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BUREAU OF GENERAL SERVICES  
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January 18, 2013

Mr. Michael Parker  
Maine Department of Environmental Protection  
Bureau of Hazardous Materials & Solid Waste  
17 State House Station  
Augusta, Maine 04333

Re: Response to Public Comments Regarding the Application to Accept Municipal  
Solid Waste Sources at the Juniper Ridge Landfill, DEP #S-020700-WD-BC-A


Dear Mike:


The Maine Bureau of General Services (BGS) and NEWSME Landfill Operations, LLC (NEWSME) have prepared responses to some of the public comments filed with the Department on the above-referenced license amendment application. These comments were provided by: (1) Ed Spencer, in a letter dated October 14, 2012; (2) Ralph Coffman, in a letter dated October 20, 2012; (3) Robert Quattrone, in a letter dated October 21, 2012; and (4) Charles Leithiser, in a letter dated December 23, 2012. For your convenience, in the attached submittal we have repeated the applicable comment and then provided our response.

As you are aware, BGS and NEWSME submitted a revision to the application on December 20, 2012, to explain the impact of an agreement reached between Casella Waste Systems (CWS), NEWSME's ultimate parent company, and the Penobscot Energy Recover Company (PERC), that requires CWS to supply PERC with no less than 30,000 tons annually of in-state municipal solid waste from customers of Maine Energy contingent upon approval of the pending application. Because responding to a number of the comments requires referencing the data contained in the application, we have responded based on the updated data contained in the revised application, where appropriate.

We appreciate the opportunity to respond to these comments.

Sincerely,

  
Donald L. McCormack  
Director, Bureau of Government Services

  
Brian Oliver  
Vice-President, Casella Waste Systems

cc: Interested persons list

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## **BGS AND NEWSME'S RESPONSE TO PUBLIC COMMENTS**

### **1. Responses to Ed Spencer's comment letter of October 14, 2012.**

**Spencer Comment 1:** "There are broken promises involved here. In 2004, during lengthy public information sessions prior to JRL becoming licensed to accept non-Mill waste, members of the public asked both the DEP staff and Casella's spokesman, Don Meagher, if there would be any raw garbage, or MSW, coming to the Old Town Dump. Cyndi Darling assured my wife Cheryl Spencer that there would be 'no putrescible waste' brought here. That proved to be not factual when MSW was approved as a soft layer material, and even earlier because FEPR is indeed putrescible. Don Meagher told us there would be no raw garbage, or 'what is picked up roadside' brought here."

**Response:** Mr. Spencer's assertions are false, and appear to be based on distortions of public proceedings that date back to 2004.

As demonstrated in the excerpts from the transcript of the public informational sessions for the Juniper Ridge Landfill (JRL) in Old Town on March 29 and 30, 2004, the exchanges with the Department of Environmental Protection (DEP) staff and Mr. Meagher alleged by Mr. Spencer did not occur in the way that he appears to recollect. As the transcript shows, the "promises" referenced by Ms. Spencer apparently pertain to the original permitting process of Fort James in 1993 to permit its paper mill sludge landfill, not by Casella Waste Systems (CWS or Casella) in the permitting of the State-owned landfill in 2004. (See Exhibit 1 at page 2, line 25 through page 3, line 8 (referring to the "original site study" by, among others, the "mill").)

Further in the transcript, the exchange between Charles Leithiser and Cyndi Darling and Don Meagher are directly at odds with Mr. Spencer's assertions. (See Exhibit 1 at page 4 line 8 through page 5, line 4.)

For example, in response to a question from Charles Leithiser, Cyndi Darling explained that out-of-state municipal solid waste (MSW) bypassed from Maine Energy would not go to the JRL. Mr. Leithiser then mischaracterized Ms. Darling's statement by asking: "So there will be no raw bypass material going to West Old Town . . . ?" (See Exhibit 1 at page 4 lines 22-24.) Ms. Darling and Mr. Meagher never stated that no MSW and putrescible waste would go to the JRL. Rather, Mr. Meagher corrected him, explaining: "You misunderstood the answer. There will be no out-of-state waste going to the West Old Town Landfill." (See Exhibit 1 at page 5 lines 2-4.) Mr. Leithiser continued to gloss over the distinction between in-state and out-of-state bypass MSW, and Mr. Meagher explained again: "No, it's still out of state and will go to Pine Tree Landfill, but in-state bypassed waste that was designated for Maine Energy would go to the Old Town landfill and there's no numerical annual limitation." (See Exhibit 1 at page 5, lines 9-13 (emphasis added).) Mr. Spencer is therefore apparently attributing Mr. Leithiser's erroneous rhetorical question as statements made by the DEP and CWS, and either ignoring or forgetting Mr. Meagher's attempts to clarify the issue.

Contrary to Mr. Spencer's assertion that MSW disposal at the JRL was first approved in the soft-layer approval in 2010, the DEP specifically authorized disposal of unprocessed MSW at the JRL in 2004. (See Exhibit 2 at pages 36-39.) Further, a review of the public record of the JRL shows it has always been clear that the owner and operator of the JRL would seek to dispose of MSW. For example:

- During the June 2003 legislative committee hearings on the resolve that authorized the State to acquire what was then called the West Old Town Landfill (WOTL), and is now referred to as the JRL, George McDonald of the State Planning Office (SPO) provided a list of the State's goals, including to provide long-term disposal for mill wastes and to "[p]ermit the delivery of other acceptable wastes to the site." (See Exhibit 3 at page 2.)
- Following up on these statements, CWS stated in its July 2003 proposal to the State to operate the landfill that it anticipated it would accept MSW at the JRL. (See Exhibit 4 (excerpt from CWS's proposal to the SPO).)
- Shortly thereafter, the SPO explained in its license transfer application, filed in September 2003, that it intended to accept additional waste streams, including MSW. (See Exhibit 5 at page 3 (excerpt from transfer application).)
- DEP's Order approving the SPO's license transfer application, dated October 21, 2003, acknowledged that SPO planned to apply for approval to accept additional waste streams, including MSW. (See Exhibit 6 at pages 5-6 (excerpt from DEP order).)
- As promised, the SPO and NEWSME applied to the DEP for permission to accept MSW and front-end process residue (FEPR), which is a form of MSW, in an amendment application filed with the DEP in October 2003. (See Exhibit 7 at page 6-2 (excerpt from amendment application).)
- The JRL has been accepting MSW bypass and FEPR since 2005. (See Exhibit 8 at page 6 (excerpt from 2005 Annual Report on the JRL).)

In fact, the DEP even anticipated back in 2004 that if one of the incinerators in Maine were to close that the State might wish to take the MSW to WOTL "because one of the stated purposes of the WOTL is to provide capacity for Maine wastes." (See Exhibit 9 at page 44 (excerpt from DEP Response to Comments document for the April 2004 license amendment).)

**Spencer Comment 2:** "Bringing MEI's MSW to JRL would break condition #5 of the PBD, which would impose a limit of 25,000 total tons of MSW to JRL annually."

**Response:** Mr. Spencer misunderstands Condition #5 of the January 31, 2012 public benefit determination (PBD) for a potential expansion of the JRL, which provides:

No more the 25,000 tons of MSW bypass from Maine Energy shall be delivered to the 9.35 million cubic yard expansion in any calendar year, unless otherwise

authorized by specific conditions in a Department license for the 9.35 million cubic yard expansion.

(See Exhibit 10 at page 30 (excerpt of DEP's PBD Order) (emphasis added).)

There are two reasons why this comment is misplaced. First, the PBD and its conditions apply only to the proposed JRL expansion, not to the existing facility. The pending application requests approval for an amendment to the existing license for the JRL for additional MSW. No license application for an expansion of the JRL has been filed. Therefore, the PBD condition he relies upon does not apply.

Second, by its very terms, Condition 5's limit on MSW may be changed "by specific conditions in a Department license for the 9.35 million cubic yard expansion." Thus, even if somehow the PBD condition could apply here, which is not the case, the DEP specifically allowed that it could authorize just such a revision. BGS and NEWSME recognize that if this amendment application is approved by the DEP, they will have to obtain separate approval of a modification to the current PBD for the expansion before they submit any application for the JRL expansion.

**Spencer Comment 3:** "Casella claims they will recover 85% of the methane produced, and the Sierra Club says their estimates are way higher than what reality bears out."

**Response:** As its basis for assuming 85% methane collection efficiency, NEWSME relies on information provided by the U.S. Environmental Protection Agency, as referenced in the Sanborn Head Report contained in Appendix C of Attachment 9 of the Application. For his part, Mr. Spencer has provided no information from the Sierra Club other than his unsupported statement. Without this information we are unable to comment on the validity of his statement.

Moreover, it is also unclear whether the Sierra Club's study – assuming Mr. Spencer is representing it accurately – even applies to the conditions at the JRL. NEWSME utilizes two types of cover that exceed industry standards. NEWSME uses a synthetic intermediate cover on the majority of the landfill, and approximately two feet of soil cover on the top of the landfill, which is not at final grade. These covers are placed shortly after a waste lift has been completed and contain landfill gas far more effectively than the more common industry practice of using only one foot of soil cover. NEWSME conducts surface methane emission scans on a routine basis to assure the integrity and effectiveness of the synthetic intermediate cover. This contains landfill gas better than at most landfills.

NEWSME also utilizes extensive gas collection infrastructure within the landfill (lateral piping and wells), which is aggressively installed shortly after the waste has been placed and prior to the placement of the intermediate cover. The standard industry practice is to wait until the

landfill cell is complete before any gas collection infrastructure is installed, and thus the system used at the JRL begins to capture landfill gas earlier than at most landfills, and is more effective.

In sum, unless the Sierra Club report Mr. Spencer references takes into account the actual landfill gas management practices that are used at JRL, it is probably inapplicable here.

**Spencer Comment 4:** "In addition, when computing greenhouse gases from MSW, Casella does not mention the harmful effects and gases produced by trucking the MSW almost 200 miles to JRL instead of incinerating it in southern Maine."

**Response:** Mr. Spencer ignores the fact that the same truck traffic that transported nearly equivalent amounts of combustion ash and FEPR from Maine Energy to the JRL will produce almost the same emissions as transporting the proposed MSW. In fact, as the Application makes clear, there will be less traffic to the JRL if the amendment application is approved and thus emissions from trucks will actually decrease, as compared to when Maine Energy operated and delivered ash and FEPR to the JRL.

In addition, there is no permitting standard here for regulating truck emissions. See 06-096 CMR 400 § 4.G (limiting regulation of air emissions to the "solid waste facility" itself). DEP therefore has no authority in this proceeding to regulate emissions from truck traffic.

**Spencer Comment 5:** "When asked Oct. 3<sup>rd</sup> whether out-of-State trucks would be allowed at Casella's proposed new Westbrook Transfer Station, Brian Oliver (Casella VP) said that out-of-state trucks will be allowed at Westbrook, but that their waste will be segregated and sent back beyond our borders. Once again, it is hard to believe that some of that MSW will NOT end up in JRL, given Casella's creativity at labeling parts of their waste stream."

**Response:** Although permitted to accept out-of-state waste at the Westbrook facility, in recognition of the concerns that have been expressed, CWS has no current plans to do so.

Regarding out-of-state waste generally, in accordance with state law, CWS utilizes a manifest tracking system for every load delivered to ensure that only waste generated in Maine is disposed at the JRL. Mr. Spencer's reference to what he deems creative labeling by CWS ignores long-standing regulatory practice and Maine law. Residue from the processing of any waste in Maine, regardless of source, has been regarded by State government as Maine waste since 1990, long before CWS had any presence in Maine. This recognition of what is considered Maine waste was discussed and confirmed during debate in the Legislature in 2003 on the Resolve that authorized the purchase of the West Old Town Landfill. Finally, that long-standing historical practice was incorporated into statute in 2006. 38 M.R.S. § 1310-N(11) (defining "waste generated within the State").

**Spencer Comment 6:** "In my letter of comment dated October 1, 2012, I raised concerns about incomplete proof of financial capacity for Casella."

**Response:** The letter in Attachment 4 of the Application from Bank of America, NEWSME's banker and the agent for its secured credit facility, is more than adequate evidence of the applicants' financial capacity for this JRL license amendment application. Mr. Spencer's concerns are without merit.

**Spencer Comment 7:** "In addition, I asked how Casella having been fined \$1 Million by the State of Vermont in 2011 for anti-trust violations, etc., was not mentioned in the Civil/Criminal Violations section."

**Response:** Under DEP's rules, disclosure for CWS is not required because it does not have managerial or executive authority and hold more than 5% of the equity in or debt of BGS or NEWSME. 06-096 CMR 400 § 12.A.1.b.ii. In this case, the applicants are BGS, the owner, and NEWSME, the operator. NEWSME's immediate parent is New England Waste Services of ME, Inc. Disclosure statements have been provided in the application for all three entities.

In any event, DEP's rules require disclosure for violations of criminal and environmental laws only. 06-096 CMR 400 § 12.4-12.7. The fine referred to was for alleged civil anti-trust violations, and involved neither criminal nor environmental laws. The fine was related to technical violations of a decade-old consent order (Assurance of Discontinuance) signed by CWS in Vermont, which consent order restricted the use of certain clauses in CWS's commercial contracts for certain products. The use of the offending terms was accidental, and there was no harm to any consumer as CWS reissued contracts to all customers, and never enforced any of the terms against any customer. Nevertheless, in the face of a binding order, CWS elected to settle rather than going to court and risking damages and costs in excess of the fine.

**Spencer Comment 8:** "Casella's misleading statements concerning air and leachate quality, as well as greenhouse gas remediation may rise to the level of Credible Conflicting Technical Evidence."

**Response:** It is Mr. Spencer's obligation to provide credible conflicting technical information if he disagrees with a statement made by BGS or NEWSME. To date he has not done so. In any event, the "credible conflicting technical information" standard applies only when the Department is deciding whether to hold a public hearing. 06-096 CMR 2 § 7.B. Here, the Commissioner has already decided to hold a public hearing for reasons other than "credible conflicting technical information," and thus this standard does not apply.

## **2. Responses to Ralph Coffman's comment letter of October 20, 2012.**

**Coffman Comment 1:** Mr. Coffman refers to the Juniper Ridge Landfill as a "toxic dump."

**Response:** The facility is not a "toxic dump." First, the term "dump" applies to the hundreds of unlined solid waste disposal sites across Maine that do not meet today's rigorous environmental standards and have nearly all been closed. The JRL is a state-of-the-art secure landfill that meets all of Maine's requirements for locating, designing, permitting, constructing, operating, monitoring, and closing landfills.

Second, NEWSME rigorously complies with the DEP's requirements for testing waste that is accepted at the JRL to ensure that it is not "toxic" (the correct regulatory term is hazardous). In addition, the leachate that the landfill generates is also tested on a regular basis to demonstrate that it does not exhibit hazardous or other characteristics that would interfere with the operations of the facilities approved to treat the JRL leachate, the Old Town Fuel and Fiber wastewater treatment plant and the Brewer, Maine publicly owned treatment works. The agreements between NEWSME and Old Town Fuel and Fiber and the City of Brewer under which leachate may be accepted at those treatment plants, along with the testing requirements, are included in Attachment 8 of the Application.

**Coffman Comment 2:** "This plan to dump raw garbage/sewage in the Juniper Ridge Toxic Waste Dump is located in a swamp between Pushew [sic] Stream and Birch Stream."

**Response:** First, the application does not propose to dispose of "raw sewage" at the JRL. Raw sewage is treated at wastewater treatment plants. JRL is licensed to accept treatment plant sludge for disposal. This has been the case since 2004.

Second, the landfill is not located in a swamp. During the initial permitting of the landfill by James River in 1989 through 1993, wetlands were mapped, and the potential impact of the landfill on wetlands around the project site was extensively studied and approved by both the DEP and the Army Corps of Engineers. These wetland studies were updated as part of the permitting process in 2004. Because this amendment application does not change the footprint of the landfill, there will be no additional wetland impacts.

**Coffman Comment 3:** "The toxic waste site is also located just 2 miles upstream from the deep water municipal wells that supply water to the residents of Old Town, Penobscot Nation, University of Maine and Stillwater."

**Response:** The hydraulic setting of the JRL and its potential to impact either municipal or private water supplies was extensively studied when it was initially licensed by James River from 1989 through 1993, and again as the State-owned landfill in 2004. The DEP concluded in

both instances that drinking water supply aquifers would not be negatively impacted. Specifically, the DEP's 2004 Order amending the JRL's license concludes:

The City of Old Town's public drinking water supply well is located in Stillwater and along Spring Street; there is no direct hydraulic connection between these wells and the groundwater beneath the landfill. The Department finds that the landfill does not pose an unreasonable threat to the public drinking water supply.

(See Exhibit 2 at page 16.)

In addition, residential wells in the neighborhoods around the landfill (West Old Town Road, Old Stagecoach Road) have been sampled and tested by the DEP and no contamination caused by the JRL has been detected in any residential well.

**Coffman Comment 4:** "This is a new illegal and scientifically improper addition to the toxic mixture already present."

**Response:** Mr. Coffman is factually wrong on all four counts:

- "New": This is not a new waste stream. The JRL is already permitted to accept MSW and has done so in complete compliance with its DEP permit since 2005. The only thing that is new here is that MSW accepted would not first have to be bypassed from a Maine incinerator, as is currently the case.
- "Illegal": There is nothing illegal about the amendment application or accepting non-bypass MSW if the application is approved.
- "Scientifically improper": As noted above, MSW is already accepted at the JRL and has been accepted since 2005. The JRL was designed to accept MSW, in addition to several other waste streams. MSW is routinely accepted for disposal at other active landfills in Maine. In New England and on a national basis, MSW is the most common waste category disposed at landfills. Thus, the science behind disposing of MSW in secure landfills is well-understood and is in no way improper.
- "Toxic": MSW is not a toxic material. Homeowners routinely handle it, move it from small trash cans into larger trash bags, put those bags into trash bins, and wheel the bins out to the curb on a weekly basis. Maine residents in homes and businesses produce and are in direct contact with MSW almost every day.

**Coffman Comment 5:** "We already have NE's largest toxic waste dump with +63% coming from out of state . . . ."



**Response:** The JRL is not the largest landfill in New England. According to the New Hampshire Department of Environmental Services, the Waste Management landfill in Rochester, NH (Turnkey) had nearly 34 million cubic yards of licensed capacity as of 2011. This is far larger than JRL's existing licensed capacity of 10 million cubic yards and larger even than approved in the recent PBD (for an additional 9.35 million cubic yards).

Contrary to Mr. Coffman's claim, the JRL does not accept any out-of state-waste. All of the waste accepted at the JRL meets the statutory definition of waste generated in Maine. 38 M.R.S. § 1310-N(11). This definition, in turn, is consistent with how solid waste has been categorized in Maine since 1990.

**Coffman Comment 6:** "There is absolutely no benefit to Old Town especially since Old Town only receives 15% of what other host communities throughout New England receive . . . ."

**Response:** This statement is inaccurate. As of November 2012, CWS has provided the following direct financial benefits associated with the JRL:

- City of Old Town: approximately \$8.5 million. This is far in excess of what CWS is required to provide under its Operating Services Agreement with the State.
- Town of Alton: more than \$0.5 million. CWS's Operating Services Agreement with the State does not require any such payment at all.
- Landfill Neighbors: more than \$3 million in benefits, none of which are required under CWS's Operating Services Agreement with the State, its Host Community Benefit Agreement with Old Town, or its Community Benefit Agreement with Alton.
- Maine Solid Waste Management Fund: nearly \$5 million.

In total, these benefits add up to more than \$17 million paid out in direct benefits since February 2004, when the State became the owner and NEWSME the operator of the JRL.

In addition, CWS contributes significantly to the local economy through charitable contributions and the purchase of goods and services. The total JRL expenditures in 2012, for example, were more than \$6.3 million just on Old Town charities and businesses alone. In addition, NEWSME provides good paying jobs for local residents, who in turn provide more support for the local economy.

### **3. Responses to Robert Quattrone's comment letter of October 21, 2012.**

**Quattrone Comment 1:** "According to table 2-1 of the application, Casella states that the volume of truck traffic to JRL will decrease if this amendment is accepted. . . . Therefore they estimate that total truck traffic will be less than previous years. After closer examination of the data, the total truck numbers are off. If Casella would like to bring 123,000 tons of MSW to JRL,

and they claim that the average load of MSW is 27.7 tons, then the result is a total of 4,400 total truck loads going into JRL. This figure was reached by taking (123,000 tons) X (2,000 pounds) / (27.7 average tons/load) X (2,000 pounds). . . . When comparing the differences in total MSW trucks traveling to JRL, the difference is 374 truck trips more than Casella has stated. These additional trucks will make 74,800 (374 X 2000 pounds) pounds of CO<sub>2</sub>."

**Response:** As noted above, the DEP does not have the authority to regulate truck emissions in this proceeding. Nonetheless, Mr. Quattrone's comment bears a response to correct an error in his method of analyzing traffic counts.

The traffic analysis presented in the amendment application on Table 2-1 is a comparison of (a) actual truck counts associated with waste deliveries to the JRL in 2011 to (b) projected truck counts to JRL based on 2011 data from the JRL and Maine Energy. The Maine Energy data includes the amount of in-state MSW received at Maine Energy in 2011. Mr. Quattrone, on the other hand, incorrectly attempts to compare two different data sets by focusing on the proposed cap of 123,000 tons of Maine MSW (reduced to 93,000 tons in the December updated application), with only one year of truck trip data. As explained at page 1-8 in the original Application, the proposed cap is a three-year average of in-state MSW sent to Maine Energy, combined with the bypass and soft layer MSW from Maine Energy sent to the JRL, from 2009 to 2011. Using an average MSW acceptance rate based on three years of data and comparing it to 2011 data, as Mr. Quattrone has done, is like comparing apples to oranges because it fails to recognize that the tonnage of the other Maine Energy waste streams does not remain consistent between these two data sets.

As part of the updated application filed in December, we have provided comparisons of truck traffic for both data sets – 2011 and the three-year average from 2009 to 2011 – now adjusted to reflect the 30,000 tons of MSW that must be shipped to the Penobscot Energy Recovery Company (PERC). The analysis using the 2011 data is presented on Table 2-1 in the body of the Application, and the analysis using the three-year average is presented on Table 2-1.1 in Attachment 11 of the Application. Both of these analyses demonstrate that the truck traffic to the JRL will be less with this proposed amendment than if Maine Energy was still operating and the JRL was receiving the residuals from that facility.

