

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
 EOE No.: **14322**
 MEPA Analyst: **Deirdre Buckley**
 Phone: 617-626-**1044**

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: Water Treatment Plant Upgrade and Expansion		
Street: Newton Road		
Municipality: Amesbury	Watershed: Merrimack River	
Universal Tranverse Mercator Coordinates: 338849.52, 4747240.28 Feet	Latitude: 42°51'38.95"N	
	Longitude: 70°58'21.74"W	
Estimated commencement date: 07/2009	Estimated completion date: 12/2011	
Approximate cost: \$15,000,000	Status of project design: 30	%complete
Proponent: Robert L. Desmarais, PE		
Street: Amesbury Town Hall, 62 Friend Street		
Municipality: Amesbury	State: MA	Zip Code: 01913
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Jennifer Doyle-Breen		
Firm/Agency: Metcalf & Eddy	Street: 701 Edgewater Drive	
Municipality: Wakefield	State: MA	Zip Code: 01880-5371
Phone: (781) 224-6474	Fax: (781) 224-5986	E-mail: Jennifer-Doyle-Breen@m-e.aecom.com

- 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. _____) 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 301 CMR 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): MassDEP Drinking Water State Revolving Fund \$13,500,000.

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

List Local or Federal Permits and Approvals: Local Order of Conditions and Planning Board Approval; US EPA NPDES Construction General Permit for Stormwater Discharge.

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- | | | |
|---|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input checked="" 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 type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i> *There is a possibility that a 7-foot tall ventilation stack may be necessary above the highest roof line for lab ventilation, although this has not yet been definitively determined; if needed the maximum height would be 33 feet rather than 26 feet
Total site acreage	7.0			
New acres of land altered		0		
Acres of impervious area	1.46	0	1.46	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		23,400 Riverfront		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	21,490	+9,050	30,540	
Number of housing units	0	0	0	
Maximum height (in feet)	29	-3*	26*	
TRANSPORTATION				
Vehicle trips per day	15	0	15	
Parking spaces	12	0	12	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	300	0	300	
GPD water withdrawal	1.7 MGD annual avg	0	1.7 MGD annual avg	
GPD wastewater generation/ treatment	300	0	300	
Length of water/sewer mains (in miles)	425	0	425	

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 _____) 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.)

Project Site

The Town of Amesbury's existing Water Treatment Plant is located on Newton Road in Amesbury, Massachusetts, adjacent to the Powwow River and began operation in 1986. The plant withdraws water from the Powwow River through an existing intake. Two gravel packed wells are located adjacent to the Powwow River, and supplement the surface water supply. When the wells are in use, the well water is blended with the river water, and the blended water is treated through the water plant processes. Finished water is pumped from the plant into the Town's distribution system and storage. The facility consists of a single building which houses pumping and process equipment as well as office space. The site also includes lagoons and storage/garage buildings. Portions of the existing site are located within the 200-foot Riverfront Area associated with the Powwow River as well as the 100-foot Buffer Zone of Bordering Vegetated Wetland (BVW) and Bank along the river. Current access to the Water Treatment Plant (WTP) consists of a bituminous concrete driveway off Newton Road on the east side of the treatment plant.

Proposed Activities

The basic objectives of the WTP Upgrade and Expansion project are to improve process performance for water treatment and residuals handling while also expanding the plant capacity. When completed, the upgraded facility will allow for compliance with the U.S. EPA's Stage 2 Disinfection By-Product (DBP) Rule by supplying finished water with lower DBPs. Combined, all of the proposed improvements serve to achieve this goal. The installation of filter-to-waste will also assist compliance with the Long Term 2 Enhanced Surface Water Treatment Rule by providing better filtered water quality. New residuals handling processes will relieve the burden on the existing lagoons by significantly reducing the volume of solids in the process waste stream. In addition, more reliable removal of manganese will be provided, which will improve the aesthetics of the finished water and minimize customer complaints. Further, the planned "in-

situ" replacement of existing clarification processes will provide redundancy for the process while preventing the need for construction within adjacent wetlands buffer zone. In addition to the upgrades necessary to improve the treatment process and comply with the DBP rule, the project includes expansion of production capacity of the plant from 3.0 million gallons per day (MGD) to 4.0 MGD to accommodate long-term future growth in the Town. The Town is not currently proposing to increase its permitted water withdrawal; however the Town does want to incorporate sufficient capacity into the plant to accommodate future growth so as to avoid the need for a separate, costly second upgrade project at the WTP.

The upgrades planned at the plant consist of the following:

- Addition of a pre-oxidation tank for treatment of iron and manganese
- Retrofit of existing tube settler clarifiers with dissolved air flotation equipment in existing building
- Provision of filter-to-waste capability to reduce solids in the treated water, via installation of new piping
- Addition of a new garage/maintenance facility, including an upgrade to chemical storage/feed areas to comply with current MassDEP standards
- Provision of a residuals mechanical dewatering facility, located within the new chemical storage/maintenance building, to reduce solids loading to the existing lagoons
- Installation of a new, smaller, 750 KW emergency generator to improve energy use efficiency
- Installation of a new transformer to replace an aging, deteriorated transformer and new fuel tank

Locations of the new facilities identified above are shown on the site plan in Attachment B. There will be no change to the site access. The driveway will be repaved. The paved access driveway around the WTP building will have a turning radius sufficient for 70-foot chemical delivery trucks. A turn around area is included to allow chemical deliveries to the back of the new chemical storage/maintenance facility. Portions of the existing parking areas will be demolished as part of construction. New parking areas will be provided. Twelve parking spaces are proposed, including one handicapped space. Paving on the site will also include paving the bottom of the lagoons so that they can be cleaned more easily. Overall, there will be no net change in impervious area at the site.

Alternatives

The alternatives to the proposed project include a no-action, a different configuration on site, or the installation of new lagoons instead of the addition of mechanical dewatering. A no-action alternative would not result in an upgrade to the water treatment plant to meet federal standards and therefore is not a viable alternative. Alternative layouts on the site were considered, but would result in similar or greater impacts to natural resources. The site is bounded by the Powwow River and associated wetland resource areas to the north and west, Newton Road to the east, and a private residence to the south. Therefore, possible alternative configurations are limited and provide no benefits to natural resources or abutters as compared to the selected alternative. Similarly, installation of two new lagoons instead of the mechanical dewatering process would have required siting these in previously undisturbed areas adjacent to the site, and therefore was not considered an environmentally preferred alternative.

Mitigation

Impervious surface at the site has been minimized to limit stormwater runoff and allow project compliance with the January 2008 Massachusetts Stormwater Policy. There will be no increase in impervious area (other than lagoon bottoms) as a result of judicious site planning. Similarly, the proposed configuration has been selected to keep all proposed facilities and grading outside of BVW and other resource areas, with the exception of the Riverfront Area. However, all work in the Riverfront Area is located within areas previously disturbed for construction of the existing WTP in 1986. Erosion and sedimentation controls will be installed around the site perimeter during construction as shown on the site plan in Attachment A, and monitored for effectiveness during construction. Waste materials, debris, and trash will be cleaned from the work site at the end of each day and placed in trash barrels and/or dumpsters which will be disposed of off-site. Dumping of waste or other debris into wetland resource areas and/or buffer zones outside of the limit of work will not be allowed during construction. General construction safety procedures will be followed to prevent events which could result in spills, releases, or other environmental damage.