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:

1. 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

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

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

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

meet the standard for a public hearing in 06-096 CMR Chapter 2.7. 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).

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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

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

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

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

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

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

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

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

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.

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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STATE PLANNING OFFICE	)	
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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 $3x10^{-6}$ 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 $3x10^{-6}$ 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

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

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 $1x10^{-7}$ cm/sec. The liner system will be underlain by an additional foot of compacted clay with a maximum hydraulic conductivity of $1x10^{-7}$ 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

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.

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

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

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.

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

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

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

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

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

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,

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

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

contaminated with non-hazardous process chemicals, virgin oily contaminated debris, sand from sandfilters, and non-hazardous sandblast grit), 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

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

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

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

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 perimeter 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.

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.

STATE OF MAINE, ACTING THROUGH THE	43	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

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

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 commentors requested that the Department require that all haulers use I-95 to access the facility; other commentors 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

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

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.

STATE OF MAINE, ACTING THROUGH THE	47	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

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.

STATE OF MAINE, ACTING THROUGH THE	48	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

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.

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

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:

STATE OF MAINE, ACTING THROUGH THE STATE PLANNING OFFICE OLD TOWN, PENOBSCOT COUNTY, MAINE VERTICAL INCREASE and ADDITIONAL WASTE STREAMS #S-020700-WD-N-A (APPROVAL WITH CONDITIONS)	51))))))	SOLID WASTE ORDER AMENDMENT

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

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

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

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

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.

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.;

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

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 9TH 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:

FILED
APR - 9 2004
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

XCD51106/cwd

DEP FACT SHEET

Appealing a Commissioner's Licensing Decision

issued: April 2003 contact: (207) 287-2811

SUMMARY

Two methods are available to an aggrieved person for appealing a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner -- in an administrative process before the Board of Environmental Protection ("Board") or a judicial process before Maine's Superior Court. This FACT SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, will assist aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

Maine Revised Statutes Annotated (M.R.S.A.) Title 38, section 341-D(4) and DEP Rule Chapter 2, section 24(B).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written notice of appeal within 30 calendar days of the date on which the Commissioner's decision was filed with the Board. An appeal filed after 30 calendar days will be dismissed.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable if followed by the original document within 5 working days. To be deemed received on a particular day, appeal documents must be received by 5:00p.m., as determined by received time stamp on the document or fax. The person appealing a licensing decision must also send the DEP's Commissioner and the applicant a copy of the documents. All the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

An appeal must contain the following information:

1. *Evidence demonstrating that the appellant is an aggrieved person.* In order to bring an appeal, the appellant must demonstrate that the appellant may be particularly injured by the project.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or t to changes in specific permit conditions.

tters to be contested. As part of the appeal, the Board will limit its consideration to those ecifically raised in the written notice of appeal.

6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.

7. *Supplemental evidence to be offered.* The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Any proposed supplemental evidence must be filed with the appeal. Other specific requirements for supplemental evidence are found in DEP Rule Chapter 2, section 24(B).

Other Considerations in Appealing a Decision to the Board

1. *Be familiar with all relevant material in the DEP record.* A license file is public information made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.

2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.

3. *The filing of an appeal does not operate as a stay to any decision.* If an applicant proceeds with a project pending the outcome of an appeal, the applicant runs the risk of the decision being reversed or modified as a result of the appeal.

What to Expect Once You File a Timely Appeal with the Board

The Board will formally acknowledge initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The acknowledgement will set out a schedule for further filings and an anticipated date when the appeal will be presented to the Board. The notice of appeal, all materials accepted by the Board Chair as supplemental evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision. The Board will notify parties to an appeal and interested persons of its decision.

II. Appeals to Maine Superior Court

Maine law allows aggrieved persons to appeal final Commissioner licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); DEP Rules Chapter 2, section 26; 5 M.R.S.A. § 11001; & Maine Rules of Civil Procedure 80C. Parties to the decision must file a petition for review within 30 days after receipt of notice of the Commissioner's written decision. A petition for review by any other aggrieved person must be filed within 40 days from the date the written decision is rendered. The laws cited in this paragraph and other legal procedures govern the contents and processing of a Superior Court appeal.

Additional Information

If you have questions or need additional information on the appeal process, contact the DEP's Director of Procedures and Enforcement at (207) 287-2811.

Note: The DEP provides this FACT SHEET for general guidance only; it is not intended for legal reference. Maine law governs an appellant's rights.

Appendix A

STANDARD CONDITIONS TO ALL SOLID WASTE FACILITY LICENSES

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

1. Approval of Variations from Plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed by the license. Any consequential variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.

2. Compliance with All Applicable Laws. The licensee shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.

3. Compliance with All Terms and Conditions of Approval. The licensee shall submit all reports and information requested by the Department demonstrating that the licensee has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.

4. Transfer of License. The licensee may not transfer the solid waste facility license or any portion thereof without approval of the Department.

5. Initiation of Construction or Development Within Two Years. If the construction or operation of the solid waste facility is not begun within two years of issuance 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.

ADDITIONAL STANDARD CONDITIONS FOR SOLID WASTE DISPOSAL FACILITIES

10. **Recycling and Source Reduction Determination for Solid Waste Disposal Facilities.** This condition does not apply to the expansion of a commercial solid waste disposal facility that accepts only special waste for landfilling.

    The solid waste disposal facility shall only accept solid waste that is subject to recycling and source reduction programs, voluntary or otherwise, at least as effective an those imposed by 38 MRSA Chapter 13.

11. **Deed Requirements for Solid Waste Disposal Facilities.** Whenever any lot of land on which an active, inactive, or closed solid waste disposal facility is located is being transferred by deed, the following must be expressly stated in the deed:

    A. The type of facility located on the lot and the dates of its establishment and closure.

    B. A description of the location and the composition, extent, and depth of the waste deposited.

    C. The disposal location coordinates of asbestos wastes must be identified.