Therefore, because actual truck traffic to the JRL will decrease slightly with the proposal, Mr. Quattrone's conclusion regarding overall CO<sub>2</sub> emissions from truck traffic for waste going to the JRL is not correct. Actual emissions will decrease because there will be fewer trucks.

**Quattrone Comment 2:** "On October 3<sup>rd</sup>, Casella and a representative of Sevee and Maher Engineering (Mike Booth) said that the tonnage going into JRL will remain about the same. Mr. Booth also stated that the volumes will remain about the same. Eco-Maine calculates that MSW to ash is about a 90% reduction. Maine Energy calculates that about 65%-80% reduction.

. . . If Maine Energy waste can be reduced by 65% by burning it, I find it hard to believe that by compacting it at JRL will give the same volume.”

**Response:** The tonnage going to the JRL will decrease as a result of the proposed changes. This is shown on Tables 1-2 and 1-2.1 of the updated application (December 2012) for both 2011 data and a three-year average.

As far as landfill capacity consumption, what Mr. Booth said at the October 3<sup>rd</sup> Landfill Advisory Committee (LAC) meeting is that this proposed change will not result in a significant change in the in-place waste density, and hence the landfill capacity consumption rate. The figure included as Exhibit 11, which was presented at the October 3<sup>rd</sup> meeting that Mr. Quattrone refers to, illustrates this point. We have also included in Exhibit 11 an updated version of this figure to reflect the amended Table 3-1 contained in the updated application. As these figures show, the MSW will occupy a greater percentage of the landfill volume, but this is more than offset by a reduction in the volume of other MSW incinerator residues (e.g., FEPR and ash).

Mr. Quattrone does not adequately account for the fact that only about a third of the MSW formerly handled or bypassed by Maine Energy is proposed to be disposed of at the JRL. The rest of the waste formerly managed by Maine Energy will not be taken to the JRL because it is out-of-state waste. Likewise, there will no longer be a need to dispose at the JRL of all the residue formerly generated by Maine Energy. This, in combination with the 30,000 tons of MSW that will now be sent to PERC, will further reduce the rate at which landfill capacity is consumed at the JRL, as described in Section 3.3 of the application.

**Quattrone Comment 3:** “Methane gas is produced by land filling organic matter and/or putrescible matter. This fact cannot be disputed. What does come into debate is the amount of methane that can be captured in Landfill gas-to-energy projects. . . .”

**Response:** Both landfills and waste-to-energy facilities produce greenhouse gas emissions. Whereas landfills produce methane (CH<sub>4</sub>) from the decomposition of putrescible wastes, waste-to-energy facilities produce anthropogenic carbon dioxide (CO<sub>2</sub>) from the combustion of plastics. The relative climate impact of the two technologies varies based on a variety of scenario-specific factors. Neither technology is inherently better or worse from a climate perspective.

Through adherence to landfill best management practices and design standards, landfill methane can be generated on a controlled basis and effectively and safely captured. By continuing to implement these practices and standards at the JRL, the proposed project will not increase greenhouse gas emissions, and could result in a net reduction in greenhouse gas emissions. This is on both an instantaneous basis and a full life-cycle basis.

CWS's commitment to climate protection is well-demonstrated. The company was the only solid waste company in the nation to join the EPA's voluntary Climate Leaders program as a charter member in 2003. Between 2005 and 2010, the company reduced its carbon footprint by 45%. In 2012, CWS received a Climate Leadership Award from the EPA, The Climate Registry, the Center for Climate and Energy Solutions, and the Association of Climate Change Officers. CWS was also recognized as the 2008 EPA Landfill Methane Outreach Project Partner of the Year.

**Quattrone Comment 4:** "The last area that I would like to comment on is Casella's business ethics used in JRL and MERC. . . . At MERC, employees call this 'trash laundering.' The problem of this is that This MSW is barely processed and this MSW is a mixture of In-state and Out-of-state MSW. Basically what has been happening for a decade is **OUT-OF-STATE MSW has been going to JRL.**"

**Response:** Mr. Quattrone's comment suggests that CWS's business ethics are questionable because it employs a practice he refers to as "trash laundering."

Because of its location in downtown Biddeford, Maine Energy managed the flow of MSW into its facility more tightly than any facility in Maine and most likely the country. It was imperative for Maine Energy to process all of its MSW deliveries into fuel (RDF) each week for odor control purposes. This was a long-standing commitment CWS made to the City of Biddeford, a goal met approximately 95% of the time. Other waste-to-energy facilities rarely, if ever, empty their tipping buildings or charging pits of MSW, something that Maine Energy did each week. In addition, Maine Energy rotated its fuel supply each week, so that odors were minimized from aging RDF.

To achieve these goals, Maine Energy adjusted the amount of MSW it received by (1) bypassing some Maine MSW to the JRL, (2) diverting out-of-state MSW to other disposal sites, and (3) altering the percentage of fuel recovered from the MSW.

In addition to the weekly management of MSW and RDF inventories, Maine Energy also managed its MSW deliveries with respect to seasonal variations and customer service. The Maine Energy wasteshed was heavily influenced by tourists, and thus there was a lot more MSW produced in the summer than in the winter. The seasonal variation in MSW production forced Maine Energy to rely on commercial MSW contractors to make up the winter shortfall. In turn, Maine Energy provided disposal capacity to these contractors in the summer. There were times, mostly during the summer months, when Maine Energy decreased the fuel recovery rate so that it could hit its goals of emptying the tipping floor each week, rotating RDF inventory weekly, and providing reliable disposal services to its customers.

Maine Energy's MSW and RDF management practices were both reasonable and within regulatory requirements given its location and seasonal variations in MSW supplies.

Finally, as discussed in detail above, Mr. Quattrone's comment that out-of-state waste has been going to JRL all along is simply incorrect. 38 M.R.S. § 1310-N(11) (defining "waste generated within the State").

#### **4. Responses to Charles Leithiser's comment letter of October 23, 2012.**

**Leithiser Comment 1:** "[I]f this MSW is permitted to be disposed of at Juniper Ridge, the materials currently separated out and recycled as part of the processing of MSW into refuse-derived fuel would no longer be recycled and would simply be landfilled instead."

**Response:** Maine Energy recovered and recycled approximately 2% from the MSW it received as ferrous and non-ferrous metals. Other than incidental quantities of cardboard, no other materials were recovered and recycled.

In contrast, CWS's Zero-Sort recycling program, which will be made available to the City of Biddeford, PERC communities, and the other Maine communities formerly using Maine Energy, recovers and recycles four types of paper fiber, glass, seven grades of plastic, and metal. As stated in the application, towns that have instituted Zero-Sort programs have seen more than a 30% reduction in MSW disposal volumes landfilled.

**Leithiser Comment 2:** "Representatives of the DEP assured residents that there would be no putrescible waste coming to Old Town."

**Response:** The applicants are not aware of the DEP making any such statement since BGS (or the State) has owned the JRL. In addition, the documents discussed above in response to Spencer Comment 1 clearly identified proposed putrescible waste streams for the State-owned landfill, including treatment sludge, FEPR, and by-pass MSW. These wastes were approved for disposal at the JRL by the DEP in 2004.

**Leithiser Comment 3:** "Although there is an extensive gas collection system at the landfill, that is located primarily in closed and covered portions of the landfill.

**Response:** As described above, horizontal gas collection piping is installed and operated in the active and open areas of the landfill as each cell is being constructed. This collection system is replaced by vertical wells and interim synthetic cover once active operations in that cell are completed. Therefore, the entire landfill has an active landfill gas collection system.

**Leithiser Comment 4:** "By taking advantage of loose definitions and loopholes, more waste that originates outside of Maine's borders currently comes to Juniper Ridge than true Maine waste.

**Response:** As discussed above, residue from waste brought into Maine and processed in Maine has been recognized as Maine waste since 1990 and is now clearly provided in statute. In any event, regardless of how in-state waste is defined, the current proposal would clearly result in less out-of-state waste being brought into Maine, as the out-of-state waste formerly processed at Maine Energy will instead be pushed back to the out-of-state market.

**Leithiser Comment 5:** "MSW could simply be sent to landfills that are already licensed for large amounts of MSW . . . ."

**Response:** There is an inconsistency between this statement and Mr. Leithiser's logic regarding the hierarchy. Why is it acceptable for MSW to be disposed at other Maine landfills, but not at the JRL? Why are these other landfills not required to send the MSW they are accepting to Maine incinerators instead? It would appear that Mr. Leithiser's sole objection to BGS/NEWSME's application is location: the landfill in question is in the community in which he resides. He appears to care not at all what occurs at any other landfill in Maine.

In fact, six other active Maine landfills are licensed by the DEP to accept MSW for disposal. These other landfills are not limited to only MSW that is bypassed from Maine incinerators. These landfills do not have an annual limit on how much MSW they can accept. These landfills do not, and are not required to, divert any of the MSW that is generated in their service areas to Maine incinerators. In total, these landfills accepted nearly 140,000 tons of MSW for disposal in 2010.<sup>1</sup>

There is no basis in law to apply a different in-state MSW standard with respect to acceptable solid waste at JRL than is currently being applied to other Maine landfills.

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<sup>1</sup> Source: Table 2, page 16, 2010 Solid Waste Generation and Disposal Capacity Report (published Jan. 2012).

**EXHIBIT 1**

RELEVANT EXCERPTS FROM TRANSCRIPT OF PUBLIC INFORMATION MEETING  
ON INITIAL STATE-OWNED LANDFILL AMENDMENT APPLICATION HELD IN OLD  
TOWN ON March 29 and 30, 2004

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24                   MS. SPENCER: I'm going to read my  
25                   testimony. My name is Cheryl Spencer, and I'm

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1                   from West Old Town. I'd like to request that the  
2                   petitions already delivered to the DEP containing  
3                   the signatures of over a thousand people in the  
4                   area who are in opposition to this landfill  
5                   project and requested a legal public hearing be  
6                   entered into the public record if that's not  
7                   already been done.

8                   COMMISSIONER GALLAGHER: It's been done.

9                   MS. SPENCER: Thank you. I'd like the DEP  
10                  to take under consideration the Federal Aviation  
11                  Administration Advisory Circular, Number  
12                  150/5200-34, created August 2000. A copy was  
13                  submitted with comments this morning. It outlines  
14                  filing requirements for new municipal solid waste  
15                  landfills within six miles of a public airport.  
16                  In Section 7, it defines a new landfill as  
17                  receiving its first shipment of putrescible waste  
18                  after April 5th, 2000. Putrescible waste is  
19                  defined in Appendix 1-J as capable of attracting  
20                  and providing food for birds. These same  
21                  immigrant birds will intimidate the native  
22                  population of wading birds identified by the  
23                  Department of Conservation as using the area  
24                  surrounding the dump. Concerning the groundwater  
25                  and surface water monitoring, three tests per



1 year, although they meet the Department's  
2 criteria, are far from sufficient to provide an  
3 accurate historical record or any sense of  
4 temporal pattern. My suggestion would be to test  
5 every 30 days. The draft outlines the provisions  
6 for self-testing. The state is the owner of this  
7 facility and should take responsibility for doing  
8 the necessary testing and billing the operator  
9 accordingly. Ultimately 60 years from now, the  
10 conditions that exist at the site will be the  
11 state taxpayers' liability. We continue to hear  
12 that no waste generated outside the state will be  
13 brought to this facility; however, in the draft,  
14 condition number 16-C, it states that no more than  
15 310,000 tons of unprocessed municipal solid waste  
16 bypass may be brought to the West Old Town  
17 landfill and Pine Tree landfill. When the Pine  
18 Tree landfill reaches capacity, all of that would  
19 come to Old Town. 310,000 tons is more than 50  
20 percent of the estimated 540,000 tons per year  
21 estimated by Casella to be received at the  
22 landfill. This amount of allowable bypass would  
23 include unprocessed waste produced out of state  
24 and in my opinion demonstrates poor process  
25 management. The mill, the DEP and many of the

1 scientists doing the initial site study made  
2 promises and assurances at that time that the  
3 people should have nothing to fear for this would  
4 never be anything more than a sludge dump. The  
5 people of West Old Town made personal concessions  
6 for the mill's survival at that time. Expecting  
7 us to make further concessions I find  
8 unconscionable. This fasttrack process has  
9 effectively destroyed the trust of the people who  
10 were given assurances. During this process I've  
11 learned that one cannot trust the word of the  
12 mill's upper management, the DEP or our state or  
13 local government officials because at one time or  
14 another along the way we were misled by all of  
15 them. Breach of trust is a horrible abuse to  
16 bear. The siting and operation of this landfill  
17 should have been the model of a non-commercial  
18 system of state waste management for others to  
19 follow. The Maine State Motto is "I lead".  
20 Instead, it is more --

21 MR. BURSON: One minute.

22 MS. SPENCER: Instead it is a more  
23 convoluted form of the status quo and a grave  
24 disappointment. Fifteen years in the making and  
25 so little progress. Thank you.

8           MR. LEITHISER: Then my next question would  
9     be, is there a cap on the amount of raw municipal  
10    solid waste that could come to the West Old Town  
11    landfill?

12           MS. DARLING: I'll let Casella answer a  
13    part of this. Because of the concern that was  
14    raised at the last informational meetings about  
15    bypass from out of state going to the West Old  
16    Town landfill if it couldn't be processed at Maine  
17    Energy, Casella did submit a letter assuring the  
18    Department and people concerned that if there is  
19    waste bypassed because it can't be processed at  
20    Maine Energy that comes in from out of state, it  
21    will go to Hampden instead of Old Town.

22           MR. LEITHISER: So there will be no raw  
23    bypass material going to West Old Town and that  
24    will be part of the approval of the process?

25           MR. BURSON: I think Casella would like to

1 respond to that.

2 MR. MEAGHER: You misunderstood the  
3 answer. There will be no out-of-state bypass  
4 going to the West Old Town landfill.

5 MR. LEITHISER: But if out-of-state  
6 material comes, say, to Maine Energy and it can't  
7 be processed there, then my understanding is it is  
8 in-state bypass, is that true?

9 MR. MEAGHER: No, it's still out of state  
10 and will go to Pine Tree landfill, but in-state  
11 bypassed waste that was designated for Maine  
12 Energy would go to the Old Town landfill and  
13 there's no numerical annual limitation.

14 MR. LEITHISER: So then basically with the  
15 language that's in that conditional approval  
16 310,000 tons per year out of the 450,000 tons of  
17 expected waste in the first year could  
18 theoretically be bypass, so greater than  
19 two-thirds of the waste coming there could be  
20 untreated raw municipal trash?

21 MR. MEAGHER: In the hypothetical, it would  
22 mean that Maine Energy was completely shut down  
23 for the entire year and all 310,000 tons would  
24 also have to be entirely originating from in  
25 Maine.

**EXHIBIT 2**

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4/9/04  
file copy



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STATE HOUSE STATION 17 AUGUSTA MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

STATE OF MAINE, ACTING THROUGH THE )	SOLID WASTE ORDER
STATE PLANNING OFFICE )	
OLD TOWN, PENOBSCOT COUNTY, MAINE )	
VERTICAL INCREASE and )	
ADDITIONAL WASTE STREAMS )	
#S-020700-WD-N-A )	
(APPROVAL WITH CONDITIONS) )	AMENDMENT

Pursuant to the provisions of Resolve 2003, Chapter 93, 38 M R S A Section 1301 et seq., and 06-096 CMR Chapter 400 et seq., Solid Waste Management Regulations, effective September 6, 1999, the Department of Environmental Protection ("Department") has considered the application of the State of Maine, acting through the State Planning Office, with its supportive data, staff review comments, and other related materials on file and FINDS THE FOLLOWING FACTS

I APPLICATION SUMMARY

A Application The State of Maine, State Planning Office ("SPO" or "the applicant") is applying for an amendment to the original license for the West Old Town Landfill ("WOTL" or "the landfill"), SPO seeks to increase the approved final elevation of the landfill without increasing the horizontal footprint of the landfill, and to dispose of additional waste streams in the landfill

B History The WOTL was licensed by the Board of Environmental Protection on July 28, 1993 as a 15-cell generator-owned landfill for the disposal of pulp and papermaking residuals generated at the Fort James Operating Company's mill in Old Town. Summaries of information on the siting and design of the landfill are contained in the landfill license, DEP #S-020700-7A-A-N ("the original license"). The licensed footprint of the WOTL, including the accessory structures, is approximately 68 acres, it sits on a parcel of land approximately 780 acres in size

In summary, the landfill is situated on an area of deep glacial till soils with an average fines content of 58% passing the No. 200 sieve. The average till thickness is approximately 30 feet, and after excavation and grading to the proposed base grades of the landfill a minimum of 10 feet of soil above bedrock will remain in all areas. The bedrock consists of

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metasediments that are generally competent and occasionally fractured, there was no mapped or observed faulting in the bedrock beneath the site. The site does not overlay, or lie adjacent to, a mapped significant sand and gravel aquifer, nor a mapped high-yield bedrock zone. The proposed facility was found not to cause an unreasonable threat to a significant sand and gravel aquifer, or to a fractured bedrock aquifer. The closest water supply well is located approximately 1500 feet west of the site across a bog and stream, and on the other side of a topographic ridge. The landfill was located on the property in an area where seepage gradients and the site's topography hydraulically isolate it from the regional ground water systems and existing water supplies.

The landfill began operation in December 1996, and cells 1 and 2 have been developed. In addition to the wastes from the Old Town Mill, bottom ash from the Lincoln Pulp and Paper Mill in Lincoln, Maine and burn pile ash from the City of Old Town's transfer station are licensed for disposal in the landfill. Fort James Operating Company is a wholly owned subsidiary of Georgia-Pacific Corporation ("GPC"). The landfill has a composite liner system, and leachate is stored in a pond with a double liner system. Approximately 300,000 tons of waste has been disposed in the landfill. No complaints from the public about any aspect of the landfill's operation were received by the Department prior to the submission of this application.

In April 2003 GPC shut down 2 tissue machines and 13 converting lines at its Old Town Mill. Through negotiations with the Office of the Governor, GPC agreed to continue operation of its mill in Old Town, Maine under certain conditions. One of the conditions was that the State of Maine purchase the company's West Old Town Landfill, and provide disposal capacity for the mill's wastes for a 30 year period. In June 2003, following a public hearing before the Legislature's Natural Resources Committee, the Maine Legislature passed Resolve 2003, Chapter 93 ("the Resolve"). The Resolve authorized SPO to purchase the WOTL from Fort James Operating Company, and to enter into any contracts necessary for the operation of the landfill, however the landfill will continue to be owned and controlled by the State. SPO initiated a competitive bid

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process to select a long-term operator for the landfill. On August 18, 2003, SPO notified Casella Waste Systems, Inc ("Casella") that it had been selected to be the long-term operator of the landfill, pending successful negotiation of mutually agreeable terms. Actual operations will be by NEWSME Landfill Operations, LLC ("NEWSME Operations"), a company in which New England Waste Services of ME, Inc., a Casella subsidiary, holds the sole membership interest. In accordance with the intent of the Resolve and the terms of the State's Request for Proposals ("RFP"), the operation of the landfill will remain revenue-neutral to the State.

SPO, Fort James Operating Company and GPC signed a purchase and sales agreement, dated November 20, 2003, for transfer of the ownership of the West Old Town Landfill from Fort James Operating Company to SPO, the purchase and sales agreement was executed on February 5, 2004. In addition, SPO and Casella signed an Operating Services Agreement ("OSA") on February 5, 2004. The purchase and sales agreement and the OSA state that the pulp and paper mill wastes currently licensed for disposal in the landfill will continue to be disposed in the landfill for at least 30 years, and that SPO will seek permits to expand the capacity of the landfill. Under the terms of the OSA between SPO and Casella, Casella will pay all costs associated with development, operational and closure/post-closure activities at the landfill.

On October 21, 2003, following public notice as required by 06-096 CMR Chapter 2, the Department issued conditional approval for the transfer of the licenses for the WOTL from Fort James Operating Company to the SPO (DEP #S-020700-WR-M-T and #L-019015-TH-C-T), the transfer became effective when the sale of the landfill to SPO occurred on February 5, 2004. No appeals were filed from this approval.

- C Summary of Proposal SPO proposes to increase the licensed final elevation of the landfill from 270 feet (which would be about 60 feet above the original ground surface) to 390 feet. This vertical increase would result in the disposal capacity of the landfill being increased from the original estimate of 3.3 million cubic yards to an estimated 10 million



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cubic yards In addition to the wastes currently disposed in the landfill (sludge from Fort James' Old Town Mill and ash from Lincoln Pulp & Paper), SPO proposes to dispose of the waste streams generated in Maine that are currently accepted for disposal at the Pine Tree Landfill in Hampden, Maine These waste streams are the following construction and demolition debris, the residues (ash, front-end process residue and oversized bulky wastes) generated by municipal solid waste ("MSW") incinerators located in Maine, a limited amount of MSW bypass from the incinerators, water/wastewater treatment plant sludge, and smaller amounts of miscellaneous non-hazardous wastes The proposed vertical increase is expected to provide disposal capacity for approved waste streams for up to 15 years After construction of a new cell is completed during the summer of 2004 and the additional wastes begin coming to the facility, the applicant estimates approximately 450,000 tons of waste per year will be disposed in the landfill, in the future, that quantity is estimated to potentially increase to 540,000 tons per year In accordance with the RFP and the OSA between SPO and Casella, waste that is generated outside Maine will not be accepted at the landfill

The applicant proposes to modify the approved design of the facility by using clay as the earthen part of the composite liner instead of glacial till, by placing a foot of compacted clay beneath the undeveloped portions of the landfill's footprint, by eliminating liner penetrations associated with the leachate removal system and instead installing leachate collection sumps and removal pumps above the liner system, by adding an above-ground storage tank to be used as the primary leachate containment system, and by installing an active gas extraction system as the landfill is developed To increase the capacity of the landfill, an elevated soil berm will be constructed around the perimeter of the landfill, with the interior toe of the berm within the currently licensed solid waste boundary The western portion of the berm will be mechanically stabilized using reinforcing geogrids

The proposal is described in an application dated October 2003 and submitted to the Department on October 30 2003, and includes several additional submittals prepared in response to comments on the application

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The application was accepted for processing on November 21, 2003. In addition to meetings held with municipal officials to discuss traffic impacts associated with the facility, a public informational meeting on the application was held on January 21, 2004. A written summary of the questions asked and the answers provided during the public informational meeting is part of the record. A draft license was made available to the public on February 17, 2004. The Department received written comments on the draft license and also participated in a public informational session on February 24, 2004, written comments submitted during that session are included in the record. The Department held 2 days of public sessions on the proposed project on March 29 and 30, 2004. Testimony under oath was accepted, and the sessions were recorded and transcribed. The transcriptions and copies of written comments submitted at these sessions are included in the record. The record was closed to receipt of comments on the application at the close of the last session held on March 30, 2004. The Department prepared a written summary of comments received throughout the processing of the application, this summary is included in the record. The application was reviewed by staff of the Department's Bureau of Remediation and Waste Management, staff of the Maine Department of Transportation, and the outside consulting firm Terrence J DeWan & Associates. Mr. DeWan's firm provided the review of the updated visual impact assessment through a contract with the Department.

