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March 7, 2008

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

PROJECT NAME : Dennis Water Treatment Facilities
(South WTF and North WTF)
PROJECT MUNICIPALITY : Dennis
PROJECT WATERSHED : Cape Cod
EEA NUMBER : 14176
PROJECT PROPONENT : Dennis Water District
DATE NOTICED IN MONITOR : February 6, 2008

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.03 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).

As described in the Environmental Notification Form (ENF) and supplemental materials, this project involves the construction of two, four million gallons per day (MGD) iron and manganese removal water treatment facilities (WTFs). Each facility will be located on property owned by the Dennis Water District, with the North WTF located off Old Bass River Road and the South WTF located off Route 134. Each WTF will treat water from five existing public water supply wells, for a total treatment of ten wells. The project includes the installation of approximately 24,000 linear feet of new raw water and finished water transmission mains. Some of the raw and finished water mains will be placed side-by-side, resulting in a total construction route distance of 16,250 feet. The majority (approximately 11,250 feet) of new transmission mains will be installed in existing disturbed areas such as gravel or dirt access roads;



approximately 5,000 feet of new transmission mains will be located in undisturbed areas, requiring clearing and grubbing of vegetation.

The project will result in 3.81 acres of land alteration associated with the North WTF and transmission mains, while the South WTF and transmission mains will require the alteration of approximately 3.28 acres of land. Certain portions of the transmission main routes associated with the North WTF will traverse *Priority* and *Estimated* habitat for rare or endangered species. Efforts have been made on the part of the proponent to locate transmission mains outside wetland resource areas and their 100-foot buffer zones. Each WTF will be a 50-foot by 100-foot metal building with slab-on-grade foundations. The WTFs will be set back from roadways or abutters to the maximum extent practicable. Each WTF will have two lined lagoons for settling and treatment of residuals (backwash water) and one infiltration lagoon for the supernatant from the lined lagoons.

The project is undergoing MEPA review pursuant to Section 11.03(4)(b)(4) because the project requires a State Agency Action and will involve the construction of a new drinking water treatment plant with a capacity of 1,000,000 or more gallons per day. The project requires an Approval to Construct a Water Treatment Facility (DEP BRP WS 24) and Distribution System Modifications (DEP BRP WS 32) approval from the Massachusetts Department of Environmental Protection (MassDEP). The project will require approval under the National Pollutant Discharge Elimination System Construction General Permit (NPDES CGP) from the United States Environmental Protection Agency (U.S. EPA). The project may require an Order of Conditions from the Dennis Conservation Commission and/or review under the Massachusetts Endangered Species Act (MESA).

The project will be financed in part by State Revolving Funds issued by the Commonwealth. Therefore, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment.

Water Supply

The project will include the construction of two, four-MGD WTFs, for treatment of iron and manganese within town public water supply wells. The project will also require the construction of 24,000 feet of new water transmission mains. The raw water transmission mains will be installed from pumping stations to corrosion control facilities (as needed) and from corrosion control facilities to the WTFs. Finished water transmission mains will be installed from the WTFs to the distribution system. In some instances, raw and finished water mains will be installed side-by-side, requiring a cleared width of approximately 20 feet to accommodate construction equipment. Other routes will have single transmission mains, which will require a cleared width of ten feet for equipment. Transmission main trenches will be approximately six to seven feet in depth with trench widths varying from three to five feet for single water mains to eight feet in width for side-by-side water mains. Disturbed areas will be allowed to revert back to their natural state, with selective vegetation maintenance to ensure access to the various pump stations and water mains for operations and maintenance purposes.

The proponent has presented two transmission main route options near Grassy Pond associated with the North WTF. Option A avoids wetland resource areas but veers off the existing ten foot wide pathway to reduce the length of water main that would need to be constructed. The Option A route is approximately 1,000 feet in length. Option A would require a 20 foot wide path in an undisturbed upland area, with a total new disturbance of 0.51 acres. Option B would follow the existing ten foot wide path in its entirety, for a length of approximately 2,550 feet. The existing ten foot wide path would need to be cleared an additional ten feet in width to accommodate the construction equipment, resulting in a total new disturbance of 0.59 acres. Both routing options are located within *Priority* and *Estimated* habitat for rare species. I encourage the proponent to work with the Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP) and the Dennis Conservation Commission to select a route option that will successfully reduce potential resource area and habitat impacts to the maximum extent practicable.

