washington Street | | Brewer | ME | 04412 |
| | 2 | 44 46 | Thomas Dunn and | Karen Bertolino | ····· | | 631 West Old Town Road 579 West Old Town Road | | Old Town Old Town | ME | 04468 |
| 2012 | 2 | 48 47 | Lawrence | Steeves Heirs | | | 216 Sycamore Street | | Holbrook | ME | 04468 |
| | 2 | 52 | Raymond A. | Perkins | | | 55 Old Brooklyn Tumpike | | Windham | CT | 02343 |
| <u> </u> | 2 | 53 | Cassandra | Goodspeed | | | 519 West Old Town Rd | | Old Town | ME | 04468 |
| | | | | | | University of Maine | | | 0.0.10 | | 01.00 |
| | 3 | 1A | | | | System | 65 Texas Ave | | Bangor | ME | 04401 |
| | 3 | 6B | Scott E. | Bergquist | | | 474 South 2550 West | | Springville | UT | 84663 |
| | 3 | 7A | Angela D. | Cyr | | | 449 West Old Town Road | | Old Town | ME | 04468 |
| | 3 | 15 | | | | NEWSME Landfill Operations LLC | 2828 Bennoch Road | | Old Town | ME | 04468 |
| | 3 | 41C | Herbert A. | Robertson, Jr. | | Operations LLC | 163 Clewleyville Road | | Eddington | ME | 04428 |
| | 3 | 53,45B,50A,54B,58B,1B | | | | SSR, LLC | PO Box 435 | | Stillwater | ME | 04489 |
| | 2 | 55 | Robyn | Emmons | | | 488 West Old Town Road | | Old Town | ME | 04468 |
| | | | | | | New England Waste | 358 Emerson Mill Road | | | ME | |
| | 2 | 51 | | | | Services of Maine | | | Hampden | ME | 04444 |
| | 2 | 54 | Gregg P. and Evlynn | Wallace | | | 526 West Old Town Road | | Old Town | ME | 04468 |
| Alton | 8 | 102,122,122-1 | | | | NEWSME Landfill | 1235 North Loop West, | | Houston | тх | 77008 |
| Alton | 8 | 102,122,122-1 | Tasanee | Lolonga | | Operations LLC | Suite 205 157 Massapoag Ave | | N. Easton | MA | 02356 |
| | 8 | 104 | Karl | Held | | | 2351 Cochran Road | | Dallas | GA | 30132 |
| | 8 | 107 | Harry & Tammy | Feero | | | 1118 Southgate Rd. | | Argyle | ME | 04468 |
| | 8 | 108,109,111,112 | Win & Nancy | Chaiyabhat | | | PO Box 34 | | Searsport | ME | 04974 |
| | 8 | 113 | Jesse | Pekkala | | | PO Box 471 | | Telluride | CO | 81435 |
| | 8 | 114 | Charles | Tringale III | | | 250 Old Stagecoach Rd. | | Alton | ME | 04468 |
| | 8 | 116 | Anthony | Madden | | | PO Box 499 | | Milford | ME | 04461 |
| | 8 | 117 | Challis | Randall | | | 220 Old Stagecoach Rd. | | Alton | ME | 04468 |
| | 8 | 117.1 | | | | Town of Alton | 3352 Bennoch Road | | Alton | ME | 04468 |
| | 8 | 118 119 | Kenneth | Gray | | | PO Box 357 | | Old Town | ME | 04468 |
| | 8 | 119 | Kathryn Ruth | Pelletier Dalton | | | 198 Old Stage Coach Rd. 206 Old Stagecoach Rd. | | Alton | ME | 04468 |
| · · · · · · · · · · · · · · · · · · · | 8 | 119.1 | Anthony & Cynthia | Brown | | | 11 Chamberlain Road | | Alton Seymour | ME CT | 04468 |
| | 8 | 121.1 | Mary St. Louis/Cynthia a | | | | PO Box 394 | | Stillwater | ME | 04489 |
| | 8 | 123 | Jennifer & Richard | Paradise | | | 51 Mill Street | | Kennebunk | ME | 0 4043 |
| | 8 | 124 | Margo | Diaz | | | 156 Old Stagecoach Rd. | | Alton | ME | 04468 |
| | 8 | 119.2 | Shana | McLaughlin | | | 18 Howard Siding Lane | | Abbott | ME | 04406 |

PUBLIC NOTICE OF INTENT TO FILE

Please take notice that the State of Maine, acting through the Department of Administrative and Financial Services, Bureau of General Services, Station #77, Augusta, Maine 04333-0077 (tel. 207-624-7436), as owner, and NEWSME Landfill Operations, LLC ("NEWSME"), 358 Emerson Mill Road, Hampden, Maine 04444 (tel. 207 862-4200), as operator, are intending to file a license amendment application with the Maine Department of Environmental Protection (DEP) on or about November 27, 2017, pursuant to the provisions of 38 M.R.S. §§ 1301 et seq., Chapter 400 of Maine's Solid Waste Management Regulations, and the DEP's Chapter 2 Rules Concerning the Processing of Applications.

The application is for an Amendment of License Amendment #S-020700-WD-BC-A of the Juniper Ridge Landfill to remove the date of March 31, 2018 from Condition 10 of that License. The Juniper Ridge Landfill is owned by the State of Maine and operated by NEWSME. The facility mailing address is 2828 Bennoch Road, Old Town, Maine 04468.

According to Department regulations, interested parties must be publicly notified, written comments invited, and if justified, an opportunity for public hearing given. A request for a public hearing or for the Board of Environmental Protection to assume jurisdiction over this application, must be received by the Department, in writing, no later than 20 days after the application is accepted by the Department as complete for processing.

The application and supporting documentation are available for review at the Bureau of Remediation and Waste Management (BRWM) at the DEP's Augusta office, during normal working hours. A copy of the application and supporting documentation will also be sent to, and may be seen at, the municipal offices in Old Town and Alton, Maine and at the Penobscot Indian Nation, Penobscot Indian Island Reservation, Maine.

Send all correspondence pertaining to this amendment application by email to Kathy Tarbuck at (kathy.tarbuck@maine.gov) or by regular mail to: Maine Department of Environmental Protection, Bureau of Remediation and Waste Management, 17 State House Station, Augusta, Maine 04333-0017 (207 287-2651 or 1-800-452-1942).









U.S. Postal Service[™] **CERTIFIED MAIL® RECEIPT** Domestic Mail Only -S For delivery information, visit our website at www.usps.com®. n OLD TOWN, ME 04468 JSA P Certified Mail Fee 0021 S \$3.35 04 m ppiopria Extra Services & Fees (check b T \$0.00 Return Receipt (hardcopy) Return Receipt (electronic) \$0.00 mark 011 Here Certified Mail Restricted Delivery 40.00 NU\$0.00 Adult Signature Required Adult Signature Restricted Delivery ostage \$0.49 L 11/17/2017 **Total Postage and Fees** 2 \$6.59 Sent To _0 City of Old Town A Street and A 265 Main Street Old Town, ME 04468 City, State, See Reverse for Instruction PS Form 3800, April 2015 PSN 7530-02-000-9047



L) 2 _0 F













П r-Ы F S P _ 1



CERTIFIED MAIL® RECEIPT Domestic Mail Only For delivery information, visit our website at www.usps.com®. 22 OLD TOWNS ME 04468 5 Certified Mail Fee sdsn 0021 \$3.35 T appropriate 04 xtra Services & Fees (check \$0.00 Return Receipt (hardcopy) \$0.00 Postmark Return Receipt (electronic) Certified Mail Restricted Delivery Here \$0.00 Adult Signature Required \$0.00)UI 0 Adult Signature Restricted Delivery \$_ ostage 50 \$0.49 11/12/2017 Total Postage and Fees 2 \$6.59 076 ent To OM SENTER

Margo Diaz

156 Old Stagecoach Rd. Alton, ME 04468

See Reverse for Instru

PS Form 3800, April 2015 PSN 7530-02-000-9047

U.S. Postal Service[™]

Street and Apt.

City, State, ZIP

n





U.S. Postal Service[™] **CERTIFIED MAIL® RECEIPT** Domestic Mail Only For delivery information, visit our web ww.usps.com® SEYMOUR CT 06483 Certified Mail Fee 20 \$3.35 0021 Extra Services & Fees (check box, Ü4 Return Receipt (hardcopy) \$0.00 Return Receipt (electronic) \$0.00 Postmar Certified Mail Restricted Deliv \$0.00 Here Adult Signature Required \$0,00 Adult Signature Restricted Deli ostade \$0.49 Total Postage and Fees 11/17/2017 \$6.59 h Sent To TFP Anthony & Cynthia Brown 11 Chamberlain Road Street a Seymour, CT 06483 City, St. PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



J 200 P in T S 5 _ JUL I



\$0,00

\$0.00

Gregg P, and Evlynn Wallace

526 West Old Town Road Old Town, ME 04468

\$

€0.00

3

Postmark

201

20 Here

47









Return Receipt (electronic)

Adult Signature Required

Total Postage and Fees

Street and Apt. No

City, State, ZIP+4

Postage

Sent To

Certified Mail Restricted Deliv

Adult Signature Restricted Deliv

\$0.49

\$6.59

PS Form 3800, April 2015 PSN 7530-02-000

















PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions




















D2 Tuesday, November 21, 2017 Bangor Daily News

Legal Notices PUBLIC NOTICE OF INTENT TO FILE

Please take notice that the State of Maine, acting through the Department of Administrative and Financial Services, Bureau of General Services, Station #77, Augusta, Maine 04333-0077 (tel. 207-624-7436), as owner, and NEWSME Landfill Operations, LLC ("NEWSME"), 358 Emerson Mill Road, Hampden, Maine 04444 (tel. 207 862-4200), as operator, are intending to file a license amendment application with the Maine Department of Environmental Protection (DEP) on or about November 27, 2017, pursuant to the provisions of 38 M.R.S. §§ 1301 et seq., Chapter 400 of Maine's Solid Waste Management Regulations, and the DE-P's Chapter 2 Rules Concerning the Processing of Applications.

