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December 8, 2006

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

PROJECT NAME	: Comprehensive Wastewater Management Plan
PROJECT MUNICIPALITY	: Taunton
PROJECT WATERSHED	: Taunton
EOEA NUMBER	: 13897
PROJECT PROPONENT	: City of Taunton, Public Works Department
DATE NOTICED IN MONITOR	: October 25, 2006

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.03 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a Draft Environmental Impact Report (DEIR).

As described in the Environmental Notification Form (ENF), the City of Taunton proposes to expand its sewer system to encompass an additional 14 sewer Needs Areas identified within its Draft Comprehensive Wastewater Management Plan (CWMP), submitted in July 2005 to the Massachusetts Department of Environmental Protection (MassDEP). The proposed Needs Areas throughout the city are currently served by on-site wastewater disposal systems. This CWMP would require the expansion of the existing Taunton wastewater treatment facility (WWTF) to handle the additional wastewater flow from these Needs Areas, future infill development within existing sewered areas, and projected additional inter-municipal flow. The ENF estimates approximately 50 miles of gravity and force main sewers and 15 pump stations within the Needs Areas would be necessary to accommodate the expansion. The existing WWTF would be expanded from a treatment capacity of 8.25 million gallons per day (mgd) to 10.7 mgd. To accommodate the expanded treatment capacity at the WWTF, certain structural upgrades are proposed. The recommended wastewater management plan is proposed by the City of Taunton in accordance with the requirements of an Administrative Consent Order (ACOP-SE-R006-1N-SEP) issued by MassDEP.

According to the ENF, the treated effluent from the existing WWTF is discharged to the Taunton River. The City of Taunton has a current *average* wastewater flow of 6.8 mgd, however, springtime flows have exceeded the permitted flow level of 8.4 mgd for extended periods of time,

and peak wet weather flows in the system exceed 20 mgd. The Taunton WWTF also presently treats flows from portions of the towns of Raynham (0.6 mgd), Dighton (0.14 mgd), and Norton (0.017 mgd). The Town of Raynham is concurrently undergoing MEPA review (EOEA #13507) for its own CWMP in which additional wastewater flows generated by the Town of Raynham may be conveyed to the City of Taunton for treatment. The City of Taunton is also presently implementing an extensive Inflow and Infiltration (I/I) removal program to alleviate treatment capacity issues.

The project is undergoing review pursuant to Section 11.03 (5)(a)(3) and (5)(b)(2) of the MEPA regulations, because the project requires State permits and involves construction of sewer mains ten or more miles in length and the expansion of an existing wastewater treatment facility by the greater of 100,000 gpd or 10% of existing capacity (2.3 million gallons per day or 27%), respectively. The project is also subject to MEPA review under Section 11.03(11)(b), as the project will occur within a designated Area of Critical Environmental Concern (ACEC), and Section 11.03(2)(b)(2) as the project may result in the "take" of an endangered, threatened or species of special concern within a designated Priority Site of Rare Species Habitat.

It is anticipated that the project will require an Order of Conditions from the Taunton Conservation Commission, and in the case of an appeal, a Superseding Order of Conditions issued by MassDEP; a Sewer Connection/Extension Permit from MassDEP; a Massachusetts Highway Department (MassHighway) Construction Permit; review under the Massachusetts Endangered Species Act (MESA) by the Massachusetts Department of Fisheries and Wildlife; and possibly MassDEP Limited Plan Approval. The project will also require a National Pollutant Discharge Elimination System (NPDES) Surface Water Discharge Permit Modification, a NPDES Construction General Permit, and a NPDES Remediation General Permit from the United States Environmental Protection Agency (U.S. EPA).

The project will be financed in full or in part by State Revolving Funds issued by the Commonwealth. Therefore, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment.

Sewer Extensions During CWMP Process

I note that the MassDEP has issued a policy guidance document entitled, "Guidance for Evaluating Sewer Extensions Within Communities Developing a Comprehensive Water Resources Management Plan." This guidance applies to sewer extensions and sewer connections greater than 15,000 gallons per day (gpd) and supplements other review requirements of the MassDEP pursuant to 314 CMR 7.00. This policy guidance document contains the procedures and expectations for mitigation for sewer connection or extension permits Due to the length of preparation and review of a CWMP, any project that is advanced in Taunton prior to terminal MEPA action on this filing, and requires a MassDEP sewer extension or connection permit that has not already been approved by MassDEP at the time of the issuance of this Certificate, will have to file a Notice of Project Change (NPC) to obtain Phase 1 waiver approval from MEPA prior to Taunton completing its EIR on the CWMP.

