



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>

January 20, 2006

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
THE 4th NOTICE OF PROJECT CHANGE

PROJECT NAME : Area 5 Sewers/Wastewater Facilities Plan
PROJECT MUNICIPALITY : Barnstable
PROJECT WATERSHED : Cape Cod
EOEA NUMBER : 6553
PROJECT PROPONENT : Town of Barnstable
DATE NOTICED IN MONITOR : November 22, 2005

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c.30, ss.61-62H) and Section 11.17 of the MEPA regulations (301 CMR 11.00), I have reviewed the Notice of Project Change (NPC) submitted for this project and hereby determine that it **continues to require** the preparation of a Draft Wastewater Facilities Plan/Draft Environmental Impact Report (DEIR).

The proponent has requested a Phase I Waiver to allow the construction of the effluent force main from the Water Pollution Control Facility (WPCF) to the proposed wastewater discharge location (McManus site), the construction of the wastewater groundwater disposal facility at the proposed McManus effluent disposal site, and the sewerage of 2 areas in Barnstable to proceed, pending the preparation of the Phase III - Draft and Final Wastewater Facilities Plan/EIR for the project. A description of the Phase I Waiver activities was presented within the Notice of Project Change (NPC)/Phase I Waiver Request submittal. In a Draft Record of Decision (DROD), also issued today, I have proposed to **grant** a Phase I Waiver with conditions allowing portions of the proponent's Wastewater Facilities Plan to proceed to permitting and construction while the Draft Wastewater Facilities Plan/DEIR is being prepared.

Project History:

As described in the original September 1997 Environmental Notification Form (ENF), the project involved the sewerage of Area 5 of the Town of Barnstable. The Secretary's Certificate on the ENF authorized the installation of the proposed sewers while the proponent prepared an EIR to address the need for a Sewer Master Plan including options for improving the Hyannis Water Pollution Control Facility (WPCF). The Certificate also required the Town to limit connections to only those sites with documented failing on-site septic systems until the MEPA process was completed. A scope for an EIR was established in the ENF Certificate issued June 1987.

A Notice of Project Change (NPC) was filed in March 1996 that proposed to expand the project to include a comprehensive Town-wide wastewater facilities plan (WWFP) designed to quantify the Town's long-term wastewater treatment and water supply protection needs, and identify alternative approaches for meeting those needs. A Special Review Procedure was established for this project, consisting of a Phase I - Needs Report, Phase II - Screening of Alternatives (Interim Report of the Wastewater Facilities Plan), and Phase III - Draft and Final Wastewater Facilities Plan/EIR. The Secretary's Certificate on the NPC (April 1996), adopted the proponent's proposed scope for a Wastewater Facilities Plan/Environmental Impact Report (WWFP/EIR) and provided for the establishment of a Citizens Advisory Committee (CAC) to provide input into the plan's development.

A second Notice of Project Change (2nd NPC) was filed in May 2003, that proposed to proceed with portions of the Scope for the Phase III - DEIR to provide, in the near term, sewerage and advanced nitrogen removal for those Areas of Concern (AOCs) located in close proximity to the Hyannis WPCF. As described in the 2nd NPC, the Town proposed to wait until such time as the ongoing Massachusetts Estuaries Project can be concluded and relied on to develop appropriate nitrogen loading limits for determining appropriate treatment and discharge options for sewage flows from those AOCs located in the western and southwestern sections of Barnstable.

A third Notice of Project Change (3rd NPC) was filed in February 2005 that proposed to proceed with the construction of interim improvements to the Hyannis Water Pollution Control Facility (WPCF) that will enable the town to increase the wastewater flow capacity of the WPCF from 2.7 mgd to 4.2 mgd. Specifically, the proposed improvements to the WPCF include the addition of a third aeration tank, replacement of the existing grit removal system, and installation of a Supervisory Control and data Acquisition (SCADA) system. The proposed facility modifications will result in approximately 6,000 sf of land alteration and approximately 8,000 sf of new impervious surface area.

