



March 28, 2014

Via Email and First Class Mail

Mark Dakers, Chief
Solid Waste Management Section
Southeast Regional Office
Massachusetts Department of Environmental Protection
20 Riverside Drive
Lakeville, MA 02347

Re: 452 Old Fall River Road, Dartmouth, MA
Revised Conceptual Closure Plan

Dear Mr. Dakers:

On behalf of Mary Robinson, owner of property located at 452 Old Fall River Road, Dartmouth, Massachusetts (the "Site"), Boston Environmental Corporation ("BEC") has submitted to the Massachusetts Department of Environmental Protection (MassDEP) a conceptual closure plan ("Closure Plan") to cap and close the so-called Cecil Smith Landfill located on the Site (the "Landfill"). In connection with MassDEP's evaluation of the conceptual Closure Plan, MassDEP conducted a public informational meeting in Dartmouth, Massachusetts on March 28, 2013. Thereafter, MassDEP accepted written comments regarding the Closure Plan during an extended public comment period. DEP received forty-five e-mails and letters including public comments from Senator Mark Montigny, Representative Christopher Markey, the Dartmouth Select Board, the Dartmouth Director of Public Health, local environmental organizations and Dartmouth residents.

BEC would like to thank all of those who have taken the time and effort to review the Closure Plan and appreciates the thoughtfulness of the written comments. BEC has and will continue to consider the public comments as BEC further refines the Closure Plan. BEC takes this opportunity to respond to the written public comments. The public comments can be generally organized by issue as represented by the section headings in this letter. The sections are in no particular order of priority or importance.



Water Quality Protection

Some of the public comments expressed concern over the potential impacts that the proposed project would have on ground and surface water quality. Some of the public comments also expressed a belief that BEC has proposed siting a “hazardous waste dump” at the Site and that the potential impacts such a proposal would have on water quality in and around the Site and the environment in general would be significant.

BEC Response

The purpose of the Closure Plan proposed by BEC is to cap and close an existing unlined inactive landfill that currently exists at the site. The Closure Plan has been prepared in connection with ongoing enforcement actions by MassDEP. BEC’s proposal is a remedial plan to address existing and potential impacts of the Landfill on public health, safety and the environment, including the protection of ground and surface water quality. The materials that are proposed to be brought to the site are consistent with MassDEP’s landfill closure policy, and are not hazardous waste pursuant to MassDEP’s regulations. The proposed materials to be brought to the site are consistent with other unlined landfill closure projects throughout the state, including several in the Southeast Region. The unlined landfill closure project in Marion is very similar to what is being proposed at the site and similar materials were also used during the capping and closure of the Westport Town landfill.

It is also important to note that this site, including groundwater and surface water, has been tested and evaluated in the past by both EPA and MassDEP. In addition, to augment the breadth of existing data about the site, BEC drilled additional wells and conducted another round of water quality testing from the new and existing wells on site. The most recent round of water quality data confirmed past information and was submitted to MassDEP, the Town of Dartmouth and the Town’s consultant, by Haley & Aldrich.

During the review and hearings on the Notice of Intent filed with the Town and MassDEP, BEC’s consultant provided documentation that the proposed landfill capping project would not increase any flooding and that the proposed project met or exceeded MassDEP’s stormwater management requirements. BEC adopted the Dartmouth Conservation Agent’s estimated 100 year flood elevation and designed the project to meet the performance standards for flooding and stormwater management. Any existing risks to adjacent wetlands and streams will be reduced by removing existing waste from the wetlands and restoring functional wetlands.



The soil and synthetic geomembrane final cover system proposed by BEC is a widely recognized, accepted and proven methodology to address existing and potential impacts from the unlined Landfill, including impacts to water quality. The Closure Plan proposed by BEC, which will create an impermeable layer over the landfill, will eliminate infiltration through the existing solid waste and dramatically reduce the amount and potential movement of leachate from the unlined Landfill. The proposed cap is designed to meet MassDEP solid waste regulations and to protect and improve water quality. In short, given existing conditions on site, BEC is confident that the proposed Closure Plan will substantially improve conditions at the site and provide a benefit to the surrounding areas.

As part of the final closure and post-closure plans, BEC understands and acknowledges its regulatory obligations to implement assessment, monitoring and maintenance activities, which will include the periodic sampling and laboratory analysis of ground water and surface water during construction and for the 30 year post-closure period. BEC commits to working cooperatively with MassDEP and the Town's Environmental Coordinator and environmental consultant to develop and finalize a monitoring plan.

Grading and Shaping Material

Similar to public comments received regarding impacts to water quality, some of the public comments expressed concern over impacts from the grading and shaping material proposed to be used by BEC in the Closure Plan. Some of the comments expressed concern that the Site would be used for the disposal of highly contaminated "hazardous waste."

