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April 24, 2009

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

PROJECT NAME : Mattapoisett Comprehensive Wastewater Management
Plan
PROJECT MUNICIPALITY : Mattapoisett
PROJECT WATERSHED : Buzzards Bay
EOEA NUMBER : 14390
PROJECT PROPONENT : Town of Mattapoisett, Water & Sewer Department
DATE NOTICED IN MONITOR : March 25, 2009

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62I) and Sections 11.05 and 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of Draft and Final Environmental Impact Reports.

Project Overview

In 2006, the Department of Environmental Protection (MassDEP) requested that the proponent prepare a new Comprehensive Wastewater Management Plan (CWMP) to address wastewater management issues in the Town of Mattapoisett for the next 20 years. This Environmental Notification Form is a first step in a process that will evaluate existing conditions, identify wastewater needs, and propose solutions. The CWMP has been undertaken for the purposes of:

- 1) Evaluating and planning impacts from community growth on the Town's existing wastewater management systems over the next twenty years;
- 2) Reviewing community growth and development changes since the 1983 Water Pollution Control Plan;

- 3) Evaluating and quantifying infiltration and inflow conditions within the existing sanitary sewer collection system;
- 4) Reviewing the wastewater needs of existing homes that are currently served by on-site septic systems;
- 5) Evaluating the feasibility of on-site sewage disposal options for future growth areas and existing unsewered areas with failing systems;
- 6) Evaluating alternatives to traditional surface water disposal methods, including groundwater disposal and water reuse, with the intent of minimizing any increased discharge to the Fairhaven Wastewater Treatment Facility (WWTF); and
- 7) Reviewing the long-term effectiveness of regional disposal options, including the existing Intermunicipal Agreement (IMA) with the Town of Fairhaven.

The proponent has assessed the condition of the current wastewater infrastructure in the Town of Mattapoisett, identified potential alternatives to the current systems, and screened potential in-town and regional locations to evaluate their suitability for existing and new infrastructure. The proposed project consists of the installation of approximately 27.9 miles of new sewer pipe within existing streets, the construction of wastewater pumping stations, the installation of grinder pumps on private property, and clean-up and paving activities to complete the project. The proponent is proposing to construct the project in two phases. The proposed Phase 1 includes addressing existing wastewater system needs, infiltration/inflow (I/I) control and mitigation and extending the centralized sewer system to serve the significant needs in the Mattapoisett Neck area (Study Areas 9, 11, 12, 13, 17, 18, 19, and 20). The existing sewer system needs include replacing the old North Street Sewer, implementing the phased Eel Pond Pump Station improvement program, implementing a defined sewerage system maintenance plan, and implementing a computerized maintenance program. As part of the I/I component, the proponent will investigate other service connections for inflow, and will address other construction deficiencies to mitigate infiltration and other inflow sources. Addressing the existing sewer system needs and the I/I control and mitigation issues will take place during both phases. The Phase 2 proposal would extend the sewer system to additional significant need areas in the vicinity of the sewer system (Study Areas 8, 10, 14, 15, 21, 22, 23, 25, and 26) once capacity becomes available at the Fairhaven WWTF.

State Permits and Jurisdiction

The project requires a mandatory EIR pursuant to Section 11.03(5)(a)(3) of the MEPA regulations (301 CMR 11.00) because it involves the construction of one or more new sewer mains of ten or miles in length. The project will require a Sewer Extension Permit, a Groundwater Discharge Permit, a Chapter 91 License, and a 401 Water Quality Certificate from MassDEP. It will require review under the Interbasin Transfer Act by the Water Resources Commission (WRC) in order to increase the wastewater capacity which is discharged to the Fairhaven Wastewater Treatment Facility by 0.3 million gallons per day (mgd). Because the proposed interbasin transfer is less than 1 mgd, the proponent could request a Determination of Insignificance from the WRC. The project must be reviewed by the Natural Heritage

Endangered Species Program (NHESP) because portions of the project occur within Priority Habitat. It may require Federal Consistency Review with the Massachusetts Coastal Zone Management (MCZM) Office. It may also require a Construction Access Permit from the Massachusetts Highway Department. The project may need to obtain a Section 404 Permit from the U.S. Army Corps of Engineers. The project should comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site. It will also require Orders of Conditions from the Mattapoisett Conservation Commission which may treat it as a "limited project" under the Wetlands Protection Act.