Wetlands

As currently proposed, the project has been designed to avoid direct alteration to both wetland resource areas and their associated 100-foot buffer zones. Should the location of transmission mains be altered in accordance with requests under MESA, the proponent should reevaluate the potential impact to wetlands or buffer zone. If necessary, the proponent should file a Notice of Intent with the Dennis Conservation Commission in accordance with the Massachusetts Wetlands Protection Act.

Rare Species

According to NHESP, a portion of the proposed project is located within mapped *Priority* and *Estimated* habitat for several vascular plant species including: Plymouth Gentian (*Sabatia kennedyana*), Wright's Panic-grass (*Dichanthelium wrightianum*), Redroot (*Lachnanthes carolianna*), Long-beaked Bald-sedge (*Rhynchospora scirpoides*), and Terete Arrowhead (*Sagittaria teres*).

The proponent has submitted a formal filing with NHESP in accordance with the Massachusetts Endangered Species Act (MESA). The location of the two WTFs are not located within mapped habitat areas and NHESP has indicated that they anticipate that this portion of the project would not result in a "take" of state-listed species. The proponent should provide the supplemental information requested by NHESP in their comment letter on the ENF related to the construction of water mains in the area between Run Pond and the cranberry bogs and the area between Grassy Pond and the Wixon Middle School. The NHESP comment letter stated that while they require more information for project review, they anticipate that state-listed species conflicts can likely be avoided and/or addressed by the proponent without significant change to the proposed project. I expect that the proponent will provide these materials to NHESP, modify the project as necessary to accommodate rare species interests, and accept project conditions to avoid, minimize, or mitigate potential impacts to rare species habitat.

Historic Resources

The locations for the two water treatment facilities are within the boundaries of the Old King's Highway Historic District which is listed in the State and National Registers of Historic Places. The proponent indicated at the MEPA consultation session that efforts were taken to site the WTFs in a manner that would limit their visibility from the Historic District. The Massachusetts Historic Commission (MHC) has issued a comment letter stating that the proposed project will have "no adverse effect" (36 CFR 800.5(b) and 950 CMR 71.07(2)(b)(2)) on the Old King's Highway Historic District.

Stormwater

The paved areas surrounding the WTFs will not contain structured stormwater Best Management Practices (BMPs). Vegetated areas surrounding the paved areas will capture and filter stormwater runoff. I encourage the proponent to investigate the feasibility of infiltrating clean roof runoff from each WTF building as an additional measure of groundwater recharge. The WTFs are located in designated Zone II's or Interim Wellhead Protection Areas (IWPAs). The proponent indicated at the MEPA consultation session that chemical storage areas on-site will include a 110% containment area and that propane generators will be used. The proponent also intends to dose pre-filter chemicals, potassium hydroxide (KOH) for pH adjustment and sodium hyperchlorite (NaOCl) for oxidation, at the existing Corrosion Control Facilities, limiting the storage of additional chemicals at the new WTFs.

The overall project will result in the disturbance of greater than one acre in area. The proponent will require a NPDES CGP approval from the U.S. EPA. The proponent should prepare a stormwater pollution prevention plan to outline stormwater management measures and erosion and sedimentation controls that will be employed on site to reduce construction period impacts related to stormwater discharges.

Based on the information in the ENF and after consultation with relevant public agencies, I find that no further MEPA review is required at this time. The project may proceed with obtaining required State permits.

March 7, 2008

Date


Ian A. Bowles

Comments received:

02/25/2008 Massachusetts Historical Commission
02/26/2008 Division of Fisheries and Wildlife – Natural Heritage and Endangered Species Program
02/29/2008 Massachusetts Department of Environmental Protection - SERO
IAB/HSJ/hsj