The Area 5 Sewers/Wastewater Facilities Plan project is undergoing review pursuant to Section 11.03 (5)(a)(3) and (5)(b)(3)(a) of the MEPA regulations, because the project will likely involve the construction of sewer mains ten or more miles in length and the construction of one or more new sewer mains that will result in the expansion in the flow to a wastewater treatment facility by 10% of existing capacity, respectively.

The project will require an Order of Conditions from the Barnstable Conservation Commission; a Construction Permit from the Massachusetts Highway Department (MHD); and a 401 Water Quality Certification and Sewer Extension Permit from the Department of Environmental Protection (DEP). Because the project is receiving financial assistance from the Commonwealth, MEPA jurisdiction extends to all aspects of the project that may produce significant Damage to the Environment. The project is also subject to Joint Review with the Cape Cod Commission (CCC) under the Development of Regional Impact (DRI) process. The Town continues to work closely with CCC and DEP. Both DEP and CCC have provided comments on this third NPC that are sufficiently detailed in nature and that should be incorporated in the existing scope of work for the EIR. The Town of Barnstable's continued interaction with CCC and DEP should serve to develop a comprehensive regional solution for the treatment and discharge of Barnstable's wastewater flows.

Fourth Notice of Project Change (NPC4) / Phase I Waiver Request

As described in this Notice of Project Change 4/Phase I Waiver Request, the proponent is now proposing a number of comprehensive sewer construction activities in advance of the proponent's completion and submittal of the Phase III - Draft and Final Wastewater Facilities Plan/EIR including; 1) construction of an 18" effluent force main within the Route 132 right-of-way from the Hyannis WPCF to the proponent's proposed effluent disposal site (McManus site) located near Exit 6 off Route 6, and construction of a sewer main from the Cape Cod Community College to the Route 132 effluent force main; 2) construction of the proposed McManus effluent disposal facility; and, 3) construction of two sewer extensions to limited areas in Hyannis (North Street, Pleasant Street).

Effluent Force Main/ Route 132 Roadway Reconstruction Project Coordination

The proponent proposes to construct an 18" effluent force main within the Route 132 right-of-way from the Hyannis WPCF to the proponent's proposed effluent disposal site (McManus site) located near Exit 6 off Route 6, and to construct a sewer main from the Cape Cod Community College to the Route 132 effluent force main. The proposed force main construction has been designed by the Town to convey 1.3 mgd of treated wastewater effluent from the Hyannis WPCF to a new McManus effluent disposal site. The proponent has worked closely with DEP, MHD and others to coordinate its proposed effluent force main construction with the construction of the Route 132 Reconstruction Project (EOEA #13526). As described by the proponent, the Route 132 Reconstruction Project involves widening and safety improvements to Route 132 from the Route 6 Interchange No. 6 to the Bearses Way interchange. A Secretary's Certificate on the Route 132 Reconstruction Project was issued in June 2005 and determined that no further MEPA review was required.

Wastewater Discharge/Disposal Locations – McManus properties site

The Town has completed a number of groundwater modeling studies and evaluations to evaluate potential groundwater impacts from various potential wastewater discharge sites located in the eastern half of Barnstable.

The Town has identified four sites (the McManus Properties Site – Site B, the Airport Site – Site C, the Cape Cod Community College Site – Site D, and the Lorusso Site – Site E) as suitable for the discharge/disposal of treated effluent from its Hyannis WPCF. The Town-owned 44-acre McManus site, located at the intersection of the Route 6 Mid-Cape Highway and Route 132, has been selected to accommodate approximately 1.3 mgd of effluent disposal using Rapid Infiltration Bed (RIB) and subsurface infiltration technology.

Additional Sewering

The NPC/Phase I Waiver Request describes the need for construction two additional sewer extensions in Hyannis (North Street, Pleasant Street) due to the occurrence of failing septic systems in these areas.

Procedural:

Phase I Waiver Request

The proponent has requested a Phase I Waiver to proceed with portions of the Town of Barnstable's proposed municipal sewerage project listed below, prior to completion of the overall environmental review for the comprehensive wastewater management planning process, including;

- the construction of an effluent force main within the Route 132 right-of-way from the Hyannis Water Pollution Control Facility (WPCF) to the proposed McManus effluent disposal site located near Exit 6 off Route 6, and from the Cape Cod Community College to the proposed Route 132 effluent force main;
- the construction of the proposed McManus effluent disposal facility and,
- the construction of 2 sewer extensions to limited areas in Hyannis including Pleasant Street and North Street.