The project has received funding from the State Revolving Fund (SRF) program for the Draft CWMP. The proponent anticipates applying for SRF loans for subsequent planning and construction portions of the project. Therefore, MEPA jurisdiction is broad and extends to all aspects of the project that may cause Damage to the Environment, as defined in the MEPA regulations.

SCOPE

General

The proponent should prepare the Draft Environmental Impact Report (DEIR) in accordance with the guidelines contained in Section 11.07 of the MEPA regulations, as modified by this scope.

Project Description

The DEIR should include an executive summary explaining what is being proposed and why. It should identify significant environmental benefits and impacts, and measures that will be taken to avoid, minimize and mitigate adverse impacts. The DEIR should describe the planning process that has occurred to date, and the proposed schedule for the remaining phases of planning, design, environmental permitting and review, and construction. Detailed information should be provided for each area where construction is proposed, including maps that show where sewer lines, cross-country easements, pumping stations, and other facilities will be located. The DEIR should provide the best information currently available for the proposed phases, and explain what additional information is proposed for later collection and analysis.

The DEIR should discuss the state permitting process for this project and describe how it will meet the performance standards.

Needs Assessment

A needs assessment was conducted in order to help determine the types of wastewater

disposal that would be most appropriate for areas that are currently unsewered. The Draft CWMP reviewed the lot size constraints, soil constraints, groundwater constraints, and water resource areas for 26 study areas to determine the wastewater needs. Each developed lot was rated by a point system to determine its sewer needs. The Draft CWMP identified the significant or high needs wastewater areas. Both MassDEP and I generally concur with the findings of the Needs Analysis. However, some of the moderate needs areas should be further analyzed to determine if the remaining onsite wastewater systems are adequate for off-site treatment and disposal capacity.

The DEIR should identify the basis for the sewerage recommendations in each of the areas proposed. Additional maps and a narrative for each area should be included in the DEIR. Any changes to the proposed CWMP described in the ENF should be highlighted and explained.

In addition, the DEIR should present a detailed analysis that takes into account measures that have the potential for reducing wastewater volumes, including water conservation and infiltration and inflow (I/I) removal, and adjust the needs analysis accordingly. The DEIR should include detailed responses to the comments received for this project from MassDEP pertaining to the proponent's needs assessment, the potential future sewer demand for the Town of Mattapoisett, and the use of zoning overlay districts and specific sewer connection policies as a means for controlling the potential secondary growth impacts that may be induced by public sewers.

Alternatives Analysis

The Draft CWMP reviewed decentralized, community, and regional wastewater alternatives to address the identified wastewater needs. Its Preferred Alternative includes measures to reduce I/I, to improve maintenance and repairs to the existing wastewater system, to expand the centralized wastewater system to significant needs areas (Phase 1 and Phase 2 as described in the Project Overview) as capacity allows at the WWTF, and developing satellite wastewater systems for the moderate/low needs areas.

The DEIR should evaluate and screen all potential alternatives and combinations of alternatives that can address the needs and problems identified in the Draft CWMP. The alternatives analysis should specifically document the need for each disposal measure by geographic area and land use type, including a reasonable projection of growth through the design year. The alternatives to be considered should include the full range of options available under Title 5 (conventional and innovative/alternative systems, both for individual properties and for shared and communal facilities to serve multiple properties) and consideration should be given to maintaining discharges in the sub-basins in which they are now occurring, where possible. I also note that the alternatives eventually selected by the Town for wastewater collection, treatment, and disposal infrastructure for Phase 2 and other remote, significant need areas will need to be consistent with all of MCZM's Program Policies as outlined in their comment letter. The DEIR should address Executive Orders #181 which recognizes barrier

beaches and their dynamic nature and # 149 which relates to floodplain use.

An appropriate set of screening criteria should be developed and applied. These criteria should address the areas of cost (both to individuals and the community), technical feasibility, environmental and public health protection (including maintenance of water balance in the drainage sub-basins), institutional and management issues, and other relevant concerns. It is important that this screening be carefully conducted and that the alternatives are evaluated in a balanced and comparable manner. The DEIR should also include an analysis of alternatives and a recommendation for ownership and management of the wastewater treatment and disposal system. Such an analysis must include consideration of legal, technical, and financial factors, and demonstrate the feasibility of the proposed system.

The DEIR should include more detailed hydrogeological data and modeling for the sites selected for further analysis for a ground water discharge. The proponent should consult with MassDEP and submit detailed hydrogeological work for review and approval by MassDEP prior to any field work and modeling being carried out.

