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August 8, 2008

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

PROJECT NAME : Bomil Wells Water Treatment Facility
PROJECT MUNICIPALITY : Chelmsford
PROJECT WATERSHED : Merrimack
EEA NUMBER : 14281
PROJECT PROPONENT : North Chelmsford Water District
DATE NOTICED IN MONITOR : July 9, 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 information, this project involves the construction of a 2.5-million gallons per day (MGD) water treatment facility (WTF) to remove iron and manganese from the North Chelmsford Water District's (Proponent) Bomil water supply wells. The facility will be located on a 58-acre parcel, owned by the Proponent, and located off Richardson Road in Chelmsford. The new WTF will have a designed capacity of 2.5 MGD and will treat raw water supplied from four existing public water supply wells which have a combined approved daily withdrawal rate of 1.8 MGD. The project includes the construction of a one-story 12,837 square foot (sf) slab-on-grade building housing water filtration equipment, office space, restrooms w/shower, garage space, a loading dock, eight surface parking spaces, and a new 1,250-foot-long and 15-foot wide bituminous site driveway.

The project will also involve the installation of a new twelve-inch finished water transmission main, a two-inch sewer connection force main, and gas and electric utility service extending approximately 1,250 linear feet west from Richardson Road to the WTF. A portion of the finished water will be conveyed from the WTF via an existing twelve-inch cross-country water supply main north to existing service located in Spring Street. The majority of new finished water transmission main, sewer connection pipe, and utilities will be installed within the proposed site driveway right-of-way. The project will result in 3.75 acres of land alteration associated with the construction of the WTF building and water transmission mains and associated utilities. Efforts have been made on the part of the Proponent to locate transmission mains outside of wetland resource areas and their 100-foot buffer zones.

The project is undergoing MEPA review pursuant to Section 11.03(4)(b)(4) because it 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 (BRPWS24) and a Distribution System Modifications Approval (BRPWS32) from the Massachusetts Department of Environmental Protection (MassDEP). The project requires a National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) for stormwater discharges from a construction site of over one acre from the U.S. Environmental Protection Agency. The project will also require an Order of Conditions from the Chelmsford Conservation Commission (and hence Superseding Order(s) from MassDEP if any local Orders are appealed). The project may also require an Air Quality Permit from MassDEP if the WTF will include an emergency power generator with an energy generation capacity of greater than 3 million British Thermal Units (BTU) per hour.

The Proponent is not seeking state funding or financial assistance for the proposed project. MEPA jurisdiction therefore is limited to those aspects of the project within the subject matter of any required or potentially required state permits that have the potential to produce significant damage to the environment (land alteration, wetlands, and water supply).

Wetlands

The project has been designed to avoid direct alteration to bordering vegetative wetlands (BVW) and flood plain area located on the project site. As currently proposed, the project will result in the alteration of approximately 8,000 sf of 100-foot wetland buffer area, and the filling of approximately 1,100 sf of the 100-year floodplain area. MassDEP has indicated that the project will result in the filling of approximately 4,500 sf of the 100-year floodplain area. The Proponent must provide additional information to MassDEP regarding the project's proposed floodplain filling and compensatory flood storage commitments. The Proponent should provide an updated site plan to the MEPA Office depicting the affected and compensatory floodplain areas for the project file.

Stormwater

As designed, portions of the WTF will be located within a Zone I of a public drinking water supply. According to the Proponent, the proposed stormwater management system has been designed to meet MassDEP's Stormwater Management Regulations. The site driveway will be paved and bermed.

According to the Proponent, treebox filters will provide the required stormwater treatment prior to disbursement to adjacent land area. In the area of the WTF, the stormwater management plan incorporates a grass swale to convey stormwater and treat for the metal roof prior to discharge to an infiltration basin to be located immediately west of the WTF. The infiltration basin will attenuate all storm events and provide for the required groundwater recharge. The Proponent indicated at the MEPA consultation session that on-site chemical storage areas will include a 110% containment area and that propane generators will be used. The Proponent should prepare a stormwater pollution prevention plan for MassDEP's review that clearly outlines on-site stormwater management measures and erosion and sedimentation controls that will be employed to reduce construction and post-construction period impacts related to stormwater discharges.

Water Supply

The project will also require the construction of 1,250 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 WTF. A finished water transmission main will be installed from the WTF to the North Chelmsford Water District's water supply distribution system. Disturbed areas will be allowed to revert back to their natural state, with selective vegetation maintenance to ensure access for operations and maintenance purposes.

New Water Supply Wells

As described in MassDEP's comment letter, the Proponent has recently submitted a Request for Site Exam and Pump Test Proposal application to MassDEP for the proposed construction of two new additional public water supply bedrock wells near the existing Bomil Wells to meet projected future water demand and provide operational flexibility. The Proponent estimates that these two new wells will supply the North Chelmsford Water District with up to approximately 0.70 MGD of additional water from the Merrimack River Basin. According to the Proponent, the proposed WTF has been designed to accept and treat the additional water that might be supplied from these proposed new bedrock wells. The Proponent will need to file a Notice of Project Change (NPC) with the MEPA Office if the Proponent proposes to develop these new wells sites as viable sources of public water supply.

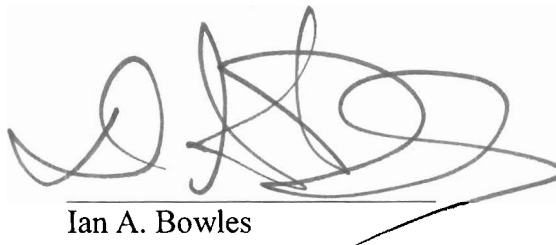
Wastewater

The WTF will generate wastewater and residual solids from the filtration process, and lavatory-generated wastewater. Filtration process wastewater will be collected on-site in an underground concrete storage tank and conveyed to two on-site lined backwash water filtering beds located east of the proposed parking area for settling and treatment of residual solids. The residual solids, consisting primarily of iron and manganese, will be collected and trucked off-site for disposal. The Proponent must provide MassDEP with an off-site disposal plan for the residual solids generated by the WTF. Neutralized filtration water generated by the filtration process will be conveyed from the water filtering beds and discharged to BWV located north of the WTF and west of Bomil Well #1.

According to the comments received from MassDEP, the proposed lined filtering beds are located within a 400-foot Zone I for Bomil Well #1 and must be relocated outside of the Zone I water supply protection area. The WTF will also generate approximately 100 gpd of lavatory-generated wastewater which will be conveyed via a two-inch force main from the WTF to Chelmsford's sewer collection system located in Richardson Road. The Proponent must also satisfactorily demonstrate to MassDEP that the Town of Chelmsford has sufficient sewer capacity to serve the project's estimated wastewater flows.

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.

August 8, 2008
Date



Ian A. Bowles

Comments received:

07/29/2008 Northern Middlesex Council of Governments (NMCOG)
07/29/2008 Massachusetts Department of Environmental Protection (MassDEP) – CERO

IAB/NCZ/ncz
EEA #14281