

Merrill's Wharf  
254 Commercial Street  
Portland, ME 04101

PH 207.791.1214  
FX 207.791.1350  
tdoyle@pierceatwood.com  
pierceatwood.com

February 28, 2013

Mr. Michael T. Parker  
Dept. of Environmental Protection  
17 State House Station  
Augusta, ME 04333-0017

RE: DEP Application #S-020700-WD-BC-A

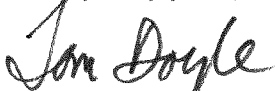
Dear Mike:

I enclose the Pre-Filed Direct Testimony of the Bureau of General Services (BGS) and NEWSME Landfill Operations, LLC (NEWSME). BGS and NEWSME will present four witnesses for their direct testimony. Each witness will summarize his direct testimony briefly, and then the four witnesses will be available for cross-examination as a panel. We anticipate requiring no more than 90 minutes for our direct testimony presentation, excluding any cross-examination of our witnesses.

As I noted at the pre-hearing conference, and as I reiterate here for the record, BGS and NEWSME are fully supportive of Maine's solid waste management hierarchy. Consistent with the Department's prior precedent, including most recently the March 2011 BEP decision on use of MSW bypass for the JRL soft layer ("the hierarchy is not a regulatory standard that is applied to individual waste licensing decisions of a technical nature"), however, we do not believe that it is a relevant licensing standard for this application. Thus, to the extent that the waste management hierarchy is used as a review standard in this proceeding, we respectfully object as it would violate the applicant's constitutional due process rights, is unlawfully vague, and creates impermissible delegation issues. Nevertheless, we understand the Hearing Officer has ruled that the waste management hierarchy will be considered in this proceeding and we have presented testimony on this topic because of this. As indicated in the application and as underscored by pre-filed testimony, this application is consistent with the State's solid waste management hierarchy. Because of this and because this application satisfies all applicable review criteria, the Commissioner should approve this application.

Please let me know if you have any questions.

Very truly yours,



Thomas R. Doyle

TRD/dcu  
Enclosures (original and one copy)

cc: Intervenor Service List (Via email and USPS)

**STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**IN THE MATTER OF**

**JUNIPER RIDGE LANDFILL                    )  
DEP APPLICATION S-020700-WD-BC-A        )**

**PRE-FILED DIRECT TESTIMONY  
of**

**BUREAU OF GENERAL SERVICES (BGS)  
and  
NEWSME LANDFILL OPERATIONS, LLC (NEWSME)**

**FEBRUARY 28, 2013**

**EXHIBIT LIST FOR PRE-FILED DIRECT TESTIMONY  
OF BUREAU OF GENERAL SERVICES AND  
NEWSME LANDFILL OPERATIONS, LLC**

**TAB**

**Michael T. Barden**

Memorandum of Agreement..... BGS/NEWSME #1

**Brian G. Oliver**

CV ..... BGS/NEWSME #2

Host Community Compensation and Facility Oversight Agreement

with First and Second Amendments ..... BGS/NEWSME #3

Lease Agreement between City of Lewiston and Casella Recycling ... BGS/NEWSME #4

**Michael S. Booth**

CV ..... BGS/NEWSME #5

Pages from 2003 West Old Town Landfill Amendment Application ... BGS/NEWSME #6

Comparison of JRL Leachate to Leachate from MSW Landfills ..... BGS/NEWSME #7

**Jeremy M. Labbe**

CV ..... BGS/NEWSME #8

Odor Complaint Management and Response Plan ..... BGS/NEWSME #9

JRL Odor Control Operations..... BGS/NEWSME #10

JRL Cell 8 Landfill Gas System Expansion Drawings..... BGS/NEWSME #11

JRL Odor Related Complaints 2007-2012..... BGS/NEWSME #12

JRL Cell #3 Operation Compliance Noise Study ..... BGS/NEWSME #13





**Pre-Filed Direct Testimony of Michael Barden  
Before the Maine Department of Environmental Protection**

**Juniper Ridge Landfill**

**DEP Application# S-020700-WD-BC-A**

**Introduction and Qualifications**

My name is Michael Barden. I am the Manager of the State-owned Landfills, a position that is located in the Department of Economic and Community Development (DECD). I have held this position since September 2012. I have held previous positions as a senior energy planner in the Governor's Energy Office, Grants Administrator for Efficiency Maine Trust and Maine Public Utilities Commission, Environmental Affairs Director with Maine Pulp and Paper Association and Division Director with Maine Department of Environmental Protection. I have Bachelor of Science Degrees in Chemistry and Microbiology and Master of Science Degree in Regional Resources Planning.

In 2011, the Maine Legislature approved LD 1903 (Public Law 2011, Ch 655), which eliminated the State Planning Office (SPO) and transferred its duties and responsibilities for ownership and management of state-owned landfills to the Department of Administrative and Financial Services, Bureau of General Services (BGS) and DECD. The State owns 3 solid waste landfills – Carpenter Ridge, Unorganized Territory at T2 R8 (licensed, but undeveloped); Juniper Ridge Landfill, Old Town; and Dolby Landfill, East Millinocket. Pursuant to Ch 655, the landfills are owned by BGS and managed by DECD. The roles and responsibilities for management, operation and oversight of the state-owned landfills are governed under a Memorandum of Understanding between BGS and DECD, effective October 2012. *See BGS-NEWSME Exhibit #1.*

**Operations at Juniper Ridge Landfill**

NEWSME Landfill Operations, LLC, a subsidiary of Casella Waste Systems, Inc., is responsible for all operations management and permitting/compliance activities at JRL, pursuant to the Operating Services Agreement (OSA) between the State and Casella, effective February 2004. As part of the State's oversight activities at JRL, NEWSME provides me copies of all required regulatory reports submitted to Maine DEP, including water quality monitoring reports, semi-annual/annual certification statements and reports, and cell construction reports/drawings. In addition, NEWSME provides me electronic copies of several monthly activity reports, including summary of monthly landfill activities and planned activities for subsequent month, citizen complaint logs, overweight truck logs, host community benefit and state solid waste fee

payments, and landfill delivery log sheets. I provide copies of all monthly reports to the Juniper Ridge Landfill Advisory Committee and other interested parties, including municipal officials in Old Town, Alton and Orono.

In regards to my duties at JRL, I review the above noted regulatory documents and monthly reports, and schedule/conduct landfill site visits to monitor operations and compliance with the OSA. On occasions, I participate in workshops with NEWSME and technical consultants to receive briefings on landfill construction design, site hydrogeology and environmental monitoring programs.

### **Amendment Application**

In September 2012, NEWSME, consistent with the OSA, prepared the pending amendment application to accept MSW from Maine sources as a result of the sale and closure of the Maine Energy Recovery facility in Biddeford. I, along with legal counsel from the Attorney General's Office provided review comments to NEWSME on the draft application prior to finalization and submittal to DEP, including the revision changes submitted to DEP in December 2012. In addition to minor editorial corrections, the State requested that NEWSME include an annual cap on the tonnage of MSW disposed at JRL.

After review of the application, I believe the proposed license amendment is consistent with the operations of Juniper Ridge Landfill as set forth in the OSA, and I would request that the Commissioner approve the application.

Dated: 2/25/13

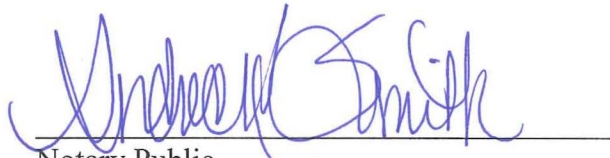
  
Michael T. Barden

STATE OF MAINE  
Kennebec, SS

Personally appeared before me the above-named, Michael T. Barden, and made oath that the foregoing is true and accurate to the best of his knowledge and belief.

Before me,

Dated: 2/25/2013

  
Notary Public  
Name: **ANDREA K. SMITH**  
Notary Public, Maine  
My Commission Expires **October 19, 2017**



Memorandum of Agreement  
July 1, 2012 through June 30, 2014

Department of Administrative & Financial Services  
Bureau of General Services  
AND  
Department of Economic and Community Development  
Landfill Manager Position

**I. PURPOSE, OBJECTIVE AND EXPECTED OUTCOMES OF THIS AGREEMENT**

The purpose of this Memorandum of Agreement (MOA) is to set forth the terms and conditions agreed upon by the Department of Administrative & Financial Services (DAFS), Bureau of General Services (BGS), the owner of the State-owned landfills, and the Department of Economic & Community Development (DECD), the manager of the State-owned landfills, with regard to the management, operation, and oversight of the State-owned landfills.

The Memorandum Administrators are:

For BGS, the Director of the Bureau of General Services, or designee

For DECD, the Landfill Manager

Either party may change the above designated Administrator upon written notice to the other party.

Currently, the State of Maine owns three landfills:

- Carpenter Ridge Landfill is located in T2 R8 (West of Lincoln, Maine). The landfill is licensed but not developed. The State is responsible for the management of the landfill.
- Juniper Ridge Landfill is located in Old Town, Maine. The landfill is licensed and currently in operation, accepting for disposal licensed waste streams. The landfill is operated by Casella Waste Systems under an Operating Services Agreement executed in 2004.
- Dolby Landfill is located in East Millinocket, Maine. The landfill is licensed and currently in operation. It is accepting for disposal only wastes generated by paper mill operations located in East Millinocket. The landfill is operated by Sevee and Maher Engineers, Inc., under an operating agreement that expires on June 30, 2013.

The parties agree that the landfills covered by this MOA are to be licensed, maintained, operated, and closed in accordance with applicable environmental rules and regulations, and in accordance with the respective operating service agreements.

This MOA defines the responsibilities and the obligations of BGS and DECD with regard to the licensing, maintenance, operation and closure of the landfills covered by this MOA.

Memorandum of Agreement  
July 1, 2012 through June 30, 2014

**II. RESPONSIBILITIES OF EACH PARTY**

- A. The DECD Landfill Manager shall maintain regular communications with the operators of the respective sites and shall conduct site visits from time to time and/or at the request of BGS. The DECD Landfill Manager will notify BGS of such contacts or visits through an email or other written means.
- B. The DECD Landfill Manager is responsible for providing BGS with monthly updates pertaining to the contractual obligations and operations of each site.
- C. The DECD Landfill Manager is responsible for proper administration of agreements related to each site and shall coordinate with BGS during any negotiations, modifications, or amendments to such agreements.
- D. The DECD Landfill Manager shall represent BGS at the Juniper Ridge Landfill Citizen Advisory Committee meetings, and should similar committees be established for the other sites, shall also represent BGS at those respective committee meetings.
- E. The DECD Landfill Manager is responsible for undertaking and completing tasks related to the State's ownership of the landfill properties, as more fully described in Appendix A (attached hereto).
- F. The DECD Landfill Manager will notify BGS immediately of any issues or complaints regarding the sites.
- G. The BGS Administrator shall notify the DECD Landfill Manager of any issue or complaints that may impact the management of the sites.
- H. BGS, with advice and assistance from the DECD Landfill Manager, shall be responsible for the negotiation and execution of any contracts or contract amendments related to the operation of the landfills and shall be responsible for all matters related to the licensing of the landfills.
- I. DAFS shall be responsible for ensuring that funding is available for any and all payments related to the operations and maintenance of the landfills.
- J. The DECD Landfill Manager will comply with the DAFS Communications policy with respect to all media inquiries and will comply with the DAFS policy for any Freedom Of Access Act requests.

**III. FUNDING**

Funding and operating expenses for the DECD Landfill Manager are allocated within the budget of DECD. The funds are Other Special Revenue funds derived from a transfer of Tire, Battery and Waste Recycling fees administered by DAFS through Maine Revenue Services.

Funding for the operations, licensing, and maintenance of the sites, will be provided by the Maine Solid Waste Management Fund and by direct appropriation from the Legislature to DAFS.

Memorandum of Agreement  
July 1, 2012 through June 30, 2014

The DECD Landfill Manager, with guidance from DAFS, is authorized to make expenditures from the Funds.

There will be no funds exchanged between DAFS and DECD as a result of this MOA.

**IV. AMENDMENTS**

This MOA may be amended only by written agreement of all parties.

**V. RENEWALS and TERMINATION**

This MOA must be reviewed and renewed no later than 60 days prior to the beginning of each new fiscal year, starting in June, 2014. The MOA may be terminated by mutual consent of the parties after receiving Legislative approval to terminate.

**SIGNATURES**

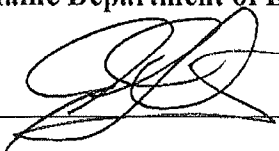
Reviewed and approved by:  
**Donald L. McCormack, Director**  
Bureau of General Services

 DATE 10-19-12

Reviewed and approved by:  
**H. Sawin Millett, Commissioner**  
Department of Administrative & Financial Services

 DATE 10-19-12

Reviewed and approved by:  
**George Gervais, Commissioner**  
Maine Department of Economic and Community Development

 DATE 10/19/2012

Memorandum of Agreement  
July 1, 2012 through June 30, 2014

**APPENDIX A**

**TASKS FOR LANDFILL OVERSIGHT BY DECD ADMINISTRATOR**

Juniper Ridge Landfill

- Attend meetings of Advisory Committee, assist as appropriate
- Serve as State's point of contact with City of Old Town, Town of Alton, and all state agencies
- Be point of contact for landfill neighbors and issues
- Monitor contractor for compliance with Operating Services Agreement
- Review landfill operations
- Coordinate activities with AG's Office
- Complete, provide monthly reports as appropriate
- Assist with licensing and permitting issues related to landfill operations
- Keep state's website current on landfill activities
- Review engineering, water quality and other landfill reports
- Assist with annual report
- Other tasks as appropriate

Dolby Landfill

- Serve as State's point of contact with Towns of East Millinocket and Millinocket, GNP, and all state agencies
- Be point of contact for landfill neighbors and issues
- Secure and maintain contract for landfill maintenance and operational needs with qualified provider
- Coordinate activities with AG's Office
- Review landfill operations
- Complete, provide monthly reports as appropriate, including billing
- Assist with licensing and permitting issues related to landfill operations
- Review engineering, water quality and other landfill reports
- Assist with annual report
- Other tasks as appropriate

Carpenter Ridge Landfill

- Serve as State's point of contact with Penobscot County Commissioners and other parties
- Be point of contact for landfill neighbors and issues
- Oversee maintenance of license permits related to landfill
- Coordinate activities with AG's Office
- Assist with annual report
- Other tasks as appropriate





**Pre-Filed Direct Testimony of Brian Oliver  
Before the Department of Environmental Protection**

**Juniper Ridge Landfill**

**DEP Application S-020700-WD-BC-A**

**I. Introduction and Qualifications**

My name is Brian Oliver. I am the Regional Vice President for Casella Waste Systems and Vice President of NEWSME Landfill Operations, LLC (“NEWSME”), the operator of the Juniper Ridge Landfill (“JRL”). My responsibilities include oversight of all Casella facilities and operations in the State of Maine. A copy of my curriculum vitae is attached. *See* BGS/NEWSME Exhibit #2.

I’m extremely proud of the 350 hardworking Casella employees in the State of Maine who work every day to provide cost effective, comprehensive solid waste management solutions to the communities and businesses in the State of Maine. In my pre-filed testimony, I will explain the events that led to the submittal of this application, how it is consistent with the State’s waste management policy, and the benefits that result from the approval of the application. Others will follow my testimony with a description of the application itself and how it meets the regulatory standards for an amendment to the JRL license.

**II. Application Background**

NEWSME operates the State-owned JRL under a 30-year operating services agreement with the State. The current operating license for JRL was approved by the DEP in April of 2004 as an amendment to an existing license. The 2004 amendment approved additional waste streams and increased landfill capacity to handle Maine generated wastes. That amendment limited the acceptance of municipal solid waste, or MSW, at JRL to by-pass from the then four

active MSW incinerators in the State. Here we are in 2013 and, as you are aware, the Maine Energy Incinerator (“MEI” or “Maine Energy”) facility has been shut down, ending a perennial source of controversy and providing Biddeford and Saco with economic development and job creation opportunities. The current amendment application asks that the conditions that limited MSW disposal at JRL be modified to allow disposal of up to 93,000 tons of in-state MSW each year. This would provide the Maine communities and businesses that used the MEI facility environmentally and economically sound options to handle the part of their waste streams that cannot be reused or recycled.

Throughout Casella’s involvement with the State-owned landfill, we have always been very clear that MSW is a waste stream that the facility was intended to handle. As discussed in detail on page 2 of our Response to Public Comments document, this was stated in our proposal in July 2003 to the State to be selected as the operator, and in the October 2003 amendment application to expand the waste streams and capacity at the landfill. It was also contemplated at pages 7 and 8 of the Host Community Compensation and Facility Oversight Agreement with Old Town effective in 2005, in which Casella agreed to pay the City \$2.50 per ton for MSW from Maine Energy that is disposed at JRL if Maine Energy ceased to operate. *See* BGS/NEWSME Exhibit #3. There are two reasons for this consistent position. First, the incinerators need to bypass MSW on occasion, and there must be somewhere to dispose of the waste when that occurs. Second, one or more of the incinerators or landfills that currently accept MSW could cease to operate, and again, there must be somewhere to dispose of the excess MSW if that occurs. JRL has, in fact, been accepting MSW as bypass on a regular basis since 2005. This amendment application is not proposing a new waste stream or a condition that was not anticipated in the granting of the facility license in April of 2004.

The cities of Saco and Biddeford have long expressed the desire for the closure of MEI to happen. Both cities have a strong belief that long term economic development and job creation will be achieved through this facility closure. Maine Energy was located in Biddeford in the 1980s, long before Casella had a presence in Maine, which occurred in 1996. However, that location has been very controversial from the start. The developer of Maine Energy, a company called KTI, had a very contentious relationship with Biddeford and Saco.

When Casella acquired KTI in 1999, it also assumed ownership of Maine Energy, and with that ownership all of the controversy attached to the incinerator. As a result of many years of discussion, and two State-sponsored task forces, Casella and Biddeford agreed to work cooperatively to find a mutually agreeable approach for the future of Maine Energy, including the possibility of it being closed. This closure opportunity was memorialized in the Biddeford Waste Handling Agreement, dated March 1, 2007, in which the two parties agreed to work cooperatively towards the closure of Maine Energy in a manner that furthered our mutual interests.

There were many approaches that seemed to have promise but never succeeded. Discussions with Biddeford occurred over many years. Finally, on August 1, 2012, Biddeford and Casella signed a Purchase and Sale Agreement under which Biddeford would purchase Maine Energy and it would be closed. The agreement became effective on November 30, 2012. In addition, as part of the agreement, Casella or its subsidiary will be initiating its Zero Sort® curbside recycling program in Biddeford in July 2013, which will dramatically increase the MSW recycling rate in that City.

Closing Maine Energy means that the in-state MSW that the plant was incinerating needs another disposal site. Since these are Casella's customers, and we have an obligation to service

our customers, we initially made the approval to dispose of MSW at JRL a condition of the sale of Maine Energy. Our view was that it would be inappropriate to shut down the facility with no long term home for the disposal of this waste. We agreed with the Bureau of General Services (“BGS”), the owner of the JRL, to limit the amount of MSW sent to JRL to 123,000 tons per year from in-state customers. This self-imposed limitation will ensure that these customers have a disposal option for their waste and the proposed amount of in-state MSW that JRL can accept is based on these tonnages. We are proposing a tonnage cap, as opposed to carrying over specific customers, as it would be administratively impossible to attempt to track new or existing individual customers, which are constantly changing, that could ultimately go through various in-state transfer stations or direct to JRL. These transfer stations accept in-state waste that previously went to MEI, as well as commercial, industrial, and residential customers that may never have disposed at MEI. All these tonnages are then consolidated into trailers for disposal at licensed facilities. Tracking which individual customers comprise these trailer loads is impossible. All contracted out-of-state waste that previously was sent to Maine Energy will be diverted back to facilities outside the State of Maine.

Even though this amendment application has not yet been approved, Casella has honored its commitment to Biddeford and sold Maine Energy to the City effective November 30, 2012. Casella stopped operations at Maine Energy at the end of 2012. While this amendment application continues to be processed by the DEP, MSW from Maine communities that had been going to Maine Energy is currently going to the recently constructed Casella transfer station in Westbrook. Until Casella obtains approval as requested in this application, the Maine MSW will be disposed of at approved disposal facilities other than JRL. These currently include the

Penobscot Energy Recovery Company (“PERC”), ecomaine, and Casella facilities outside the State of Maine.

Casella recently executed an agreement with PERC that reduces the amount of MSW we are asking to be disposed at JRL. This is an agreement that, like the sale of Maine Energy to Biddeford, has been under discussion with PERC for some time. As part of this agreement with PERC, if the JRL application is approved, Casella will deliver at least 30,000 tons of in-state MSW to PERC each year until 2018. This provision will help stabilize PERC’s MSW supply base, which is necessary to keep electricity generation at full capacity. This is particularly a challenge for PERC during the winter months when MSW generation is down. This provision will also allow PERC to displace out-of-state MSW currently being combusted at PERC and we understand it will generate approximately \$450,000 annually of additional tipping fees for PERC. In addition, Casella also agreed to deliver to PERC all MSW volume it collects in the PERC Charter Municipalities and not to cause any PERC Charter Municipality’s MSW to be diverted to any disposal facility other than PERC.

The Casella/PERC agreement also contains a section providing for a very robust recycling opportunity for the PERC communities. Currently, communities using PERC run the risk of significant financial penalties if recycling causes the tonnage they deliver to PERC to go down. In the future, for any of PERC’s Charter Municipalities (members of the Municipal Review Committee) that join Casella’s Zero Sort Recycling® program, Casella will replace delivery shortfalls to PERC resulting from Zero-Sort Recycling® with additional Maine MSW. Therefore, there will be no financial penalty for these Charter Municipalities as a result of increased recycling with Casella and the PERC facility will receive the necessary fuel.

### **III. Consistency with Waste Management Policy**

Although not applicable to the approval criteria for this application, the topics I've just described are consistent with Maine's waste management hierarchy in 38 M.R.S. § 2101.

#### **A. Waste Reduction**

First, with respect to waste reduction, when Maine Energy was operating, approximately 170,000 tons of out-of-state MSW was incinerated at that facility per year, and the residue (Front End Process Residue, or "FEPR" and ash) was disposed at Juniper Ridge. This residue, because it is generated in Maine, is defined as Maine waste under Maine statute. 38 M.R.S. § 1310-N(11). With the closure of Maine Energy, Casella will stop delivering the 170,000 tons of out-of-state waste to MEI, and will no longer need to dispose of the resulting ash and other residues at JRL. Rather, Casella has appropriately organized delivery of those out-of-state tons to licensed facilities outside the state in instances where we have contracts. In addition, we understand from PERC that the 30,000 tons per year of Maine waste that Casella will deliver to PERC, if this application is approved, will displace approximately the same amount of out-of-state MSW that is currently being combusted at PERC. In total, this represents a reduction of approximately 200,000 tons of out-of-state waste coming to Maine.

#### **B. Reuse and Recycling**

Second, with respect to reuse and recycling, expanding Zero-Sort Recycling® by Casella, especially in the PERC Charter Municipalities (as described earlier in my testimony) and in southern Maine, will significantly increase recycling. When one makes recycling easier, as Zero-Sort® does, more people recycle and less waste is disposed.

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. Casella has found the benefits of Zero Sort® recycling to 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 more efficient collection of materials. All of these advantages encourage greater amounts of recycling and more people to participate in recycling, ultimately giving communities the opportunity to recycle larger amounts and more items, thereby reducing the amount of MSW that must be managed by alternate means, such as incineration or landfilling. For example, in the City of Old Town, where a Casella subsidiary, Pine Tree Waste, Inc., operates a Zero Sort® collection program, the City has seen a 126% increase in the amount of recycling year over year. Casella is also in the process of amending the Residential Refuse and Collection and Recycled Material Services Agreement with Old Town to extend the agreement for an additional 5 years subject to approval of this application. The Old Town amendment would also provide 64 gallon recycling totes, at Casella's expense, to every household in Old Town in an effort to further increase this recycling percentage. Examples of the amount of MSW diverted by the Zero Sort® recycling programs in a number of Maine and New England communities are shown on the graph contained in Attachment 6 of the amendment application.

As noted above, Casella or its subsidiary will be initiating its Zero Sort® curbside recycling program in Biddeford in July 2013, which will dramatically increase the MSW recycling rate in that City. The Biddeford program will be similar to other programs CWS has implemented in many communities within the State.

Beyond Biddeford, in Southern Maine, the 13 Tri-County municipalities that 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. These programs reduce the amount of MSW 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 limits their ability to continue to expand their recycling programs. As a result, the waste stream coming from these communities will already have been subject to municipal recycling programs at least as effective as those imposed by State law.

Casella continues to expand its Zero-Sort® program and is in direct negotiations with several Maine communities in this regard. As another example of its efforts to expand recycling, Casella has just executed an agreement with the City of Lewiston to construct a Zero Sort® processing facility. This facility will handle the in-state recyclable materials currently sent to Charlestown, MA, and be the catalyst to expand recycling efforts in the State of Maine and further assist the State in achieving its recycling goals. Casella will also undertake commercially reasonable efforts to dispose of non-recyclable residue generated from the processing of these recyclable materials in the Lewiston facility at the Mid-Maine Waste Action Corporation ("MMWAC") incinerator located in Auburn, Maine, unless that facility is unable or unwilling to accept such material. At full capacity, the Lewiston facility will need to dispose of approximately 2,800 tons of residue annually at MMWAC, resulting in additional in-State fuel for that incinerator. The project will be a capital investment of approximately \$4 million, and will create approximately 25 new jobs with an annual payroll of about \$1 million. A copy of Casella's recently executed Lease Agreement with Lewiston is attached as BGS/NEWSME Exhibit #4.

Casella has developed and continues to implement state-of-the-art-resource optimization programs in the State to address both the recycling and source reduction goals of the State. In 2011, Casella 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 locations in Maine. This recycling and re-use includes: 145,500 tons of recyclables related to processing construction and demolition debris at its KTI facility in Lewiston Maine; 235,400 tons from programs managed by Casella Organics including its Hawk Ridge Compost Facility in Unity, Maine; and 109,500 tons of MSW recyclables from Maine businesses and communities. Casella subsidiary Pine Tree Waste 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. As a result, the waste stream coming from the communities and businesses we service will already have been subject to recycling and reuse programs at least as effective as those imposed by State law.

### **C. Incineration**

As discussed earlier, under its agreement with PERC, if this application is approved, Casella will deliver at least 30,000 tons of in-state MSW to PERC annually until 2018. This provision will help stabilize PERC's MSW supply base. This is a challenge for PERC during the winter when MSW generation is lower. This provision will also allow PERC to displace out-of-state MSW currently being combusted at PERC and we understand will generate approximately \$450,000 annually of additional tipping fees for PERC. Additionally, Casella agreed to deliver to PERC all MSW volume it collects in the PERC Charter Municipalities and not to cause any PERC Charter Municipality's MSW to be diverted to any disposal facility other than PERC.

The enhanced recycling opportunities for PERC and its member communities under the new PERC Agreement are discussed earlier in my testimony.

Recognizing that the other two incinerators might be able to take at least some of the volume of MSW that used to go to MEI, especially in the winter months, I also have had discussions with both ecomaine and MMWAC regarding future volumes of MSW. I met with Kevin Roche, General Manager of ecomaine on October 9, 2012. We discussed Casella providing in-state MSW volumes to ecomaine, but did not reach agreement due to the inability to come to terms on pricing. We left the door open for future discussions. I also met with Joe Kazar, Executive Director of MMWAC on October 25, 2012, to discuss potential opportunities. I offered to work together towards a similar outcome that we reached with PERC. I stated that Casella could provide MSW volumes and also work towards a robust recycling initiative for the MMWAC member communities with the ability to backfill displaced MSW volumes. I have not heard back from Joe as of this date.

Finally, this proposal will actually decrease the overall waste tonnage accepted at JRL. This will, therefore, increase the life of the JRL facility.

#### **IV. Conclusion**

In conclusion, there are many benefits to several parties involved in this proceeding from the decision to sell and close Maine Energy and the approval of this Application:

- PERC and its partners, including the MRC Communities, will get at least 30,000 tons per year of additional in-state MSW that will generate approximately \$450,000 of additional revenue annually because it will displace out-of-state sources that pay significantly lower disposal fees.
- The City of Old Town will get additional host community revenue on this material under the provisions in Casella's 2005 Host Community Agreement with the City, which specifically contemplated MSW from the closure of Maine Energy being permitted for disposal at JRL. If this application is approved, Old Town will also begin benefitting from an escalator on the \$2.50 per ton fee on this MSW.

- Although approval of this application is no longer a pre-condition of the sale of Maine Energy, Casella's commitment to its relationship with Biddeford in proceeding with that transaction allows the City to fulfill a decades-long goal of closing Maine Energy, thereby unleashing opportunities for economic development in Biddeford.
- Approximately 200,000 tons of out-of-state waste previously or currently delivered to Maine will get pushed back out-of-state.
- Opportunities for robust recycling opportunities will be pursued to help Maine reach its recycling goals and to further reduce waste disposal.
- Fewer tons will be delivered annually to the JRL as a result of this transaction saving valuable landfill space.
- A transfer station has been constructed in Westbrook to handle material that used to go to Maine Energy, providing additional revenue and job creation opportunities in that community.
- Utilization of a State of Maine asset, JRL, for Maine communities and businesses.

With this amendment application approved, JRL will be regulated the same way as are the other Maine landfills that are licensed to accept municipal solid waste. In 2010, these landfills accepted more than 139,000 tons of MSW. They are not limited to only what is bypassed from Maine incinerators. They have no annual tonnage limit on the MSW they can accept for disposal, but this application has offered a cap of 93,000 tons from Maine sources.

Dated: 2/27/13

BOL  
Brian Oliver

STATE OF MAINE

YORK, ss.

Personally appeared before me the above-named Brian Oliver and made oath that the foregoing is true and accurate to the best of his knowledge and belief.

Before me,

Dated: 2/27/13

Dianne C. Ursia  
Notary Public  
Name:  
My Commission Expires:

DIANNE C. URSIA  
Notary Public, Maine  
My Commission Expires April 16, 2013



**BRIAN G. OLIVER, CIA, MSA**

10 Dunn Estates Drive  
 Scarborough, ME 04074  
 (207) 883-9801 (HOME)  
 (207) 286-1668 (WORK)  
 Brian\_Oliver@casella.com

**FINANCIAL MANAGEMENT EXPERIENCE****Casella Waste Systems, Inc., Saco, ME****1996-Present**

Regional Controller / Regional Vice President. Manage fiscal affairs for Eastern Region, involving 30 divisions in 3 states, for company providing integrated waste management solutions for communities in VT, NH, ME, upstate NY and northern PA. Provide financial planning consultation to senior management and lead staff of 14 controllers, 12 general managers and 7 support staff to generate financial reporting, ensure internal controls, and facilitate business development. Select, supervise, train, and evaluate staff.

**Budgeting and reporting:** Perform financial analyses and assist with strategic planning, focusing on cost effective use of corporate resources and appropriate growth in revenue. Complete revenue and earnings projections. Prepare, review, and control budget, including implementing action plans to mitigate budget variances. Oversee cash management and prepare monthly close, quarterly, and annual reports.

- Created and implemented company policies, procedures, and internal controls, consistent with generally accepted accounting principles, to maintain integrity for revenues which increased rapidly from \$25M to \$250M.
- Maximized profits, exceeding budgeted internal growth in each of the past 11 years. Results achieved through formulating pricing models focusing on incremental growth, vertical integration of operations, development of routing/disposal infrastructure, and improvements in personnel selection and retention.
- Formulated and implemented operating/accounting plan to liberate \$13 million in restricted cash to pay down corporate debt.
- Achieved excess in free cash flow budget each fiscal year through working capital improvements, profit maximization and reductions in capital spending.
- Reduced regional accounts receivable from 20% to under 3%. Results achieved through implementing improvements in credit policies, formulation of incentive plans, and use of outside collection agencies.
- Introduced work place initiatives, reducing employee turnover percentage by more than 37% through Fiscal Year 2009. Results achieved through improvements in hiring, training, and compensation practices.

**Business development:** Collaborate with management in regional business planning to develop new markets, densify existing markets, and maximize profitability. Evaluate potential acquisitions and divestitures, including completing proformas and due diligence examinations. Handle related negotiations, involving coordinating approval process with local, state, and federal governments.

- Negotiated, closed on contracts, and integrated financial functions, information systems, and operations for 4 landfill and 30 hauling and recycling acquisitions.
- Negotiated 2 landfill expansions, 3 transfer station permit increases, and 1 new transfer station.
- Negotiated 5 Host Community Benefit Agreements.

**S-K-I Ltd., Killington, VT****1987-90 and 1993-96**

Senior Internal Auditor. Directed internal audit function and provided financial planning consultation for company operating major ski resorts. Led team of 3 auditors to plan, manage, and perform financial, information system, and operational audits for revenues of up to \$100M. Completed financial analyses, evaluating integrity of internal controls and formulating recommendations to alleviate weaknesses and inefficiencies. Evaluated potential mergers and acquisitions, including completing proformas and due diligence examinations. Provided consultation on system and product development to ensure value and appropriate internal controls.

**Alderman's Chevrolet**, Rutland, VT

**1986-87**

Business Manager. Oversaw business affairs for large volume vehicle dealership. Sold financing, insurance, and extended service agreements, including advising customers as to contractual and regulatory terms. Developed and maintained accounting system to record and track sales data.

- Enhanced dealership profitability through increasing annual contractual sales revenue from \$50K to 500K.
- Introduced management information systems to generate sales aids, formulate customer payment information, and prepare associated contracts.

**Bass Shoe Outlet**, Rutland, VT

**1984-86**

Manager. Directed operations of high volume chain retail store. Oversaw customer relations, merchandising, inventory control, advertising, cash management, and human resources. Emphasized excellence in service and monitored current regional fashion trends to meet needs of customers and build profitability. Prepared financial reports for corporate management. Selected, trained, supervised, and evaluated 10 associates.

**OTHER EXPERIENCE**

**General Electric Company**, Rutland, VT

**1990-93**

Machinist/Toolmaker. Performed precision machining for manufacturer of aircraft engine components. Read and interpreted detailed tool, gauge, and product drawings. Designed, repaired, and manufactured tooling and related gauges.

- Acquired Extensive experience with CAD systems, numerical control machines, mills, lathes, and grinders.
- Completed extensive apprenticeship program, incorporating 6000 hours manufacturing training/experience with 900 hours of study in related technical courses.

**EDUCATION**

**Saint Michael's College**, Winooski, VT

**M.S.A. 1998**

Program: Administration with a specialization in Planning and Control, including financial and strategic planning.

**Bryant College of Business Administration**, Smithfield, RI

**B.S. 1983**

Major: Business Administration; Minor: Accounting.

**PROFESSIONAL CONTINUING EDUCATION**

Participate in ongoing program of professional development to improve qualifications and maintain status as Certified Internal Auditor.

**PROFESSIONAL CERTIFICATIONS**

Certified Internal Auditor, November 1994 • Vermont State Certified Toolmaker, April 1993

**COMMUNITY ACTIVITIES**

Coach Little League and Community Services Basketball.

**MANAGEMENT INFORMATION SKILLS**

Microsoft Windows • Microsoft Excel • Microsoft Word • Soft-Pak • JD Edwards • Khalix





**HOST COMMUNITY COMPENSATION AND  
FACILITY OVERSIGHT AGREEMENT**

This Agreement ("Agreement") made as of the 9<sup>th</sup> day of December, 2005, by and among the STATE OF MAINE, acting by and through its Executive Department, State Planning Office (the "State"), the City of Old Town, Maine, a municipal corporation organized and existing under the laws of the State of Maine, having its principal offices at 150 Brunswick Street, Old Town, Maine 04468 (the "City") and Casella Waste Systems, Inc., a Delaware corporation having a place of business at 25 Greens Hill Road, Rutland, Vermont 05702 ("Casella").

WITNESSETH:

WHEREAS, the STATE OF MAINE, acting by and through its Executive Department, State Planning Office, pursuant to Resolve 2003, ch. 93 (the "Resolve"), agreed to purchase from Fort James Operating Company ("FJ"), and FJ agreed to sell to the State, FJ's solid waste landfill (the "Landfill") located in Old Town, Maine; and

WHEREAS, an operator of the landfill was sought through a competitive bid process conducted by the State Planning Office; and

WHEREAS, Casella was selected as the operator of the Landfill; and

WHEREAS, by deed dated 3 February 2004, recorded in the Penobscot County Registry of Deeds in Book 9188, Page 153, FJ conveyed the Landfill to the State; and

WHEREAS, the State, acting pursuant to the Resolve has entered into an Operating Services Agreement, dated 5 February 2004 with Casella; and

WHEREAS, the parties hereby acknowledge that landfills and their operations may have ongoing impacts on host communities, and the State and Casella agree to provide benefits to the City pursuant to 38 M.R.S.A. § 2170 et. seq. and as further provided in this Agreement; and

WHEREAS, except as provided in the Resolve, 38 M.R.S.A. §§ 2170 to 2177 requires the State to provide certain benefits to the City as the municipality in which the Landfill is located; and

NOW, THEREFORE, in consideration of the foregoing, the mutual promises and agreements herein contained, and for other and good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the State, the City and Casella agree as follows:

**SECTION 1            DEFINITIONS**

“Acceptable Waste” shall mean such material as may from time to time be legally accepted at the Landfill in accordance with applicable MDEP permits and other applicable laws and regulations excluding, however, all Excluded Waste.

“Biomass Ash” shall mean the ash resulting from the operation of the Biomass Generating Facility to the extent the same is disposable at the Landfill under the Existing Permit and meets the definition of “special waste” as defined under Maine Environmental Law.

“Biomass Generating Facility” shall mean the electric generating facility fueled principally with biomass fuel, to be installed at the Old Town Mill.

“City” shall mean the City of Old Town, Maine, a municipal corporation organized and existing under the laws of the State of Maine, also referred to herein as the Host Community.

“Commencement Date” shall be the effective date of this Agreement, which shall be deemed to be the date on which all parties have signed the Agreement.

“Disposal” or “Dispose” shall mean and include the disposal or deposit of Acceptable Waste at or in the Landfill in accordance with applicable DEP permits and other applicable federal, State or local laws, regulations and ordinances, excluding, however, all Excluded Waste.

“Environmental Law” shall mean any federal, state or local law, statute, rule, order, directive, judgment, Governmental Approval or regulation or the common law relating to the environment (including the ambient air, surface water, groundwater, land surface or subsurface strata), or exposure of persons or property to Materials of Environmental Concern, including any statute, regulation, administrative decision or order pertaining to: (a) the presence of or the treatment, storage, disposal, generation, transportation, handling, distribution, manufacture, processing, use, or recycling of Materials of Environmental Concern or documentation related to the foregoing; (b) air, water and noise pollution; (c) groundwater and soil contamination; (d) the release, threatened release, or accidental release into the environment, or other areas of Materials of Environmental Concern, including emissions, discharges, injections, spills, escapes or dumping of Materials of Environmental Concern; (e) transfer of interests in or control of real property; (f) land use, subdivision and zoning; (g) community or worker right-to-know disclosures with respect to Materials of Environmental Concern; (h) the protection of wild life, aquatic and marine life and wetlands, and endangered and threatened species; and (i) storage tanks, vessels, containers, abandoned or discarded barrels and other open or closed receptacles. As used above, the term “release” shall have the meaning set forth in CERCLA, and to the extent it is more extensive or comprehensive, as defined in Maine Environmental Law. Without limiting the

foregoing, the term "Environmental Law" shall include the Maine Forest Practices Act, 12 M.R.S.A. §§8867-A et. seq.

"Existing Permit" shall mean Maine Department of Environmental Protection Permit #S- 20700-7A-A-N, issued July 28, 1993, as amended or revised.

"Excluded Waste" shall mean (a) any Acceptable Waste or any other waste of any nature generated outside of the State of Maine, (b) any waste as of the date of this Agreement 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 (c) 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, provided that Excluded Waste shall not include any waste that would otherwise constitute Excluded Waste hereunder if such category of waste is accepted at another disposal facility in the State of Maine owned or operated by the State, subject in all instances to the prior receipt of any and all required licenses or permits for such category of waste. Notwithstanding the foregoing, the parties acknowledge and agree that, subject to applicable laws and regulations and such certifications as the State may reasonably require, Casella may bring construction and demolition waste generated outside the State of Maine for processing within the State of Maine solely for the purposes of allowing Casella to generate biomass fuel required in connection with the provision of biomass fuel to FJ or its successor or assigns under the C&D Fuel Agreement between FJ and Casella dated February 5, 2004. Casella agrees to use its best efforts to ensure that any such construction and demolition waste generated outside the State of Maine and processed in the State of Maine is free of putrescible waste. This term shall also include such other wastes and materials as Casella determines, in the reasonable exercise of its commercial judgment, pose a risk or danger to the operation or safety of the Landfill or to the human or natural environment or are otherwise reasonably unacceptable to Casella provided, however, that in no event may FJ Waste be excluded or otherwise deemed Excluded Waste unless such exclusion is required by applicable law, regulation, permit, license, authorization or approval.

"Expansion Permit" shall mean any and all federal, state, local and other governmental permits, permit modifications, operation plan modifications, other modifications, statutory amendments and legislation, licenses, approvals, authorizations or amendments necessary for the expansion of the Landfill beyond the licensed footprint as of the date hereof.

"FJ" shall mean Fort James Operating Company, a Delaware Corporation with a place of business in Old Town, Maine or its successors or assigns.

"FJ Waste" shall mean collectively all Mill Waste and all Biomass Ash.

“Force Majeure” shall mean any act, event or condition affecting the Landfill or to the extent that it materially and adversely affects the ability of either party to perform or comply with any obligation, duty or agreement required of the party under this Agreement, provided such act, event or condition is beyond the reasonable control of the party or its agents relying thereon and is not the result of the willful or negligent act or omission of the party relying thereon. Force Majeure includes, without limitation but by way of illustrating the actions, events and conditions constituting a Force Majeure hereunder: (a) an act of God, epidemic, lightning, earthquake, fire, explosion, storm, flood or similar occurrence; (b) an act of the public enemy, war, blockage, insurrection, riot, general arrest or restraint of government and people, civil disturbance or disobedience, sabotage or similar occurrence; or (c) a strike, work slowdown, or similar industrial or labor action.

“Governmental Approval” means any and all approvals, licenses, permits, authorizations (or the transfer thereof) required by any Governmental Authority for the design, construction, improvement, alteration, ownership or operation of the Landfill and all related projects, improvements or land use or the transfer thereof.

“Host Community Fee” shall mean the fees to be paid monthly by Casella (and/or the State) for Acceptable Waste disposed of at or in the Landfill as stated in Section 3 herein.

