



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

Deval L. Patrick
GOVERNOR

Timothy P. Murray
LIEUTENANT GOVERNOR

Ian A. Bowles
SECRETARY

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

June 13, 2008

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
PHASE III DRAFT EIR/FACILITIES PLAN/2nd NOTICE OF PROJECT CHANGE

PROJECT NAME : Chatham Comprehensive Wastewater
Management Plan
PROJECT MUNICIPALITY : Chatham
PROJECT WATERSHED : Cape Cod
EOEA NUMBER : 11510
PROJECT PROPONENT : Town of Chatham
DATE NOTICED IN MONITOR : May 7, 2008

The Secretary of Energy and Environmental Affairs hereby determines that the Draft Environmental Impact Report (DEIR) submitted on the above project **adequately and properly complies** with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

This project involves the development of a comprehensive wastewater management plan/facilities plan for the Town of Chatham. The environmental review of the project under MEPA was defined in a Special Review Procedure established by agreement between the Town of Chatham and the MEPA Office in April 1998. The Special Review Procedure called for the filing of four documents:

- Phase I - Needs Analysis;
- Phase II - Screening of Alternatives;
- Phase III - Draft EIR/Facilities Plan; and
- Phase IV - Final EIR/Facilities Plan.

MEPA History

The Phase I document was submitted to the MEPA Office for review in September 1999 and was found adequate in October of 1999. The Secretary's Certificate on the Phase I - Needs Assessment document required the proponent to include in the Phase II document detailed responses to the issues raised in the comment letters on the Phase I document, a discussion of the proposed project's consistency with Executive Order 385, (Planning for Growth), and the Town of Chatham's land use and open space goals.

Notice of Project Change

A Notice of Project Change (NPC) was filed with the MEPA Office on March 10, 2004 pursuant to Section 11.10 (2) of the MEPA Regulations because more than three years elapsed between the publication of the Secretary's Certificate on the Phase I Needs Analysis and the filing of the Final EIR/Facilities Plan. According to the comments received from the Department of Environmental Protection (MassDEP) and Massachusetts Coastal Zone Management (CZM) on the NPC submittal, the Town of Chatham continued to work closely with MassDEP, the Cape Cod Commission (CCC), the Marine Estuaries Project (MEP) and others to develop appropriate nitrogen load limits (total maximum daily load (TMDLs) for nitrogen for coastal embayments.

According to the comments received on the NPC, the Town of Chatham has made significant progress and continues to demonstrate its commitment to the comprehensive wastewater management planning process. As described in the NPC, the Town also requested a change to the Special Review Procedure described above, and proposed to submit for MEPA review a Supplemental Needs Analysis, and to combine the Phase II document (Screening of Alternatives) and the Phase III document (Draft EIR/Facilities Plan) documents into one MEPA submittal document entitled "Alternatives Analysis and Draft Environmental Impact Report/Recommended Facilities Plan". The proposed change to the Special Review Procedure would allow the MEPA review of the Town of Chatham's Comprehensive Wastewater Management Plan in three steps:

Phase II – Supplemental Needs Assessment

Phase III – Draft Environmental Impact Report/Recommended Facilities Plan

Phase IV - Final Environmental Impact Report /Recommended Facilities Plan

The Secretary's Certificate on the NPC submittal (April 9, 2004) found that the proposed changes to the Special Review Procedure were appropriate and acceptable. The Town was asked to include in the Phase II (Supplemental Needs Assessment) document detailed responses to the issues raised in the comment letters on the previously submitted Phase I Needs Assessment document, and a discussion of the proposed project's consistency with Executive Order 385 (Planning for Growth), and the Town of Chatham's land use and open space goals.

2nd Notice of Project Change and Phase III Draft EIR/Facilities Plan

The Proponent has filed this second Notice of Project Change (2nd NPC) with the MEPA Office pursuant to Section 11.10 (2) of the MEPA Regulations because more than three years have elapsed between the publication of the Secretary's Certificate on the Phase I Needs Analysis and the filing of the Final EIR/Facilities Plan. This 2nd NPC contains a description of the Proponent's recommended phased (Phase 1, Phase 2) comprehensive wastewater management and reduced nitrogen loading plan to provide municipal sewer service throughout the Town of Chatham and restore Chatham's marine embayments by 2040.