BEC Response

MassDEP scientists and risk assessors have determined that a variety of materials can be used safely to bring sites to proper grade for closure. *DEP Revised Guidelines for Determining Closure Activities at Inactive Unlined Landfill Sites*, dated July 6, 2001 ("*DEP Landfill Closure Guidance*") expressly states that such material cannot only be used safely, but can also provide an adequate foundation layer for final cover materials and help defray the cost of closure. BEC's Closure Plan proposes the use of only those materials that have been determined safe to use for shaping and grading and that comply with the *DEP Landfill Closure Guidance*. BEC will only use MassDEP approved materials and will not use any material that adds to the actual or potential risk to public health, safety or environmental concerns of the unlined inactive landfill site in any significant way.

Not only will BEC restrict grading and shaping material to only those materials that are approved and consistent with the *DEP Landfill Closure Guidance*, but BEC understands and acknowledges the requirements to screen, test and characterize grading and



shaping material. A detailed Material Acceptance Plan will be prepared and submitted to MassDEP with the Corrective Action Design before any material is brought to the Site. The Material Acceptance Plan will fully describe the procedures to be followed for screening incoming loads for unacceptable material and the recording mechanisms for tracking all of the materials that are brought to this facility. The Material Acceptance Plan will also include provisions for the review of analytical data by a Licensed Site Professional (LSP) as required by regulation. It is important to note that an LSP will be testing the material at the source and BEC will have another LSP review the documentation before it is accepted at the site.

Storm Water Protection

Some of the written public comments expressed concern that the Closure Plan would exacerbate the quality and quantity of storm water runoff in the vicinity of the Landfill.

BEC Response

Currently, storm water runoff from the Landfill flows untreated into the adjacent wetlands and a portion of rain water infiltrates into and through the existing solid waste. The construction and post-closure storm water controls proposed as part of the Closure Plan are designed to comply with the Solid Waste Regulation Storm Water Controls (310 CMR 19.115) and MassDEP's Storm Water Policy. Detailed stormwater management design plans have been presented to the Dartmouth Conservation Commission.

MassDEP's Storm Water Policy addresses both water quantity and quality by establishing a level of required controls, which are achieved through site planning processes, non-structural measures and the use of Best Management Practices (BMPs). BEC has included storm water protection controls during both the construction and post-closure phases of the project that comply with MassDEP's standards. To ensure that sediment is not eroded into the surrounding wetlands during construction, BEC will install hay bales, silt fences, silt socks, earthen perimeter containment berms and storm water detention basins. These controls will be implemented consistent with BEC's Construction Period Pollution Prevention & Erosion Control Plan and will provide protection against impacting adjacent wetlands and streams. As part of the Landfill closure, BEC proposes to implement a storm water control system that includes grassed drainage channels, stone lined drainage channels, storm water let-down channels, stormwater detention basins with outlet control structures and sediment collection forebays, landfill surface grading and the establishment of dense vegetative cover that is resistant to erosion. The storm water improvements are designed to mitigate the 2, 10, 25 and 100 year 24-hour rainfall events, ensuring that there will not be an increase in runoff during storm events. The storm water controls have been reviewed by the Town of Dartmouth's consulting engineer and will constitute a vast improvement over existing conditions at the site.



Finally, as mentioned above in the water quality section, removal of existing waste from the wetlands, and controlled to ensure that adjacent wetlands are not impacted, and restoring functional wetlands, will have a net benefit on water quality and stormwater management.

Environmental Site Assessment

Some of the written public comments expressed concern that the environmental condition of the Site has not been adequately addressed and that the selection of a corrective action remedy is, therefore, premature.

BEC Response

A series of environmental sampling events have occurred over the past several decades to evaluate the limits and content of solid waste and the potential impact to surface water, sediment, soil, and groundwater. The United States Environmental Protection Agency (EPA) performed a comprehensive sampling program to further evaluate conditions at the site in 2004 and 2005. There has been a substantial and significant number of subsurface soil, surface soil, sediment, and groundwater samples collected and analyzed. The findings of the EPA's investigation confirmed that the site contains many of the conditions commonly encountered at inactive unlined landfills that operated in the 1950s to 1970s.

BEC retained a Licensed Site Professional to review the historic environmental assessment data with MassDEP and the Town's Environmental Coordinator, Public Health Director and outside environmental consultant. In addition, in response to the public comments, and in consultation with the Town's Environmental Coordinator, Public Health Director and outside environmental consultant, BEC's environmental consultant developed and implemented a groundwater sampling and analysis plan, which utilized existing wells and included drilling six new monitoring wells on the site, to obtain current groundwater data. The results of the recent testing has been sent to MassDEP and the Town of Dartmouth, as well as made available for public review. shortly. Based on the new data collected:

- No compounds were detected in groundwater above risk-based standards established in the Massachusetts Contingency Plan, which are designed to be protective of human health and the environment.
- Wells located to the north and south of the landfill did not have elevated water quality parameters indicating groundwater quality to the north and south of the landfill has not been degraded.