The application is for an Amendment of License Amendment #S-020700-WD-BC-A of the Juniper Ridge Landfill to remove the date of March 31, 2018 from Condition 10 of that License. The Juniper Ridge Landfill is owned by the State of. Maine and operated by NEWSME. The facility mailing address is 2828 Bennoch Road, Old Town, Maine 04468.

According to Department regulations, interested parties must be publicly notified, written comments invited, and if justified, an opportunity for public hearing given. A request for a public hearing or for the Board of Environmental Protection to assume jurisdiction over this application, must be received by the Department, in writing, no later than 20 days after the application is accepted by the Department as complete for processing.

The application and supporting documentation are available for review at the Bureau of Remediation and Waste Management (BRWM) at the DEP's Augusta office, during normal working hours. A copy of the application and supporting documentation will also be sent to, and may be seen at, the municipal offices in Old Town and Alton, Maine and at the Penobscot Indian Nation, Penobscot Indian Island Reservation, Maine.

Send all correspondence pertaining to this amendment application by email to Kathy Tarbuck at (kathy.tarbuck@maine.gov) or by regular mail to: Maine Department of Environmental Protection, Bureau of Remediation and Waste Management, 17 State House Station, Augusta, Maine 04333-0017 (207 287-2651 or 1 -800-452-1942).

Nov. 21, 2017



After printing this label:

Use the 'Print' button on this page to print your label to your laser or inkjet printer. Fold the printed page along the horizontal line.

NO

Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number

delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other documented loss. delay, nonfedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide



After printing this label:

Use the 'Print' button on this page to print your label to your laser or inkjet printer. Fold the printed page along the horizontal line.

NO

Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct. items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide



After printing this label:

NÖ

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number. Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic incidental consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss Maximum for items of extraordinary value is \$1,000, e.g. jeweiry, precious metals, negotiable instruments and other value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide

APPENDIX 7

FINANCIAL ABILITY / ASSURANCE



September 8, 2017

Maine Department of Environmental Protection Bureau of Remediation and Waste Management 17 State House Station Augusta, ME 04333

RE: NEWSME Landfill Operations, LLC / Casella Waste Systems, Inc. Financial Capability

We understand that you require a bank reference for Casella Waste Systems, Inc. (the "Company") and its wholly-owned subsidiary, NEWSME Landfill Operations, LLC.

Bank of America, N.A. has had the pleasure of doing business with Casella Waste and its subsidiaries since 1995. We are the Administrative Agent for and a participant in, the Company's five-year \$160 million Revolving Credit Facility, of which approximately \$85 million is available, as of this date, to be utilized for direct borrowings and issuance of standby letters of credit subject to certain conditions. The facility has been handled as agreed. The Company is in compliance with all covenants.

The Company has adequate financial resources and all of their accounts are in good standing. Should you have additional questions about our relationship with the Company, please do not hesitate to contact me by phone at: 312-992-3882 or by email at: <u>michael.contreras@baml.com</u>.

Please note that the information set forth in this letter is subject to change without notice, and is provided in strict confidence, without any responsibility or liability on the part of Bank of America, N.A. Bank of America, N.A. undertakes no responsibility to update the information set forth in this letter. Very truly yours,

BANK OF AMERICA, N.A.

Michael Contreras Vice President



Operated By NEWSME Landfill Operations, LLC

August 11, 2017

Kathleen E. Tarbuck, P.E. Senior Environmental Engineer Division of Technical Services Bureau of Remediation and Waste Management 17 State House Station Augusta, ME 04333

Re: Juniper Ridge Landfill Financial Assurance

Greetings:

Please find enclosed *original* updated security bonds for closure and post-closure care financial assurance, continued with increased riders commensurate with the third-party calculations included within the most recent facility annual report.

Should you require additional information or clarification, please do not hesitate to contact me via e-mail at: <u>toni.king@casella.com</u>, or via mobile phone at: 207-653-4421.

Respectfully submitted,

NEWSME LANDFILL OPERATIONS, LLC.

Toni M. King, F Region Engineer

c: Jeremy Labbe, NEWSME

Facility Name: Juniper Ridge Landfill – Closure Maine DEP Site No. S-020700-WD-N-A

INCREASE RIDER TO SURETY BOND

PURPOSE: **INCREASE RIDER**

To be attached to Bond Number <u>853746</u> by <u>Evergreen National Indemnity Company</u>, as Surety in the amount of <u>Thirteen Million, Two Hundred Fifty-Four Thousand, Six Hundred</u> <u>and 00/100 Dollars (\$13,254,600.00)</u>, on behalf of <u>NEWSME Landfill Operation, LLC</u>, the Principal, in favor of the <u>State of Maine Department of Environmental Protection</u>.

In consideration of the premium charged for the attached bond, it is mutually understood and agreed by the Principal and the Surety that the bond shall be modified to read as follows: The above said bond amount shall be **Fourteen Million, Seven Hundred Fifty-Nine Thousand and** <u>00/100 Dollars (\$14,759,000.00)</u>, effective the 12th day of August, 2017.

All other items, limitations and conditions of said bond except as herein expressly modified shall remain unchanged.

Signed, sealed and dated this 1st day of August, 2017.

Principal: NEWSME Landfill Operation, LLC.

John W. Casella By:

Surety: Evergreen National Indemnity Company

ra A. Temple, Attorney-In-

EVERGREEN NATIONAL INDEMNITY COMPANY MAYFIELD HEIGHTS, OH POWER OF ATTORNEY

POWER NO. 853746

KNOW ALL MEN BY THESE PRESENTS: That the Evergreen National Indemnity Company, a corporation in the State of Ohio does hereby nominate, constitute and appoint:

Patricia A. Temple

its true and lawful Attorney(s)-In-Fact to make, execute, attest, seal and deliver for and on its behalf, as Surety, and as its act and deed, where required, any and all bonds, undertakings, recognizances and written obligations in the nature thereof, PROVIDED, however, that the obligation of the Company under this Power of Attorney shall not exceed Fourteen Million, Seven Hundred Fifty-Nine Thousand and 00/100 Dollars (\$14,759,000.00)

This Power of Attorney is granted and is signed by facsimile pursuant to the following Resolution adopted by its Board of Directors on the 23rd day of July, 2004:

"RESOLVED, That any two officers of the Company have the authority to make, execute and deliver a Power of Attorney constituting as Attorney(s)-in-fact such persons, firms, or corporations as may be selected from time to time.

FURTHER RESOLVED, that the signatures of such officers and the Seal of the Company may be affixed to any such Power of Attorney or any certificate relating thereto by facsimile; and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company; and any such powers so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached."

IN WITNESS WHEREOF, the Evergreen National Indemnity Company has caused its corporate seal to be affixed hereunto, and these presents to be signed by its duly authorized officers this 1st day of June, 2017.

EVERGREEN NATIONAL INDEMNITY COMPANY



By: Matthew T. Tucker, President By: David A. Canzone, CFO

Notary Public) State of Ohio)

SS:

On this 1st day of June, 2017, before the subscriber, a Notary for the State of Ohio, duly commissioned and qualified, personally came Matthew T. Tucker and David A. Canzone of the Evergreen National Indemnity Company, to me personally known to be the individuals and officers described herein, and who executed the preceding instrument and acknowledged the execution of the same and being by me duly sworn, deposed and said that they are the officers of said Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company, and the said Corporate Seal and signatures as officers were duly affixed and subscribed to the said instrument by the authority and direction of said Corporation, and that the resolution of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at Cleveland, Ohio, the day and year above written.



Penny M. Hamm, Notary Public My Commission Expires April 4, 2022

State of Ohio)

SS

I, the undersigned, Secretary of the Evergreen National Indemnity Company, a stock corporation of the State of Ohio, DO HEREBY CERTIFY that the foregoing Power of Attorney remains in full force and has not been revoked; and furthermore that the Resolution of the Board of Directors, set forth herein above, is now in force.

Signed and sealed in Mayfield Hts, Ohio this 1st day of August, 2017.



Wan C. Collier, Secretary

Facility Name: Juniper Ridge Landfill – Post-Closure Maine DEP Site No. S-020700-WD-N-A

INCREASE RIDER TO SURETY BOND

PURPOSE: INCREASE RIDER

To be attached to Bond Number <u>853747</u> by <u>Evergreen National Indemnity Company</u>, as Surety in the amount of <u>Ten Million, Two Hundred Eighty-Four Thousand, Three Hundred</u> <u>Eighty and 00/100 Dollars (\$10,254,380.00)</u>, on behalf of <u>NEWSME Landfill Operation, LLC</u>, the Principal, in favor of the <u>State of Maine Department of Environmental Protection</u>.