SCOPE

The proponent should continue to prepare the Phase III – Draft Wastewater Facilities Plan/DEIR for the project in accordance with Section 11.07 of the MEPA regulations as modified by this Certificate. The DEIR should include a copy of this Certificate and the Certificate granting a Phase I Waiver Request. The DEIR document should also contain copies of the comments received. The proponent should circulate the DEIR to those who commented on the ENF, and each of the previous 3 NPC submittals, and to any party required by regulation.

Water Resources/Public Water Supplies:

As described in the NPC, the Town has proposed to convey approximately 1.3 mgd of treated wastewater effluent from the Hyannis WPCF to the 44-acre McManus site, located at the intersection of the Route 6 Mid-Cape Highway and Route 132, for subsurface disposal using subsurface infiltration technology.

The McManus discharge facility is located within a marine recharge area to Barnstable Harbor, the Wellhead Protection Area for Barnstable Fire District Wells (BFD) #3 and #4, and the recharge area for Lake Wequaquet, Shallow Pond and Hinckley Pond. The NPC includes a discussion of the proponent's proposed mitigation plan designed to mitigate the potential impacts to downgradient water resources, including; sewerage of the Lake Wequaquet Area of Concern (AOC), sewerage of the zones of contribution areas for the Barnstable Fire Department's wells #3 & #4, and the installation of phosphorous removal technology at the Hyannis WPCF.

According to the comments received from CCC and others, the proposed new effluent discharge of 1.3 mgd at the 44-acre McManus site will cause changes to aquifer flows, and may result in potential nutrient (nitrogen, phosphorous) loading impacts to downgradient public water supplies and Lake Wequaquet. CCC has recommended that the Town's proposed discharge of wastewater effluent at the McManus site be limited to 0.5 mgd to maintain the existing aquifer flows in this area, until the proponent can complete additional needed groundwater evaluations to satisfactorily demonstrate the feasibility of the proponent's McManus 1.3 mgd effluent discharge proposal. I adopt these comments as my own and will condition my approval of the Town's Phase I Waiver Request to allow the Town to proceed to permitting for the construction of the McManus site to accept 0.5 mgd of treated wastewater effluent from the Hyannis WPCF.

I ask that the proponent work closely with CCC, DEP and others to identify and complete any additional groundwater modeling and/or nutrient loading analysis that may be needed to determine the feasibility of the proponent's McManus 1.3 mgd effluent discharge proposal and mitigation plan. The Draft Wastewater Facilities Plan/DEIR should contain the results of the proponent's additional analysis and a detailed description of the Town's mitigation plan. The DEIR should respond to the comments received by CCC.

Article 97/Open Space:

As described in the NPC/Phase I Waiver Request submittal, the project involves the use of approximately 44 acres of forested Article 97 land (McManus site), for the construction and operation of a new 1.3 mgd wastewater disposal facility. According to the proponent, construction of the McManus effluent disposal facility will involve clearing and grading most of the 44.0 acre site, construction of subsurface infiltration trenches and supporting infrastructure, including a small pump station building, parking area and driveway, the restoration/re-vegetation of the site's surface area for open grassland meadow habitat, and the construction of approximately seven active recreational playing fields and two basketball courts.

A number of commenters have questioned the consistency of the Town's proposed use of the McManus Article 97 land with the use conditions and restrictions established for the McManus site pursuant to the Cape Cod Land Bank Acquisitions Program (Chapter 293 Act of 1998, and Chapter 127 Act of 1999). The McManus site was acquired in March 2002 for the purposes described in the Cape Cod Land Bank Acquisitions Program documentation, including the protection of public drinking water supplies, open space, and conservation land, the creation of walking trails and bicycling trails, and the creation of recreational areas.