“Host Community” shall mean the City of Old Town and may also be referred to as the “Host Municipality” or the “City”.

“Landfill” shall mean the solid waste landfill located in Old Town, Maine, that the State has acquired from FJ pursuant to the Resolve and all of the assets and properties acquired by the State from FJ in connection with said landfill, including any expansion of the solid waste landfill located at the Premises, whether such expansion is effected under the Existing Permit or under a new, amended or additional Governmental Approval, and any associated land, buildings, appurtenances, equipment and fixtures, the full benefit of all utility arrangements, licenses, approvals and permits to the extent transferable, including rights of assignment to the extent any such licenses and permits are assignable (but subject to any third party consents when required).

“License Amendment” shall mean any and all federal, state, local and other governmental permits, permit modifications, operation plan modifications, other modifications, statutory amendments and legislation, licenses, approvals, authorizations or amendments necessary for the development of the Landfill within the currently permitted footprint for an additional seven (7) million cubic yards.

“Lincoln” shall mean Lincoln Paper & Tissue Co., LLC

“Lincoln’s Biomass Ash” shall mean the ash resulting from the operation of the Lincoln biomass boiler located at Lincoln’s Mill in Lincoln, Maine.

“Materials of Environmental Concern” shall mean any: pollutants, contaminants or hazardous substances (as such terms are defined under CERCLA, the Maine Protection and Improvement of Waters Act, 38 M.R.S.A. § 361-A, or the Maine Uncontrolled Hazardous Substances Sites Law, 38 M.R.S.A. § 1362.1), pesticides (as such term is defined under the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. §§ 136 et seq.), solid wastes and hazardous wastes (as such terms are defined under the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq., and Maine’s Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. §§ 1301 et seq.), chemicals, other hazardous, radioactive or toxic materials, oil, petroleum and petroleum products (and fractions thereof), asbestos and asbestos-containing materials, polychlorinated biphenyls (PCBs”) or PCB-containing materials, or any other material (or article containing such material) listed or subject to regulation under any law, statute, rule, regulation, order, Governmental Approval, or directive due to its potential, directly or indirectly, to harm the environment or the health of humans or other living beings.

“MDEP” shall mean the Maine Department of Environmental Protection, and any successor agency or department of the State of Maine.

“Mill Waste” shall mean waste from the Old Town Mill of a composition consistent with the waste FJ (or its successors or assigns) is permitted to dispose of at the Landfill under the Existing Permit, provided it meets the definition of “special waste” as currently defined by Maine Environmental Law.

“Operating Services Agreement or OSA” shall mean the Agreement between the State and Casella effective on 5 February 2004 and pursuant to which Casella is authorized to operate the Landfill.

“Premises” shall mean the real estate, together with all buildings and improvements thereon, situated in Alton and Old Town, Maine and more particularly described in Exhibit A of the Operating Services Agreement, including the Landfill.

“Reconciliation Notice” shall mean the written notice provided by the State and/or Casella to the City each month indicating the number of tons of Mill Waste, Biomass Ash and other waste of any kind or material disposed of or utilized at or in the Landfill during the month.

“Resolve” shall mean Resolve 2003, Chapter 93 of the Maine Legislature pursuant to which the State was authorized to acquire from FJ, and to own and cause to be operated, the Landfill.

“SPO” shall mean the State Planning Office, an Executive Department of the State.

**SECTION 2                    STATE LAW, OPERATING SERVICES AGREEMENT**

2.1     State Law. The parties agree that the construction, operation and maintenance of the Landfill are subject to the procedures and requirements of 38 M.R.S.A. §§ 2170 to 2177 and the Resolve, as in effect on the date of this Agreement. In the event that any provision of 38 M.R.S.A. §§ 2170 to 2177 conflicts with the specific language of the Resolve, the language of the Resolve shall prevail. The City agrees that Casella's and the State's performance of their obligations under this Agreement fully satisfies the State's and Casella's obligations to the City under these statutory sections and the Resolve for the duration of Casella's role as operator under the OSA.

2.2     Operating Services Agreement. The responsibilities of the State and Casella, relative to the landfill and its operation, are identified in the Operating Services Agreement between the parties, signed February 5, 2004. The State Planning Office is the owner of the landfill property and holds the landfill permits and licenses. .

**SECTION 3                    FEES**

The City shall receive the following fees:

3.1     Host Community Fee. Casella shall pay the City a monthly Host Community Fee for Acceptable Waste disposed of at or in the Landfill, as follows:

- (a) Per ton fee. \$ 1.85 per ton for all Acceptable Waste disposed of at or in the Landfill, except as otherwise provided herein. Construction and Demolition Debris and other Acceptable Waste generated by the City and disposed of at the Landfill at no cost pursuant to Section 4, FJ Mill Waste, as described in Section 2.8 (b)(i) of the OSA (up to 50,000 tons per calendar year ), and Lincoln Biomass Ash, as described in Section 2.8 (c) of the OSA (up to 6000 tons per calendar year), disposed of at or in the Landfill, materials approved for beneficial use by MDEP in writing and set forth in Exhibit 1, as expanded from time to time by Casella as new materials are approved in writing by MDEP for beneficial use at or on the Landfill, tire chips or wire for drainage, lime, fine woodash for cell construction or odor control or other such beneficial use, which must be generated by third parties and used on a short term, sporadic basis, or other materials that Casella accepts for beneficial use and for a tipping or disposal fee (exclusive of transportation costs) of \$5.00 per ton or less, shall be exempt from the per ton fee. Waste collected from City residents or businesses shall not be deemed generated by the City. FJ Mill Waste in excess of 50,000 tons per calendar year and Lincoln Biomass

Ash in excess of 6000 tons per calendar year, respectively, disposed of at the Landfill shall be subject to the \$1.85 Host Community Fee described above.

Annual adjustment. The base Host Community Fee set forth above shall be adjusted annually by multiplying 3.7% times the increase (assuming there is one) in the annual average third party tipping fee (exclusive of transportation, intra-Casella company tip fees and any tipping fees on waste or material not subject to the Host Community Fee) paid at the Landfill. Casella agrees to maintain tipping fees on waste separate and distinct from transportation fees and to avoid offering third parties the opportunity to dispose of waste at lower tipping fees in exchange for higher transportation fees. The first annual adjustment shall be made effective May 1, 2006 and will be in effect for the following twelve months. The next annual adjustment shall be made (assuming an increase or decrease is calculated) on May 1, 2007 and every May 1 thereafter for the term of this Agreement.

(Example of annual adjustment calculation: If the average third party tip fee for the period prior to May 1, 2005 was \$42.50/per ton and the average third party tip for the period May 1, 2005 to May 1, 2006 is \$45 per ton, the annual adjustment effective May 1, 2006 would be:  $\$45 \text{ minus } \$42.50 = \$2.50 \times 3.7\% = \$.09$  increase in host per ton fee, or  $\$1.85 + \$.09 = \$1.94$  per ton). In no event shall the per ton fee fall below \$1.85 ton.

- (b) Per ton fee on new categories of waste. \$2.50 per ton on any category of solid waste not currently approved by MDEP for acceptance at the Landfill that subsequently is licensed as an Acceptable Waste. The categories of wastes currently approved for acceptance at the Landfill are set forth on Exhibit 2. Casella shall provide the City with a copy of all blanket permits related to categories of waste referred to in Exhibit 2 and copies of all specific permits or approvals related to all other waste streams listed in Exhibit 2. Acceptance of a new customer's waste does not constitute a new category of waste if that customer's waste is listed as a currently approved waste category on Exhibit 1. One example of a category of waste for which Casella agrees to pay this higher per ton fee is any waste disposed at the Landfill after a bypass event at the Maine Energy Recovery Company in Biddeford, ME ("Maine Energy") that involves a complete cessation of processing and incineration at Maine Energy for a period of at least 120 consecutive days. The \$2.50 per ton fee would apply to all such Maine Energy waste disposed at the Landfill after the 120 day period and would revert to the per ton fee under Section 3.1(a) if and when Maine Energy resumed operations. Casella agrees that if Maine Energy ceases to operate permanently as a result of a decision by its management



and/or owners, or the Cities of Biddeford and/or Saco or by order of any governmental authority, then the \$2.50 per ton fee would apply from the date of such cessation of operations.

- (c) Reconciliation Notice. No later than fifteen (15) days following the end of each calendar month, Casella shall provide the City with a written Reconciliation Notice for the previous month showing the Host Community Fee owed for the previous month, the number of tons of waste disposed of at or in the Landfill and specifically the number of tons of Mill Waste, Biomass Ash and Lincoln Biomass Ash disposed of at or in the Landfill.
- (d) Payment. Fees payable under this Section shall be paid monthly with payment to be made no later than thirty-five (35) days after the last day of each calendar month. Payments under this Section shall be deemed to have begun accruing on September 1, 2005.
- (e) Adjustments. Upon receiving the Reconciliation Notice, the City may inspect the relevant books and records from the operation of the Landfill in order to verify the Reconciliation Notice and the City may propose any adjustment that such review of books and records may disclose. Casella may accept or reject said adjustment, and in the event Casella rejects said adjustment, the parties shall resolve such rejection through the dispute resolution process set forth in Section 20 below. In the event that it is ultimately determined through arbitration that the City shall be entitled to the adjustment in whole or in part, the City shall be entitled to said adjustment together with the legal rate of interest the City may charge on overdue taxes from the date the payment was due as set forth in (d) above.
- (f) Suspension of Payments. Notwithstanding anything above to the contrary, the obligation of Casella to make the payments or provide the benefits set forth in Sections 3.1(a) and 3.1(b) above shall be suspended in the event that, and for so long as, the City:
  - (i) appeals or funds a third party to appeal to any administrative or judicial body any federal, state or local permit, license, approval or determination including, but not limited to, any of the foregoing issued by DEP to the State and/or Casella relating to the Landfill or any expansion thereof (provided that the City's participation in any such permit, license, approval or determination process up to the point of decision shall not be a basis for suspending payment under this provision ), or

(ii) imposes, through ordinance (whether enacted by the City Council or adopted as a result of a citizen initiative or referendum), permit, condition, or other act (including, but not limited to, denial of a Landfill-related application) or failure to act (including, but not limited to, failure to act on a Landfill-related application within the time period required by law), any substantial or material limitation on the State and/or Casella's ability to operate the Landfill or any expansion thereof in accordance with permits and licenses issued by DEP (e.g., enactment or enforcement of an ordinance or regulation that effectively prohibits the operation of the Landfill or any expansion thereof), other than any such ordinance, permit, condition or other act or failure to act that is authorized to be enacted, implemented, done or omitted by the City under the Resolve.

If any of the actions described in clauses (i) or (ii) above occurs, Casella shall, subject to the notice of suspension provision below, place the Host Community Fees normally due the City into an escrow account as of the effective date of the event until the disputed action is resolved by negotiation, mediation, arbitration, or litigation after all appeals, if any, have been exhausted. Disposition of the escrowed Host Community Fees through negotiation or mediation shall be by agreement of the City and Casella. Disposition of the escrowed Host Community Fees through arbitration shall be as determined by the arbitrator. Disposition of the Host Community Fees through litigation shall be payment to the City if the City prevails, and retention by Casella if Casella prevails. If the City prevails in any arbitration or litigation under this subsection, Casella shall pay the escrowed Host Community Fees, plus interest at the rate set forth in 14 M.R.S.A. § 1602-C (1) (B). Following resolution of the disputed action, Host Community Fee payments shall resume as described in Section 3.1 a-e.

This Section 3.1(f) is not intended to preclude the City from exercising any statutory authority it may have to act in its own interest under applicable law, but rather to provide a contractual means for Casella to withhold certain benefits under this Agreement until resolution of the action taken by the City. With respect to clause (ii) above, the parties agree to conduct ongoing communication concerning the operation of the Landfill or any expansion thereof. The City shall make a good faith effort to provide Casella with: (1) copies of agendas of the meetings of the City on which the Landfill appears at the time they are provided to the City Council, (2) copies of any proposed ordinance relating to the Landfill, and (3) written notice at least 15 to 30 days in advance of any meeting of the City in which the City may take action that could reasonably be anticipated to impose a substantial or material limitation

on the ability of Casella to continue to operate the Landfill including any expansion of same. The commencement of an action by the City to prosecute a violation of its Ordinances or of this Agreement shall not constitute grounds for suspension as set forth in this Section 3.1(f).

Notice of Suspension. Casella shall make a good faith effort to advise the City in writing within 15 days of receipt of notice from the City if any ordinance, or other act, or failure to act, of the City described in clause (ii) above could reasonably be anticipated to impose a substantial or material limitation on the operation of the Landfill including any expansion thereof. In the event that Casella elects to suspend payments pursuant to this Section 3.1(f), Casella shall provide 14 days prior written notice of the suspension to the City, which notice shall state the reason(s) for the suspension. In the event the parties do not resolve the matter within 14 days of the receipt of said notice, the suspension shall become effective as of the date of the acts of the City that trigger the right to suspend or the effective date of a City vote in the case of a referendum, as set forth above ("Suspension Effective Date"). In the event that Casella suspends payments pursuant to this Section 3.1(f), Casella shall pay, and the City shall be entitled to, the fees due under Sections 3.1(a) and 3.1(b) up to the Suspension Effective Date.

- (g) Books and Records. The acceptance of Host Community Fee payments shall be without prejudice to the City's rights to an examination of the relevant books and records from the operation of the Landfill during normal business hours in order to verify the amount of the Host Community Fee payments. The State and/or Casella shall keep accurate and true records, books and dates with respect to all material received at the Landfill. Accurate books and other records and data of account shall be kept of such business whether payment was made for cash or otherwise and whether or not monies were actually received. Any examination of the books and records described in this paragraph shall occur at the usual location where such materials are maintained.

3.2 Impact Payments. Casella shall make annual impact payments to the City in accordance with 38 M.R.S.A. § 2176. The impact payments shall be in the amount of \$50,000.00 payable on an annual basis beginning on the Commencement Date and on each subsequent annual anniversary date of the Commencement Date during the term of this Agreement. Casella agrees that it will make the 2005 Impact Payments upon execution of this Agreement. Every five (5) years during the term of this Agreement, the annual Impact Payments shall be increased by \$5,000. The payments shall be used by the City to help determine or help offset potential impacts on the City's public welfare, budget, infrastructure and services arising

out of the construction, operation and maintenance of the Landfill and any expansion thereof in the City, which may include, without limitation, the following:

- (a) Roads. Improvements, maintenance and repair of local roads or traveled ways affected by the Landfill.
- (b) Emergency Response. Development and maintenance of adequate or additional local emergency response capacity relating to the Landfill.
- (c) Employee Monitoring. Financial support to retain, train and supervise municipally employed personnel to monitor the State's, Casella's or the Landfill's compliance with any Environmental Law or the terms of this Agreement.
- (d) Consultant Monitoring. Financial support to retain and supervise consultants as deemed necessary by the City to monitor the State's, Casella's or the Landfill's compliance with any Environmental Law or the terms of this Agreement.
- (e) Budget. Financial support to offset potential losses of tax revenues due to any reductions in assessed values for properties in the City directly attributable to the construction, operation or maintenance of the Landfill.

3.3 Payment in Lieu of Taxes. Casella has already paid the payment in lieu of taxes for the City's fiscal year 2005-2006, which started on July 1, 2005 and will end on June 30, 2006. Beginning in 2006 and on an annual basis thereafter, Casella shall make on or before October 1 of each year a payment in-lieu of taxes to the City equal to the amount of property tax that would have been assessed during the tax year if said property had not been exempt from municipal taxation, calculated in accordance with the financial model utilized by the City and agreed to by Casella. The financial model is attached as Exhibit 3 and will be updated annually for changes in costs, revenues, capitalization rate and available volumes. By way of example, the application of the model resulted in a taxable basis of \$8,780,192 for the City's fiscal year 2005-2006. Future calculations of the payment in lieu of taxes shall apply such model in a manner consistent with that used to produce the result described in the immediately preceding sentence.

3.4 Exclusive Payment Obligations. The parties agree and acknowledge that the payment obligations set forth in this Section 3 shall be the exclusive payment obligations from the State or Casella arising out of or related to the ownership or operation of the Landfill or any expansion thereof, and that the City may not collect or seek to collect other payments, fees, costs, taxes, or payments in lieu of taxes from Casella or the State in respect thereof under laws, regulations, or common law theories in effect at the Commencement Date or under laws, regulations, or common law theories enacted or arising in the future, provided, however, that

nothing in this section shall limit the City's ability to assess taxes related to new projects developed or in connection with the Landfill or for equipment (including motor vehicles) owned currently or in the future by Casella or third parties or to collect reasonable fees that may be required by local ordinances, development review or otherwise, in effect or enacted in the future in accordance with the limitations of the Resolve, provided that all such ordinances and the fees required therein are applicable to all industrial facilities or other businesses with similar impacts in the City.

**SECTION 4                    CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER ACCEPTABLE WASTE GENERATED BY OLD TOWN**

Casella agrees to dispose up to the following amounts of construction and demolition debris, as defined in MDEP Rules Chapter 400.1(FF), and other Acceptable Waste generated by the City (exclusive of waste collected from residents or businesses) at no cost to the City; provided, however, it shall be the City's responsibility and obligation to deliver said construction and demolition debris and other Acceptable Waste to the Landfill:

<u>Year</u>	<u>Tons per calendar year</u>
May 1, 2005 to April 30, 2006	500 tons
May 1, 2006 to end of term	3000 tons

In the event the State and Casella secure a permit to expand the Landfill (as said Expansion Permit is defined herein), and construct the expansion, Casella agrees to accept up to 3000 tons annually (May 1 to April 30) of construction and demolition debris or other Acceptable Waste generated by the City at no cost to the City. The tipping fee for amounts of City-generated Acceptable Waste in excess of those described above shall be the prices of the published Landfill tipping fees for the waste delivered.

**SECTION 5                    INFORMATION AND ENFORCEMENT**

5.1 Information from the State. During the Term of this Agreement, the State agrees to provide all of the following information to the City or the City's consultant designee in a timely fashion:

- (a) Copies of any State or MDEP inspection report relating to the Landfill within five (5) working days of the preparation of the report or its presentation to the State or MDEP.

- (b) Notification of all enforcement or emergency orders for or related to the Landfill, including, but not limited to, abatement orders, cessation orders, final civil penalty assessments, consent orders and decrees and notices of violation within five (5) working days of issuance.
- (c) Copies of all air, soil and water quality monitoring data collected by the State or the MDEP at the Landfill, including, without limitation, leachate and ash testing results and test results related to landfill gas, within five working days after laboratory analysis becomes available to the State.
- (d) Copies of all analyses of the data compiled under subparagraph (c).

5.2 Information from Casella. During the Term of this Agreement, Casella agrees to provide all of the following information to the City or the City's consultant designee in a timely fashion:

- (a) Copies of all air, soil and water quality monitoring data related to the Landfill, including, without limitation, leachate and ash testing results and test results related to landfill gas, conducted by or on behalf of Casella, within five (5) working days after the information becomes available to Casella. Said information shall include the results of any tests which are not required by permit or State regulation.
- (b) A copy of the annual report prepared by Casella and provided to the State pursuant to Section 10.1 of the Operating Services Agreement summarizing in reasonable detail the business and technical operation of the Landfill during the preceding calendar year or portion thereof and such other books and records as the City may reasonably request at the same time that such information is provided to the State. Casella shall maintain accurate records, books and data with respect to the amount of all Acceptable Waste disposed of at or in the Landfill.

5.3 Local Inspections. The City, acting by and through its Code Enforcement Officer, or his or her designated representative, shall have the right to inspect the Landfill during reasonable business hours to ensure that only Acceptable Waste is being received at the Landfill and to confirm compliance with the provisions of this Agreement and the requirements of all Environmental Laws and other applicable laws. The City shall also have the right to take all necessary action to monitor the amount and type of solid waste materials delivered to the Landfill and to perform air, soil and water quality testing at the site, including the right to perform testing at the Landfill in emergency situations without prior notice to the State and/or Casella.

5.4 Hotline. Casella agrees to continue to operate a hotline twenty-four (24) hours per day. The operator of the hotline shall at all times have access to one or more persons with the authority to address any citizen concerns or emergency conditions at the Landfill. Casella shall maintain a written log of all calls to the hotline and upon request by the City, shall promptly provide a copy of the log to the City. If the parties agree at some point in the future that a twenty-four (24) hour hotline is no longer necessary, then Casella may limit the hours of operation of the hotline to no less than eight (8) hours per day/five (5) days per week.

**SECTION 6 PROPERTY VALUE OFFSET**

The parties acknowledge that under state statute, 38 M.R.S.A. § 2175-A and Chapter 475, The Property Value Offset Program of the Maine State Planning Office, owners of property in the City, the value of which has been affected by a state-owned landfill are eligible for reimbursement from the state for loss in property value directly attributable to the construction and operation of the Landfill.

**SECTION 7 WATER SUPPLY MONITORING AND PROTECTION**

The parties acknowledge that under state statute, 38 M.R.S.A. § 2177, persons owning land contiguous to a State-owned Landfill may request that quarterly water quality sampling and analysis be performed on their private water supply and that the provisions of this statute apply.

**SECTION 8 OTHER LANDFILL-RELATED DEVELOPMENT**

The parties acknowledge that in the future Casella may seek to develop projects at or in connection with the Landfill other than for disposal of solid waste. Such future development projects may include, but are not limited to, a landfill gas to energy generation facility and a greenhouse powered by waste heat from a landfill gas to energy facility, or recycling or processing facilities. Casella agrees to work with the State to establish any such project as a taxable facility and Casella further agrees that the City shall derive tax revenue from any leased property and any new non-Landfill structure built thereon. Moreover, prior to the development of any such project, Casella shall invite the City to become a partner in the development venture, with revenue sharing proportionate to the City's investment. The terms of any such arrangement shall be the subject of future negotiations between the City and Casella, which the parties agree shall be undertaken in good faith. Any agreement reached between the parties shall be memorialized in a separate written agreement.

**SECTION 9**                    **TERM OF AGREEMENT**

The term of this Agreement shall be deemed to commence on the Commencement Date and shall end on the earlier to occur of: (a) thirty (30) years after the Commencement Date; or (b) the date the Operating Services Agreement is terminated by either the State or Casella as provided therein, including, without limitation, as set forth in Section 5.3(a) of said Agreement; or (c) the date this Agreement is terminated by one or more of the parties as provided herein.

**SECTION 10**                    **EXPANSION OF LANDFILL**

The parties specifically acknowledge that Casella has an obligation to the State under the Operating Services Agreement to prepare on or before 5 February 2007, an application for an Expansion Permit. At least sixty (60) days prior to submission of the application to the MDEP, Casella shall provide to the City written notice of said proposed expansion. The parties agree to meet within thirty (30) days after receipt of said notice for purposes of discussing the proposed expansion and the draft application. A copy of the Application shall be provided by Casella to the City not later than its submission to MDEP. If Casella demonstrates to the City's satisfaction that the application for an Expansion Permit meets all applicable environmental standards, including the provisions of the City's Ordinances in effect at that time, the City agrees to use reasonable efforts to actively support the application before all applicable agencies, including the MDEP.

**SECTION 11**                    **COOPERATION BETWEEN THE PARTIES**

During the term of this Agreement, the State and Casella agree to cooperate and to work together with the City to minimize and manage the impacts from the Landfill's operations. The parties agree to conduct ongoing communication concerning the operation of the Landfill or any expansion thereof.

**SECTION 12**                    **SUBCONTRACTING**

In the performance of their obligations hereunder, the State and Casella shall have the unrestricted right to subcontract those services that they deem appropriate in their sole discretion, including, without limitation, construction, engineering, design, permitting, operation, maintenance, management and administration; provided, that the State and Casella shall remain fully responsible for the performance of any and all obligations subcontracted hereunder.



**SECTION 13            NO JOINT VENTURE**

Except as otherwise provided in Section 8 herein, and without limiting the State's or Casella's obligations hereunder, the parties acknowledge and agree that nothing contained in this Agreement is intended to nor shall be construed to create a partnership or joint venture between the City and Casella or the City and the State or make the City, Casella and the State partners or joint venturers, or make either party in any way liable or otherwise responsible for the debts, actions, obligations or losses of the other party.

**SECTION 14            CLAIMS UNDER THIS AGREEMENT**

The City agrees that Casella and/or the State may seek injunctive relief to enforce the obligations of the City under this Agreement, and the City hereby waives its governmental immunity for this limited purpose. This provision is expressly intended to permit those legal actions of Casella and the State that may arise directly under or be necessarily related to a breach of this Agreement. Except as provided in Section 3.1(f), the parties agree that, in the event of any dispute or disagreement hereunder, Casella shall continue to make payment of all amounts due hereunder in the manner and at the times specified herein until final resolution of such dispute, whether by mutual agreement or final decision of a court, arbitrator or other dispute resolution mechanism; provided however, that nothing herein shall constitute a waiver of the City's tort immunity.

**SECTION 15            CERTAIN REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE CITY**

The City represents and warrants to the State and Casella as follows:

15.1 The City is validly existing as a political subdivision of the State of Maine in good standing under the laws of the State of Maine.

15.2 The City has full power and authority to enter into this Agreement and to fully perform its duties and obligations hereunder. The City's Town Council has duly authorized the execution and delivery of this Agreement and the City's performance of its duties and obligations hereunder, and this Agreement constitutes a valid and legally binding obligation of the City, enforceable in accordance with its terms.

**SECTION 16**

**CERTAIN REPRESENTATIONS, WARRANTIES AND COVENANTS OF CASELLA**

Casella represents and warrants to the City and the State as follows:

16.1 Casella is a corporation duly organized and existing under the laws of the State of Delaware and authorized to do business and in good standing under the laws of the State of Maine with the full legal right, power and authority to enter into and fully and timely perform its obligations under this Agreement.

16.2 Casella has duly authorized, executed and delivered this Agreement, and this Agreement constitutes a legal, valid and binding obligation, enforceable against Casella in accordance with its terms, subject to bankruptcy, insolvency and other laws affecting creditors' rights generally.

16.3 Neither the execution nor delivery by Casella of this Agreement nor the performance by Casella of its obligations in connection with the transactions contemplated hereby or Casella's fulfillment of the terms and conditions hereof conflicts with, violates or results in a breach of any law or governmental regulation applicable to Casella or materially conflicts with, violates or results in a breach of, any term or condition of any order, judgment or decree or any agreement or instrument to which Casella is a party or by which Casella or any of its properties or assets is bound, or otherwise constitutes a default thereunder.

16.4 No approval, authorization, order, consent, declaration, registration or filing with any federal, state or local governmental authority or agency is required for the valid execution and delivery by Casella of this Agreement or the performance by Casella of its obligations hereunder.

16.5 Casella covenants and agrees to operate the Landfill and otherwise conduct all aspects of its business at the Landfill including compliance with all closure and post closure requirement in compliance with all Environmental Laws and other applicable laws and regulations and permits.

16.6 Throughout the Term hereof, Casella agrees to participate in, and to use reasonable efforts to support the joint citizen advisory committee comprised of representatives from the City of Old Town, the Penobscot Indian Nation and the Town of Alton, as created by the Resolve and amended by LD 597 in the First Special Session of the 122<sup>nd</sup> Legislature.

**SECTION 17**            **SURVIVAL OF REPRESENTATIONS, WARRANTIES  
AND COVENANTS**

All representations, warranties, promises, agreements, statements and covenants made herein or in any schedules or exhibits attached hereto, or in any instrument or document delivered by or on behalf of any party pursuant to this Agreement, shall remain in effect during the Term and shall survive termination hereof to the extent specifically contemplated herein.

**SECTION 18**            **TERMINATION**

18.1 This Agreement may be terminated at any time by mutual written agreement of all of the parties.

18.2 This Agreement may be terminated for an Event of Default as set forth in Section 18 below.

18.3 Effects of Termination.

Termination of this Agreement for any reason shall not relieve a party of its obligations arising prior to the termination date or those that expressly survive termination as set forth herein, except obligations that are expressly extinguished by said termination. In the event the Operating Services Agreement is terminated, Casella's obligations hereunder shall terminate, and the State shall notify the City immediately in writing of such termination, however the State shall remain obligated to perform all of the State's obligations under this Agreement. The State further agrees that in any request for proposals issued by the State for a new operator of the Landfill the State shall include as a specification that the successful vendor shall enter into a host community benefits agreement under terms and conditions at least as favorable to the City as those set forth in this agreement. The City and State agree to meet within thirty (30) days after receipt by the City of notice that the Operating Services Agreement has been terminated for the purposes of discussing the impact of the termination.

**SECTION 19**            **DEFAULT AND REMEDIES**

19.1 Notice/Cure. If any party fails to perform a material obligation under this Agreement, then any other party shall give notice to all parties of such alleged material failure, describing the alleged material failure and the action required to cure such material failure, if any. If the party or parties receiving such notice fail to cure any such material failure to perform pursuant to Section 20 hereof, then an "Event of Default" shall be deemed to have occurred and the other party or parties shall have the rights and remedies set forth in this Agreement.

19.2 Remedies. If any Event of Default occurs (as defined in subsection 19.1 above), then (a) this Agreement may be terminated by a non-defaulting party by giving notice of termination to the defaulting party or parties, and/or (b) pursuant to the dispute resolution process set forth in Section 21 below or the limited judicial process set forth in Section 21.4 below, the non-defaulting party shall have the right to seek whatever damages or remedies that are available in an action at law or in equity it deems necessary or desirable to collect any amounts then due or thereafter to become due under this Agreement or to enforce performance of any covenant or obligation of the defaulting party or parties under this Agreement.

19.3 Sovereign Immunity. Casella and the City acknowledge and agree that nothing in this Agreement, or the execution and delivery of this Agreement, or the agreement by the State to perform its obligations hereunder constitutes or is intended to constitute abrogation of the sovereign immunity of the State with respect to each and every term of this Agreement. In this regard, the State expressly reserves its right of sovereign immunity with respect to its obligations hereunder, and the execution and delivery of this Agreement by the State, and its undertakings herein in no way waive, partially waive, imply a waiver, limit or restrict the State's unconditional right to exercise its right of, or to assert sovereign immunity with respect to any matter, term or issue arising under or relating to this Agreement.

## **SECTION 20            RIGHT TO CURE BREACH**

Upon its receipt of a notice of alleged material failure to perform a material obligation under this Agreement issued under Section 19 hereof, the receiving party or parties shall either:

20.1 Cure the material failure to perform within thirty (30) days of receipt of the written notice from any other party; or

20.2 Continuously demonstrate, within such thirty (30) day cure period, if cure cannot reasonably be effectuated during such period, that it is actively pursuing a course of action which reasonably can be expected to lead to a cure of the material failure to perform (and the cure period shall be extended for so long as the curing party or parties are actively and continuously pursuing such course of action) within a commercially reasonable period of time not to exceed ninety (90) days.

**SECTION 21            RESOLUTION OF DISPUTES**

21.1 Negotiation. The parties agree that in the event of any dispute, controversy or claim arising under or relating to this Agreement or any alleged breach thereof, other than a breach by Casella of its payment obligations, the parties shall attempt to come to a reasonable settlement of any dispute (a) by having their authorized representatives attempt to negotiate a resolution of the dispute for a period of thirty (30) days, and, if not resolved by the authorized representatives, (b) by having other more senior members of each party's management, who have no previous involvement in the dispute, but who have the authority to resolve the dispute, attempt to negotiate a resolution of the dispute for an additional fifteen (15) days.

21.2 Mediation.

(a) In the event that the parties are unable to resolve any dispute through negotiation, the parties agree to mediate any such dispute. The parties agree that mediation shall be conducted promptly and efficiently in an effort to resolve any such dispute.

(b) Any party desiring to invoke mediation shall send notice to the other party regarding the issues to be mediated. Both parties shall, within ten (10) days of such notice, agree upon a mutually acceptable mediator who shall be independent and impartial, have full authority to implement the process required by this paragraph, and have full authority to schedule meetings and to require the production or exchange of relevant information as is necessary to promptly resolve the dispute. If the parties cannot agree upon a mediator within ten (10) days of such notice, then the dispute shall be referred to the American Arbitration Association for the appointment by them of a mediator reasonably local to Penobscot County. Both parties shall pay the cost of the mediator equally.

(c) Any compromise achieved through mediation shall be memorialized in a report rendered by the mediator. In the event that the dispute is not resolved through mediation within sixty (60) days after the mediator has been appointed, the mediator shall render a report regarding the nature of this dispute, the mediator's opinion as to how the dispute should be resolved, and the mediator's opinion regarding which party is at fault in the dispute. The report rendered by the mediator shall be non-binding and shall not be admissible in court against either party, except in connection with an application for attorney's fees as provided below.

(d) Any time limit in this paragraph may be extended by mutual agreement of the parties.

21.3 Arbitration. Subject to Section 21.4 below, any controversy between the parties hereto involving the construction or application of any terms, covenants or conditions of this Agreement, or any claims arising out of or relating to this Agreement, or the breach or default hereof or thereof, not resolved by negotiation or mediation pursuant to Sections 21.1 and 21.2, will be submitted to and settled by final and binding arbitration in the State of Maine, in accordance with the rules of the American Arbitration Association then in effect, and judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. In the event of any arbitration under this Agreement each party shall cover its own expenses, attorney's fees and costs incurred therein. The prevailing party shall be entitled to recover from the losing party reasonable expenses, attorneys' fees and costs incurred in the enforcement or collection of any judgment or award rendered therein.

21.4 Availability of Judicial Relief and Consent to Jurisdiction. In addition to any rights or remedies that the parties might otherwise be entitled to invoke, the parties may seek specific enforcement of any provision of this Agreement or injunctive relief in a legal or equitable proceeding. For purposes of the preceding sentence, and for the enforcement of any arbitration award rendered pursuant to Section 21.3 hereof, the parties and their assigns submit to the jurisdiction of any state or federal court located in the State of Maine in connection with any proceeding or action arising from or relating to this Agreement or the agreements referred to herein. The parties consent to the jurisdiction and venue of any such court and waive any argument that venue in such forums is not convenient. In the event a party commences any action in another jurisdiction or venue under any tort or contract theory arising directly or indirectly from the relationship created by this Agreement, the other parties at their option shall be entitled to have the case transferred to the jurisdiction and one of the venues above-described, or if such transfer cannot be accomplished under applicable law, to have such case dismissed without prejudice.

## **SECTION 22            FORCE MAJEURE**

If any party hereto is rendered unable, in whole or in part, to perform any of its obligations under this Agreement (other than an obligation to pay money when due) as a result of the occurrence of an event of Force Majeure, then the obligations of the affected party shall be suspended and its non-performance thereof excused during the continuation of the event of Force Majeure. At any time that a party intends to rely upon an event of Force Majeure to suspend its obligations or excuse its non-performance as provided in this Section, the affected parties shall notify the other party as soon as reasonably practicable (but in no event later than seventy-two (72) hours following such event) describing in reasonable detail the circumstances of the event of Force Majeure and its ongoing efforts to mitigate the effects of such event of Force Majeure. Notice shall again be given when the effect of the event of Force Majeure has ceased. As a condition of invoking the protection afforded by this Section, the party relying upon an event of

Force Majeure shall be required to exercise its best and most diligent efforts to eliminate the Force Majeure or devise a means of performance notwithstanding the Force Majeure and re-establish performance hereunder as rapidly as possible.

## **SECTION 23            INSURANCE**

23.1 General Insurance Requirements. The State shall require Casella to maintain liability, fire and workers' compensation insurance insuring the City, the State and Casella in the amounts set forth in Schedule 21 of the Operating Services Agreement, as the same may be amended from time to time, issued by financially sound and reputable insurance companies reasonably acceptable to the State that are authorized and licensed to issue such policies in the State of Maine. Casella shall pay any premiums with respect to such policies as they come due. If Casella fails to pay any such premiums when due, the State shall have the right and option to pay any such premiums, whereupon the amount of any such premiums paid by the State shall be reimbursed by Casella to the State upon demand therefore. Upon request from the City, Casella shall promptly provide copies of such policies to the City.

## **SECTION 24            MISCELLANEOUS PROVISIONS**

24.1 Assignment. This Agreement may not be assigned by any party without the prior written consent of the others, which consent may not be unreasonably withheld; notwithstanding the foregoing, Casella shall have the right to assign this Agreement without the consent of the other parties (i) to any Affiliate provided that Casella remains fully liable hereunder and provides reasonable assurances of the same to the State and the City in connection with any such assignment, (ii) in connection with the sale of all or substantially all of Casella's assets (or those of its affiliates) provided, however, in the event of such a sale, Casella shall provide advance notice to the City if in the judgment of Casella's counsel such notice may be given without violating securities or other applicable laws

24.2 Cumulative Remedies. The specified remedies available to a party under this Agreement are not exclusive of any other remedies or means of redress to which such party may be lawfully entitled in the event of any breach or threatened breach by the other party of any provision(s) of this Agreement.

24.3 Captions and Headings. Captions and headings contained in this Agreement are inserted for convenience and reference only and the words contained therein shall in no way be held or deemed to define, limit, describe, explain, modify, amplify or add to the interpretation, construction or meaning of any provision or of the scope or intent of this Agreement, nor in any way to affect this Agreement.

24.4 Amendments and Modifications. This agreement shall not be amended, modified or changed, except pursuant to an agreement in writing signed by or on behalf of the party against whom enforcement of the amendment, modification or change is sought.

24.5 Notices. All notices or other communications required or permitted hereunder shall be in writing and may be given by personal delivery, by overnight express delivery, or by registered or certified U.S. mail, postage prepaid, return receipt requested, properly addressed as follows:

**To the State:**

Executive Department  
State Planning Office  
38 State House Station  
Augusta, Maine 04333-0038  
Attention: Director

With a copy to:

William Laubenstein, Esq.  
Office of Attorney General  
6 State House Station  
Augusta, ME 04333-0006

**To Casella:**

c/o Casella Waste Systems, Inc.  
25 Greens Hill Lane  
Rutland, VT 05702-0866

With a copy to:

Thomas R. Doyle, Esq.  
Pierce Atwood  
One Monument Square  
Portland, ME 04101

**To City of Old Town:**

City Manager  
City of Old Town  
150 Brunswick Street  
Old Town, Maine 04468

With a copy to:

Robert E. Miller, Esq.  
282 Main Street, P.O. Box 414  
Old Town, Maine 04468  
and  
Catherine Lee, Esq.  
Gallagher, Callahan & Gartrell, P.A.  
P.O. Box 5010  
Augusta, ME 04332-5010

Any party may change the address to which notices are required to be sent by giving notice of such change in the manner provided in this Section 24.5. All notices shall be deemed to have been received on the date of delivery if service is made in person, on the day after sent by overnight express delivery service, or on the third (3rd) business day after mailing in accordance



with this Section 24.5, except that any notice of a change of address shall be effective only upon actual receipt.

24.6 Strict Performance. The failure of either party to insist on the strict performance of any of the terms, covenants and provisions of this Agreement or to exercise any right, remedy or option herein contained shall not be construed as a waiver or a relinquishment for the future of such term, covenant, condition, provision, right, remedy or option.

24.7 Severability. In the event that anyone or more of the terms or provisions of this Agreement shall for any reason be held by a court or other tribunal of competent jurisdiction to be invalid, illegal or unenforceable in any respect, in whole or in part, such invalidity, illegality or unenforceability shall not affect any other terms or provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal or unenforceable term or provision had never been contained herein, provided that it is the intention of the parties that, in lieu of such term or provision held to be invalid, illegal or unenforceable, there shall be added by mutual agreement as a part of this Agreement a term or provision as similar in term to such illegal, invalid or unenforceable term or provision as may be possible, valid, legal and enforceable.

24.8 Construction. Words connoting the singular number shall include the plural in each case, and vice versa, and words connoting persons shall include corporations, companies, firms or other entities. The terms "herein", "hereunder", "hereby", "hereof" and any similar terms shall refer to this Agreement; the term "heretofore" shall mean before the date of execution of this Agreement. This Agreement is the result of joint negotiations and drafting and no part of this Agreement shall be construed as the product of anyone of the parties hereto.

24.9 Entire Agreement. This Agreement constitutes the entire agreement between the City, the State and Casella with respect to the subject matter hereof, and supersedes all prior or contemporaneous negotiations, representations, understandings and agreements, whether written or oral, between the parties with respect to the subject matter hereof.

24.10 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original for all purposes, but all of which together shall constitute one and the same agreement.

24.11 Governing Law. This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Maine, without regard to the conflicts of law principles of such State.

24.12 Binding Effect; No Third Party Rights. This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective legal representatives, successors (whether by sale, assignment, transfer, merger, other acquisition, operation of law, or



**EXHIBIT 1**

**Materials Approved By MDEP For Beneficial Use**

**Bark pile adjacent to the Landfill.**

**EXHIBIT 2**  
**List of Acceptable Categories of Maine Waste**  
**Licensed by the DEP for Disposal at WOTL**  
**As of September 2005**

Air and water filtration media  
Approved land utilization wastes  
Ash and soot  
Catch basin grit  
Commercial and industrial laundry waste  
Construction and demolition debris  
Contaminated soil  
Dredge spoils  
Filter press cake and collegin scrapings  
Front-end process residue  
Leather manufacturing wastes and scraps  
Metal grinding waste  
Municipal Solid Waste (incinerator bypass only)  
Off-spec., spent, or spilled chemicals  
Over-sized bulky waste  
Papermill sludge  
Petroleum contaminated debris  
Pigeon waste  
Railroad ties and treated wood  
Sand blast grit  
Spoiled/discarded food or consumable related wastes  
Tire shredder waste  
Treatment sludge  
Waste water treatment plant grit and screenings  
Wood chips

**EXHIBIT 3**

**Financial Model for Calculating Annual Payment in Lieu of Taxes**

Example 2 of Proposed Landfill Valuation Methodology

		Assume 800 acres of land	
	Active Landfill Area	82 acres	
	Licensed and Developed		
A	Total Volume	-	cy
B	Volume Consumed to Date	-	cy
C	Remaining Volume	-	cy
B	Estimate Annual Usage of available volume	-	cy
C	Estimate Remaining Life of Active Landfill Area	30.25 years	
D	Estimate Annual Gross Income per year	#DIV/0!	
	Estimate Annual Expenses per year including		
E	escrowed amounts for proper closure	\$	
	Estimate Annual Net Operating Income Per Year		
F	After Startup	#DIV/0!	
G	Determine a discount rate		15%
	Discount Annual Net Operating Income to Current		
H	Value	Year	Income
		YEAR 1	2005 #DIV/0!
		2	2006 #DIV/0!
		3	2007 #DIV/0!
		4	2008 #DIV/0!
		5	2009 #DIV/0!
		6	2010 #DIV/0!
		7	2011 #DIV/0!
		8	2012 #DIV/0!
		9	2013 #DIV/0!
		10	2014 #DIV/0!
		11	2015 #DIV/0!
		12	2016 #DIV/0!
		13	2017 #DIV/0!
		14	2018 #DIV/0!
		15	2019 #DIV/0!
		16	2020 #DIV/0!
		17	2021 #DIV/0!
		18	2022 #DIV/0!
		19	2023 #DIV/0!
		20	2024 #DIV/0!
		21	2025 #DIV/0!
		22	2026 #DIV/0!
		23	2027 #DIV/0!
		24	2028 #DIV/0!
		25	2029 #DIV/0!
		26	2030 #DIV/0!
		27	2031 #DIV/0!
		28	2032 #DIV/0!
		29	2033 #DIV/0!
		30	2034 #DIV/0!
		31	2035 #DIV/0!
		32	2036 #DIV/0!
		33	2037 #DIV/0!
	Net Present Value		#DIV/0!

