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May 11, 2007

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
NOTICE OF PROJECT CHANGE

PROJECT NAME: Bondi Island Sanitary Landfill
PROJECT MUNICIPALITY: Springfield
PROJECT WATERSHED: Connecticut River
EOEA NUMBER: 3384
PROJECT PROPONENT: City of Springfield, Department of Public Works
DATE NOTICED IN MONITOR: April 11, 2007

Pursuant to the Massachusetts Environmental Policy Act (M. G. L. c. 30, ss. 61-62H) and Section 11.10 of the MEPA regulations (301 CMR 11.00), I have reviewed the Notice of Project Change (NPC) submitted on this project and hereby determine that it **does not require** further MEPA review. The current proposed change and changes proposed in previously reviewed NPCs on the project will result in a level of cumulative environmental impact for the entire landfill site that approaches MEPA's mandatory Environmental Impact Report (EIR) review thresholds related to solid waste. However, I do not believe that an EIR is warranted for the project given the extensive permitting process associated with approvals required by the Department of Environmental Protection. In addition, the proponent has outlined measures to avoid, minimize and mitigate environmental impacts in the NPC that address the management impacts from the full project. I also note that there is further opportunity for public review and comment during the permitting process; I direct the proponent to contact commenters on the NPC regarding these opportunities.

Project Site Description

The Bondi Island Sanitary Landfill is located in West Springfield and Agawam on a parcel of land bounded to the east by Route 5 and the Connecticut River; to the north by the Con-Ed power generation facility; to the west by Agawam Avenue; and to the south by open space and the Westfield River. Other facilities located in the vicinity of the Bondi Island Landfill include the Springfield Regional Wastewater Treatment Facility; the Pioneer Valley Resource Recovery Facility; and the Springfield Regional Composting site.

The landfill area is approximately 68 acres in size. The landfill is divided into three general areas: Cell 1 on the western portion of the site in Agawam and West Springfield (39 acres); Cell 2 on the eastern portion of the site in West Springfield (27 acres); and a power line easement (2 acres) dividing the two cells and currently occupied by a Western Massachusetts Electric Company (WMECo) overhead electric transmission line. The project change proposed in the NPC is an increase in capacity and height for the lined landfill development of the Cell 2 area.

The lined Cell 1 areas in Agawam and West Springfield comprise the western half of the project site and total approximately 38 acres of lined landfill area equipped with leachate collection and environmental control areas. The lined Cell 1 area in Agawam was used for the disposal of residual ash generated by the Pioneer Valley Resource Recovery Facility (PVERRF) until 2006 when filling operations began in the West Springfield Supplemental Liner Area (WSSLA) in Cell 1, which was reviewed by MEPA in a 2003 NPC. Disposal operations continue to date in the WSSLA for residual ash generated by the PVERRF and processed bottom ash and/or fly ash generated by the Pittsfield Resource Recovery Facility (PRRF).

MEPA History

The project was originally reviewed by MEPA in 1979 in an Environmental Notification Form (ENF) submitted by the City of Springfield, (the proponent) for the expansion of the Bondi Island Sanitary Landfill. The project involved the construction of a lined landfill area over the Cell 1 area in Agawam and West Springfield for the disposal of ash residue and non-processible waste from the Pioneer Valley Resource Recovery Facility (PVERRF) and the interim (6 to 9 month) use of the unlined Cell 2 area for solid waste disposal. The project was reviewed in a Draft Environmental Impact Report (DEIR), a Final EIR (FEIR), and two Supplemental EIRs in 1983 through 1985.

The City of Springfield filed a NPC in August of 2001 that proposed changes to the final operating grades within the Cell 1 lined landfill area. No further review was required in the September 7, 2001 Certificate on the NPC. A second NPC was filed in September of 2003 for the construction of a supplemental liner and leachate collection system across the northern section of the existing lined West Springfield Area at the landfill. The change was to allow an increase in closure grades to a maximum elevation of 133 mean sea level (msl) and to extend the

operating life of the area by approximately two years. The Secretary did not require any further MEPA review on the changes proposed in the 2003 NPC.

Review of the NPC/Project Change Description

The current NPC proposes an increase in capacity and height of the Cell 2 area of the Bondi Island landfill. The project will involve the sequential phased construction and operation of approximately 30 acres of lined waste disposal cells in Cell 2. Cell 2 is an unlined landfill cell that was used prior to 1986 for the disposal of solid waste materials. The Cell 2 area includes a power line easement that is currently occupied by a WMECo overhead electric transmission line. The upper surface of Cell 2 is currently used by the City of Springfield for composting operations under a third party agreement. The composting operation will be relocated as the Cell 2 liner project is developed.

The project change includes increasing the final closure height of Cell 2 from 125 feet msl to 142 feet msl and increasing the Cell 1 closure height in Agawam and West Springfield to a maximum elevation of 142 msl from 138 msl. The height increase on Cell 2 is associated with a proposed increase in the permitted annual waste disposal rate from the existing allowable annual rate of 54,750 tons to an annual disposal rate of 105,850 tons. This translates to an increase of 140 tons per day, 365 days per year. In addition to disposing residual ash from the PVRRF and the PRRF, the proponent is seeking approval from MassDEP to accept contaminated soils and residual ash from other municipal waste combustion facilities.