SCOPE

The proponent should prepare the DEIR 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 should also contain copies of the comments received. The City of Taunton has prepared a CWMP that was submitted to MassDEP for review in July 2005. The DEIR should include a copy of the CWMP document recently submitted to MassDEP. The proponent should circulate the DEIR to those who commented on the ENF, and to any party required by regulation.

Project History

As indicated in the ENF, the proposed project, consisting of sewering 14 specific Needs Areas throughout the City of Taunton, represents a comprehensive plan to upgrade and expand Taunton's sewer system. The City's WWTF has been in operation since the 1940's and currently provides advanced secondary treatment for discharges to the system. Over the years, numerous projects have been reviewed by the MEPA office related to the expansion of the Taunton sewer system, related either to specific projects or system wide improvements. These include: EOEA #331 – December 1973; EOEA #2028 – September 1975; EOEA #5014 – December 1983; EOEA #6341 November 25, 1986; EOEA #11468 – December 1998; EOEA #11977 – July 1999; and EOEA #12561 – July 2001.

In July 2005, the City of Taunton submitted to MassDEP its recommended plan of the CWMP. This recommended plan was prepared in accordance with the Administrative Consent Order issued by the MassDEP.

In order to better understand the relationship of Taunton's individual sewer construction projects to its comprehensive wastewater management planning and construction program, I am requiring the proponent to prepare as a separate chapter of the DEIR a detailed discussion of the history of sewer construction in the City of Taunton. This section of the DEIR should include a detailed description of the construction activities and environmental impacts associated with each of the previously constructed sewered areas, and prior MEPA submittals, and for the expanded sewer construction program contemplated by the City of Taunton. I encourage the proponent to consult with the MEPA Office as it develops this section of the DEIR.

Additionally, the proponent should provide a history or existing and proposed permitting requirements to implement the proposed CWMP.

Needs Analysis / Alternatives Analysis

The City of Taunton prepared a Needs Analysis, an Alternatives Analysis, and an evaluation of baseline environmental conditions, and outlined a recommended plan and implementation (the Preferred Alternative) as part of its CWMP. While I recognize the substantial efforts taken by the City of Taunton to prepare this CWMP, these critical data were not included in the ENF for consideration by the public during the MEPA review process. As I have indicated below, the proponent must include in the DEIR a copy of the CWMP with an updated Needs

Analysis, Alternatives Analysis, evaluation of environmental impacts, and description of the Preferred Alternative.

The Needs Analysis should be based on data and information that effectively evaluates existing problems and projects future conditions. This analysis should describe specific areas of needs and the severity and nature of the problems. Data should include existing wastewater flows, septage volumes, pumping records, and similar information. The analysis should support the geographic designation of the previously sewered areas, and the new 14 proposed service areas identified in the ENF for application of wastewater disposal measures. It is important to note that these determinations should, in the first instance, be made independent of what measures might be available to reduce water use and subsequent demand. The DEIR should include the criteria for ranking Needs Areas and population projections within study areas.

In addition, the DEIR should present an analysis that addresses measures to reduce wastewater volumes, including water conservation and infiltration and inflow (I/I) removal, and adjust the needs analysis accordingly. The report should address the feasibility and effectiveness of such measures. It should, at a minimum, include a preliminary water demand management and conservation plan. The MEPA office has reviewed such plans in the recent past that could serve as examples, and I recommend consultation with MEPA staff on this matter. The DEIR should include detailed responses to the comments received for this project, especially the comments received from MassDEP pertaining to the increase in WWTF flow beyond the current NPDES flow limit, the flow allowance for the Town of Raynham, and control of future sewer extensions and connections consistent with CWMP recommendations. The DEIR should provide more detailed locations for the pump stations to facilitate wastewater flows. Within the ENF, the proponent noted that the final location of pump stations could be adjusted to avoid or minimize impacts to sensitive receptors. The DEIR should provide an update on efforts to relocate pump stations and provide more detailed site plans so that their locations can be more readily evaluated.

