

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
 EOEA No.: 13350
 MEPA Analyst: NICK ZAVALAS
 Phone: 617-626-1030

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Greenwood Street Landfill		
Street: Greenwood Street		
Municipality: Worcester	Watershed: Blackstone	
Universal Transverse Mercator Coordinates: 269671.1 E, 4677545.5 N	Latitude: 42°-13'-09" Longitude: 71°-47'-25"	
Estimated commencement date: 10/04	Estimated completion date: 8/08	
Approximate cost: \$8 million	Status of project design: 25 %complete	
Proponent: Worcester DPW and Mass Environmental Associates, Inc (MEA)		
Street: 20 East Worcester Street		
Municipality: Worcester	State: MA	Zip Code: 01604
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Daniel Duffy		
Firm/Agency: Global Environmental Strategies	Street: Two Newton Executive Park, Suite 200	
Municipality: Newton	State: MA	Zip Code: 02462
Phone: 617.782.7777 x113	Fax: 617.332.3224	E-mail: dduffy@globalenv.net

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
 Yes No
- Has this project been filed with MEPA before?
 Yes (EOEA No. _____) No
- Has any project on this Site been filed with MEPA before?
 Yes (EOEA No. 03367) No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- a Single EIR? (see 301 CMR 11.06(8)) Yes No
 - a Special Review Procedure? (see 301CMR 11.09) Yes No
 - a Waiver of mandatory EIR? (see 301 CMR 11.11) Yes No
 - a Phase I Waiver? (see 301 CMR 11.11) Yes No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): Not Applicable

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) No

List Local or Federal Permits and Approvals:
NPDES Stormwater
Order of Conditions – Worcester Conservation Commission

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03): **None**

- | | | |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/Extension Permit <input checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i> - Initial Site Assessment - Comprehensive Site Assessment - Corrective Actions Alternatives Analysis - Corrective Action Design
Total Site acreage	100.6			
New acres of land altered		0		
Acres of impervious area	0	Phase I - 0 ¹	0	
Square feet of new bordering vegetated wetlands alteration		Phase I - 0 ²		
Square feet of new other wetland alteration		Phase I - 21,000 ²		
Acres of new non-water dependent use of tidelands or waterways		0.0		
STRUCTURES				
Gross square footage	0	0	0	
Number of housing units	0	0	0	
Maximum height (in feet)	0	0	0	
TRANSPORTATION				
Vehicle trips per day	0	400	400	
Parking spaces	0	10	10	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	0	15,000 ³	15,000 ³	
GPD water withdrawal	0	0	0	
GPD wastewater generation/treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0	0	

- Phase II will include 2.17 acres total new impervious area for the extension of the existing NipNap Trail.
- Other Phase II and III impacts unknown.
- Temporary seasonal use for dust control.

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify _____) No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify _____) No

RARE SPECIES: Does the project Site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify: Rare Species of Grasshopper Sparrow Habitat) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project Site include any structure, Site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify _____) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify _____) No

PROJECT DESCRIPTION: The project description should include (a) a description of the project Site, (b) a description of both on-Site and off-Site alternatives and the impacts associated with each alternative, and (c) potential on-Site and off-Site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

The Greenwood Street Sanitary Landfill (the "Landfill") is a 60-acre solid waste disposal facility located on approximately 100 acres of land (the "Site") owned by the City of Worcester. The Site is located in the southeastern portion of the City, between the Blackstone River and Greenwood Street and north of the Upper Blackstone wastewater treatment facility.

The proposed project involves repair of settlement and recapping of 26 acres of the 52-acre (8-acres of the 60-acre landfill were transferred for use by the adjacent wastewater treatment facility) capped landfill and investigation of the entire 100-acre site (Phase I), remediation of the remainder of the 100-acre Site (Phase II), followed by the post-closure development of the Site (Phase III). At this time, Phase I of the project is being proposed. As Phase I proceeds, the investigations necessary to determine the requirement of Phase II will commence, and the planning for post-closure development of the Site will occur. The following is a discussion of each of the phases. On this basis, a Phase I waiver, in accordance with the provisions of 301 CMR 11.11 (4), is being requested with this submittal allowing this initial phase to proceed during the investigations necessary to determine the Phase II and III impacts.

Phase I – Landfill Settlement Repair

The Worcester Department of Public Works (DPW) operated the sanitary Landfill between April 1973 and June 1985. During closure, City placed clean soil across portions of the top of the Landfill to create the final five percent crowning slope necessary for the cap to shed rainwater. An original estimate of the fill material necessary to create this five percent grade was about 40,000 cubic yards. During the closure construction, approximately 160,000 cubic yards of soil was placed on top of the Landfill to create the five percent grade, however, only a 2 to 3 percent grade could be established. During the material placement, extensive settlement occurred due to the greater density of the soil used for grading, as compared to the less dense MSW.