In consideration of the premium charged for the attached bond, it is mutually understood and agreed by the Principal and the Surety that the bond shall be modified to read as follows: The above said bond amount shall be <u>Thirteen Million, One Hundred Seventy-Eight Thousand</u>, <u>and 00/100 Dollars (\$13,178,000.00)</u>, effective the 12th day of August, 2017.

All other items, limitations and conditions of said bond except as herein expressly modified shall remain unchanged.

Signed, sealed and dated this 1st day of August, 2017.

Principal: NEWSME Landfill Operation, LLC.

, tres ? Sec John W. Caselle

Surety: Evergreen National Indemnity Company

ricia A. Temple, Attorney-In-Fact By:

EVERGREEN NATIONAL INDEMNITY COMPANY MAYFIELD HEIGHTS, OH POWER OF ATTORNEY

POWER NO. 853747

KNOW ALL MEN BY THESE PRESENTS: That the Evergreen National Indemnity Company, a corporation in the State of Ohio does hereby nominate, constitute and appoint:

Patricia A. Temple

its true and lawful Attorney(s)-In-Fact to make, execute, attest, seal and deliver for and on its behalf, as Surety, and as its act and deed, where required, any and all bonds, undertakings, recognizances and written obligations in the nature thereof, PROVIDED, however, that the obligation of the Company under this Power of Attorney shall not exceed **Thirteen Million, One Hundred Seventy-Eight Thousand and 00/100 Dollars** (\$13,178,000.00)

This Power of Attorney is granted and is signed by facsimile pursuant to the following Resolution adopted by its Board of Directors on the 23rd day of July, 2004:

"RESOLVED, That any two officers of the Company have the authority to make, execute and deliver a Power of Attorney constituting as Attorney(s)-in-fact such persons, firms, or corporations as may be selected from time to time.

FURTHER RESOLVED, that the signatures of such officers and the Seal of the Company may be affixed to any such Power of Attorney or any certificate relating thereto by facsimile; and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company; and any such powers so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached."

IN WITNESS WHEREOF, the Evergreen National Indemnity Company has caused its corporate seal to be affixed hereunto, and these presents to be signed by its duly authorized officers this 1st day of June, 2017.

EVERGREEN NATIONAL INDEMNITY COMPANY



By: Matthew T. Tucker, President By: David A. Canzone, CFO

Notary Public) State of Ohio)

SS:

On this 1st day of June, 2017, before the subscriber, a Notary for the State of Ohio, duly commissioned and qualified, personally came Matthew T. Tucker and David A. Canzone of the Evergreen National Indemnity Company, to me personally known to be the individuals and officers described herein, and who executed the preceding instrument and acknowledged the execution of the same and being by me duly sworn, deposed and said that they are the officers of said Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company, and the said Corporate Seal and signatures as officers were duly affixed and subscribed to the said instrument by the authority and direction of said Corporation, and that the resolution of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at Cleveland, Ohio, the day and year above written.



1thm

Penny M. Hamm, Notary Public My Commission Expires April 4, 2022

State of Ohio)

SS

I, the undersigned, Secretary of the Evergreen National Indemnity Company, a stock corporation of the State of Ohio, DO HEREBY CERTIFY that the foregoing Power of Attorney remains in full force and has not been revoked; and furthermore that the Resolution of the Board of Directors, set forth herein above, is now in force.

Signed and sealed in Mayfield Hts, Ohio this 1st day of August, 2017.



Wan C. Collier, Secretary

APPENDIX 8

CIVIL & CRIMINAL DISCLOSURES / COMPLIANCE

Criminal or Civil Record for the Department of Administrative and Financial Services Bureau of General Services July 31, 2017

All applicants for a new or amended license, or transfer of a solid waste license, shall submit, at the time of application, a disclosure statement with the Department containing information, as described in Maine Department of Environmental Protection's Solid Waste Management Rules, Chapter 400, Section 12..

1. The facility, known as Juniper Ridge Landfill, is owned by the State of Maine, through the Department of Administrative and Financial Services, managed by the Bureau of General Services and Maine's State-owned Landfills Program, Department of Economic and Community Development, 77 State House Station, Augusta, Maine 04333-0077. The State's Federal Employer Identification number is 016000001. The Director of the Bureau of General Services is Gilbert Bilodeau, 77 State House Station, Augusta, Maine 04333-0077

2. The Bureau of General Services does not hold an equity interest in any company which collects, transports, treats, stores or disposes of solid or hazardous waste.

3. The Bureau of General Services has no felony conviction or criminal convictions of environmental laws of any state or county.

4. The Bureau of General Services has no adjudicated civil violations of environmental laws.

5. The Bureau of General Services is not a party to any ongoing court proceedings, consent agreements or enforcement actions concerning environmental laws administered by the DEP or the State.

6. The U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency have regulatory responsibility over the Agency in connection with the disposal of solid waste at the Juniper Ridge Landfill site.

7. Neither the DEP nor the Maine Attorney General's Office has requested information, other than listed here, relating to the character of the Bureau of General Services

8. The applicant has not entered into any administrative consent agreements or consent decrees for violations of environmental laws.

State of Maine Department of Environmental Protection Disclosure Statement for NEWSME Landfill Operations, LLC

January 2017

Applicant: NEWSME Landfill Operations LLC Immediate parent company: New England Waste Services of ME, Inc.

Criminal and Civil Record Disclosure is required by owner, operator or any person having a legal interest in the applicant or the facility and shall disclose whether said owner, operator or person 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. Such an adjudication or finding can be by means of a court order or consent decree, or by means of an administrative order or agreement.

Disclosure is required by:

Officers, Directors, Partners

All persons or business concerns having managerial or executive authority *and* having more than 5 percent of the equity in or debt of that business.

All persons or business concerns having a 25 percent or greater financial interest in the applicant.

Managerial person with operational responsibility of the facility

Corporate Disclosure:

A disclosure concerning the applicant is attached hereto.

Officers, Directors and Partners of NEWSME Landfill Operations, LLC:

DIRECTORS

John W. Casella Edwin Johnson Director Director

OFFICERS

John W. Casella President Secretary Brian Oliver Vice President

Edmond Coletta Vice President Treasurer Edwin Johnson Vice President

PERSONS with MANAGERIAL / EXECUTIVE AUTHORITY:

Regional Vice President: Brian Oliver

EQUITY / DEBT OWNERSHIP:

One Hundred Percent of the Equity in NEWSME Landfill Operations, LLC is held by New England Waste Services of ME, Inc. A disclosure form is attached with respect to New England Waste Services of ME, Inc.

Submitted to the Department of Environmental Conservation for the State of Maine, as required by the General Provisions of Chapter 400 of the Maine Department of Environmental Protection Regulations.

Dated this <u>19</u> day of <u>January</u>, 2017

John W. Casella, President and Secretary NEWSME Landfill Operations, LLC

STATE OF VERMONT COUNTY OF RUTLAND

On the <u>19</u>th day of <u>January</u>, 2017, personally appeared John W. Casella, President and Secretary of NEWSME Landfill Operations, LLC and acknowledged the foregoing to be his free act and deed and the free act and deed of NEWSME Landfill Operations, LLC.

Selden atricia

Notary Public

PATRICIA BELDEN Notary Public, State of Vermont My Commission Expires Feb. 10, 2019

| | | Maine Disclosure Form | | | |
|--|--|--|--|--|--|
| Name | NEWSME Landfill Operations, LLC | | | | |
| Business Address | 358 Emerson Mill Road, Hampden, Maine, 04444 | | | | |
| Home Address (if app.) | Not Applicable | | | | |
| Date of Formation | September 18, 2003 | | | | |
| Social Security or Tax ID | 20-0735025 | | | | |
| Criminal Convictions | | yes – Give date and explanation of conviction, together with the in which the conviction occurred | | | |
| | XXXXX | | | | |
| Civil Violations | administered b the 5 years imp | judicated civil violation(s) of environmental laws or rules y the State, other states, the United States or another country in nediately preceding the filing of this application. | | | |
| Explanation | None Adjudicated | | | | |
| Consent Decrees and Administrative Orders | List and explain administrative orders and consent decrees entered into by or administrative orders for violations of environmental laws administered by t Department, the State, other States, the United States or another country in t 5 years immediately preceding the filing of this application. | | | | |
| | None | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement actior not already provided in which disclosing entity or person is a party and whice concerns environmental laws administered by the Department or State. | | | | |
| | None | | | | |
| Civil Proceedings: | None | | | | |
| Other Information | responsibilities transportation, any other infor relates to the en | es outside the State of Maine that have regulatory over the applicant in connection with its collection, treatment, storage or disposal of solid or hazardous wastes and mation required by the Department of the Attorney General that inforcement history or character of the applicant. | | | |
| | Army Corps of Engineers U.S. Environmental Protection Agency U.S. Fish & Wildlife | | | | |
| | The company is subject to extensive and evolving Federal, state and local environmental laws and regulations. The environmental regulations affecting the Company are administered by the EPA and other Federal, state and local environmental, zoning, health and safety agencies. The Company believes that it is currently in substantial compliance with applicable Federal, state and local environmental laws, permits, orders and regulations. | | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity Interest | None | | | | |

State of Maine **Department of Environmental Protection** Disclosure Statement for New England Waste Services of ME, Inc.