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. 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, solids and handling disposal, permitting, and other relevant concerns. It is important that this screening be carefully conducted and that the alternatives be evaluated in a balanced and comparable manner.

At the recommendation of MassDEP, the DEIR must fully describe the recommended plan in accordance with CWMP guidelines. The Preferred Alternative plan chapter must include the legal, institutional, management, and financial mechanisms for implementation, and there must be an analysis of costs to the average household, both sewered and non-sewered.

Projected Wastewater Flows and Sewer System Capacities:

The DEIR should contain a detailed analysis of Taunton's existing wastewater flows, including the total combined sewage flow volumes from the previously constructed sewer service areas, proposed sewer service areas, areas served under inter-municipal agreements (IMAs), and should make projections of these flows and volumes to the project design year. The DEIR should contain an analysis of the City of Taunton's wastewater transmission and conveyance capacities for Taunton's existing wastewater flows, and for the proposed project's design year flows. The analysis should identify the transmission and conveyance capacities from adjacent communities to the City of Taunton its WWTF.

According to the ENF, the existing WWTF will need to be expanded and upgraded to accommodate the additional 2.45 mgd of wastewater flows. The DEIR should summarize the proposed improvements, potential impacts of plant expansion to wetland resource areas and compliance with performance standards, upgrades in treatment capabilities, and proposed mitigation, if any. The DEIR should include a discussion of the status of the City of Taunton's NPDES Permit, proposed modifications to the NPDES Permit to accommodate the project, and potential future nutrient loading limits for nitrogen and phosphorous. The DEIR should include details of the proposed capital and ongoing operation and maintenance costs associated with the WWTF upgrades, including a scenario with enhanced nitrogen and phosphorus treatment. The DEIR should discuss how plant upgrades and operating costs are addressed within IMAs.

The DEIR must also contain a discussion as to how the City of Taunton will control future sewer extensions and connections. This narrative should provide an update on the potential creation of a "sewer bank" to mitigate new I/I flows for future connections to the Taunton WWTF.

Inter-municipal Agreements

The DEIR should include a thorough discussion of existing flows, infrastructure and service areas within other communities facilitated through IMAs. This discussion should include a brief history of IMAs, remaining capacities under existing IMAs, potential future IMAs, and what portion of the proposed CWMP is allocated to accommodate IMAs. The Needs Analysis and Alternatives Analysis should include the areas presently serviced through IMAs, as well as known and projected future IMA service areas in adjacent communities. Additionally, the DEIR should contain a summary of ongoing CWMPs or MEPA reviews underway for other communities that currently tie into, or anticipate tying into the Taunton WWTF, and discuss their impact on the Taunton CWMP.

Wetlands

The DEIR should delineate on a plan of reasonable scale all environmental resources and resource areas located within those areas previously sewered and those proposed for sewering (including those areas in adjacent towns with IMAs) under the new CWMP including: wetlands; drinking water supplies; fisheries; water bodies; NHESP priority or estimated habitats, parklands, recreational resources, historic resources, and agricultural lands. All resource area boundaries,

riverfront areas, applicable buffer zones, and 100-year flood elevations should also be included on this plan. The text should explain whether the local conservation commission has accepted the resource area boundaries, and any disputed boundary should be identified. Each wetland resource area and riverfront area should be characterized according to 310 CMR 10.00. The DEIR should provide an accurate measurement of the wetland resource areas that will be affected by the project.

The wetland section of the DEIR should contain an alternative analysis to ensure that all wetland impacts are avoided, and where unavoidable impacts occur, impacts are minimized and mitigated. The DEIR should illustrate 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 DEIR should address the significance of the wetland resources within the various Needs Areas and WWTF expansion area, or any other wetland resource areas that may be impacted through the implementation of the CWMP. This discussion should include wetland resource areas' significance including public and private water supply, riverfront area, flood control, storm damage prevention, fisheries, shellfish, and wildlife habitat. It should identify the location of nearby public water supplies and wells.