The Department finds that the applicant has provided a plan for all aspects of the development of the additional landfill capacity within the licensed footprint. As is typical, the applicant has not provided the detailed design packages required for construction. The applicable detailed design packages required by the Solid Waste Management Regulations ("Rules") and any information specifically described in the finding of facts below must be reviewed and approved by the Department prior to construction of the individual cells and any new ancillary structures for the landfill.

The Department received numerous comments from the public on the application, and on the State's transaction with GPC as a whole. Many of these comments, both in opposition to and in support of the transaction, were received on aspects of the transaction that are outside the purview of

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the Department’s authority, and thus the Department cannot make findings of fact or conclusions of law on these issues. These aspects included the following issues: the legislative process, ending in the Resolve that authorized the purchase of the landfill, the RFP and bidding process that resulted in the selection of Casella as the operator of the landfill, the terms of the Purchase and Sales Agreement between GPC and the State of Maine, acting through the State Planning Office, the terms of the OSA between SPO and Casella, the establishment and duties of the Citizens Advisory Committee established by the Resolve, the host community benefits offered by SPO and/or Casella, the effect of the project on property values in the area, and the 80,000 pound weight limit on trucks using I-95, which results in heavy trucks using local roads.

The Department finds that this application for a vertical increase in the final elevation of the existing landfill is not an expansion of the landfill because solid waste will not be disposed beyond the boundaries previously licensed by the Department for solid waste disposal in the original license. The Department recognizes that under the terms of the RFP and the OSA, an application to the Department for an expansion of the landfill is required to be submitted. However, the applicant has not submitted an application for expansion or yet discussed its plans for submission of an expansion application, and thus no comments relating to development of the landfill facility beyond the vertical increase described in this application can be considered at this time.

2 PUBLIC PARTICIPATION

The Department received timely requests for a public hearing from the following 5 persons: the Town of Alton, Bruce Sidell, Oscar Emerson, William Lippincott, and the Maine Peoples Alliance. 06-096 CMR Chapter 2-7 states, in part, that “A request for a public hearing on an application must be received by the Department, in writing, no later than 20 days after the application is accepted for processing.” The application was accepted for processing on November 21, 2003, thus, the 20 day period ended on December 11, 2003. On January 28, 2004, the Department notified all 5 persons that their requests did not include conflicting technical information, and thus their requests were denied because they failed to

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meet the standard for a public hearing in 06-096 CMR Chapter 27. The Department also received a timely request from the City of Brewer that the Board of Environmental Protection assume jurisdiction of the project and hold a public hearing, the City of Brewer withdrew its request on January 28, 2004 after its concerns with the traffic impacts associated with the project were addressed.

As noted in Finding of Fact #1 C, above, many comments were received by the Department that cannot be considered because they fall outside the Department's purview.

The majority of the remaining comments from people opposed to the project focused on issues related to traffic movement, ground water quality, visual impact of the facility, odors, the types of wastes to be accepted at the facility and Casella's civil and criminal record.

The majority of the remaining comments from people supporting the project focused on it being an existing and operating, well-sited landfill, and Casella's excellent records of operating facilities in their areas. Commentors also note that area residents' concerns were addressed during the original siting and licensing of the landfill, that operation of the landfill to date has not been problematic, and that the landfill will provide needed disposal capacity for the state.

As noted in Finding of Fact #1 C, above, the Department participated in several public meetings on the project. Meetings were held on December 8, 2003 and December 16, 2003 with municipal officials to discuss the traffic impacts from the project, public informational meetings were held on January 21, 2004, February 24, 2004, March 29, 2004 and March 30, 2004.

Where applicable, comments on the project that are within the Department's purview are addressed in the appropriate findings of fact, below. In addition, a written summary of comments received throughout the processing of the application is included in the record.

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3 DESCRIPTION OF SPO/CASELLA RELATIONSHIP

As described in Finding of Fact #1 B , above, the State of Maine SPO is the owner of the landfill and the applicant for this application SPO advertised an RFP to operate the landfill At the conclusion of that process, Casella was selected to be the long-term operator of the landfill Actual operations will be by NEWSME Operations, a company in which a Casella subsidiary holds the sole membership interest The terms and conditions of NEWSME Operations' operation of the landfill are established by the OSA, dated February 5, 2004, between SPO and Casella

While SPO retains control of the landfill, in accordance with the Resolve and the OSA, Casella/NEWSME Operations will pay all costs associated with the development, operation, closure and post-closure care of the landfill In addition, Casella/NEWSME Operations will establish and maintain financial assurance for the landfill sufficient to meet the closure and post-closure care provisions of the Rules, assume liability for the landfill under both the current (including past actions by GPC) and future conditions, and assure that adequate disposal capacity is provided for the wastes currently disposed in the landfill for a 30 year period

Condition #6 of the order transferring the landfill licenses (DEP #S-020700-WR-M-T, dated October 21, 2003) from Fort James Operating Company to SPO requires that if Casella or a subsidiary of Casella is replaced as the operator, prior to finalization of a new OSA SPO must submit to the Department for its review and approval information on the financial capacity of the new operator, information on the financial assurance to be provided by the new operator consistent with Chapter 400 11 of the Rules or successor regulations in effect at that time, and information on the technical ability of the new operator

The Department finds that in many instances the responsibility for submittals required by this license are placed on Casella/NEWSME Operations (or a successor operator) by the OSA Therefore, reference to the applicant in this license refers to both SPO and Casella/NEWSME Operations (or a successor operator)

STATE OF MAINE, ACTING THROUGH THE	9	SOLID WASTE ORDER
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#### 4 FINANCIAL CAPACITY

A Funding for development operation closure and post-closure care of the facility Under the provisions of the RFP and the OSA, Casella/NEWSME Operations is required to fund future development and operation of the landfill, and closure and post-closure care of the landfill. The application includes a letter demonstrating that monies are available to fund the construction proposed for 2004, thereafter evidence of financial capacity for construction costs is proposed to be demonstrated prior to each subsequent construction activity. Funds to cover facility operations and maintenance will be generated from facility tipping fees. Financial assurance will be provided as described in Finding of Fact #4 B, below. The Department finds that the applicant has demonstrated that it has the financial capacity to undertake the proposed project consistent with the State's environmental standards and laws with regards to the construction planned for 2004 and the operation of the landfill. The Department further finds that the applicant must demonstrate financial capacity for costs associated with construction of each additional cell, the information must be included in the detailed design package as required in Finding of Fact #11, below.

B Financial Assurance Casella/NEWSME Operations affirmed in a letter dated October 22, 2003 that it will initially fund a closure/post-closure care account through a trust account funded by a surety bond. In accordance with Chapter 400 11 of the Rules, the financial assurance mechanism will be submitted to the Department for its review and approval, the amount of the financial assurance will be based on the costs of a third party closing any developed areas of the landfill that have not received final cover, and conducting post-closure care and maintenance of the facility for at least 30 years after closure of the facility, in accordance with the Rules. The amount of financial assurance necessary to meet these requirements, and any changes in the financial assurance mechanism, will be calculated and adjusted annually during the operational period, and reported in the annual report for the facility. The Department finds that Casella/NEWSME Operations, as the operator of the facility and as required by the OSA will provide financial assurance sufficient to ensure

STATE OF MAINE, ACTING THROUGH THE	10	SOLID WASTE ORDER
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that funds are available to pay for the anticipated costs of compliance with all facility closure, post-closure maintenance, and post-closure monitoring requirements for a period of at least 30 years after closure of the facility, provided the financial assurance package submitted to the Department for its review and approval meets requirements of the Rules and Casella/NEWSME Operations updates it in accordance with the Rules on an annual basis

5 TECHNICAL ABILITY

A Description of Experience The applicant provided information demonstrating the technical ability of both SPO and the selected operator, Casella, its subsidiary NEWSME, and NEWSME Operations The application describes SPO's experience in siting, designing and licensing the Carpenter Ridge Landfill It also describes the solid waste expertise of Casella and its subsidiaries, and its consultants and legal counsel The application indicates the personnel currently responsible for operations at the Pine Tree Landfill in Hampden, Maine will be responsible for fulfilling the operating services contract at this landfill, the Pine Tree Landfill is consistently operated in substantial compliance with its licenses and the Rules

The applicant retained a number of consultants in developing the application Sevee & Maher Engineers, Inc ("SME"), a firm specializing in waste management issues, was the primary consultant for the project The applicant also retained SMRT, Inc to prepare the visual impact portion of the application, Richard E Wardwell, P E , Ph D for work on the geotechnical aspects of the application, Sanborn Head & Associates for work on the active gas management system for the landfill, Eaton Traffic Engineering to prepare the traffic assessment portion of the application, Acentech Incorporated to prepare the section of the application that addresses potential noise impacts, and Odor Science & Engineering, Inc for work on odor control measures for the facility

The Department finds that the combination of SPO and NEWSME Operations personnel and the consultants retained by the applicant have

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the technical ability to develop the project in a manner consistent with State standards and laws

- B Civil/Criminal Disclosure Statement The applicant provided civil and criminal disclosure statements prepared in accordance with Chapter 400 12 of the Rules for SPO and Casella, including its subsidiaries and the individuals required to disclose under that regulation, in the transfer application approved by the Department on October 21, 2003, the Department did not require the applicant to provide another copy of that information in this application

The Department received comments from the public on alleged environmental violations by Casella. Department staff ("staff") requested that Casella respond to the listing of violations, Casella provided information on each of the alleged violations. Letters from municipal and county officials praising Casella's management of many of the facilities listed in the comments have been submitted. Staff also contacted environmental enforcement staff in states where the violations were alleged to occur and discussed the list provided by the public. Staff comments that based on those conversations, and the submittals from Casella and the municipal and county employees, there is no reason to withhold this license due to Casella's civil or criminal record. Staff's evaluation of the nature, substance and severity of the violations, and state and local officials' assessment of Casella's willingness to correct violations demonstrate that, where Casella is found to have violated regulatory or license criteria, it will complete any required corrective actions.

The Department finds that the applicant filed an accurate Criminal/Civil Record, prepared in accordance with Chapter 400 12 of the Rules. The Department finds that the applicant has shown that past violations of certain environmental laws, as described in the application, will not prevent SPO from owning and controlling, and NEWSME Operations from operating the landfill as proposed in this application in compliance with Maine laws and regulations in that Casella/NEWSME Operations has conducted the required corrective actions to resolve its previous violations.



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6 TITLE, RIGHT OR INTEREST

The Department finds that the applicant has provided evidence of its interest in this project by submitting a copy of the purchase and sales agreement, dated November 20, 2003, between SPO and Fort James Operating Company. The closing on the transfer of the landfill property occurred on February 5, 2004. In accordance with Condition #2 of the transfer order (DEP #S-020700-WR-M-T, dated October 21, 2003), SPO submitted a copy of the deed to the landfill property within 30 days of its entry in the Penobscot County Registry of Deeds.

7 GEOLOGY AND HYDROGEOLOGY

A detailed description of the geology and hydrogeology of the site is contained in the original license, a summary of the siting characteristics is found in Finding of Fact #1 B, above. As confirmed during preparation of the application, the geologic and hydrogeologic characteristics of the site have not changed since the issuance of the original order and thus are not subject to the siting criteria of these Rules, however, in accordance with the Rules, the application addresses any impact the existing facility is having on water quality, affirms that groundwater flow directions and the upward seepage gradients have not changed in a significant way that would invalidate the landfill design assumptions, provides a calculation of time of travel to sensitive receptors from the bottom of the landfill and the leachate storage system, and includes a contaminant transport analysis.

A Groundwater Flow Directions. Attachment 8 of the application includes a review of all groundwater data that has been collected at the site from 1991 when the original application was filed through September 2003. The applicant's consultant for this review, SME, reviewed the available groundwater information, and concluded that the phreatic groundwater surface has not significantly changed since the original application. Groundwater passing beneath the landfill continues to remain within the landfill property prior to discharge. Based on the orientation of bedrock foliation, it is suggested that the primary horizontal direction of groundwater flow in the bedrock is more or less the same direction as the interpreted direction of horizontal flow in the overburden. Groundwater in

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the bedrock continues to be interpreted as discharging into the stream along the westerly side of the landfill, due to the presence of a topographic hill south of the stream which significantly reduces the possibility of groundwater movement beyond it. The review of the information on vertical seepage gradients indicates groundwater continues to migrate downward in the upper portions of the site and tends overall to migrate upwards in the lower portions of the site.

All staff comments on the groundwater flow information for the site have been addressed. Based on the additional information submitted in support of the application on November 21, 2003, staff agree with SME's conclusions on groundwater flow directions and vertical seepage gradients.

The Department finds that the findings in the original license regarding the direction of groundwater flow have not changed as a result of the construction and operation of the existing landfill.

- B Existing Groundwater Quality As noted in Finding of Fact #7 A, Attachment 8 of the application includes a review of all water quality data that has been collected at the site from 1991 when the original application was filed through September 2003. The site is currently monitored by 12 groundwater monitoring wells, the results from the 12 monitoring wells were analyzed for statistically significant increases. Nine of the 12 wells were found to have one or more parameters that varied over time based on the statistical analyses, of these 9 wells, SME concluded that only one, MW-204, was potentially affected by leachate. SME concluded the changes found in the other 8 wells were caused by well installation trauma or a source other than leachate in the groundwater, based on its review of the parameters for which a statistically significant change was found. With regards to the water quality changes noted in MW-204, SME noted that the well is a shallow till well located immediately adjacent to the leachate pond and the manhole used for emptying of the leachate pond for annual inspection. SME concluded the changes in MW-204 were likely attributable to small leachate spills in the vicinity of the manhole and leachate pond during emptying of the leachate pond for annual

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inspections, rather than directly into groundwater from the landfill or the leachate pond SME's basis for its conclusions are described in detail in the application

Staff conducted a comprehensive review of all water quality information available for the site, including the same historic water quality results compiled by GPC's water quality sampling consultant that were reviewed by SME in the application, the data gathered by the consultant GPC hired to perform a baseline analysis of conditions on the property just prior to its purchase by SPO, and data gathered from monitoring wells installed in January and February 2004 to resolve the source of changes in groundwater quality discussed during the review of the application. In an initial review memorandum dated December 16, 2003, staff noted that the water quality changes have occurred in 3 monitoring wells MW-204, MW-223B, and MW-302. Staff agreed that the sources of changes noted in these wells could be those operational issues identified by SME in its report, but that the applicant had not provided sufficient evidence to conclude the landfill or the leachate pond were not the sources.

In response to the initial staff review memorandum, the applicant and GPC provided additional information concerning operational anomalies at the site, and 7 additional groundwater monitoring wells were installed by the applicant at the facility. Five of the wells are located between the landfill boundary and the leachate pond, and 2 of the wells are located downgradient of the leachate pond and/or in the vicinity of manhole #1. Staff oversaw the installation of the wells by the consultant, and staff took independent split samples from the wells. Up to 4 rounds of data have been collected from the new wells. Additional samples from the landfill underdrain, the leachate pond underdrain, and the leak detection system for the leachate pond were also taken during this period. Based on the information in Attachment 8 of the application and the new information gathered during review of the application, staff comment that, within the limitations of the data, a leak in the landfill liner system is not the source of the water quality changes noted in the initial staff memorandum regarding this project. Staff comment that the sources of the water quality changes are likely due to operational practices related to leachate

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management, such as the small surface spills documented to have occurred in the past. Staff recommend several operational changes which will eliminate the release of leachate. The applicant has agreed to the changes. Staff further recommend that additional investigations be conducted in Spring 2004 to monitor the performance of the facility's existing detention ponds, and that the ponds be included in the surface water quality monitoring program for the facility. The applicant submitted on April 1, 2004 a workplan for the additional investigation in the areas of the detention ponds, the workplan is under review by staff. Staff comment that the approved workplan should be revised to address staff recommendations and implemented as approved.

The Department finds that the subtle changes in groundwater quality observed in monitoring wells MW-204, MW-223B and MW-302 do not appear to be caused by leakage through the landfill liner system. The Department also finds that the applicant must submit to the Department for review and approval changes to the operations manual that address all staff recommendations, complete the investigation in the areas around and beneath detention ponds 1 and 2 in accordance with the workplan approved by the Department, and include the ponds in the surface water quality monitoring program for the facility. The Department further finds that the facility is not contaminating groundwater in that no primary drinking water standards have been exceeded, and no statistically significant changes in measured parameters indicating a deterioration in water quality have been demonstrated through an assessment monitoring program.

The Department received many comments from the public in reaction to staff's initial memorandum regarding the water quality assessment, no independent information on water quality was submitted by the public. The Department finds that, as noted in this finding, the comments on existing water quality have been addressed by the additional information gathered during the review process. The Department also received comments from the public on the hydrologic connection between the landfill and the City of Old Town's drinking water supply. As described in Finding of Fact #1 B above, the facility is hydraulically isolated from

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private drinking water supplies in the area of the landfill. The City of Old Town's public drinking water supply is wells located in Stillwater and along Spring Street, there is no direct hydraulic connection between these wells and the groundwater beneath the landfill. The Department finds that the landfill does not pose an unreasonable threat to the public drinking water supply.

C Existing Surface Water Quality Attachment 8 also includes a review of the surface water quality data that has been collected at the site from 1991 when the original application was filed through September 2003. There are 3 surface water monitoring points (SW-1, SW-2 and SW-3) along the unnamed stream on the westerly boundary of the facility. The report notes that there were no apparent or significant changes in water quality at these locations. This stream is the sensitive receptor for the landfill, see Finding of Fact #7 D, below. Although labeled as a surface water monitoring location, SW-4 is actually the sampling manhole for the cells 1 and 2 underdrains, the report notes that the data from this monitoring point is comparable to upgradient monitoring locations. There are 3 surface water monitoring points along the entrance road into the landfill (SW-AR1, SW-AR2 and SW-AR3), the results from these locations also show no changes in water quality data over time. Staff concur with the applicant's conclusions regarding the historical surface water quality monitoring results.

The Department received comments from the public that baseline testing for biological indicators of water quality should be done at the site.

The Department finds that the facility is not contaminating surface water. The Department further finds that baseline surface water quality was established in accordance with the Rules before the landfill was developed and that the Rules do not include provisions for biological indicators testing.

D Updated Time of Travel Calculations and Contaminant Transport Analysis Updated time of travel calculations for the landfill prepared in accordance with the Rules are found in Section 7 of the application. Using

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available water level information collected at the site since 1991, the applicant calculated groundwater time-of-travel from the bottom of the landfill liner systems to the sensitive receptor for the site – the unnamed stream along the westerly boundary. The updated contaminant transport analysis, also prepared in accordance with the Rules, assesses the potential for an unreasonable threat to the unnamed stream at the westerly boundary of the landfill, and identifies operational and monitoring measures that would be utilized to ensure protection of the stream if contaminants were released to groundwater beyond the engineered systems.

The report modeled contaminant transport from within 3 areas of the landfill, the leachate storage tank, and the leachate force main in hypothetical failure scenarios. The results demonstrate that even under the unrealistic failure scenarios required to be modeled, the sensitive receptor in the vicinity of the landfill will not be threatened.

In response to initial staff comments on the time-of-travel calculations and contaminant transport analysis, SME recalculated some of the travel time analyses and hypothetical leachate containment system failure analyses for the entire flow path to the unnamed stream to the west, using the groundwater velocities in the bedrock submitted in the original application. Staff comment that the revised calculations show that the regulatory time frames are met.

The Department received comments from the public that the bedrock underneath the landfill is “cracked”. The Department finds that the entire State of Maine is underlain by fractured bedrock. The Rules require a detailed evaluation of underlying fractured bedrock aquifers to determine that a facility will not pose an unreasonable threat to an underlying fractured bedrock aquifer.

The Department finds that the applicant has demonstrated that the time of travel to the sensitive receptor for the landfill is greater than 6 years, and greater than 3 years for the proposed leachate force main and storage tank. The Department also finds that the contaminant transport analysis demonstrates that contaminant releases from the area within the solid

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waste boundary or the leachate management system will not pose an unreasonable threat to sensitive receptors

8 WATER QUALITY MONITORING

The proposed environmental monitoring plan ("EMP") for the facility was prepared in accordance with the Rules and is found in Appendix H of the application. The applicant proposes to continue monitoring groundwater at the existing 12 monitoring wells, surface water at the existing 6 monitoring points, the underdrains for the landfill and the leachate pond at the existing 2 surface water points, and leachate quality. Monitoring will be done 3 times per year, using low flow methodology. The applicant proposed to continue monitoring for the existing detection monitoring list for the landfill, plus sulfide during the spring and fall sampling events, and for parameters on the expanded list for the landfill during the summer sampling event. The EMP describes the sampling procedures to be used, the quality assurance/quality control program, the submission of the data to the Department, and procedures for the abandonment of wells.