January 2017

Applicant: NEWSME Landfill Operations LLC

Criminal and Civil Record Disclosure is required by owner, operator or any person having a legal interest in the applicant or the facility and shall disclose whether said owner, operator or person 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. Such an adjudication or finding can be by means of a court order or consent decree, or by means of an administrative order or agreement.

Disclosure is required by:

Officers, Directors, Partners

All persons or business concerns having managerial or executive authority and having more than 5 percent of the equity in or debt of that business.

All persons or business concerns having a 25 percent or greater financial interest in the applicant.

Managerial person with operational responsibility of the facility

Corporate Disclosure:

A disclosure concerning the applicant is attached hereto.

Officers, Directors and Partners of New England Waste Services of ME, Inc:

DIRECTORS

| John W. Casella | Edwin D. Johnson | Douglas R. Casella |
|-----------------|------------------|--------------------|
| Director | Director | Director |

Brian Oliver

OFFICERS

| John W. Casella | |
|-----------------|--|
| President | |
| Secretary | |

Edwin Johnson Vice President Vice President

Edmond R. Coletta Vice President Treasurer

Michael Hodge Vice President

PERSONS with MANAGERIAL / EXECUTIVE AUTHORITY:

Regional Vice President: Brian Oliver

EQUITY / DEBT OWNERSHIP:

One Hundred Percent of the Equity in New England Waste Services of ME, Inc. is held by Casella Waste Systems, Inc.

Submitted to the Department of Environmental Conservation for the State of Maine, as required by the General Provisions of Chapter 400 of the Maine Department of Environmental Protection Regulations.

Dated this <u>191</u> day of <u>January</u>, 2017

John W. Casella, President and Secretary New England Waste Services of ME, Inc.

STATE OF VERMONT COUNTY OF RUTLAND

On the <u>19</u>th day of <u>Jummy</u>, 2017, personally appeared John W. Casella, President and Secretary of New England Waste Services of ME, Inc. and acknowledged the foregoing to be his free act and deed and the free act and deed of New England Waste Services of ME, Inc.

atricia Belder Notary Public

My Commission Expires Feb. 10, 2019

PATRICIA BELDEN Notary Public, State of Vermont

| | Maine Disclosure Form | | | |
|---|--|--|--|--|
| Name | New England Waste Services of ME, Inc. | | | |
| Business Address | 135 Presumpscot Street, Unit #1, Portland, ME 04102 | | | |
| Home Address (if app.) | Not Applicable | | | |
| Date of Birth | Incorporated October 11, 1974 | | | |
| Social Security or Tax ID | 01-0329311 | | | |
| Criminal Convictions | No * If yes – Give date and explanation of conviction, together with the State in which the conviction occurred | | | |
| | XXXXX | | | |
| Civil Violations | Explain any adjudicated civil violation(s) of environmental laws or rules administered by the State, other states, the United States or another country in the 5 years immediately preceding the filing of this application. | | | |
| Explanation | None Adjudicated | | | |
| Consent Decrees and Administrative Orders | List and explain administrative orders and consent decrees entered into by or administrative orders for violations of environmental laws administered by the Department, the State, other States, the United States or another country in the 5 years immediately preceding the filing of this application. | | | |
| | Please see attached | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement action not already provided in which disclosing entity or person is a party and which concerns environmental laws administered by the Department or State. | | | |
| Civil Proceeding: | Please see attached | | | |
| Other Information | List any agencies outside the State of Maine that have regulatory responsibilities over the applicant in connection with its collection, transportation, treatment, storage or disposal of solid or hazardous wastes and any other information required by the Department of the Attorney General that relates to the enforcement history or character of the applicant. Army Corps of Engineers | | | |
| | U.S. Environmental Protection Agency U.S. Fish & Wildlife | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or | New England Waste Services of ME, Inc. is the owner of: NEWSME Landfill Operations LLC and Lewiston Landfill LLC | | | |
| Greater Equity Interest | Pinetree Landfill is a D/B/A of New England Waste Services of ME, Inc. | | | |

| Name of Entity Cited | Location of Alleged Violation | Name of Citing Entity | Type of Notice | Date of inspection or incident | Date of Violation/Order | Nature of Violation/Alleged Violation | Disposition | Penalty |
|--|-----------------------------------|--------------------------|---------------------------------|-----------------------------------|----------------------------|--|---|---------|
| New England Waste Services of ME, Inc. (aka Pinetree Landfill) | Pinetree Landfill, Hampden, ME | Bangor WWTF | Notice of Violation | June 22, 2012 | June 29, 2012 | Notice of Violation pertaining to a "slug" load release of tank bottom sludge from the leachate storage tank during routine maintenance during the period of June 20-21, 2012. | Response submitted on July 6, 2012. The facility developed a Standard Operating Procedure for cleaning the tank. | None |
| New England Waste Services of ME, Inc. (aka Pinetree Landfill) | Pinetree Landfill, Hampden, ME | Town of Hermon, Me | Administrative Order | June 22, 2012 | July 9, 2012 | Administrative Order (AO) issued to Pine Tree Landfil concerning the slug load release of sludge during routine maintenance cleaning of the leachate tank. | Response was submitted on July 20, 2012 - PTL filed an appeal of the AO. A hearing on the appeal was held on November 19, 2012. The appeal was denied and the facility must comply with the conditions of the AO. | None |
| New England Waste Services of ME, Inc. (aka Pinetree Landfill) | Pine Tree Landfill Hampden, ME | City of Bangor WWTP | Notice of Violation (NOV) | N/A | April 22, 2013 | PTL failed to sample and submit results for Total Phosphorous and Vanadium during the first quarter of 2013. | Sevee & Maher Engineers, Inc. inadvertently omitted the vanadium and total phosphorous analysis from the analysis request that is submitted to the Laboratory; they tried to contact the lab to retrieve the data for vanadium and total phosphorous however the lab was unable to retrieve the data. | None |
| New England Waste Services of ME, Inc. (aka Pinetree Landfill) | Pine Tree Landfill Hampden, ME | Bangor WWTF | Notice of Violation | January 13, 2015 | January 13, 2015 | PTL exceeded the action level limit of .24 mg/l concentration for the pollutant arsenic. | PTL submitted a response outlining the actions taken to investigate potential sources of arsenic in leachate from the landfill. | None |

Organizational Chart

C

Casella Waste Systems, Inc.

(Ultimate Parent Company)

New England Waste Services of ME, Inc.

(Parent Company)

NEWSME Landfill Operations, LLC

(Applicant)

| | Maine Disclosure Form | | | | |
|---|---|------------------------------|--|--|--|
| Name | John W. Casella | | | | |
| Business Address | 25 Greens Hill Lane, Rutland, Vermont 05701 | | | | |
| Home Address (if app.) | 67 Ives Avenue, Rutland, Vermont 05701 | | | | |
| Date of Birth | 12/05/1950 | | | | |
| an di selaman nanya yang mananan di Milan di Milanda na manangkan dan manangkan di magkan dan dalam di Seri di A | | | | | |
| Criminal Convictions | No* If yes – Give date and explanation of conviction, togState in which the conviction occurred | gether with the | | | |
| | XXXXX | | | | |
| Civil Violations | Explain any adjudicated civil violation(s) of environmental laws or rules administered by the State, other states, the United States or another in the 5 years immediately preceding the filing of this application. | | | | |
| Explanation | None | | | | |
| Consent Decrees and Administrative Orders | List and explain administrative orders and consent decrees enter- administrative orders for violations of environmental laws admin Department, the State, other States, the United States or another 5 years immediately preceding the filing of this application. | nistered by the | | | |
| | None | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative of agreement negotiation, or similar ongoing administrative enforce not already provided in which disclosing entity or person is a par- concerns environmental laws administered by the Department or None | ement action ty and which | | | |
| Other Information | List any agencies outside the State of Maine that have regulatory responsibilities over the applicant in connection with its collection transportation, treatment, storage or disposal of solid or hazardou any other information required by the Department of the Attorne relates to the enforcement history or character of the applicant. See Applicant Disclosure | on, is wastes and | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity Interest | No interest equal or exceeding 5% of any entity that collects, transtores or disposes of solid or hazardous waste, per Chapter 400, I Department of Environmental Protection Regulations. | | | | |
| | Date Signature Jan. 19, 2017 AirAM | | | | |
| | John W. Casella | | | | |
| | John W. Coorna | | | | |

STATE OF VERMONT COUNTY OF RUTLAND

On the 19^{+1} day of January, 2017, personally appeared John W. Casella and acknowledged the foregoing to be his free act and deed.