Example 2 of Proposed Landfill Valuation Methodology

4	Buffer Land				
	Value at appropriate value per acre	Unit Value			
		718 \$	\$		
	Total Value			#DIV/0!	
	Exempt Property @ 40% of Active Landfill			#DIV/0!	
	Taxable Value			#DIV/0!	
ANTICIPATED ANNUAL VOLUME					
	TYPE	TONS	FEES	GROSS	
	PROCESSING RESIDUAL	-	\$	\$	-
	GP SLUDGE	-	\$	\$	-
	C&D	-	\$	\$	-
	WASTE TO ENERGY ASH	-	\$	\$	-
	WASTE TO ENERGY FRONT END RESIDUAL	-	\$	\$	-
	WASTE TO ENERGY BIPASS	-	\$	\$	-
	SPECIAL WASTE	-	\$	\$	-
	TOTAL	-		\$	-
	SUMMARY STATEMENT WAS 401,000 CY PER YEAR WITH LIFE OF 30.25 ACRES		AVG	#DIV/0!	
	PERIOD OF 2/4/04 TO 4/30/05				
	TYPE	TONS	FEES	GROSS	
	PROCESSING RESIDUAL	-	\$	\$	-
	GP SLUDGE	-	\$	\$	-
	C&D	-	\$	\$	-
	WASTE TO ENERGY ASH	-	\$	\$	-
	WASTE TO ENERGY FRONT END RESIDUAL	-	\$	\$	-
	WASTE TO ENERGY BIPASS	-	\$	\$	-
	SPECIAL WASTE (SLUDGE)	-	\$	\$	-
	TOTAL	-		\$	-
	EXPENSE				#DIV/0!
	INCOME				#DIV/0!
	ANNUAL COST	COSTS	TONS	COST PER TON	#DIV/0!
		\$			

**FIRST AMENDMENT TO HOST COMMUNITY  
AND FACILITY OVERSIGHT AGREEMENT**

This First Amendment to Host Community and Facility Oversight Agreement ("Amendment") is made as of this 17<sup>th</sup> day of **September, 2009**, by and between the STATE OF MAINE, acting by and through its Executive Department, State Planning Office (the "State"), the CITY OF OLD TOWN, Maine, having its principal offices at 150 Brunswick Street, Old Town, Maine 04469 (the "City") and CASELLA WASTE SYSTEMS, INC., a Delaware corporation having a place of business at 25 Greens Hill Lane, Rutland, Vermont 05702 ("Casella").

WITNESSETH:

WHEREAS, the State, the City and Casella are parties to a Host Community and Facility Oversight Agreement, dated as of December 8, 2005 (the "Host Community Agreement"); and

WHEREAS, the State and Casella are parties to an Operating Services Agreement dated as of February 5, 2004, as amended by the First Amendment to the Operating Services Agreement dated as of July 28, 2006, and as further amended by the Second Amendment to the Operating Services Agreement dated as of November 2, 2006 (the "OSA"); and

WHEREAS, the State, the City and Casella wish to amend the Host Community Agreement to clarify the Host Community Agreement (HCA). Two amendments to the Operating Services Agreement (OSA) between the State and Casella have resulted in the need to make the amendment to the HCA ;

WHEREAS, in 2009, State Planning Office instituted new rules regarding holding a public hearing prior to making further amendments to the OSA. The inconsistencies between the OSA and HCA created a misperception that Casella is not operating in compliance with the HCA even though the HCA does not regulate landfill operations.

NOW, THEREFORE, in consideration of the mutual promises and agreements hereinafter contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. The recitals and identification of the parties to this Amendment are incorporated by reference as though fully set forth herein. Capitalized terms not defined or amended herein shall have the meaning given to them in Host Community Agreement.
2. The definitions in the Host Community Agreement are intended to be consistent with the definitions in the OSA. To the extent there is any inconsistency between, or conflict with, a definition in the Host Community Agreement and the same term in the OSA, as it may be amended from time to time, the parties shall consult and agree on which definition shall control.
3. For purposes of clarification and the avoidance of doubt, residue and bulky waste generated at a processing facility located in Maine that produces construction and



demolition wood fuel was a category of acceptable Maine waste licensed by the DEP for disposal at Juniper Ridge Landfill as of September 2005 and therefore is included on Exhibit 2 and does not represent an "expansion of the type of waste" as defined in the Resolve.

The Host Community Agreement is intended to provide for the exclusive payments and other benefits provided by the State and Casella to the City pursuant to State law for the duration of Casella's role as operator of the Juniper Ridge Landfill under the OSA. The Host Community Agreement is not intended to regulate the Landfill or any Expansion thereof, or to give rise to City enforcement of the MDEP License Amendment for said Landfill, any expansion thereof, or otherwise. Any City regulation of the Landfill expansion will occur pursuant to the terms of the City Solid Waste Facilities Ordinance, dated June 1, 2009 provided, however, that this paragraph does not exempt the State and Casella from any obligation to make payment to the City of fees for applications, licenses, reviews, permits and approvals under State, local, federal laws, regulations and ordinances, including but not limited to the City Solid Waste Facilities Ordinance, dated June 1, 2009, all of which shall be in addition to any payments required to be made to the City under the OSA and/or the HCA

4. The first sentence of Section 5.2 of the Host Community Agreement is hereby amended as follows: "During the Term of this Agreement, Casella agrees to make available upon request the following information to the City or the City's consultant designee in a timely fashion."
5. The first sentence of Section 10 of the Host Community Agreement is hereby amended as follows: "The parties specifically acknowledge that Casella fulfilled its obligation to the State under the Operating Services Agreement as amended, to prepare a draft application for an Expansion Permit on or before 5 February 2009."
6. In all other respects, the Host Community Agreement shall remain in full force and effect in accordance with its terms.

IN WITNESS WHEREOF, the undersigned have executed this Agreement on and as of the date first above written.

WITNESSETH:

*George M. [Signature]*  
Name:

*Deane Hayward*  
Name:

*Donald [Signature]*  
Name:

STATE OF MAINE

By: *Margha Faurman*  
Its *Director, State Planning Office*

CITY OF OLD TOWN, MAINE

By: *Margaret [Signature]*  
Its City Manager

CASELLA WASTE SYSTEMS, INC.

By: *B. [Signature]*  
Its Vice President

**SECOND AMENDMENT TO HOST COMMUNITY COMPENSATION  
AND FACILITY OVERSIGHT AGREEMENT**

This Second Amendment to the Host Community Compensation and Facility Oversight Agreement ("Second Amendment") is made as of this 22 day of <sup>February</sup> ~~January~~, 2013, by and among the STATE OF MAINE, acting by and through the Department of Administrative and Financial Services, Bureau of General Services (the "State"), the CITY OF OLD TOWN, Maine, having its principal offices at <sup>888</sup> ~~150~~ Brunswick Street, Old Town, Maine 04469 (the "City") and CASELLA WASTE SYSTEMS, INC., a Delaware corporation having a place of business at 25 Greens Hill Road, Rutland, Vermont 05702 ("Casella").

WITNESSETH:

WHEREAS, the State, the City and Casella are parties to a Host Community Compensation and Facility Oversight Agreement, dated as of December 8, 2005, as amended by the First Amendment to Host Community and Facility Oversight Agreement dated as of September 17, 2009 (the "Host Community Agreement"); and

WHEREAS, the State, the City and Casella wish to amend the Host Community Agreement to clarify Casella's obligations in light of the cessation of operations of the Maine Energy Recovery Facility located in Biddeford, Maine ("Maine Energy"); and

WHEREAS, the closure of Maine Energy has resulted in the need to make this amendment to the Host Community Agreement;

NOW, THEREFORE, in consideration of the mutual promises and agreements hereinafter contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. The recitals and identification of the Parties to this Amendment are incorporated by reference as though fully set forth herein. Capitalized terms not defined or amended herein shall have the meaning given to them in the Host Community Agreement.
2. Section 3.1(b) of the Host Community Agreement currently provides for the payment of a Host Community Fee in the amount of \$2.50 per ton for new categories of waste permitted by the Maine Department of Environmental Protection ("MDEP"), as Acceptable Waste for disposal at the Landfill. For purposes of clarification and the avoidance of doubt, the parties agree that this includes specifically up to 93,000 tons of MSW generated in Maine that is licensed as Acceptable Waste by DEP, including but not limited to the MSW that would have been disposed of at Maine Energy but for a permanent cessation of operations at Maine Energy. Subject to paragraph 5 hereof, the \$2.50 per ton fee shall apply from December 31, 2012, the date of cessation of Maine Energy's operations. Section 3.1(b) of the Host Community Agreement is hereby amended by inserting at the beginning thereof "Notwithstanding any other provision of this Agreement to the contrary,"

3. The Parties have agreed that the \$2.50 per ton fee referred to in paragraph 2 above shall be adjusted annually using the same formula in the Annual adjustment set forth in Section 3.1(a) of the Host Community Agreement. Section 3.1(b) of the Host Community Agreement is hereby amended by adding the following at the end of the existing provision: "Casella agrees to an annual adjustment to the Host Community Fee to be paid for all categories of solid waste not approved by MDEP as of the date of the Host Community Agreement for acceptance at the Landfill that is subsequently licensed as Acceptable Waste, including for MSW generated in Maine, including but not limited to MSW that would have been disposed of at Maine Energy while it was operational but which has been approved for disposal at the Landfill due to a permanent cessation of operations at Maine Energy, and is in fact disposed of at the Landfill. The adjustment shall be calculated by multiplying 3.7% times the increase (assuming there is one) in the annual average third party tipping fee (exclusive of transportation, intra-Casella company tip fees and any tipping fees on waste or material not subject to the Host Community Fee) paid at the Landfill. Casella agrees to maintain tipping fees on waste separate and distinct from transportation fees and to avoid offering third parties the opportunity to dispose of waste at lower tipping fees in exchange for higher transportation fees.

The first annual adjustment (assuming an increase or decrease is calculated) shall be made effective one year after the date on which Casella (or its affiliate) receives a final permit that is not subject to further appeal providing for the disposal at the Juniper Ridge Landfill of up to 93,000 tons of municipal solid waste per year. An annual adjustment (assuming an increase or decrease is calculated) shall be made on each subsequent anniversary thereof for the remaining Term of the Host Community Agreement. In no event shall the per ton fee for such waste fall below \$2.50 per ton."

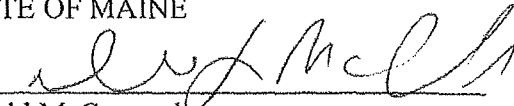
4. In all other respects, the Host Community Agreement shall remain in full force and effect in accordance with its terms as amended previously.
5. The parties agree and acknowledge that the effectiveness of Section 3 of this Amendment shall be subject to and conditioned upon the receipt by Casella (or its affiliate) of a final permit that is not subject to further appeal, providing for the disposal at the Juniper Ridge Landfill of up to 93,000 tons of municipal solid waste per year, in accordance with the application submitted by Casella which is under consideration as of the date of this Amendment.

IN WITNESS WHEREOF, the undersigned have executed this Agreement on and as of the date first above written.

WITNESSETH:

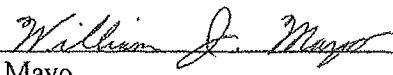
\_\_\_\_\_  
Name:

STATE OF MAINE

By:   
Donald McCormack  
Dir. Bureau of General Services


\_\_\_\_\_  
Name:

CITY OF OLD TOWN, MAINE

By:   
William Mayo  
Its City Manager

\_\_\_\_\_  
Name:

CASELLA WASTE SYSTEMS, INC.

By:   
Its  
Vice President





**City of Lewiston  
Executive Department**

EDWARD A. BARRETT  
City Administrator

PHIL NADEAU  
Deputy City Administrator



February 21, 2013

Robert Cappadona  
Vice President  
Casella Recycling, LLC  
14/24 Bunker Hill Industrial Park  
Charlestown, MA 02129

RE: Lease Agreement between the City of Lewiston and Casella Recycling, LLC

Dear Mr. Cappadona:

On February 19, 2013, the Lewiston City Council voted unanimously to authorize the City to enter into a Lease with Casella Recycling, LLC ("Casella") in the form of the attached Exhibit A (the "Lease"), subject to the approval by the City Administrator and the City Attorney of the form of bonds to be provided, as required under Articles 5D and 25 of the Lease. I am prepared to execute the Lease based on the understanding and agreement, as reflected by this letter agreement, that the form of payment and performance bond (attached as Exhibit B) and performance bond (attached as Exhibit C) will be the form of bonds that Casella will provide at the times and in the amounts specified in the Lease, unless otherwise agreed to by Casella and the City. These forms of bonds were discussed and negotiated by counsel for both Casella and the City, and have been approved by Casella and me, as City Administrator, under the understanding that the form of bonds to be provided under the Lease will be as found in Exhibits B and C. Please sign below to signify your agreement that the form of bonds attached as Exhibit B and Exhibit C will be the bonds provided at the times and in the amounts specified in the Lease.

Upon our signature to this Agreement, both you and I will then execute the Lease.

Sincerely yours,

Edward A. Barrett  
City Administrator

SEEN, READ AND AGREED TO:

CASELLA RECYCLING, LLC

By:   
Title: Vice President

EXHIBIT A

MATERIALS PROCESSING FACILITY LEASE

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Lease Agreement

This Lease (the "Lease") is made and entered into the \_\_\_\_\_ day of \_\_\_\_\_, 2013 by and between the CITY OF LEWISTON, a municipal corporation organized by law with a principal place of business in Lewiston, County of Androscoggin, State of Maine (the "CITY") and Casella Recycling, LLC, a Maine limited liability corporation having its principal place of business in the City of Charlestown, County of Suffolk, Commonwealth of Massachusetts ("CASELLA").

WITNESSETH:

In consideration of the mutual promises herein contained and other good and valuable consideration, receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows.

ARTICLE 1: LEASED PREMISES

The CITY hereby leases to CASELLA and CASELLA hereby leases from the CITY those premises described in Attachment A, annexed hereto (+3 ACRES), and including the buildings and structures located therein known as the Solid Waste Facility Processing Building (collectively the "Premises"). This Lease specifically excludes areas outside of the Premises shown on Attachment A and, more particularly, the CITY's adjacent recycling area and sanitary landfill, all of which shall remain under the sole control and management of the CITY and not subject to any rights of CASELLA. CASELLA shall use the Premises to construct and operate a Recyclable Materials Processing Facility (the "Facility") for the processing of materials that can be recycled, as more fully described in Attachment B ("Recyclable Materials").

ARTICLE 2: TERM & CONSTRUCTION DATE

- A. Term. This Lease shall extend for a term of twenty (20) years from the Effective Date (hereinafter defined) unless sooner terminated as hereinafter provided. The Lease may be extended for additional terms of five (5) years upon mutually acceptable terms and conditions and agreement of the parties.



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B. Construction Date. CASELLA shall have twelve (12) months from the date of execution of the Lease to satisfy (or waive, in CASELLA's sole judgment), the following conditions precedent (the "Conditions Precedent") to effectiveness of the Lease (The first day of the calendar month immediately following the month in which the Conditions Precedent are satisfied is referred to as the "Construction Date"):

(1) CASELLA shall have received all necessary permits, approvals and authorizations, including all state and local construction and operating permits, approvals and authorizations, for the construction and operation of the Facility by the scheduled Construction Date. Casella shall undertake commercially reasonable efforts to obtain such permits, approval and authorizations in a timely manner.

(2) CASELLA shall have secured necessary equity and/or debt financing, in the exercise of its reasonable judgment, for the construction and operation of the Facility in an economically viable fashion for a period of not less than the initial Term of this Lease (all mortgages and financings to be in accordance with Article 24 hereof).

If the Construction Date has not occurred within twelve (12) months of the date of the execution of this Lease or if the Phase I Termination Rights and Phase II Termination Rights further described in Article 5 (A) are triggered pursuant to the terms of said Article V, either party may terminate this Lease, with no liability to the other party, except as set forth in Section 2(C), upon thirty (30) days written notice served on the other party.

C. Rental Deposit. CASELLA shall make a deposit of Twenty Five Thousand Dollars (\$25,000) to the CITY within thirty (30) days of execution of the Lease (the "Rental Deposit"). The Rental Deposit shall be applied to the rental payments for the first year of the Lease in an amount of Two Thousand Eighty Three Dollars and Thirty Three Cents (\$2,083.33) per month. If the Lease is terminated by CASELLA based on the inability of CASELLA to satisfy Conditions Precedent set forth in Section 2(B) (2) above, the Rental Deposit shall not be returned to CASELLA. If the Lease is terminated by CASELLA based on an inability of CASELLA to satisfy Conditions Precedent set forth in Section 2(B) (1) above, or the Lease is terminated by either

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party pursuant to the Phase I Termination Rights or Phase II Termination Rights further described in Article 5 (A), the Rental Deposit shall be returned to CASELLA within thirty (30) days of the termination of the Lease.

ARTICLE 3: RENTAL & EFFECTIVE DATE

- A. Base Rental. In addition to the other obligations imposed herein, CASELLA hereby agrees to pay the CITY, as the base rental (the "Base Rental") during the term hereof, the sum of Five Thousand Six Hundred Thirty Eight Dollars (\$5,638) in advance on the first day of each and every month of said term commencing on the first day of the month following the Effective Date (hereinafter defined). The Effective Date shall be the date of issuance of an occupancy permit to CASELLA for the purpose of operating a Recyclable Materials Processing facility on the Premises or eight (8) months after the Construction Date, whichever occurs first. CASELLA agrees to pay the full annual rental of Sixty-Seven Thousand Six Hundred Fifty-Six Dollars (\$67,656) to the CITY on the first day of the month following the Effective Date in full satisfaction of the Base Rental for the first twelve (12) months of the Lease term ("First Lease Payment").
- B. Additional Rental. In addition to the Base Rental, Casella agrees to pay as additional rental a percentage increase, beginning on the anniversary date of the Effective Date, and each anniversary date thereafter, effective on the anniversary of the Effective Date, an amount equal to the percentage increase of the Gross National Product – Implicit Price Deflator (Source – Survey of Current Business – Department of Labor) as compiled for the most recent twelve (12) month period for which such data is available as compared with the comparable figure for the prior twelve (12) month period. Notwithstanding anything to the contrary, the increase shall not be less than two percent (2%) per year nor greater than five percent (5%) per year.
- C. Place of Payment. Unless and until the CITY has otherwise notified CASELLA in writing, all payments of Base Rental and Additional Rental shall be paid to the CITY by CASELLA in care of the City Treasurer, City of Lewiston, 27 Pine Street, Lewiston, Maine 04240.

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- D. Set-Off. CASELLA shall not have the right or option to set off or deduct from either the Base Rental or Additional Rental any charges or obligation of CASELLA.

ARTICLE 4: PERMITTED USES; LESSEE'S WORK

- A. Material Processing Facility. CASELLA shall use the Premises solely as a Recyclable Materials Processing Facility, which shall be licensed as a solid waste transfer facility by the Maine Department of Environmental Protection (the "DEP Solid Waste Permit") and may also be permitted as a junkyard for waste and material storage by the City of Lewiston (the "City Junkyard Permit"), as such licenses and permits may be amended or modified from time to time, provided that at all times CASELLA shall maintain all requisite licenses and permits to operate the Facility as a solid waste transfer facility and as a junkyard, if a junkyard permit is required. Recyclable Materials activities permitted on the Premises shall be limited to accepting, sorting, and shipping Recyclable Materials for appropriate reuse, which include the materials found on Attachment B, and only those similar non-hazardous materials for which a market exists and that the CITY has approved in writing, such approval not to be unreasonably withheld, conditioned or delayed. The Recyclable Materials on Attachment B may be updated by the parties from time to time. Casella shall not dispose of any materials or residue at the adjacent CITY-owned and operated landfill.
- B. In-State Material. CASELLA shall accept only those Recyclable Materials originating within the State of Maine. No out-of-state waste of any type will be accepted for processing or storage at the leased Premises. For purposes of this section, in-state waste shall not include waste originating from out of state sources that is subsequently processed or handled at a facility located within the State of Maine, with the exception of cardboard, plastic, and other acceptable materials as defined in Section 4 (A) above recovered at the KTI Biofuels, Inc. facility located in Lewiston, Maine.
- C. New Construction and Improvements. CASELLA shall undertake such site work and construct such buildings and structures as may be required to support the activities authorized by this Lease. Such work and construction is preliminarily shown on Attachment A. Final approval of such buildings and structures is subject to CASELLA

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submitting a site plan, prepared and stamped by a State of Maine licensed engineer to the CITY and its Planning Board for review and approval, and building plans and specifications. Such finally approved site plan and building plans and specifications shall be attached to the Lease, be deemed part of the Lease, and be referred to as the Site Plan. CASELLA shall at all times during the Term of this Lease and any extension thereto remain in conformance with the Site Plan as may be modified from time to time pursuant to this Section 4 (C). The Site Plan may be modified in the future by CASELLA if proposed changes are approved in advance by the CITY, such approvals to not be unreasonably withheld, conditioned, or delayed. All buildings constructed on the Premises shall be designed and constructed in accordance with all applicable federal, state, and local laws, rules, and regulations, including conditions imposed by the City Planning Board. CASELLA shall submit plans and specifications to the CITY for any structures which are new or which will be relocated on or after the initial commencement date of this Lease.

- D. Space Provided to CITY. CASELLA shall provide, at no rent to CITY, adequate space within the Premises for the CITY to accept and process universal and electronic waste, waste oil, and appliances or equipment containing Freon, subject to certain indemnity provisions from CITY to CASELLA to be further described in a sub-lease agreement between the parties attached as Attachment C.

ARTICLE 5: COVENANTS OF CASELLA

- A. Acceptance of Premises. CASELLA shall accept delivery of the Premises in an “as is” state, subject to the completion of a Phase I Environmental Assessment to be undertaken by CASELLA by a qualified consulting firm acceptable to the CITY. Should either party deem the results of such assessment to be problematic, either party may terminate this Lease within thirty (30) days of the receipt of the results of the Phase I Assessment with no further obligations to the other (“Phase I Termination Rights”). Alternatively, the parties may agree to undertake a Phase II Environmental Assessment with the cost of such assessment to be divided equally. In the absence of such termination, the parties shall be deemed to have agreed to undertake a Phase II assessment, which CASELLA shall undertake using a qualified consulting firm

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acceptable to the CITY. Should the Phase II assessment indicate a reasonable likelihood of the existence of environmental issues that are likely to require remediation at a cost of twenty-five thousand dollars (\$25,000) or less, CASELLA shall undertake such remediation in a manner, and using contractors, acceptable to the CITY. Should the Phase II assessment indicate a reasonable likelihood of the existence of environmental issues that are likely to require remediation at a cost in excess of twenty-five thousand dollars (\$25,000), the CITY and CASELLA shall each individually, within sixty (60) days of receipt of the results of the assessment, have the right to terminate this Lease ("Phase II Termination Rights"). In the event that either party does not provide notice to the other party of termination within such sixty (60) day period, then the parties shall be deemed to have agreed to continue the Lease in full force and effect and to share equally in those costs of remediation in excess of twenty-five thousand dollars (\$25,000), such remediation efforts to be undertaken by the CITY and made in consultation with CASELLA but without the CITY being bound to follow the CASELLA advice. No representations as to the state of the Premises are made by the CITY.

- B. Business Use. CASELLA agrees that, without prior written consent of the CITY, the Premises shall be occupied by no other person or firm, its agents, employees, contractors, vendors, or suppliers, except in accordance with the provisions hereof with respect to the construction of buildings and facilities and delivery of materials and removal of product and by-products pursuant to the Article 4 permitted activities.
- C. Lawful Use. CASELLA will use and occupy the Premises and appurtenances thereto in a careful, safe, and proper manner and will not commit, suffer, or permit the same to be used for any unlawful purpose and will conform to and abide in all material respects by any and all governmental regulations respecting the Premises and the use and occupancy thereof. Without limiting the generality of the foregoing, CASELLA shall:
1. Obtain and maintain in force at all times all licenses and permits, whether state, federal, or local, necessary for CASELLA to operate its businesses.
  2. Remove all waste material not destined for beneficial reuse to an appropriate place for lawful disposition thereof. Such material will not be accepted or placed in the CITY's adjacent sanitary landfill. CASELLA shall undertake commercially reasonable efforts to dispose of residue from the processing of the Recyclable Materials at the Mid-Maine Waste Action Corporation incinerator

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located in Auburn, Maine unless that facility is unable or unwilling to accept such material.

3. Prevent any leaching of petroleum products or other materials into the ground in accordance with all laws, rules, regulations, and requirements established by or in connection with the Maine Department of Environmental Protection.
4. Cause all conveyors and all machinery, with the exception of mobile processing equipment, to be fully and safely placed within buildings and/or enclosed so as to prevent access by unauthorized persons and to minimize any possible escape of dust and other materials into the atmosphere.
5. Construct its facilities and operate the same in full compliance with all local, state, and federal requirements, specifically including relevant fire prevention codes and environmental laws.
6. Not permanently place, cause to be placed, deposit, or discharge any hazardous waste upon the Premises or upon any other portion of the CITY's adjacent property and further expressly agree that it shall indemnify the CITY from any and all costs, expense, or liability of whatever kind or nature, including reasonable attorneys fees and costs and any penalties and fines, incurred by the CITY in detecting, evaluating, removing, treating, disposing of, or otherwise responding to any hazardous waste placed or deposited in violation of this paragraph. CASELLA agrees that it shall not violate any local, state, or federal regulation, ordinance, or statute pertaining to hazardous waste or hazardous materials and further expressly agrees that it shall indemnify the CITY from any and all costs, expense, or liability, of whatever kind or nature, including reasonable attorneys fees and costs and any penalties and fines, incurred by the CITY for any such violation. Such costs shall be deemed to include, without limitation, the CITY's costs and attorneys fees of defending any suit filed by any person, entity, agency, or governmental authority; paying any fines imposed in connection with such suit; paying any judgments or otherwise settling any damage claims; complying with any order by a court of competent jurisdiction directing the CITY to take any remedial action with respect to such waste; and all associated attorney's fees and costs. For the purpose of this paragraph, the term "hazardous waste" shall be deemed to include every substance now or hereafter designated as a hazardous waste under any provision of state or federal law.

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CASELLA's obligations under this paragraph shall be deemed to survive the expiration or termination of this Lease.

7. Make deliveries to the Premises from 7 a.m. to 5 p.m. on Monday through Friday and from 8 a.m. to 12 p.m. on Saturday, with no Sunday operation, subject to longer daily and/or weekly operation with the CITY's consent. The processing of Recyclable Materials delivered to the Facility will be permitted from 6 a.m. to 10 p.m. to the extent that all processing occurs within an enclosed structure. Notwithstanding the foregoing sentences, CASELLA shall be permitted to perform maintenance and repairs on the plant and equipment at any time.
  8. Operate the Premises so as to produce no more than seventy (70) dBa of noise measured at the property line. Transient noise caused by backup alarms on vehicles shall be disregarded for purposes of determining compliance with this requirement.
  9. All deliveries of Recyclable Materials shall be deposited and stored within the processing building. Once processed, these materials shall be stored inside a building until transported from the Premises. Staging areas and storage of all materials shall be in accordance with the terms and conditions of the City Junkyard Permit, if required, and DEP Solid Waste Permit as such may be modified, renewed, or amended from time to time.
- D. Payment and Performance Bonds. With respect to any construction (labor or materials) contemplated by Article 4 hereof and any repairs to or restoration or reconstruction thereof, and also to any other construction or other work which is lienable under Maine law from time to time in effect, CASELLA shall, prior to commencement thereof, submit a request to the CITY as to whether a bond will be required, and, if requested by the CITY, provide to the CITY a payment and performance bond or bonds naming the CITY as obligee in full contract price for such labor and materials (including, where applicable, any contractual element for profit and/or overhead), all in form and issued by insurers approved by the CITY.
- E. Creation of Additional Hazards. Except for the use of the Premises contemplated by this Lease, CASELLA shall neither do, nor permit, any act or thing which may increase the casualty risk, fire hazard, or insurance coverages on the Premises, except with the prior written consent of the CITY and assumption by CASELLA of additional rates arising from such additional potential hazard. If CASELLA should cause an increase in

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the hazard, the CITY reserves the right to require a higher minimum level of insurance. Without limiting the generality of the foregoing, no fuel burning equipment, except vehicles and boilers necessary for providing heat to buildings, will be used on the Premises.

- F. Utilities. CASELLA shall pay all bills for water, sewer, stormwater, trash removal, gas, and electricity, fuel oil, and other utilities which may be assessed or charged against the occupant of the Premises during the term of this Lease.
- G. Taxation. CASELLA agrees that the Premises shall be deemed taxable by the City of Lewiston Tax Assessor during the entire term hereby created. CASELLA shall promptly pay on or before the due date thereof all real estate taxes (land and buildings) and all taxes on its personal property at the Premises, including, without limitation, excise taxes on its mobile equipment predominantly stationed at the Premises, which shall be registered under Maine law at CASELLA's place of business at Lewiston, Maine, it being intended that the City of Lewiston shall benefit from the tax on such mobile equipment.

ARTICLE 6: MAINTENANCE, REPAIR, RELACEMENT, AND RESTORATION

- A. CASELLA's Obligation. CASELLA agrees that, except for reasonable wear and tear and casualty damage, and at its sole cost and expense, it shall make all repairs, alterations, and restorations to the Premises, including foundations, roof, interior and exterior structural components of the buildings, and the non-structural components of the Premises (including all doors, doorframes, glass, window sashes, floor coverings, and including the water and sewer systems and plumbing, heating, air conditioning, electrical and electric systems) (i) as may be necessary to maintain said portions of the Premises in as good repair and condition as the same are on the date of substantial completion of CASELLA's work and execution of the certificate of occupancy; and (ii) which may be required by any laws, ordinances, or regulations of any public authority having jurisdiction, the applicability of which CASELLA shall be entitled to contest in an appropriate form.
- B. Right of Access. The CITY and its designated representatives shall have a right of access to inspect the Premises and to order corrective measures consistent with the terms of this Lease and/or applicable law. In the event CASELLA fails to make repairs to keep the



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Premises and all improvements thereon in a safe and sanitary condition, the CITY shall have the right to enter upon the Premises for purposes of making repairs and to charge the cost of such reasonable repairs to CASELLA, which charges shall be payable within ninety (90) days of demand by the CITY in the form of an invoice for such charges and costs to CASELLA.

- C. Due Diligence. Before making any repairs, alterations, or restorations regarding the Premises or any improvements thereon, CASELLA agrees that it will procure all necessary permits. CASELLA agrees to pay promptly when due the costs of any work caused to be done by it on the Premises so that the Premises shall at all times be free of liens for labor or materials. CASELLA agrees to save harmless and indemnify the CITY from and against any and all injury, loss, claim, or damage to any person or property occasioned by or arising out of the doing of any such work by CASELLA or its employees or agents.
- D. Snow Removal. CASELLA shall be responsible for snow removal within the Premises and shall be responsible to perform all snow and ice removal necessary to its operations at the Premises.
- E. Trash Removal. CASELLA shall be responsible for all waste and trash removal at the Premises.
- F. Pavement Maintenance. CASELLA shall be responsible for maintaining all pavements (including parking areas) throughout the Premises in a manner that allows for the safe passage of vehicles and equipment throughout the Premises and through the Premises to adjacent CITY property.

ARTICLE 7: Insurance.

CASELLA shall purchase and maintain in full force and effect, at all times during the term of this Lease, a policy or policies of commercial general liability and property damage insurance with policy limits of not less than those outlined below. Insurance policies shall be issued on ISO form CG 00 01, or a substitute providing equivalent coverage naming the CITY as an additional insured. Such policies shall be issued with an endorsement on the following forms (or their equivalents): Liability: ISO CG 20 11 01 96 Additional Insured – Managers or Lessors of Premises; and Property: ISO CP 12 19 06 07 Additional Insured - Building Owner, since the CITY will be the owner of the building. The foregoing endorsements shall provide that there is

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no exclusion from coverage for the acts or omissions of the Additional Insured. The insurance shall be endorsed to provide primary and non-contributing liability coverage. It is the specific intent of the parties to this Agreement that all insurance held by the CITY shall be excess, secondary and non-contributory. In addition, such insurance shall have the following endorsements: Waiver of Subrogation: ISO form CG 29 88 10 93 Waiver of Transfer of Rights of Recovery Against Others Endorsement; and ISO form CP 10 30, or equivalent, Waiver of Subrogation by Insurer as to the Landlord. In addition, the insurance shall contain an endorsement, "Deletion of Personal Injury Exclusion to Contractual Liability Coverage" that provides that the personal injury contractual liability exclusion shall be deleted. The following endorsements are prohibited from such insurance:

- (a) Contractual Liability Limitation, CG 21 39 or its equivalent.
- (b) Amendment Of Insured Contract Definition, CG 24 26 or its equivalent.
- (c) Limitation of Coverage to Designated Premises or Project, CG 21 44.
- (d) Any endorsement modifying or deleting the exception to the Employer's Liability exclusion.
- (e) Any "Insured vs. Insured" exclusion
- (f) Any type of punitive, exemplary or multiplied damages exclusion.

All deductibles and/or retentions shall be paid by, assumed by, for the account of, and at the CASELLA's sole risk, except as otherwise provided in the Sublease. CASELLA shall not be reimbursed for same.

CASELLA agrees, at the request of the CITY, but in any event not more often than once every 5 years, to increase the limits of its general liability insurance to such limits as are then customarily carried with respect to premises similar to the Leased Premises within the State of Maine. The designation of insurance policy minimum limits shall not be construed to be, nor operate as, a limitation on the financial liability of CASELLA in respect to the hold harmless provisions of this Lease but only establish a minimum threshold for third-party payment. The amounts of such coverage shall be initially no less than as follows:

<u>Type</u>	<u>Amount</u>
1. Workers' Compensation	\$1 Million combined single limit Statutory Employers Liability Covered by no less than a\$50 Million Umbrella in conjunction with items 2 and 3 below
2. Commercial General Liability to include but not be limited to	\$3 Million per occurrence \$3 Million aggregate

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- |                                                                                                            |                                                                               |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| the following                                                                                              | covered by \$50 Million umbrella                                              |
| a) premises/operations                                                                                     | \$250,000 deductible                                                          |
| b) independent contractor                                                                                  |                                                                               |
| c) personal injury coverage                                                                                |                                                                               |
| d) product/completed operations                                                                            |                                                                               |
| e) contractual liability                                                                                   |                                                                               |
| <br>                                                                                                       |                                                                               |
| 3. Comprehensive Automobile Liability coverage to include coverage for:                                    | \$3 Million per occurrence<br>\$3 Million aggregate<br>\$25,000 deductible    |
| a) owned/rented automobiles                                                                                | Covered by \$50 Million Umbrella                                              |
| b) non-owned automobiles                                                                                   |                                                                               |
| c) hired cars                                                                                              |                                                                               |
| <br>                                                                                                       |                                                                               |
| 4. Standard Form Replacement Value All Risk Insurance Policy except as otherwise provided in the Sublease. | Replacement Value;<br>\$100,000 deductible                                    |
| <br>                                                                                                       |                                                                               |
| 5. Commercial Business Interruption                                                                        | Equal to 1 year loss of profit                                                |
| <br>                                                                                                       |                                                                               |
| 6. Environmental Liability                                                                                 | \$13 million per occurrence<br>\$13 million aggregate<br>\$100,000 deductible |

The CITY and CASELLA release each other from any liability or responsibility (to the other or anyone claiming through or under them by way of subrogation or otherwise) for any loss or damage to any building, structure or tangible property, or any resulting loss of income, or losses under any workers' compensation laws and benefits, notwithstanding the fact that such loss or damage shall have been caused by the fault or negligence of the other party, or anyone for whom such party may be responsible. Each party shall include in any insurance policy or policies required by this Lease a provision that any such release shall not adversely affect said policies or prejudice any right to recover under such policies. If the release of either the CITY or CASELLA, as set forth in the first sentence of this Section, shall contravene any law with respect to exculpatory agreements, the liability of the party in question shall be deemed not released, but no action or rights shall be sought or enforced against such party unless and until all rights and remedies against the claimant's insurer are exhausted and the claimant shall be unable to collect such insurance proceeds.

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ARTICLE 8: DAMAGE BY FIRE OR OTHER CASUALTY

If, during the Term hereof, the buildings and improvements on the Premises shall be destroyed or damaged in whole or in part by fire or the elements or by any other cause whatsoever, then CASELLA shall cause the same to be repaired, replaced, or rebuilt as nearly as practicable to the condition existing just prior to such damage or destruction and within a period of time which, under all prevailing circumstances, shall be reasonable. CASELLA shall repair, replace, or rebuild the affected portion of the Premises with due diligence.

Prior to commencing any work necessary to repair, replace, or rebuild the buildings and other improvements, CASELLA shall furnish the CITY with complete plans and specifications for such repairing, replacing, and rebuilding, which plans and specifications shall meet with the reasonable approval of the CITY and with the approval of any governmental board, bureau, or body then exercising jurisdiction with regard to such work. CASELLA shall cause such repairs, replacement, or rebuilding to be performed in accordance with the plans and specifications therefor and any applicable law, statute, ordinance, regulation, or requirement of the federal, state, or municipal governments. CASELLA shall not be entitled to any abatement or reduction in Rent during the period of such restoration or rebuilding.

ARTICLE 9: COVENANT OF THE CITY

The CITY shall warrant and defend CASELLA in the quiet peaceable possession of the Premises during the term hereof so long as CASELLA shall perform any and all of the covenants, agreements, terms, and conditions herein agreed to be kept by CASELLA.

ARTICLE 10: INDEMNITY

- A. General Indemnification - CASELLA shall defend, indemnify, and hold the CITY and its inhabitants, officers, employees, and agents completely harmless from and against any and all liabilities, losses, suits, claims, judgments, fines, or demands arising by reason of injury or death of any person or damage to any property, including all reasonable costs for investigation and defense thereof (including but not limited to attorneys' fees, court costs, and expert witness fees), of any nature whatsoever arising out of or incident to the use, occupancy, conduct, or management of the Premises or the acts or omissions of CASELLA's officers, agents, employees, contractors, subcontractors, licensees, or

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invitees, except to the extent that such injury, death, or damage is caused by the negligence and/or intentional acts or omissions of the CITY and/or its agents or employees utilizing the Premises. CASELLA shall give to the CITY reasonable notice of any such claims or actions.

- B. Waiver of Workers' Compensation Immunity - CASELLA hereby expressly agrees that it will defend, indemnify and hold the CITY, its inhabitants, officers, employees and agents completely harmless from any and all claims made or asserted by CASELLA's agents, servants, or employees arising out of CASELLA's activities under this Lease; provided, however, that CASELLA's aforesaid indemnity and hold harmless agreement shall not be applicable to any liability arising from the negligence and/or intentional acts or omissions of the CITY and/or others utilizing the Premises and/or portions thereof as herein provided. For this purpose, CASELLA hereby expressly waives any and all immunity it may have under the Maine Workers Compensation Act in regard to such claims made or asserted by CASELLA's agents, servants, or employees. Subject to the limitations hereinabove set forth, the indemnification provided under this paragraph shall extend to and include any and all costs incurred by the CITY to answer, investigate, defend, and settle all such claims, including but not limited to the CITY's costs for attorneys fees, expert and other witness fees, the cost of investigators, and payment in full of any and all judgments rendered in favor of CASELLA's agents, servants, or employees against the CITY in regard to claims made or asserted by such agents, servants, or employees.
- C. CASELLA shall indemnify, defend, and hold harmless the CITY from and against all claims and actions, and all expenses incidental to such claims or actions, based upon or arising out of damage to property or injuries to persons or other tortious acts caused or contributed to by CASELLA or anyone acting under its direction or control or in its behalf in the course of CASELLA's activities under this Lease and/or others utilizing the Premises, provided that CASELLA's aforesaid indemnity and hold harmless agreement shall not be applicable to the extent of any liability arising from the negligence and/or intentional acts or omissions of the CITY or anyone acting under its direction or control or in its behalf under this Lease.

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- D. The CITY hereby expressly agrees that it will defend, indemnify, and hold CASELLA harmless from any and all claims made or asserted by the CITY's agents, servants, employees, visitors or customers arising out of the CITY's activities under this Lease; provided however that the CITY's aforesaid indemnity and hold harmless agreement shall not be applicable to the extent of any liability based upon the negligence and/or intentional acts or omissions of CASELLA or anyone acting under its direction or control or in its behalf in the course of CASELLA's activities under this Lease. For this purpose, the CITY hereby expressly waives any and all immunity it may have under Maine's Workers' Compensation Act in regard to such claims made or asserted by the CITY's agents, servants, or employees subject to the limitations hereinabove set forth. The indemnification provided under this paragraph shall extend to and include any and all costs incurred by CASELLA to answer, investigate, defend, and settle all such claims, including but not limited to CASELLA's costs for attorney fees, expert and other witness fees, the cost of investigators, and payment in full of any and all judgments rendered in favor of the CITY's agents, servants, or employees against CASELLA in regard to claims made or asserted by such agents, servants, or employees.
- E. The indemnification and hold harmless provisions of the CITY contained in this Lease, notwithstanding anything to the contrary in this Lease, shall not be considered to, and shall not, expand or create liability on the part of the CITY to any person (including the persons so indemnified) for claims from which the CITY is released, exempted, and/or protected by the Maine Tort Claims Act, as it is currently in effect or is in the future from time to time modified or expanded. The obligations and exposure of the CITY under any indemnification obligations contained in this Lease are subject to the foregoing limitations and are further subject to and shall not exceed the amounts payable to any claiming party under any liability insurance or other applicable insurance the CITY is maintaining at the time of such claim, if any, whichever is higher.
- F. CASELLA agrees that all personal property of every kind and description that may at any time be in or on the Premises shall be at its sole risk and that the CITY shall not be liable for any damage to said property or for any loss suffered by CASELLA in its business caused by any manner whatsoever. The CITY shall not be liable for any damage to said property or for any loss suffered by CASELLA in its business caused by any manner

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whatsoever, unless arising as a result of the CITY's misconduct or negligence. The CITY shall not be liable for any damage to persons or property resulting from fire, explosion, falling building materials, steam, gas, electricity, rain, water, snow, or leaks in any part of the Premises or from the pipes, appliances, plumbing works, or from the roof, streets, or subsurface, or from any other place.