Staff proposed several revisions to the EMP to clarify that the EMP will require ongoing revisions as the facility is developed. Although the results from the new groundwater monitoring wells described in Finding of Fact #7 B, above, appear to corroborate the applicant's conclusions as to the source of the slight changes in existing water quality, staff recommend that assessment monitoring be initiated at monitoring wells MW-204, MW-302, MW-223B, MW-212 and MW-303 during the Spring 2004 sampling event and that new monitoring locations in the area of the detention ponds be added to the assessment monitoring program after their installation. Staff further recommend that the 3 new clusters of monitoring wells proposed in the application be installed in Spring 2004, and that new monitoring wells #DP-4, #P-04-02 and #P-04-04 and the 2 existing detention ponds be included in the detection monitoring program. Staff further recommend that the underdrain for the landfill be added to the EMP for the facility, all landfill underdrain discharge locations should be monitored monthly for the field parameters in Appendix A, Column 1 of Chapter 405 of the Rules and be sampled 3 times per year for the facility's suite of detection parameters at the same time as the other monitoring locations.

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Staff also comment that the existing underdrains for the landfill and the leachate pond are directed through manholes where water quality monitoring can be conducted. The system allows for the removal of the water into the leachate containment system instead of discharge into the stormwater structures if the water quality results indicate it should not be discharged. Staff recommended, based on investigations done in January and February 2004 that the underdrain for the leachate pond be routed into the leachate pond. A pump has been installed in manhole #MH 7 and this underdrain discharge is being directed to the leachate pond. Staff also recommend that the underdrain for the existing leachate pond be sampled weekly throughout 2004, and an analysis of the results be included in the 2004 annual report for the facility.

The Department finds that the applicant has proposed an EMP prepared in accordance with the Rules. The Department further finds that the applicant must update the EMP on an ongoing basis as recommended by staff, beginning with the submittal of the 2003 Annual Report. The Department also finds that assessment monitoring must be initiated at existing monitoring wells MW-204, MW-302, MW-223B, MW-212 and MW-303 during the Spring 2004 sampling event, that the new monitoring locations in the area of the detention ponds be included in the assessment monitoring program beginning with the Summer 2004 sampling event, and that the new monitoring wells #DP-4, #P-04-02 and #P-04-04 and the 2 existing detention ponds must be included in the detection monitoring program in addition to the 3 new clusters of monitoring wells proposed in the application to be installed in Spring 2004. The Department also finds that the underdrain for the landfill must be added to the EMP for the facility, all landfill underdrain discharge locations must be monitored monthly for the field parameters in Appendix A, Column 1 of Chapter 405 of the Rules, and be sampled 3 times per year for the facility's suite of detection parameters at the same time as the other monitoring locations. The Department also finds that the underdrain for the leachate pond has been routed into the leachate pond, and that the leachate pond underdrain water quality must be sampled weekly throughout the rest of 2004 and an analysis of the results be included in the 2004 annual report for the facility. The Department also finds that the proposed construction at the facility will not affect the ability to monitor water quality at the facility site.



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## 9 LANDFILL DESIGN

- A Summary of Current Design The design of the facility is described in the original license and the construction documentation for cells 1 and 2. Cells 1 and 2 of the landfill have been developed, a temporary geomembrane intermediate cover has been placed on cell 1 and cell 2 is currently operational. The approved composite liner system for these cells consists of, from top to bottom, a 15-inch drainage sand leachate collection system with perforated collection pipes (underlain by a drainage geocomposite in cell 2), an 80-mil textured high-density polyethylene ("HDPE") geomembrane, a geosynthetic clay liner ("GCL"), and 24 inches of recompacted glacial till with a maximum hydraulic conductivity of  $3 \times 10^{-6}$  cm/sec. A groundwater underdrain system consisting of a 6-ounce non-woven geotextile, 12 inches of drainage sand with collection pipes, and another 6-ounce non-woven geotextile underlies most areas under these cells. Leachate is conveyed by gravity to a leachate storage pond located outside the western boundary of the landfill. Leachate is transported from the pond via a force main to a loading rack where it is loaded into tank trucks for transport and subsequent treatment and disposal at the Old Town Mill's wastewater treatment facility. The pond has a double liner system consisting of two 80 mil HDPE geomembranes, with a drainage geocomposite and sand leak detection layer in between. The secondary geomembrane is underlain by a GCL and 2 feet of recompacted glacial till with a maximum hydraulic conductivity of  $3 \times 10^{-6}$  cm/sec. Landfill gas is passively vented to the atmosphere.
- B General Description of Proposed Design As noted above, cells 1 and 2 have already been developed. The waste currently in these cells will be excavated and mixed with incoming waste to improve the geotechnical stability characteristics of the existing sludge (see Finding of Fact #10 A, below) and then cells 1 and 2 will be refilled. The leachate collection, liner, and underdrain system for cells 1 and 2 will continue in service. Cells 3 through 8 will be located on the base grade for the landfill, and cells 9, 10, and 11 will be developed over cells 1 through 8. To accommodate the proposed vertical increase in the final elevation, a berm

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will be constructed around the perimeter of the landfill as it is developed. The berm will be constructed entirely of soil, except for the western portion of the berm which is proposed to have mechanically stabilized exterior grades. The landfill will be developed in a sequential manner as shown on the cell development plan for the facility.

All base grade cells will include a liner system overlain by a leachate collection system. The original liner system has been modified through the use of compacted clay rather than compacted glacial till for the soil component of the composite liner system. Instead of the pipe liner penetrations currently used to convey leachate from cells 1 and 2 (which will be removed and repaired as part of cell 4 construction), cells 3 through 8 will have leachate collection sumps and pumps located above the liner system. A groundwater underdrain system will underlie the liner system for cells 3 through 8. Gas produced by the landfill will be burned off initially through the use of passive flares. When the gas produced is of sufficient quantity and quality to support combustion, an active gas extraction system will be installed as described in Finding of Fact #9 E. The cells will be developed sequentially, and intermediate or final cover will be placed as the cells are filled. The leachate from the landfill will be conveyed through a force main to a new above-ground storage tank with the existing leachate pond used only as a backup system. The stored leachate will be emptied into tank trucks for transport to the Old Town Mill's wastewater treatment plant. In the future, the leachate may be transported to the City of Old Town's wastewater treatment plant via a new sewer line along Route 43, after studies of the treatment plant, and any necessary upgrades identified in the studies, are completed and if the City of Old Town approves the acceptance of the leachate. As described more fully in this finding and in Finding of Fact #11, below, detailed design packages will be submitted to the Department for review and approval prior to each construction project at the facility.

The Department received comments from the public regarding bioreactor (wet cell) landfills. Commentors suggested that the Department require that landfill cells constructed under this license utilize wet cell technology. The Department finds that the applicant did not propose and the Rules do

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not require an applicant to consider the use of wet cell technology  
 Furthermore, the United States Environmental Protection Agency  
 published a Final Rule in the Federal Register on March 22, 2004 entitled  
 Research, Development, and Demonstration Rule (RD&D) for municipal  
 solid waste landfills. The effective date of this rule is April 21, 2004.  
 This rule addresses design and operational criteria variances that are  
 necessary in order to develop information on bioreactor landfills. The  
 applicant has provided correspondence dated April 5, 2004 documenting  
 its willingness to explore the feasibility of wet cell or bioreactor  
 technology.

C Liner System and Perimeter Berm. The liner system proposed for the base  
 grade cells of the landfill will consist of, from top to bottom: a leachate  
 collection layer consisting of 12 inches of drainage sand with perforated  
 HDPE collection pipes over a drainage geocomposite, an 80-mil HDPE  
 textured geomembrane, a GCL, and one foot of compacted clay with a  
 maximum hydraulic conductivity of  $1 \times 10^{-7}$  cm/sec. The liner system will  
 be underlain by an additional foot of compacted clay with a maximum  
 hydraulic conductivity of  $1 \times 10^{-7}$  cm/sec. Three internal leachate sumps  
 will be constructed to collect all leachate generated by both the existing  
 and new cells. The existing leachate transport pipes that penetrate the  
 liner system to convey leachate to the storage pond will be removed and  
 the liner repaired and tested. The landfill liner will be underlain by a  
 groundwater underdrain system consisting of twelve inches of sand with  
 perforated HDPE collection pipes. The underdrain system is designed  
 with groundwater quality monitoring sumps.

As noted previously, a berm is proposed to be constructed around the  
 perimeter of the landfill. The berm is required to achieve the increase in  
 the final elevation of the landfill. It will be constructed entirely of soil,  
 except for the western portion where it is proposed to have mechanically  
 stabilized exterior grades due to wetland setback limitations. The interior  
 of the berm will have 3 horizontal to 1 vertical sideslopes. The exterior  
 sideslopes where the berm will be constructed entirely of soil will have 2  
 horizontal to 1 vertical grades. The mechanically stabilized earthen  
 ("MSE") portions of the berm will have 1 horizontal to 3 vertical

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sideslopes The height of the berm will vary from 19 feet along the western side to 30 feet along the eastern side of the landfill. The top surface of the berm will be approximately 44 feet wide. A 20-foot wide access road, surface water drainage ditches and the valve houses for the leachate pumping stations will be located on the top of the berm. The berm will be constructed in phases concurrent with cell development. Geotechnical analyses of the berm, for both short- and long-term conditions, demonstrate that it will remain stable with the appropriate factors of safety, see Finding of Fact #10 C, below.

Staff comment that all issues raised in initial review memoranda regarding the liner system and the perimeter berm have been satisfactorily resolved, provided that the detailed design packages to be submitted prior to each construction project address all staff recommendations regarding the design, the technical specifications, and the construction quality assurance plan as agreed to in SME's January 22, 2004 responses to the comments provided in 3 initial engineering review memoranda by staff.

The Department finds that the liner system and the perimeter berm proposed by the applicant are designed in accordance with the Rules, provided that the detailed design packages to be submitted to the Department for review and approval prior to each construction project address all staff recommendations on the design, the technical specifications, and the construction quality assurance plan as agreed to in SME's January 22, 2004 responses to the comments provided in 3 initial engineering review memoranda by staff.

- D Leachate Collection Conveyance and Storage System The leachate collection system for the base grade cells will consist of a 12-inch layer of drainage sand (drainage stone on the top 10 feet of the sideslopes) with perforated leachate collection pipes, a drainage geocomposite, several leachate collection inlets, and tee connections on the leachate collection system cleanouts. The inlets and tee connections will help facilitate leachate drainage during operations, including the development of upper lifts. Pressure transducers will be placed within each base grade cell in order to monitor the performance of the leachate collection system.

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Leachate will be collected within the perforated pipes, directed to sumps, and pumped through a double-walled force main to an above ground storage tank. The existing leachate storage pond will be used for back-up storage capacity with the leachate flows pumped directly to it if the leachate storage tank is full.

The applicant proposes to construct a new 81-foot diameter by 25-foot high above-ground tank with a capacity of 900,000 gallons for the storage of leachate generated by the landfill. The tank will be underlain by a leak detection system and a secure secondary containment structure sized to contain 110 percent of the maximum tank storage capacity. An assessment of the quantity of leachate anticipated to be generated by the landfill was completed. Based on a comparison with data from another facility, SME concluded that the modeling parameters used to estimate leachate provided a good representation of actual leachate generation rates. The anticipated leachate production rates during the period identified as having the highest leachate volume were used to size the leachate collection, conveyance and storage structures. From the storage tank, leachate will be loaded into tank trucks and transported to the Old Town Mill's wastewater treatment facility.

Staff comment that all issues raised in initial engineering review memoranda regarding the leachate collection, conveyance and storage systems have been satisfactorily resolved, provided the detailed design packages submitted to the Department for review and approval prior to each construction project address all staff recommendations regarding the design, the technical specifications, and the construction quality assurance plan as agreed to in SME's January 22, 2004 responses to the comments provided in 3 initial engineering review memoranda by staff.

The Department finds that the applicant has proposed leachate collection, conveyance and storage systems designed in accordance with the Rules, provided that the detailed design packages to be submitted to the Department for review and approval prior to each construction project address all staff recommendations regarding the design, the technical

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specifications, and the construction quality assurance plan as agreed to in SME s January 22, 2004 responses to the comments provided in 3 initial engineering review memoranda by staff

- E Gas Management System The applicant proposes to install an active gas extraction system within the landfill. The primary purpose of the system is to control emissions of landfill gas from the landfill to provide compliance with current Title V New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements. A secondary benefit of the system is the control of potential landfill odors. The system will be installed sequentially during site development.

The active gas extraction system will consist of vertical gas extraction wells, and may be supplemented by horizontal collector pipes as needed, along with the associated header and lateral piping to transport the gas to a blower and flare station. The blower and flare station will be constructed near the area where the leachate storage tank is proposed to be located. Condensate from the gas management system will be pumped directly into the leachate management system, both at the cell 4/5 leachate collection sump and the leachate storage tank.

Staff comment that the active gas extraction system was sized, and the installation timing of the components proposed, in part, on the projected disposal rates in the application. To ensure the effectiveness of the active gas extraction system, staff comment that each year's annual report should include an evaluation of the of the sizing and the installation timing of the system components over the reporting period, and an evaluation of the effectiveness of the system based on the quantities and types of wastes projected for the next year.

In response to staff comments, the applicant has committed to an accelerated schedule for installation of the active gas extraction system. During initial operations in cell 3, the applicant proposes to install passive flares. The location and number of passive flares will be included in the detailed design package for cell 3 submitted to the Department for review.

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and approval The applicant proposes to monitor the passive flare locations for gas flow rate, and concentrations of methane, carbon dioxide, and oxygen Once the monitoring data shows that the gas is of a sufficient quality and quantity to support combustion with an active gas management system, the applicant will finalize the design of the active gas management system, including a schedule for installation of the system Furthermore, the applicant proposes to install gas collection infrastructure to provide the ability to collect gas generated from solid waste in place for 12 months or longer through either vertical extraction wells or horizontal collectors, or a combination thereof

The applicant will install temporary connections to the active gas management system components at the time of construction if the necessary infrastructure is not in place to accommodate the planned permanent connections The applicant also proposes to use a portable blower and flare unit if the permanent blower and flare station has not been constructed at the time it is initially needed

In response to staff comments regarding access to the well-heads on areas that have received intermediate cover, the applicant stated that soil intermediate cover will be utilized as the primary option This will allow operating personnel to have safe access to the well-heads to monitor and balance the well-field The applicant further stated that temporary geomembrane tarps will be a secondary option, and acknowledged that protection of the well-heads and safe access provisions, particularly during the winter months, will be necessary if temporary geomembrane tarps are utilized Staff comment that well-head protection and access provisions need to be submitted to the Department if temporary geomembrane tarps are utilized for intermediate cover

The applicant proposes to submit the operating plan for the gas management system with the appropriate annual report Staff comment that the operational procedures for the gas management system, inclusive of monitoring record-keeping, and reporting procedures for both the well-field, and the blower and flare unit, should be submitted with the detailed design package for construction of the system

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The Department finds that the applicant has demonstrated that the active gas extraction system proposed for phased construction in the landfill is designed to reduce fugitive emissions of landfill gas and control odors associated with the landfill, provided the detailed design package to be submitted to the Department for review and approval prior to each phase of construction addresses staff recommendations regarding the design, the technical specifications, and the construction quality assurance plan as agreed to in Sanborn Head & Associates' ('SHA') submittal dated January 21, 2004 and the applicant's letter dated February 4, 2004, provided the active gas system operating plan, inclusive of monitoring, record-keeping and reporting procedures, is submitted for review and approval with the detailed design packages, provided that each year's annual report includes an evaluation of the of the sizing and the installation timing of the active gas system components over the reporting period, and an evaluation of the effectiveness of the system based on the quantities and types of wastes projected for the next year, and provided plans are submitted to the Department for review and approval detailing the provisions to be utilized to protect the well-heads and provide safe access to the well-heads if temporary geomembrane tarps are utilized for intermediate cover

F Closure Design The applicant proposes to construct a phased final cover system throughout the operational life of the landfill as areas of the landfill with no plans for future waste placement are filled to final grade. The proposed cover system will meet the applicable requirements of the Rules for a secure landfill that govern at the time of closure. Prior to the placement of final cover on any area, the applicant will submit the detailed design package and supporting information on the design required by the applicable requirements in Chapter 401.5 of the Rules to the Department for review and approval. The Department finds that the applicant has proposed to apply a phased final cover system in accordance with the Rules, provided the detailed design packages for the placement of phased final cover are reviewed and approved by the Department prior to each application of final cover. The Department further finds that the applicant must submit to the Department for its review and approval a final closure



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plan for the landfill, prepared in accordance with the Rules in effect at that time, and complete final closure of the landfill in accordance with the approved final closure plan. As required by the Rules, the final closure plan must include a post-closure monitoring and maintenance plan covering a period of at least 30 years following closure. The Department also finds that the post-closure monitoring and maintenance plan must be revised throughout the post-closure period to comply with any changes in the post-closure monitoring and maintenance requirements of the Rules. The Department further finds that post-closure monitoring and maintenance requirements do not automatically cease after 30 years, they must continue to be met until the Department approves their cessation.

10 SETTLEMENT AND GEOTECHNICAL STABILITY

A Test Plot Program. GPC has been conducting a pilot project at the existing landfill since October 1999. The purpose of the project is to evaluate the short-term stability of the sludge in the field, and to evaluate operational issues associated with the initial loss of shear strength in the sludge. The consultant for the pilot project is Richard E. Wardwell, P.E., Ph.D. ("REW"). The applicant retained REW to evaluate the settlement and stability aspects of this application in part because of his working knowledge of the characteristics of the sludge already disposed in cells 1 and 2 of the landfill. Based on the Department's recommendations, due to geotechnical stability concerns, the applicant proposed to remove the existing sludge and mix it with other incoming wastes (including new sludge from the Old Town Mill) in order to improve its geotechnical characteristics.

Originally the applicant proposed to mix no more than 15% of the existing and new sludge by volume into the incoming waste. Stability of the waste at this percentage would meet the regulatory criteria, but it was predicted to take several years to complete the mixing process and require a large operating area. The large operating area would result in greater leachate production and an increase in potential odor generation. The applicant now proposes to determine the optimum ratio at which the existing sludge can be mixed with the incoming waste and still achieve deposit stability by

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constructing an initial test plot in the existing, unused area of cell 2. The test plot construction is expected to take at least 6 weeks to complete, and will require a total of approximately 98,000 cubic yards of waste. Of this amount, approximately 60% of the waste will be diverted from the Pine Tree Landfill in Hampden and the remaining 40% will be existing and new sludge. It is important for the test plot program to operate through the spring thaw period because this has been observed to be the most biologically and chemically active time in the existing sludge. As a result, the amount of waste delivered to the landfill for mixing with the sludge will exceed the projected rate of filling at the landfill for this time period.

The test plot is proposed to consist of 3 sections, in each of the 3 sections the existing sludge will be mixed with incoming waste at different ratios (20%, 40% and 60% sludge to other wastes). The test plot has been designed to mimic actual operating conditions and will provide necessary information on the operating criteria that will be used to effectively run the landfill. In addition to gathering data for the stability evaluation through instruments installed in the test plot, air monitoring (oxygen, methane, and hydrogen sulfide) will be conducted. Based on the findings of the test plot program, the need to re-assess geotechnical stability will be evaluated, a finalized geotechnical monitoring plan for the facility will be prepared, the operating requirements for cell 3 will be finalized, and an odor control plan for sludge excavation and mixing will be prepared. All of the above will be submitted to the Department for review and approval.

The Department finds that the use of the proposed test plot program to determine the optimum rate at which the existing sludge can be excavated and mixed with incoming waste will result in a stable landfill configuration provided operations are conducted in accordance with approved recommendations from the program. The Department further finds that it is acceptable for the applicant to divert the necessary quantity of any waste delivered to PTL to the WOTL for use in the test plot within the time frame needed for completion, as outlined in the description of the test plot program proposal.

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B Settlement Analysis Short and long-term settlement was analyzed to assure that load and non-load related strains associated with primary compression and waste decomposition will not be detrimental to the performance of the proposed liner, leachate collection, underdrain, and final cover system. Liner, leachate collection, and underdrain system settlement was evaluated considering the elastic deformation of the subgrade soils. Cover system settlement was estimated from the projected secondary compression of the mixed solid waste using coefficients that have been observed for similar waste streams at a similar facility. The Department finds that the applicant demonstrated that the landfill liner, leachate collection, underdrain, and final cover systems will maintain their integrity and performance at the maximum predicted settlements.

C Geotechnical Stability Analysis Geotechnical stability analyses for the proposed vertical increase at the landfill were completed in accordance with the Rules. The stability assessment analyzed potential failure planes through the foundation soils and along liner and cover system interfaces. The minimum required factors of safety were achieved for all identified critical failure planes. The need to re-assess geotechnical stability will be evaluated once the findings of the test plot program described in Finding of Fact #10 A, above, are available. Stability of the MSE berm was also evaluated and the minimum required factors of safety were achieved. The Department finds that the applicant has demonstrated that the landfill, including the MSE berm, will meet or exceed the minimum required factors of safety during construction, operation and the post-closure periods under both static and seismic conditions, provided an appropriate ratio of sludge to other incoming waste is chosen and approved by the Department through an evaluation of the findings of the test plot program.

D Settlement and Stability Monitoring Plan After completion of the test plot program described in Finding of Fact #10 A, above, the applicant will prepare and submit to the Department for review and approval a proposed geotechnical monitoring plan that will include the proposed waste mixing procedures for cells 1, 2 and 3 as well as routine operational stability monitoring. The applicant also proposes periodic settlement monitoring of completed cells to determine site specific compression coefficients and

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monitoring and observations of the final cover system, to confirm that total and differential strains are within tolerable limits. The Department finds that the applicant has proposed to provide a plan to monitor stability and settlement during construction, operational and post-closure periods, and report the results to the Department, including an interpretation of the results by a qualified geotechnical engineer. The Department also finds that the applicant proposes to prepare and submit the geotechnical monitoring plan for the landfill to the Department for review and approval once the findings of the test plot program have been evaluated.

11 CONSTRUCTION

The landfill, and some of the proposed ancillary structures, will be constructed over time, as capacity is needed. New cells will be constructed by a general contractor who can demonstrate familiarity and experience with the various aspects of landfill construction, and by subcontractors with specialized experience in the installation of geosynthetics.

The applicant has prepared a preliminary construction quality assurance ("CQA") plan that establishes the requirements for CQA testing and installation oversight of all construction materials to assure that the design specifications and performance requirements are achieved during construction. Geosynthetics and soil components will be tested, certified, and inspected by qualified CQA personnel independent of SPO, NEWSME Operations and any contractor hired for the project.

