



The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

100 Cambridge Street, Suite 900

Boston, MA 02114-2524

MITT ROMNEY
GOVERNOR

KERRY HEALEY
LIEUTENANT GOVERNOR

STEPHEN R. PRITCHARD
SECRETARY

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

July 28, 2006

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS

ON THE SPECIAL REVIEW PROCEDURE

PHASE II: SCREENING OF ALTERNATIVES

PROJECT NAME : Comprehensive Wastewater Management Plan
PROJECT MUNICIPALITY : Tyngsborough
PROJECT WATERSHED : Merrimack
EOEA NUMBER : 11788
PROJECT PROPONENT : Town of Tyngsborough
DATE NOTICED IN MONITOR : June 21, 2006

As Secretary of Environmental Affairs, I hereby determine that the Phase II: Screening of Alternatives document submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00). The proponent may prepare and submit for review the Phase III: Draft Environmental Impact Report (DEIR)/Facilities Plan.

Project Description

This project involves the development of a town-wide Comprehensive Wastewater Management Plan (CWMP) for Tyngsborough. The goal of the CWMP is to examine the full range of wastewater management needs and identify environmentally sustainable treatment and disposal alternatives that respond to the community's needs while meeting water quality and public health standards. The Town has identified alleviating non point source pollution, protecting water quality and promoting groundwater recharge as priorities. The result will be a comprehensive plan outlining how the Town of Tyngsborough will treat and dispose of its wastewater for the next 20 years.

One third of the community's wastewater management needs are met through existing sewers in the areas of Mascuppick Lake, Dunstable Road and the southern end of Pawtucket Boulevard. The Tyngsborough Sewer Commission is responsible for administering, maintaining, and operating these sewage collection systems. Sewage is conveyed from Tyngsborough to the Lowell Regional Wastewater Utility (LRWU) for treatment via sewage collection systems in the towns of Dracut, Chelmsford and Lowell. Wastewater flow limits are established through intermunicipal agreements (IMAs) with each of these communities. The remaining two thirds of the wastewater management needs are met through on-site systems located throughout the town. Seventy percent of the Town's water needs are met through local aquifers and, as noted previously, protection of groundwater resources is an important priority of the CWMP.

Procedural History

In the fall of 1998, the Town of Tyngsborough filed an ENF for the CWMP. In December of that year, a Certificate on the ENF was issued defining a Special Review Procedure (SRP) for the CWMP and allowing a portion of the proposed plan, east of the Merrimack River, to proceed as Phase I prior to completion of the EIR for the overall project. On April 6, 2001, a Certificate was issued on a Notice of Project Change (NPC) granting the proponent's request to add a section of sewers to the Phase I project to support the development of Sycamore Networks, a campus style office park off Potash Hill Road.

The SRP required the Town of Tyngsborough to file four documents: Phase I: Needs and Growth Management Analysis includes an assessment of existing conditions and an analysis of wastewater management needs; Phase II: Screening of Alternatives, which is the current document, includes the development and screening of water resources and wastewater management alternatives to address the needs defined in the Phase I document; Phase III: DEIR/Facilities Plan will evaluate the most feasible options and present a draft plan; and Phase IV: FEIR/Facilities Plan will present the final proposed plan and incorporate and respond to any outstanding comments and issues. On May 15, 2003, a Certificate was issued on the SRP: Phase I document indicating that it adequately and properly complied with MEPA regulations and establishing the Scope for the Phase II document.

Permits and Jurisdiction

This project is subject to the Mandatory EIR provisions of the MEPA regulations because it will likely involve construction of more than ten miles of new sewers and may exceed other Mandatory EIR thresholds. It will likely require sewer extension and connection permits from the Department of Environmental Protection (DEP), National Pollutant Discharge Elimination System (NPDES) permits from the U.S. Environmental Protection Agency (EPA) and an Order of Conditions from the Tyngsborough Conservation Commission. It may also require access permits from the Massachusetts Highway Department (MHD). Because the project will receive funding or financial assistance from DEP under the State Revolving Fund (SRF), MEPA jurisdiction extends

to all aspects of the project that may cause Damage to the Environment.

Summary of Phase II: Screening of Alternatives

The Phase II report evaluates technologies and sites for their ability to address the wastewater needs of all study areas identified in the Phase I report as medium or high severity. Also, it responds to specific comments raised by DEP during review of the Phase I document. The report summarizes a broad range of wastewater alternatives and technologies including: on-site wastewater management; regional wastewater solutions; wastewater collection, disposal and treatment; and alternative technologies. The report assesses 10 potential sites for locating wastewater management facilities. It concludes that none of these sites are appropriate for one or several of the following reasons: soils (moderate to severe), land use restrictions (many sites are under conservation restrictions), water supply impacts (many are located within Interim Wellhead Protection Areas (IWPA)) or other environmental impacts (endangered species habitat, proximity to surface waters). The report does not provide much information regarding site selection and, although additional sites may have been considered, only publicly owned sites were included in the report.