- G. Under no circumstances shall either party ever be liable for special, incidental, exemplary, punitive, indirect or consequential damages.

ARTICLE 11: PASSAGE AND EASEMENT

The parties acknowledge that the Premises is used by CASELLA and other parties and that, in order to accommodate various uses, the CITY in this Lease reserves certain rights and uses related to the Premises to itself and its successors and assigns. The CITY hereby reserves for itself, its residents, and its customers the right to pass through the Premises during the hours in which the City accepts materials at its recycling area or landfill for purposes of accessing other CITY property and operations located in or adjacent to the Premises to include the CITY's sanitary landfill, adjacent CITY-owned property, and the office building used by the CITY and located near the River Road frontage of the Premises. In addition, the CITY's authorized employees shall have this right and easement at all times, whether during or outside of CASELLA's operating hours. These rights shall also extend to those authorized by the CITY to access the CITY's sanitary landfill, the household hazardous waste facility located adjacent to the premises, and other adjacent CITY owned property.

The parties also acknowledge that CASELLA and its authorized agents require access to adjacent portions of CITY-owned and controlled property for purposes of access to the Premises and to fulfill various requirements of this Lease. Therefore, the CITY grants to CASELLA, its agents, and its customers the right to pass through these areas as shown on Attachment A, attached hereto, for these purposes. This right shall not extend to access to the CITY's adjacent sanitary landfill.

ARTICLE 12: TERMINATION OF LEASE

- A. Provisions as to Default. The following acts shall constitute acts of default:

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1. If, notwithstanding the lack of notice or demand by the CITY to CASELLA, the rent or any part thereof (including additional rent) shall at any time be in arrears and unpaid for a period of seven (7) calendar days after notice thereof from the CITY to CASELLA, or
  2. If CASELLA shall fail to keep and perform any of the covenants, agreements, and conditions of this Lease on its part to be kept and performed within thirty (30) days of notice of such failure to CASELLA, or
  3. If CASELLA shall vacate or abandon the Premises for a period of six consecutive months during the term of this Lease or shall make an assignment for the benefit of its creditors without the consent of the CITY or if the interest of CASELLA hereunder shall be sold upon execution or other legal process, or
  4. If CASELLA shall have entered against it by any Court having jurisdiction a decree or order for relief in respect of CASELLA in an involuntary case under any applicable bankruptcy, insolvency, or other similar law now or hereafter in effect, or if a receiver, liquidator, assignee, trustee, custodian, or similar official is appointed regarding CASELLA or any substantial part of its property, or if CASELLA fails generally to pay its debts as they come due, or if CASELLA files a voluntary petition in bankruptcy or takes any corporate action in furtherance of any of the foregoing.
- B. Notice of Default. With regard to the occurrence of an event of default under subparagraph 12(A)(2), above, the Lease shall terminate if CASELLA has failed to cure such default within thirty (30) days from the date the CITY gives CASELLA written notice of such default. With regard to the occurrence of an event of default under subparagraphs 12(A)(1), (3) or (4) above, the Lease shall terminate upon the City giving notice to CASELLA of termination of the Lease.
- C. Real Property and Fixtures Thereto. Upon the termination of this Lease by expiration of the term or because of a default by CASELLA, all buildings, fencing, paving, plumbing, heating, lighting, and similar fixtures not excluded under Article 18 shall become the sole property of the CITY, free from any claim by CASELLA or its successors or assigns.
- D. Remedies for Default. The CITY shall have the right to the following remedies which are intended to be cumulative and in addition to any other remedies provided under applicable law for default and its right to terminate under Subsection 12B:
- (i) The CITY may terminate the Lease and retake possession of the Premises. Following such retaking of possession, the CITY shall not be obligated to relet the



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Premises.

(ii) The CITY may make any payment or perform any obligation which CASELLA has failed to perform. The CITY shall be entitled to recover from CASELLA upon demand all amounts so expended plus interest from the date of the expenditure at the rate of one and one-half percent (1½%) per month together with the CITY's reasonable attorneys' fees and costs of collection for failure to pay. Any such payment or performance by the CITY shall not waive CASELLA's default.

(iii) In any action to enforce any terms of the Lease, the City shall be entitled to its reasonable attorneys' fees and costs.

E. Limitation of Rental Obligation Upon Default. In the event of a termination as a result of CASELLA's default, the CITY shall be entitled to actual direct damages in an amount of twenty-four (24) months Base Rental and Additional Rental, which amount is the parties best estimate of the City's damages. The parties agree that such amount constitutes liquidated damages, and not a penalty.

ARTICLE 13: ASSIGNMENT OR SUBLEASE.

Except for an assignment to a lender for collateral security, CASELLA shall not have the right to assign this Lease or sublet the Premises, or any part thereof, without the written consent of the CITY. By giving consent, the CITY agrees to accept the assignee of CASELLA, but such assignment shall not release CASELLA from the performance of any obligations under this Lease unless such release is otherwise specifically provided for in writing between the CITY and CASELLA. In the event the Premises are sublet, said sublease shall be for the full term of this Lease unless this Lease is sooner terminated, as provided herein, in which event such sublease shall be coterminous with this Lease. Notwithstanding anything to the contrary in this section, CASELLA may assign this Lease to any entity controlling, controlled by, or under common control with CASELLA without obtaining the CITY's consent.

ARTICLE 14: NEW CONSTRUCTION AND RECONSTRUCTION.

No material change in the construction or modification of the buildings located on the Premises shown in the Site Plan, after substantial completion of CASELLA's initial improvements, shall be

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made without the prior consent of the CITY, except such construction as may be required as a result of a casualty loss, in which case the building or buildings thus damaged shall be returned to their pre-existing condition.

ARTICLE 15: LIENS

CASELLA will promptly discharge (either by payment or by filing of the necessary bond or otherwise) any mechanics', materialmen's or other liens against the Premises or any buildings, structures or improvements thereon, which liens may arise out of any payment due for labor, services, materials, supplies or equipment which may have been furnished to or for CASELLA or the Premises during the term of the Lease.

ARTICLE 16: TITLE TO BUILDINGS, STRUCTURES, AND IMPROVEMENTS

Title to the buildings, structures, and improvements constructed on the Premises by CASELLA shall pass to the CITY upon their completion, personal property of CASELLA excepted. The CITY shall retain title to all building, structures, improvements, facilities and installations currently located on the Premises.

ARTICLE 17: RIGHT OF ENTRY.

The CITY, or any of its duly authorized agents, may enter upon the Premises at all reasonable times and with reasonable advance notice to CASELLA to examine the condition of the Premises, the state of repair and maintenance being performed by CASELLA, and, for purposes of determining compliance with this Lease, to examine records relating to the origin of Recyclable Materials received at the Facility, the locations to which processed waste and residuals have been shipped, and the pricing structure in place for other CASELLA customers.

ARTICLE 18: SURRENDER.

CASELLA shall surrender and deliver up the Premises at the end of the term in as good order and condition as existed upon substantial completion of CASELLA's work and the execution of the initial certificate of occupancy, reasonable use, normal wear and tear, and damage by casualty excepted. All machinery and equipment installed or used by CASELLA in the operation of its

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business on the Premises, with the exception of any machinery or equipment initially provided by the CITY, whether such equipment and machinery is later replaced, upgraded, or improved, shall, at the termination of the leasehold, be removed from the Premises and the Premises shall be returned to the CITY in broom clean condition. Any such property shall be removed by CASELLA within thirty (30) days following the end of the term hereby created unless the CITY consents in writing to the non-removal thereof, with such property then becoming the property of the CITY. Any damage to the land or the buildings of the CITY caused by CASELLA's removal of any of its property shall be promptly repaired by CASELLA such that the land or buildings of the CITY shall be returned as nearly as possible to its condition at the commencement of the Lease, ordinary wear and tear excepted.

ARTICLE 19: HOLD-OVER.

Rights acquired under this Lease shall not extend beyond the term hereby created, and no holding over or continuing in the occupancy of the Premises shall not cause or be construed to be an extension of this Lease, but, in any and all such cases, CASELLA shall be a tenant at will at the option of the CITY, subject to removal by the CITY by summary process and proceedings. CASELLA hereby agrees to pay for the time CASELLA retains possession of the Premises or any part thereof after the termination of this Lease at the rate of rental provided for herein, including additional rental, plus an additional 50% of total rental and to pay all expenses of the CITY incurred in enforcing the provisions of this Article 19. This Agreement shall not constitute a waiver by the CITY of any right of re-entry.

ARTICLE 20: CITY RECYCLABLES.

CASELLA shall accept Recyclable Materials delivered to the Premises by the CITY or its contractors or agents for processing under terms and conditions that meet or exceed the most favorable financial terms and conditions offered by CASELLA to any other customer utilizing the services of the Facility. The CITY hereby exercises its option under the existing agreement with CASELLA for processing of Recyclable Materials for the additional two (2) year period ending June 30, 2016. CASELLA hereby offers the City options to further extend such existing agreement for two (2) additional five (5) year periods beyond June 30, 2016, which the City may consider and accept in accordance with its normal purchasing policies.

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ARTICLE 21: SCALE; WEIGH FEE

CASELLA agrees to pay for the value of the replacement of one CITY-owned scale in an amount not to exceed Seventy-Five Thousand Dollars (\$75,000), such amount to be paid within thirty (30) days of the date of the Construction Date (the "Pre-Payment"). In addition, CASELLA shall pay to CITY an initial weigh fee of five dollars (\$5) per vehicle entering the PREMISES for the purpose of delivering recyclables for processing (the "Weigh Fee"). The CITY will be responsible for tracking the number of vehicles entering the PREMISES daily, and will provide CASELLA with a monthly report. The Weigh Fee shall be adjusted on every fifth (5<sup>th</sup>) anniversary of the Effective Date in an amount equal to the percentage increase of the Gross National Product – Implicit Price Deflator over the most recent five (5) year period for which this data is available. Notwithstanding anything to the contrary, each five (5) year increase shall not be less than ten percent (10%) nor greater than twenty-five percent (25%). The Weigh Fee shall not be collected from CASELLA by the CITY until CASELLA has been credited in an amount equal to the amount initially paid by CASELLA for the Pre-Payment. The CITY shall provide CASELLA with a monthly statement showing the Weigh Fee credit. Once this Weigh Fee credit has been satisfied, CITY shall invoice CASELLA monthly for the Weigh Fee.

ARTICLE 22: EXISTING CITY AGREEMENTS

In the event that CITY has agreements to accept Recyclable Materials in effect with other municipalities as of the date this Agreement is executed, CITY shall provide CASELLA with copies of such agreements within thirty (30) days of that date. CASELLA may, at its option, continue to honor such agreements or request that CITY exercise its right to terminate such agreements in accordance with their terms and conditions. At the request of CASELLA, the CITY shall assist CASELLA in meeting with such municipalities regarding continued use of CASELLA services provided on the Premises.

ARTICLE 23: ACCESS TO RECORDS

CASELLA shall provide the CITY with access to inspect all records documenting the origin of all commercial materials received at the Facility for processing and the locations to which processed material and residues are sent for reuse or disposal. All such records shall be

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maintained at the Facility for a minimum of three (3) years from the time of their creation. Such access shall be provided within normal business hours upon reasonable prior written notification to CASELLA. For purposes of this paragraph, "reasonable notification" shall include any actual notification to CASELLA not less than one business day prior to the date of inspection. Any such inspections shall be conducted in a manner which does not unduly interfere with CASELLA's operations on the leased premises.

ARTICLE 24: MISCELLANEOUS

- A. Notice. Any notice to be served by and on behalf of either party to the other under this Lease or in connection with any proceedings or any act growing out of this Lease and the tenancy hereby granted, shall be sufficiently served by forwarding the same by registered or certified mail to such party by the other or by delivery in person or as by service of legal process addressed to the parties as set forth herein.

If to Lessee:                    Casella Recycling, LLC  
                                          14-24 Bunker Hill Industrial Park  
                                          Charlestown, MA 02129  
                                          Attn: Bob Cappadona, VP

With copy to:                    Casella Waste Systems, Inc.  
                                          25 Greens Hill Lane  
                                          Rutland, VT 05701  
                                          Attn: Office of General Counsel

And with a further copy to a bank (mortgagee) to be designated from time to time by Lessee.

If to the Lessor:                City of Lewiston  
                                          27 Pine Street  
                                          Lewiston, ME 04240  
                                          ATTN: City Administrator

With copy to:                    City Clerk  
                                          City of Lewiston  
                                          27 Pine Street  
                                          Lewiston, ME 04240

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All such notices shall be effective from the date of delivery of the same to the United States Postal Service or from the date of receipt if delivery in person or by service of legal process. All notices and consents required by the provisions of this Lease shall be in writing.

- B. Memorandum of Lease. The CITY and CASELLA agree to execute a Memorandum of Lease, which CASELLA, at its expense, shall record with the Registry of Deeds of Androscoggin County, Maine.
- C. Employees. To the extent permitted by federal and Maine law, CASELLA agrees to use commercially reasonable efforts to employ individuals who reside in Lewiston, Auburn, or any other municipality bordering upon Lewiston and Auburn for its operations at the Premises, including management personnel.
- D. Permits. All federal, state, and local permits necessary for the accomplishment of the construction of buildings, improvement of land, and operation of the facilities on the Premises shall be at the sole expense of CASELLA.
- E. Binding Effect. The terms of this Lease shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.
- F. Governing Law. This Lease shall be construed in accordance with the provisions of the laws of the State of Maine.
- G. Entire Agreement. The parties hereto agree that this Lease contains the entire agreement between the parties hereto with respect to the matters set forth herein and supersede any prior understandings between them.
- H. Amendment. This Lease may be amended only by a document making specific reference to this Lease and executed on behalf of the CITY and CASELLA.

ARTICLE 25: SECURITY

CASELLA shall furnish to the CITY a bond issued by a bonding company approved by the CITY in order to assure the availability of funds to remedy any default hereunder, including, without limitation, any failure to comply with environmental requirements, and to provide for abatement of nuisances, removal of materials stored other than as herein limited, and to provide for restoration and clearing of the Premises upon the termination of this Lease, whether by expiration of the term hereby created or by any

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default by CASELLA or the Surety, as defined below. The initial bond shall initially be in the amount of Five Hundred Thousand Dollars (\$500,000)("Initial Amount"), to be provided within ten (10) days after site plan approval by the City of the proposed materials processing facility, and dated as of the date of the site plan approval ("Site Plan Approval Date"). Within forty five (45) days prior to the each anniversary date of the Site Plan Approval Date, CASELLA shall provide to the City a bond in the amount of the Initial Amount, except that the amount may be reduced on the third anniversary of its issuance to Two Hundred Twenty Five Thousand Dollars (\$225,000), which amount shall be adjusted annually thereafter in accordance with the formula provided with respect to Additional Rental in Article 3, Section B, above. In the event CASELLA (or the Surety as defined below) shall fail to provide a bond as required herein, a default shall occur, such that the face amount of the existing bond shall be paid to the City by the issuer of such existing bond (the "Surety"). Because the amount of damages to the City for failure to provide a bond as required herein is difficult to determine, the face amount of the bond is the parties' best estimate of the damages to the City for failure to provide a bond. The parties agree that the face amount of the bond constitutes liquidated damages, and not a penalty. If the surety makes payment of the face amount of the bond within thirty (30) days of notice from the City to CASELLA and the Surety of failure to provide the bond as required herein, the Surety shall be entitled to assume all of CASELLA's rights and obligations under the Lease, provided that the Surety provides a bond, in the amount of the bond in the amount as specified herein, within thirty (30) days of such payment. If the Surety assumes CASELLA's rights and obligations under the Lease, the Surety shall continue to provide to the City a bond in the amount as specified herein within forty five (45) days prior to each anniversary date of the Site Plan Approval Date.

ARTICLE 26: FINANCING: MORTGAGE RIGHTS

- A. Financing. CASELLA shall be entitled to mortgage, assign, or transfer its leasehold interest in the Premises to a bank or other financial institution ("Mortgagee") for the

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purpose of obtaining construction and long-term financing for CASELLA's Project during the term of this Lease, provided that:

- a. The term of any debt secured by any such mortgage assignment or transfer (in either case, a "mortgage") shall not exceed the term of this Lease; and
  - b. CASELLA shall give notice to the CITY of the existence of any mortgage, together with the name and address of the mortgagee and a copy of any Mortgage that is a matter of public record. Upon such notice, such mortgagee is deemed a Mortgagee for purposes of Article 24.
- B. Cure of CASELLA's Default. In the event that the CITY sends CASELLA written notice of an act of default by CASELLA under any of the terms of the Lease, the CITY agrees to also simultaneously send a copy of such notice (the "Default Notice") to any Mortgagee of which it has written notice. The Mortgagee shall have a period of thirty (30) days after receipt of a Default Notice to cure any such act of default, provided that where an act of default by its nature takes longer than thirty (30) days to cure, the Mortgagee shall have an additional thirty (30) days to cure such default. The CITY agrees that so long as any Mortgage is in effect, no material change, modification, or amendment to this Lease shall be effective without the prior written consent of the Mortgagee and no termination or surrender of this Lease shall be effective without the CITY providing Mortgagee with prior written notice.
- C. Foreclosure by the Mortgagee. If any Mortgagee shall become the owner of CASELLA's interest under this Lease pursuant to a foreclosure of any Mortgage, or if any Mortgagee shall enter into possession of the Premises under the rights granted in its Mortgage, the Mortgagee shall have the right to take possession of the Premises and to become the legal owner and holder of the leasehold estate created under this Lease, provided Mortgagee has provided notice to the City of the same, and shall hold such estate upon the same terms and conditions as held by CASELLA. However, in such event, the Mortgagee shall only be liable under the terms and conditions of this Lease during the period of time the Mortgagee holds such estate, and not thereafter, nor shall the Mortgagee be liable for any default under the terms or conditions hereof which arose before said estate became vested in the Mortgagee, provided, however, that (i) the CITY shall have the right to terminate this Lease in the event that rentals accruing before said estate became vested in the Mortgagee are not paid in full within thirty (30) days after possession by Mortgagee, or (ii) if the Mortgagee shall obtain CASELLA's leasehold interest in the Premises, the



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Mortgagee shall have the right to assign this Lease in accordance with the requirements of Article 13.

- D. Continuing Liability of CASELLA. The existence of any Mortgage or any foreclosure by a Mortgagee shall not relieve CASELLA from any liability or responsibility for its obligations under this Lease.

ARTICLE 27: CUMULATIVE NATURE OF CITY'S RIGHTS.

Except as may be specifically limited by Article 25, all rights and remedies of the CITY under this Lease shall be cumulative and none shall be exclusive of any other right or remedy allowed by law, nor as a waiver of its authority to assert such rights in the future. The waiver of any one right by the CITY shall not be construed to be a waiver of any other right.

ARTICLE 28: EXCLUSIVE JURISDICTION/DISPUTE RESOLUTION.

- A. The parties agree and consent that the exclusive jurisdictions for purposes of any claim arising from or related to this Amended Agreement as to which a party seeks injunctive relief shall be the state and federal courts of the State of Maine. For all other disputes, claims or controversies arising out of or relating to this Lease or the breach, termination, enforcement, interpretation or validity thereof, including the determination of the scope or applicability of the parties' agreement to arbitrate set forth herein, whether based on contract, tort, common law, equity, statute, regulation, order or otherwise ("Other Disputes"), the Parties agree to pursue the dispute resolution procedures set forth in Section 26B.
- B. Either party may elect to institute dispute resolution procedures before JAMS, as follows, for all Other Disputes:
1. By providing to JAMS office in Boston, MA and the other party a written request for mediation, setting forth the subject of the Dispute and the relief requested. Such mediation shall be conducted by JAMS pursuant to its mediation procedures. The parties will cooperate with JAMS and with each

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other in selecting a mediator from the JAMS panel of neutrals and in scheduling the mediation proceedings. The parties agree that they will participate in the mediation in good faith and that they will share equally in its costs. Such mediation shall take place in Lewiston Maine, unless the parties mutually agree to conduct the mediation at another location. If mediation does not resolve the Dispute, then the parties shall arbitrate the Dispute as set forth in subsection (B)(2) below.

2. The arbitration shall be in accordance with the following procedures:
  - a. The arbitration shall be conducted in Lewiston, Maine before a single arbitrator. The arbitration shall be administered by JAMS, Boston MA office, pursuant to its Comprehensive Arbitration Rules and Procedures and in accordance with the Expedited Procedures in those Rules, or pursuant to JAMS' Streamlined Arbitration Rules and Procedures, as provided for pursuant to such Rules. Judgment on the Award may be entered in any court having jurisdiction. This clause shall not preclude parties from seeking provisional remedies in aid of arbitration from a court of appropriate jurisdiction.
  - b. In any arbitration arising out of or related to this Lease, the arbitrator is not empowered to award punitive or exemplary damages, or consequential or special damages, and the parties waive any right to recover any such damages.

ARTICLE 29: NONDISCRIMINATION

CASELLA for itself, its personal representatives, successors in interest and assigns, and as part of the considerations hereof, does hereby covenant and agree as a covenant running with the land that (1) no person or group of persons shall be excluded on the grounds of race, color, religion, sexual orientation, or national origin from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use or occupancy of said Premises and (2) in the construction of all improvements, buildings, structures, on, over or under such land and the furnishing of services thereon, no person or group of persons shall be excluded on the grounds of race, color, religion, sexual orientation, or national origin from participation in, denied the benefits of, or be otherwise subjected to unlawful discrimination.

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ARTICLE 30: FORCE MAJEURE

- A. "Force Majeure" means shall mean any act, event or condition materially and adversely affecting the ability of a party to perform or comply with any material obligation, duty or agreement required under this Agreement, if such act, event, or condition is beyond the reasonable control of the nonperforming party or its agents relying thereon, is not the result of the willful or negligent action, inaction or fault of the party relying thereon, and the nonperforming party has been unable to avoid or overcome the act, event or condition by the exercise of due diligence, including, without limitation: (i) an act of God, epidemic, landslide, lightning, earthquake, fire, explosion, storm, flood or similar occurrence; (ii) an act of public enemy, war, blockage, insurrection, riot, general unrest or restraint of government and people, civil disturbance or disobedience, sabotage, act of terrorism or similar occurrence; (iii) a strike, work slowdown, or similar industrial or labor action; (iv) an order or judgment (including without limitation a temporary restraining order, temporary injunction, preliminary injunction, permanent injunction, or cease and desist order) or other act of any federal, state, county or local court, administrative agency or governmental office or body which prevents a party's obligations as contemplated by this Agreement; or (v) adoption or change (including a change in interpretation or enforcement) of any federal, state or local law after the Effective Date of this Agreement, preventing performance of or compliance with the obligations hereunder.
- B. Neither party shall be liable to the other for damages without limitation (including liquidated damages) if such party's performance is delayed or prevented due to an event of Force Majeure. In such event, the affected party shall promptly notify the other of the event of Force Majeure and its likely duration. During the continuation of the Force Majeure Event, the nonperforming party shall (i) exercise commercially reasonable efforts to mitigate or limit damages to the performing party; (ii) exercise commercially reasonable due diligence to overcome the Force Majeure event; (iii) to the extent it is able, continue to perform its obligations under this Agreement; and (iv) cause the suspension of performance to be of no greater scope and no longer duration than the Force Majeure event requires.

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C. In the event of a delay in either party's performance of its obligation hereunder for more than sixty (60) days due to a Force Majeure, the other party may, at any time thereafter, terminate this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Lease to be executed in their respective names and on their respective behalves by their duly authorized officers this \_\_\_\_\_ day of \_\_\_\_\_, A.D., 2013, at Lewiston, Maine.

LESSOR, CITY OF LEWISTON.

BY: Edward A. Bennett

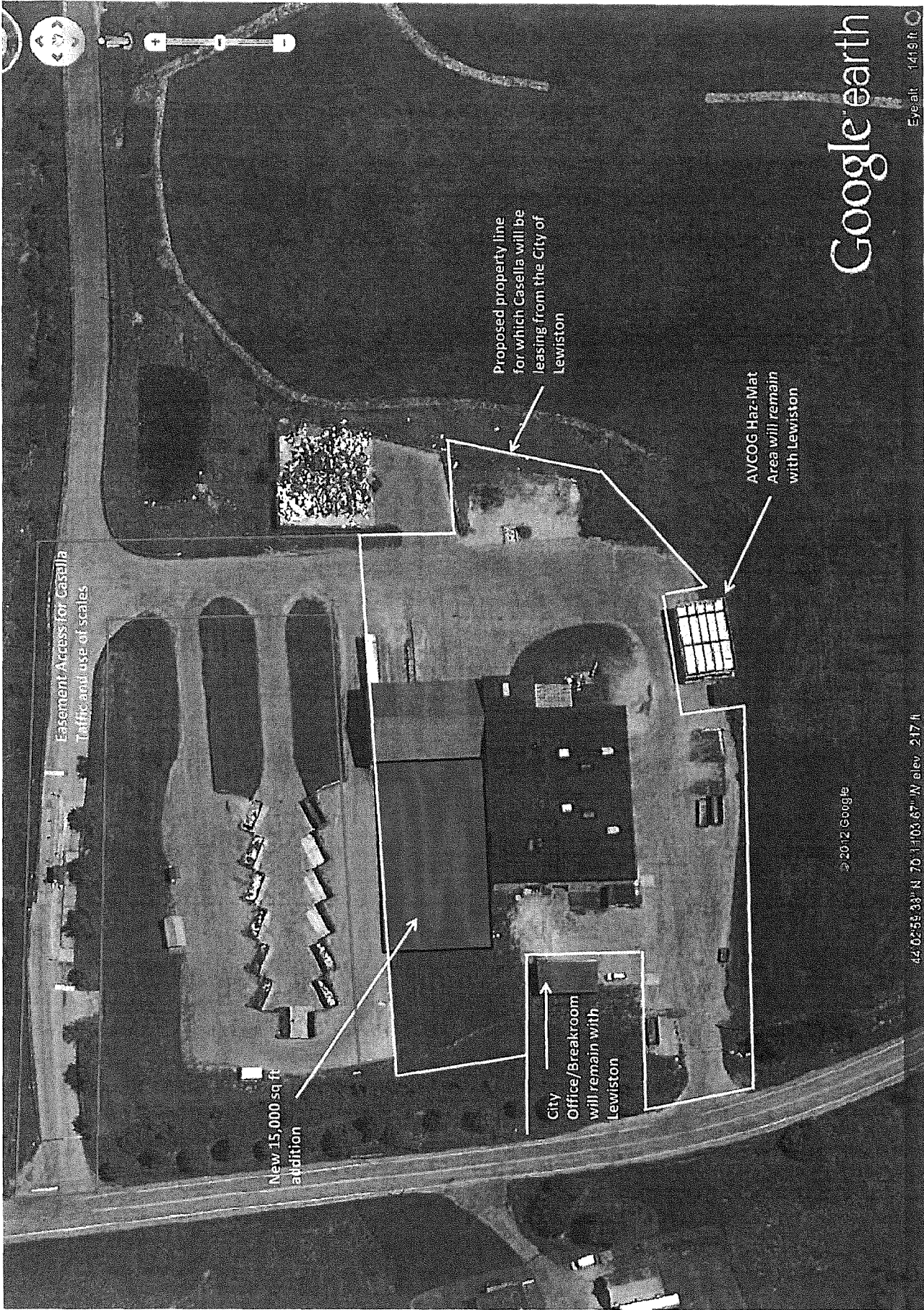
LESSEE, CASELLA RECYCLING, LLC

BY: [Signature]

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ATTACHMENT A

DESCRIPTION OF PREMISES



Easement Access for Casella  
Traffic and use of scales

New 15,000 sq ft  
addition

City  
Office/Breakroom  
will remain with  
Lewiston

Proposed property line  
for which Casella will be  
leasing from the City of  
Lewiston

AVCOG Haz-Mat  
Area will remain  
with Lewiston

© 2012 Google

Google earth

44° 02' 55.33" N 70° 14' 03.67" W elev. 217 ft

Eye alt. 1419 ft

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ATTACHMENT B

Acceptable Material Single Stream Residential Commingled Containers and Residential  
Fiber:

*Aluminum food and beverage containers*

aluminum soda and beer cans, cat food cans, etc.

**Glass food and beverage containers**

Flint (clear)

Amber (brown)

Emerald (green)

**Ferrous Cans**

soup, coffee cans, etc.

**P.E.T. plastic containers with the symbol #1**

no microwave trays

**H.D.P.E. natural plastic containers with the symbol #2**

milk jugs and water jugs containers only (narrow neck containers)

**H.D.P.E. pigmented plastic containers with the symbol #2**

detergent, shampoo, bleach bottles without caps (narrow neck containers)

**Plastics labeled 3 thru 7.**

**Mixed Rigid Plastics**

(5 gallon buckets, plastic toys, plastic pools)

**Old Newspaper (ONP)**

Sunday inserts are acceptable paper.

***Kraft Paper Bags***

***Old Corrugated Containers (OCC)***

no wax coated.

***Magazines (OMG)***

Coated magazines, catalogues and similar printed materials, junk mail, and soft cover books.

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ATTACHMENT C

**Sub-Lease Agreement for Space Provided for City Use on the Premises**



## COMMERCIAL SUB-LEASE

This Commercial Sub-Lease ("Sub-Lease" or "Agreement") is entered into this \_\_\_ day of \_\_\_\_\_, 2013, by and between Casella Recycling, LLC ("Landlord"), and the City of Lewiston, Maine ("Tenant").

### 1. LEASED PREMISES

1.1 The "Leased Property" shall consist of the real property located at \_\_\_\_\_, currently leased by Landlord, pursuant to that certain Lease Agreement dated \_\_\_\_\_, 2013, between the parties, for the Solid Waste Facility Processing Building owned by the City of Lewiston and for the Facility to be built by Landlord (the "Master Lease Agreement"), including, without limitation all rights of ingress and egress to the Leased Property. The "Sub-Leased Premises" shall consist of the portion of the Leased Property as determined by the parties based on the building plans and specifications described in the Master Lease and all rights of ingress and egress thereto.

### 2. TERM AND RENT

2.1 The term of this Sub-Lease shall run in conjunction with the term (including any early termination or extensions thereof) of the Master Lease Agreement.

2.2 The Tenant shall pay to the Landlord rent at the rate of one dollar (\$1.00) annually for use of the Leased Premises.

### 3. USE OF LEASED PREMISES

3.1 The Tenant shall use the Sub-Leased Premises as an area to accept and process universal and electronic waste, waste oil, and appliances or equipment containing freon, pursuant to Maine Department of Environmental Protection regulations.

3.2 Tenant agrees to use the Sub-Leased Premises in accordance with applicable laws, including local, state and federal environmental laws, and to maintain the Sub-Leased Premises in good condition, reasonable wear and tear, damage by fire and other casualty excepted. Landlord shall provide free and unobstructed access to the Sub-Leased Premises by Tenant, its employees and agents.

3.3 Tenant agrees to abide by all safety regulations of Landlord in effect at the Facility.

### 4. INSURANCE

4.1 Tenant's Insurance. Tenant shall be responsible, at its expense, for maintaining general liability insurance for maintaining fire and extended coverage insurance on all contents belonging to Tenant, including, but not limited to, personal property and removable trade fixtures located in the Sub-Leased Premises for the duration of the Agreement, in the amount of such limits as currently provided for on the City's insurance policies. Tenant shall be responsible for the deductible under Landlord's property insurance in the amount of one hundred thousand dollars

(\$100,000) if a loss at the Leased Property is due solely to the negligence or misconduct of the Tenant. Tenant shall have Landlord named as an additional insured on the insurance policies.

4.2 Insurance. Landlord shall maintain insurance as more further described in Article 7 of the Master Lease Agreement.

## 5. MISCELLANEOUS

5.1 Indemnification. The indemnification provisions of the Master Lease Agreement shall govern.

5.2 Assignment/Subletting. Tenant shall not assign or sublease this Sub-Lease without the Landlord's prior written consent.

5.3 Improvements. All renovations or improvements to the Sub-Leased Premises must be approved by Landlord and completed to the satisfaction of the Landlord.

5.4 Landlord Access. The Landlord or agents of the Landlord may, at reasonable times and upon reasonable prior notice, enter to view the Sub-Leased Premises and make such repairs and alterations as the Landlord may elect to do.

5.5 Limitation of Liability. Neither party shall be liable to the other for special, incidental, exemplary, punitive or consequential damages including without limitation loss of use, loss of profits or revenues, or cost of substitute or re-performed services, suffered, asserted or alleged by either party or any third party arising from or relating to this Agreement, regardless of whether those damages are claimed under contract, warranty, indemnity, tort or any other theory at law or in equity.

5.6 Disclaimer of Joint Venture, Partnership, and Agency. This Agreement shall not be interpreted or construed to create an association, joint venture, or partnership between the parties or to impose any partnership obligation or liability upon either party. Neither party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent of representative of, or to otherwise bind, the other party.

5.7 Governing Law. This Agreement and any issues arising hereunder or relating hereto shall be governed by and construed in accordance with the laws of the State of Maine.

5.8 Representations and Warranties of Authority. Each party represents and warrants to the other that:

a. it is duly qualified to do business and is in good standing in every jurisdiction in which this Agreement requires its performance;

b. it has full power and authority to execute, deliver and perform its obligations under this Agreement;

c. the execution, delivery and performance of this Agreement have been duly and validly authorized by all necessary action by such party; and

d. the execution and delivery of this Agreement by such party and the performance of the terms, covenants and conditions contained herein will not violate the articles of incorporation or by-laws of such party, or any order of a court or arbitrator, and will not conflict with and will not constitute a material breach of, or default under, the provisions of any material contract by which either party is bound.

These warranties shall survive the expiration or termination of this Agreement.

5.9 Termination. This Agreement may be terminated:

a. at any time by both parties upon mutual written agreement; or

b. immediately upon notice by either party in the event that any of the representations and warranties contained in this Agreement are shown to be untrue; or

c. by either party in the event of a failure by the other party to perform a material obligation (a "Default") as follows: if the Default has not been cured by the defaulting party within thirty (30) days from receipt of notice from the non-defaulting party, the non-defaulting party may (i) terminate this Agreement immediately upon notice, or (ii) agree in writing that the defaulting party is diligently pursuing a cure, and extend the cure period at its sole discretion, subject to immediate termination upon notice.

5.10 Entire Agreement. Except as otherwise set forth in the Master Lease Agreement, it is understood and agreed that all understandings and agreements heretofore had between and parties thereto are merged in this Agreement, which alone fully and completely expresses their agreement and contains all of the terms agreed upon between the parties with respect to the subject matter of this Agreement, and that this Agreement is entered into after full investigation, neither party relying upon any statement or representation, not embodied in this Agreement, made by the other. All exhibits, schedules and other attachments, as well as the Master Lease Agreement, are a part of this Agreement and the contents thereof are incorporated herein by reference.

5.11 Amendment. This Agreement may not be amended, modified or supplemented, except in writing and signed by the parties.

5.12 Non-Waiver. No waiver by any party to this Agreement of any failure or refusal by the other party to comply with its obligations shall be deemed a waiver of any other or subsequent failure or refusal to so comply. No waiver by either Party of any right or remedy hereunder shall be valid unless the same shall be in writing and signed by the Party giving such waiver. No waiver by either Party with respect to any default, misrepresentation, or breach of warranty or covenant hereunder shall be deemed to extend to any prior or subsequent default, misrepresentation, or breach of warranty or covenant hereunder or affect in any way any rights arising by virtue of any prior or subsequent such occurrence.

5.13 Severability; Modification Required By Law. If any term or provision of this Agreement shall be found by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable, the same shall not affect the other terms or provisions thereof or hereof or the whole of this Agreement, but such term or provision shall be deemed modified to the extent necessary in the court's opinion to render such term or provision enforceable, and the rights and obligations of the parties shall be construed and enforced accordingly, preserving to the fullest permissible extent the intent and agreement of the parties herein set forth.

5.14 No Third Party Beneficiaries. Nothing in this Agreement, express or implied, is intended to confer upon any third party any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

5.15 No Brokers. The parties agree that they have entered into this Agreement without the benefit or assistance of any brokers, and each party agrees to indemnify, defend and hold the other harmless from any and all costs, expenses, losses or liabilities arising out of any claim by any person or entity that such person or entity acted as or was retained by the indemnifying party as a finder or broker with respect to the transaction described in this Agreement.

5.16 Further Acts. Each party agrees to perform any further acts and to execute, acknowledge, and deliver any documents which may be reasonably necessary to carry out the provisions of this Agreement.

5.17 Successors and Assigns. This Agreement and all of the provisions thereof and hereof shall be binding upon and inure to the benefit of the parties and their respective successors and permitted assigns.

5.18 Counterparts. This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but which together will constitute one and the same instrument.

5.19 Disputes. Article 28 of the Master Lease Agreement shall govern for purposes of any claim arising out of this Agreement or its performance.

**IN WITNESS WHEREOF**, the parties hereto have executed this Commercial Sub-Lease as of the Effective Date.

**CITY OF LEWISTON**

**CASELLA RECYCLING, LLC**

By: <u>Edward A. Barrett</u>	By: <u>[Signature]</u>
Name: <u>Edward A. Barrett</u>	Name: <u>BOB CARRATONA</u>
Title: <u>City Administrator</u>	Title: <u>Vice President</u>
Date: <u>2-21-2012</u>	Date: <u>2-25-2013</u>

EXHIBIT B

FORM OF PAYMENT AND PERFORMANCE BOND

Bond No.: \_\_\_\_\_

### Payment and Performance Bond

KNOW ALL MEN BY THESE PRESENTS that we \_\_\_\_\_  
the Principal and \_\_\_\_\_, the Surety, are hereby bound unto \_\_\_\_\_  
\_\_\_\_\_, the Oblige, in the penal sum of \_\_\_\_\_

Dollars (\$ \_\_\_\_\_) for the payment of which we bind ourselves, our heirs, administrators, executors, successors, and assigns, jointly and severally, by these presents.

WHEREAS, the Principal has entered into a certain written Lease Agreement with the Oblige, dated the \_\_\_\_\_  
day of \_\_\_\_\_, (year) \_\_\_\_\_ (the "Contract"), covering \_\_\_\_\_

\_\_\_\_\_ which Contract is hereby incorporated herein  
as if fully rewritten:

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall promptly and faithfully perform its obligations (the "Construction Obligations") to construct the Facility (as defined under said Contract) pursuant to Article 4 of said Contract and shall pay all lawful claims of such subcontractors and suppliers who provide labor and/or materials used in the construction of the Facility for the purpose of performing the Construction Obligations (including discharging any liens associated therewith), then this obligation shall be void; otherwise, it shall remain in full force and effect, subject to the following conditions:

1. This Bond is for the term beginning \_\_\_\_\_ and ending upon the date of the issuance of the occupancy permit for the Facility.
2. If there is no breach or default on the part of the Oblige, then Surety's performance obligation under the bond shall arise after:
  - a. The Oblige has notified the Principal and the Surety in writing at their respective addresses of the alleged breach or the failure of the Principal to pay any subcontractors and suppliers who provided labor and/or materials for the construction of the Facility, and has requested and attempted to arrange a conference with the Principal and the Surety to be held not later than fifteen (15) days after receipt of such notice to discuss methods of performing the Contract, and has made available during the notice period all books, records, and accounts relevant to the Contract which may be requested by the Principal or Surety. If the Oblige, Principal and Surety agree, the Principal shall be allowed a reasonable time to perform the Contract; but such an agreement shall not waive the Oblige's right, if any, subsequently to declare the Principal in default;
  - b. The Oblige has declared the Principal in default of the Construction Obligations and formally terminated the Principal's right to complete the construction of buildings required by the Contract, provided, however, that such default shall not be declared earlier than twenty (20) days after the Principal and the Surety have received the notice as provided in "a" above; and
  - c. The Oblige has agreed that the Surety shall have, at Surety's option, the right to assume all of Principal's rights and obligations under the Contract upon satisfaction of this Bond.
3. The Oblige shall notify the Surety immediately of any change orders approved by the Oblige, any changes to the scope of work or to the duration of the Contract, or any increases to the Contract price.
4. The Oblige shall immediately notify the Surety of any liens, levies, attested accounts, or other claims against the Principal of which the Oblige has actual or constructive notice.
5. No claim, action, suit or proceeding, except as hereinafter set forth, shall be had or maintained against the Surety of this instrument unless same be brought or instituted and process served upon the Surety within six months after the expiration of this Bond. The parties hereto expressly acknowledge and agree that no liquidated damages shall be claimed, due or payable by Surety pursuant to this Bond.
6. This Bond may be extended for additional terms at the option of the Surety, by Continuation Certificate executed by the Surety.
7. In no event shall the liability of the Surety hereunder exceed the penal sum hereof.

Signed, sealed and executed, this \_\_\_\_\_ day of \_\_\_\_\_, (year) \_\_\_\_\_.

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety

By: \_\_\_\_\_  
Title

By: \_\_\_\_\_  
Attorney-in-fact

Witness: \_\_\_\_\_

Witness: \_\_\_\_\_

EXHIBIT C  
PERFORMANCE BOND

## Performance Bond

Bond No:

KNOW ALL MEN BY THESE PRESENTS, that \_\_\_\_\_, the Principal, and \_\_\_\_\_, the Surety, are held and firmly bound unto the \_\_\_\_\_ as Obligee, in the penal sum of \_\_\_\_\_ (\$), for the payment of which we bind ourselves, our heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Lease Agreement with the above mentioned Obligee dated the day of \_\_\_\_\_, \_\_\_\_\_ ("Contract") whereby the Principal has agreed to lease the Premise (as defined in Contract) and operate the Facility (as defined in the Contract), which Contract is hereby incorporated herein as if fully rewritten. Notwithstanding, any terms and provisions specifically modified herein shall have the meaning given in this bond.

