

## DEVAL L. PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

IAN A. BOWLES

## The Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Tel: (617) 626-1000 Fax: (617) 626-1181 http://www.mass.gov/envir

September 5, 2008

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

PROJECT NAME

: Bedrock Wellfield

PROJECT MUNICIPALITY

: Phillips Road - Lynnfield

- PROJECT WATERSHED

: North Coastal

EOEA NUMBER

: 14293

A PROJECT PROPONENT

: Lynnfield Center Water District

DATE NOTICED IN MONITOR

: August 6, 2008

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-621) 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).

According to the Environmental Notification Form (ENF), the proposed project consists of the development and construction of a bedrock wellfield (Wells No. 6, 7, 9, and 10) with a capacity of 610,000 gallons per day (gpd)/424 gallons per minute (gpm). The proposed project will include the installation of a submersible purip and motor at each well. The well water will teceive treatment to mitigate for high levels of naturally occurring iron and manganese. The project includes a new emergency generator with a propane tank and an additional greensand filter at the existing 4,387-sf water treatment plant on the project site. The new wells will be connected to the system via approximately 1,900 linear feet of 8-inch diameter water main. The project will include a 1,500-linear foot gravel access roadway that is about 10 feet wide. Beside the water treatment plant, the 104-acre site contains the Phillips Road Tubular Wellfield (490,000 gpd), Wells No. 9 (130,000 gpd) and No. 26 (300,000 gpd). Well No. 26 is proposed for abandonment because of water quality deterioration.

The proponent is proposing these wells as approved withdrawal points, but the wells would not be included as permitted volume beyond what is already registered by the proponent. The wellfield is being developed to address long-term water supply needs and to augment the existing water supply sources with the abandonment of Well No. 26. It would create flexibility

and reliability in the water system, improve fire protection, meet future water demands, and take pressure off the existing water supply. The proponent is proposing to request an increase in its permitted water withdrawal after its Water Demand Forecast has been completed by the Massachusetts Water Resources Commission (MWRC).

This project is subject to review pursuant to Section 11.03(4)(b)(1) of the MEPA regulations because it involves a new withdrawal of 100,000 or more gpd from a water source that requires new construction for the withdrawal. The Department of Environmental Protection (MassDEP) must approve the Pump Test Report. The project may require a New Source Approval, a Water Management Act Permit, an Approval to Construct, and an approval of the treatment plant modifications by MassDEP. The proponent has a Water Management Act (WMA) Permit for the Ipswich River Basin for the Glen Drive Wellfield, which does not have any permitted volume. In the future, the proponent will receive a permitted volume under the WMA. The project may require an Order of Conditions from the Lynnfield Conservation Commission for impacts to wetland buffer zones. MEPA jurisdiction is limited to those aspects of the project within the subject matter of state permits and that may cause Damage to the Environment, as defined in the MEPA regulations (in this case: water withdrawal and treatment, wetlands, and stormwater).

The proponent currently is registered to withdraw 0.61 million gallons per day (mgd) or approximately 223 million gallons per year from its North Coastal and Ipswich River Basins. The Lynnfield Center Water District's average and maximum daily demands have not exceeded 0.81 mgd. The addition of this proposed wellfield to its withdrawal permit would provide redundancy. The proponent is not seeking an increase in the total volume withdrawn by the system within the current permit period. In the future, the proponent anticipates requesting an additional withdrawal volume in the range of 0.05 to 0.25 mgd. The Zone I wellhead protection area is approximately 28 acres and will be controlled by the proponent. The Zone II area is approximately 608 acres.

As part of this review, the proponent summarized its efforts to operate an efficient water supply system. The proponent conducts a leak detection survey of the full system every two years. Master meters are calibrated annually. The water system is 100 percent metered. The proponent replaces about 150 water meters each year. The unaccounted-for-water in the system was approximately 15 and 10 percent in 2007 and 2006, respectively. In 2007, the proponent's unaccounted-for water was higher than the Department of Conservation and Recreation's (DCR) recommended goal of 10 percent. The proponent's residential consumption rate is about 71 gallons per person per day (gpcd). Most Town buildings have been retrofitted with low-flow fixtures and appliances. The proponent has a public education program to inform customers of the efficient use of water, and fliers on water conservation are included with water bills. It provides educational tours of its facilities.

The Town of Lynnfield has a groundwater protection district in place. The areas for the existing Zone II and the new wellfield's proposed Zone II are already encompassed within the boundary of the groundwater protection district. The Town has adopted a Water Use Restriction Bylaw, and the proponent limits the outside use of sprinklers to even calendar days between 5:00 and 9:00 pm year-round. On November 12, 1996, the Lynnfield Board of Health adopted the Model Floor Drain Regulation Wellhead Protection Source Approval Regulation 310 CMR 22.21. This regulation prohibits floor drains in existing facilities, in industrial or commercial hazardous material areas, which discharge to the ground without a MassDEP permit within the Zone II or Zone III. The Town of Lynnfield has adopted Low Impact Development (LID) techniques that maximize infiltration, minimize the need for irrigation, and encourage water-efficient appliances. The Town of Lynnfield requires builders to install low-flow toilets for new construction and renovations.

The proponent operates a fully-funded water system in which customers pay for the actual cost of water. It uses an increasing block rate system for water rates to encourage users to limit their water use. The proponent will initiate a rebate program for residential water-savings devices in the near future.

The proponent expects that MassDEP will require wetland monitoring as a condition of the Water Withdrawal Permit for this project. I strongly encourage the proponent to incorporate the following measures as part of this project. The proponent should consider distributing free water conservation kits to all customers. The proponent should investigate adding a seasonal price increase during hot and dry weather to its water conservation program in order to discourage outdoor watering.

Based on a review of the information provided by the proponent and after consulting with the relevant public agencies, I find that the potential impacts of this project do not warrant the preparation of an EIR and can be adequately addressed in the MassDEP permitting process. No further MEPA review is required.

September 5, 2008

Date

lan A Rowles

Comments received:

CDM, 8/20/08 MassDEP/NERO, 8/26/08

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