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November 7, 2008

# CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS ON THE ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME PROJECT MUNICIPALITY PROJECT WATERSHED EOEA NUMBER PROJECT PROPONENT DATE NOTICED IN MONITOR : Water Treatment Plant Upgrade and Expansion
: Amesbury
: Merrimack River
: 14322
: Town of Amesbury
: October 8, 2008

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** the preparation of an Environmental Impact Report (EIR).

### **Project Description**

The project consists of the upgrade and expansion of the Amesbury Water Treatment Plant. The purpose of the project is to improve process performance for water treatment and residuals handling while expanding plant capacity. Performance will be improved to comply with the United States Environmental Protection Agency (EPA) Stage 2 Disinfection By-Product (DBP) Rule and the Federal Long Term 2 Enhanced Surface Water Treatment Rule. Plant capacity will be increased from 3.0 million gallons per day (MGD) to 4.0 MGD to accommodate long-term future growth in the Town; however the Town is not seeking an increase in its permitted water withdrawal of 1.7 MGD (annual average).

Upgrades include the addition of a pre-oxidation tank for treatment of iron and manganese; retrofit of existing tube settler clarifiers with dissolved air flotation (DAF) clarifiers in the existing

building; provision of filter-to-waste capability to reduce solids in the treated water; addition of a new garage/maintenance facility including an upgrade to chemical storage/feed areas and a residuals mechanical dewatering facility; installation of a new, smaller 750 KW emergency generator to improve energy efficiency; and installation of a new transformer and fuel tank. The project will include repaying of the access road, demolition of existing parking areas, construction of 12 new parking spaces, paving of the lagoons and installation of a stormwater management system. The stormwater management system consists of catch basins, a gravel swale, and an outfall. An oil grit separator will be located in the truck loading area. In addition, the proponent is considering the use of rain gardens or other constructed vegetation features as part of the stormwater management system.

## Project Site

The Water Treatment Plant is located on Newton Road in Amesbury adjacent to the Powwow River. The site includes the water treatment facility, lagoons, storage/garage buildings and access drives. The plant withdraws water from the Powwow River through an existing intake. Two gravel packed wells are located adjacent to the Powwow River to supplement the surface water supply. Access is provided from Newton Road on the east side of the treatment plant. Portions of the site are located within the 200-foot Riverfront Area associated with the Powwow River, the buffer zone of Bordering Vegetated Wetland (BVW) and Bank along the river. Portions of the project site along the southern boundary are within the 100-year floodplain, Zone AE. The site is located within the watershed of Lake Attitash, a designated Outstanding Resource Water (ORW). The entire site is within the Zone II to the public water supply wells and a significant area of the site is within the Zone A of the public drinking water supply based on a review of the MassGIS data layer for Surface Water Protection Areas.

### Permits and Jurisdiction

The project is undergoing MEPA review pursuant to Section 301 CMR 11.03 (4)(b)(5) because it includes state funding and consists of expansion of an existing water treatment plant by the greater of 1,000,000 gpd or 10% of existing capacity. The project requires a Treatment Facility Modification (BRPWS25) from the Massachusetts Department of Environmental Protection (MassDEP). The project requires a National Pollution Discharge Elimination System (NPDES) Construction General Permit for Stormwater and the associated NPDES Stormwater Pollution Prevention Plans (SWPPP) will require review by MassDEP. Also, the project requires an Order of Conditions from the Amesbury Conservation Commission (and a Superseding Order of Conditions in the event the local Order is appealed).

The proponent has requested funding from MassDEP through the Drinking Water State Revolving Fund (SRF). Because the project includes state funds, MEPA jurisdiction is broad in

<sup>&</sup>lt;sup>1</sup> Supplemental information including a revised proposed conditions plan was submitted on October 23, 2008. The plan relocates the stormwater discharge location so stormwater will discharge downstream of the intake structure, identifies changes to the alignment and grading associated with the pre-oxidation tank and includes a drainage swale between the existing and new building to direct drainage to the adjacent catch basin.

scope and extends to all issues that may cause Damage to the Environment as defined in the MEPA regulations. These include water supply and wetlands.

## Review of the ENF

The ENF indicates the project will impact approximately 23,400 square feet (sf) of Riverfront Area and may include filling within the floodplain associated with the oxidation tank. Consistency with the Wetlands Protection Act (WPA) will be addressed by the Amesbury Conservation Commission through the local review process. A comment letter from MassDEP identifies several issues related to wetlands and stormwater that should be addressed by the project proponent and reviewed by the Conservation Commission as part of the local review process. These include demonstrating that existing conditions will be improved within the Riverfront Area to protect the interests of the Wetlands Protection Act, ensuring that compensatory flood storage is provided for any filling of the floodplain, compliance with the Stormwater Management regulations, including Standard 6 (critical areas) and the requirement for 80% TSS removal. MassDEP comments note that the current design of the stormwater management system will only remove a small fraction of total suspended solids (TSS) and, therefore, incorporation of additional best management practices (BMP) is needed to achieve the 80% TSS removal requirements.

Because the project requires a NPDES Permit and includes stormwater discharge to an ORW, MassDEP will review the SWPPP to determine whether measures and controls identified in the SWPPP will adequately prevent or minimize stormwater impacts to the protected resource and determine if additional stormwater pollution control measures will be required.

Because this project does not require preparation of an Environmental Impact Report (EIR), it is not subject to the EEA Greenhouse Gas Policy and Protocol; however, I strongly encourage the proponent to consider how the project can be designed and operated to minimize energy use and associated municipal costs. As comments from MassDEP note, the upgrade and expansion of the existing plant will likely require more energy for additional pumping and treatment. The installation of premium efficiency electric motors and variable speed drives can significantly reduce electric consumption and plant operating costs.

The MassDEP SRF allows communities to integrate renewable energy and energy conservation into new or upgraded construction projects. Eligible project types may include renewable energy sources (e.g. wind power, micro-turbine systems, photovoltaic cells, fuel cells, digester gas use for power/heat) green buildings, new energy efficient equipment (e.g., lighting, HVAC systems, motors, pumps) and energy conservation retrofits. This is an opportune time to consider the incorporation of additional cost-effective energy saving improvements into the project. The MassDEP comment letter identifies resources and funding available from National Grid, the Massachusetts Technology Collaborative (MTC) Renewable Energy Trust, EPA and ENERGY STAR. I urge the proponent to take advantage of these resources.

MassDEP comments note that the ENF does not state how Amesbury will meet its municipal water needs during the construction process. If the Town will need MassDEP to inspect and approve individual treatment units for use as construction proceeds, the Town should consult with MassDEP prior to construction. In addition, MassDEP comments indicate that the project will require pre-installation approval for the emergency generator.

The review of the ENF has served to adequately disclose the potential impacts associated with this project. Based on the information in the ENF and after consultation with relevant public agencies, I find that no further MEPA review is required. The project may proceed to permitting.

November 7, 2008 Date

Bowles

Comments Received:

10/28/08 Massachusetts Department of Environmental Protection/Northeast Regional Office (MassDEP/NERO)

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