- Elevated general water quality parameters that relate to drinking water aesthetics, color, taste and odor were only detected in groundwater located immediately adjacent to the landfill. These parameters include alkalinity, nitrate, dissolved solids, calcium, sodium, iron and manganese. These results are consistent with and typical for areas adjacent to a construction and demolition debris landfill. These conditions were only noted at the landfill and not in groundwater further away from the landfill.

BEC acknowledges its obligations to perform an environmental site assessment in accordance with the requirements established at 310 CMR 19.150 and consistent with the *DEP Landfill Closure Guidance*. As part of these efforts, additional wells will be installed, surface, groundwater and sediment sampling will occur to ensure that the proposed closure plan addresses and eliminates potential harm to public health and the environment. Post closure maintenance and monitoring will also occur for a period of 30 years. Any long-term Remediation Plan will include measures necessary to address existing and potential impacts of the unlined Landfill on public health, safety and the environment as determined by the findings of the environmental assessment.

Landfill Contour / Alternatives

Some of the written public comments expressed concern about the height of the Landfill cap and alleged it was “too high” and would “tower above the tree line.” Some of the written public comments also suggested the construction of a cap that satisfies DEP’s minimal slope requirements be constructed.

BEC Response

In response to public comments and concerns, BEC commissioned a study by an independent third-party consultant, Atlantic Design Engineers, LLC (“Atlantic”). Atlantic performed a so-called balloon test and prepared a series of photosimulations for the proposed Closure Plan. Photosimulations are used to accurately depict what the Landfill, as proposed, will look like from specified areas surrounding the Site. The procedure involves superimposing the Landfill contour onto a photograph at the proper scale, location and elevation to provide a visual representation of what the proposed Landfill will look like from the specific locations. Preliminary results indicate that the height of the Landfill as proposed in the Closure Plan will have minimal, if any, visual impact on the surrounding area. Because the Landfill is located approximately 800 feet from Old Fall River Road and surrounded by dense woodlands, the Landfill cap from most locations, including Fall River Road, will not be visible, or barely visible. The proposed Landfill cap will be visible from higher elevations where one can currently see the inactive unlined Landfill, however, the cap will not interrupt a horizon view from such



locations. BEC has provided MassDEP and the Town of Dartmouth with a copy of the Atlantic report. The report has also been made available to the general public.

MassDEP has significantly reduced the volume of material allowed to close the landfill at the site, which results in maximum height reduction of approximately 20 feet, or 26%.

Nuisance Prevention

Some of the written public comments expressed concern regarding impacts from dust, noise, and traffic.

BEC Response

In response to these public comments and to minimize any impacts from dust, noise and traffic, BEC will implement a Nuisance Prevention Program for the Site. The program will cover noise, dust, and traffic. The program will part of BEC's Best Management Practices to control and mitigate dust, noise and traffic. For example, BEC will have a traffic plan for the Site which will include travel times, a restriction from using "jake brakes" while on town roads, limits on which roads will be allowed to be used to access the landfill as well as traffic speed sign boards and an overall zero tolerance for violations of the traffic program. This will be similar to the very successful program that BEC has operated under for the Haverhill landfill project.

Dust Control

Operation of Wheel Wash

The facility will be equipped with a Stanton Systems STB 75 Truck Tire wash System that will be utilized recycled water to clean all debris from the vehicles tires prior to leaving the landfill. Operation of the system is automatic via optical eyes controlling the 75 hp pump that is submerged in the 10,000-gallon water holding tank. The wash troughs are equipped with a sluice drain that collects the water and returns it to the holding tank via two solids sumps. Maintenance of the system shall include maintaining the proper water level in the tank and removing solids from the sumps and holding tank as necessary.

Street Sweeping Procedures

Street sweeping of the roadways adjacent to the facility shall be accomplished with a mechanical street sweeper that will be stored at the site. Visual inspection of the roadways shall be performed periodically during the day and street sweeping will be performed as necessary. In addition to the street sweeping, a 500-gallon water truck



with power sprayer bars will be available to maintain dust suppression along the interior roadways during dry days.

Noise Mitigation

Truck Noise

Special conditions will be implemented in that no engine brakes (“jake brakes”) will be utilized on the truck route from Route 140 to the landfill along Mount Pleasant Street, New Plainville Road and Old Fall River Road in consideration to the residents and that all traffic controls will be strictly adhered to.