CQA personnel will provide on-going, thorough project documentation during construction. Daily and weekly reports will be prepared and provided to the Department. A final construction report will be prepared and submitted for Department review and approval within 45 days of the conclusion of each construction project.

Following installation of the leachate collection system, the applicant proposes to conduct an electric leak location survey of the geomembrane liner to assure that it was not damaged during overburden placement. Electric leak location is an innovative quality assurance technology developed to detect any breaches in the

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geomembrane after placement of the protective layer (once the greatest potential for damage to the geomembrane has passed) It is accomplished by impressing a voltage across the geomembrane then scanning the surface for current flow The geomembrane is an insulator and will not allow current to pass through it unless a hole is present If a hole is found, it will be exposed, repaired, and retested before the liner system is placed into service

The applicant has prepared preliminary construction contract documents as part of the application Prior to construction of each cell, the applicant will provide the Department for review and approval a detailed design package which will include design details and calculations, a complete set of project specific construction contract bid documents, including drawings, technical specifications, contract administrative documents, and the construction quality assurance plan for that project

The applicant proposes to initiate construction of the test plot program described in Finding of Fact #10 A, above, shortly after approval of this application is received The test plot construction is anticipated to take at least 6 weeks to complete The findings of the test plot program will then be used to evaluate the need for additional geotechnical stability analyses, to finalize the operating requirements for cells 1, 2 and 3, to finalize a geotechnical monitoring plan for the facility, and to develop an odor control plan for sludge excavation and mixing operations Staff comment that all recommendations regarding the construction, operation, and monitoring of the test plot have been adequately addressed, provided the work is completed as described in REW's work plan as revised in REW's submittal dated January 16, 2004

The detailed design package for cell 3, and the new leachate storage tank and ancillary structures, are expected to be submitted to the Department for review and approval in Spring 2004 It will include the technical specifications, construction drawings, construction quality assurance plans, and construction monitoring and documentation provisions required by the Rules It will include all information recommended by staff during review of the application as agreed to in SME's submittal dated January 22, 2004 and as responded to in staff memoranda dated January 26, 28, and 30, 2004

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Construction of cells 4 through 11, inclusive of the leachate management system for the cells, is expected to proceed sequentially. The applicant proposes to submit to the Department for review and approval the detailed design package for each of these cells at least 6 months prior to the date planned for initiation of operation. Each detailed design package will include the technical specifications, construction drawings, a construction quality assurance plan, and the construction monitoring and documentation provisions required by the Rules. Each detailed design package will include all information recommended by staff during review of the application as agreed to in SME's submittal dated January 22, 2004 and as responded to in staff memoranda dated January 26, 28 and 30, 2004. Staff further comment that, if the Rules applicable to any aspect of construction of the landfill cells change during the development of the landfill, the applicant should be required to address the new design requirements in the subsequent detailed design submittals.

Construction of the perimeter berm, including the MSE berm, is expected to proceed sequentially as the landfill cells are developed. A detailed design for the construction of the perimeter berm in the area of cell construction will be included in the detailed design package submitted for construction of the individual cells. Staff comment that all issues identified in the review of the application have been satisfactorily addressed, provided all recommendations in staff memoranda are addressed as agreed to in SME's submittal dated January 22, 2004 and as responded to in staff memoranda dated January 26, 28 and 30, 2004. Staff further comment that, if the Rules applicable to any aspect of construction of the perimeter berm change during the development of the landfill, the applicant should be required to address the new design requirements in the subsequent detailed design packages.

Construction of the active gas extraction system is expected to occur on an annual basis. The details for the following year's installation are proposed to be described in the annual report for the facility, and in detailed design packages provided to the Department for review and approval prior to construction. Staff comment that all issues identified in the review of the application have been satisfactorily addressed, provided all recommendations in the staff memoranda are addressed as agreed to in SHA's submittal dated January 21, 2004 and the applicant's letter dated February 4, 2004 provided the active gas system.

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operating and monitoring plans are submitted with the detailed design package, and provided plans are submitted detailing the provisions to be utilized to protect the well-heads and provide safe access to the well-heads if temporary geomembrane is utilized as intermediate cover. Staff further comment that, if the Rules applicable to any aspect of construction of the active gas extraction system change during the development of the landfill, the applicant should be required to address the new design requirements in the subsequent detailed design packages.

Construction of the phased final cover will occur as areas of the landfill are filled to the proposed final grade. Prior to the placement of final cover on any area, the applicant will submit to the Department for review and approval a detailed design package to include the detailed construction plans, technical specifications, a construction quality assurance plan, and supporting information on the design as required by the applicable provisions of Chapter 401.5 of the Rules. Staff comment that all issues identified in the review of the application have been satisfactorily addressed, provided all recommendations in staff memoranda are addressed as agreed to in SME's submittal dated January 22, 2004 and as responded to in staff memoranda dated January 26, 28 and 30, 2004. Staff further comment that, if the Rules applicable to any aspect of the placement of phased final cover change during the development of the landfill, the applicant should be required to address the new closure requirements in the subsequent phased final cover submittals. Staff comment that the applicant must also submit to the Department for its review and approval a final closure plan for the landfill, prepared in accordance with the Rules in effect at that time, and complete final closure of the landfill in accordance with the approved final closure plan. As required by the Rules, the final closure plan should include a post-closure monitoring and maintenance plan covering a period of at least 30 years following closure. The post-closure monitoring and maintenance plan should be revised throughout the post-closure period to comply with any changes in the post-closure monitoring and maintenance requirements of the Rules.

The Department finds that the applicant has addressed all aspects of the construction and closure of the proposed vertical increase of the landfill, provided detailed design packages are submitted to the Department for review and approval prior to the initiation of any construction project, and provided the various ongoing construction activities described in this finding are designed, constructed

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monitored, operated, closed, and monitored and maintained during the post-closure period in accordance with the application, staff recommendations on the application and responses to staff recommendations submitted by the applicant and its consultants in submittals dated January 16, 2004, January 21, 2004, January 22, 2004, and February 4, 2004. The Department also finds that, as recommended in Finding of Fact #4 A, above, the applicant must include a demonstration of financial capacity for costs associated with construction of cells 4 through 11 as part of the detailed design packages for these cells. The Department further finds that, if the Rules applicable to any aspect of construction or post-closure care of the vertical increase of the landfill and its ancillary structures change during the development of the landfill, the applicant must address the new requirements in subsequent submittals.

## 12 OPERATIONS

The applicant proposes to continue using the current operations manual for the landfill until the completion of construction of cell 3. The current operations manual for the facility includes the detailed operating requirements specific to the GPC waste characteristics and generation rates. Until the time cell 3 is available for disposal, only the wastes currently approved for disposal will be landfilled, except during the construction of the test plot program described in Finding of Fact #10 A, above. Operational criteria specific to the test plot program have been reviewed and found to be acceptable by staff.

The applicant proposes to update the operations manual to reflect the proposed waste characteristics, generation rates, mixing requirements, and cell development sequence and provide it to the Department for review and approval prior to the commencement of waste placement in cell 3. A conceptual cell development plan for the proposed life of the landfill was included in the application, staff comment that all recommendations regarding the conceptual cell development plan have been adequately addressed provided the plan is revised as described in SME's January 22, 2004 submittal. The applicant proposes to provide a detailed cell development plan, covering the first 2 years of operations, for the landfill prior to the commencement of filling in cell 3, and provide it to the Department for review and approval. As required by the Rules, proposed revisions to the operations manual, including the annually updated cell development plan, will be included in



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the facility's annual report, and the operations manual will be revised to comply with any changes in the operating requirements in the Rules. The operations manual will again be updated and submitted to the Department for review and approval following completion of the test plot program and prior to the excavation of sludge from cells 1 and 2.

The hours of operation for the landfill are proposed to be 6 AM to 8 PM on weekdays and 8 AM to 4 PM on weekends, although Casella's contract with PERC requires that the landfill be available for disposal of its residues outside the normal business hours. The operations manual for the facility addresses basic functions such as the maintenance of the access road, and includes the many plans and provisions for the orderly operation of the landfill addressed throughout this order.

The Department finds that the operations manual was prepared in substantial accordance with the Rules, and that it provides the information necessary to enable supervisory and operating personnel, and persons evaluating the operation of the landfill, to determine the sequence of operation, policies and procedures for the landfill, as well as the monitoring, maintenance, inspection and legal requirements that must be met for the operation of the landfill on an ongoing basis, provided the operations manual is revised prior to the commencement of waste placement in cell 3 and as recommended by staff. The revisions to the operations manual must include the following information: the conceptual and detailed cell development plans, and changes made to address staff recommendations as agreed to in SME's January 22, 2004 submittal addressing staff memoranda. The operations manual must be updated again to incorporate changes needed to address the findings of the test plot program. All changes to the operations manual are to be submitted to the Department for review and approval, and implemented as approved by the Department.

13 ACCEPTABLE WASTES

A. Waste Types and Sources. The landfill is currently licensed to accept pulp and paper mill wastewater treatment plant sludge from the Old Town Mill, smaller quantities of other special wastes from the Old Town Mill (lime wastes and grit, woodwaste and inert debris, soil and sawdust

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contaminated with non-hazardous process chemicals, virgin oily contaminated debris, sand from sandfilters, and non-hazardous sandblast grnt), flyash from Lincoln Pulp and Paper, and burn pile ash from the City of Old Town's transfer station

This application proposes to add the solid wastes approved for disposal at Pine Tree Landfill in Hampden that are generated in Maine, including solid waste from all 4 licensed incinerators, to the list of wastes acceptable for disposal in the landfill. The wastes proposed to be added would consist primarily of front-end process residue ("FEPR") from PERC in Orrington, Maine and Maine Energy in Biddeford, Maine, oversized bulky wastes, MSW bypassed from incinerators located in Maine, construction and demolition debris, ash from incinerators located in Maine, and water/wastewater treatment sludge. Small quantities of other miscellaneous non-hazardous waste streams are also listed in the application for disposal in the landfill. There are 34 wastes listed in the miscellaneous category, in total, they are anticipated to equal approximately 50,000 tons per year. In addition, Appendix K of the application includes a listing of the generator, type of solid waste and permit number of several individually permitted wastes currently approved at Pine Tree Landfill that the applicant proposes to accept at WOTL. The yearly quantity of solid waste to be accepted at the landfill is not expected to exceed 540,000 tons per year.

The applicant has committed to the same limitations on MSW accepted for disposal at WOTL as at Pine Tree Landfill. Department License #S-001987-WD-QA-M, issued to Pine Tree Landfill on February 26, 2002, limits the MSW Pine Tree Landfill is allowed to accept to unprocessed MSW bypass from the following sources: the PERC incinerator in Orrington and the Maine Energy incinerator in Biddeford, waste delivered under an interruptible contract with PERC, or waste delivered in excess of processing capacity at other MSW incinerators in Maine. An annual limit of 310,000 tons on the amount of unprocessed MSW destined for Maine Energy, and then incinerated at Maine Energy or bypassed to Pine Tree Landfill, was selected. This is not the annual amount of MSW anticipated to come to Pine Tree Landfill and/or the WOTL from Maine Energy, this

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is the maximum total amount of unprocessed MSW destined for Maine Energy that will be delivered to all 3 Casella owned or operated disposal facilities Maine Energy, Pine Tree Landfill and WOTL Unprocessed MSW from Maine Energy is only bypassed to a landfill for disposal during temporary shutdowns for repairs or maintenance, and when the amount of contracted waste exceeds the plant's capacity Conditions #2 through 7 of that license specify the limitations and parameters under which Pine Tree Landfill can accept MSW from the Maine incinerators

In accordance with the RFP and OSA, the applicant will not accept solid wastes generated from out-of-state sources at the WOTL The applicant proposes to manifest all wastes brought to the facility for disposal, including those not required to be manifested by law The Department finds that the monthly activity reports submitted to the Department must be designed to provide the data needed for determining the quantities of the various waste types, and their sources, delivered to the landfill The Department further finds that the applicant must submit an application to the Department for review and approval prior to accepting for disposal any waste not listed in the application

The Department received comments from the public regarding specific wastes and whether they would be regarded as in state or out of state waste The Department responded that FEPR and ash from incinerators in Maine, as well as a limited amount of bypass, would be considered waste generated in Maine, but that waste delivered from out of state to another facility (such as a transfer station, or a compost facility if no processing occurs) for transfer to WOTL in its original form would be considered waste generated outside Maine As noted above, the amount of bypassed MSW from the incinerators will be limited and the amount of MSW bypassed from Maine Energy, also owned by Casella, will in addition be tied to production at Maine Energy The applicant has committed, in a letter dated March 9, 2004, that no out of state MSW will be bypassed to the landfill, and that waste from the tipping floor of any of the incinerators will not be transported to the landfill if it contains any out of state waste The Department also received comments that the landfill would be required to accommodate MSW from the closure of existing municipal

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landfills due to Department violations, as noted above, MSW will be accepted only from the 4 incinerators in Maine. Additional sources of MSW would require Department review and approval prior to acceptance for disposal.

- B Waste Characterization and Compatibility. The procedures for characterizing the solid wastes accepted at the landfill are identified in the Solid Waste Characterization Plan for the facility, the plan is located in Appendix K of the application and will be part of the facility's operations manual. The facility proposes to accept non-hazardous wastes for disposal using the same procedure as approved for Pine Tree Landfill. The wastes fall into 2 categories: those accepted on an ongoing basis under general permitting requirements for specific categories of wastes and those accepted under individual permits. Each waste required to be characterized by the Rules has a testing frequency, list of parameters to be tested for, and the acceptance criteria for each parameter, based on the requirements of Chapter 405 of the Rules. Copies of all analyses will be kept on file at the facility and may be viewed during normal business hours. The wastes proposed for disposal in the landfill have been demonstrated to be compatible with each other and the liner and leachate collection system components at Pine Tree Landfill, the same materials are proposed to be used in the construction of cells 3 through 11 at WOTL.

The Department received several comments related to the waste characterization process and its reliability in terms of keeping hazardous wastes out of the facility. The Department finds that the waste characterization plan proposed for use at WOTL provides adequate provisions for the testing of wastes coming into the landfill and a proven, reliable method of keeping hazardous waste from being disposed. The Department further finds that the proposed waste streams are compatible with each other and the components of the landfill system.

- C Reporting Requirements. As described in Finding of Fact #13 A, above, the Department finds that a monthly summary of the wastes accepted for disposal will be submitted to the Department and the monthly activity

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reports submitted to the Department must be designed to provide the data needed for determining the quantities of the various waste types, and their sources, delivered to the landfill. As found in Finding of Fact #13 A, above, the Department finds that the information on the source and quantity of MSW accepted for disposal is to be reported to the Department on both a monthly and an annual basis, as follows

- 1 The monthly reports on the wastes accepted for disposal at the landfill shall include the amount and source of unprocessed MSW accepted for disposal,
- 2 The total amount of (a) unprocessed MSW incinerated at Maine Energy and (b) MSW bypassed from Maine Energy for disposal at the WOTL and at Pine Tree Landfill's Secure III Landfill Expansion shall not exceed 310,000 tons in any calendar year, unless changes in conditions or circumstances occur that cause the Department to revise this cap, and
- 3 In addition to the specific requirements of Chapter 401 4(D) of the Rules, the annual reports for the facility submitted to the Department shall include the amount of unprocessed MSW received at WOTL from each of the approved sources, including statements from the incinerators providing an estimate of the percentage of the MSW that originated outside Maine

14 AIR QUALITY

A Fugitive Dust To control fugitive dust from unpaved access roads, the applicant will apply water and/or calcium chloride to the road surfaces on an as-needed basis. The applicant also proposes to pave an additional portion of the access road from where it begins at Route 16 such that the first one-half mile of the road will be paved. If necessary to control dust, the applicant has also committed to pave an additional portion of the access road. The applicant has committed to daily cleaning of the paved surface using a street sweeper. The Department received comments on existing dust control methods and the potential for additional problems

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with fugitive dust emissions associated with the increased traffic at the landfill entrance. The Department finds that the dust control measures proposed by the applicant are sufficient to control fugitive dust. However, the Department also finds that if staff find that operation of the landfill as proposed unreasonably adversely affects air quality additional fugitive dust control measures will be required.

B Landfill Gas The applicant proposes to install an active gas extraction system for control of fugitive emissions of gas generated by the landfill. Passive flares will be installed initially and monitored to determine when the gas quantity and quality is adequate to support combustion. At that time the detailed design of the active gas extraction system will be prepared and the system installed. (See Finding of Fact #9 E, above.) The Department finds that the applicant has proposed adequate measures to control fugitive emissions of gas from the landfill.

C Odor Control The applicant proposes to use several mechanisms to control odors associated with the facility, an odor assessment, including proposed odor control mechanisms, prepared by Odor Science & Engineering, Inc., is included in Attachment 7 of the application. As fully described in Finding of Fact #9 E, above, one of the benefits of the proposed gas management system is the control of potential landfill odor. The applicant will also employ operational practices, including the use of a portable odor neutralizer system and minimization of the active working face of the landfill. Odors associated with the leachate will be minimized by the use of an above-ground leachate storage tank instead of the existing open leachate pond. The applicant has committed to odor training of its landfill personnel, the implementation of a community odor complaint response plan, and to the installation of penmeter hydrogen sulfide monitoring instruments. The applicant will also monitor odors during the sludge mixing test plot program, described in Finding of Fact #10 A, above and will prepare a detailed odor control plan for sludge excavation and mixing operations following completion of the program and prior to full-scale operations.

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The Department received comments from the public that odors from the existing landfill have been a problem. Staff comment that, prior to the submission of this application, no odor complaints about this facility were received by the Department.

The Department finds that the applicant has proposed odor control mechanisms sufficient to control nuisance odors. However, the Department also finds that if staff find that operation of the landfill as proposed unreasonably adversely affects air quality additional odor control measures will be required. The Department further finds that the applicant must submit to the Department for review and approval the following information on the perimeter hydrogen sulfide monitoring program prior to implementation of the program: the number and locations of instruments, based on meteorological conditions, system security measures, monitoring program details and responsibilities, and reporting procedures.

15 TRAFFIC MOVEMENT

The parcel of land which includes the landfill is located between Routes 43 and 16. Although the landfill is located much closer to Route 43 than to Route 16, it is accessed from Route 16 by a road into the property that existed at the time of the original licensing. A large wetland exists between the landfill and Route 43, the applicant does not propose to change the access to the landfill from Route 16 to Route 43 now or in the future. The access road intercepts Route 16 approximately 600 feet west of I-95.

At the time this application was filed, approximately 16 trucks were hauling sludge from the Old Town Mill, ash from Lincoln Pulp & Paper, leachate from the landfill back to the Old Town Mill's wastewater treatment plant, and gravel during the peak hour, approximately one-half of these vehicles were hauling gravel to the landfill for use as daily cover.

Attachment 4 of this application contains a new traffic assessment prepared by Eaton Traffic Engineering in accordance with the Rules.

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With the increased use proposed by the applicant, approximately 30 total vehicles (9 of them passenger vehicles) will enter the landfill during the peak hour at the initial projected waste acceptance rate of 450,000 tons/year, and up to 35 total vehicles (still 9 of them passenger vehicles) will enter the landfill during the peak hour at the highest projected waste acceptance rate of 540,000 tons/year. These peak numbers include the current vehicles, except that the gravel deliveries will cease.

The total daily number of trucks anticipated to enter the facility on a daily basis is 108 at the 450,000 tons/year rate of waste acceptance. The total daily number of trucks at the 540,000 tons/year rate is 140 trucks per day. The existing daily trips into the landfill are estimated at 45-50 trips per day.

The trucks hauling wastes that are currently disposed at the landfill are expected to continue using the same haul routes, likewise, the trucks hauling leachate to the Old Town Mill's wastewater treatment plant will continue using the same routes.

A major haul route for transporting waste in trucks weighing over 80,000 pounds from Pine Tree Landfill to WOTL is identified in the application, the route includes roads within Hampden, Bangor, Brewer, Eddington, Bradley, Milford and Old Town. During the peak hour, the number of over 80,000 pound trucks is anticipated to be 7 at 450,000 tons/year and up to 10 at 540,000 tons/year. The major haul route identified for trucks and other vehicles weighing less than 80,000 pounds is I-95, the remaining new traffic associated with the project would use I-95 to deliver waste to the landfill, and all empty trucks would use I-95 on their return trip.

The Maine Department of Transportation ("MDOT") was asked to review the traffic section of the application, it reviewed high crash locations, roadway geometrics, traffic volumes and traffic signal progression along the identified route. The volume of traffic associated with the landfill falls far below the threshold for review of the project under MDOT's Chapter 305 "Rules and Regulations Pertaining to Traffic Movement Permits", effective May 20, 2000, that threshold is 100 or more passenger car equivalent vehicles during the peak hour. In a memorandum dated December 12, 2003 MDOT concluded that the route identified in the application was acceptable in terms of geometrics traffic



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volumes, and economic feasibility, but that an alternative route identified in the MDOT memorandum as Alternative 1 was more desirable. The only difference in the two routes was the bridge used to cross the Penobscot River from Bangor into Brewer.

In response to numerous comments on traffic associated with the project, MDOT staff identified in a memorandum received by the Department on February 4, 2004 a total of 5 routes (plus I-95 for the less than 80,000 pound vehicles) that could safely accommodate the number, weight and types of vehicles transporting waste to and from the facility from the south or west. Each of the routes have minor deficiencies, however, since the drivers are likely to make their choices of routes depending on the time of day, day of the week or time of year, all of the routes are viable alternatives over which trucks now travel. MDOT noted that all of the identified routes can handle traffic generated by the landfill, and that the functionality of any of the 6 routes will not be negatively affected by the landfill's traffic.

MDOT also reviewed the Route 16/landfill access road intersection. It concluded that there is adequate sight distance for the posted speed of Route 16, and that no turn lanes are needed. No high crash locations within the immediate vicinity of the site were identified. MDOT did recommend that overhead lights be installed at the entrance to the facility to make it easier for trucks to locate the entrance.

As noted above, the Department received many comments from the public on the proposed haul route for the facility. Many commentators requested that the Department require that all haulers use I-95 to access the facility, other commentators expressed concern over increased traffic, and associated road damage and other safety and esthetic impacts, through their neighborhood.