Notary Public war

PATRICIA BELDEN Notary Public, State of Vermont My Commission Expires Feb. 10, 2019

| n - Ni - Li K. Kali I. M Malaka | Maine Disclosure Form | | | | |
|--|--|--|--|--|--|
| Name | Douglas R. Casella | | | | |
| Business Address | 25 Greens Hill Lane, Rutland, Vermont 05701 | | | | |
| Home Address (if app.) | 3 Stone Hollow Road | | | | |
| | Mendon, Vermont 05701 | | | | |
| Date of Birth | 06/23/1956 | | | | |
| | | | | | |
| Criminal Convictions | No * If yes – Give date and explanation of conviction, together with the State in which the conviction occurred | | | | |
| | XXXXX | | | | |
| Civil Violations | Explain any adjudicated civil violation(s) of environmental laws or rules administered by the State, other states, the United States or another in the 5 years immediately preceding the filing of this application. | | | | |
| Explanation | No Violations | | | | |
| Consent Decrees and Administrative Orders | List and explain administrative orders and consent decrees entered into by or administrative orders for violations of environmental laws administered by the Department, the State, other States, the United States or another country in the 5 years immediately preceding the filing of this application. | | | | |
| | None | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement action not already provided in which disclosing entity or person is a party and which concerns environmental laws administered by the Department or State. None | | | | |
| Other Information | | | | | |
| | List any agencies outside the State of Maine that have regulatory responsibilities over the applicant in connection with its collection, transportation, treatment, storage or disposal of solid or hazardous wastes and any other information required by the Department of the Attorney General that relates to the enforcement history or character of the applicant. See Applicant Disclosure | | | | |
| Entities in Which Person or Entity Executing | No interest equal or exceeding 5% of any entity that collects, transports, treats, stores or disposes of solid or hazardous waste, per Chapter 400, Maine | | | | |
| Disclosure has 5% or Greater Equity Interest | Department of Environmental Protection Regulations. | | | | |
| | Date Signature - hanuary 19, 2017 Dans Casella | | | | |
| | Douglas R. Casella | | | | |

STATE OF VERMONT COUNTY OF RUTLAND

On the 19^{+1} day of January, 2017, personally appeared Douglas R. Casella personally appeared and acknowledged the foregoing to be his free act and deed.

atricin DelOen Notary Public

PATRICIA BELDEN Notary Public, State of Vermont My Commission Expires Feb. 10, 2019

| | | Maine Dis | closure Form | | |
|--|--|--|--|--|--|
| Name | Edwin Johnson | | | | |
| Business Address | 25 Greens Hill Lane, Rutland, Vermont 05701 | | | | |
| Home Address (if app.) | 1161 Quarterline Road, Center Rutland, VT 05736 | | | | |
| Date of Birth | 09/01/1 | 956 | | | |
| Criminal Convictions | No | * If yes – Give date and State in which the convid | l explanation of conviction, together with the ction occurred | | |
| | XXXXX | | | | |
| Civil Violations | adminis | | ation(s) of environmental laws or rules ates, the United States or another in the 5 iling of this application. | | |
| Explanation | None | | | | |
| Consent Decrees and Administrative Orders | adminis Departn | trative orders for violatior nent, the State, other State | ders and consent decrees entered into by or as of environmental laws administered by the s, the United States or another country in the e filing of this application. | | |
| | None | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement action not already provided in which disclosing entity or person is a party and which concerns environmental laws administered by the Department or State. None | | | | |
| Other Information | responsi transpor any othe relates to | bilities over the applicant tation, treatment, storage r information required by | e of Maine that have regulatory in connection with its collection, or disposal of solid or hazardous wastes and the Department of the Attorney General that or character of the applicant. | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity Interest | stores or disposes of solid or hazardous waste, per Chapter 400, Department of Environmental Protection Regulations. | | | | |
| | Date | | Signature | | |
| | $\left \right $ | Junuary 19 2017 | | | |
| | | MIMMARI 19 aUT | | | |

STATE OF VERMONT

COUNTY OF RUTLAND On the $\frac{19^{4}}{12}$ day of $\frac{1}{12}$ day of $\frac{1}{12}$ are 2017, personally appeared Edwin Johnson and acknowledged the foregoing to be his free act and deed. Tatricis elles

Notary Public PATRICIA BELDEN Notary Public, State of Vermont My Commission Expires Feb. 10, 2019

| | Maine Disclosure Form | | | | |
|--|--|--|--|--|--|
| Name | Edmond R. Coletta | | | | |
| Business Address | 25 Greens Hill Lane, Rutland, VT 05701 | | | | |
| Home Address (if app.) | 240 Grove St., Rutland, VT 05701 | | | | |
| Date of Birth | 11/15/1975 | | | | |
| Criminal Convictions | No * If yes – Give date and explanation of conviction, together with the State in which the conviction occurred | | | | |
| Civil Violations | xxxxxExplain any adjudicated civil violation(s) of environmental laws or rulesadministered by the State, other states, the United States or another in the 5years immediately preceding the filing of this application. | | | | |
| Explanation | None | | | | |
| Consent Decrees and Administrative Orders | List and explain administrative orders and consent decrees entered into by or administrative orders for violations of environmental laws administered by the Department, the State, other States, the United States or another country in the 5 years immediately preceding the filing of this application. | | | | |
| | None | | | | |
| Other Proceedings | List and explain any ongoing court proceeding, administrative consent agreement negotiation, or similar ongoing administrative enforcement action not already provided in which disclosing entity or person is a party and which concerns environmental laws administered by the Department or State. None | | | | |
| Other Information | List any agencies outside the State of Maine that have regulatory responsibilities over the applicant in connection with its collection. transportation, treatment, storage or disposal of solid or hazardous wastes and any other information required by the Department of the Attorney General that relates to the enforcement history or character of the applicant. See Applicant Disclosure | | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity Interest | None | | | | |
| | Date Signature Signature January 19, 2017 Edmond R. Coletta | | | | |

STATE OF VERMONT COUNTY OF RUTLAND

On the 19^{-4} day of 5000 day of 2017, personally appeared Edmond R. Coletta and acknowledged the foregoing to be his free act and deed.

Thericia (seen Notary Public

PATRICIA BELDEN Notary Public, State of Vermont My Commission Expires Feb. 10, 2019

| | | Maine Disclosure Form | | | | | |
|--|---|---|--|--|--|--|--|
| Name | | Brian G. Oliver | | | | | |
| Business Address | 110 M | 110 Main Street, Suite 1308, Saco, Maine 04072 | | | | | |
| Home Address (if app.) | 10 Du | 10 Dunn Estates Drive, Scarborough Maine 04074 | | | | | |
| Date of Birth | | 07-23-1961 | | | | | |
| Criminal Convictions | No | * If yes – Give date and explanation of conviction, together with the State in which the conviction occurred | | | | | |
| Civil Violations | Explain adminis | xxxxx Explain any adjudicated civil violation(s) of environmental laws or rules administered by the State, other states, the United States or another in the 5 years immediately preceding the filing of this application. | | | | | |
| Explanation | None | | | | | | |
| Consent Decrees and Administrative Orders | adminis Departn | I explain administrative orders and consent decrees entered into by or trative orders for violations of environmental laws administered by the nent, the State, other States, the United States or another country in the immediately preceding the filing of this application. | | | | | |
| | None | | | | | | |
| Other Proceedings | agreeme not alrea | explain any ongoing court proceeding, administrative consent ent negotiation, or similar ongoing administrative enforcement action ady provided in which disclosing entity or person is a party and which s environmental laws administered by the Department or State. | | | | | |
| Other Information | responsi transport any othe relates to | agencies outside the State of Maine that have regulatory bilities over the applicant in connection with its collection, tation, treatment, storage or disposal of solid or hazardous wastes and or information required by the Department of the Attorney General that to the enforcement history or character of the applicant. licant Disclosure | | | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity Interest | None Date | Signature | | | | | |
| | 1 | 23/17 Brian G. Oliver | | | | | |
| STATE OF MAINE COUNTY OF YORK | | | | | | | |
| On the $\frac{2^3}{2}$ day of a cknowledged the foregoing | $\int an$ to be his f | $\frac{\sqrt{c}}{1}$ 2017, personally appeared Brian G. Oliver and ree act and deed. | | | | | |
| | | Notary Public DAVID S. RO | | | | | |

/

i

Notary Public - Maine My Commission Expires July 10, 2022 當

| | | Maine Disclosure Form | | | |
|--|---|---|--|--|--|
| Name | Michael Hodge | | | | |
| Business Address | 110 Main Street, Suite 1308, Saco, Maine 04072 | | | | |
| Home Address (if app.) | 1 Deer Creek Run, Dover, NH 03820 | | | | |
| Date of Birth | 09/26/ | | | | |
| | | | | | |
| Criminal Convictions | No | * If yes – Give date and explanation of conviction, together with the State in which the conviction occurred | | | |
| | XXXXX | | | | |
| Civil Violations | admini years ir | n any adjudicated civil violation(s) of environmental laws or rules stered by the State, other states, the United States or another in the 5 mmediately preceding the filing of this application. | | | |
| Explanation | None | | | | |
| Consent Decrees and | | d explain administrative orders and consent decrees entered into by or | | | |
| Administrative Orders | Departr | administrative orders for violations of environmental laws administered by the Department, the State, other States, the United States or another country in the 5 years immediately preceding the filing of this application. | | | |
| Allendansen in nærenensellensen en forkelde och som en en gengensen en et en sammen med | None | | | | |
| Other Proceedings | agreem not alre | d explain any ongoing court proceeding, administrative consent ent negotiation, or similar ongoing administrative enforcement action ady provided in which disclosing entity or person is a party and which as environmental laws administered by the Department or State. | | | |
| Other Information | List any agencies outside the State of Maine that have regulatory | | | | |
| | responsibilities over the applicant in connection with its collection, | | | | |
| | transportation, treatment, storage or disposal of solid or hazardous wastes and any other information required by the Department of the Attorney General that relates to the enforcement history or character of the applicant. See Applicant Disclosure | | | | |
| | n | | | | |
| Entities in Which Person or Entity Executing Disclosure has 5% or Greater Equity Interest | None | | | | |
| | Date | Signature | | | |
| | Janua | N 25, 2017 Much Allange | | | |
| anala a 🕿 matalagan yang sama ata ata dari dari yang pangan yang baharan yang baharan sa sa | + | | | | |
| STATE OF ALL | ± | | | | |