The proponent has provided additional information to the MEPA Office that indicates that prior to the purchase of the land in March 2002, the Town of Barnstable also acquired a use easement associated with 6.9 acres of the McManus site specifically for effluent mitigation use as a groundwater discharge facility ("easement area"). According to the proponent, this easement area could accommodate the construction of a groundwater discharge facility to accept 0.5 mgd of treated wastewater effluent from the Hyannis WPCF. I have reviewed the information provided in the NPC4 submittal and additional information provided by the proponent pertaining to the 6.9-acre easement area, and find that the Town's proposed use of the 6.9-acre easement area located within the McManus site for the disposal of treated wastewater effluent appears to be consistent with the intended uses and activities described by the use easement documentation.

I ask that the proponent provide additional information in any subsequent filings for this project to demonstrate the consistency of the proponent's proposed use of the remainder 37.1 acres of the McManus site for wastewater effluent disposal with the intended Article 97 purposes and interests in land outlined in the Cape Cod Land Bank Acquisitions Program (Chapter 293 Act of 1998, and Chapter 127 Act of 1999). As described below, the proponent will need to propose adequate mitigation for any proposed use of Article 97 lands, and interests in lands, that are not in compliance with the intended Article 97 purposes and interests in land outlined in the Cape Cod Land Bank Acquisition Program.

Mitigation

Article 97 of the Massachusetts Constitution bespeaks the high value placed upon the preservation of existing open space lands, including lands subject to Conservation Restrictions. The goal of this policy is to ensure no net loss of Article 97 lands and interests in lands under the ownership and control of the Commonwealth and its political subdivisions. To further the Commonwealth's open space goals, the EOEAs Article 97 Land Disposition Policy requires a demonstration that a proponent has explored alternatives to avoid and/or minimize the Article 97 disposition. The Draft Wastewater Facilities Plan/DEIR should clarify how the McManus site will be used after project implementation.

The proponent will need to demonstrate that the proposed use of the entire 44-acre McManus site represents the minimum acreage necessary for the project. Specifically, the DEIR should supplement the proponent's alternatives analysis provided in this NPC4, to include a discussion of wastewater effluent disposal alternatives for the Town of Barnstable that incorporates the use of the McManus site at less than 1.3 mgd and 44 acres, and use of the Cape Cod Community College Site (Site D) as an additional effluent disposal site. The DEIR 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. The Town of Barnstable may consider public accessible open sandplain grassland habitat and recreational fields developed as part of project, and public access to the remaining forested open spaces, if any, as possible compensation or mitigation for impacts. I ask that the proponent consult with EOEAs staff, CCC and DEP to provide advice to the Town on feasible mitigation alternatives.

Wastewater Disposal Alternatives:

In addition to the proposed McManus effluent disposal site, the Town of Barnstable has identified a number of additional potentially suitable sites for the disposal of treated wastewater effluent from its Hyannis WPCF, including; the Airport Site – Site C, the Cape Cod Community College Site – Site D, the Lorusso Site – Site E. As described in the NPC/Phase I Waiver submittal, the Town is also evaluating the feasibility of using treated wastewater effluent from its Hyannis WPCF as groundwater recharge on property owned by the Cape Cod Hospital, and as lawn irrigation for town-owned properties (Town Hall, school athletic fields, etc.).

In light of the project's potential impacts to groundwater resources, drinking water supplies and Article 97 lands, I strongly encourage the proponent to give serious consideration to incorporating a mix of effluent disposal and reuse alternatives to accommodate the Town of Barnstable's future wastewater flows. Specifically, the Draft Wastewater Facilities Plan/DEIR should discuss a wastewater effluent disposal plan alternative for the Town of Barnstable that incorporates the use of the McManus site at less than 1.3 mgd, and use of the Cape Cod Community College Site – Site D as an additional effluent disposal site. This plan alternative should also evaluate the feasibility of incorporating wastewater effluent reuse alternatives such as groundwater recharge on Cape Cod Hospital property, and lawn irrigation for town-owned properties, to accommodate the Town of Barnstable's long term wastewater treatment and disposal needs.