The only change proposed to the 10,950 foot long, 24 foot-wide mostly gravel access road into the site is an extension of the paved section from the first 500 feet to the first one-half mile of the road. If necessary to control dust, the applicant has also committed to pave an additional portion of the access road. A scale, and a small scale house, are proposed to be constructed approximately 250 feet from the landfill perimeter security fence, parking will be provided at this location for only the scale house operator. The gravel parking area at the operations office

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will be expanded to approximately 4,000 square feet to provide parking for up to 20 cars. The perimeter access road for the landfill is proposed to be located on top of the perimeter berm described in Finding of Fact #9 C, above. Gravel maintenance roads will also be provided for access to the leachate pond pump station, the leachate storage tank and the blower and flare for the active gas extraction system.

The Department finds that the applicant has made adequate provisions for the safe and uncongested movement of traffic of all types into, out of, and within the facility, provided it installs overhead lights, or another effective lighting system, at the entrance to the facility to make it easier for trucks to locate the entrance. The Department further finds that it is outside its purview to require that waste haulers using this facility limit their truck weights to 80,000 pounds and use I-95 as the only haul route for the facility, and affirms MDOT's statement that there is an affirmative right for all individuals and entities, public and private, domestic or commercial, to travel on all State and State Aid Highways in Maine.

## 16 EXISTING USES AND SCENIC CHARACTER

A Visual Analysis The original application included a visual impact assessment report prepared by Environmental Analysis and Design. In summary, the report concluded that the landfill would not have an unreasonable adverse effect on the scenic character of the area because of its limited viewshed, small visual magnitude and its low visual contrast.

Attachment 5 of this application contains an updated visual impact assessment report prepared by SMRT, Inc. in accordance with the Rules. The consultant evaluated the proposal in terms of unreasonable interference with views from established public viewing areas as well as other potential viewshed locations. The applicant states that the landfill will not be visible from an established public viewing areas as defined by the Rules or any new viewsheds. As predicted in the original application, people traveling on Route 43 in a northerly direction will be able to see the landfill along an approximately 3/8 mile long stretch, the view will last about 21 seconds if the viewer is driving the speed limit. The applicant

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has offered to plant a tree screen along this stretch if permission is granted by the landowner

The Department received written comments from a Route 43 resident who owns property and a business off Route 43. The commentor noted that the landfill is currently visible from Route 43, in contradiction to the original visual assessment, and that the landfill would be visible from Route 43, Route 16, I-95 and at other points within Old Town if the Department did not limit the height of the landfill. He commented that the proposed final elevation would be 150 feet higher than the highest point in Old Town (Fairdale Hill, at 240 feet)

The Department retained Terrence J DeWan & Associates, Inc ("tjd&a") to perform an independent review of SMRT, Inc 's updated assessment. Tjd&a's report, dated February 6, 2004, confirms the results of SMRT, Inc 's assessment. It also makes several suggestions for making the updated visual impact assessment a stand-alone document, and for providing corroborative information on the conclusions reached in the SMRT, Inc report. At staff's request tjd&a also responded to written comments from the Route 43 resident. Although tjd&a agrees with some of the commentor's statements, tjd&a concludes that the proposed increase in the landfill's height will not unreasonably adversely affect the use of the resident's property or other existing uses in the area.

The Department finds that the design of the project continues to take into account the scenic character of the surrounding area, and that the development has been located and screened to minimize its visual impact, but that the visibility of the landfill would be lessened if the section of Route 43 where the landfill is visible is screened. The Department finds that the development will not have an unreasonable effect on the scenic character of the surrounding area, provided the results of a future visual analysis, performed when the final elevation of the landfill reaches 330 feet, agree with the projections provided in the application, and provided the applicant negotiates in good faith with the Route 43 landowner for permission to plant a tree screen in the location identified in the visual impact assessment.

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B Noise The original application included a noise study prepared by Acentech Incorporated (“Acentech”) In summary, the study demonstrated that the noise standards of the applicable Rules would be met by the implementation of several noise abatement measures during construction and operation, and that noise would be reduced by atmospheric adsorption and the proposed buffer strips around the facility As a check on the actual noise levels from the facility, the Department placed Condition #7 in the original license The condition required that noise studies be performed within the first month of operation, and again within the first month of operation of cell 4 of the landfill The noise study performed when the landfill became operational demonstrated the facility was operating within the noise limits, cell 4 has not been developed

The applicant retained Acentech to address noise impacts associated with the proposed facility A copy of Acentech’s report is contained in Attachment 6 of the application The noise study modeled the projected noise levels from the landfill operating equipment to the nearest property boundary and the nearest residence, the study demonstrated that the facility will comply with the 60 dBA day time noise standards of the Rules Between 7 p m and 7 a m , the 50 dBA night time standards of the Rules apply, and the applicant will limit the spreading and compacting equipment to 1 compactor and 1 dozer or loader if necessary to meet the noise standards (The landfill is proposed to operate between 6 a m and 8 p m on weekdays )

The Department finds that the noise study for the proposed facility indicates that it will not generate excessive noise at the property boundary or at any protected location as defined by the Rules However, the Department also finds that the applicant must perform 2 additional noise studies to confirm the model used in the study one within the first month of operation of cell 3, and the other within the first month of operation of cell 9 If the actual noise limits are above the limits in the Rules additional noise measures must be promptly implemented to meet the requirements of the Rules

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C Existing Uses and Conditions The portions of the 780 acre parcel that are currently undeveloped will not be altered, and the current allowed uses of the property by the public described in Finding of Fact #24 of the original order will be allowed to continue. The Department finds that its original finding that the facility will not unreasonably interfere with existing uses and conditions, and has enhanced values in some areas, is not changed.

17 STORMWATER MANAGEMENT

The Department found in the original license that the project is not located on a floodplain. The applicant has provided an updated stormwater management plan for the proposed facility, prepared in accordance with the Rules and the three general objectives of the Department's *Stormwater Management for Maine Best Management Practices* (MDEP, 2003) effective drainage, flood prevention and erosion control. The plan is contained in Section 5.7 of the application.

The proposed stormwater management measures, which include the erosion and sedimentation control plan for the facility (see Finding of Fact #18, below), will assure that peak runoff rates for the post-development conditions at the site will be equal to or less than the peak runoff rates for the site's pre-development (prior to 1991) conditions. A major consideration in the grading and layout of the landfill in the original application was the minimization of wetlands impact, the same consideration was applied to the vertical increase of the landfill proposed in this application. Existing drainage courses will be utilized where feasible, no surface water drainage outlet structures from the developed site will discharge concentrated flows directly onto abutting properties. Where necessary, the runoff from the developed site will discharge into detention or sedimentation basins that will attenuate peak flow rates to the unnamed tributary feeding Pushaw Stream, located at the lowest elevation of the facility. This runoff will be only from areas outside the landfill footprint and from landfill areas that have received final or intermediate cover material. Runoff from areas where waste is exposed or has received only daily cover is considered leachate and is handled within the leachate collection and conveyance systems.

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A drumlin oriented in a northwest to southeast direction effectively divides the 780-acre parcel into 4 major watersheds northeast, northwest, southeast and southwest. The Department received comments from the public that the ditches on the Stagecoach Road contain runoff contaminated by the existing landfill. Staff comment that the Stagecoach Road is located in the northwest watershed of the parcel. The landfill is located in the southwest watershed of the parcel, and runoff from this watershed drains to a wetland area that serves as the headwater of an unnamed tributary that empties into Pushaw Stream, not towards the Stagecoach Road.

The Department has also received comments from the public that contaminated runoff from the landfill can flow into ditches along Route 43 and onto property across Route 43. Staff comment that water in the unnamed stream directly downgradient of the landfill has been consistently sampled at least 3 times per year since 1991, no changes in surface water quality have been observed. Staff also comment that no analyses or other documentation of contamination of ditches in either area was submitted to the Department.

Staff comment that all issues raised in the initial engineering review memorandum regarding the provisions for stormwater management have been satisfactorily resolved.

The Department finds that the facility's stormwater management plan will control run-on and run-off, and infiltrate, detain or retain water falling on the facility site during a storm of intensity up to and including a 25-year, 24-hour event such that the rate of flow of stormwater from the facility after construction does not exceed the rate of outflow of stormwater from the facility prior to construction of the facility. The Department also finds that the preponderance of the evidence indicates that runoff from the landfill is not impacting ditches along Route 43 or the Stagecoach Road.

## 18 EROSION AND SEDIMENTATION CONTROL

The application contains an erosion and sedimentation control plan prepared in accordance with the *Maine Erosion and Sedimentation Control Best Management Practices* (MDEP 2003) and the requirements of the Rules. The plan is

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contained in Appendix F of the application. The plan includes the construction of two new stormwater detention ponds, several new drainage structures (ditches, catch basins and culverts), and it addresses the inclusion of terrace drainage swales and downchutes on the landfill cover system. To minimize erosion during construction and operation, both temporary and permanent erosion control measures will be used. All measures will be continuously monitored and all necessary maintenance will be performed to assure that the measures are functioning properly. In response to staff comments, the applicant confirmed that the design of construction-related erosion and sedimentation control systems will be included in the detailed design package for each phase of the landfill development. For all cells other than cell 3, which will utilize the existing sedimentation control structures, it is anticipated that water generated within the cell construction area will be contained within that landfill cell, thus allowing sediment to settle out within the cell before being pumped out. If necessary, additional sediment removal techniques will be employed.

The Department finds that ongoing construction of the proposed facility will not cause unreasonable sedimentation or erosion of soil, provided the erosion and sedimentation control plan is implemented as described in the application, and as amended during the review of the detailed design package submitted for the Department's review and approval prior to each phase of landfill construction.

19 RECYCLING AND SOURCE REDUCTION

The landfill will accept only solid waste that is subject to recycling and source reduction programs at least as effective as those imposed by State law. The recycling and source reduction programs included in the OSA will affect the region served by the landfill and the rest of the state, and includes several innovative recycling initiatives that will advance the State's solid waste management policy.

In signing the OSA, Casella agreed, in part, to use its best efforts to operate the landfill following the State's solid waste management hierarchy. Specific actions listed in the OSA include the following:

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- A Implementation of a technology for recovery and recycling of all color glass containers so that glass does not require separation by color in order to be recycled,
  
- B Work with the Municipal Review Committee ("MRC"), which represents over 160 municipalities that are limited partners in PERC and/or users of PERC, to
  - 1 through Casella's Fairfield County Recycling Division, analyze and develop the best collection, processing and marketing options for paper recycling,
  - 2 help develop organics recycling programs that enhance or expand current practices of MRC members,
  - 3 develop a program to collect, store and process (where applicable) universal wastes and mercury containing products, and
  - 4 develop programs to identify, collect and properly dispose of household hazardous wastes,
  
- C Work with the MRC and appropriate research facilities to assess the viability of using Maine-developed ablation technology as a source of air emission control for biomass boilers combusting up to 50% clean wood from construction and demolition debris ("CDD") as a fuel source, as proposed for new GPC biomass boiler, and
  
- D Expand the CDD processing capability of Casella and its affiliates to achieve a decrease in CDD waste volume requiring disposal with a focus on recovering the clean CDD wood waste that would assist in meeting the biomass fuel commitment of the OSA. Other recyclable materials, including cardboard, aggregate and metals, would be separated and utilized in other applications

The Department finds that the provisions of 38 M R S A §1310-N(5) and the Rules are not applicable to this application because it is not an application for a new landfill or an expansion of an existing landfill (See Finding of Fact #1 C, above.) However, to address public comments on the need for additional



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recycling rather than additional disposal capacity, the applicant submitted a summary of the recycling initiatives included in its response to the RFP and in the OSA

20 PROTECTED NATURAL RESOURCES

The original application, and the application submitted to the Army Corps of Engineers, included an extensive wetlands study of the property. The original licenses permitted the filling of 8.84 acres of wetlands, and contained a compensation plan for the activity. Condition #4 of the original license required that the original licensee submit annual reports on the restoration and enhancement projects in the compensation plan for a 3 year period, compliance with this condition has been demonstrated.

No additional wetland areas will be impacted by the proposed project. However, the reconstruction of the access road from the landfill berm to the existing leachate pump station, and the construction of the leachate force main will include construction activities within 75 feet of the upland boundary of the forested wetland to the west of the site, and thus the applicant will file Permit By Rule applications under the Department's Chapter 305, Sections 4 and 9, Regulations prior to this construction, and will comply with the standards in the regulations.

The Department finds that the proposed facility will not unreasonably adversely effect protected natural resources in that no new impact on protected natural resources will occur, provided that the applicant obtains, and complies with the standards of, permits-by-rule under 06-096 CMR Chapter 305.4 and 305.9.

21 SETBACKS AND BUFFERS

The setbacks to public roads, private residences, public and private water supplies, protected natural resources, airports and the property boundary are not changed as a result of this proposal, and thus continue to exceed the setbacks set forth in the Rules. As required by Condition #9 of the original license, the 100 foot forested buffer between the western side of the facility between the landfill and the emergent wetland to the southwest of the facility will be maintained. The

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Department finds that Finding of Fact #22 of the original license, which sets forth required buffers, is not changed by this proposal

## 22 UTILITIES

On site single-phase power is supplied from Route 16 via buried electrical lines. Potable water will continue to be provided by an on-site well. On-site sanitary wastewater treatment is provided by a licensed subsurface wastewater disposal facility. The applicant proposes to upgrade the facility from 113 gallons/day to 420 gallons/day, a copy of the HH200 form for the upgraded facility is contained in Attachment 10 of the application. As described in Finding of Fact #9.D, above, leachate will initially be trucked to the Old Town Mill's wastewater treatment plant, but may be transported via sewer line or truck to the City of Old Town Wastewater treatment plant in the future, if the necessary upgrades are made and the City of Old Town is willing. The Department finds that the applicant has provided for adequate utilities and the proposed facility will not have an unreasonable adverse effect on existing or proposed utilities in the municipality or area served by the utilities.

## 23 ALL OTHER FINDINGS OF THE ORIGINAL ORDER

The Department finds that all of the remaining Findings of Fact of the original license will be unchanged by the proposed amendment for a vertical increase, in that the horizontal footprint of the landfill will be unchanged by the proposal.

BASED on the above Findings of Fact, the Department CONCLUDES the following

- 1 The applicant has provided adequate evidence of financial capacity and technical ability to meet air and water pollution control standards, provided an acceptable package for financial assurance is submitted and maintained, and provided evidence of financial capacity for construction of each cell is provided as part of the detailed design package submitted prior to each construction season.
- 2 The information submitted by the applicant and supplied by state and local officials regarding Casella's previous violations of certain environmental laws as described in the civil and criminal record for SPO and Casella/NEWSME

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Operations, demonstrates that Casella has willingly conducted all required corrective actions, thus the civil and criminal record does not provide a basis to deny approval for SPO to own and control, and NEWSME Operations to operate, the landfill as proposed in this application in compliance with Maine laws and regulations

- 3 The applicant has provided adequate evidence of title, right or interest in the parcel of property containing the existing landfill
  
- 4 The proposed vertical increase of the landfill will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur in that the landfill is not located over a significant sand and gravel aquifer and the proposed vertical increase of the landfill does not pose an unreasonable threat to the quality of a significant sand and gravel aquifer which it does not overlie, or to an underlying fractured bedrock aquifer, in that soils under the landfill and the proposed design of the vertical increase, combined with the groundwater flow conditions, provide adequate protection to water quality
  
- 5 The proposed vertical increase of the landfill will not pollute any waters of the State, contaminate the ambient air, constitute a hazard to health and welfare, or create a nuisance, provided the environmental monitoring plan for the landfill is updated in accordance with staff recommendations, and provided the landfill is constructed, operated, closed and monitored and maintained throughout the post-closure period in accordance with staff recommendations and the approved design and then-current operational standards, including reporting requirements  
Compliance with the intent of the Solid Waste Management Regulations has been affirmatively demonstrated
  
- 6 The applicant has adequately addressed the settlement and stability of the landfill, provided it monitors the facility in accordance with an approved settlement and stability monitoring plan that incorporates all recommendations made by staff
  
- 7 The applicant has made adequate provisions for traffic movement of all types into, out of and within the development area, provided overhead lights, or another effective lighting system as approved by the Department, are installed at the

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entrance to the access road prior to the operation of cell 3 The traffic increases attributable to operation of the landfill will not result in unreasonable congestion or unsafe conditions on a road in the vicinity of the project

- 8 The applicant has made adequate provisions for fitting the development harmoniously into the existing natural environment and the development will not adversely affect the existing uses, scenic character, or natural resources in the municipality or in neighborhood municipalities provided the landfill is properly operated, properly closed, and properly cared for after closure, all in accordance with then-current regulatory requirements, that the applicant obtains the necessary Natural Resource Protection permit-by-rules before construction of the MSE berm, and provided the results of future visual and noise analyses confirm the projections contained in the application
- 9 The proposed change in the landfill will not cause unreasonable erosion of soil or sediment, nor inhibit the natural transfer of soil The applicant has made adequate provisions for controlling erosion and managing stormwater, provided the approved stormwater management plan and erosion control plan are fully implemented
- 10 The applicant has made adequate provisions for utilities, including water supplies, sewerage facilities, solid waste disposal and roadways required for the development, and the landfill will not have an unreasonable adverse effect on existing or proposed utilities in the City of Old Town, the Town of Alton, or the area served by those services

THEREFORE the Department APPROVES the above noted application of the STATE OF MAINE, ACTING THROUGH THE STATE PLANNING OFFICE, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations

- 1 The Standard Conditions of Approval, a copy attached as Appendix A
- 2 The applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in unnecessary or noticeable erosion of soils on site during construction or operation of the facility

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- 3 Prior to May 15, 2004, the applicant shall submit a financial assurance package for closure and post-closure care to the Department for review and approval that meets requirements of the Rules. The applicant shall implement the approved package. The approved financial assurance package shall be updated on an annual basis by the applicant in accordance with the Rules.
- 4 The applicant shall complete the investigation in the areas around and beneath detention ponds 1 and 2 in accordance with the workplan approved by the Department.
- 5 The applicant shall update the EMP on an ongoing basis as recommended by staff, beginning with the submittal of the 2003 Annual Report. Monitoring of detention ponds 1 and 2, and monitoring wells #DP-4, #P-04-02, and #P-04-04 shall be added to the EMP. The 3 new well clusters proposed in the application shall be installed in locations approved by the Department, and added to the monitoring program for the facility. All landfill underdrain discharge locations shall be added to the monitoring program for the facility, they shall be monitored monthly for the field parameters in Appendix A, Column 1 of Chapter 405 of the Rules, and sampled 3 times per year for the facility's suite of detection parameters at the same time as the other monitoring locations.
- 6 The applicant shall initiate assessment monitoring in accordance with the Rules at monitoring wells MW-204, MW-302, MW-223B, MW-212 and MW-303 during the Spring 2004 sampling event. New wells installed in accordance with Condition #4, above, shall be included in the assessment monitoring program during the Summer 2004 sampling event.
- 7 The applicant shall continue to route the discharge from the leachate pond underdrain into the leachate storage pond until the Department authorizes a resumption of the surface discharge. The leachate pond underdrain water quality shall be sampled weekly throughout the rest of 2004 for field parameters including pH, specific conductivity and temperature, and an analysis of the results shall be included in the 2004 annual report for the facility. The analysis of the results shall include a proposal for future monitoring at this location, and the

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necessary changes to the EMP After review and approval by the Department, the changes shall be incorporated into the EMP and implemented as approved

- 8 The applicant shall construct the sludge mixing test plot in accordance with the proposed plan, as revised in accordance with staff recommendations At least 60 days prior to landfilling of sludge from cells 1 and 2 with other waste outside of the test plot, the applicant shall propose to the Department for review and approval, based on the findings of the test plot program, a ratio of existing and new sludge to incoming waste to be placed in cells 1, 2 and 3, detailed procedures for mixing the waste streams, and an odor control and monitoring plan for sludge excavation and mixing operations
- 9 At least 60 days prior to landfilling of sludge from cells 1 and 2 with other waste outside of the test plot, the applicant shall submit to the Department for review and approval, based on the findings of the test plot program, an updated geotechnical stability analysis and a finalized geotechnical monitoring plan for the landfill
- 10 At least 45 days prior to the commencement of waste placement in cell 3, the applicant shall submit to the Department for review and approval an updated operations manual, including a finalized conceptual cell development plan for the life of the landfill and a detailed cell development plan for the next 2 years of operation The updated operations manual shall address all staff recommendations as agreed to in SME's January 22, 2004 submittal addressing staff memoranda The operations manual shall be updated again following completion of the test plot program and prior to excavation of sludge from cells 1 and 2 All changes to the operations manual for the facility are to be implemented as approved by the Department
- 11 The applicant shall include in each of the facility's annual reports proposed revisions to the operations manual, including an annually updated cell development plan Each year's annual report shall also include an evaluation of the sizing and the installation timing of the active gas extraction system components over the reporting period and an evaluation of the effectiveness of the system based on the quantities and types of wastes projected for the next year

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The operations manual shall be revised as conditions dictate and to comply with any changes in the operating requirements in the Rules

- 12 Prior to the commencement of operations in cell 3, the applicant shall install overhead lights, or another lighting system that identifies the entrance road into the facility, at the entrance to the facility
- 13 The applicant shall obtain prior to construction of the MSE berm, and comply with the standards of during construction, permits-by-rule under 06-096 CMR Chapter 305 4 and 305 9
- 14 At least 60 days prior to the planned commencement of operations in cell 3, the applicant shall submit to the Department for review and approval the following information on the perimeter hydrogen sulfide monitoring program the number and locations of instruments, based on meteorological conditions; system security measures, monitoring program details and responsibilities, and reporting procedures
- 15 At least 6 months prior to the planned commencement of operation of new cells or other structures, the applicant shall submit to the Department for review and approval detailed design packages for each construction activity The detailed design packages shall include a complete set of project specific contract bid documents, including construction drawings, technical specifications, contract administrative documents, construction monitoring and documentation provisions, construction quality assurance plans, erosion and sedimentation control plans, and the following information
  - A For the landfill cells other than cell 3, the perimeter berm, the leachate storage tank and the ancillary structures, the detailed design packages shall also address all staff recommendations regarding the design, the technical specifications, the construction drawings, and the construction quality assurance plan as agreed to in SME's January 22, 2004 responses to the comments provided in 3 initial engineering review memoranda by staff In addition the applicant shall include a demonstration of financial capacity for costs associated with the construction of each cell developed after cell 3 ,