NOW, THEREFORE, the condition of the above obligation is such that if the Principal shall promptly and faithfully perform its obligations under the Contract (other than its obligations to construct the Facility), then the Surety's obligation shall be null and void; subject, however, to the following conditions:

1. This bond is for the term beginning \_\_\_\_\_ and ending \_\_\_\_\_.
2. If there is no material breach or default on the part of the Obligee for which the Principal has provided notice, then the Surety's performance obligation under this bond, at the Surety's option, to either (i) perform the Principal's obligations under the Contract should the Principal fail to perform or (ii) pay the losses, including liquidated damages specified in the Contract, incurred by the Obligee up to the penal sum, shall arise after:
  - a. The Obligee has notified the Principal and the Surety in writing at their respective addresses of an alleged breach, or in the alternative the Obligee has notified the Principal and the Surety in writing at their respective addresses of a failure to provide a bond as required under Article 25 of the Contract, and has requested and attempted to arrange a conference with the Principal and the Surety to be held not later than fifteen (15) days after receipt of such notice to discuss methods of performing the Contract or providing the bond, as the case may be; and has made available during notice period all books, records, and accounts relevant to the Contract which may be requested by the Principal or Surety. If the Obligee, Principal and Surety agree, the Principal shall be allowed a reasonable time to perform the Contract; but such an agreement shall not waive the Obligee's right, if any subsequently to declare the Principal in default; and
  - b. The Obligee has declared the Principal in default and formally terminated the Principal's right to complete the Contract, provided, however, that such default shall not be declared earlier than twenty (20) days after the Principal and the Surety have received the notice as provided in "a" above.
3. The Obligee has agreed that the Surety shall have, at the Surety's option, the right to assume all of the Principal's rights and obligations under the Contract upon satisfaction of this Bond, including but not limited to satisfy the requirements of Article 25 of the Contract.
4. The Obligee has agreed that (i) upon notice by the Obligee of the Principal's failure to provide the bond as required under Article 25 of the Contract, (ii) the Obligee's compliance with Section 2 and (iii) the Surety has determined that a valid claim has been made on this bond by the Obligee, for failure of the Principal to provide the bond required under Article 25, the Surety, at its option, can either perform the Principal's obligations under Article 25 by posting a new bond in accordance with Article 25 or pay the Obligee the penal sum of this bond.
5. As required by Section 2(a) above, the Obligee shall notify the Surety of each instance (each a "Infraction") whereby the Principal has failed to comply with its obligations under Article 4(B) of the Contract, through the



actions of an entity other than Principal or any of Principal's affiliates, by the delivery of out of state waste to the Leased Premises or Principal's recycling transfer facilities located in Westbrook and Scarborough, Maine, respectively. Upon the failure of the Principal to pay the liquidated damages amount agreed by the Principal and the Obligees for each such Infraction (which is set forth below), the Surety and the Obligees have agreed that the Obligees can make a claim on this bond for (and receive payment upon a valid claim of) such liquidated damages amount upon the Principal's failure to perform as described in this Section 5; provided, that the Obligees has complied with Section 2 and the Surety's obligation under this bond is limited to payment of the liquidated damages amounts set forth below and the aggregate liability under this bond shall not exceed the penal sum hereof.

<b>Infraction</b>	<b>Liquidated Damages Amount</b>
Infraction No. 1	\$10,000
Infraction No. 2	\$20,000
Infraction No. 3	\$30,000
Infraction No. 4	\$40,000
Each infraction thereafter	\$50,000 per infraction

6. As required by Section 2(a) above, the Obligees shall notify the Surety when the Principal has failed to comply with its obligations under Article 5(C)(2) of the Contract, or has failed to comply with its obligations under Article 4(B) of the Contract, except as otherwise provided in Section 5 of this bond. Upon the failure of the Principal to pay the liquidated damages amount agreed by the Principal and the Obligees for each such failure (which is set forth below), the Surety and the Obligees have agreed that the Obligees can make a claim on this bond for (and receive payment upon a valid claim of) such liquidated damages upon the Principal's failure to perform as described in this Section 6; provided, that the Obligees has complied with Section 2 of this bond and the Surety's obligation under this bond is limited to payment of the liquidated damages amounts set forth below and the aggregate liability under this bond shall not exceed the penal sum hereof.

<b>Infraction</b>	<b>Liquidated Damages Amount</b>
Infraction No. 1	\$10,000
Infraction No. 2	Penal sum of this bond reduced by any losses already claimed under this bond

7. No claim, action, suit or proceeding, except as hereinafter set forth, shall be had or maintained against the Surety of this instrument unless same be brought or instituted and process served upon the Surety within six months after the expiration of this Bond.
8. This Bond may be extended for additional terms at the option of the Surety, by Continuation Certificate executed by the Surety.
9. In no event shall the liability of the Surety hereunder exceed the penal sum hereof.

Signed, sealed and executed this \_\_\_\_\_ day of \_\_\_\_\_ 2013.

Principal

Evergreen National Indemnity Company  
Surety

By: \_\_\_\_\_  
Title

(Corporate Seal)

By: \_\_\_\_\_  
Attorney-In-Fact

(Corporate Seal)

Witness: \_\_\_\_\_

Witness: \_\_\_\_\_

Obligee

By: \_\_\_\_\_  
Title

Witness: \_\_\_\_\_



**Pre-Filed Direct Testimony of Michael Booth  
Before the Department of Environmental Protection**

**Juniper Ridge Landfill**

**DEP Application S-020700-WD-BC-A**

**I. Introduction and Qualifications**

My name is Michael Booth. I am a Licensed Professional Engineer in the State of Maine and am employed as a Senior Project Manager at Sevee and Maher Engineers, Inc. (SME) of Cumberland Maine. I have over thirty years of environmental engineering experience with my principal area of practice being solid waste management with a focus on landfill design and operations. I have been involved in the Juniper Ridge Landfill (JRL) since its inception in 1993 when I assisted with siting and designing the facility for James River. I also directed the design and preparation of the permit application for the vertical increase and additional waste streams amendment application (MEDEP #S-020700-WD-N-A) approved by the Department in 2004 (2004 amendment). Throughout my career, I've been involved in multiple functions with many of the landfills in the State of Maine. Therefore, I'm very familiar with the standards of practice relating to landfill design, the DEP's landfill licensing standards, and the disposal of municipal solid waste (MSW) in secure landfills such as JRL. A copy of my curriculum vitae is attached. *See* BGS/NEWSME Exhibit BGS/NEWSME #5. My testimony will focus on several design issues addressed in this application, including liner design, leachate quantity and quality, landfill capacity, landfill gas generation, and traffic.

**II. Application Content and Evaluation Approach**

In preparing this application, we began by quantifying the proposed changes in waste tonnage and composition taken to JRL as the result of shutting down the Maine Energy

Incinerator (MEI), thus eliminating the disposal of residuals from MEI at JRL, and replacing them with in-state MSW. The next step was to evaluate whether the resulting change in waste composition (i.e., additional MSW and reduced Front End Process Residue (FEPR) and ash volumes) would materially change any technical assumptions or criteria used to design and operate the landfill in compliance with the Solid Waste Regulations (Regulations) and DEP's Findings of Fact in the 2004 Amendment License. As a result of this analysis, and as explained in greater detail below, we concluded that this proposed license amendment would have, from a technical perspective, little to no impact on JRL, and thus that the facility is adequately designed to receive additional MSW in compliance with the Regulations. This is consistent with the Department's technical staff review memo prepared by Engineer Amanda Wade, which is in the hearing record and available on the Department's website, in which staff provided only one substantive comment on the application, which was to correct a typographical error, and then concluded: "Based on our review of the information presented in the application and our knowledge of the design of the facility, operations at the JRL are adequate to handle the addition of the proposed amount of MSW to the currently permitted waste stream." See October 22, 2012 Memorandum from Amanda S. Wade, P.E. to Michael Parker.

There are three conditions that are most relevant in evaluating this proposal relative to facility design.

First, the proposed change will reduce the yearly tonnage accepted at the facility about 5 percent, thus extending slightly its projected life. Tables 1-2 and 1-2.1 in the application compare existing material tonnages accepted at JRL to the proposed tonnages as a result of this proposal.

Second, the proposed change involves just the incinerator wastes from MEI, which in combination with the PERC waste streams is about 30 percent of the total materials placed in

JRL, and thus the great majority of the waste mix (approximately 70%) will be unaffected. Using the three-year average of MEI wastes, as showing in the application, the materials and percentages, by weight, that will change are as follows: (1) FEPR will decrease from 16 percent of the waste volume to 9 percent; (2) MSW incinerator ash will decrease from 14 percent to 8 percent; and straight MSW will increase from 4 to 14 percent.

Third, again using the three-year averages of MEI wastes, the amount of MSW-type wastes received at JRL will increase only slightly from about 20 to about 23 percent. This includes both MSW and FEPR generated by both the MEI and PERC incinerators, which has similar properties to MSW and is, in fact, a subset of MSW, as defined by Chapter 400.1.FFF and 400.1.NNNN of the Regulations. For those not familiar with FEPR, this material consists of screenings generated at the front end of the refuse-derived fuel incinerators such as MEI and PERC where MSW is shredded and then passed over a screen to increase the fuel value of the MSW. FEPR is typically composed of grit and small pieces of glass, organic material, paper, and plastic.

These three factors listed above are important in considering the potential impact of the proposal on JRL's liner, leachate management, capacity consumption, gas management, and traffic, all of which are discussed below.

### **III. Liner Design**

Because the current landfill liner design already exceeds the requirements for landfills that accept MSW, as outlined in Chapter 401.2.D.1 of the Regulations, there will be no change needed as a result of the pending application. The JRL liner includes an 80 mil high density polyethylene (HDPE) geomembrane, a geosynthetic clay liner, and two feet of compacted marine clay. The Regulations, Chapter 401.2.D.1.a, only require that landfill liners for secure MSW

landfills include a 60 mil HDPE geomembrane, a geosynthetic clay liner, and one foot of compacted low permeable soil. Thus, the additional 20 mil thickness of the geomembrane and additional foot of compacted soil provide a more robust liner system than is required by the Regulations.

In addition, the existing liner system is already compatible with MSW. The compatibility of the liner materials with MSW landfill leachate is well documented, as demonstrated by the routine use of these materials in landfills throughout the State of Maine that handle MSW and other special wastes. Therefore, this proposal is entirely consistent with the types of liner systems used at other landfills in Maine that handle the same types of waste.

#### **IV. Leachate Quantity and Quality**

Leachate quantity and quality are not anticipated to change as a result of the proposed change in waste composition. The facility's leachate collection system design, including leachate collection system pipe design and the onsite leachate storage tank capacity, was designed for the 2004 amendment application as if that the entire waste mass would be MSW. As a result, the systems needed to manage the leachate under this amendment application are already in place.

The leachate volume estimates for JRL, which were calculated for the 2004 amendment application, were based on the properties of MSW and projections of the various open and covered areas of the landfill. *See* BGS/NEWSME Exhibit #6. The projections indicated that landfill leachate volumes would be in the range of 13,000,000 to 15,000,000 gallons per year. The actual leachate generation rates over the last several years have been less than we conservatively estimated: 10,966,753 gallons, 10,916,259 gallons, and 9,708,645 gallons in 2010, 2011, and 2012, respectively. I do not anticipate leachate generation rates to change as a

result of the proposed additional MSW, because the amount of material taken to the landfill will remain approximately the same and therefore the amount of open operational area will remain approximately the same. The open operational area and annual precipitation are the largest factors that affect the leachate generation rate at the facility. Neither of these will be affected by the proposed change in MSW. Thus, the quantity of leachate generated by JRL will not change.

In addition, this proposal will not change the leachate quality at the site. Included as BGS/NEWSME Exhibit #7 is a modified version of Table 3-2 of the Application, which compares the JRL leachate to typical MSW landfill leachate. For purposes of my testimony, we have augmented the original table with additional data on leachate quality from an MSW landfill site operated by Casella in New York, and the results from the last several quarters of leachate sampling at JRL taken at the point where leachate is loaded from the leachate storage tank into trucks to be transported offsite for disposal. This testing is done as part of the pre-treatment sampling program. As this analysis demonstrates, overall leachate quality from a site that received predominately MSW is similar to the JRL leachate. Equally important to this evaluation is the fact that the actual increase in MSW-type waste (i.e., FEPR and MSW) to JRL will only be about 10,000 tons (approximately 3 percent of the total waste tonnage based on the 3 year average). This is not large enough to appreciably change the leachate quality from what has been generated at JRL since 2004. Therefore, I do not expect that this proposal will have any meaningful impact on leachate quality, either.

#### **V. Landfill Capacity Consumption**

The proposed change in the overall waste percentages proposed in the amendment application will not have a significant change on the in-place waste density and hence the landfill capacity consumption. In fact, the proposed change is projected to extend the life of the landfill



slightly. Tables 3-1 and 3-1.1 of the application compare the weighted-average waste density for the current waste percentages (using 2011 and three year average figures, respectively) to the estimated future waste tonnages if the amendment application is approved. The landfill space that will be consumed by additional MSW will be more than offset by the reduction in space previously used to dispose of the residues from MEI that will no longer be disposed of at the site, resulting in a net reduction in landfill capacity consumed as shown on the tables 3-1 and 3-1.1. This analysis is conservative in terms of capacity consumption because it does not account for the commingling of wastes, waste consolidation associated with load, and secondary decomposition of the wastes, all of which result in higher in-place waste densities, and hence less landfill capacity consumed than the weighted average densities shown on these tables and discussed below.

The actual 3-year running average in-place waste density at JRL in the active fill area, which accounts for the factors cited above, is about 0.91 tons per cubic yard. As the analysis presented in Tables 3-1 and 3-1.1 demonstrates, the proposed change in the overall waste composition from this amendment application will result in similar weighted average waste densities. Hence, no appreciable changes are 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.

## **VI. Gas Management**

Landfill gas management is an important component of site operations from both an air quality and odor management standpoint. The specific discussion about the operational practices that JRL employs to handle landfill gas will be covered by Jeremy Labbe in his

presentation. I will address the evaluation that was completed to determine if there would be changes in the projected volume of landfill gas generated based on this proposal. This work was completed by Sanborn Head & Associates (SHA), who are experts in this field of study. The application for the 2004 Amendment contained projections of landfill gas generation, also prepared by SHA, which provided the basis for the location and design of gas collection infrastructure within the landfill, the sizing of the flare used to combust the landfill gas, and gas transport piping to deliver the landfill gas from the collection system to the flare.

To evaluate the impact of this application on projected landfill gas generation, SHA re-modeled landfill gas generation rates using the proposed waste composition. This information is contained in Attachment 9 of the Application. This evaluation includes a projection of proposed maximum gas generation with the additional tonnage of MSW. The updated evaluation of the change in the waste composition estimates peak landfill gas generation at approximately 3,420 scfm, assuming a methane content of 50 percent. The peak design gas flow rate presented in the application for the 2004 Amendment was 3,980 scfm, assuming a methane content of the gas of 50 percent. Therefore, the anticipated peak gas generation is still less than the value used to design the system in 2004. Because the gas headers and landfill flare were sized to handle greater peak gas flow rates than projected for this proposal, the existing gas collection, transport, and treatment systems can adequately handle landfill gas generated by the facility as a result of the proposed application.

## **VII. Traffic**

As stated in the application, the proposed change in the waste composition will actually result in fewer truck trips than when MEI was operating. This conclusion is based on a comparison of actual waste truck trips associated with delivering materials to the landfill in 2011

to projected truck trips based on the waste tonnage proposed to be accepted, utilizing the average waste tonnage per load for the various types of wastes received at the JRL. A typical load of material received at the facility varies from 25.4 tons to 30.2 tons of waste. This weight is dependent on the material's physical properties, which dictate both the size and number of trucks that are used to transport waste. The majority of the materials are delivered via an 18 wheeled truck and trailer that can carry up to 100 cubic yards depending on the weight of the material. Some of the material, such as ash, is typically delivered in 10 wheeled trucks transporting 60 yard roll off containers. As shown in Table 2-1 and 2-1.1 of the application the additional truck traffic generated from the additional MSW is more than offset by a reduction in the loads of FEPR and ash from MEI. Therefore, because traffic will actually be reduced slightly, this proposal will not require any changes to the Findings of Fact relative to traffic in the 2004 amendment.

### **VIII. Conclusion**

I have evaluated the technical and design components of JRL considering the proposed change in the waste composition proposed in this application. As a result of that evaluation, I have determined that there are no changes in the technical bases for the Findings of Fact contained in the 2004 amendment.

Dated: 2/21/2013

*Michael Booth*  
Michael Booth

STATE OF MAINE

Cumberland, ss.

Personally appeared before me the above-named Michael Booth and made oath that the foregoing is true and accurate to the best of his knowledge and belief.

Before me,

Dated: February 21, 2013

*Holly A. Brooks*  
Notary Public  
Name:  
My Commission Expires:

HOLLY A. BROOKS  
Notary Public, Maine  
My Commission Expires July 17, 2017





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Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

## MICHAEL S. BOOTH

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### EDUCATION

University of Maine - B.S. in Civil Engineering, 1979

Special Courses:

Carbon Emission Trading – 2008, Financial Research Associates LLC  
 Landfill Gas Systems Engineering Design – 2006, CES Landtec Course  
 Geotechnical Aspects of Waste Disposal – 1987, University of Maine  
 Sanitary Landfill Gas and Leachate Management – 1985, University of Wisconsin  
 Geotechnical Aspects of Landfill Design – 1984, University of Wisconsin  
 Groundwater Pollution and Hydrology – 1984, Princeton University  
 Advanced Wastewater Treatment Systems – 1981, University of Maine

### PROFESSIONAL REGISTRATION

Professional Engineer – Maine

### AFFILIATIONS

American Society of Civil Engineers, Member  
 Solid Waste Association of North America, Member  
 U.S.EPA Landfill Methane Outreach Program, member

### EMPLOYMENT HISTORY

1989 to currently - Sevee & Maher Engineers, Inc, Senior Project Manager/Project Engineer  
 1986 to 1989 - E.C. Jordan Co., Portland, Maine, Project Manager/Project Engineer  
 1980 to 1986 - Maine Department of Environmental Protection, Augusta, Maine, Engineer

### PROFESSIONAL EXPERIENCE

Mr. Booth has over 32 years of experience with the design, permitting, and operation of environmental projects. As a Project Manager/Project Engineer with Sevee & Maher Engineers, Mr. Booth is responsible for both the technical and managerial aspects of multi-task projects including client relations, regulatory agency relations, detailed design, permitting, construction, and operation assistance principally focused on solid waste management issues.

Assignments in his various areas of expertise have included:

- Preparing Design and Permits for Commercial, Private and State Owned Landfills and Overseeing Landfill Construction - Mr. Booth has managed and acted as lead technical engineer on five landfill projects in the State of Maine. As the lead technical engineer Mr. Booth has been responsible for directing the detailed hydrogeologic investigations, evaluating siting issues such as odor, noise, visual, and wetland impacts, completing detail liner and leachate collection system designs, and preparing cell development and operational plans. Mr. Booth has also been responsible for preparing supporting permits for the projects and providing permit support during the permitting process. These landfills were designed to accept a number of different materials, including municipal solid waste, construction and demolition debris, and special wastes such as bottom and fly ash, and sludges. For

these projects Mr. Booth has been involved in the oversight of construction and provided operational assistance to the facilities.

- Providing Technical Design Services for a 68-acre Commercial Landfill - In this role, Mr. Booth has been responsible for managing and preparing a number of State and Local applications for both an expansion and closure of this facility since 1992. The facility handles a variety of waste streams, including MSW incinerator ash, other boiler ash, construction and demolition debris, municipal solid waste, and assorted special wastes. He has directed the design and construction of eight phases of landfill cell construction and three phases of final cover construction at the facility including the development of detailed design drawings, administrative contract documents, and operations manuals. For this site, he has also directed studies and designs relating to landfill liner and cover stability; landfill leachate collection and treatment; groundwater remediation; landfill gas collection and fugitive migration control. Recently he has been responsible for designing and permitting the leachate recirculation system for the site. This system is unique because it recirculates leachate in a waste mass with a large percentage of construction and demolition debris.
- Evaluating the performance of an Alternate Landfill Final Cover System in South Africa - Mr. Booth worked with a South African Paper Company to evaluate the performance of an alternate final cover system at a pulp and paper mill landfill in Springs, South Africa. The landfill received a number of process mill wastes, including pulping wastes, bottom and fly ash, and wastewater sludge. Prior to Mr. Booth's involvement, the company had performed initial laboratory and field tests to evaluate if its primary sludge could be used as a final landfill cover material. A test cell was constructed using the primary sludge and its performance was monitored over a several year period. The monitoring results indicated that the properties of the sludge cover were changing over time and the original assumptions on cover performance were no longer valid. Mr. Booth developed a program to characterize the current in-situ characteristics of the sludge cover and its hydraulic performance in the South African climate. Samples of the in situ sludge cover were collected and laboratory tests performed. From the tests results, Mr. Booth was able to characterize the cover degradation mechanisms and use this information to demonstrate the effectiveness of the cover in the South African climate. Recommendations were also provided on future cover designs using the sludge material.
- Assist client obtain a program approval for a Solid Waste Beneficial Use Permit - Mr. Booth prepared and permitted a program approval under the State of Maine Beneficial Use of Solid Waste Regulations to allow for the general distribution of patented biomass energy pellets to industrial, commercial and institutional biomass boilers for use as a fuel substitute. The pellets are manufactured using biomass and recycled plastics to produce a fuel that is high in BTU content and moisture resistant. Because the pellets contain recycled plastics, and are used as a boiler fuel an individual permit would be required for each boiler using the pellets. Mr. Booth designed a program approval program that allowed use of the pellets in solid fuel boilers without first receiving individual permit.
- Evaluate State Solid Waste Capacity Needs As it Relates to an Expansion of State of Maine Landfill - Mr. Booth prepared an application for the Public Benefit Determination for the Expansion of the State Owned Landfill in Old Town Maine. The application needed to demonstrate consistency with the State of Maine's Waste Management and Recycling Plan prepared for the State Planning Office. Through this effort Mr. Booth developed an in-depth working knowledge of the current waste management practices with the State and the implementation of the waste management hierarchy establishing priorities of waste handling of waste reduction, reuse, recycling, composting, volume reduction by incineration, for energy recovery, and landfilling.
- Designing and Permitting of an Odor Control and Landfill Gas Treatment System for Commercial Landfill - Mr. Booth participated in the design and permitting of an active landfill gas collection and



treatment system at a 57-acre commercial landfill. The main components of the system include gas collection and conveyance piping; a condensate handling system; a stationary flare with a rated capacity of 1,200 standard cubic feet per minute (SCFM) and 34 MMBTUs per hour and a gas conditioning system to remove sulfur compounds. Mr. Booth was responsible for providing technical oversight to the project, preparing the Title V air permit application, and the facility's Operations Manual. As part of the Operations Manual, Mr. Booth was involved in designing a data operation collections system to allow timely collection of operational data for the facility.

- Preparing and Evaluating the Feasibility of Renewable Energy Projects at a Municipal Landfill - Mr. Booth evaluated the feasibility of developing a renewable energy project for a small municipal landfill with an active gas collection system. The evaluation consisted of quantifying and projecting future landfill gas projections; identifying seven potential utilization projects and their components and performing an economic evaluation that defined project costs and revenues and a project life cycle analysis. The project evaluated included using the gas for power generation, on and off-site heating, and off-site cogeneration.
- Evaluating and Preparing Documentation of Carbon Credits Associated with an Active Landfill Gas Flaring Project - Mr. Booth assisted a municipal client with the monetization of emission reductions associated with a landfill gas flaring project. The emission reductions, associated with destroying methane gas, are eligible to be sold as monetized "carbon credits" under several different protocols established to provide a means to quantify and qualify projects that result in the reduction of greenhouse gas emissions. The first phase of the project was to evaluate the eligibility of the project under protocols set forth by the Voluntary Carbon Standard (VCS), the Chicago Climate Exchange (CCX), the Regional Greenhouse Gas Initiative (RGGI), and the Climate Action Reserve (CAR). Based on this evaluation the client elected to pursue carbon credits using the CAR protocol. Mr. Booth prepared the required project documentation to have this project listed and verified under the CAR Protocol. Another component of this project was to assist the client with compiling and managing the data required to verify this project.

## PRESENTATIONS and PUBLICATIONS

March 2009 Is it low tide? The saga of an odor control challenge at a small municipal landfill. Presented at SWANA Landfill Gas Symposium in Atlanta, Georgia. Coauthor.

December 2008 A Small Landfill's Preliminary Evaluation of Carbon Credits and Renewable Energy Projects. Presented at U.S.EPA LMOP Landfill Gas Energy: A Sustainable Energy Source from Small Landfills in New England conference in Portland Maine.

June 22, 1989, Closing Landfills, presented at one-day conference entitled "How to Deal With Your Solid Waste," sponsored by SMVTI.

February 1987, Permitting a Landfill in the State of New York, presented at the New York North Western Region monthly TAPPI meeting.





FROM WEST OLD TOWN LANDFILL LICENSE AMENDMENT APPLICATION  
VERTICAL INCREASE & CHANGE IN LANDFILL OPERATIONS OCTOBER 2003 (VOLUME 1)

and with the concurrence of the City of Old Town, NEWSME Operations proposes as part of its host community benefits program to construct an approximate 2.5-mile sewer along Route 43 to the existing Old Town sewer adjacent to the Old Town Airport.

In addition to the new leachate storage tank, the existing leachate pond will be maintained to provide back-up leachate storage on-site. The leachate conveyance and storage system has been designed in accordance with the requirements of Section 401.2.D.4 of the Regulations. Supporting design calculations are provided in Appendix D.

5.2.1 Leachate Generation. An assessment was made of the leachate generation rates anticipated at the site during the operations, closure, and post-closure periods, using the U.S.EPA's Hydrologic Evaluation of Landfill Performance (HELP) Model, Version 3. The HELP model simulations used climatological data from the Bangor area for a 15-year period from 1975 through 1989. Design parameters used for the model simulations are representative of the existing and proposed liner systems. Landfill wastes were modeled using the HELP model default municipal solid waste (MSW) properties. These properties were selected because they represent the majority of the waste types anticipated for disposal at the landfill (see Section 6.2). To provide conservative estimates of leachate generation for the purpose of sizing leachate storage facilities, the conditions modeled assumed a 10-foot thick waste lift (i.e., first waste lift) with no runoff, and no cover material. The results of this modeling effort were compared to the actual leachate generation rates from PTL Phase VIII-C Stage I cell, since the wastes placed in the PTL site are of similar make-up to the wastes anticipated to be placed at the West Old Town Landfill. This analysis is included in Appendix D and suggests the modeling parameters used to estimate leachate provide a good representation of the anticipated waste characteristics and associated leachate generation rates.

The HELP model was also used to estimate leachate flows from cells with intermediate and final cover applied. The input parameters for the liner and leachate collection system are as

constructed for Cells 1 and 2, and as proposed for future landfill cells. HELP model output summaries are included in Appendix D.

To size the leachate storage facilities, leachate production for each of the operating cells presented on the Cell Development Plan, discussed in Section 5.3 and presented in Appendix C, were evaluated. The worst case scenario involved the operating condition when Cells 1, 2, and 3 are open with no cover applied. The combined open area for these cells is 22.6 acres. Development of subsequent cells will result in less open area and therefore less leachate production during the peak leachate production months, although slightly larger average annual daily flows may be generated when future landfill cells are developed. The HELP model estimates the daily leachate flow based on average annual leachate production during the life of the facility of between to range between 35,000 to 41,000 gallons per day. During the month of peak leachate generation, the HELP model predicts leachate generation in the range between 81,000 and 133,000 gallons per day. These calculations are found in Appendix D. The HELP model generally provides conservative estimates of leachate production.

5.2.2 Leachate Piping. The layout of the proposed leachate piping within the landfill is shown on Drawings included in Appendix A, and on the Cell Development Plans included in Appendix C. The proposed leachate pipe spacing is based on the landfill base slopes and leachate impingement rate calculated from the HELP model. The pipe space will be 150 feet slope length within each cell. To monitor the performance of the leachate collection system, at least one transducer will be placed in each cell in the drainage sand layer.

Leachate collection laterals generally run in north/south direction within the cells. This provides the ability to clean the lateral from access points around the perimeter of the landfill. The laterals, cleanouts, and tees will be at the perimeter of the cells. The tee provides a location to install additional leachate collection piping for future waste lifts, if necessary. The laterals will be connected to leachate header pipes located on the southern end of the cells. The header pipes will convey leachate to one of the three internal leachate collection sumps within the cells. The

APPENDIX D-4

SUMMARY OF LEACHATE GENERATION RATES  
FOR INDIVIDUAL LANDFILL CELLS

SUMMARY OF LEACHATE GENERATION BASED ON HELP MODEL RESULTS, (10' OPEN WASTE)  
CASELLA "WEST OLD TOWN LANDFILL" - VERTICAL EXPANSION DESIGN

TOTAL AREA IN ACRES

CELL	OPEN AREA (Ac.)	TEMPORARY COVER (Ac.)	FINAL COVER (Ac.)
3	22.6	0	0
4	11.5	14.8	4.3
5	13.6	16.3	8.6
6	12.6	21.4	13.8
7	13.1	27.3	16.2
8	17.2	26.5	22.1

DAILY LEACHATE GENERATION RATES FROM AVERAGE ANNUAL

CELL	OPEN AREA (Gal./day)	TEMPORARY COVER (Gal./day)	FINAL COVER (Gal./day)	TOTAL (Gal./day)
3	34685	0	0	34685
4	17649	8126	0	25776
5	20872	8950	0	29822
6	19338	11750	0	31088
7	20105	14990	0	35095
8	26397	14550	0	40948

AVERAGE ANNUAL LEACHATE FLOWS

OPEN	TEMP.	FINAL
74890	26793	0
1535	549	0

<- CU.FEET/AC./YR FROM HELP MODEL  
 <- GAL./AC./DAY CONVERSION

DAILY LEACHATE GENERATION RATES FROM PEAK MONTHLY AVERAGE

CELL	OPEN AREA (Gal./day)	TEMPORARY COVER (Gal./day)	FINAL COVER (Gal./day)	TOTAL (Gal./day)
3	132510	0	0	132510
4	67428	1400	0	68828
5	79741	1542	0	81282
6	73877	2024	0	75901
7	76809	2582	0	79391
8	100849	2506	0	103355

AVERAGE MONTHLY LEACHATE FLOW FOR MAX. MONTH (April)

OPEN	TEMP.	FINAL
6.4782	0.1045	0
5863	95	0

<- IN./MO. FROM HELP MODEL  
 <- GAL./AC./DAY CONVERSION

D-4



## Comparision of JRL Leachate to Leachate from Municipal Solid Waste Landfills

Parameter	Units	Typical Concentration of MSW Landfill Leachate <sup>1</sup>	Hyland Landfill Leachate <sup>2</sup>	JRL Cell 4 (LT-C4L) Mean Value <sup>4</sup>	JRL Leachate Tank Mean Value <sup>5</sup>
Ammonia (as N)	mg/L	50 - 2,200	1,003	620	519
Arsenic	mg/L	0.01 - 1	0.11	0.1	0.10
Barium	mg/L	NR <sup>3</sup>	0.90	1.6	1.52
BOD	mg/L	20 - 57,000	516	1400	1587
Cadmium	mg/L	0.0001 - 0.4	0.005U	0.0024	0.0098
Calcium	mg/L	10 - 7,200	125	930	690.5
Chloride	mg/L	150 - 4,500	3,320	18,000	8,860
Chromium (total)	mg/L	0.02 - 1.5	0.14	0.069	0.0487
COD	mg/L	140 - 152,000	1,910	3,500	3,553
Copper	mg/L	0.005 - 10	0.03	0.015	0.058
Cyanide	mg/L	NR <sup>3</sup>	.01u	0.008	0.005
DO	mg/L	NR <sup>3</sup>	NR <sup>3</sup>	4	2.00
Iron	mg/L	3 - 5,500	12.13	27	29.97
Lead	mg/L	0.001 - 5	0.007	0.046	0.034
Magnesium	mg/L	30 - 15,000	218	410	371
Manganese	mg/L	0.03 - 1,400	1.16	3.7	16.32
Mercury	mg/L	0.00005 - 0.16	.0002u	0.0002	0.0076
Nickel	mg/L	0.015 - 1.3	0.26	0.11	0.11
Nitrate (as N)	mg/L	0.1 - 10	.2u	18	NR <sup>3</sup>
Oil & Grease	mg/L	NR <sup>3</sup>	NR <sup>3</sup>	NR <sup>3</sup>	2.40
pH	s.u.	4.5-9.0	7.88	7.2	7.05
Phosphorus	mg/L	0.1 - 23	NR	0.99	0.58
Potassium	mg/L	50 - 3,700	571	1,800	NR <sup>3</sup>
Selenium	mg/L	NR <sup>3</sup>	.005U	0.016	0.044
Silver	mg/L	NR <sup>3</sup>	0.01U	0.028	0.003
Sodium	mg/L	70 - 7,700	2,300	2,400	1,929
Vanadium	mg/L	NR <sup>3</sup>	0.05	0.023	0.01
Specific conductance	umhos/cm	2,500-35,000	17,643	25,000	21,560
Sulfate	mg/L	8 - 7,750	20U	150	131
TOC	mg/L	30 - 29,000	816	880	NR <sup>3</sup>
Total Kjeldahl Nitrogen (as N)	mg/L	2.6 - 945	1,379	790	597
Turbidity	NTU	NR <sup>3</sup>	NR <sup>3</sup>	NR <sup>3</sup>	177
Bicarb (CaCO3)	mg/L	NR <sup>3</sup>	NR <sup>3</sup>	3,000	NR <sup>3</sup>
Total alkalinity (as CaCO3)	mg/L	730 - 15,500	5,833	3,300	2,487
Total hardness (as CaCO3)	mg/L	500 - 10,000	1,210	4,500	3,251
TDS	mg/L	3,000 - 50,000 <sup>6</sup>	8,896	17,000	12,773
TSS	mg/L	3,000 - 50,000 <sup>6</sup>	NR	95	56
Zinc	mg/L	0.03 - 1,000	0.35	0.33	0.44
Temperature	deg F	NR <sup>3</sup>	NR <sup>3</sup>	66.2	64.37
Eh	mv	NR <sup>3</sup>	NR <sup>3</sup>	120	NR <sup>3</sup>

## Notes

1. 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); unless otherwise noted.
2. The Hyland Landfill is located in Angelica NY and operated by Casella. The landfill primarily disposes of Municipal Solid Waste. The results are the mean value from three samples collected between August 2007 and August 2008 from the primary leachate collection system.
3. NR indicates that No "Typical Range" or value was reported in reference source.
4. Mean values incorporate available data through 2011.
5. Mean values of 6 leachate samples collected between July 2011 and January 2013.
6. Values are thus reported for "Total Solids", no TDS or TSS values were identified.





**Testimony of Jeremy Labbe  
Before the Department of Environmental Protection**

**Juniper Ridge Landfill**

**DEP Application S-020700-WD-BC-A**

**I. Introduction and Qualifications**

My name is Jeremy Labbe. I am a licensed Professional Engineer in the State of Maine and a Solid Waste Association of North America (SWANA) certified Manager of Landfill Operations (MOLO). I am employed by NEWSME Landfill Operations, LLC (NEWSME), the operator of the Juniper Ridge Landfill (JRL), as the Environmental Manager. My responsibilities as Environmental Manager include oversight of landfill design, compliance, and operations. A copy of my curriculum vitae is attached as BGS/NEWSME Exhibit #8. My testimony will address the technical aspects of site operations associated with NEWSME's pending application to amend its solid waste license.

**II. Background**

JRL currently handles municipal solid waste (MSW) at JRL on a regular basis in the form of front end process residue (FEPR) and MSW that has been bypassed from a Maine incinerator (note that Maine Solid Waste Management Regulations define FEPR as a subset of MSW). In fact, JRL accepted 125,700 tons of FEPR, bypassed and soft layer MSW in 2011 from Maine incinerators, as described in Table 1.2 in the application. Our operations staff is very familiar with the properties of MSW. We are also very familiar with the appropriate operational techniques and procedures required to handle this waste stream in accordance with the requirements of the Maine Solid Waste Management Regulations and accepted industry practices. As we outlined in the pending application, the additional MSW that is proposed to be

accepted for disposal at JRL will be offset by the elimination of Maine Energy Incinerator (MEI) residuals, which have been disposed at JRL since 2005. The residuals are incinerator combustion ash, FEPR, and by-passed and soft layer MSW. This proposal actually decreases the amount of waste handled at JRL in comparison to when MEI was operating. This will result in a slightly extended life of the landfill.

In developing the amendment application to the DEP, we reviewed our currently approved site operational procedures to determine: (1) if our current in-place operational procedures are adequate to handle the additional MSW, and if not, (2) what changes would be required to these procedures to handle this material. I will discuss both these items in my testimony.

### **III. Evaluation of Proposal's Effect on Site Operations**

To get a clear picture of what this proposal means to site operations, it is important to keep this proposal in context with the quantity and quality (character) of waste currently handled at the site and how that will change as a result of this proposal, as discussed by Mike Booth.

As a summary, first, with respect to quantity, the proposed amendment will have very little impact on landfill operations because the amount of residuals that were disposed at JRL when MEI was operating are slightly greater than the amount of in-state MSW proposed to be disposed at JRL in this application. Simply put, there will actually be somewhat fewer tons disposed at JRL. With this proposal, the total quantity of waste accepted at JRL would decrease about 5% from when MEI was operating. Thus, one of the reasons that this proposed amendment will have little or no appreciable impact on landfill operations is that the quantity of waste being disposed at JRL would actually decrease.

Second, with respect to quality, the proposed amendment will have little impact on operations since the pending application does not introduce a new waste stream to JRL, and thus will not significantly affect the character of the waste handled at JRL.

Although the overall impact of the proposal on the quantity and quality of the waste will be small, effective management to address the generation of odors, and control of vectors and windblown litter is necessary. Several members of the public have also raised questions about noise. Thus, these topics will each be addressed below to present the operational controls that will be used to minimize and control these issues.

#### **A. Odor control**

To manage potential landfill odors, JRL currently employs the following key practices: (1) use of deodorizers and direct application of odor neutralizers, as necessary; (2) use of two types of cover as part of landfill operations – daily and intermediate; and (3) an active gas management system that collects and flares landfill gas generated by the decomposition of landfilled waste that has an organic component. Additionally, JRL has an extensive Odor Complaint Management and Response Plan that is included at BGS/NEWSME Exhibit #9. These practices have been effective at controlling landfill odor, and we are planning on utilizing these same techniques to control landfill odors if this proposal is approved. For more information on the odor management practices used at JRL, see the presentation that NEWSME gave to the Landfill Advisory Committee in August 2009, included at BGS/NEWSME Exhibit # 10.

##### **1. Waste Handling Related Odors**

From the time a truck arrives at JRL, odor control is a high priority for the landfill staff. Trucks delivering potentially odorous materials are tarped in transit to the landfill until they are

weighed on the JRL scales, to reduce transportation related odors. This is the case with both FEPR and soft layer and bypass MSW, and will be the case with the MSW discussed in this proposal. In warm weather, when temperatures allow outdoor spray application of odor neutralizer, trucks then remove their tarps and proceed through an automated truck spray station where the deodorizer is sprayed directly onto the waste in the trailer. This waste is then unloaded at the working face of the landfill where it is covered with daily cover materials, which will be discussed later. Empty trucks then proceed back through the spray station where the empty trailers are once again sprayed with a deodorizer before leaving the facility. In addition to this process, in warm weather JRL also employs a mobile deodorizing spray system on the working face of the landfill, and a stationary deodorizing spray system along the landfill perimeter to further reduce the potential for odor. Lastly, we also have equipment to directly apply odor neutralizers onto waste as it is unloaded onto the working face if odors are detected. MSW materials are currently handled this way at JRL successfully, and will continue to be in the future.

## **2. Landfill Gas Related Odors**

Our current landfill gas collection and treatment system is adequately sized to handle landfill gas generation as a result of this proposal, as demonstrated by an analysis completed by Sanborn Head & Associates included in the application as Attachment 9. Based on this analysis, the proposed additional MSW will not appreciably change JRL gas generation rates. Mike Booth previously discussed the gas system design. I will focus my discussion on the current operational procedures to properly manage landfill gas at JRL and why they will be effective in controlling landfill gas related odors associated with this proposal.

The primary measures to contain and control landfill gas related odors at JRL are the use of intermediate cover materials and the early and extensive installation of an active gas collection system. Our synthetic intermediate cover material (SICM) currently consists primarily of 40-mil high density polyethylene, which we typically install multiple times during the year on the sideslopes of the landfill. We have found this sideslope usage to be far more effective than use of a soil intermediate cover, which is allowed by DEP Regulations and used by many other landfills. Soil material is permeable, subject to erosion, and can develop cracks when placed on slopes, allowing landfill gas to escape. Synthetic materials are not prone to this, and provide a very effective barrier to gas migration out of the landfill and air infiltration into the landfill. SICM also dramatically reduces moisture infiltration into the waste mass from precipitation when compared to soil intermediate cover. Reducing moisture reduces landfill gas generation and related odors.

In addition to intermediate cover, and equally important in collecting and controlling landfill gas, is the early and extensive active gas collection system installed in every cell built at JRL. The system employed at JRL goes above and beyond industry standards by placing horizontal gas collection, consisting of horizontal collection piping, in the waste as the cell is being filled. Cell 8 landfill gas design plans depicting the infrastructure installed at JRL are presented in BGS/NEWSME Exhibit #11. This infrastructure, and the placement of intermediate cover, allows us to collect landfill gas from an active cell soon after the waste is placed, thereby reducing gas related odor primarily due to hydrogen sulfide. Each gas collection trench has valves and monitoring ports that allow us to monitor gas composition, temperature, flow, and pressure, and determine what vacuum is necessary on a particular area of the landfill. In addition to horizontal gas collection, vertical gas collection wells are also installed once the

waste reaches grade. Both the horizontal and vertical collection infrastructure are connected to a vacuum blower system that pulls gas from each collector and delivers the gas to a flare stack for combustion. Combustion destroys odor causing compounds (such as hydrogen sulfide), and methane gas produced by the waste, significantly reducing greenhouse gas emissions from the landfill. These same procedures will be used when the additional MSW is handled by the site.

Our staff are trained and certified to install gas collection infrastructure, which gives us the ability to install and repair gas collection piping very rapidly and responsively. Currently, there are over 130 gas collectors and several miles of horizontal gas collection and conveyance piping, with more continually added as additional waste is placed. The sheer number of collectors allows our operational staff to precisely control landfill gas collection throughout the waste mass. Daily odor surveys are typically performed around the active landfill areas, the surveys include monitoring for gas migration and landfill-related odors. The surveys also include measurements of airborne concentrations of H<sub>2</sub>S using a Jerome<sup>®</sup> 631-X<sup>™</sup> Hydrogen Sulfide Analyzer. The results of the surveys are reported to the landfill supervisor in order to assure that any potential odor causing conditions are corrected accordingly. Quarterly methane emission surface scans are typically completed on the inactive landfill areas containing intermediate cover with a flame ionizing detector (MicroFID<sup>™</sup>), measuring methane emissions from the landfill surface to assure the effectiveness in containing, collecting, and combusting methane.