-9



APPENDIX 9

LETTERS OF SUPPORT

Coastal Resources of Maine LLC 1450 South Rolling Road Baltimore, MD 21227

November 10th, 2017

Kathy Tarbuck, Project Manager Maine Department of Environmental Protection 17 State House Station Augusta, Maine 04333-0017

Re: NEWSME Juniper Ridge Landfill Amendment Application

Dear Ms. Tarbuck:

NEWSME Landfill Operations, LLC and Bureau of General Services has submitted an amendment application to amend a prior amendment (#S-020700-WD-BC-A). The prior amendment allowed up to 81,000 tons per year of non-bypass Maine MSW to be disposed at the Juniper Ridge Landfill until March 31, 2018. The current amendment application would extend approval of the same amount of MSW until the remaining disposal capacity under the current JRL license (#S-020700-WD-N-A) has been utilized. For the avoidance of doubt, the current amendment application does not seek to allow for the disposal of MSW in any expansion of JRL (Permit #-020700-WD-BI-N)

Coastal Resources of Maine LLC ("CRM") is co-licensee of the Fiberight/MRC municipal solid waste processing facility being constructed in Hampden, ME. CRM is in support of the above referenced JRL Amendment application.

Pine Tree Waste ("PTW"), a division of Casella Waste Systems, has executed an agreement for Disposal Services whereby PTW would deliver approximately 40,000 tons per year of commercial municipal solid waste generated in Maine. Our disposal services agreement with PTW provides significant benefits to our Hampden facility, not the least of which is a pathway to balance waste supply in winter months using Maine derived waste.

Further, our agreement with PTW memorializes our collective support of Maine's solid waste hierarchy, and respects flow control ordinances enacted by municipalities in our service area. This agreement also moves us considerably towards our stated goal of being able to provide rebates to the Municipal Review Committee communities we serve by providing significant revenue opportunities to the Hampden facility.

The agreement between CRM and PTW is subject to, and conditioned upon, receipt by NEWSME/Bureau of General Services of a final, non-appealable approval allowing continued disposal of up to 81,800 tons per year of non-bypass Maine MSW at the Juniper Ridge Landfill beyond March 31, 2018; as requested in the aforementioned Amendment Application.

Sincerely,

Craig Stuart Paul

Manager, Coastal Resources of Maine LLC CEO Fiberight LLC



TRI COUNTY SOLID WASTE GROUP

P.O. Box 422, North Berwick, ME 039063 (207)-676-3353, ext. 4 Town of Acton Town of Alfred Town of Buxton Town of Cornish Town of Dayton Town of Kennebunk Town of Kennebunkport Town of North Berwick Town of Old Orchard Beach Town of Sanford Town of Shapleigh Town of South Berwick Town of Wells

November 6, 2017

Kathy Tarbuck, Project Manager Maine Department of Environmental Protection 17 State House Station Augusta, ME 04333-0017

Dear Ms. Tarbuck:

This letter is submitted in support of Casella Waste Systems, Inc.'s request to continue to dispose of municipal solid waste at the Juniper Ridge Landfill after March 31, 2018.

The Tri County Solid Waste Group is a group of 13 municipalities who have entered into a partnership for the solid waste disposal needs of their municipalities. While the Tri County Communities are not a direct user of this landfill, we have had a long relationship with Casella Waste Systems, Inc. The Tri-County municipalities that comprise the group utilized the Maine Energy Recovery Facility ("MERC") for the disposal of their municipal solid waste from 1988 through 2012. With the closure of MERC at the end of 2012, the Tri-County towns have delivered their MSW to the Casella owned Westbrook Transfer Station from which it has been delivered to an approved disposal facility.

In 2012, Tri-County supported Casella's application to the DEP for approval to dispose of our MSW at the State-owned Juniper Ridge Landfill. We believed that, as Maine municipalities, we were entitled to utilize the Maine landfill to meet our solid waste management needs.

The approval that was granted was time-limited and will expire on March 31, 2018. The need for disposal of our MSW at JRL will continue beyond that date as the Tri-County municipalities have disposal Agreements with Casella that extend to June 30, 2025. Having predictability with respect to solid waste management is essential for municipal government. Residents and businesses within our municipalities are entitled to expect that the solid waste they generate will be collected and managed properly. That is a responsibility State government has imposed on local government. Allowing uncertainty as to what will be allowed beyond March 31, 2018 is unacceptable. Taking a management option off the table is unacceptable. This uncertainty must be resolved and corrected well ahead of that expiration date.

The Tri County Solid Waste Group support Casella Waste Systems, Inc.'s request to continue to dispose of municipal solid waste at the Juniper Ridge Landfill after March 31, 2018.

Sincerely yours,

4 ne G. Morin Dway President



Town of North Berwick

21 Main Street + P.O. Box 422 + North Berwick, Maine 03906

WWW.TOWNOFNORTHBERWICK.ORG

Office: 207-676-3353 Fax: 207-676-3201

November 6, 2017

Kathy Tarbuck, Project Manager Maine Department of Environmental Protection 17 State House Station Augusta, ME 04333-0017

Dear Ms. Tarbuck:

The thirteen member municipalities that comprise the group known as "Tri-County" utilized the Maine Energy Recovery Facility ("MERC") for the disposal of their municipal solid waste from 1988 through 2012. With the closure of MERC at the end of 2012, the Tri-County towns have delivered their MSW to the Westbrook Transfer Station from which it has been delivered by Casella Waste Systems, Inc. to an approved disposal facility.

In 2012 and 2013, Tri-County municipalities supported Casella's application to the DEP for approval to dispose of our MSW at the State-owned Juniper Ridge Landfill. We believed that, as Maine municipalities, we were entitled to utilize the Maine landfill to meet our solid waste management needs.

The approval that was granted was time-limited and will expire on March 31, 2018. The need for disposal of our MSW at JRL will continue beyond that date as the Tri-County municipalities have disposal Agreements with Casella that extend to June 30, 2025. Having predictability with respect to solid waste management is essential for municipal government. Residents and businesses within our municipalities are entitled to expect that the solid waste they generate will be collected and managed properly. That is a responsibility State government has imposed on local government. Allowing uncertainty as to what will be allowed beyond March 31, 2018 is unacceptable. Taking a management option off the table is unacceptable. This uncertainty must be resolved and corrected well ahead of that expiration date.

We support Casella Waste Systems, Inc.'s request to continue to dispose of municipal solid waste at the Juniper Ridge Landfill after March 31, 2018.

Sincerely

Dwayne G. Morin Town Manager

Oceanside Rubbish, Inc. P O Box 39 Wells, Maine 04090 (207) 646-3230

November 3, 2017

Kathy Tarbuck, Project Manager Maine Department of Environmental Protection 17 State House Station Augusta, Maine 04333-0017

Dear Ms. Tarbuck:

I own and operate a solid waste collection company in wells, Maine. I operate packer trucks for curbside pickup for the communities of Wells, Ogunquit, Kennebunkport, Sanford and Acton, Maine. I also rent waste collection containers ("dumpsters") to businesses throughout my service area.

I deliver some of the household and commercial trash that I collect to Casella's transfer station in Westbrook, Maine. Once I drop it off, Casella takes it from there. But where they allowed to take it of course will affect me, principally in the price that I am charged. Whether they continue to have a place to take it would, of course, have a profound effect on me because I, in turn, must have a place to bring the solid waste I collect with my business. It's all connected, and it must work.

I also take municipal solid waste from the Town of Wells transfer station, which I operate, to the Juniper Ridge Landfill. Again, once solid waste arrives at the Wells transfer station, it then has to be transported to an approved disposal facility.

I understand that Casella's current State approval to dispose of trash from Westbrook Transfer Station expires on March 31, 2018. That expiration date must be removed. I expect that my business will be still operating less than six months from now. My customers will still expect me to pick up their trash. It's got to have a place to go. And that uncertainty needs to be resolved sooner than later.

Having a variety of disposal options in Maine allows more competition and is good for business. Uncertainty about the future is bad for business, as are having limited disposal options. What has worked very well for the past four years should be allowed to continue. Please approve Casella's request to continue to dispose of municipal solid waste at the Juniper Ridge Landfill after March 31, 2018. Thank you.

Sincerely,

Karl J. Ekstedt President / Owner Oceanside Rubbish, Inc.