Preliminary estimates of leachate generation for the proposed the lined Cell 2 area is based on a generation rate of 1,000 gallons per day (gpd) per acre. This approximately 30-acre lined landfill development project will be phased into three 10 acre phases with a net leachate generation of about 10,000 gpd per 10 acre phase. The current average leachate flow from lined areas of the landfill is about 15,000 gpd. The City of Springfield is currently upgrading the existing facility leachate collection and pumping station systems; this work will provide an upgrade system to transmit leachate to the Springfield Waste Water Treatment Plant.

The Cell 2 lined landfill development project will provide approximately 7.5 to 11.5 years of additional waste disposal capacity for the PVRRF and the PRRF. The project will provide an increase in height to match the abutting Cell 1 and West Springfield landfill areas. The proponent hopes to achieve minimum 2% surface grades across the completed Cell 3 area, matching 2% minimum grades in Cell 1 and the WSSLA. The ultimate goal of the project is to develop the top of the Bondi Island Landfill into an approximately 28-acre multi-use platform for post-closure uses to benefit the citizens of Agawam, West Springfield and Springfield.

The NPC also proposes the relocation of overhead WMECo electric transmission lines to develop landfill capacity in the area of the power line easement of Cell 2. WMECo is currently reviewing two options for relocating the transmission lines. Option 1, relocation of the power lines along Agawam Avenue in West Springfield is the preferred option and will maximize the potential for post-closure use of the site. Option 2 would relocate the power lines to an existing

easement in the Cell 1 area and may restrict post-closure development options at the site. The proponent and WMECo should note comments from the Pioneer Valley Planning Commission (PVPC) regarding the need to consult the recently adopted Regional Transportation Plan for the Pioneer Valley Region when considering these options.

Permitting

The project change requires the following permits and/or approvals from MassDEP: BWP SW 38 – Major Modification of Site Suitability Report; BWP SW 26 – New Major Expansion; and BWP SW 10 – Authorization to Operate (ATO) a Landfill. The project also requires Site Plan Review from the Agawam Planning Board; an update to an existing Special Permit from the Agawam Board of Appeals; a Site Assignment Renewal from the Agawam Board of Health; and an amended or new Order of Conditions from the Agawam Conservation Commission.

As part of the BWP SW 26 permit the proponent will need to demonstrate the design adequacy of the liner, gas collection and leachate collection systems as impacted by construction over the existing lined and unlined landfill areas. The proponent must demonstrate that the operation of the landfill expansion can be conducted without damaging the final cover of adjacent landfill areas. Since there will be existing solid waste below the liner throughout the project area, design plans should provide for adequate landfill gas collection below the liner. Although there are existing landfill gas collection systems in Cell 1 and Cell 2, the area between the cells currently does not have a landfill gas collection system. The NPC plans show that “approved shaping/grading material” will be used to bring the top of Cell 1 to its final pre-capping grade. The proponent should note comments from MassDEP that a Beneficial Use Determination (BUD) may be required as part of the Authorization to Construct.

Stormwater from capped areas, and areas not impacted by waste disposal operations, is currently transported by swales, culverts, and sheet flow to regulated wetland areas to the east and south of the landfill. The proponent must demonstrate during permitting that the specified final closure top slope (2%) is adequate to ensure positive drainage of stormwater. It is expected that construction of additional impervious area (i.e. capped landfill areas) will result in an increase in stormwater rates and volume. The proponent must demonstrate that the stormwater management structures will meet applicable performance requirements in the Solid Waste Management regulations at 310 CMR 19.115. The stormwater and wetland resource impacts of the project will also be reviewed by the Agawam Conservation Commission during the Wetlands Protection Act permitting process.


Conclusion

Although the landfill capacity and Cell 2 height increase exceeds the general 10 percent criterion under 310 CMR 11.06(6)(a), I find that the change in the project is not likely to significantly increase environmental consequences. The capacity increase is within previously Site Assigned and permitted landfill areas, and overlies existing pre-lined and unlined landfill cells. The project will provide additional capacity at a pre-existing, permitted waste disposal site

instead of developing a new "greenfield" site in Massachusetts or sending the waste out of state. The proposed change will result in increased environmental controls at the landfill through the construction of a state-of-the-art liner system over the currently unlined Cell 2 landfill area. The new Cell 2 liner system will include leachate collection and under-liner gas extraction systems that will help mitigate existing environmental impacts at the facility.

Based on a review of the information provided by the proponent and after consultation with the relevant public agencies, I find that the potential impacts of this project do not warrant further MEPA review. The proponent should continue to work closely with MassDEP, local officials and interested citizens to resolve outstanding information requests and should respond to comments raised during the review of this NPC in the MassDEP permitting process.

May 11, 2007
Date



Ian A. Bowles

Comments Received:

4/30/2007	Pioneer Valley Planning Commission
5/1/2007	Department of Environmental Protection, Western Regional Office
5/1/2007	Connecticut River Watershed Council
5/4/2007	Jonathan Owen, Shlansky & Co., LLP

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