### **3. Odor Complaint Management**

We have worked hard to control odor at JRL. We have gone above and beyond standard industry protocol in both design and implementation of landfill gas collection infrastructure and use of SICM. The effectiveness of these odor management practices is evidenced by the decreasing trend in odor complaints since we have implemented these procedures. In the first

few years of operation of JRL, odor was a significant concern. In 2007, we received 241 odor related complaints via our 24 hour a day landfill complaint hotline. With the proactive measures we have taken to curb odor and the excellent staff we have on site, we have reduced those complaints substantially year over year since 2007, as seen in BGS/NEWSME Exhibit #12. In fact, in 2012 we received only seven odor related complaints, detailed in the above exhibit, only one of which was confirmed to be a landfill related odor. The procedure for how JRL staff responds to complaints, and what information is recorded, is provided in the Odor Complaint Management and Response Plan. See BGS/NEWME Exhibit #9.

As previously described, this application proposes to increase the quantity of MSW disposed at JRL by up to 93,000 tons per year, a relatively small amount of waste in comparison with the existing waste stream. The current odor management practices described above are more than adequate to handle odors associated with these additional MSW materials.

## **B. Vectors and Windblown Litter**

The use of daily cover is the primary operational practice to control vectors and windblown litter. We make every effort to utilize waste products as daily cover, commonly referred to as alternate daily cover (ADC). We are proud of the fact that we have found products that function very well as daily cover materials, giving us an alternative that performs as well or better than virgin soil materials. These alternative daily cover materials include: ash, wood fines, processed construction and demolition debris (CDD), wood chips, short-paper-fiber, contaminated soil, or other approved soil-related materials.

### **1. Daily and Intermediate Cover**

Daily cover materials are placed to discourage attraction of birds, our primary vector concern, and minimize windblown litter, and are placed in accordance with DEP standards. The

amount of daily cover material needed in site operations to meet Maine DEP Solid Waste Management Rules, Chapter 401.C.8, has typically ranged between 30 and 35 percent of material placed in the landfill on a weight basis. Our current technique of utilizing alternative daily cover materials has virtually eliminated the need for virgin soil materials for that purpose at JRL, therefore conserving resources. This proposal will slightly increase the amount of wastes that require daily cover. As addressed in Section 4.6 of the application, we have adequate waste materials that can be used as alternate daily cover for this increase. If we do have temporary shortages of ADC, we also have sources of soil that can be used as daily cover material as is the standard industry practice.

In addition to daily cover, intermediate cover is placed on areas of the landfill that have reached interim grades where no additional waste will be placed for a period of six months or longer. The intermediate cover used on the side slopes at JRL is primarily SICM (typically 40-mil thickness). Soil is typically utilized on the top surface (plateau) when grade is reached, where it is less subject to erosion, movement, and subsequent cracking than on side slopes that causes the issues described above. We have found this process to be very effective in controlling vectors and odors.

The additional MSW that will be received at the site will be placed and compacted with the other waste materials accepted at the site. Compaction rates at JRL typically average about 0.91 tons/cubic yard. I do not anticipate that the additional MSW that will result from this proposal will change these compaction rates and subsequent volume consumption. This is due to the composition of the wastes we receive, the comingling of waste materials, the type of compaction equipment we use, and settlement and decomposition that occurs over time in the landfill.



## **2. Vectors**

Because the change in total MSW disposed of at JRL will be relatively small in comparison with the total amount of waste handled currently, we do not anticipate any measurable change in vector activity at the landfill. Currently, vectors are being controlled effectively. In fact, NEWSME has received only one vector related complaint since 2007.

In the future, JRL will continue to utilize daily and intermediate cover as the primary vector control techniques, along with harassment and depredation of sea gulls, in accordance with site permits. Additionally, by commingling MSW with other wastes, such as construction debris, we hinder access for vectors, which further aids in vector control. JRL currently monitors vectors and manages vector control closely, and will continue to do so in the future. Should vectors increase, we would implement additional techniques for controlling sea gulls, including fencing, overhead wires, and outside third-party pest control.

## **3. Litter**

Our primary means to minimize windblown litter is to compact waste as it is placed and cover it as described above. Litter control fencing is also placed at the perimeter of each cell. To date, windblown litter at JRL has been effectively controlled with the procedures described. There have been no landfill litter related complaints. We are 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. We have utilized this technology at JRL, and at other sites, including the Pine Tree Landfill in Hampden prior to its closure, and are very familiar with the proper techniques for utilization. The fencing would be placed on the prevailing downwind side of the waste placement

operations. NEWSME will also continue to pick up litter from the area surrounding the landfill on a regular basis, as is currently done.

**C. Noise**

Noise due to truck traffic to and from JRL is exempt from regulation under DEP's Rules. Nevertheless, total site traffic will not increase with the proposed change in the waste stream. Therefore, there will be no increased truck traffic noise associated with the truck traffic. In addition, the material accepted will not require additional landfill related industrial equipment other than what is currently utilized on site, and that equipment is not expected to operate in a materially different manner. Therefore, increased noise associated with landfill operations will not occur. A site compliance noise study was completed by Warren Brown of EnRad Consulting during cell #3 operation, in 2006, and is included in BGS/NEWSME Exhibit #13. Hourly sound levels from all sources, including ambient, were well below regulatory limits contained in the DEP's Solid Waste Management Rules (Study, page 5). Because no increased sound levels are expected from landfill sources regulated under the DEP's Rules as a result of the additional MSW contemplated in this amendment application, we will continue to be in full compliance with the DEP's Rules.

Dated: 2/21/13

Jeremy M Labbe  
Jeremy M Labbe

STATE OF MAINE  
Penobscot, ss.

Personally appeared before me the above-named, Jeremy Labbe, and made oath that the foregoing is true and accurate to the best of his knowledge and belief.

Before me,

Dated: February 21, 2013

Maria J. Thibodeau  
Notary Public  
Name: Maria J. Thibodeau  
My Commission Expires: June 6, 2015



**Jeremy M. Labbe, P.E.**  
2825 Bennoch Rd, Alton, Maine 04468  
207.217.7988 (cell)  
jeremy.labbe@casella.com

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## PROFILE

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Over 5 years of in-depth experience in landfill operations, design, permitting, compliance, and oversight. Licensed State of Maine Professional Engineer, as well as certified Manager of Landfill Operations. Proven record of success, well organized, and highly motivated.

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## EDUCATION

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### **M.S. Geotechnical Engineering**

*University of Maine, Orono, Maine*

- ∴ Thesis Ongoing, Expected Graduation, Summer 2013
- ∴ Class work Completed

### **B.S. Civil Engineering**

*University of Maine, Orono, Maine*

- ∴ Academic Minor in Business Administration
- ∴ Graduated cum laude

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## WORK EXPERIENCE

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### **Landfill Engineer & Environmental Manager (2011 – Present)**

*Casella Waste Systems, Hampden, Maine*

- ∴ Responsible for environmental compliance of two landfill facilities
- ∴ Oversees facility design, construction, operation, and closure
- ∴ Manages federal, state, and local, permitting functions and required report filings

### **Environmental Technician (2007 – 2011)**

*Casella Waste Systems, Hampden, Maine*

- ∴ Promoted to landfill engineer & environmental manager in May 2011
- ∴ Completed fieldwork pertaining to all aspects of landfill operation
- ∴ Worked with engineers on facility design, construction, operation, and closure

### **Graduate Research and Teaching Assistant (2005-2007)**

*University of Maine, Orono, Maine*

- ∴ Responsible for facilitating and overseeing multiple civil engineering laboratory classes
- ∴ Worked with Professor Dana N Humphrey, Ph.D. on field research using light weight retaining wall and roadway embankment backfill

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## PROFESSIONAL CERTIFICATIONS, MEMBERSHIPS & AWARDS

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- ∴ Licensed State of Maine Professional Engineer (PE)
- ∴ SWANA Manager of Landfill Operations (MOLO)
- ∴ Outdoor Emergency Care (OEC) Technician
- ∴ American Society of Civil Engineers (ASCE)
- ∴ Solid Waste Assoc. of North America (SWANA)
- ∴ National Ski Patrol (NSP)

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## HONORS & DISTINCTIONS

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- ∴ Awarded Waste & Recycling News, 2012 "Rising Stars" Award
- ∴ Proud Eagle Scout

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## RELEVANT SKILLS AND EXPERIENCE

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- ∴ Landfill operation, design, permitting, and planning
- ∴ Project Management and budgeting
- ∴ Federal, State, and Local Regulatory permitting, compliance, and reporting
- ∴ Facility and employee management and oversight
- ∴ GPS Surveying, Trimble Business Center Software
- ∴ Civil, Mechanical, and Electrical engineering design
- ∴ Basic computer aided design (CAD)
- ∴ Computer literate in both software and hardware

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## CIVIC ACTIVITIES

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- ∴ Volunteer Youth Teacher and Mentor, River City Wesleyan Church
- ∴ Local Board of Administration, River City Wesleyan Church
- ∴ Volunteer ski patroller, Hermon Mountain Ski Patrol

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## REFERENCES

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Available upon request



NEWSME LANDFILL OPERATIONS, LLC

JUNIPER RIDGE LANDFILL  
Odor Complaint Management and Response Plan

Revision  
February 19, 2013



## **1.0 Introduction**

NEWSME Landfill Operations, LLC (NEWSME), which operates the Juniper Ridge Landfill (JRL), receives periodic complaints of odors from residents living within the vicinity of the landfill. NEWSME is committed to mitigating the odor problem and has implemented an aggressive program of identifying potential sources of odors and corrective measures to reduce the intensity and frequency of odors transported offsite to residential locations. A copy of JRL's Odor Control Plan may be found in Attachment C.

As part of the program, NEWSME has instituted a plan to respond to odor complaints received from the community. NEWSME encourages local residents potentially affected by odors from the JRL to report any odors that they may be experiencing as soon as they occur. This will allow the landfill staff to more immediately investigate and identify the source of the odor, and to implement corrective measures to reduce the transport of odors offsite.

This document details the procedures NEWSME staff will follow to respond to complaints received on odor, document the response, and institute a plan of action to address the complaint.

## **2.0 Odor Complaint Response Procedure**

### **2.1 Basic Procedure for Responding to Odor Complaints**

The basic procedure for responding to odor complaints is as follows:

1. When odor complaints are received during landfill operational hours, complaint line personnel will ask several specific questions of the caller including requesting identification and the nature of the complaint (first determine if the complaint is odor related).
2. The information will be documented by the person receiving the call at the scale house, then relayed immediately to a member of the complaint response group, who will respond to the complaint, if deemed necessary.
3. During the following times, all complaint line calls will be automatically forwarded to a member of the response group via cell phone:  
  
Weekdays: 9:00 PM – 5:30 AM      Weekends: 5:00 PM – 5:00 AM
4. The designated response group staff member will be responsible for following up with each caller, more thoroughly documenting the complaint, and also for notifying other staff, if any corrective action(s) may be required.

### **2.2 NEWSME Phone Number for Receipt of Complaints**

NEWSME Operations has a dedicated incoming phone line for complaints from the public relating to any aspect of the JRL operations. **The complaint number is 207-394-**

4376. The complaint line is answered 24 hours per day 7 days per week by trained landfill personnel.

### **2.3 Scale House Operator Procedures for Responding to Odor Complaints**

The following information will be gathered from any users (callers) of the complaint number:

- Name, address, and telephone number.
- Determine if the complaint is odor related.
- Ask what time of day they first experienced the odor.
- Ask whether or not the odor is being experienced at their residence.

Attachment A lists the dialogue the scale house operator will employ in responding to a caller, and the specific questions the scale house operator will ask of the caller. After this information is received, the scale house operator taking the call will immediately relay the information to the appropriate complaint response personnel.

In addition, the scale house operator will formally document the complaint using the blank COMPLAINT RECORD FORM provided in Attachment B. The completed COMPLAINT RECORD FORMS will be kept on file at the Environmental Compliance Manager's office.

## **2.4 Response Group Member Procedure for Further Response to Odor Complaint**

During operational hours, an available member of the complaint response group will respond to the complaint if necessary. If a return call has been requested, the on-call response group member will first telephone the person initiating the complaint. If a site visit has been requested, the group member will go to the residence to evaluate site-specific information.

During non-operational hours, the on duty response group member is responsible for completion of all procedures relating to the complaint call.

Whether or not the response group member meets directly with the individual initiating the complaint, the following information will be gathered at the earliest opportunity and entered onto the Complaint Record Form:

- Time of arrival at the location of the odor complaint (if applicable).
- Recorded wind direction and speed at the landfill.
- H<sub>2</sub>S level measured at the complaint location.
- Observation of the cover integrity at the landfill.
- Observed waste materials being accepted at time of complaint.
- If necessary, initiate remedial measures with the landfill supervisor to mitigate the source of the odor.

The complaint response group member will be responsible for documenting the additional information required by the COMPLAINT RECORD FORM, including the following:

- Actions taken to remedy cause of the complaint.

- Resolution of the complaint.
- Time and comments made in reporting back to caller.
- Comments made by caller during final exchange.
- Recommendations as to how to resolve any observed problem.

If applicable, it is important that the person calling with the complaint be made fully aware of the actions taken and resolution of the complaint, such as placement of additional cover or other remedial measures. It's also important to notify the caller if it's determined that the source of the odor is not the JRL.

**Scale House Operator Odor Response Procedures**

**-JUNIPER RIDGE LANDFILL-**

**-LANDFILL COMPLAINT RESPONSE PROCEDURES-**

**WHEN RECEIVING A COMPLAINT CALL PERTAINING TO JUNIPER RIDGE LANDFILL, FOLLOW THE BELOW LISTED LANGUAGE:**

- 1. HELLO, THIS IS THE LANDFILL COMPLAINT LINE, WHO IS CALLING PLEASE?**
- 2. ARE YOU CALLING WITH A COMPLAINT PERTAINING TO JUNIPER RIDGE LANDFILL?**
- 3. WHAT IS YOUR NAME, RESIDENCE ADDRESS, AND TELEPHONE NUMBER?**
- 4. WHAT IS THE NATURE OF YOUR COMPLAINT?**
- 5. AT WHAT TIME OF DAY DID YOU FIRST NOTICE THE SOURCE OF YOUR COMPLAINT?**
- 6. DO YOU WANT SOMEONE TO CALL YOU BACK OR VISIT YOUR RESIDENCE?**
- 7. I WILL REPORT THE SPECIFICS OF THIS COMPLAINT TO LANDFILL MANAGEMENT, SO THAT THEY CAN FOLLOW-UP AT THE EARLIEST OPPORTUNITY.**
- 8. THANK YOU FOR CALLING TO REPORT THIS SITUATION.**

COMPLETELY FILL OUT THE SCALEHOUSE SECTION OF THE COMPLAINT RECORD FORM, AND THEN CALL THE APPROPRIATE INDIVIDUAL LISTED BELOW TO REPORT THE COMPLAINT. PLEASE CALL IN THE ORDER LISTED.

<b><i>DURING OPERATIONAL HOURS</i></b>			<b><i>EVENINGS (After 9:00 PM) AND WEEKENDS(After 5:00 PM)</i></b>		
<b>NAME</b>	<b>WORK</b>	<b>CELL</b>	<b>NAME</b>	<b>HOME</b>	<b>CELL</b>
ERIC NUTE		852-0340	CARRIE SMART		852-3267
JEREMY LABBE	862-4200 x233	217-7988	JEREMY LABBE		217-7988
WAYNE BOYD	862-4200 x224	694-5510	WAYNE BOYD	989-9021	694-5510
DAN DUTILE	862-4200 x222	852-9093	DAN DUTILE	257-3577	852-9093
DON MEAGHER	862-4200 x230	461-0879	DON MEAGHER	947-1963	461-0879

**Attachment B**  
**Blank Complaint Record Form**

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# COMPLAINT RECORD FORM

## JUNIPER RIDGE LANDFILL

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**-THIS SECTION COMPLETED BY SCALEHOUSE-**

Complaint received by the following method:  Phone  Email  Fax  In Person

Complaint received at:  394-4376 (JRL 24-hour line)  394-4370 (fax)  
 941-4580 (MDEP)  [michael.t.parker@maine.gov](mailto:michael.t.parker@maine.gov) (MDEP)

Date of complaint: \_\_\_\_\_ Time of call/fax/visit: \_\_\_\_\_  AM  PM

Name of person filing complaint: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_

Nature of complaint:  Odor  Noise  Lights  Dust  Traffic  Other  
 Traffic- Name of Company \_\_\_\_\_ License# \_\_\_\_\_ Route \_\_\_\_\_

Direction traveling \_\_\_\_\_ Truck type  tractor trailer  straight/dump trailer

No Specific Information

For odor complaints; time odor was detected: \_\_\_\_\_  AM  PM

Is the odor being detected at the caller's residence?  Yes  No

Telephone call requested?  Yes  No

Site visit requested?  Yes  No

Wind direction & speed at time of complaint: From the \_\_\_\_\_ @ \_\_\_\_\_ mph

Manager contacted regarding this complaint: \_\_\_\_\_ Time: \_\_\_\_\_

Comments and/or Odor Type:  Sludge  Trash  Rotten Eggs (H<sub>2</sub>S)  Other (Specify)

\_\_\_\_\_  
\_\_\_\_\_

Scalehouse Attendant Taking Call: \_\_\_\_\_ Time Faxed to Jeremy Labbe: \_\_\_\_\_

Complaint Log Number: \_\_\_\_\_

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**-THIS SECTION COMPLETED BY RESPONSE PERSONNEL-**

Wind direction & speed at time of visit: From the \_\_\_\_\_ @ \_\_\_\_\_ mph

Telephone called returned by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Site visited by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

If odor present: Butanol level: \_\_\_\_\_ Potential Source:  H<sub>2</sub>S  Sludge  FEPR  MSW  Other

Specific comments pertaining to complaint:  
\_\_\_\_\_  
\_\_\_\_\_

Completed Complaint Record Form entered into the Environmental Audit Database: (Date) \_\_\_\_\_



**Attachment C**  
**JRL Odor Control Plan**

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**NEWSME LANDFILL OPERATIONS, LLC**  
**JUNIPER RIDGE LANDFILL**  
**ODOR CONTROL PLAN**

***Introduction***

The Juniper Ridge Landfill (JRL), formerly known as the West Old Town Landfill, accepts a variety of special wastes that have the potential to generate odors. The waste types with the highest potential for odor generation are front end process residue (FEPR), by-pass municipal solid waste (MSW), and wastewater sludges. The leachate generated from the landfill is also a likely source of odors during its storage and transport to the wastewater treatment plant. As the waste mix in the landfill begins to degrade, it has the potential to generate landfill gases, such as methane and hydrogen sulfide (H<sub>2</sub>S).

All of the above sources of landfill-related odors must be managed appropriately to prevent offsite migration of odor sources, such as H<sub>2</sub>S, and the resulting odor complaints from individuals who live near the JRL. This Odor Control Plan describes the current odor control measures implemented at JRL, as well as policies and procedures to control the offsite migration of landfill-related odors.

***Control of Odors Associated With Incoming Wastes:***

A variety of methods are utilized to control offsite migration of gases and odors associated with daytime operations. They include the following:

1. The active placement of incoming wastes is confined to the smallest cell area possible. The wastes are spread over the active face, compacted, then another lift initiated. If a load of waste arrives that is noticeably odorous, ash, construction and demolition debris (CDD), till, or other effective neutralizing material, will be spread over the waste to limit

odor migration. This activity is particularly important on windy days to minimize gas and odor migration.

2. Additionally, daily cover is applied over the active portion of the landfill at the end of each workday. Cover materials include wood chips, CDD processing fines, bark, ash, soil-type materials, and/or other approved wastes that provide appropriate cover.
3. When necessary, a dozer mounted odor neutralizer spray system is utilized to control odors from arriving wastes as they are offloaded and spread out.
4. Upon arrival at the landfill during warm weather months, the tops of the trailer loads of FEPR, sludge, and bypass MSW pass under a trailer spray system that applies an odor control agent onto the waste to assist in controlling odors during the offloading process. These empty trailers pass through the same spray system to control empty trailer transit odors.
5. A perimeter odor (misting) neutralization system is employed during the warm weather months to provide additional odor control coverage. The system is sited in strategic locations around the active area of the landfill and is moved to appropriate locations when new cells are opened. A portable system is also utilized at the active face of the landfill.

### ***Control of Odors Associated With Leachate Storage & Transport***

1. JRL has a leachate storage tank designed to store all leachate being generated from the landfill prior to being transported offsite for appropriate disposal. The leachate storage pond is utilized as a back-up system in the event that leachate generation rates (during a heavy rain event) dramatically increase in a short period of time.
2. Tankers hauling the leachate to the Old Town Fuel & Fiber or City of Brewer waste water treatment plants generally operate during the daytime hours. If required, chemicals will be added or metered into the tankers as they are being loaded so that odors are

minimized during transport. All tanker filling ports are required to be tightly sealed during transport to and from the disposal facility.

### ***Control of Landfill-Related Gases***

1. Non-active portions of the landfill will receive intermediate or final cover as soon as the cell reaches its final grade.
2. A comprehensive landfill gas management system, including gas blowers/flare systems, horizontal collection trenches, and vertical extraction wells, have been designed and installed at the facility. Horizontal gas collection trenches and vertical extraction wells have been installed throughout the existing landfill with horizontal systems being installed every 40-feet of waste depth to help control landfill gas generation as a cell is being filled. Gas extraction wells are generally installed after a cell has reached its final capacity and provide more efficient LFG removal.
3. The landfill gas blowers/flare system consists of a 3,500 CFM flare with dual blowers to provide the extraction and destruction of landfill gas.

### ***Monitoring for Offsite Migration of Landfill Related Gases and Odors***

1. Daily odor surveys are typically performed around the active landfill areas, while periodic surveys will be performed at surrounding residential areas when conditions warrant. The surveys will include monitoring for gas migration and landfill-related odors. Odor intensity will be rated according to the Butanol Odor Intensity Scale. The surveys will also include measurements of airborne concentrations of H<sub>2</sub>S using a Jerome<sup>®</sup> 631-X<sup>™</sup> Hydrogen Sulfide Analyzer. The results of the surveys will be immediately reported to the landfill supervisor in order to assure that any potential odor causing conditions are corrected accordingly.

2. As a proactive measure, JRL has installed six Zellweger Analytic Single Point Monitors onsite and offsite, so that facility personnel can review real-time H<sub>2</sub>S concentration data from the monitors and identify conditions that may require abatement. Locations of the monitors are as follows:
  1. Adjacent to the perimeter fence line just south of cell #5.
  2. Located at 2824 Bennoch Road, off Route 16 northeast of the landfill (Route 16 Monitor).
  3. Located approximately 1-mile north of the landfill on the access road (Access Road Monitor).
  4. Located at 4 West Coiley Road , off Route 43 southeast of the landfill (West Coiley Monitor).
  5. Located at the Fort James House off Route 43 southwest of the landfill (Fort James Monitor).
  6. Located off the Old Stagecoach Road northwest of the landfill (Stagecoach Monitor).

All six of the H<sub>2</sub>S monitors have direct communication with the landfill's monitoring system through telemetry. Real-time information can be obtained at the Scale house, as well as, on the office computer. If any of the H<sub>2</sub>S monitors detects a concentration of 15 ppb, the scale house is alerted by telephone with an automated message reporting the condition. The scale house operators and security personnel are instructed to immediately report any such condition to the supervisory staff, so that they can follow-up by investigating onsite conditions as necessary.

If an odor complaint is received at the facility, the scale house staff can report the real-time H<sub>2</sub>S data (along with the wind direction from the onsite weather station) to response personnel to assist them with their follow-up investigation.

### ***Odor Complaint Records***

1. Odor complaints related to the JRL are accepted by the following four methods:
  - Maine DEP telephone number (941-4580)
  - JRL complaint line (394-4376)
  - JRL fax (394-4373),
  - Email to [michael.t.parker@maine.gov](mailto:michael.t.parker@maine.gov)
2. As detailed in the JRL *Odor Complaint Management and Response Plan*, specific procedures are followed for responding to complaints. All complaints will be recorded on the facility complaint record form and assigned a complaint record number.

All completed complaint record forms will be kept on file in the Environmental Manager's Office and monthly reports on complaint activity provided to the MDEP.



# JUNIPER RIDGE LANDFILL ODOR CONTROL OPERATIONS



1



## Hydrogen Sulfide

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### Odor Prevention

- **Gas Collection and Destruction through Flaring**
- **Intermediate & Synthetic Cover**
- **ZeoMatrix Paper & Powder Application**
- **Direct Application of Odor Neutralizer on incoming Sludge to prevent H<sub>2</sub>S release**

### Odor Detection

- **Continuous Stationary Monitors**
- **Fugitive Emissions Surveys with Jerome Meter**
- **24/7 Complaint Line Service**
- **24/7 Onsite Detection & Response**

## **Odor Response**

- **Hot Spot Cover**
- **Direct Neutralizer Application**
- **Maintenance/Repair Gas Collection & Synthetic Cover**

## **Odiferous Waste**

### Odor Prevention

- Waste Delivery Scheduling & Logistics to minimize odor complaints
- Neutralizing Spray Application at Generating Facility (Minimal at NEO Portland)
- Direct Application of Odor Neutralizer on incoming odiferous waste (loaded trailer-seasonal)
- Direct Application of Odor Neutralizer (liquid-seasonal) on offloading waste as placed in active face
- Incoming waste stream mixing with non-odiferous waste (ash- ph and odor neutralizing)
- Perimeter Fence Neutralizing Spray (seasonal)
- Mobile Application of Neutralizing Spray surrounding active face
- Direct Application of Neutralizing Powder during excavation, trenching and drilling operations.
- Direct Application of Odor Neutralizer on outgoing trailers (empty trailers with residual odor-seasonal)
- Daily & Intermediate Cover

### Odor Detection

- **24/7 Complaint Line Service**
- **24/7 Onsite Detection & Response**

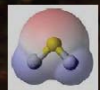
**Odor Response**

- **Scheduling of waste deliveries**
- **Direct Application of Odor Neutralizer**
- **Increased frequency of cover**

**Odor & Odor Control Practices  
Explained**

- At sunrise a surface integrity scan is performed prior to operating hours in an effort to locate and cover odor breakouts.
- ZeoMatrix Paper & Duo Plus Powder is sometimes used as an immediate short-term fix until clay and/or spf can be applied with equipment. Commonly used temporarily on small excavations and well drilling applications.
- When a hydrogen sulfide breakout has been detected the area is covered with SPF and/or clay depending on availability of labor and delivery options.
- It is important to not only detect problems but also to look for potential problem areas. Proactive odor control is a key component to the success of the odor control programs at the landfill.
- When the problematic area is found on multiple occasions permanent gas collection can be installed to place the entire area under vacuum and collect and combust any potential fugitive emissions.

## Odor Control



11

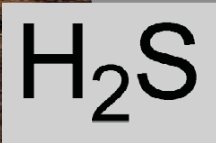
### POTENTIALLY ODIFEROUS WASTES REQUIRING SPECIAL HANDLING AT LANDFILL

WASTE DESCRIPTION	2008 TONS	% OF TOTAL WASTESTREAM
FRONT-END PROCESS RESIDUE (FEPR)	117,118	18.96%
MUNICIPAL WASTEWATER TREATMENT PLANT SLUDGE	37,002	5.99%
MUNICIPAL SOLID WASTE BYPASS (MSW)	21,426	3.47%
SPOILED FOOD RELATED WASTES	1,004	0.16%
<b>2008 TOTAL TONS (ALL WASTES):</b>	<b>617,782</b>	<b>28.58%</b>

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## Odor Control



- To control the odor, ash is mixed into the sludge. Ash neutralizes ph and decreases odor levels
- The D4 with the odor neutralizing chemical sprayer is spraying SL-4000 sludge treatment from NCM. This is sprayed directly on the sludge to prevent sludge odor from traveling off site.

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# Sludge

Once the sludge is dumped and sprayed it requires at least a **2:1 ash** to sludge ratio for ph and odor neutralization and a **3:1 CDD** to sludge ratio to be stabilized enough for the compactors to work. This is accomplished through a complete team effort.

## Odor Control





# SLUDGE TRUCK SPRAYER

- To prevent odor complaints, all sludge trucks must spray the inside of the dump body with odor neutralizing chemicals as they enter and exit the landfill facility. The spray system is automated with motion sensor activation.



Odor Control

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# ODOR NEUTRALIZING CHEMICAL SPRAYER

Odor Control  
"Crop Duster"



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# ODOR NEUTRALIZING CHEMICAL SPRAYER

- The "Crop Duster" runs nonstop throughout the day to neutralize odor
- Mobility is a key component: The Crop Duster is placed upwind of active areas and/or odor sources in the predominant wind direction to engulf the odor



Odor Control

# THE ODOR NEUTRALIZING ENZYME DUSTER

Odor Control





## THE ODOR NEUTRALIZING ENZYME DUSTER



- The powder duster is used for direct application purposes.

- Predominantly used in situations where waste cannot be immediately covered and excavation/trenching operations

Odor Control

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## TEMPORARY COVER

- Areas are covered with ash and spf in order to control odor.
- Virgin Soil is used when sufficient amounts of ash and spf are not available.



Odor Control



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## Odor Control



- FEPR from MERC + PERC and Grit Screenings from WWTP's are other potentially odiferous waste materials that have to be buried and covered very quickly.
- Potentially odiferous loads and decomposing waste with certain waste mixes can lead to rapid gas production.
- This commonly requires additional gas collection infrastructure and increased demands for acceptable cover material in order to prevent odor complaints

## Proactive Approach:

- By internally performing gas collection installation and surveying, we are able to plan more efficiently and react quickly to newly developing odor problems.
- Sphere of influence's decreases as waste is compacted, which requires supplementary collection lines over time.

- Gas collection systems are installed at specific intervals of cell development in order to assure that landfill gas is controlled effectively.



- Piping
  - Horizontal collection
  - Vertical collection
  - Conveyance piping
- Well tuning
  - GEM meter
  - LFG contents
  - Flow Rates





# GAS SYSTEM MATERIALS & AVAILABILITY

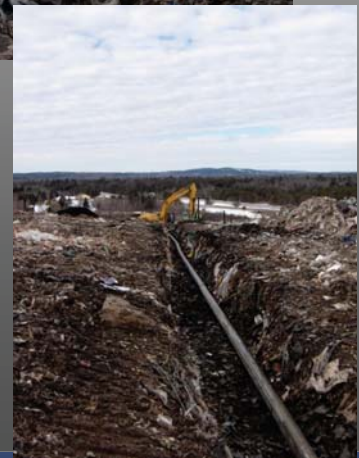
Landfill gas collection installation is performed onsite primarily by Casella employees. An adequate inventory of pipe and fittings is needed onsite to ensure immediate response to any necessary additions and/or changes to the existing gas infrastructure (i.e. watered out conveyance lines, additional collection, etc.)



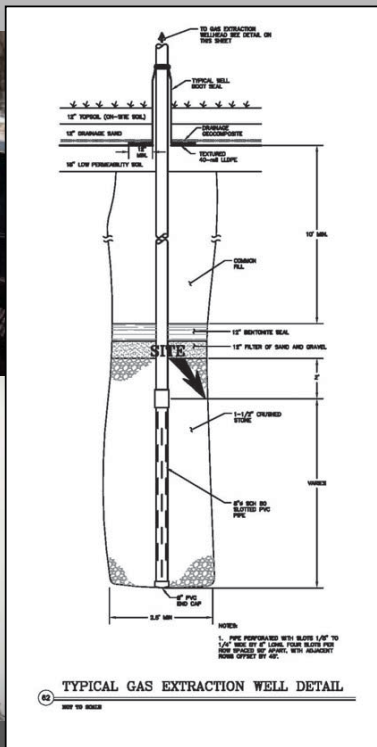
# CONSTRUCTION OF GAS COLLECTION SYSTEMS



Odor Control



# DRILLING VERTICAL WELLS Odor Control



27

# FLARING

## Odor Control



28

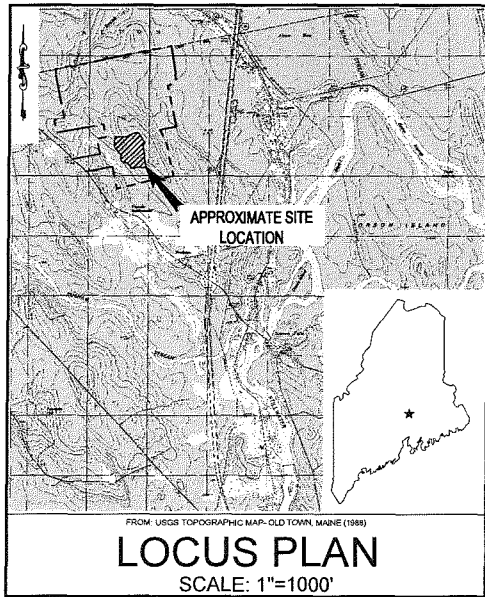


THANK YOU...



# CELL 8 LANDFILL GAS SYSTEM EXPANSION DRAWINGS

JUNIPER RIDGE LANDFILL  
OLD TOWN, MAINE  
MARCH 2012



## SHEET INDEX

SHEET 1	EXISTING CONDITIONS PLAN
SHEET 2	LFG INFRASTRUCTURE DEVELOPMENT PLAN - STAGE 1
SHEET 3	LFG INFRASTRUCTURE DEVELOPMENT PLAN - STAGE 2
SHEET 4	LFG INFRASTRUCTURE DEVELOPMENT PLAN - STAGE 3
SHEET 5	LFG INFRASTRUCTURE DEVELOPMENT PLAN - STAGE 4
SHEET 6	CROSS SECTIONS
SHEETS 7-10	DETAILS



ISSUED FOR  
MAINE DEP APPROVAL  
AND CONSTRUCTION  
2/29/12

PREPARED FOR:

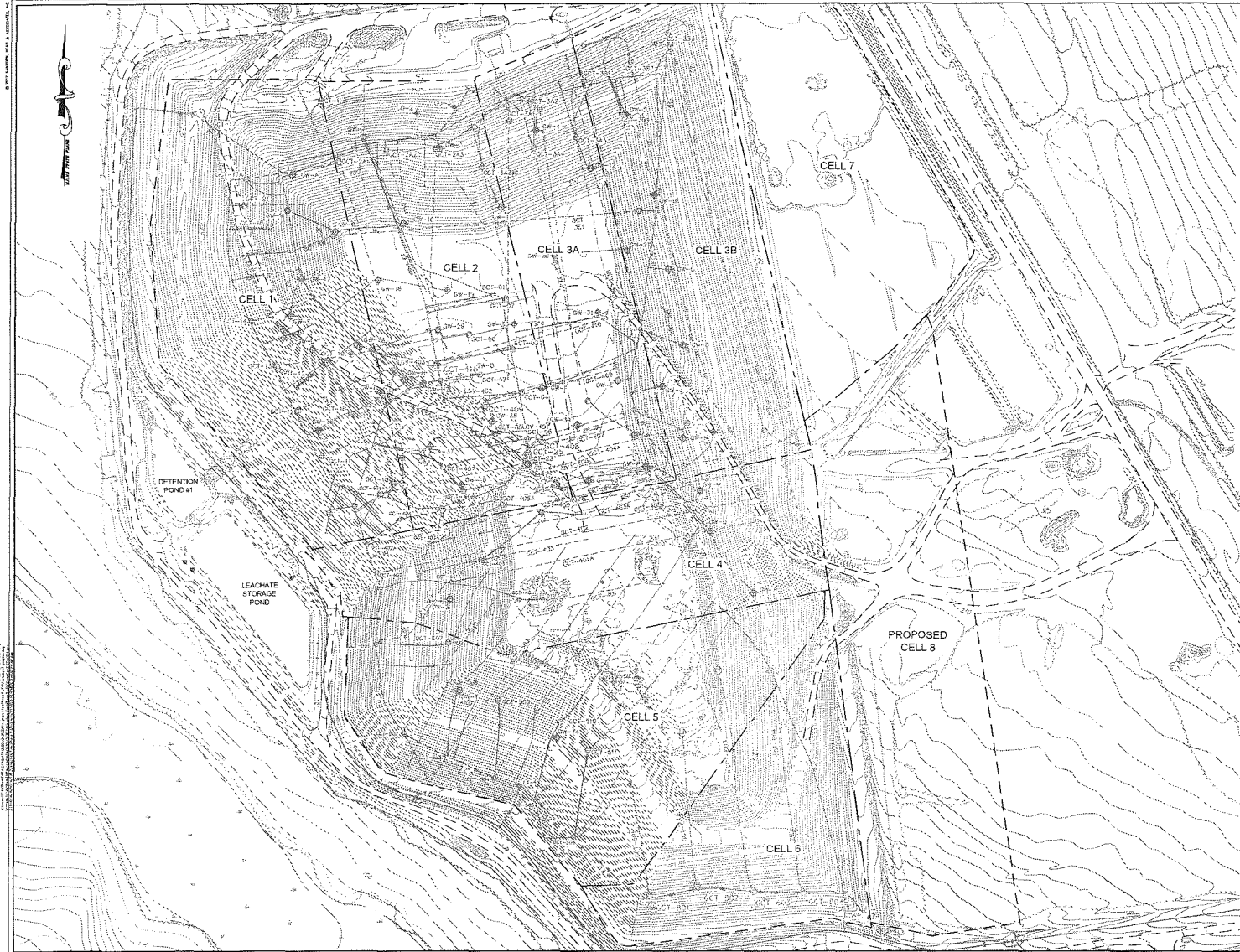
**new england**  
NEW ENGLAND WASTE SERVICES  
NEWSME LANDFILL OPERATIONS, LLC  
**JUNIPER RIDGE LANDFILL**  
OLD TOWN, MAINE

PREPARED BY:

**SANBORN HEAD**

20 FOUNDRY STREET, CONCORD, NEW HAMPSHIRE 03301  
(603) 229-1900 FAX (603) 229-1919





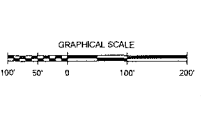
- NOTES:**
1. THE EXISTING LANDFILL GAS EXTRACTION SYSTEM INFRASTRUCTURE FEATURES SHOWN ARE BASED ON A COMBINATION OF DESIGN AND AS-BUILT DOCUMENTATION AVAILABLE TO SANBORN HEAD & ASSOCIATES, INC. (SANBORN HEAD). ACTUAL LOCATIONS OF INDIVIDUAL FEATURES MAY BE DIFFERENT THAN SHOWN.
  2. BASE MAP PREPARED BY AERIAL SURVEY & PHOTO INC., OF NORRIDGEWOCK, MAINE. PHOTO DATE NOVEMBER 2, 2011. VERTICAL DATUM: BRASS PLUG AT PUMP STATION. HORIZONTAL DATUM: MAINE STATE COORDINATES EAST ZONE NAD 83. GROUND CONTROL BY PLUSGA & DAY LAND SURVEYORS, BANGOR, MAINE.

**LEGEND:**

EXISTING	
	10-FOOT CONTOUR
	2-FOOT CONTOUR
	LIMIT OF WASTE CONTAINMENT
	CELL LIMIT
	EDGE OF ROAD
	LANDFILL GAS CONVEYANCE PIPE
	LANDFILL GAS COLLECTION TRENCH (PERFORATED PIPE)
	LIMIT OF MARSH
	FENCE LINE
	LANDFILL GAS EXTRACTION WELL
	COLLECTION TRENCH WELLHEAD
	COLLECTION TRENCH TERMINATION
	PIPE END CAP
	LEACHATE COLLECTION PIPE CLEANOUT
	LEACHATE COLLECTION INLET
	LANDFILL GAS EXTRACTION WELLHEAD
	RIPRAP AREAS

ISSUED FOR  
MAINE DEP APPROVAL  
AND CONSTRUCTION  
2/29/12

**SANBORN HEAD**



NO.	DATE	DESCRIPTION	BY

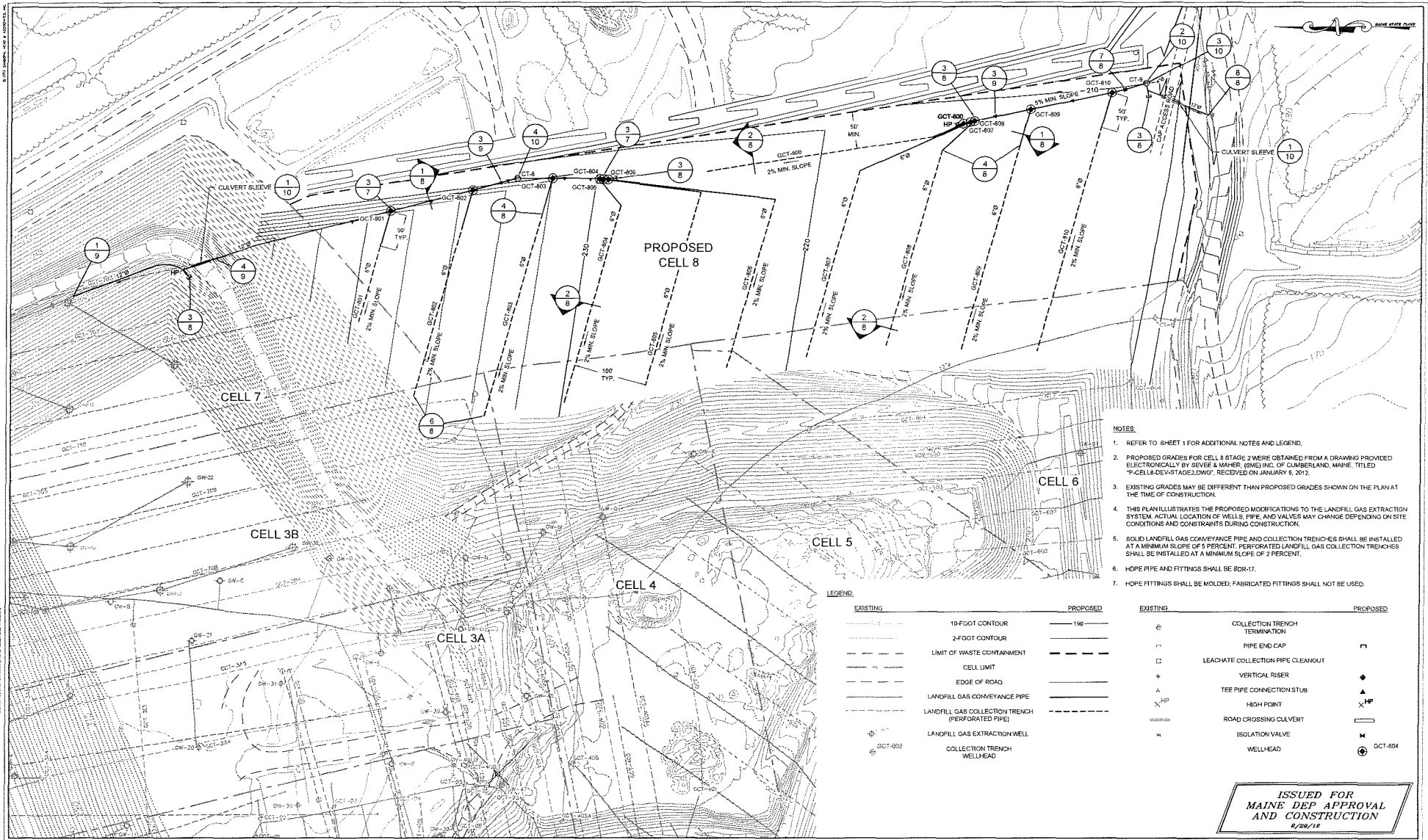
DRAWN BY: C. RIVET  
 DESIGNED BY: C. RIVET  
 REVIEWED BY: K. ANDERSON  
 PROJECT MGR: K. ANDERSON  
 PIC: E. STEINHAUSER  
 DATE: MARCH 2012

**CELL 8 LFG SYSTEM EXPANSION DRAWINGS**  
**JUNIPER RIDGE LANDFILL**  
 OLD TOWN, MAINE

PROJECT NUMBER  
2536.23

EXISTING CONDITIONS PLAN

SHEET NUMBER  
1 OF 10



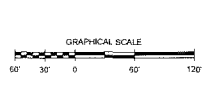
- NOTES:**
- REFER TO SHEET 1 FOR ADDITIONAL NOTES AND LEGEND.
  - PROPOSED GRADES FOR CELL 8 STAGE 2 WERE OBTAINED FROM A DRAWING PROVIDED ELECTRONICALLY BY SEVEE & MAHER, (SME) INC. OF CUMBERLAND, MAINE, TITLED "P-CELL8-DEV-STAGE2.DWG", RECEIVED ON JANUARY 5, 2012.
  - EXISTING GRADES MAY BE DIFFERENT THAN PROPOSED GRADES SHOWN ON THE PLAN AT THE TIME OF CONSTRUCTION.
  - THIS PLAN ILLUSTRATES THE PROPOSED MODIFICATIONS TO THE LANDFILL GAS EXTRACTION SYSTEM. ACTUAL LOCATION OF WELLS, PIPE, AND VALVES MAY CHANGE DEPENDING ON SITE CONDITIONS AND CONSTRAINTS DURING CONSTRUCTION.
  - SOLID LANDFILL GAS CONVEYANCE PIPE AND COLLECTION TRENCHES SHALL BE INSTALLED AT A MINIMUM SLOPE OF 5 PERCENT. PERFORATED LANDFILL GAS COLLECTION TRENCHES SHALL BE INSTALLED AT A MINIMUM SLOPE OF 2 PERCENT.
  - HDPE PIPE AND FITTINGS SHALL BE 8DR-17.
  - HDPE FITTINGS SHALL BE MOLDED; FABRICATED FITTINGS SHALL NOT BE USED.