The report identifies sewer capacity available through existing intermunicipal agreements (IMAs) and describes associated flow limits. It indicates that IMA's provide a total of 2.03 million gallons per day (mgd) in permitted capacity. Currently, the Town is using approximately .46 million gallons per day (mgd) of existing capacity and has 1.57 mgd additional capacity. The report identifies the potential for additional sewer capacity through connection to the Nashua, New Hampshire sewer system.

Based on the review of alternatives and technologies and the site selection analysis, the report identifies expansion of the existing sewer system for nine of the study areas and inclusion of development and implementation of Septage Management Plans (SMPs) for seven of the study areas. It notes potential secondary growth impacts related to this approach; however, it does not include a thorough assessment of this issue.

As required, the report provides a response to comments providing during review of the Phase I document report. It provides additional information on the only large (greater than 15,000 gallons per day) Title 5 system in the Town, summarizes results of the Inflow/Infiltration study (completed in October 2002), provides a revised estimate of wastewater flow rates for typical homes based on actual water use data and provides additional information on water conservation.

Scope for the Phase III: DEIR/Facilities Plan

The Phase II report contains a proposed scope for the Phase III DEIR/Facilities Plan. It will assess the costs, financing, environmental impacts (direct and secondary) and technical design criteria for wastewater systems. It will include a draft wastewater management plan, preliminary

plans and designs and identify appropriate measures to mitigate environmental impacts. It will assess the secondary impacts associated with sewer expansion and the coordination of the Town's Master Plan with the CWMP in more detail. In addition, it will respond to this Certificate and the comments provided on the Phase II document.

DEP and EPA have indicated that reconsideration of potential sites for wastewater facilities may be appropriate for two reasons: 1) some sites may have been overlooked or eliminated prematurely; and 2) available capacity appears to be lower than that identified in the IMA. Site screening for groundwater disposal is not normally limited to publicly owned sites as this analysis appears to be and, while protection of water supply should be and is an important consideration, DEP guidelines allow wastewater discharges in Zone II areas (although treatment standards are more protective) particularly in areas where the time of travel between the discharge and the well is more than two years. The DEIR should include additional, more detailed information regarding site selection and public water supply constraints.

Comment letters provided by DEP and the Town of Dracut indicate that capacity provided through existing IMA's is lower than that identified in the Phase II report. The IMA between Tyngsborough and Dracut allows generation of 1.0 mgd of average daily flow and 2.1 mgd of maximum daily flow. The 1.6 mgd cited in the report refers to transmission capacity, not flow limits. Therefore, the Town has .97 mgd additional capacity, not 1.57 mgd. Both DEP and EPA have noted that it is unlikely that the Town can secure increases in permitted flow capacity because the City of Lowell is at or near the flow limitation in its NPDES permit. The DEIR should identify projected flows for the needs areas (both residential and commercial/industrial) to assess whether permitted capacity (1.43 mgd) is adequate to handle existing flows and projected growth. In addition, DEP has noted that the report should include Memorandums of Agreement (MOAs) or new/revised IMAs, as appropriate, to demonstrate the feasibility of the recommended plan.

Comments from EPA express concern that expansion of the sewer system may affect tributary stream flows and be inconsistent with the Massachusetts Water Policy. I note that the Scope of Work indicates that the maintenance of water balance within drainage sub-basins will be addressed.

The DEIR should include a copy of this Certificate, copies of the attached comment letters and should address the issues raised by each. The proponent should work with DEP to refine and finalize the Scope of Work for the Phase II document. The proponent should file the revised Scope of Work for the Phase II document with the MEPA Office for publication of a Notice of Availability in the *Environmental Monitor*, and it should distribute copies of the revised Scope of Work to all commentors to the Phase II document.

July 28, 2006

Date


Stephen R. Pritchard

Comments received:

7/21/06 Department of Environmental Protection/Northeast Regional Office (DEP/NERO)
7/21/06 Division of Fisheries & Wildlife/Natural Heritage &
Endangered Species Program (DFW/NHESP)
7/17/06 United States Environmental Protection Agency (EPA)
7/26/09 Northern Middlesex Council of Governments
7/20/06 Town of Dracut

SRP/CDB/cdb