TOWN OF WELLS

208 Sanford Road Wells, Maine 04090

Offices of the Town Manager and Board of Selectmen Tel: (207) 646-5113 Fax: (207) 646-2935 TDD: (207) 646-7892 www.wellstown.org

November 3, 2017

Kathy Tarbuck, Project Manager Maine Department of Environmental Protection 17 State House Station Augusta, ME 04333-0017

Dear Ms. Tarbuck:

The thirteen member municipalities that comprise the group known as "Tri-County" utilized the Maine Energy Recovery Facility ("MERC") for the disposal of their municipal solid waste from 1988 through 2012. With the closure of MERC at the end of 2012, the Tri-County towns have delivered their MSW to the Westbrook Transfer Station from which it has been delivered by Casella to an approved disposal facility.

In 2012 and 2013, Tri-County supported Casella's application to the DEP for approval to dispose of our MSW at the State-owned Juniper Ridge Landfill. We believed that, as Maine municipalities, we were entitled to utilize the Maine landfill to meet our solid waste management needs.

The approval that was granted was time-limited and will expire on March 31, 2018. The need for disposal of our MSW at JRL will continue beyond that date as the Tri-County municipalities have disposal Agreements with Casella that extend to June 30, 2025. Having predictability with respect to solid waste management is essential for municipal government. Residents and businesses within our municipalities are entitled to expect that the solid waste they generate will be collected and managed properly. That is a responsibility State government has imposed on local government. Allowing uncertainty as to what will be allowed beyond March 31, 2018 is unacceptable. Taking a management option off the table is unacceptable. This uncertainty must be resolved and corrected well ahead of that expiration date.

We support Casella's request to continue to dispose of municipal solid waste at the Juniper Ridge Landfill after March 31, 2018.

Sinderely,

Jonathan L. Carter Town Manager





November 8, 2017

Kathy Tarbuck, Project Manager Maine Department of Environmental Protection 17 State House Station Augusta, Maine 04333-0017

Dear Ms. Tarbuck,

Agri-cycle Energy and Exeter Agri-Energy are sister companies located in Exeter, Maine. Our operations are focused on a farm based 3MW anaerobic digestion using food waste, manure and other organic materials that together produce electricity, heat, animal bedding and liquid fertilizer for the farm. With the completion of our latest expansion project Exeter Agri-Energy is now one of the largest food waste digesters in the country with 3.2 million gallons of processing capacity. We also have one of the only commercial de-packaging machines in the New England which has allowed us to expand our food waste recycling to include food waste that is in its packaging, this material has traditionally gone to landfill or incineration, now it is able to be processed at our digestion site and used to create renewable energy. Last year we moved in the range of 35,000 tons of food waste and plan to double that amount over the next couple years.

Over the past two years we have developed a relationship with Casella and its subsidiary Pine Tree Waste, Inc. The companies proactively reached out to us to discuss building a relationship here in ME and across New England. They reached out in an effort to understand how they could better participate in recycling efforts of food waste as their customers were looking for more sustainable solutions. We have spent time training their sales force on food waste diversion and are working with them as opportunities arise to help customers increase their recycling efforts. In the process of building a partnership they have helped us better understand collection, routing efficiency, and truck maintenance for our growing fleet. They have also allowed us to use their truck wash bays and have been there to provide roll-off service when our clients have large amount of product loss.

Furthermore, their industry resources have allowed Agri-cycle to provide bundled sustainable services including single sort recycling, electronic recycling and paper brokerage. Casella's organics division, New England Organics in Unity, Maine provides back hauls for our long-haul collection fleet that helps drive our costs down and in turn enables us to lower the cost to small quantity generators of food and organics waste.

We are pleased to be able to offer our support to Casella in Maine. Their efforts to be an environmentally responsible provider of sustainable services in Maine are very much evidenced by the support that has been provided to our company.

Sincerely,

Daniel J Bell

Daniel J. Bell General Manager Agri-Cycle Energy



City of Biddeford, Maine

The Office of City Manager **James A. Bennett** Email: james.bennett@biddefordmaine.org

November 2, 2017

Kathy Tarbuck, Project Manager Maine Department of Environmental Protection 17 State House Station Augusta, Maine 04333-0017

Dear Ms. Tarbuck:

The City of Biddeford is writing to support Casella's application to continue accepting municipal solid waste at the Juniper Ridge Landfill beyond March 31, 2018.

For decades, municipal, regional leaders, and state grappled with ongoing community concerns about the Maine Energy Recovery Company (MERC), a waste-to-energy incinerator that was located in the heart of Biddeford. There were actually two governor-appointed commissions established to find a workable solution to this issue.

In 2012, MERC's owner, Casella Waste Systems, and Biddeford reached an agreement whereby the City would purchase the facility and it would be closed by Casella. It's important to note that Casella initially conditioned the sale of Maine Energy on obtaining approval for disposal of Maine MSW at the Juniper Ridge Landfill. The company's desire to retain its Maine customers is very understandable. Casella then removed this precondition of the Maine Energy sale when it became apparent that the DEP permitting process would go far beyond the scheduled sale date. Casella then reduced the amount of MSW proposed to be disposed at JRL to 81,000 tons following an agreement reached with PERC to dispose of 30,000 tons of Maine MSW there instead of at JRL. This repeated willingness on Casella's part to give ground, compromise, and create benefits for others, and by doing so giving up what others might have perceived to be leverage, is remarkable and should be remembered, recognized, and appreciated.

In addition to closing MERC, Casella established a comprehensive recycling program in Biddeford to reduce the amount of municipal solid waste require disposal, consistent with Maine's waste management hierarchy. This Casella program included providing each home in the City with a large toter for collection of recyclables. Since being established in 2013, this program has resulted in a 349 percent increase in Biddeford's recycling rate.

Biddeford delivers its post-recycling municipal solid waste to Casella's Westbrook transfer station. Biddeford has a disposal contract with Casella that runs to 2022. Like other municipalities in York County that used to dispose of their residential and commercial solid waste at MERC prior to its closure in 2012, disposal of this waste is still a necessity. We urge the Department to approve Casella's application to continue to accept municipal solid waste at the Juniper Ridge Landfill after March 31, 2018.

Sincerely, James A. Bennett City Manager

205 Main Street, Biddeford, ME 04005 P: 207.284.9313 F: 207.571.0678 www.biddefordmaine.org The City of Biddeford is an equal opportunity provider. To file a complaint, write to

Marcy Faucher, Human Resource Director, 205 Main Street Biddeford, ME 04005, or call (207) 286-0593.

MAINE WASTE PROCESSING CORP

201 East Lake Street, Suite 222 Wayzata, Minnesota 55391

October 26, 2017

Kathy Tarbuck, Project Manager Maine Department of Environmental Protection 17 State House Station Augusta, Maine 04333-0017

Re: Juniper Ridge Landfill Amendment Application to Allow Disposal of Unprocessed MSW at Juniper Ridge Landfill beyond March 31, 2018

Dear Ms. Tarbuck:

As you know, NEWSME Landfill Operations, LLC and Bureau of General Services have submitted an Amendment Application to amend a prior amendment (#S-020700-WD-BC-A). The prior amendment allowed up to 81,000 tons per year of non-bypass Maine MSW to be disposed at the Juniper Ridge Landfill until March 31, 2018 and the current amendment application would extend the approval of the same amount of MSW until the remaining disposal capacity under the current JRL license (#S-020700-WD-N-A) has been utilized.

The Penobscot Energy Recovery Company (PERC) supported the 2013 Amendment, and we support the current amendment application as well. The reasons for PERC's support are twofold. Casella has been a long term partner and supporter of PERC, but also provides an environmentally sound, economically beneficial land disposal facility needed to safely handle PERC's ash and residual materials. Secondly, the approval of the permit modification allows Casella to continue to provide delivery levels of MSW that are essential for the continuing operation of the PERC facility.

You are probably aware, the date of March 31, 2018 has critical importance for the future operations of the PERC facility in Orrington, Maine. The 30-year disposal contracts between PERC and a large number of Maine cities and towns will expire as will the 2012 contract with Casella for the disposal of processing residues from PERC (ash, FEPR, bulky waste, bypassed MSW), and for the delivery of MSW to PERC.

In October of 2017, Maine Waste Processing Corporation ("MWPC" the fuel procurement group contracted with PERC), on behalf of Penobscot Energy Recovery Company, Limited Partnership, USA Energy Group, LLC, ESOCO Orrington, LLC, gained substantial agreement with Casella

Waste Systems, Inc., Pine Tree Waste, Inc., and New England Waste Services of ME, Inc. for the final terms to enter into a new Disposal Agreement ("Agreement"). This Agreement in many ways mirrors the 2012 PERC/Casella contract mentioned above. Under the terms of this Agreement, Casella will provide the majority of the MSW tons delivered to PERC, including the continuation of the delivery of the tons displaced by the closure of MERC in Saco/Biddeford. MSW from Casella transfer stations in Waterville and Bath would also be delivered by Casella to PERC. PERC will continue to have a disposal site for its processing residues and ash. All of these provisions in the Agreement between Casella and PERC are essential to the future operation of PERC.