The proponent should also consult with MassDEP regarding the alternatives being considered for in-town groundwater disposal. The DEIR must conduct a detailed analysis to determine whether, or to what extent, wastewater disposal can be carried out at sites within Water Protection Zones. MassDEP has suggested that the proponent investigate an approach similar to that employed in Provincetown to determine whether only the needed sewerage could be accomplished without having to sewer intermediate areas.

The DEIR should also identify environmental resources and resource areas such as wetlands, drinking water supplies, fisheries, water bodies, sensitive habitats, parklands, recreational resources, and historic and archaeological interests (including conservation lands) on a plan of reasonable scale. This information is needed so that the potential impacts of proposed facilities on these resources can be evaluated, and the alternatives can be compared in that regard, prior to formal decisions regarding the type, design and location of any proposed wastewater treatment facilities. This identification of resources should include any facilities that are required to convey sewage beyond the Town boundaries.

The DEIR should address the concerns expressed in the comment letters from the WRC and the Riverways Program. The comments cite the low flow conditions in the Mattapoissett River and ask that the proponent assess potential project impacts associated with reducing the amount of groundwater flow to the River. The DEIR should take a close look at the Town's wastewater disposal options, particularly a decentralized wastewater treatment system that would maximize groundwater discharges to the upper and central reaches of the Mattapoissett River. The proponent should identify the reasons for failing septic systems (under-sized, inadequately maintained, at the end of their design life, poorly sited, etc). It should investigate advanced treatment systems that may be available.

If the proponent intends to locate infrastructure within hazard-prone areas, MCZM recommended that the DEIR assess the potential for damage of sewer lines. The DEIR should consider alternatives to locating sewers and infrastructure within velocity and flood zones. The proponent should identify any measures it will propose to protect infrastructure from flooding and erosion.

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 DEIR should identify parcels located within the proposed sewer service areas that are undeveloped or that have development constraints due to the lack of sewers, and compare the potential secondary growth impacts that may be induced by public sewers with local and regional growth management policies. It should examine what regulatory or physical constraints would remain on home expansions after sewers are provided, and if such expansions might have unanticipated impacts on estimated wastewater flows and water use. I encourage the proponent to consult with MassDEP in developing a growth management strategy.

The CWMP should include provisions to control development and redevelopment of properties in the wetlands, floodplains and high-hazard areas. The proponent should adopt the recently adopted provisions of the Wetlands Protection Act and the State Building Code that apply to these situations.

Projected Wastewater Flows and Sewer System Capacities

The DEIR should contain a detailed analysis of Mattapoisett's existing wastewater flows. It should contain an analysis of the Town's wastewater transmission and conveyance capacities for its existing wastewater flows, and for the proposed project's projected design year flows. The analysis should identify the transmission and conveyance capacities from proposed alternative Wastewater Treatment Facilities. The DEIR should identify any/all formal inter-municipal agreements or memoranda of understanding and infrastructure capacity upgrades, proposed and/or currently underway, to support the transmission and treatment capacity analyses in the DEIR. The DEIR must include a full analysis of the methods needed to control future sewer connections and extensions to the system in order to minimize Growth Management issues. The DEIR should also include a copy of any executed or proposed agreements with the Town of Fairhaven for wastewater treatment, and should explain how the proposed 20-year plan can be implemented under such agreements.

The DEIR should also include a discussion of the status of Fairhaven's National Pollutant Discharge Elimination System Permit (NPDES Permit) for wastewater and what impacts the proposed sewer expansion plan and wastewater flows will have on this NPDES Permit. Any commitments to the Inflow/Infiltration (I/I) removal program and water conservation plan must be included in the proposed Section 61 findings for MassDEP. The DEIR should identify the existing wastewater flows, projected flows, the design capacity, and current and future NPDES permit limits for the Fairhaven WWTF. It should identify when the existing NPDES permit for the WWTF will expire. The DEIR should identify any potential new NPDES permit requirements. It should identify the schedule for any proposed WWTF plant upgrades that may be required to meet the NPDES permit limits. The new NPDES permit limits will establish a Total Maximum Daily Load (TMDL) to meet water quality standards. The DEIR should describe how increasing Mattapoissett's wastewater to the WWTF would be structurally accommodated by the Fairhaven wastewater system under its current and/or any revised NPDES permit (as applicable).

In its comment letter, MCZM recommended that the DEIR quantify the amount of additional nitrogen that will be discharged from the FWTF into New Bedford Inner Harbor as a result of the increased sewerage proposed in the CWMP by Mattapoissett. This amount should be compared to the total nitrogen load of the system. The DEIR needs to assess any additional nitrogen loading the Mattapoissett sewer expansion will have on the receiving waters.