The DEIR should demonstrate, through the uses of modeling or a water budget analysis, the potential impacts of a centralized WWTF to groundwater or wetland resource areas. The DEIR should discuss how new technologies or decentralized systems may impact an overall water budget and compare and contrast these impacts with those of the preferred central treatment system. Additionally, the DEIR should discuss how the preferred alternative is consistent with the Executive Office of Environmental Affairs, Massachusetts Water Policy (2004).

For any amount of required wetlands replication, a detailed wetlands replication plan should be provided in the DEIR that, at a minimum, includes: replication location(s) delineated on plans, elevations, typical cross sections, test pits or soil boring logs, groundwater elevations, the hydrology of areas to be altered and replicated, list of wetland plant species of areas to be altered and the proposed wetland replication species, planned construction sequence, and a discussion or the required performance standards and monitoring. MassDEP is recommending a replication rate of greater than 1:1.

Water Quality

The DEIR should demonstrate that additional wastewater flows to the Taunton River will not exacerbate the existing non-attainment status of the River with the U.S. EPA's 303(d) list for nutrients, pathogens, and other pollutant loads. The DEIR should include mitigation provisions to avoid exacerbating non-attainment, and address how to prevent additional areas from failing to attain their targeted water quality level. This analysis should consider the potential impact of water quality degradation on aquatic resources, downstream water withdrawals and water quality.

The DEIR should address future nutrient loading requirements associated with phosphorus or nitrogen limits from wastewater discharges. The DEIR should discuss current permit limits, the

potential changes to nutrient loading limitations, how the new WWTF will be able to meet future requirements, and all associated costs for WWTF upgrades.

Stormwater

The City of Taunton has implemented a significant program to reduce or eliminate inflow and infiltration (I/I) to its existing wastewater infrastructure system. Portions of the City's infrastructure consists of combined stormwater and wastewater conveyances, which result in combined sewer overflow (CSO) discharges during periods of wet weather. The DEIR should address existing CSO discharge points, remediation efforts, and how WWTF and capacity expansion will impact these CSOs. At the recommendation of MassDEP, the DEIR should include an engineering feasibility study to evaluate the alternatives and associated costs necessary to treat the combined flow currently discharged from the CSO outfall to the receiving waters during storm events.

It is my understanding that through effective I/I measures, the City of Taunton has been able to gain capacity at its WWTF to accommodate additional flows (within its permitted discharge limits). While these ongoing I/I removal measures themselves are not subject to MEPA review, the DEIR should summarize these efforts, discuss gains in capacity to date, and future anticipated gains in capacity through effective I/I management. This analysis should estimate the amount of I/I that is being contributed from other communities tied in to the Taunton WWTF. The DEIR should address how increases in volume capacity through I/I removal will affect implementation of the CWMP, ranking of priority areas, and the ability to accommodate interim wastewater flows while the CWMP process is ongoing.

The DEIR should provide a brief narrative describing potential stormwater impacts associated with the WWTF upgrades, pump house construction, and erosion and sedimentation controls to be implemented to limit impacts of stormwater runoff from these project areas.

Rare Species

The information presented in the ENF pertaining to the location of areas regulated under MESA referred to 2003 data. The Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP) updated its Natural Heritage Atlas in October 2006. The City of Taunton should incorporate the 2006 into its analysis within the DEIR. The DEIR should provide updated correspondence from NHESP outlining the types and protective status of rare species within the City of Taunton, the location of priority habitat areas or certified vernal pools, and the relationship of these areas to potential needs areas. The DEIR should include a site inventory to determine which needs areas might constitute suitable habitat for the rare species known to exist within the sewer expansion project area. The DEIR should present the results of the habitat inventory on an appropriately scaled map.

The proponent should coordinate with NHESP upon advancement of pump station design and impact areas to determine potential exemptions under MESA, or future filings required in accordance with MESA or the Wetlands Protection Act.

Historical/Archaeological Resources

According to comments received by the Massachusetts Historical Commission (MHC), the project area contains numerous significant historic and/or archaeological resources. The DEIR should include information detailing the relationship of the identified historical or archaeological resources to the proposed needs areas. This should be provided in a narrative and/or graphical format. The MHC has requested additional information in order to determine what impacts, if any, the proposed project may have on any significant historic and archaeological resources. The DEIR should provide information about the proposed above ground facilities (e.g., proposed pump station), including scaled project plans and elevation drawings showing existing and proposed conditions for the project.