**LEGEND**

EXISTING	PROPOSED	EXISTING	PROPOSED
10-FOOT CONTOUR	150	⊕	COLLECTION TRENCH TERMINATION
2-FOOT CONTOUR	---	⊔	PIPE END CAP
LIMIT OF WASTE CONTAINMENT	---	⊕	LEACHATE COLLECTION PIPE CLEANOUT
CELL LIMIT	---	+	VERTICAL RISER
EDGE OF ROAD	---	⊕	TEE PIPE CONNECTION STUB
LANDFILL GAS CONVEYANCE PIPE	---	⊕	HIGH POINT
LANDFILL GAS COLLECTION TRENCH (PERFORATED PIPE)	---	⊕	ROAD CROSSING CULVERT
LANDFILL GAS EXTRACTION WELL	⊕	⊕	ISOLATION VALVE
COLLECTION TRENCH WELLHEAD	⊕	⊕	WELLHEAD

**ISSUED FOR  
MAINE DEP APPROVAL  
AND CONSTRUCTION**  
8/29/12

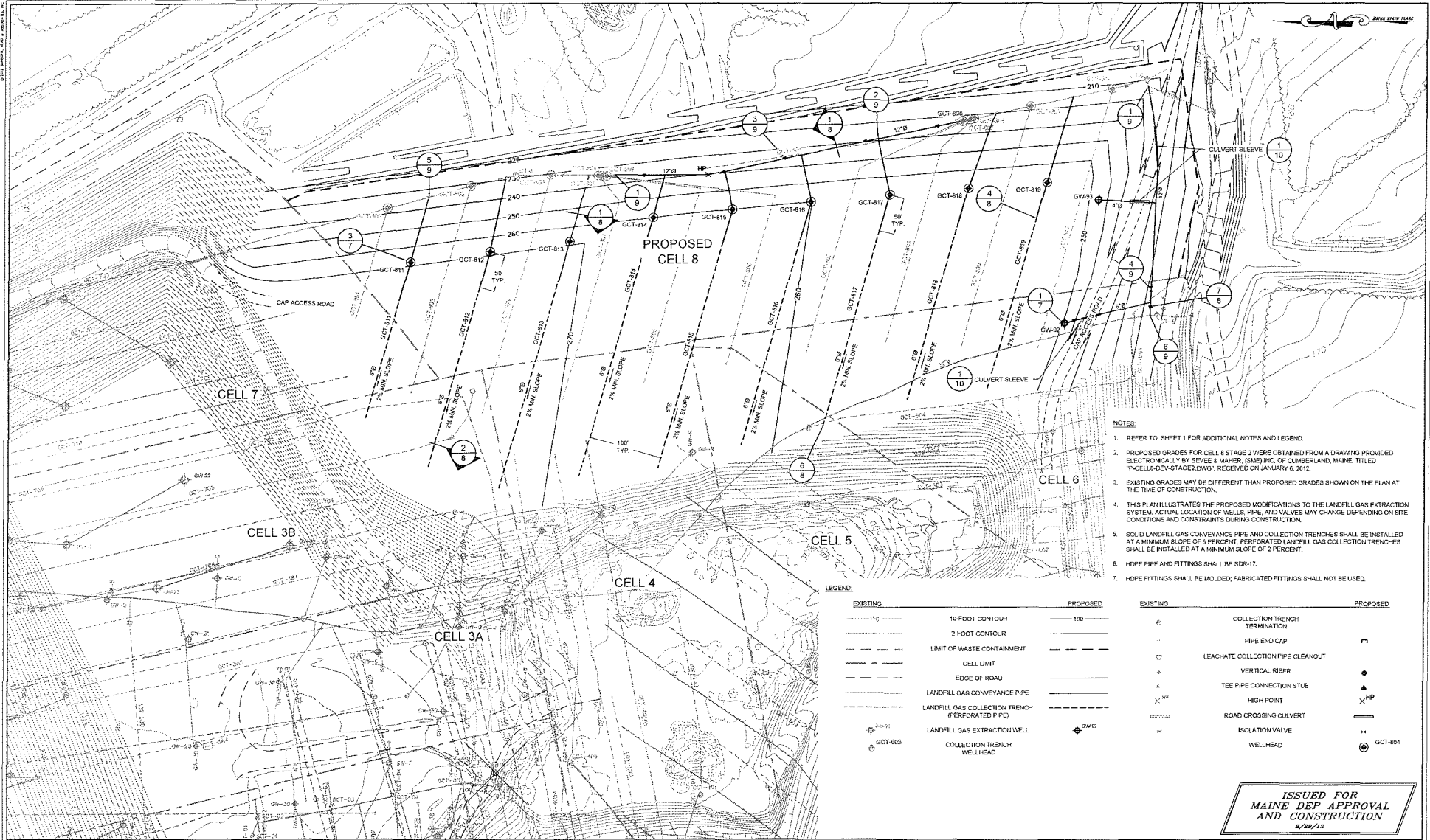
**SANBORN HEAD**



NO.	DATE	DESCRIPTION	BY

DRAWN BY: C. RIVET  
 DESIGNED BY: C. RIVET  
 REVIEWED BY: K. ANDERSON  
 PROJECT MGR: K. ANDERSON  
 PIC: E. STEINHAUSER  
 DATE: MARCH 2012

<b>CELL 8 LFG SYSTEM EXPANSION DRAWINGS JUNIPER RIDGE LANDFILL OLD TOWN, MAINE</b>	PROJECT NUMBER	2536.23
	SHEET NUMBER	2 OF 10



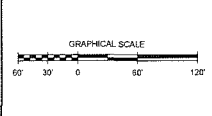
- NOTES:**
1. REFER TO SHEET 1 FOR ADDITIONAL NOTES AND LEGEND.
  2. PROPOSED GRADES FOR CELL 8 STAGE 2 WERE OBTAINED FROM A DRAWING PROVIDED ELECTRONICALLY BY SEVEE & MAHER, (SME) INC. OF CUMBERLAND, MAINE, TITLED "CELLS-DEV-STAGE2.DWG", RECEIVED ON JANUARY 6, 2012.
  3. EXISTING GRADES MAY BE DIFFERENT THAN PROPOSED GRADES SHOWN ON THE PLAN AT THE TIME OF CONSTRUCTION.
  4. THIS PLAN ILLUSTRATES THE PROPOSED MODIFICATIONS TO THE LANDFILL GAS EXTRACTION SYSTEM. ACTUAL LOCATION OF WELLS, PIPE, AND VALVES MAY CHANGE DEPENDING ON SITE CONDITIONS AND CONSTRAINTS DURING CONSTRUCTION.
  5. SOLID LANDFILL GAS CONVEYANCE PIPE AND COLLECTION TRENCHES SHALL BE INSTALLED AT A MINIMUM SLOPE OF 5 PERCENT. PERFORATED LANDFILL GAS COLLECTION TRENCHES SHALL BE INSTALLED AT A MINIMUM SLOPE OF 2 PERCENT.
  6. HOPE PIPE AND FITTINGS SHALL BE SDR-17.
  7. HOPE FITTINGS SHALL BE MOLDED; FABRICATED FITTINGS SHALL NOT BE USED.

**LEGEND:**

EXISTING	PROPOSED	EXISTING	PROPOSED
110	10-FOOT CONTOUR	150	2-FOOT CONTOUR
---	LIMIT OF WASTE CONTAINMENT	---	CELL LIMIT
---	EDGE OF ROAD	---	LANDFILL GAS CONVEYANCE PIPE
---	LANDFILL GAS COLLECTION TRENCH (PERFORATED PIPE)	---	LANDFILL GAS EXTRACTION WELL
GW-11	LANDFILL GAS EXTRACTION WELL	GW-12	COLLECTION TRENCH WELLHEAD
GCT-003	COLLECTION TRENCH WELLHEAD	⊙	COLLECTION TRENCH TERMINATION
⊙	PIPE END CAP	⊕	LEACHATE COLLECTION PIPE CLEANOUT
⊕	VERTICAL RISER	⊕	TEE PIPE CONNECTION STUB
▲	HIGH POINT	▲	HP
---	ROAD CROSSING CULVERT	---	ISOLATION VALVE
---	WELLHEAD	⊙	GCT-854

**ISSUED FOR  
MAINE DEP APPROVAL  
AND CONSTRUCTION**  
8/29/12

**SANBORN HEAD**



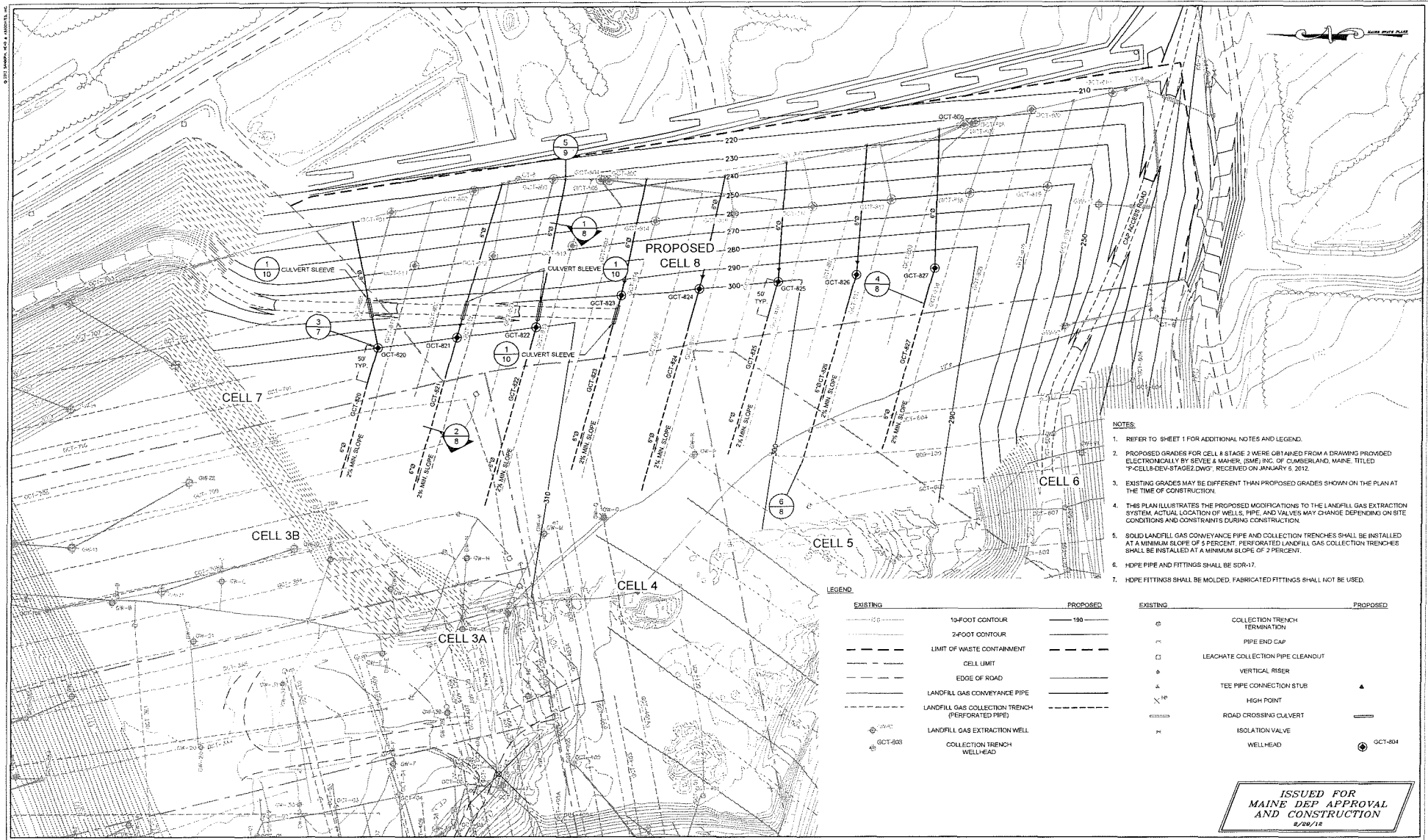
NO.	DATE	DESCRIPTION	BY

DRAWN BY: C. RIVET  
 DESIGNED BY: C. RIVET  
 REVIEWED BY: K. ANDERSON  
 PROJECT MGR: K. ANDERSON  
 PIC: E. STEINHAUSER  
 DATE: MARCH 2012

**CELL 8 LFG SYSTEM EXPANSION DRAWINGS  
JUNIPER RIDGE LANDFILL  
OLD TOWN, MAINE**

**LFG INFRASTRUCTURE  
DEVELOPMENT PLAN - STAGE 2**

PROJECT NUMBER: 2536.23
SHEET NUMBER: 3 OF 10

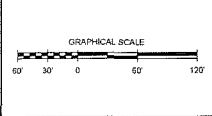


- NOTES:**
1. REFER TO SHEET 1 FOR ADDITIONAL NOTES AND LEGEND.
  2. PROPOSED GRADES FOR CELL 8 STAGE 2 WERE OBTAINED FROM A DRAWING PROVIDED ELECTRONICALLY BY SEVEE & MAHER, (SME), INC. OF CUMBERLAND, MAINE, TITLED "9-CELLS-DEVI-STAGE2.DWG", RECEIVED ON JANUARY 9, 2012.
  3. EXISTING GRADES MAY BE DIFFERENT THAN PROPOSED GRADES SHOWN ON THE PLAN AT THE TIME OF CONSTRUCTION.
  4. THIS PLAN ILLUSTRATES THE PROPOSED MODIFICATIONS TO THE LANDFILL GAS EXTRACTION SYSTEM. ACTUAL LOCATION OF WELLS, PIPE, AND VALVES MAY CHANGE DEPENDING ON SITE CONDITIONS AND CONSTRAINTS DURING CONSTRUCTION.
  5. SOLID LANDFILL GAS CONVEYANCE PIPE AND COLLECTION TRENCHES SHALL BE INSTALLED AT A MINIMUM SLOPE OF 5 PERCENT. PERFORATED LANDFILL GAS COLLECTION TRENCHES SHALL BE INSTALLED AT A MINIMUM SLOPE OF 2 PERCENT.
  6. HOPE PIPE AND FITTINGS SHALL BE SDR-17.
  7. HOPE FITTINGS SHALL BE MOLDED. FABRICATED FITTINGS SHALL NOT BE USED.

**LEGEND**

EXISTING	PROPOSED	EXISTING	PROPOSED
--- 10' ---	--- 10' ---	⊙	COLLECTION TRENCH TERMINATION
--- 24' ---	--- 10' ---	⊖	PIPE END CAP
---	---	□	LEACHATE COLLECTION PIPE CLEANOUT
---	---	⊕	VERTICAL RISER
---	---	⊕	TEE PIPE CONNECTION STUB
---	---	▲	HIGH POINT
---	---	⊕	ROAD CROSSING CULVERT
⊕	---	⊖	ISOLATION VALVE
⊕	---	⊕	WELL HEAD
⊕	---	⊕	GCT-804

**ISSUED FOR  
MAINE DEP APPROVAL  
AND CONSTRUCTION**  
4/26/12



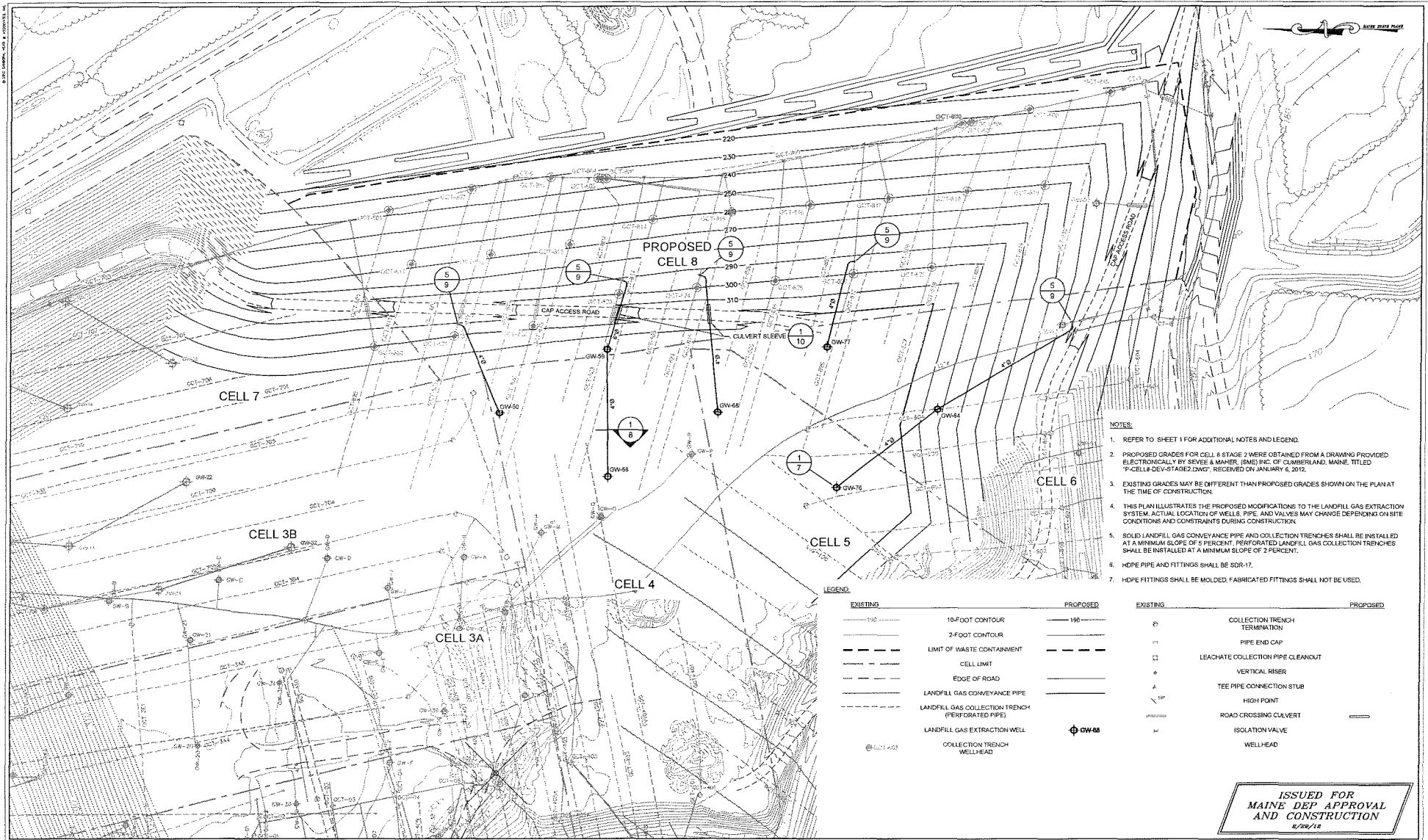
NO.	DATE	DESCRIPTION	BY

DRAWN BY: C. RIVET  
 DESIGNED BY: C. RIVET  
 REVIEWED BY: K. ANDERSON  
 PROJECT MGR: K. ANDERSON  
 PIC: E. STEINHAUSER  
 DATE: MARCH 2012

**CELL 8 LFG SYSTEM EXPANSION DRAWINGS  
JUNIPER RIDGE LANDFILL  
OLD TOWN, MAINE**

**LFG INFRASTRUCTURE  
DEVELOPMENT PLAN - STAGE 3**

PROJECT NUMBER	2536.23
SHEET NUMBER	4 OF 10

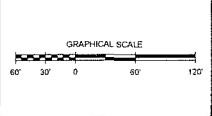


- NOTES:**
1. REFER TO SHEET 1 FOR ADDITIONAL NOTES AND LEGEND.
  2. PROPOSED GRADES FOR CELL 8 STAGE 2 WERE OBTAINED FROM A DRAWING PROVIDED ELECTRONICALLY BY SEVEE & MAHER, (SM&M) INC. OF CLIMBERLAND, MAINE, TITLED "P-CELL 8 DEV-STAGE2.DWG", RECEIVED ON JANUARY 6, 2012.
  3. EXISTING GRADES MAY BE DIFFERENT THAN PROPOSED GRADES SHOWN ON THE PLAN AT THE TIME OF CONSTRUCTION.
  4. THIS PLAN ILLUSTRATES THE PROPOSED MODIFICATIONS TO THE LANDFILL GAS EXTRACTION SYSTEM. ACTUAL LOCATION OF WELLS, PIPE, AND VALVES MAY CHANGE DEPENDING ON SITE CONDITIONS AND CONSTRAINTS DURING CONSTRUCTION.
  5. SOLID LANDFILL GAS CONVEYANCE PIPE AND COLLECTION TRENCHES SHALL BE INSTALLED AT A MINIMUM SLOPE OF 5 PERCENT. PERFORATED LANDFILL GAS COLLECTION TRENCHES SHALL BE INSTALLED AT A MINIMUM SLOPE OF 2 PERCENT.
  6. HOPE PIPE AND FITTINGS SHALL BE SDR-17.
  7. HOPE FITTINGS SHALL BE MOLDED; FABRICATED FITTINGS SHALL NOT BE USED.

**LEGEND:**

EXISTING	PROPOSED	EXISTING	PROPOSED
	10-FOOT CONTOUR		10-FOOT CONTOUR
	2-FOOT CONTOUR		2-FOOT CONTOUR
	LIMIT OF WASTE CONTAINMENT		CELL LIMIT
	EDGE OF ROAD		LANDFILL GAS CONVEYANCE PIPE
	LANDFILL GAS CONVEYANCE PIPE		LANDFILL GAS COLLECTION TRENCH (PERFORATED PIPE)
	LANDFILL GAS EXTRACTION WELL		COLLECTION TRENCH WELLHEAD
	COLLECTION TRENCH TERMINATION		PIPE END CAP
	LEACHATE COLLECTION PIPE CLEANOUT		VERTICAL RISER
	TEE PIPE CONNECTION STUB		HIGH POINT
	ROAD CROSSING CULVERT		ISOLATION VALVE
	WELLHEAD		WELLHEAD

**ISSUED FOR  
MAINE DEP APPROVAL  
AND CONSTRUCTION**  
6/20/18



NO.	DATE	DESCRIPTION	BY

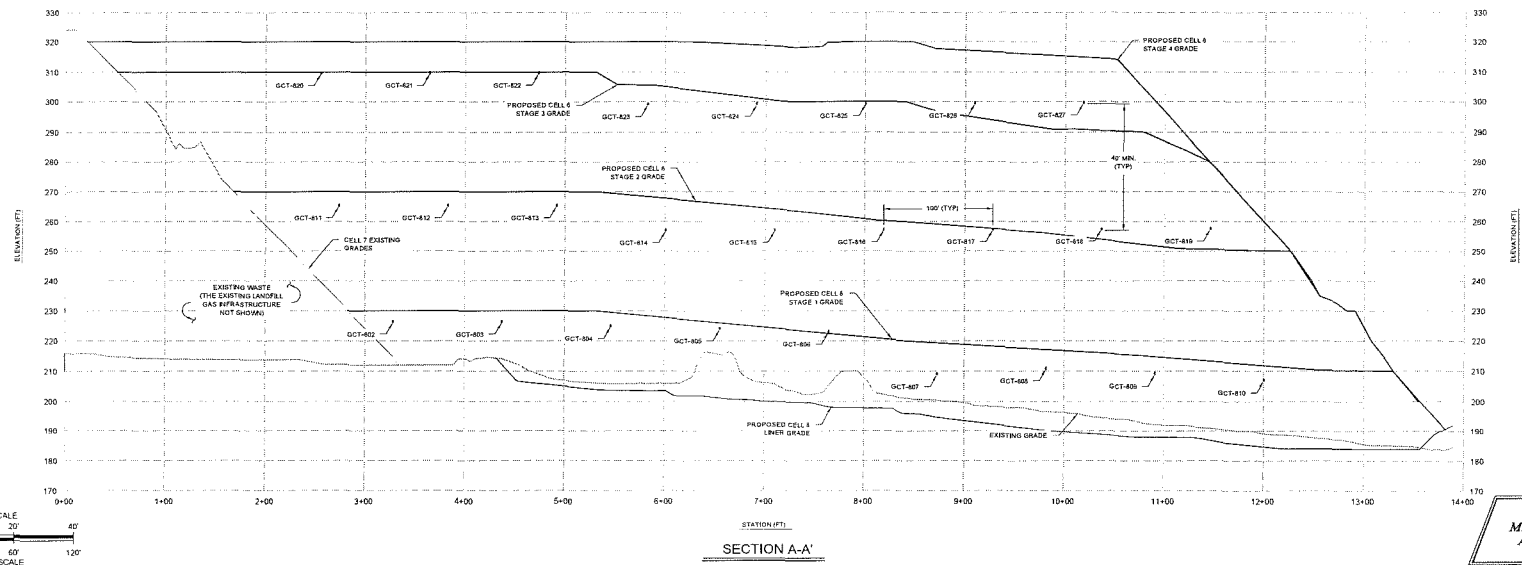
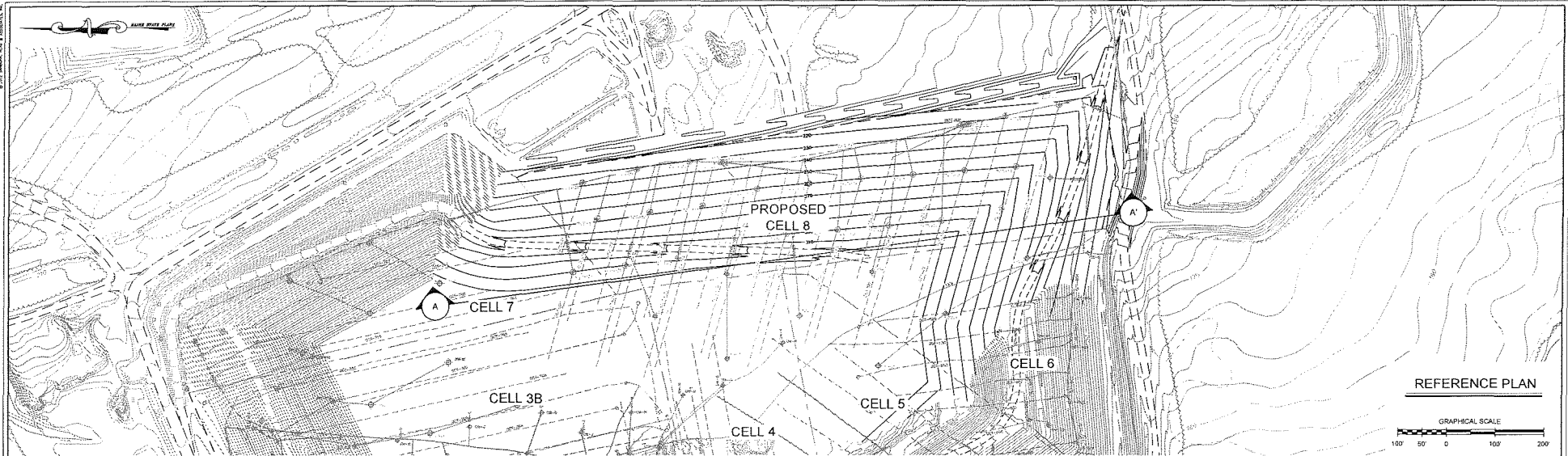
DRAWN BY: C. RIVET  
 DESIGNED BY: C. RIVET  
 REVIEWED BY: K. ANDERSON  
 PROJECT MGR: K. ANDERSON  
 PIC: E. STEINHAUSER  
 DATE: MARCH 2012

**CELL 8 LFG SYSTEM EXPANSION DRAWINGS  
JUNIPER RIDGE LANDFILL**  
OLD TOWN, MAINE

---

**LFG INFRASTRUCTURE  
DEVELOPMENT PLAN - STAGE 4**

PROJECT NUMBER	2536.23
SHEET NUMBER	5 OF 10



ISSUED FOR  
MAINE DEP APPROVAL  
AND CONSTRUCTION  
3/29/12

SANBORN HEAD

SCALE AS NOTED



NO.	DATE	DESCRIPTION	BY

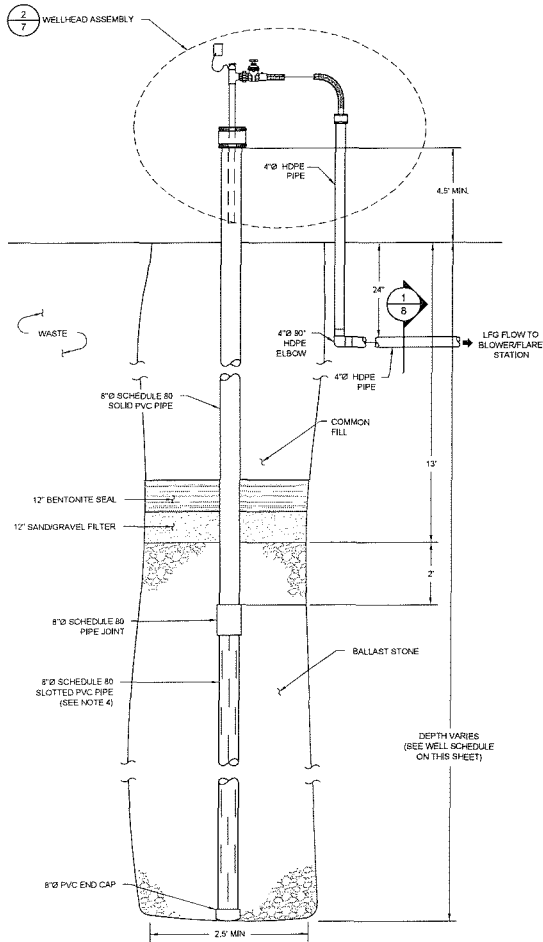
DRAWN BY: C. RIVET  
 DESIGNED BY: C. RIVET  
 REVIEWED BY: K. ANDERSON  
 PROJECT MGR: K. ANDERSON  
 PIC: E. STEINHAUSER  
 DATE: MARCH 2012

CELL 8 LFG SYSTEM EXPANSION DRAWINGS  
 JUNIPER RIDGE LANDFILL  
 OLD TOWN, MAINE

CROSS SECTIONS

PROJECT NUMBER  
2536.23

SHEET NUMBER  
6 OF 10

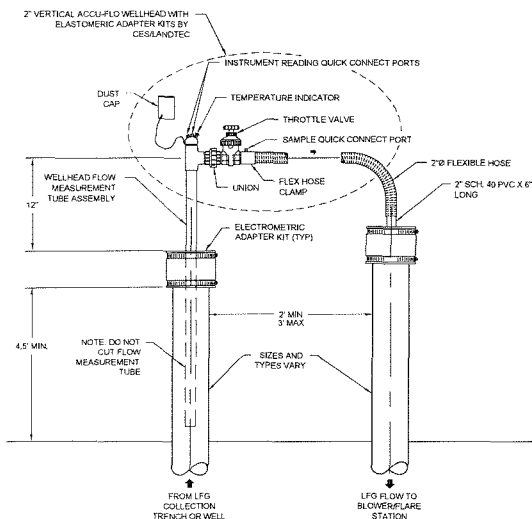


1 LFG EXTRACTION WELL DETAIL

NOT TO SCALE

NOTES

1. ALL HDPE PIPE SHALL BE SDR-17, UNLESS OTHERWISE NOTED.
2. ALL SOLID HDPE PIPE SHALL BE BUTT FUSION WELDED UNLESS OTHERWISE INDICATED OR AN ALTERNATIVE IS APPROVED BY THE ENGINEER.
3. COVER SOLID HDPE PIPE ON LANDFILL SLOPES WITH MINIMUM 2 FEET OF SOIL AND STABILIZE AGAINST EROSION.
4. PIPE PERFORATED WITH SLOTS 1/2" TO 1/2" WIDE BY 8" LONG. FOUR SLOTS PER ROW SPACED 90° APART, WITH ADJACENT ROWS OFFSET BY 45°.



WELLHEAD NOTES:

- A. CES-LANDTEC ACCU-FLOW WELL HEAD SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTION MANUAL. INSTRUCTIONS SHALL BE THOROUGHLY READ BEFORE ATTEMPTING ASSEMBLY AND INSTALLATION OF WELLHEAD.
- B. WELLHEAD AND FLOW MEASUREMENT TUBE ASSEMBLY SHALL BE COMPATIBLE WITH CES-LANDTEC GEM-2000 (LANDFILL GAS INSTRUMENT).
- C. FOR FLEXIBLE CONNECTIONS TO PIPE, USE ONLY 1/2\"/>

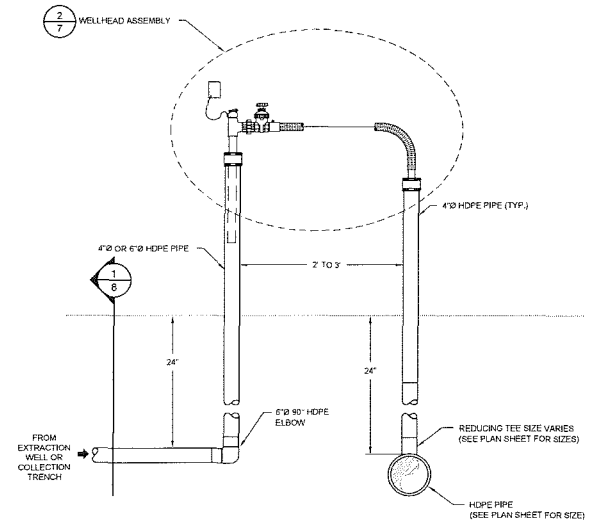
2 WELLHEAD ASSEMBLY DETAIL

NOT TO SCALE

WELL SCHEDULE									
WELL DESIGNATION	NORTHING	EASTING	BOTTOM OF WASTE (FT)	TOP OF EXISTING WASTE (FT)	TOTAL WELL DEPTH (FT)	BOTTOM OF WELL SCREEN (FT)	TOP OF WELL SCREEN (FT)	SCREEN LENGTH (FT)	TOP OF CASING ELEV. (FT)
GW-60	476475.5	926580.4	209.7	320.0	85.3	224.7	305.0	80.3	324.5
GW-66	476327.4	926473.7	196.0	320.0	107.0	213.0	305.0	92.0	324.5
GW-69	478329.1	926546.5	205.0	320.0	95.0	221.0	305.0	84.0	324.5
GW-68	478178.0	926560.0	196.3	320.0	108.7	211.3	305.0	93.7	324.5
GW-76	478015.5	926555.8	185.2	320.0	119.8	205.2	305.0	104.8	324.5
GW-77	478029.5	926550.0	192.3	320.0	112.7	207.3	305.0	97.7	324.5
GW-84	477876.6	926584.9	182.7	302.7	104.8	197.7	287.7	89.9	307.2
GW-92	477709.8	926679.5	180.0	248.5	53.5	195.0	233.5	38.5	253.0
GW-93	477664.2	926466.4	184.5	244.8	45.3	199.5	228.8	30.3	249.3

NOTES:

1. LFG EXTRACTION WELLS SHALL BE INSTALLED WITHIN ONE FOOT OF LISTED LOCATIONS.
2. A TEMPORARY BENCHMARK WITH ELEVATION SHALL BE ESTABLISHED AT EACH WELL PRIOR TO DRILLING.
3. 15 FEET OF SOLID RISER IS TO BE PROVIDED BELOW INTERMEDIATE COVER GRADES. THE INTENT IS TO PROVIDE 3 FEET OF STICK UP ABOVE FILL GRADES.
4. ELEVATIONS SHALL BE CONFIRMED AGAINST AS-BUILT TOP OF PRIMARY SAND GRADES AND FILL GRADES PRIOR TO CONSTRUCTION.



3 COLLECTION TRENCH WELLHEAD

NOT TO SCALE

ISSUED FOR  
MAINE DEP APPROVAL  
AND CONSTRUCTION  
2/22/12

SANBORN HEAD

SCALE AS NOTED



NO.	DATE	DESCRIPTION	BY

DRAWN BY: R. CLAY  
DESIGNED BY: C. RIVET  
REVIEWED BY: K. ANDERSON  
PROJECT MGR: K. ANDERSON  
PIC: E. STEINHAUSER  
DATE: MARCH 2012

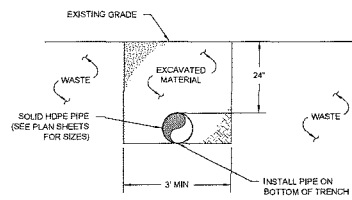
CELL 8 LFG SYSTEM EXPANSION DRAWINGS  
JUNIPER RIDGE LANDFILL  
OLD TOWN, MAINE

PROJECT NUMBER  
2536.23

DETAILS

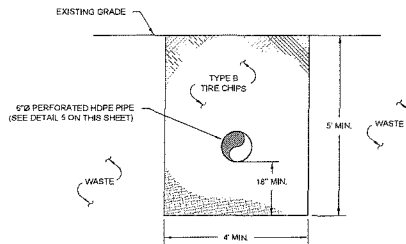
SHEET NUMBER  
7 OF 10





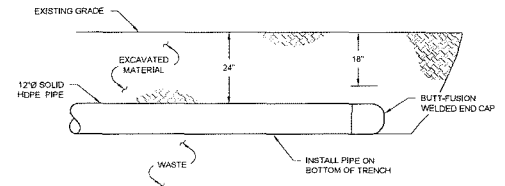
1 SOLID PIPE TRENCH DETAIL (TYP)

NOT TO SCALE



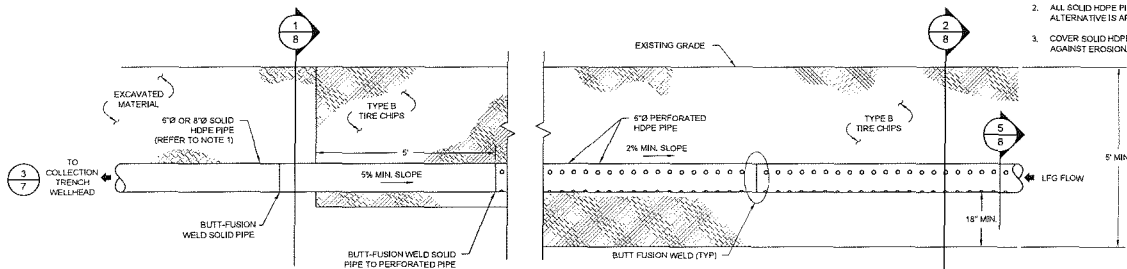
2 PERFORATED TRENCH PIPE DETAIL

NOT TO SCALE



3 TEMPORARY PIPE TERMINATION DETAIL

NOT TO SCALE

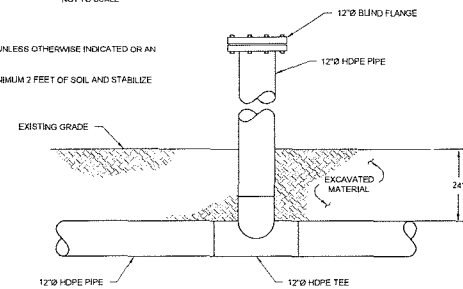


4 LFG COLLECTION TRENCH TRANSITION DETAIL

NOT TO SCALE

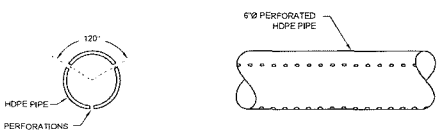
NOTES:

1. ALL HDPE PIPE SHALL BE SDR-17.
2. ALL SOLID HDPE PIPE SHALL BE BUTT-FUSION WELDED UNLESS OTHERWISE INDICATED OR AN ALTERNATIVE IS APPROVED BY THE ENGINEER.
3. COVER SOLID HDPE PIPE ON LANDFILL SLOPES WITH MINIMUM 2 FEET OF SOIL AND STABILIZE AGAINST EROSION.