Landfill Equipment Noise

All of the equipment used on Site will be equipped with Tier IV controls. While the Tier IV controls are designed to significantly reduce the amount of emissions from the equipment one of the added benefits to these control systems is the noise from the equipment is significantly reduced due to this new control system. Equipment that is not being actively used on Site will not be allowed to idle. As part of the daily landfill operation, landfill personnel will be monitoring a number of environmental and operational conditions during the day. BEC will have an Extech SDL 600 sound level meter, or equivalent, on site to measure the decibel levels of the daily operations. This will include taking decibel readings at various locations between the landfill operations and the residences along the perimeter of the site.

Traffic Control

BEC has developed a traffic control plan in order to minimize truck traffic impacts. The current school bus stops will be noted on the traffic control plan, which every truck delivering loads to the site will be required to have. The purpose of this is to make the drivers acutely aware of the school bus stops and the importance of using special care when passing them. BEC will install, after consulting with the Town of Dartmouth and City of New Bedford, “Bus Stop Signs” along the proposed traffic route so that these locations can be readily identified. BEC will assign a Trucking Compliance Manager to field any concerns that town residents may have and to address these issues immediately. BEC’s Trucking Compliance Manager will ban from the Site any drivers that do not adhere to these requirements

BEC has consulted with the City of New Bedford regarding traffic control measures including the proper placement and utilization of an Electronic Traffic and Speed Control Sign boards and signage along the designated truck route. BEC will be responsible for the installation and maintenance of the sign boards. In addition, BEC has offered to meet with the Town of Dartmouth to discuss traffic control measures.



Hours of operation and truck traffic will be controlled and monitored to ensure that safety precautions are adhered to by all vehicles entering and leaving the facility.

Reduction of Air Emissions

All of the equipment that will be utilized on the project will be equipped with the "state of the art" emission control equipment. The heavy equipment will be equipped with Tier IV emission control systems, which are the most efficient and technologically advanced emission control equipment available today. The equipment and emission control systems, combined with low sulfur fuel, will reduce the potential emissions significantly.

Best Management Practices will also be employed while operating equipment to further reduce the potential for emissions. The equipment will not be allowed to idle when not in use to help reduce potential emissions as well.

Financial Assurances

Some of the written public comments expressed a concern regarding the project proponent's ability to complete the closure and commitment to perform post-closure maintenance.

BEC Response

Pursuant to the Solid Waste Regulations for Financial Assurance Requirements (310 CMR 19.051), BEC will establish and maintain financial assurance instruments to meet MassDEP requirements regarding the capping and post closure monitoring of the facility for 30 years. The Financial Assurance amount and mechanism is established by MassDEP and is meant to ensure that the owner or operator is at all times financially capable of complying with the regulations governing the closure of the facility and its post-closure maintenance. Pursuant to MassDEP's Financial Assurance Requirements, potential financial assurance instruments include trust funds, surety bonds guaranteeing payment, surety bonds guaranteeing performance, closure and post-closure insurance and closure and post-closure letters of credit. The amount of the financial assurance will be based on the closure and post-closure plans for the facility required under 310 CMR 19.000 and equal the cost of closing the facility and providing post-closure maintenance.

If at any time during, or for the 30 year post closure period, the owner or operator fail to complete the work or monitoring, MassDEP will liquidate the Financial Assurance Mechanism and use the funds to conduct the monitoring or complete the project. In addition, if the owner or operator is found to violate the regulations, or any approved plans, MassDEP can take enforcement action, including the assessment of penalties.



Additional Testing of Waste in the Landfill

Some commenters requested that additional testing be done to quantify and characterize the waste that exists in the landfill.

BEC Response

Dozens of test pits have been conducted to evaluate the type and lateral extent of waste in the existing landfill. As referenced above, the site has been evaluated by EPA and MassDEP over the past two decades. In short, the site has been thoroughly tested and monitored, and additional wells will be installed and testing will occur to protect public health and the environment.

Conclusion

BEC, on behalf of Mary Robinson, appreciates the opportunity to thoughtfully consider the written public comments received by MassDEP in response to BEC's conceptual Closure Plan. We believe all of the public's concerns will be addressed by the requirements in a negotiated Administrative Consent Order and compliance with the MassDEP's regulations, including conducting an environmental site assessment, conducting a health and safety assessment, and preparing a Remedial Plan that includes a Corrective Action Design, Nuisance Prevention Plan, Sampling and Analysis Plan and Environmental Monitoring Plan.

BEC looks forward to working with MassDEP to bring the Site to regulatory closure.

Sincerely,

A handwritten signature in black ink that reads "A.W. Daniels".

Andrew W. Daniels, President

cc: Daniel d'Hedouville, Esq.
Mr. David Howe
Mr. Michael Toomey
Mr. Robert Golledge