DRAFT RECOMMENDED WASTEWATER FACILITIES PLAN

Under Phase I of The Town of Chatham's Draft Recommended Comprehensive Wastewater Management Plan (CWMP), the Town proposes to expand its existing wastewater collection system with approximately 110 miles of new gravity and pressure sewers, 1200 grinder pumps, 80 lift stations to serve the 17 sub-watershed Areas of Concern (AOC), and to upgrade the Chatham Wastewater Treatment Facility (Chatham WWTF) meet Enhanced Nitrogen Removal (ENR) standards for the on-site treatment and disposal of up to 1.3 millions gallons per day (mgd) of average wastewater flows. According to the information contained in the DEIR document, the need for the proposed CWMP is to remediate the current nitrogen loading to coastal estuaries to meet the TMDL requirements established by MEP for coastal estuaries and embayments, including Pleasant Bay. Proposed facility upgrades will also include the construction of a new Sewer and Water Department maintenance and administration building. Phase II sewer construction activities will involve further expansion of Chatham's wastewater collection and treatment systems to serve the Phase II Needs Areas and accommodate a total of approximately 1.9 mgd of wastewater flows collected from all areas of Chatham. According to the proponent, the proposed upgrades to the Chatham WWTF will include additional treatment capacity to accommodate possible future wastewater flows from areas of the Town of Harwich located adjacent to the proposed new sewers in Chatham.

As described by the Town, the previously completed (1996) improvements to the Town of Chatham's WWTF have enabled the facility to achieve drinking water quality standards associated with its on-site groundwater discharge. With the proposed upgrades to the WWTF, the Town will achieve an effluent nitrogen concentration of three parts per million (PPM), which is well below the state and federal drinking water standards. The Town has participated in further groundwater modeling analysis as part of its wastewater effluent discharge site screening and selection process and has determined that the WWTF's existing wastewater discharge location can accommodate additional Phase I and Phase II treated wastewater flows with no adverse effects on surrounding properties and groundwater resources.

In its comments, MassDEP indicated that a portion of the Chatham WWTF's groundwater discharge site is located within the Zone II of a Public Drinking Water Supply and that it will require that the Town incorporate treatment, including disinfection, as part of the facility's

treatment process pursuant to MassDEP's Interim Guidelines on Reclaimed Water (Revised), January 3, 2000. The FEIR should include a detailed discussion of the need for disinfection as part of the Town's proposed wastewater treatment process.

Adaptive Management Planning

The Town of Chatham's CWMP includes the implementation of an adaptive management process to monitor groundwater elevations and water quality at the Chatham WWTF groundwater recharge site, and nitrogen loading levels to coastal embayments during construction and upon completion of the phased sewerage project. This adaptive management approach will enable the CWMP to be adjusted based on the monitoring results of the environmental and economic impacts associated with the construction of new sewers in Chatham.

MassDEP has requested that the Town develop a feasible water quality and habitat quality compliance measure to track changes in water quality and habitat quality during implementation of each phase of project construction to verify the effectiveness of the Town's CWMP over time. The FEIR should respond to MassDEP's comments and include feasible water quality and habitat quality compliance measures and a detailed project implementation schedule with specific milestones and completion dates for the Phase I portion of the project.

In its comments, CCC has recommended that the Town design and implement an Adaptive Management Plan (AMP) to guide the implementation and monitor the success of the Town's proposed CWMP. Specifically, CCC has asked the Town include in an AMP a detailed description of how the AMP's monitoring results will be used to demonstrate achievement of TMDL water quality goals. The AMP should also include status reporting for nitrogen removal associated with the Town's phased construction of new sewers. The Town should consult with the CCC and MassDEP to design an AMP for this project. The FEIR should report on the Town's consultations with CCC and MassDEP.

Muddy Creek Basin Restoration

As described in the FEIR, MEP's findings conclude that the restoration of the Muddy Creek to a partial freshwater system could result in a significant reduction of nitrogen loading in the sub-watershed. The Town of Chatham and the Town of Harwich have identified the restoration of the upper portion of an old dyke located in the Muddy Creek basin to a freshwater body as a means of providing the natural attenuation of nitrogen from the Muddy Creek.

According to the Town, if successful, the restoration of Muddy Creek could reduce the extent of new sewers currently proposed in the Town's recommended CWMP. In its comments, the Pleasant Bay Resource Management Alliance (Pleasant Bay Alliance) has indicated that more information and analysis is needed to determine the potential impacts to surrounding resource

areas associated with the re-installation of a dike in Muddy Creek. I note that the Pleasant Bay Alliance has received grant funding from the Cape Cod Water Protection Collaborative to study the potential effects of restoring the upper portion of Muddy Creek into a freshwater system. The Town should consult with the Pleasant Bay Alliance and DMF as this component of the Chatham CWMP proceeds to final design. The Division of Marine Fisheries (DMF) has also requested that the Town consult with DMF to assess the potential impacts of the proposed Muddy Creek basin restoration project to diadromous fish species. The FEIR should provide an update of the Town's consultations with the Pleasant Bay Alliance and DMF.