5 VERTICAL RISER DETAIL

NOT TO SCALE

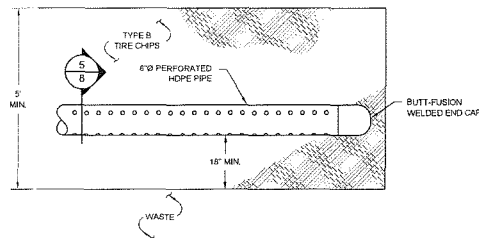


NOTE:

1. HOLES SHALL BE 1/2" DRILLED HOLES SPACED 12" APART ALONG THE LENGTH OF THE PIPE OR APPROVED EQUIVALENT BY OWNER.

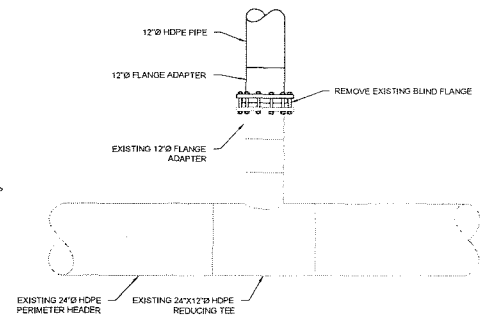
6 TYPICAL PERFORATED PIPE DETAIL

NOT TO SCALE



7 COLLECTION TRENCH TERMINATION DETAIL

NOT TO SCALE



8 CONNECTION TO PERIMETER HEADER

NOT TO SCALE

ISSUED FOR  
MAINE DEP APPROVAL  
AND CONSTRUCTION  
2/20/12

SANBORN HEAD

SCALE AS NOTED



NO.	DATE	DESCRIPTION	BY

DRAWN BY: R. CLAY  
DESIGNED BY: C. RIVET  
REVIEWED BY: K. ANDERSON  
PROJECT MGR: K. ANDERSON  
PIC: E. STEINHAUSER  
DATE: MARCH 2012

CELL 8 LFG SYSTEM EXPANSION DRAWINGS  
JUNIPER RIDGE LANDFILL  
OLD TOWN, MAINE

PROJECT NUMBER

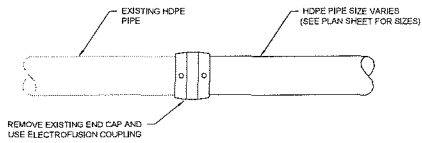
2536.23

DETAILS

SHEET NUMBER

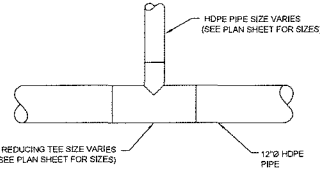
8 OF 10





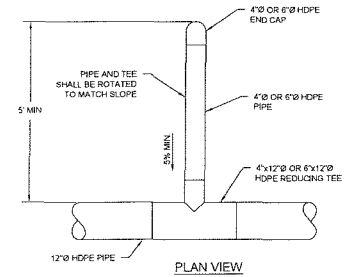
**EXISTING CONVEYANCE PIPE CONNECTION DETAIL (TYP)**

1  
NOT TO SCALE



**"TEE" CONNECTION DETAIL**

2  
NOT TO SCALE

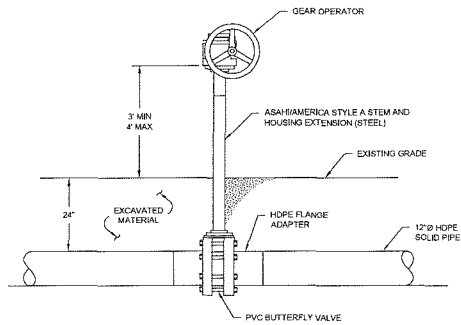


**TEE PIPE CONNECTION STUB DETAIL**

3  
NOT TO SCALE

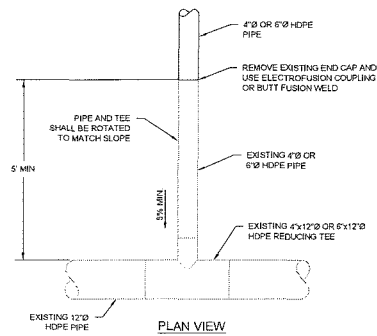
**NOTES:**

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3. COVER SOLID HDPE PIPE ON LANDFILL SLOPES WITH MINIMUM 2 FEET OF SOIL AND STABILIZE AGAINST EROSION.



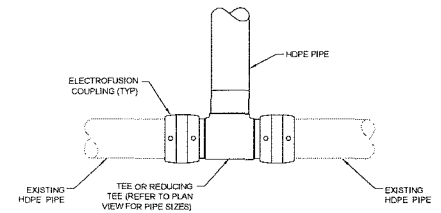
**LFG FLOW CONTROL VALVE DETAIL**

4  
NOT TO SCALE



**CONNECTION TO TEE PIPE STUB DETAIL**

5  
NOT TO SCALE



**EXISTING PIPE "TEE" CONNECTION DETAIL**

6  
NOT TO SCALE

ISSUED FOR  
MAINE DEP APPROVAL  
AND CONSTRUCTION  
2/22/12

**SANBORN HEAD**

SCALE AS NOTED



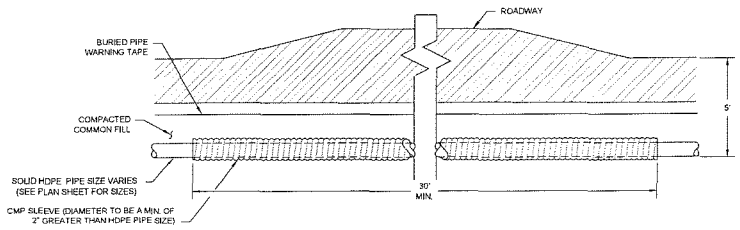
NO.	DATE	DESCRIPTION	BY

DRAWN BY: R. CLAY  
DESIGNED BY: C. RIVET  
REVIEWED BY: K. ANDERSON  
PROJECT MGR: K. ANDERSON  
PIC: E. STEINHAUSER  
DATE: MARCH 2012

**CELL 8 LFG SYSTEM EXPANSION DRAWINGS  
JUNIPER RIDGE LANDFILL  
OLD TOWN, MAINE**

**DETAILS**

PROJECT NUMBER:  
2536.23  
SHEET NUMBER:  
9 OF 10

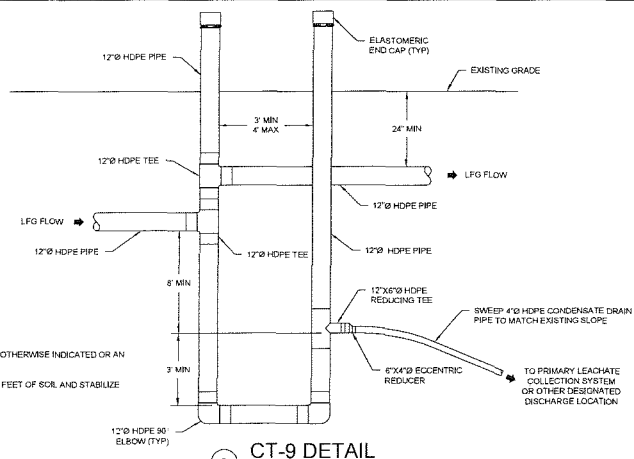


**ROAD CROSSING PIPE SLEEVE DETAIL**

1 NOT TO SCALE

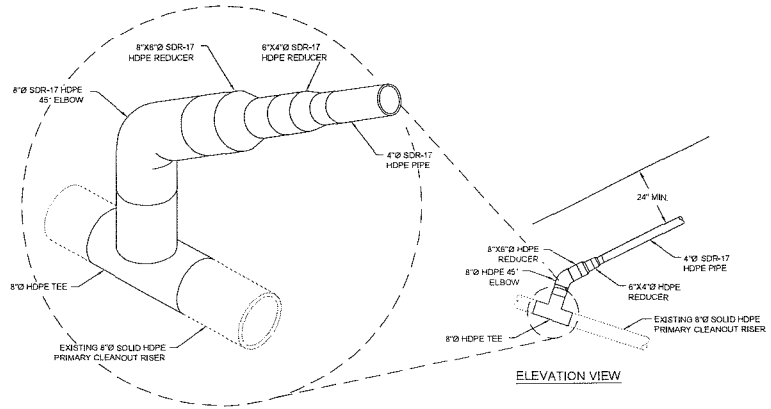
**NOTES:**

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2. ALL SOLID HDPE PIPE SHALL BE BUTT-FUSION WELDED UNLESS OTHERWISE INDICATED OR AN ALTERNATIVE IS APPROVED BY THE ENGINEER.
3. COVER SOLID HDPE PIPE ON LANDFILL SLOPES WITH MINIMUM 2 FEET OF SOIL AND STABILIZE AGAINST EROSION.



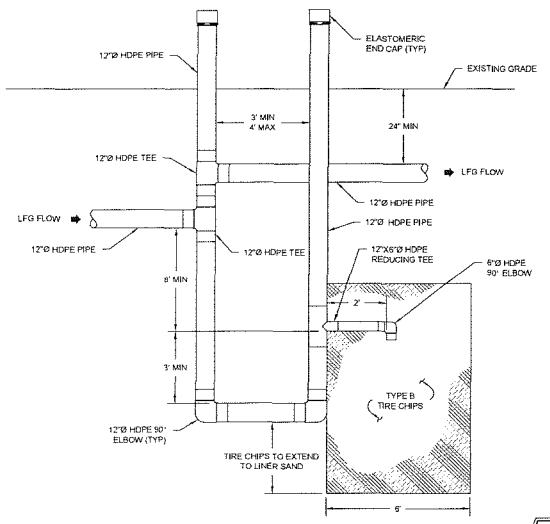
**CT-9 DETAIL**

2 NOT TO SCALE



**CONDENSATE DRAIN PIPE CONNECTION TO LEACHATE COLLECTION INLET/CLEANOUT SECTION**

3 NOT TO SCALE



**CT-8 DETAIL**

4 NOT TO SCALE

ISSUED FOR  
MAINE DEP APPROVAL  
AND CONSTRUCTION  
2/21/12



SCALE AS NOTED



NO.	DATE	DESCRIPTION	BY

DRAWN BY: R. CLAY  
DESIGNED BY: C. RIVET  
REVIEWED BY: K. ANDERSON  
PROJECT MGR: K. ANDERSON  
PIC: E. STEINHAUSER  
DATE: MARCH 2012

CELL 8 LFG SYSTEM EXPANSION DRAWINGS  
JUNIPER RIDGE LANDFILL  
OLD TOWN, MAINE

DETAILS

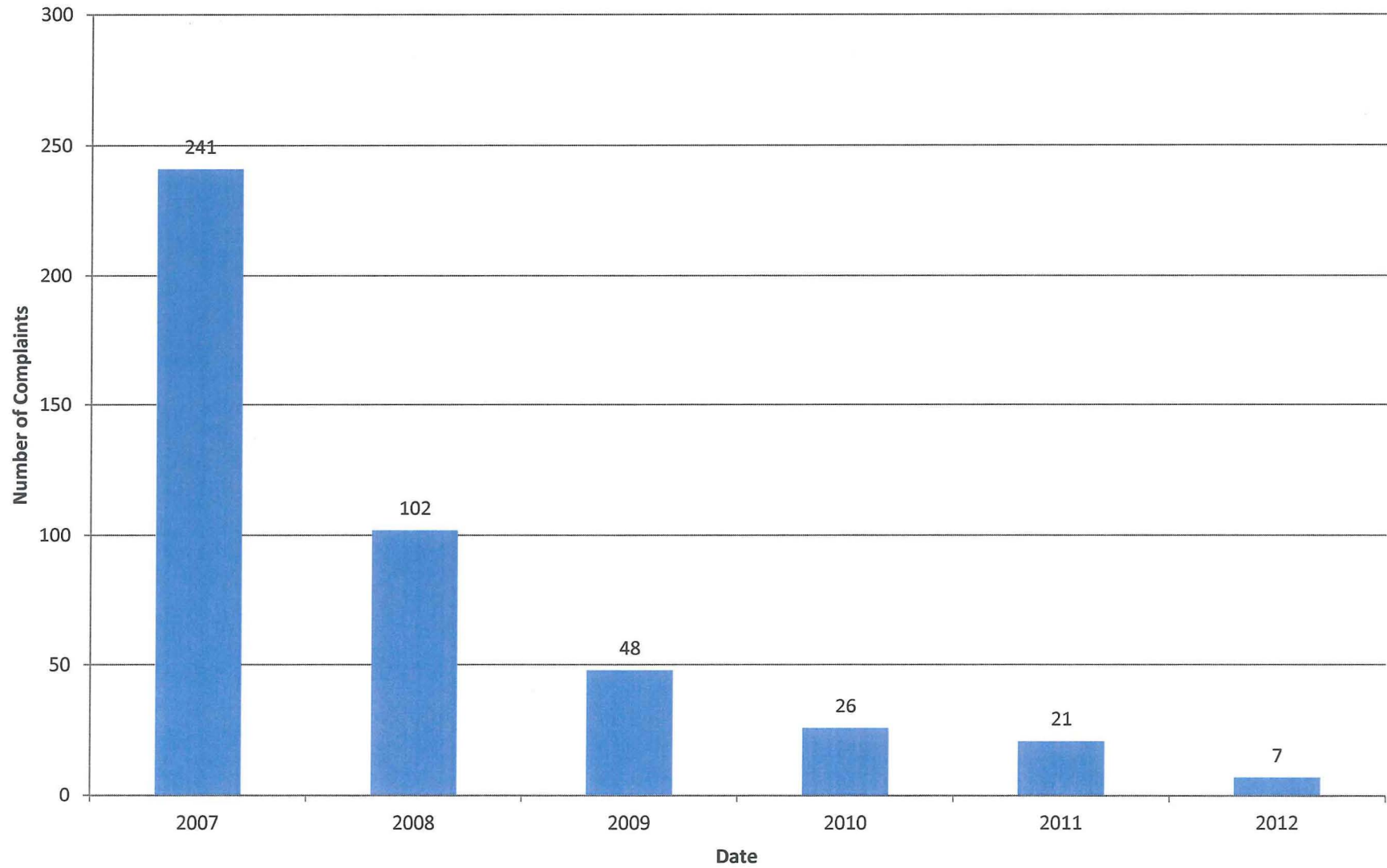
PROJECT NUMBER:  
2536.23  
SHEET NUMBER:  
10 OF 10



# Juniper Ridge Landfill

## Odor Related Complaints

### 2007-2012



**JUNIPER RIDGE LANDFILL**  
**-LANDFILL COMPLAINT RECORD FORM-**  
 January - December 2012

Date	Time	Nature of Complaint	Description of Complaint	Caller	Location of Complaint	Real Time?	Wind Direction / Speed at JRL	Complaint Downwind from JRL?	Call or Site Visit Made By	Potential Odor Source?	Landfill Odor Confirmed?	Caller / Responder Comments
02/08/12	7:44 PM	Odor	Slight sludge odor	Andrea Vigneault	2915 Bennoch Road, Alton, ME	Yes	West @ 11 mph	No	Carrie Smart	Unknown	No	Source of odor unknown. Landfill closed for evening, no sludge coming in
04/14/12	9:53 PM	Odor	Odor at residence	Marilee Stewart	7 Sarah Spring Dr. Apt 6 Indian Island, ME	Yes	West @ 3 mph	No	Carrie Smart	Unknown	No	Responder noted wood smoke and slight trash smell, sight upwind from landfill.
08/04/12	8:17 AM	Odor	Odor at residence	Sandi Daniels	439 West Old Town Road Old Town, ME	Yes	Southeast @ 2 mph	No	Jeremy Labbe	3 sludge trucks on site and one FEPR.	No	One of the sludge trucks spent an extra 45 minutes on the hill to remove material stuck in trailer.
09/21/12	9:49 PM	Odor	Slight trash odor	Ed Spencer	1140 Kirkland Road Old Town, ME	Yes	Southeast @ 0 mph	Yes	Eric Nute	Possible FEPR or RDF	Yes	Responder left message with explanation and that the issue would be taken care of. Gave GM's contact info at caller's request. Relocated the direct spray unit downwind of the working area to help with odor issue.
10/25/12	8:30 PM	Odor	Chemical Smell	Ron Dupuis	159 West Old Town Road Old Town, ME	Yes	South Southwest @ 3 mph	No	Jeremy Labbe	Mill/Wood Smoke	No	A landfill responder arrived in the area at 8:48 pm and confirmed a wood smoke odor on West Old Town Road. Odor from the mill was detected between exit 197 and the weigh station on I95.
11/04/12	5:20 PM	Odor	Mobile Complaint (while driving north on I-95)	Laura Sanborn	2845 Bennoch Road Old Town, ME	Yes	North @ 1 mph	No	Jeremy Labbe	Unknown	No	A landfill responder took a ride down I 95 to exit 197 and came back. Responder did not smell any odor north or south bound.
12/09/12	5:15 PM	Odor	Chemical Smell	Ron Dupuis	159 West Old Town Road Old Town, ME	Yes	North @ 0 mph	No	Jeremy Labbe	Unknown	No	A landfill responder noted a slight, very isolated chemical odor near the residence. Odor not similar to any landfill odor. Smelled like industrial chemical/paint/paint thinner.

2012 MONTH	COMPLAINT CATEGORY						MONTH TOTAL
	ODOR	NOISE	LIGHTS	DUST	BIRDS	OTHER	
JAN.	0	0	0	0	0	0	0
FEB.	1	0	0	0	0	0	1
MAR.	0	0	0	0	0	0	0
APR.	1	0	0	0	0	0	1
MAY	0	0	0	0	0	0	0
JUN.	0	0	0	0	0	0	0
JUL.	0	0	0	0	0	0	0
AUG.	1	0	0	0	0	0	1
SEP.	1	0	0	0	0	0	1
OCT.	1	0	0	0	0	0	1
NOV.	1	0	0	0	0	0	1
DEC.	1	0	0	0	0	0	1
<b>TOTALS</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>

\* An additional 5 non-enforceable off-site traffic related complaints have been received as of December 31, 2012.



# LETTER OF TRANSMITTAL

## SEVEE & MAHER ENGINEERS, INC.

4 Blanchard Road • P.O. Box 85A  
Cumberland Center, ME 04021

Tel. (207) 829-5016 Fax (207) 829-5692

*Distribution*

T  
O

JOB NO.	DATE <i>6-27-06</i>
ATTENTION	
RE: <i>Jumper Ridge Landfill Cell 3 operation Condition Compliance Noise Study</i>	

### WE ARE SENDING YOU

the following:

- |                                         |                                                         |
|-----------------------------------------|---------------------------------------------------------|
| <input type="checkbox"/> Attached       | <input type="checkbox"/> Under separate cover via _____ |
| <input type="checkbox"/> Shop Drawings  | <input type="checkbox"/> Specifications                 |
| <input type="checkbox"/> Prints         | <input type="checkbox"/> Plans                          |
| <input type="checkbox"/> Copy of letter | <input type="checkbox"/> Change order                   |
| <input type="checkbox"/> Samples        | <input type="checkbox"/> _____                          |

COPIES	DATE	NUMBER	DESCRIPTION
<i>1</i>			<i>Encl. Noise Study - Cell 3 operations</i>
<i>1</i>			<i>MDEP Condition Compliance Application</i>

### THESE TRANSMISSIONS ARE:

- |                                                         |                                                           |                                                                  |
|---------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------|
| <input type="checkbox"/> For your approval              | <input type="checkbox"/> Approved as submitted            | <input type="checkbox"/> Resubmit with _____ copies for approval |
| <input checked="" type="checkbox"/> For your use        | <input type="checkbox"/> Approved as noted                | <input type="checkbox"/> Submit _____ copies for distribution    |
| <input type="checkbox"/> As per your request            | <input type="checkbox"/> Corrections noted                | <input type="checkbox"/> Return _____ corrected prints           |
| <input type="checkbox"/> For your review and comment(s) | <input type="checkbox"/> _____                            |                                                                  |
| <input type="checkbox"/> FOR BIDS DUE _____ 19 _____    | <input type="checkbox"/> PRINTS RETURNED AFTER LOAN TO US |                                                                  |

### REMARKS:

*Distribution*

<i>MDEP</i>	<i>City of Old Town</i>
<i>Vicky Bryant w/check</i>	<i>Charlie Hemonen</i>
<i>Cynthia Darling</i>	
<i>Amanda Wade</i>	<i>NEWSME/Casella</i>
	<i>Don Meagher</i>
<i>STATE Planning Office</i>	<i>Marty Drew</i>
<i>George McDonald</i>	<i>Toni King</i>
	<i>Tom Gilbert</i>
	<i>Wayne Boyd</i>

COPY TO:

SIGNATURE: *[Signature]*



Juniper Ridge Landfill Cell #3 Operation  
Compliance Noise Study

Warren L. Brown

June 20, 2006

Submitted by:

EnRad Consulting  
516 Main Street  
Old Town, Maine 04468

Submitted to:

NEWSME Landfill Operations, LLC  
358 Emerson Mill Road  
Hampden, Maine 04444

## **1.0 INTRODUCTION**

NEWSME Landfill Operations, LLC (NEWSME Operations) operates a secure landfill for The State of Maine in Old Town, Maine. As a condition of the site's Maine Department of Environmental Protection (MEDEP) Amendment Solid Waste Order (#S-020700-WD-N-A), Cell 3 required a condition of compliance noise study in the first month of operation. Operation of Cell 3A commenced on May 1, 2006 and this noise assessment was begun on May 24, 2006.

The landfill is located on a 780 acre parcel with approximately 19 acres currently developed for disposal of waste. The landfill is located near the site's western property boundary in the southern half of the parcel, see **Figure 1**. The MEDEP Board Order limits development noise at nearby "protected locations", which are located directly to the west of the landfill and are marked Sites 1 through 4 accordingly on the Figure. Interstate 95 runs North/South approximately 4000 feet to the East of the landfill, and State Route 43 runs southeast/northwest approximately 1,800 feet to the west of the landfill.

The weather conditions in late May and early June were seasonally moderate. Measurements were made during a variety of conditions including those conducive to noise propagation toward protected locations.

## **2.0 METHODOLOGY**

Three protected locations located west of the landfill directly abut the site. Four off-site and one on-site monitoring locations were selected for noise assessment for this compliance study.

Monitoring locations representative of each protected location were chosen to indicate the highest noise levels produced by routine landfill operations. Site #1 was located on the southeast corner of the Meister property abutting the landfill; Site #2 was located on southeast corner of the Perkins property; Site #3 was located on the northeast corner of the Berquist property and Site 4 was 500 feet from the residence along the Berquist northern boundary. An on-site location within the operating footprint of the landfill was also monitored for noise levels.

Landfill operations were monitored for six days including a Sunday, a holiday and four weekdays. Noise arising from the landfill occurred from essentially two sources, work within Cell 3A, and construction noise associated with the placement of intermediate cover within Cell 1 (exempt). Landfill operation noise involved registered transport vehicles delivering waste (exempt) and heavy equipment used to grade and compact the waste within the landfill cell. Transport deliveries, waste grading, and compacting were essentially continuous from 6 a.m. until 8 p.m.

Ambient noise generally arose from traffic along interstate Route 95 and state Route 43.

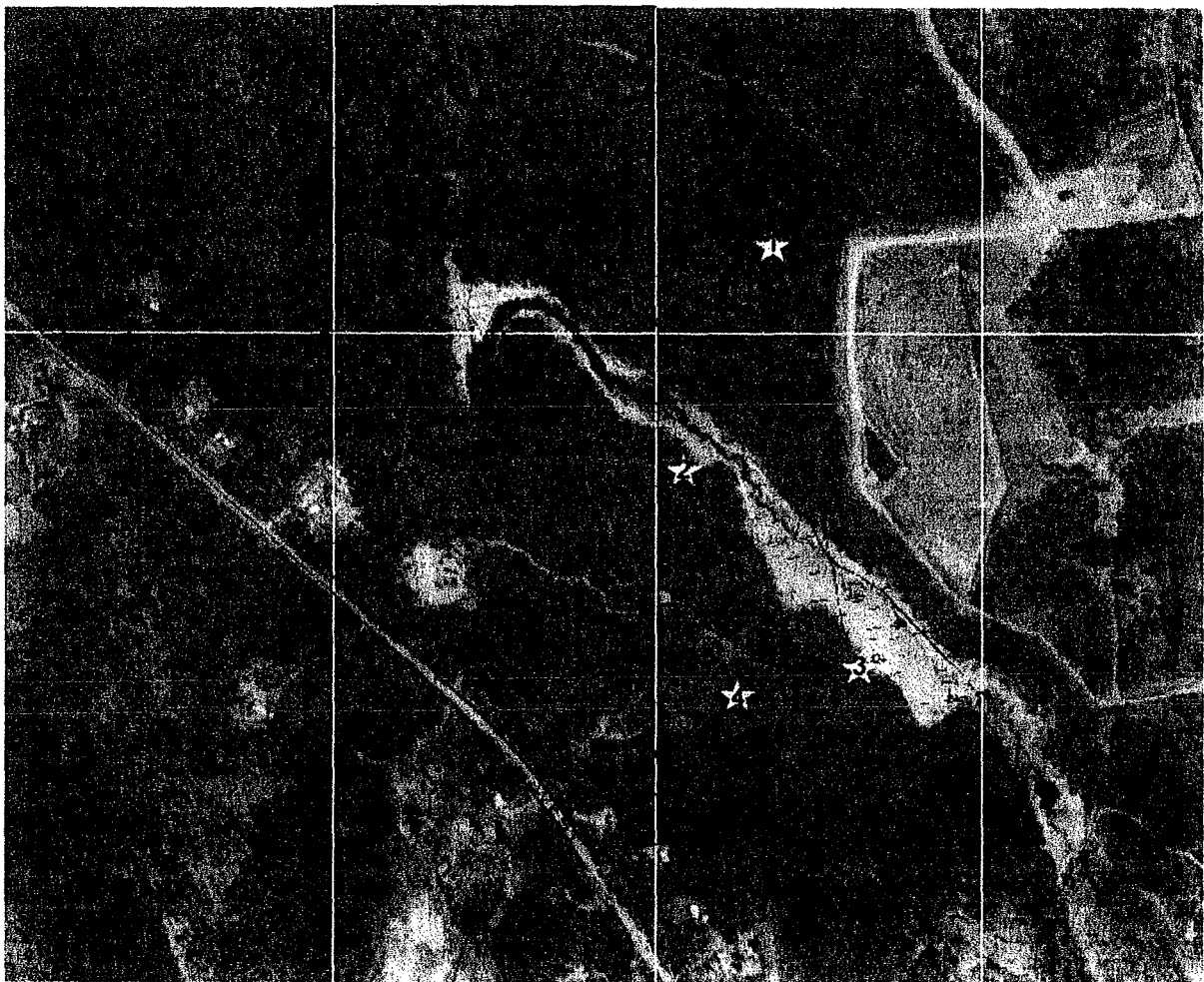
Integrating sound instruments were synchronized and correlated with an on site "cueing" monitor and observer. The noise measurement protocol, instrument specifications, and measurement period weather summaries are included in Appendix A. Instrument calibrations traceable to NIST standards and detailed weather data are available upon request.

# Juniper Ridge Landfill and Nearby Protected Locations

**Figure 1**



Approximate Scale  
1"-750'



### 3.0 FINDINGS

Ambient noise measurements at nearby protected locations during the hours of 6 a.m. to 8 p.m. were not measurable due to the continuous operation at the landfill. The lowest daytime observed values were approximately 40 dBA, as depicted in Table 1. The highest observed value (53 dBA) arose from construction activities involving the placement of cover materials on Cell 1. Exempt construction activities and waste deliveries were ongoing, concurrent with compliance measurements, making separation of exempt noise essentially impossible.

Protected location hourly noise levels resulting from all sources (including ambient non-landfill related noise, exempt registered vehicle noise, exempt construction noise associated with the placement of cover in Cell 1, and Cell 3A operational noise) are depicted in **Table 1**, along with the appropriate daytime and night-time regulatory standards. Site property boundary sound levels remained well below the DEP hourly sound level standard of 75 dBA. Average and hourly sound levels by site are depicted in the **Appendix B**. Observed operational sound levels were minimal even when combined with ambient, registered vehicle and construction noise.

**TABLE 1**  
**Hourly Sound Levels**

Parameter	Site #1	Site #2	Site #3	Site #4
Observed Range (day) (dBA)	40 - 49	40 - 51	40 - 53	N/A
Observed Range (night) (dBA)	38 - 45	38 - 44	36 - 46	42 - 46
Daytime Average (dBA)	43	44	45	N/A
Nighttime Average (dBA)	40	42	42	43
Noise Limits (dBA)	Daytime 60 Nighttime 50	Daytime 60 Nighttime 50	Daytime 60 Nighttime 50	Daytime 60 Nighttime 50

Operating equipment included two compactor units, a large bulldozer, a smaller bulldozer, a diesel truck, an excavator, and a mid-sized front-end loader. Operating equipment noise is broad spectrum with neither tonal nor short duration repetitive elements. Loads of waste delivered per day are depicted in **Table 2**. May 24 and 25 were the highest total loads recorded in a single day for the months of April and May.

**TABLE 2**

Date	Thursday May 24	Friday May 25	Sunday May 28	Monday May 29	Friday June 2	Study Average	April/May Average
Loads Delivered	107	108	19	28	86	70	64

#### **4.0 CONCLUSIONS**

Cell 3A operational sound levels are generously buffered by the large berm that Cell 1 forms and essentially do not measurably impact nearby protected locations. Concurrent construction activities during the operational sound level measurements had the greatest impact on nearby protected locations, although these sources are exempt under the applicable noise standards of the Solid Waste Rules..

Hourly sound levels from all sources of noise, including ambient, were well below regulatory limits, demonstrating full compliance by NEWSME Landfill Operations for the operation of Cell 3A at the Juniper Ridge Landfill.

**Appendix A**

## **Sound Survey Protocol**

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### **Measurement Personnel**

Measurements made by Warren Brown, B.S. Engineering Physics, M.S Physics or an appropriately skilled assistant.

### **Measurement Instrumentation**

The instruments being used for this study were the Quest M-28, integrating sound level meters, which are specified:

- ANSI S1.4-1983 type 2
- ANSI S1.25-1978
- IEC 651 type 2
- IEC 804

Calibrator          ANSI S1.40-1984

During all measurements wind screens recommended by Quest Manufacturing were used on sound level meters.

Weather data is logged using a Campbell Scientific research quality station, or other local observations.

### **Calibration**

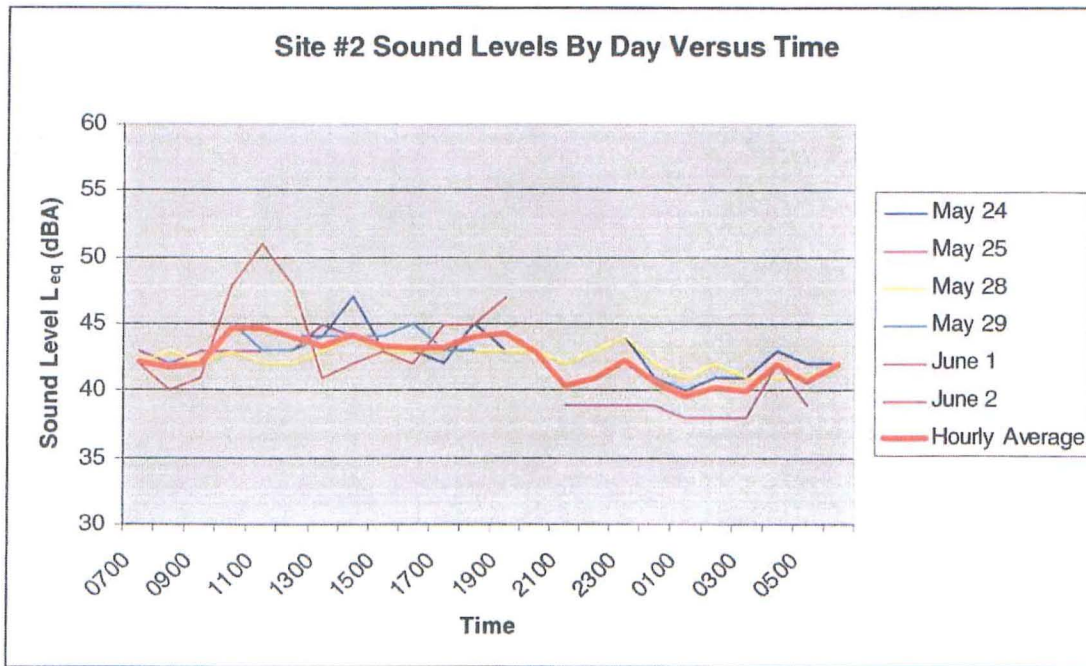
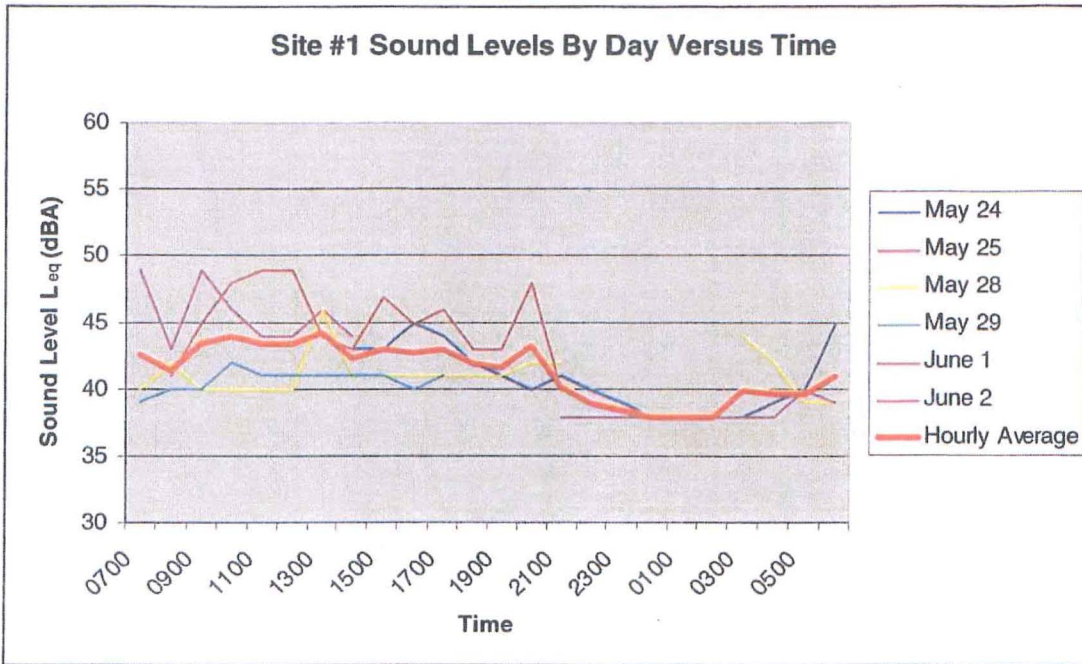
Sound level meters have been calibrated at a Quest representative service laboratory, which claims microphone response is traceable to the National Institute of Standards (NIST) within the last 12 months. Field calibrations were performed prior to measurements and repeated at the conclusion of each measurement period, which is well within the recommendations of the manufacturer.

### **Measurement Configuration and Environment**

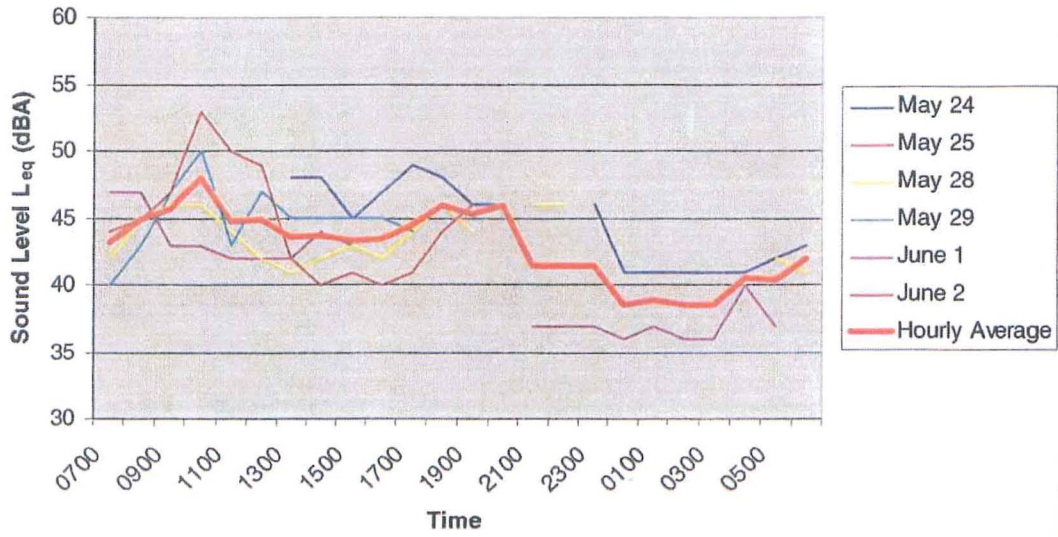
Measurement locations were selected near sensitive receptors to the development. Microphones were positioned at a height of 4 to 5 feet above the ground and oriented as recommended by the manufacturer, at a 70-degree angle to the noise source. Measurement locations at no time were positioned closer than 6 feet from vertical reflective surfaces exceeding the microphone height. There were no periods of precipitation or when local wind speeds exceeded 12 mph during measurements.



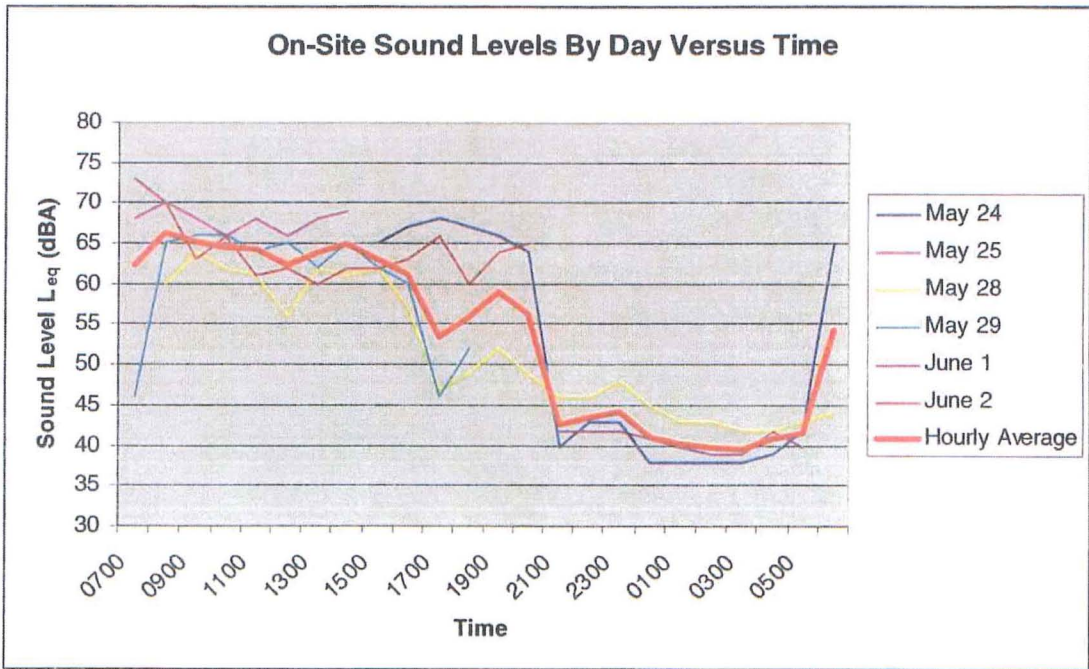
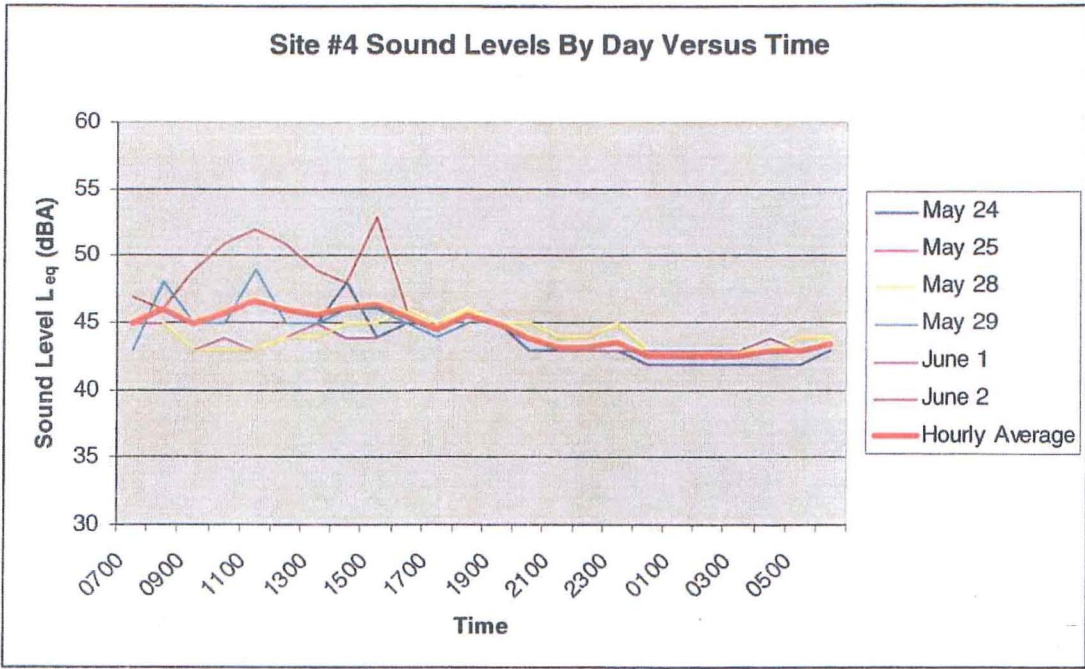
## Appendix B



Site #3 Sound Levels By Day Versus Time







## Weather Summary During Measurement Periods

May 24, 2006

Temperature: 50 – 63 F  
Dew Point: 40 – 48 F  
Sky Conditions: Overcast  
Wind Direction: Variable  
Wind Speed: 0 – 4 MPH

May 25, 2006

Temperature: 40 – 68 F  
Dew Point: 38 – 48 F  
Sky Conditions: Clear - Overcast  
Wind Direction: Calm, SSW  
Wind Speed: 0 – 6 MPH

May 28, 2006

Temperature: 53 – 84 F  
Dew Point: 42 – 53 F  
Sky Conditions: Mostly Cloudy - Partly Cloudy  
Wind Direction: Calm, S  
Wind Speed: 0 – 5 MPH

May 29, 2006

Temperature: 55 – 87 F  
Dew Point: 48 – 63 F  
Sky Conditions: Clear - Mostly Cloudy  
Wind Direction: Calm, Variable  
Wind Speed: 0 – 5 MPH

June 1, 2006

Temperature: 64 – 66 F  
Dew Point: 62 – 63 F  
Sky Conditions: Overcast  
Wind Direction: Calm, N  
Wind Speed: 0 – 2 MPH

June 2, 2006

Temperature: 66 – 75 F  
Dew Point: 50 – 60 F  
Sky Conditions: Mostly Cloudy - Overcast  
Wind Direction: NW - ESE  
Wind Speed: 0 – 3 MPH