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- B For the active gas extraction system, the detailed design package shall also address staff recommendations regarding the design, the technical specifications, the construction drawings, and the construction quality assurance plan as agreed to in SHA's submittal dated January 21, 2004 and the applicant's letter dated February 4, 2004. The detailed design package for the initial construction of the active gas extraction system shall also include the active gas system operating plan, inclusive of monitoring, record-keeping, and reporting procedures, and the provisions to be implemented to protect and provide safe access to the well-heads if temporary geomembrane tarps are proposed for intermediate cover, and
- C For the phased final cover system, the detailed design package shall include the supporting information required by the applicable provisions of Chapter 401.5 of the Rules, and address the recommendations in staff memoranda as agreed to in SME's submittal dated January 22, 2004 and as responded to in staff memoranda dated January 26, 28 and 30, 2004

If the Rules applicable to any aspect of the design and construction of the vertical increase of the landfill and its ancillary structures change during the development of the landfill, the applicant shall address the new requirements in subsequent submittals

- 16 With regards to the acceptance of MSW for disposal, consistent with its proposal, the applicant
  - A shall not dispose of unprocessed MSW from any source other than bypass from the following sources: PERC incinerator in Orrington and the Maine Energy incinerator in Biddeford, waste delivered under an interruptible contract with PERC, or waste delivered in excess of processing capacity at other MSW incinerators in Maine,
  - B shall not accept waste from an incinerator without verifiable authorization from either the owner/operator of an incinerator or from a regulatory entity with jurisdiction over the incinerator that a bypass has been called



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or, for holders of interruptible contracts, the contracts have been interrupted in accordance with the contractual provisions,

- C shall limit the total amount of (a) unprocessed MSW incinerated at Maine Energy and (b) MSW bypassed from Maine Energy for disposal at the WOTL and at Pine Tree Landfill's Secure III Landfill Expansion to no more than 310,000 tons in any calendar year, unless changes in conditions or circumstances occur that cause the Department to revise this cap, and
  - D shall notify the Department if waste deliveries in excess of processing capacity at MSW incinerators continue from a particular incinerator for a period exceeding 1 week, and provide such information as the Department may request to demonstrate that the deliveries are due to either planned outages or unplanned production problems
- 17 The monthly activity reports submitted to the Department by the applicant shall provide the data needed to determine the quantities of the various waste types, and their sources, delivered to the landfill. The monthly reports on the wastes accepted for disposal at the landfill shall include the amount and source of unprocessed MSW accepted for disposal
  - 18 Prior to accepting for disposal any waste not listed in the application, the applicant shall submit an application for the new waste to the Department for review and approval
  - 19 The applicant shall include in the annual reports for the facility submitted to the Department, in addition to the specific requirements of Chapter 401 4(D) of the Rules, the amount of unprocessed MSW received at WOTL from each of the approved sources
  - 20 If Department staff find that operation of the landfill as proposed unreasonably adversely results in unreasonable odors or fugitive dust emissions, the Department shall require additional odor control measures or fugitive dust control measures at the facility

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- 21 The applicant shall perform 2 additional noise studies in accordance with the provisions of the Rules one within the first month of operation of cell 3, and the other within the first month of operation of cell 9 The results of each of the noise studies shall be submitted to the Department for its review and comment within 2 weeks of completion If the actual noise levels are above the limits prescribed in the Rules, additional noise measures shall be implemented to meet the requirements of the Rules within 1 month of the submittal of the noise study
- 22 The applicant shall conduct a future visual analysis, performed when the final elevation of the landfill reaches 330 feet, and demonstrate that the results agree with the projections provided in the application If that demonstration cannot be made, the applicant shall propose alternative mechanisms for meeting the visual impact standards of the Rules within 1 month of the date of the visual analysis
- 23 The applicant shall negotiate in good faith with the Route 43 landowner for permission to plant a tree screen in the location identified in the visual impact assessment
- 24 The applicant shall submit the detailed construction plans for the placement of phased final cover to the Department for its review and approval at least 90 days prior to each application of final cover In addition, the applicant shall submit to the Department for its review and approval a final closure plan for the landfill, prepared in accordance with the Rules in effect at that time, and complete final closure of the landfill in accordance with the approved final closure plan The final closure plan shall include a post-closure monitoring and maintenance plan covering a period of at least 30 years following closure The post-closure monitoring and maintenance plan shall be revised throughout the post-closure period to comply with changes in site conditions or any changes in

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the post-closure monitoring and maintenance requirements of the Rules Post-closure monitoring and maintenance shall continue until the Department approves its cessation

DONE AND DATED AT AUGUSTA, MAINE THIS 9<sup>th</sup> DAY  
 OF April, 2004

DEPARTMENT OF ENVIRONMENTAL PROTECTION

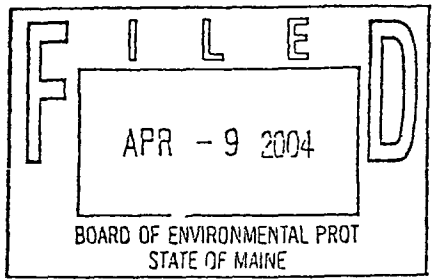
BY Dawn R Gallagher  
 Dawn R Gallagher, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application October 30, 2003  
 Date application accepted for processing November 21, 2003

Date filed with Board of Environmental Protection

XCD51106/cwd



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Appendix A

STANDARD CONDITIONS TO ALL SOLID WASTE FACILITY LICENSES

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORI CRITERIA FOR APPROVAL. VIOLATIONS OF THE CONDITIONS UNDER WHICH A LICENSE IS ISSUED SHALL CONSTITUTE A VIOLATION OF THAT LICENSE, AGAINST WHICH ENFORCEMENT ACTION MAY BE TAKEN, INCLUDING REVOCATION.

- 1 Approval of Variations from Plans The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed by the licensee. Any consequential variation from these plans, proposals and supporting documents is subject to review and approval prior to implementation.
- 2 Compliance with All Applicable Laws The licensee shall secure and comply with all applicable federal, state and local licenses, permits, authorizations, conditions, agreements and orders prior to or during construction and operation as appropriate.
- 3 Compliance with All Terms and Conditions of Approval The licensee shall submit all reports and information requested by the Department demonstrating that the licensee has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- 4 Transfer of License The licensee may not transfer the solid waste facility license or any portion thereof without approval of the Department.
- 5 Initiation of Construction or Development Within Two Years If the construction or operation of the solid waste facility is not begun within two years of issuance or within 2 years after any administrative and judicial appeals have been resolved, the license lapses and the licensee must reapply to the Department for a new license unless otherwise approved by the Department.
- 6 Approval Included in Contract Bids A copy of the approval must be included in or attached to all contract bid specifications for the solid waste facility.
- 7 Approval Shown to Contractors Contractors must be shown the license by the licensee before commencing work on the solid waste facility.
- 8 Background of key individuals A licensee may not knowingly hire as an officer, director or key solid waste facility employee or knowingly acquire an equity interest or debt interest in any person convicted of a felony or found to have violated a State or federal environmental law or rule without first obtaining the approval of the Department.
- 9 Fees The licensee must comply with annual license and annual reporting fee requirements of the Department's rules.

**EXHIBIT 3**

**TESTIMONY OF  
GEORGE MACDONALD, MANAGER**

**WASTE MANAGEMENT AND RECYCLING PROGRAM  
MAINE STATE PLANNING OFFICE**

**SPEAKING IN SUPPORT OF LD 1626**

**“Resolve, To Authorize the State to Purchase a Landfill in the City of Old Town”**

**HEARING: June 3, 2003**

**Honorable Senator Martin, Honorable Representative Koffman, Distinguished  
Members of the Natural Resources Committee:**

I am George MacDonald, Manager of the Waste Management & Recycling Program at the State Planning Office. I am here today to testify in support of LD 1626.

State law directs the State Planning Office to plan for the development of disposal facilities sufficient to meet the needs of the State, as well as to recommend such facilities' development when four years or fewer of disposal capacity remains within the State. That policy guided the State's acquisition of the landfill site in T 2 R 8, commonly referred to as 'Carpenter Ridge', and that policy remains in effect today.

What is now before us is the unique opportunity to address an array of needs, locally and statewide. The proposed purchase of this operating landfill is part of the ongoing discussions with the current owners of the paper mill in Old Town, the Georgia-Pacific Corporation. Significantly, however, the purchase of this operating landfill not only will assist in these discussions with Georgia-Pacific, but also will provide the State with a well-qualified landfill site – one that is well situated and in compliance with rules and regulations promulgated by the Maine Department of Environmental Protection that are applicable to landfill operations.

During the current Legislative session, this Committee supported a bill, L.D. 803, which directed the State Planning Office to search for additional disposal capacity within the State, and then report our search progress and recommendations back to you within six months. Even though that bill has died, perhaps your commitment to the underlying goal and concept of that legislation can support the Resolve before you.

The intent of this Office is for the State of Maine to own this landfill, and, through the use of contracts:

- Ensure that the landfill is in full compliance with DEP rules and regulations, pertaining to both siting and operations of landfills;
- Provide long-term disposal options for the Old Town paper mill and entities with which that mill has contracts, for the current type and volume of waste being filled at the site;
- Engage the services of a qualified landfill operator to manage the site;
- Enter into a "Host Community Benefit" agreement with the City of Old Town;
- Recognize and address market power concerns related to the operation of the landfill;
- Support the waste management hierarchy in the State, to the greatest degree possible;
- Permit the delivery of other acceptable wastes to the site; and,
- Structure this arrangement to reduce the state's liability, financially and environmentally, to the greatest extent possible.

Our hope is that, with your support, we will be able to achieve this acquisition.

At this point, others and I are willing to try to answer questions you may have about this opportunity the State now has before it.

Thank you.

**EXHIBIT 4**



# casella

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Waste Systems, Inc.

## **PROPOSAL: STATE PLANNING OFFICE WM&R #1 CONTRACT FOR LANDFILL OPERATION**

### **Submitted to:**

Division of Purchases  
Burton M. Cross Building, 4<sup>th</sup> Floor  
111 Sewall Street  
9 State House Station  
Augusta, ME 04333-0009

Attn: George Mac Donald

### **Submitted by:**

New England Waste Services of ME, Inc.  
C/O Casella Waste Systems, Inc.  
110 Main Street, Suite 1308  
Saco, Maine 04072  
Tel: (207) 286-1668; Fax: (207) 286-1696  
Contact: Mr. James Hiltner, Regional Vice President

**July 9, 2003**

- iv. Property Tax Reimbursement Program, similar to what NEWSM has established in Hampden, for the two properties located at the access road entrance to the West Old Town facility.
- v. Under a 15 year operating services Agreement, \$.75 per ton of non-mill waste disposed in the landfill.
- vi. Under a 30 year operating services Agreement, \$1.50 per ton of non-mill waste disposed in the landfill and extension of sewer line from the Old Town sewer system to the West Old Town Landfill.

The cost of the above host community benefits is included in NEWSM's financial bid. Any host community benefits which are negotiated with the City in excess of these benefits shall be a surcharge on the tipping fees presented in Section 5.a.

**10. Rights and Duties of the Parties to Any Contract Entered Into Pursuant to the RFP Shall Be Subject to All Applicable Laws and Legal Requirements**

NEWSM understands that any obligations of the State under the Contract that require the expenditure of funds are subject to legislative appropriations as provided by law.

**B. Anticipated categories, sources, and amounts of solid wastes**

**Table 5**

<u>Category</u>	<u>Source</u>	<u>Estimated amount (yr.)</u>
Mill waste	Georgia-Pacific	50,000
Biomass ash	Lincoln Pulp and Paper	6,000
MSW incinerator ash	PERC <sup>(1)</sup> , Maine Energy <sup>(2)</sup>	100,000
Front End Process Res. <sup>(1)</sup>	PERC, Maine Energy	90,000
Non-processibles <sup>(1)</sup>	PERC, Maine Energy	16,000
Construction and demo	State of Maine	100,000
Treatment plant sludge	State of Maine	6,000
Municipal Solid Waste <sup>(1)</sup> (including bypass)	PERC, Maine Energy	15,000 – 167,000
Miscellaneous special waste	State of Maine	23,000
Non-contracted Municipal solid waste <sup>(3)</sup>	State of Maine	Up to 200,000
<b>TOTAL</b>		<b>400,000 to 600,000 tons per year</b>

- (1) under contract to NEWSM. NEWSM has entered into an agreement with PEC to extend the current PERC residue disposal agreement to 2018 and to specifically reserve capacity at the West Old Town Landfill for this material.
- (2) available to NEWSM in 2007  
Since it is impossible to predict the future of PERC and Maine Energy, these volumes could change over time. It is anticipated, however, that should they close, and other facilities higher in the state Hierarchy do not dispose of the waste now being sent to these facilities, the West Old Town Landfill will attract a significant portion of the waste now being disposed at these facilities.
- (3) Incorporated in NEWSM's 30-year term proposal is a forward planning assumption to accept up to 200,000 tons of municipal solid waste that may require disposal because the current disposal facility is no longer available or financially viable, and is not disposed of at a facility higher in the State Hierarchy. This MSW would be accepted by contract, with the written permission of the solid waste's generator or responsible party, on a first come-first served basis. This provision is not intended to, and will not be used to disrupt or destabilize the contractual arrangements, service areas, or waste stream supplies of any current solid waste disposal facility. However, the West Old Town landfill will be operated to help address future disposal needs of the state as the current providers of disposal are phased out.

Table 6 on the following page illustrates the implementation schedule for NEWSM's proposal.

**EXHIBIT 5**

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Solid Waste Program, Attn: Vicky Bryant  
7 State House Station  
Augusta, Maine 04333-0017  
Telephone: (207) 287-2651

**FOR DEP USE ONLY**

ATS ID: _____	Seq: _____	DEP ID: _____	Received by DEP: _____
Bureau: <u>S</u>	Type of Application: _____	Activity: <u>T</u>	Fees Paid: _____
Project Analyst: _____			Check No.: _____

**LICENSE TRANSFER APPLICATION FOR SOLID WASTE FACILITY**

This form shall be used to request approval to transfer a solid waste facility license, pursuant to 38 MRSA, Section 1301 et seq., and Maine's Solid Waste Management Regulations.

**PLEASE TYPE OR PRINT**

Existing DEP Permit Number: #S-20700-7A-A-N, L-019015-31, W-007975-63-A-N

Current Permittee name: Fort James Operating Company Tel. No. 827-7711

Address: One Portland Street, Old Town, Maine 04468

Name of Contact or Agent: Michael Curtis Tel. No. 827-0671

Address: Same as above

**Applicant Address Information**

Applicant Name: State of Maine, State Planning Office Agent/Consultant Name: \_\_\_\_\_

Telephone: 287-6077 Telephone: \_\_\_\_\_

Mailing Address: 38 State House Station Mailing Address: \_\_\_\_\_

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

Town: Augusta State: ME Zip: 04333 Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Address: **Billing**  
Name: State of Maine, State Planning Office

Mailing Address: 38 State House Station

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

Town: Augusta State: ME Zip: 04333

**Location of Activity**

Name of Project: West Old Town Landfill

Address: Route 16

Municipality or Township: Old Town County: Penobscot

**PLEASE SEE PAGE 2 - SIGNATURES REQUIRED**

### SIGNATURE OF PERMITTEE

By signing this application, the current permittee certifies that he or she agrees to the transfer of his or her permit to the applicant named on this form.

DATE: 9/25/03

SIGNATURE:   
(Current Permittee)

PRINTED OR TYPED NAME: Michael Curtis

TITLE: Environmental Coordinator, Fort James Operating Company

### SIGNATURE OF APPLICANT

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

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

I also certify that I will comply with all terms and conditions of the applicable license and that I will satisfy all statutory or regulatory criteria that are applicable to this facility.

DATE: 9/24/03

NAME: Martha E. Freeman  
(Applicant)

TITLE: Director, State Planning Office

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

**PLEASE SEE ATTACHED FEE SCHEDULE TO DETERMINE THE APPLICATION FEE TO TRANSFER A SOLID WASTE FACILITY LICENSE**

**EXHIBIT 6**  
**Solid Waste Capacity Needs**

The West Old Town Landfill is currently a generator-owned landfill which accepts for disposal solid waste, including residuals, from the Fort James' Old Town Mill and boiler ash from the Lincoln Pulp & Paper Mill in Lincoln. After acquisition of the Landfill by the State, the Landfill will continue to meet these disposal capacity needs. In addition, assuming approvals are obtained from the Department for additional waste streams and increased disposal capacity, the Landfill will be operated to accept the following waste streams:

- Construction/demolition debris
- Municipal solid waste
- Waste-to-energy bottom ash/fly ash
- Oversized bulky waste
- Front-end process residue
- Other solid waste approved for disposal at Pine Tree Landfill

No out-of-state waste will be disposed at the Landfill. Construction and demolition debris will be required to be free of putrescible waste. Moreover, waste currently under contract to be delivered to another disposal facility or processing facility will not be accepted or disposed of at the Landfill, without the written permission of that solid waste's generator/responsible party. It is not the intention of the State, Casella, or any of its subsidiaries to disrupt or destabilize existing contractual arrangements, service areas, or the waste stream supplies of any current solid waste disposal facility. The Landfill will be operated, however, to help address existing and future disposal needs of the region and the State.

**EXHIBIT 6**





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

DEPARTMENT ORDER

IN THE MATTER OF

STATE OF MAINE, STATE PLANNING OFFICE )  
PURCHASE OF WEST OLD TOWN LANDFILL ) LICENSE  
FROM FORT JAMES OPERATING COMPANY ) TRANSFERS  
OLD TOWN, PENOBSBOT COUNTY, MAINE )  
#S-020700-WR-M-T )  
#L-019015-TH-C-T )  
(APPROVAL WITH CONDITIONS) )

Pursuant to the provisions of Resolve 2003, Chapter 93; 38 M.R.S.A. Sections 480-A et seq. and 1301 et seq., and the rules promulgated pursuant to these laws; 36 M.R.S.A. Sections 655(1)(N), 656(1)(E) and 1760(29); Section 401 of the Federal Water Pollution Control Act; and the *Rules Concerning the Processing of Applications* 06-096 CMR 2 (April 1, 2003), the Department of Environmental Protection ("Department") has considered the application of the State of Maine, State Planning Office ("SPO"), with its supportive data, agency review comments, and other related materials on file, and FINDS THE FOLLOWING FACTS:

1. APPLICATION SUMMARY

- A. Application: SPO is applying for transfer of all licenses, certifications, condition compliance orders and pending applications held or submitted by Fort James Operating Company associated with the West Old Town Landfill, located off Route 16 in Old Town, Maine.
- B. History: The West Old Town Landfill ("WOTL" or "landfill") was licensed by the Board of Environmental Protection on July 28, 1993 as a 15-cell generator-owned landfill for the disposal of pulp and papermaking residuals generated at the Fort James Operating Company's mill in Old Town. The licensed footprint of the WOTL, including the accessory structures, is approximately 68 acres; it sits on a parcel of land approximately 780 acres in size. The landfill began operation in December 1996, and cells 1 and 2 have been developed. In addition to the wastes from the Old Town Mill, bottom ash from the Lincoln Pulp and Paper Mill in Lincoln, Maine and burn pile ash from the City of Old Town's transfer station are licensed for disposal in the landfill. Fort James Operating Company is a wholly-owned subsidiary of Georgia-Pacific Corporation.

STATE OF MAINE, STATE PLANNING OFFICE	5	
PURCHASE OF WEST OLD TOWN LANDFILL	)	LICENSE
FROM FORT JAMES OPERATING COMPANY	)	TRANSFERS
OLD TOWN, PENOBSCOT COUNTY, MAINE	)	
#S-020700-WR-M-T	)	
#L-019015-TH-C-T	)	
(APPROVAL WITH CONDITIONS)	)	

It also describes the solid waste expertise of Casella and its subsidiaries, and its consultants and legal counsel. The application indicates the personnel currently responsible for operations at the Pine Tree Landfill in Hampden, Maine will be responsible for fulfilling the operating services contract at this landfill; the Pine Tree Landfill is consistently operated in substantial compliance with its licenses and the Rules. The Department finds that the combination of SPO and NEWSME Landfill Operations personnel and the consultants retained by Casella have the technical ability to develop the project in a manner consistent with State standards and laws. The Department further finds that, if Casella or a subsidiary of Casella is replaced as the operator, SPO must submit information on the technical ability of the new operator to the Department for its review and approval prior to finalization of an operating services agreement with a new operator.

- E. **Public Benefit:** The landfill was licensed as a generator-owned landfill for the disposal of pulp and paper mill wastes from the Old Town Mill. It has also accepted boiler ash from the Lincoln Pulp and Paper Mill in Lincoln, Maine, which is used to bulk the Fort James sludge, and burn pile ash from the City of Old Town transfer station; these 2 wastes have comprised less than 15% of the total waste disposed on an annual basis. These wastes are proposed to continue to be disposed after the State assumes ownership of the landfill for a period of at least 30 years. In addition, SPO will apply to the Department for approval to accept construction and demolition debris; municipal solid waste; municipal-solid waste incinerator ash, oversized bulky waste, front-end process residue, and other solid wastes currently approved for disposal at Casella's Pine Tree Landfill in Hampden, Maine; it will also apply to increase the capacity of the landfill. According to the RFP and Casella's response to the RFP, the capacity of the landfill is proposed to be increased in 2 parts: a vertical increase in the height of the currently licensed landfill footprint through an amendment application expected to be submitted to the Department in

STATE OF MAINE, STATE PLANNING OFFICE	6	
PURCHASE OF WEST OLD TOWN LANDFILL	)	LICENSE
FROM FORT JAMES OPERATING COMPANY	)	TRANSFERS
OLD TOWN, PENOBSCOT COUNTY, MAINE	)	
#S-020700-WR-M-T	)	
#L-019015-TH-C-T	)	
(APPROVAL WITH CONDITIONS)	)	

2003; and a horizontal expansion of the landfill expected to be submitted to the Department within the next 5 years. A condition of the operating services agreement between SPO and Casella will stipulate that no waste generated outside Maine will be disposed in the landfill. In addition, the operating services agreement will also specify that no waste currently under contract to be delivered to another disposal facility or processing facility will be accepted or disposed of at the landfill, without the written permission of that solid waste's generator or responsible party. The Department finds that the landfill will be operated to help address immediate, short-term and long-term capacity needs of the region and the State.