Water Balance

A goal of the wastewater planning process is to minimize interbasin transfers. Contrary to the statement in the ENF that the Interbasin Transfer Act (ITA) would not necessarily be triggered, the transfer of flows from Mattapoissett to the Fairhaven WWTF, which discharges to the Acushnet River and the New Bedford Harbor, would constitute an interbasin transfer, as indicated by the Water Resources Commission (WRC) in its comment letter. The DEIR should discuss the proponent's efforts to qualify for a Determination of Insignificance under the ITA from the WRC and should present a full analysis of the factors relevant to such a determination. The DEIR should report on the status of the WRC's action on this project. The WRC has requested that the DEIR discuss the extreme low flow conditions in the Mattapoissett River which may make it difficult to request a Determination of Insignificance. The proponent should consult with MassDEP, the Riverways Program, and the WRC to determine what additional analysis or mitigation will be required for the inter-basin transfer, and report on those discussions in the DEIR.

Wetlands

The DEIR should provide detailed plans, at a suitable scale, illustrating the proposed project's impacts to wetland resource areas. It should examine alternatives that avoid impacts to

wetland resource areas, their associated buffer zones, riverfront protection areas and 100-year flood plain areas. Where it has been demonstrated that impacts are unavoidable, the DEIR should demonstrate that the impacts have been minimized, and that the project will be accomplished in a manner that is consistent with the Performance Standards of the Wetlands Regulations (310 CMR 10.00). The proponent will need to provide wetlands replication at a ratio of at least 1:1 for any unavoidable impacts to wetlands. For any amount of required wetlands replication, a detailed wetlands replication plan should be provided in the DEIR which, at a minimum, includes: replication location(s), elevations, typical cross sections, test pits or soil boring logs, groundwater elevations, the hydrology of areas to be altered and replicated, list of wetlands plant species of areas to be altered and the proposed wetland replication species, planned construction sequence, and a discussion of the required performance standards and monitoring.

The DEIR should analyze both direct and indirect impacts on wetlands and water bodies resulting from the project, and quantify the amount of direct wetland impact. The analysis should also discuss the consistency of any proposed drainage and stormwater management systems that are included in the project with the MassDEP Stormwater Management regulations and the Wetlands Protection Act performance standards. Proposed activities, including construction mitigation, erosion and sedimentation control, phased construction, and drainage discharges or overland flow into wetland areas, should be evaluated. The DEIR should identify all parcels that are currently deemed unbuildable within the velocity zone and the 100-year coastal flood plain which would potentially become buildable as a result of a sewer installation, as requested by MCZM.

Historical/Archeological Resources

The Massachusetts Historical Commission (MHC) has requested a US Geological Survey topographical map that clearly locates the project area and scaled project plans showing existing and proposed conditions. These plans should be submitted to MHC as early as possible. These above plans will assist MHC in determining whether there are any impacts to historical and archaeological resources by the project. I encourage the proponent to work closely with MHC and provide MHC with the requested information detailed in their comment letter. The DEIR should provide an update on the status of these discussions.

Rare Species

The Division of Fisheries & Wildlife's Natural Heritage & Endangered Species Program (NHESP), has indicated that the potential sites for the wastewater treatment and groundwater disposal facilities are partially located within a Priority Habitat and an Estimated Habitat. The Wood Turtle (*Glyptemys insculpta*), a species of "Special Concern", is documented within or in close proximity to project construction areas. The DEIR should examine other alternatives to the use of important habitat sites. If NHESP should subsequently find that the project will require a Conservation Permit pursuant to the MESA, I will require the proponent to explain the impacts and evaluate avoidance/mitigation strategies. I strongly encourage the proponent to consult with

NHESP and to submit project plans for NHESP's review for any proposed work within rare species habitat located within the project area.

Construction Impacts

Construction period impacts and mitigation measures should be described in the DEIR, including impacts from noise and dust, impacts on trees and other vegetation, and traffic impacts. Measures that will be taken to minimize and mitigate construction period impacts (in particular impacts on sensitive receptors or exceptional resources) should be detailed.