Since the landfill was capped in 1985, the initial settlement experienced during closure construction has continued across the majority of the flatter areas of the capped Landfill surface. The differential settlement has caused significant deformation (as much as 10 vertical feet) of the Landfill cap. Due to this settlement, surface water drainage patterns on top of the Landfill have been altered causing ponding in depressions, and in low points along swales and ditches.

A series of alternatives were evaluated to address the settlement of the top of the landfill cap. These alternatives were selected through review of the DEP's Landfill Technical Guidance Manual and by varying the

amount of material brought to the Site. The alternatives are as follows:

- A no action alternative; this includes periodic regrading of the top of the Landfill to restore positive stormwater drainage and securing the Landfill;
- Cap Repair Project; involves strategic placement of shaping and grading materials restore proper grades to the flat areas of the capped landfill, upgrading the site stormwater control system and replacement of the cap on the regraded areas of the Landfill;
- Vertical Landfill Expansion; involves strategic placement and preloading of shaping and grading materials to cause the necessary settlement of the Landfill to allow for construction of a liner system, excavation and relocation of those materials and construction of the liner, replacement of the materials within the lined area, repairing and upgrading the landfill gas collection system, upgrading the site stormwater control system and replacement of the cap on the entire Landfill.

The City and DEP held many meetings and determined that the project has decided to proceed with the second option to repair the landfill cap. This alternative was selected after significant discussions with DEP relating to the alternatives. This option seeks to permanently corrects the current deficiency in the site grading (which the first option does not) with the minimum amount of impact and shaping and grading material.

The proposed project involves importing soil to the top of the landfill area to restore a five percent grade, and then re-capping the disturbed Site areas. The Site will be graded to the plan discussed in the report included in Section 4, representing about 17-feet of fill material in the southern portions of the Site and minimal fill other than the capping layers on the northern portions of the Site. Calculations show the existing air space plus anticipated settlement will require between 350,000 and 520,000 cubic yards of grading and shaping materials be imported to the Site, depending on settlement during placement of the soils. The lower number represents the minimum quantity expected to be required to restore the proper grading of the site, allowing for primary settlement of the landfill area during placement of the grading material. The higher number represents additional quantity of shaping and grading material that may be necessary due to longer-term secondary settlement. Preliminary discussions with DEP indicate that the lower volume will be initially approved, with additional quantities approved upon documentation of field measurements demonstrating their need.

Once the shaping and grading is completed, the disturbed areas will be recapped and vegetated. Since the Site is presently habitat area for the grasshopper sparrow, careful consideration has been given to developing a plan for work at the Site that maximizes habitat area and protection of this important species. As part of this project, the Massachusetts Audubon Society developed a plan for working at the Site to minimize impacts to the grasshopper sparrow. The plans generally involve sequencing the work at the Site to minimize disturbed areas while maintaining habitat or reestablishing vegetation on other areas of the Site. Based on this need, the project will take place over three construction seasons (to allow time for vegetation to be established for habitat areas prior to disturbing new areas). The plan developed by the Massachusetts Audubon Society is discussed in the Rare Species section of this document.

Phase I also includes a site investigation of the entire 100-acre City-owned parcel, as required by DEP's Solid Waste Management Regulations. The investigation will include an Initial Site Assessment (ISA), a Comprehensive Site Assessment (CSA) and a Corrective Actions Alternatives Analysis (CAAA).

Finally, as required by DEP, Phase I will include dredging of sediments from a Stone Lined Channel located along the eastern perimeter of the site, including the clearing of vegetation from this channel.

Phase II

During recent site investigations, it was discovered that waste overlays portions of the Site that have not been capped. The City previously slated this area, to the west of the capped Landfill, for redevelopment. The waste present on the western portion of the property appears to consist of materials excavated from the sand filter beds of the former Worcester Wastewater Treatment Facility. During the development of the CSA for the property during Phase I, this western portion of the property, along with other environmental issues concerning the Site, will be the subject of considerable investigation. The CSA will also include a comprehensive evaluation of environmental conditions that may identify other remedial actions necessary at the Site. In that these conditions are still unknown, this ENF does not include discussion of any potential impacts of this phase of the project. Once Phase II plans are developed, a Notice of Project Change will be submitted to MEPA.

Phase III

Phase III involves the redevelopment of the entire Site. Public meetings are presently being conducted to discuss the potential alternatives for post-closure use with the community.