Other Issues:Projected Future Wastewater Flows

The Town of Barnstable's WPCF received interim improvements to increase the facility's wastewater treatment capacity from 2.7 mgd to 4.2 mgd (to the Hyannis Water Pollution Control Facility (WPCF) that will enable the town to increase the wastewater flow capacity of the WPCF from 2.7 mgd to 4.2 mgd (3rd NPC, February 2005).

According to the comments received from the CCC, the Town has recently rezoned the downtown Hyannis area as a Growth Incentive Zone (GIZ) which may result in additional unanticipated increases to the Town's future wastewater flows.

The DEIR should respond to CCC's comments, and should include a detailed discussion of the proponent's proposed plan for sewerage any remaining areas located within the Town's AOCs, the Zone II area associated with for the Barnstable Fire District's wells #3 & #4, and any additional areas of the Town located outside the Hyannis WPCF's service area, including the Hyannis GIZ. The proponent's Draft Wastewater Facilities Plan/DEIR should contain an updated detailed analysis of the Town of Barnstable's existing wastewater flows, and projections of these flows and volumes to the design year, and what impacts the Town's rezoning of downtown Hyannis as a Growth Incentive Zone (GIZ) will have on Barnstable's projected wastewater flows and NPDES Permit. The DEIR should contain an analysis of the Town of Barnstable's wastewater transmission and conveyance capacities for the proposed project's design year flows.

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.

The Draft Wastewater Facilities Plan/DEIR should identify the land use categories located within each of the AOC/sewer service areas, and properties abutting the proposed effluent sewer main along Route 132, and compare the potential secondary growth impacts that may be induced by public sewers with local and regional growth management policies. If the Town has a current local comprehensive plan in place, the Phase III Report may refer to that plan's identification of priority areas for growth and development, and for open space and farmland preservation. Otherwise, that degree of planning for growth should be carried out directly as part of the Draft Wastewater Facilities Plan/DEIR. I encourage the proponent to consult with DEP and the Growth Management Policy staff at the Executive Office of Environmental Affairs in developing a growth management strategy.

Mitigation:

The DEIR should include a separate chapter on mitigation measures. 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 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.

Comments:

The proponent should respond to the issues identified in the comments received by the CCC, the Barnstable Fire District Water Department, and others on this 4th NPC/Phase I Waiver Request, and the comments received on the proponent's prior ENF and NPC submittals to the MEPA Office. I ask the proponent to continue to work closely with DEP, CCC, and the Office of Coastal Zone Management (CZM), to design and implement a sustainable Comprehensive Wastewater Facilities Plan and mitigation plan for the Town of Barnstable that will help to offset the proposed project's municipal water withdrawal and sewerage impacts.

Circulation:

The Draft Wastewater Facilities Plan/DEIR 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 Barnstable officials. A copy of the DEIR should be made available for public review at the Barnstable Public Library.

January 20, 2006

DATE


Stephen R. Pritchard, Secretary

Comments received: (continued on next page)

12/05/05	Gary Lopez
12/05/05	Gary Lopez
12/07/05	James M. Walsh
12/07/05	Edward W. Marshall, Jr.
12/08/05	Wequaquet Lake Protective Association, Inc.
12/08/05	Wequaquet Lake Protective Association, Inc.
12/08/05	Massachusetts Coastal Zone Management (CZM)
12/09/05	Barnstable Fire District Water Department
12/09/05	G. Richard Kramer
12/09/05	West Barnstable Fire District Water Commission
12/12/05	Cape Cod Commission (CCC)
12/12/05	Independence Park, Inc.
12/12/05	Massachusetts Department of Environmental Protection – SERO
12/12/05	Department of Conservation and Recreation (DCR)
12/12/05	Virginia Gale Klun
12/12/05	Natural Heritage and Endangered Species Program (NHESP)
12/12/05	Town of Barnstable, Department of Public Works
12/13/05	Barnstable County Commissioners
12/13/05	Gerald Ramin
12/13/05	Jordan L. Golding
12/13/05	Cape Cod Community College
12/13/05	Gail T. Maguire, Ph.D.
12/13/05	Mary Canniff

NPC(4th) /Phase I Waiver #6553
SRP/NCZ/ncz