Areas of Critical Environmental Concern

The CWMP proposes to extend sewers to areas located within both the Canoe River Aquifer and Hockomock Swamp Areas of Critical Environmental Concern (ACECs). Two specific sewer Needs Areas (Needs Areas A and C) are located within these ACECs. The DEIR should address the current status of sewering within these ACECs (i.e. what households presently are sewered, how many are proposed for sewering, how many unbuilt areas will now be available for development) within Needs Areas A and C. The DEIR should demonstrate that there will be no negative water balance impacts, or if impacts cannot be avoided, discuss mitigation measures that may be taken to maintain the local water balance within Needs Areas A and C. This analysis should be conducted in such a manner to effectively take into consideration recent sewer projects, and existing and proposed water well withdrawals within the vicinity of these ACECs.

The DEIR should identify potential growth management strategies for Needs Areas A and C, including an analysis of decentralized wastewater management options in these areas as a method to limit growth. In preparation of the DEIR, I encourage the proponent to consult with the ACEC program to discuss how implementation of the CWMP may impact the proposed Three Mile River ACEC when evaluating larger, city-wide impacts of the CWMP to wetlands, wildlife habitat and growth management.

Marine Resources

The WWTF and certain Needs Areas abut a number of streams and ponds which contain diadromous fish populations use these areas for passage, spawning, nursery, and forage habitat. The Division of Marine Fisheries (Marine Fisheries) has also identified tributaries along the Taunton River as river herring spawning ground and support the need for risk aversive management to protect anadromous species. Marine Fisheries has recommended a no activity time-of-year restriction from March 15 through July 30 be placed on construction occurring in or near diadromous fish spawning tributaries which will increase sedimentation or turbidity within these waterways. The DEIR should identify those Needs Areas or WWTF expansion areas that could potentially affect marine resources and demonstrate how these areas will not be negatively impacted during or subsequent to sewer construction. If negative impacts cannot be avoided in their entirety, the DEIR should outline mitigation measures to offset these impacts.

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 the land use categories located within the proposed Needs Areas, as well as those in adjacent communities serviced through IMAs, and compare the potential secondary growth impacts that may be induced by public sewers with local and regional growth management policies. This secondary growth analysis should consider impacts to wetlands, historical resources, ACECs and rare species habitat. 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.

Construction Period

The DEIR should evaluate construction period impacts, including impacts from earth moving, impacts to vegetation, potential impacts from erosion and sedimentation, traffic impacts on adjacent roadways, and impacts to adjacent land uses. The proponent should provide an update as to how work will be coordinated and conducted within State-controlled highways. Additionally, the proponent should clarify if sewer infrastructure will need to cross under/over Interstate 495 in order to provide service to Needs Area C, and if any additional permits or guidance will be necessary from MassHighway in order to construct this portion of the project.

Comments

The DEIR should respond to the comments received. I recommend that the proponent use either an indexed response to comments format, or else direct narrative response. The DEIR should present any additional narrative or quantitative analysis necessary to respond to the comments received.

Mitigation/Section 61

The EIR should include a separate chapter summarizing proposed mitigation measures. This chapter should also include draft Section 61 Findings for each state agency that will issue permits for the project. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and a schedule for implementation.

Distribution

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 the municipal for the City of Taunton. A copy of the DEIR should be made available for public review at the public libraries for City of Taunton and the Towns of Raynham, Dighton, and Norton.

December 8, 2006
DATE

Robert W. Golledge, Jr., Secretary

Comments received:

11/08/2006	Commonwealth of Massachusetts - Division of Marine Fisheries
11/14/2006	Mass Audubon
11/14/2006	Save The Bay
11/14/2006	Commonwealth of Massachusetts – Riverways Program
11/16/2006	Massachusetts Historical Commission
11/27/2006	Division of Fisheries and Wildlife – Natural Heritage and Endangered Species Program
11/28/2006	Department of Conservation and Recreation – ACEC Program
11/28/2006	Taunton River Watershed Campaign
11/28/2006	Massachusetts Department of Environmental Protection - SERO

RWG/HSJ/hsj