Greenhouse Gas Emissions (GHG) and Sustainable Development

The project requires an EIR and will receive financial assistance from the Commonwealth and therefore is subject to the requirements of the EEA/MEPA Greenhouse Gas Emissions (GHG) Policy and Protocol. Consistent with the objectives established in the Policy (which is available on the MEPA website at <http://www.mass.gov/envir/mepa/pdf/misc/GHG%20Policy%20FINAL.pdf>), the DEIR should quantify GHG emissions associated with each of the proposed project alternatives and proposed mitigation measures. In connection with this requirement, EEA routinely schedules pre-filing meetings to provide technical assistance to proponents in the development of GHG analyses, and I strongly encourage the Town to request a pre-filing meeting with EEA as it prepares the DEIR.

A project at this early stage of development provides a multitude of opportunities for considering and comparing alternatives, facilities, and equipment that reduce energy consumption and substitute renewable energy sources for fossil fuel sources. In the DEIR, the proponent should consider the impacts of greenhouse gas emissions in the evaluation criteria of alternatives, and propose measures to mitigate the GHG emissions associated with the alternative methods of treating wastewater. The DEIR should include a GHG Emissions section which will establish a Base Case, a Preferred Alternative Case and a Preferred Alternative with Greater GHG Mitigation Case along with providing the other information as contained in and required by the Policy. Mitigation measures for wastewater may include more energy efficient designs, facilities, treatment technology and equipment; infiltration and inflow (I/I) removal from sewer mains; and water conservation measures.

The Town should explore the use of renewable and energy-efficient equipment when designing new or upgraded wastewater treatment facilities, pump stations and other components of the Town's comprehensive wastewater management system. The Department of Energy Resources (DOER) has requested that following mitigation measures be evaluated in the DEIR:

- Specification of premium class rated motors for any new or replacement pumps, fans, or other drives larger than 1 HP, as well as any scheduled to be upgraded;
- Specification of high efficiency models for new and replacement pumps;

- An analysis to determine the combination of pumps (both size and type), controls and piping which will result in a system configuration which will operate at the highest average efficiency;
- Inclusion of renewable energy systems, such as photovoltaic panels, which could be ground mounted, to reduce the indirect CO₂ emissions due to the fossil fuel generated kWh which would otherwise be used;
- Sizing, routing, and material selection for the extension and replacement of pumped sewer lines which will result in reducing the average pumping power required for the transfer of the sewer flow;
- A discussion of the design principles and measures which will result in reduced indirect GHG emissions that will be implemented should any of these satellite stations be constructed; and
- Identification of maintenance and replacement policies, activities and schedules related to equipment included in the other system pumping stations which will eventually bring them to a comparable standard of efficiency as committed to for the Eel Pond Station.

I note that MassDEP, in coordination with other state and local agencies has initiated a demonstration project to retrofit existing wastewater treatment plants and water treatment plants with energy efficient technology. The costs of some improvements are eligible for funding through the SRF and other programs. I encourage the proponent to consult with MassDEP regarding this demonstration project as it prepares the analysis required under this section.

Costs

The DEIR should present more detailed estimates of the construction costs and capital and operating cost for each of the Town's proposed alternatives and how they will be financed. MassDEP has requested the estimated cost per user (including fees for the use of the FWCF) be included in the DEIR.

Mitigation Measures/Section 61 Findings

The DEIR should include a summary of all mitigation measures to which the proponent has committed that includes a schedule, estimated costs, and persons/agencies responsible for implementing the mitigation. It should also include proposed Section 61 Findings for use by state permitting agencies.

Response to Comments

In order to ensure that the issues raised by commenters are addressed, the EIR should include a response to comments. This directive is not intended to and shall not be construed to enlarge the scope of the DEIR beyond what has been expressly identified in the Certificate. The DEIR should include a copy of this Certificate and of each comment received.

Circulation

The 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 Mattapoisett and Fairhaven officials. A copy of the DEIR should be made available for public review at the Mattapoisett and Fairhaven Public Libraries. In addition, the proponent should provide a reasonable number of copies free of charge on a first come, first served basis.

April 24, 2009

Date


for Ian Bowles

Comments received:

Tighe & Bond, 3/24/09

Tighe & Bond, 3/30/09

Massachusetts Historical Commission, 4/7/09

Massachusetts Water Resources Commission, 4/9/09

Massachusetts Riverways Program, 4/10/09

Massachusetts Division of Marine Fisheries, 4/13/09

MassWildlife/Natural Heritage Endangered Species Program, 4/14/09

Massachusetts Department of Environmental Protection/Southeast Regional Office, 4/14/09

Massachusetts Department of Energy Resources, 4/14/09

Massachusetts Office of Coastal Zone Management, 4/14/09

The Coalition for Buzzards Bay, 4/14/09

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IAB/WTG