Sewering and Growth Management

Executive Order #385 requires that state and local agencies engage in protective and coordinated planning oriented towards resource protection and sustainable economic development. For reasons of both environmental protection and fiscal prudence, investments in public infrastructure should be carefully targeted toward those areas for which clear existing needs have been established and for areas where denser development is appropriate, thereby relieving development pressures on open space, agricultural lands, and other valuable natural resources.

As currently proposed, the project will extend sewers within coastal floodplains and barrier beaches. In its comments, CZM has indicated that the Town has demonstrated that the proposed sewer project has been designed to eliminate or minimize potential storm damage risks associated with sewer barrier beach areas by locating proposed pump stations outside of the 100-year flood zone and protecting this portion of the Town's proposed sewer collection system from potential wave action. CZM recommends that the Town incorporate a system of check valves into the new sewer collection system for barrier beach areas to minimize impacts in the event of a storm-related breach to the collection system. The Draft Wastewater Facilities Plan/DEIR includes a discussion of the potential future build-out of the proposed new sewer areas and the consistency of the Town's WWFP with Executive Order #385 which discourages unintended growth within areas planned for sewerage. The Town has recently passed (May 2005) a new section of the Town of Chatham's *Rules and Regulations of the Sewer Department* designed to prohibit new growth that might occur in newly seweraged areas of Chatham. I note that according to the comments received from the Pleasant Bay Alliance, the Town of Chatham is currently undergoing a review of its zoning bylaws and should use this review period to assess the use of zoning and other growth management tools to control growth and development in newly seweraged areas.

The FEIR should describe any new by-laws or regulations being considered or proposed by the Town for controlling new future development requesting municipal sewer service and located in areas outside of the proposed new sewer areas. I encourage the Town to adopt any proposed growth by-laws, regulations, and policies prior to the construction of any new sewers extensions.

Mitigation

The FEIR should include a separate chapter on mitigation measures associated with the Final FEIR/Facilities Plan. This chapter on mitigation should include Draft Section 61 Findings for all state agency actions. The Draft Section 61 Findings should contain a clear commitment to implement mitigation, an estimate of the individual costs of the proposed mitigation, and the identification of the parties responsible for implementing the mitigation. A schedule for the implementation of mitigation should also be included.

The FEIR should provide a detailed description of the proponent's proposed mitigation plan, and should also discuss the value of the proposed mitigation in terms of the resources it provides and the opportunities for open space protection, and active and/or passive recreation it affords. I ask that the proponent consult with EEA staff, CCC and MassDEP to provide advice to the Town on feasible mitigation alternatives.

Comments

In order to ensure that the issues raised by commenters are addressed, the FEIR should include a response to comments. This directive is not intended to, and shall not be construed to, enlarge the scope of the FEIR beyond what has been expressly identified in the initial scoping certificate or this certificate. The Town of Chatham should respond to the issues identified in the comments received by the CCC, MassDEP, Office of Coastal Zone Management (CZM) and others on this DEIR/2nd NPC submittal, and the comments received on the Town's prior ENF and NPC submittals to the MEPA Office. I ask the Town to continue to work closely with CCC, MassDEP, and the CZM, to design and implement a sustainable Comprehensive Wastewater Facilities Plan and mitigation plan for the Town of Chatham that will help to offset the proposed project's municipal water withdrawal and sewerage impacts. The Town should continue to prepare the Phase IV – Final Wastewater Facilities Plan/FEIR for the project in accordance with Section 11.07 of the MEPA regulations as modified by this Certificate. The FEIR should include a copy of this Certificate and the Certificate granting a Phase I Waiver Request. The FEIR document should also contain copies of the comments received. The proponent should circulate the FEIR to those who commented on the ENF, and each of the previous four NPC submittals, and to any party required by regulation.

Circulation

The Final Wastewater Facilities Plan/FEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to Town of Chatham and Town of Harwich officials. A copy of the FEIR should be made available for public review at the Chatham and Harwich Public Libraries.

June 13, 2008

DATE



Ian A. Bowles, Secretary

Comments received:

- 06/03/08 Massachusetts Coastal Zone Management (CZM)
- 06/05/08 Donald Edge
- 06/06/08 Massachusetts Department of Environmental Protection (DEP) – SERO
- 06/06/08 Division of Marine Fisheries
- 06/06/08 Town of Chatham, Health Department
- 06/06/08 Pleasant Bay Resource Management Alliance
- 06/09/08 Cape Cod Commission (CCC)

EEA #11510 2nd NPC
IAB/NCZ/ncz