- F. Civil and Criminal Disclosure: SPO provided civil and criminal disclosure statements prepared in accordance with Chapter 400.12 of the Rules for SPO and Casella, including its subsidiaries and the individuals required to disclose under that regulation. The Department finds that SPO and Casella have filed accurate Criminal/Civil Records, prepared in accordance with Chapter 400.12 of the Rules. The Department also finds that there is no reason to withhold this transfer due to the civil or criminal record of any of the parties. The Department further finds that if a new operator is chosen for the landfill SPO will review the operator's civil and criminal record prior to finalization of an operating services agreement with the new operator, and provide that information as part of the demonstration of technical ability required by Finding of Fact #2:D, above.

BASED on the above Findings of Fact, the Department makes the following CONCLUSIONS:

1. SPO has provided adequate evidence that it has title, right or interest in the West Old Town Landfill facility, provided a copy of the signed Purchase and Sale Agreement, and a copy of the recorded deed for the property, are provided to the Department within 30 days of the finalization and recording of each.

STATE OF MAINE, STATE PLANNING OFFICE )  
PURCHASE OF WEST OLD TOWN LANDFILL )  
FROM FORT JAMES OPERATING COMPANY )  
OLD TOWN, PENOBSCOT COUNTY, MAINE )  
#S-020700-WR-M-T )  
#L-019015-TH-C-T )  
(APPROVAL WITH CONDITIONS) )

9  
) LICENSE  
) TRANSFERS  
)  
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6. Casella or a subsidiary of Casella will operate the landfill. If Casella or a subsidiary of Casella is replaced as the operator, prior to finalization of a new operating services agreement SPO must submit to the Department for its review and approval information on the financial capacity of the new operator, information on the financial assurance to be provided by the new operator consistent with Chapter 400.11 of the Rules or successor regulations in effect at that time, and information on the technical ability of the new operator.

DONE AND DATED AT AUGUSTA, MAINE THIS 21<sup>ST</sup> DAY  
OF OCTOBER, 2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

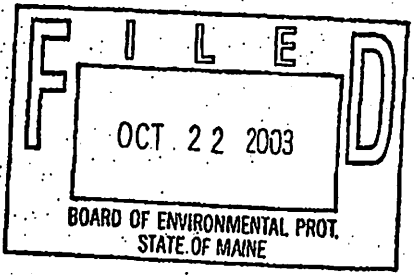
BY: *Dawn R. Gallagher* *FOTR*  
Dawn R. Gallagher, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

Date of initial receipt of application: September 26, 2003

Date application accepted for processing: September 26, 2003

Date filed with Board of Environmental Protection:



**EXHIBIT 7**

**WEST OLD TOWN LANDFILL  
LICENSE AMENDMENT APPLICATION  
VERTICAL INCREASE &  
CHANGE IN LANDFILL OPERATIONS**

**STATE PLANNING OFFICE, STATE OF  
MAINE, AUGUSTA, MAINE  
NEWSME LANDFILL OPERATIONS LLC  
SACO, MAINE**

**VOLUME I**

**OCTOBER 2003**

*SME*

*Sevee & Maher Engineers, Inc.*  
Waste Management and Hydrogeologic Consultants  
Cumberland Center, Maine



The remaining sections of this Application describe the modifications that will be implemented by NEWSME Operations when site operation changes due to the revision in landfill design for the height increase and the type of solid wastes accepted for disposal at the facility.

## 6.2 Acceptable Solid Wastes and Waste Characterization

NEWSME Operations is proposing to accept the same waste streams at the West Old Town Landfill that are currently accepted at PTL, in addition to the waste materials currently accepted at the West Old Town facility. Solid wastes generated from out-of-state sources will not be accepted at the facility. All acceptable wastes will be commingled within the operational cells. The waste proposed for disposal is compatible with the existing and proposed liner system because the liner system uses the same materials that are currently being used at PTL. The waste streams are compatible with each other as demonstrated by the commingling of these waste streams at the PTL site. The waste streams and anticipated yearly quantities, including the current waste streams are as follows:

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

Miscellaneous non-hazardous waste streams would include, but not be limited to, the following:

Wood & Biomass Boiler Ashes	Asbestos (non-friable)
Fossil Fuel Boiler Ashes	Catch Basin Grit
Clean Wood Open Burn Ashes	Air & Water Filtration Media
Municipal Solid Waste Incinerator Ash	Pigeon Waste
Biomedical Incinerator Ash	KTI Fines
PCB Contaminated Soils & Debris	Tire Shredder Waste
Gasoline Contaminated Soil & Debris	Wood Chips

Waste Oil Contaminated Soil & Debris	Railroad Ties & Treated Wood
Virgin Petroleum Contaminated Soil & Debris	Old Town Mill Chemical Wastes
Lead and/or Metals Impacted Soils	Old Town Mill Wood Waste
Pulp & Paper Mill Sludges	Old Town Mill WWTP Sludge
Commercial & Industrial Laundry Sludges	Lincoln Pulp & Paper Ash
Filter Press Cake & Collagen Scrapings	Sandblast Grit
Compost & Sludges Approved for Land Utilization	Boiler Soot
Non-Hazardous Chemical Related Products	Metal Grinding Wastes
Leather Manufacturing & Finishing Wastes	Dredged Spoils
Water Treatment Plant Related Sludge & Cake	Urban Fill-Type Soils

In addition to the above blanket waste streams, NEWSME Operations proposes to accept individually permitted wastes currently approved at Pine Tree Landfill. A separate listing that identifies the generator, type of waste, and PTL permit number may be found in Appendix K of this Application.

The procedures for characterizing, (i.e., testing) and accepting waste streams at the Old Town landfill are identified in the facility Solid Waste Characterization Plan included as Appendix K of this Application. The plan includes acceptance criteria for both individual permits and blanket permit approvals of wastes. All records of waste acceptance data will be kept on file at the facility and made available for viewing during normal business hours. Additionally, waste activity reports will be submitted to the MDEP on a monthly basis that provide pertinent data regarding all waste deliveries to the facility for the previous month. The data will include, at a minimum, the following information:

- Customer name
- Generator name
- Transporter name
- Date of delivery
- Quantity delivered in tons
- Approval (manifest) number
- Ticket number



**EXHIBIT 8**

**2005  
ANNUAL REPORT**

**JUNIPER RIDGE  
LANDFILL  
OLD TOWN, MAINE**

**MDEP LIC. #S-020700-7A-A-N and  
Amendment #S-020700-WD-N-A**

**APRIL 30 2006**

**3.0 SUMMARY OF OPERATIONS**

**3.1 Types of Wastes Received At JRL During 2005**

Between January 1, 2005 and December 31, 2005, JRL received a total of 252,314 tons of waste as compared to 53,905 tons in report year 2004. A breakdown of the various waste types received during report year 2005 may be found in Table 3-1 below:

**TABLE 3-1  
SUMMARY OF WASTES ACCEPTED AT JUNIPER RIDGE LANDFILL  
REPORT YEAR 2005**

	TONS	%
Front-End Process Residue (FEPR)	45,644	18.09%
Over-Sized Bulky Wastes (OBW)	12,271	4.86%
Ash (from all sources)	58,269	23.09%
Construction/Demolition Debris CDD)	76,088	30.16%
Municipal Solid Waste (MSW) Bypass	2,035	0.81%
Lime/Slaker grit	6,936	2.75%
Oily Debris	48	0.02%
Water/Wastewater Treatment Sludge	35,336	14.01%
Wood/Bark/Knots/Chips	7,504	2.97%
Fines	7,931	3.14%
Grit Screenings	204	0.08%
Spoiled Food	48	0.02%
<b>Totals For Report Year:</b>	<b>252,314</b>	<b>100.00%</b>
<b>Non-Special Waste Totals: (CDD, MSW, Misc.Non-SW)</b>	<b>78,375</b>	<b>31.06%</b>

As seen in Table 3-1 above, the three major waste types received at the JRL facility during report year 2005 included construction and demolition debris, ash, and front-end process residue at

**EXHIBIT 9**

**Response to Comments Summary**  
**West Old Town Landfill License Amendment Application**

**Prepared by the Department of Environmental Protection**  
**April 2004**

- Comment:** Since the same owner also operates the Hampden Landfill, if a waste stream is approved for disposal at the Hampden Landfill, does that mean it is automatically approved for disposal at the WOTL?
- Response:** *Acceptable waste at WOTL will not be defined by incorporation. No waste streams will be added to the list in the application without a licensing action specific to the WOTL. The operations manual for the facility will contain a waste characterization and acceptance plan that will be updated on an annual basis to reflect any additional waste streams the operator has been approved to accept. If it were the intent of the operator to propose a change to the waste streams for both sites, separate requests would need to be submitted for MDEP approval.*
- Comment:** How is the ash treated at the incinerator? What is the consistency of the ash prior to transport? How will it be transported? Does it get a slurry on top during transport?
- Response:** *Incinerator ash is quenched with water prior to transport. Enough water is added to cool and dampen the ash only, no slurry is formed on the ash. The ash is transported in a covered tractor trailer truck to the site.*
- Comment:** If low-level nuclear waste is reclassified as a special waste (fitting the definition of special waste under the Regulations), can it be accepted for disposal at West Old Town?
- Response:** *If low-level nuclear waste is reclassified as a special waste and fits the definition of a special waste under MDEP regulations it could be disposed of at the West Old Town Landfill only if the applicant were to request a change in waste stream and the request is approved by the MDEP.*
- Comment:** Will hazardous waste be brought in for disposal at this landfill?
- Response:** *No wastes regulated as hazardous waste under 06-096 CMR Chapter 850 will be allowed in the WOTL.*
- Comment:** Will the WOTL take MSW if an incinerator or an existing MSW landfill closes?
- Response:** *No existing MSW landfills or incinerators are expected to close in the foreseeable future. If one did, the MDEP expects SPO may wish to take the MSW to WOTL because one of the stated purposes of the WOTL is to provide capacity for Maine wastes. Any out of state wastes that were being delivered to a facility that closed would not be routed to WOTL.*
- Comment:** All raw MSW should be landfilled at Pine Tree Landfill until it is at capacity, in order to lessen the odor and traffic impacts of the WOTL.

**EXHIBIT 10**



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

DEPARTMENT ORDER

IN THE MATTER OF

STATE OF MAINE, ACTING THROUGH THE	)	PUBLIC BENEFIT
STATE PLANNING OFFICE	)	DETERMINATION
OLD TOWN, PENOBSBOT COUNTY, MAINE	)	
JUNIPER RIDGE LANDFILL EXPANSION	)	
#S-020700-W5-AU-N	)	PARTIAL APPROVAL
(APPROVAL WITH CONDITIONS)	)	

Pursuant to the provisions of the *Maine Hazardous Waste, Septage and Solid Waste Management Act*, 38 M.R.S.A. §§1301 to 1319-Y; and the *Solid Waste Management Rules: General Provisions*, 06-096 CMR 400 (last amended July 20, 2010) and *Landfill Siting, Design and Operation*, 06-096 CMR 401 (last amended July 20, 2010), the Commissioner of the Department of Environmental Protection ("Department") has considered the application of THE STATE OF MAINE, ACTING THROUGH THE STATE PLANNING OFFICE ("SPO") with its supportive data, staff review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

I. APPLICATION SUMMARY

- A. Application: The applicant has applied for a determination of public benefit for the proposed Juniper Ridge Landfill Expansion ("the expansion"), located in Old Town, Maine. The expansion is proposed to accept the same waste types as are currently disposed in the Juniper Ridge Landfill: special wastes, construction and demolition debris ("CDD"), miscellaneous non-special wastes, and municipal solid waste ("MSW") bypass from Maine's 4 MSW incinerators. The expansion is proposed to provide 21.9 million cubic yards of additional capacity at the facility. SPO states that the expansion will provide capacity for approximately 20 years based on disposal needs projected in the latest *State of Maine Waste Management and Recycling Plan* dated January 2009 ("State Plan") and the *Solid Waste Generation and Disposal Capacity Report for Calendar Year 2009*, dated January 2011 ("Capacity Report"), both prepared by SPO. To allow for the Department's periodic review of an affirmative determination of public benefit, the applicant divided the proposed expansion into 3 phases.
- B. History: On October 21, 2003, the Department issued conditional approval for the transfer of licenses for the West Old Town Landfill, developed and operated by Georgia-Pacific Corporation, to the SPO (Department licenses #S-020700-



STATE OF MAINE, ACTING THROUGH THE	30	PUBLIC BENEFIT
STATE PLANNING OFFICE	)	DETERMINATION
OLD TOWN, PENOBSCOT COUNTY, MAINE	)	
JUNIPER RIDGE LANDFILL EXPANSION	)	
#S-020700-W5-AU-N	)	PARTIAL APPROVAL
(APPROVAL WITH CONDITIONS)	)	

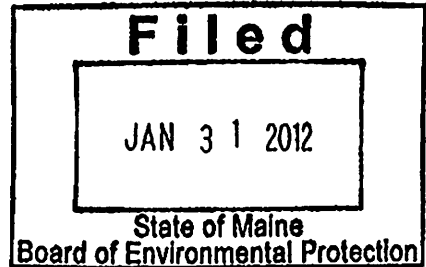
5. No more than 25,000 tons of MSW bypass from Maine Energy shall be delivered to the 9.35 million cubic yard expansion in any calendar year, unless otherwise authorized by specific conditions in a Department license for the 9.35 million cubic yards expansion.

DONE AND DATED AT AUGUSTA, MAINE, THIS 31<sup>ST</sup> DAY

OF January, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Patricia W. Aho  
 Patricia W. Aho, Commissioner



PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

Date of initial receipt of application: September 15, 2011

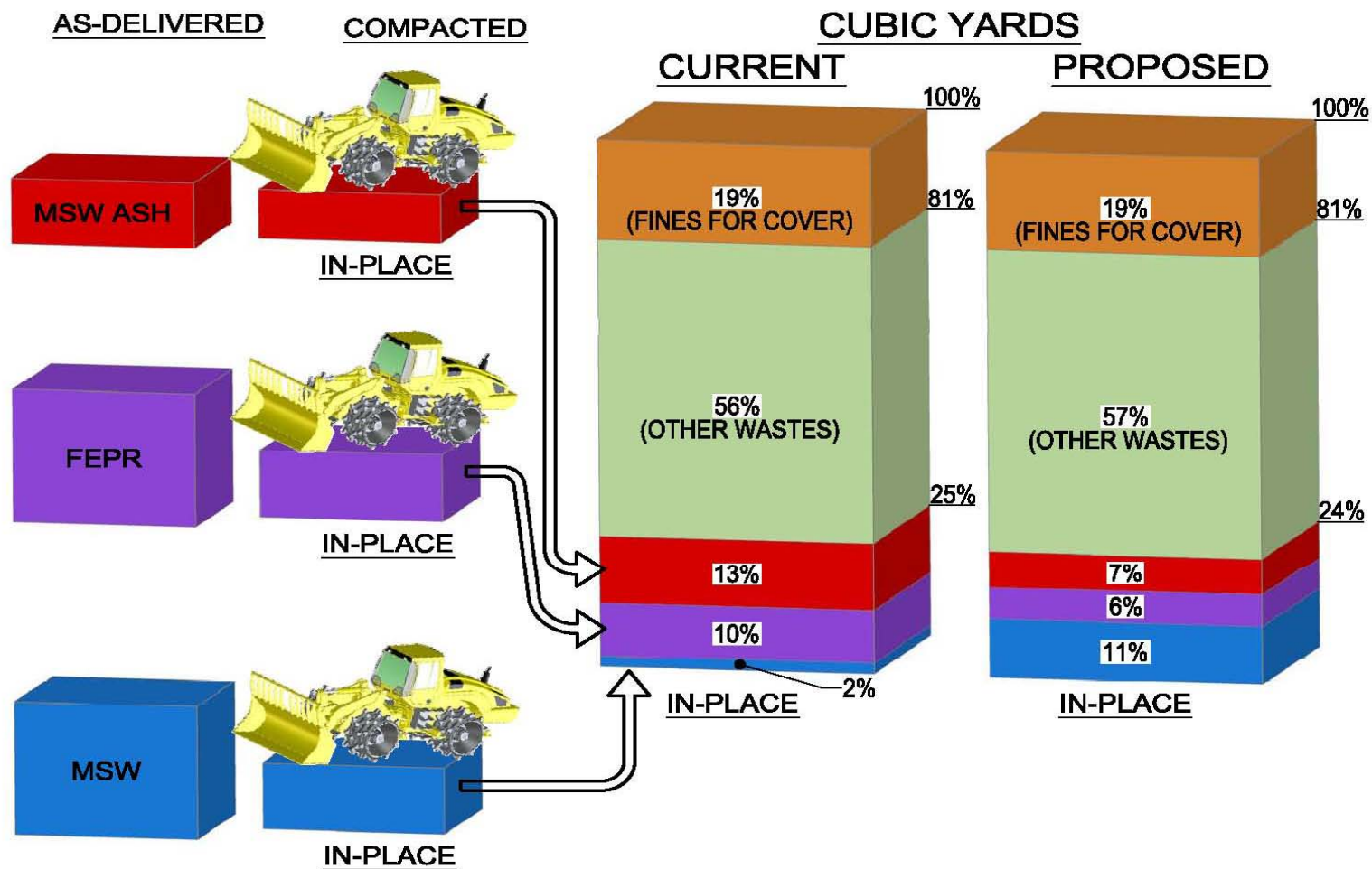
Date of application acceptance: September 23, 2011

Date filed with Board of Environmental Protection:

XCD73907/cwd

**EXHIBIT 11**

# Landfill Capacity Consumption (slight reduction)



The remaining permitted landfill life at the end of 2011 is estimated to be 7.6 years. This means the existing capacity would last until the middle of 2019, requiring new landfill capacity to be built in 2018.

# Landfill Capacity Consumption (Revised to reflect 30,000 of MSW sent to PERC.)

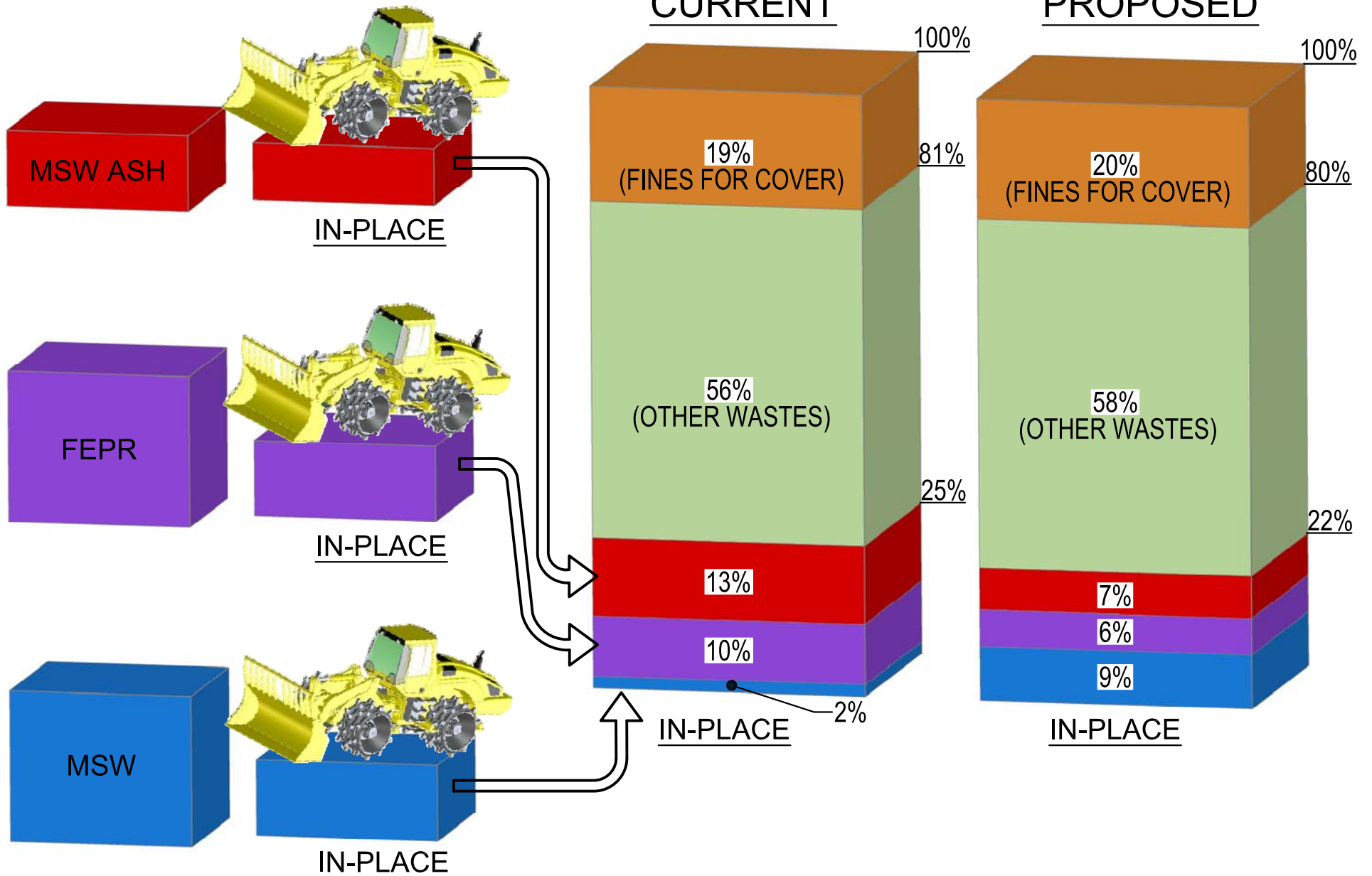
AS-DELIVERED

COMPACTED

CUBIC YARDS

CURRENT

PROPOSED



The remaining permitted landfill life at the end of 2011 is estimated to be 7.9 years. This means the existing capacity would last until the Fall of 2019, requiring new landfill capacity to be built in 2018.