However, this new PERC/Casella Agreement, to become effective on April 1, 2018, is subject to and conditioned upon receipt by NEWSME/BGS of a final, non-appealable approval allowing continued disposal of up to 81,000 tons per year of non-bypass Maine MSW at the Juniper Ridge Landfill beyond March 31, 2018. It is our hope that the important role that the Juniper Ridge Landfill plays in the overall integrated solid waste management system is fully recognized when considering the requested permit modification.

Please let me know if I can be of any assistance or if I can provide any further information on this very important issue.

Thank you.

Sincerely,

Kevin Trik Kevin Tritz



November 20, 2017

Kathy Tarbuck, Project Manager Board of Environmental Protection 17 State House Station Augusta, ME 04333-0017

Re: Time Extension DEP Permit # S-020700-WD-BC-A, Juniper Ridge Landfill

Dear Manager Tarbuck:

Old Town is in the unique position of both being the host community for Juniper Ridge Landfill and being one of the Charter Municipalities of Penobscot Energy Recovery Corporation ("PERC"), which disposes of incinerator ash, front end process residue and bypass at the Landfill. It also is a member of the Municipal Review Committee (MRC). State law (38 M.R.S. §1305(1) mandates that each municipality provide disposal services for the domestic and commercial solid waste generated within its borders, and Old Town has entered into a long-term contract with PERC through 2033 in order to meet this statutory obligation.

Old Town has sought to reduce the amount of MSW disposed of at PERC. One reason for doing so was because the State required municipalities to make adequate progress toward achieving the State goal of recycling or composting, "by January 1, 2014, 50% of the municipal solid waste tonnage generated each year." (See 38 M.R.S. §§2132 and 2133.) Another reason for doing so is to reduce Old Town's costs of complying with the State mandate to provide disposal services by reducing the amount of MSW ultimately disposed of.

Therefore, it is in Old Town's best interests that PERC have a landfill facility available to it on a continuing basis so that the residuals of waste-to-energy facility operation - incinerator ash, front end process residue and bypass – generated by that facility will continue to have a disposal facility. This enables Old Town to continue to use PERC to satisfy its fundamental State mandate to provide disposal services. It also is in Old Town's best interests to increase the amount of MSW it recycles, both to show adequate progress toward the State recycling goal and to reduce its solid waste disposal costs. This requires backfilling of Old Town's MSW requirements to PERC.

For both reasons, Old Town supports the Maine Bureau of General Services ("BGS")/NEWSME Landfill Operations, LLC ("NEWSME") removal of condition 10 in DEP Permit # S-020700-WD-BC-A. If condition 10 does not get changed this will not help Old Town to meet either the



| b be it in condition to does not be changed this will not help one town to meet child the | | | | | | | |
|---|--------------------|-----------|-------------------------|--------------------|--|--|--|
| CITY CLERK | FINANCE DEPARTMENT | | PUBLIC WORKS DEPARTMENT | WELFARE DEPARTMENT | | | |
| 827-3980 | 827-3962 | | 827-3974 | 827-3983 | | | |
| CODE ENFORCEMENT | PARKS & RECREATION | ASSESSING | WASTE TREATMENT | FAX | | | |
| 827-3081 | 827-3061 | 827.3060 | 827.3070 | 827.3070 | | | |

the State disposal mandate or the State recycling goal. Without the change requested by BGS/Casella, the ongoing availability of the Landfill for disposal of PERC residual waste and the opportunity for backfill to permit increased recycling may not exist.

This matter illustrates the complexities and interrelatedness of the solid waste management system that has evolved in Maine as a result of decades of federal, state, and local mandates and actions. Any change in permits and policies for one portion of that system can have unintended negative consequences for other portions of that system. The City of Old Town believes that the March 31, 2018 date needs to modified or removed in condition 10 of the current permit and the City supported a similar change in 4/7/2014 (see attached letter).

Sincerely,

William & Mayo

William J. Mayo Old Town Manager

cc: Old Town City Council

PERKINS THOMPSON

ATTORNEYS & COUNSELORS AT LAW

ESTABLISHED 187

ONE CANAL PLAZA PO BOX 426 PORTLAND ME 04112 TEL 207.774.2635 FAX 207.871.8026

www.perkinsthompson.com

Robert Foley, Chairman Board of Environmental Protection 17 State House Station Augusta, ME 04333-0017

April 7, 2014

Re: Appeals from DEP Permit # S-020700-WD-BC-A, Juniper Ridge Landfill ("Permit")

Dear Chairman Foley and Board Members:

This firm represents the City of Old Town ("Old Town"), an intervenor and participant in the hearings below on the application in this matter and the host community for the Juniper Ridge Landfill ("Landfill"). Under Chapter 2, Section 24 C of the Maine Department of Environmental Protection's ("DEP") Rules, any person who submitted written comments on the application may file a written response to the merits of an appeal. Old Town submitted written comments to DEP on the application in this matter. This letter constitutes Old Town's written response to the merits of the appeal of this Permit filed by the Bureau of General Services ("BGS") and NEWSME Landfill Operations, LLC ("NEWSME") (the "Appeal").

Old Town is in the unique position of being both the host community for this Landfill (BGS/NEWSME Exhibit #3) and a Charter Municipality of Penobscot Energy Recovery Corporation ("PERC"), which disposes of incinerator ash, front end process residue and bypass at the Landfill. It also is a member of the Municipal Review Committee ("MRC"), another intervenor in this matter. State law (38 M.R.S. §1305(1)) mandates that each municipality provide disposal services for the domestic and commercial solid waste generated within its borders, and so Old Town has entered into a long-term contract with PERC (which expires March 31, 2018, as MRC's Board President Chip Reeves stated in his testimony) in order to meet this statutory obligation.

Old Town has sought to reduce the amount of MSW it disposes of at PERC. One reason for doing so is because the State requires municipalities to make adequate progress toward achieving the State goal of recycling or composting, "by January 1, 2014, 50% of the municipal solid waste tonnage generated each year." (See 38 M.R.S. §§2132 and 2133.) Another reason for doing so is to reduce Old Town's costs of complying with the State mandate to provide disposal services by reducing the amount of MSW ultimately disposed of. Indeed, subsequent to the hearings in this matter but prior to issue of the Permit, Old Town entered into an amendment to its "Contract for Residential Refuse Collection & Recycled Materials Services" with Casella Waste

PHILIP C. HUNT IOHN 5. UPTON PEGGY L MKGBHEE MEUSSA HANKEY MURPHY IOHN & HOBSON IAMES N KATSAFICAS TIMOTHY P. BENKIT GORDON SCANNELL, JR. FRED W. BOPP III MARK P SNOW WILLIAM J. SHELS DAVID 8. MCCONNELL PAUL D. PIETROPACILI RANDY I CRESWELL IULIANINE C. RAY DAWN M. HARMON CHRISTOPHER M DARGE STEPHANIE & WILLIAMS PETER | McDONELL SARA N. MOPPIN SHAWN K DOIL KOSEPH G. TALBOT LAUREN & WELIVER IOSEPHIC, SIVISKI

> JOHN & CIRALDO 1956 - 2010

Robert Foley, Chairman April 7, 2014 Page 2

Systems, Inc. subsidiary Pine Tree Waste, Inc. to increase the amount of recycling to be conducted in Old Town, with Casella agreeing to backfill any shortfall in Old Town MSW guarantees to PERC that is attributable to the additional recycling. The effectiveness of that amendment is dependent upon final action on the BGS/NEWSME application.

Therefore, it is in Old Town's best interests that PERC have a landfill facility available to it on a continuing basis so that the residuals of waste-to-energy facility operation -- incinerator ash, front end process residue and bypass – generated by that facility will continue to have a disposal facility. This enables Old Town to continue to use PERC to satisfy its fundamental State mandate to provide disposal services. It also is in Old Town's best interests to increase the amount of MSW it recycles, both to show adequate progress toward the State recycling goal and to reduce its solid waste disposal costs. This requires backfilling of Old Town's MSW requirements to PERC to permit additional recycling.

For both reasons, Old Town supports the BGS/NEWSME Appeal. While Old Town's position before DEP on the application was that it did not oppose or object to the application, certain aspects of the Appeal directly affect Old Town's solid waste management functions. Limitation of the annual amount of MSW disposed of at the Landfill to 81,800 tons per year reduced by any backfilled amounts delivered to PERC may have a negative effect on the Landfill's continued availability as a disposal facility for PERC residuals. Limitation on the Permit's duration to the earlier of the period of time during which licensed disposal capacity remains available at the Landfill or until March 31, 2016, ignores the need for PERC to have this disposal capacity available at least through the current Old Town/PERC agreement date of March 31, 2018, and preferably for so long as the Landfill's current disposal capacity exists. Also, without the changes requested by BGS/NEWSME's Appeal, the opportunity for backfill to allow increased recycling may not exist.

This matter illustrates the complexities and interrelatedness of the solid waste management system that has evolved in Maine as a result of decades of federal, state, and local mandates and actions. Any change in permits and policies for one portion of that system can have unintended negative consequences for other portions of that system. The City of Old Town believes that the permit amendment issued by the Department has potential negative, and likely unintended, consequences upon its chosen solid waste disposal method and upon its recycling efforts. For these reasons, Old Town respectfully requests this Board to grant the BGS/NEWSME Appeal.

Sincerely,

James N. Katsiaficas

cc: Old Town City Council William J. Mayo, City Manager, Old Town DEP Service List