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March 14, 2008

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE DRAFT COMPREHENSIVE WATER RESOURCES
MANAGEMENT PLAN / DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Comprehensive Wastewater Management Plan
PROJECT MUNICIPALITY : Raynham
PROJECT WATERSHED : Taunton
EOEA NUMBER : 13507
PROJECT PROPONENT : Raynham Board of Sewers Commissioners
DATE NOTICED IN MONITOR : February 6, 2008

As Secretary of Environmental Affairs, I hereby determine that the Draft Comprehensive Water Resources Management Plan/Draft Environmental Impact Report (Draft CWMP/DEIR), submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (G. L., c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00). However, for the Final Wastewater Facilities Plan/Final Environmental Impact Report (Final CWMP/FEIR) to be found adequate, I am requiring the Town to provide additional information in the FEIR document specifically pertaining to sewer needs assessment, wastewater flows and sewer system capacities, groundwater impacts, and mitigation. This information is necessary to ensure that the requirements of 301 CMR 11.07 are met, that the aspects and issues of the project have been clearly described, that the proponent has committed to a set of mitigation measures that will allow the state agencies to satisfy their Section 61 obligations, and that there will be meaningful opportunities for public review of the additional analysis prior to any Agency action.

Draft Recommended Wastewater Facilities Plan

Beginning in 1974, the Town has submitted to MEPA seven separate filings (EOEA #856-June 1974, EOEA #2069 – October 1975, EOEA #5936 – March 1986, EOEA #10581 – January 1996, EOEA #11261 – August 1997, EOEA # 12353 – November 2000, EOEA #12481 – April 2001) related to the construction and expansion of new sewers throughout the Town of Raynham. Town of Raynham's existing sewer system involved the phased construction (Phases 1-5) of approximately 48 miles of sewer line and approximately 17 pump stations between 1977-2000. The Town's current wastewater flows (approximately 777,000 gpd) are conveyed to the City of Taunton's West WWTF for treatment and discharge to the Taunton River via two separate existing collection systems (South Street collection/pump station system, Route 44 collection/pump station system). The estimated wastewater flows from the proposed Phase 6 sewer expansion project is approximately 95,000 gpd. As described in the Draft CWMP, the Town of Raynham's total wastewater flows for the 2026 design year is 1.206 MGD.

The Town of Raynham and the City of Taunton continue to operate under an Inter-municipal Agreement (IMA) that provides for the treatment and discharge of up to 1.3 MGD of the Town's Raynham's wastewater at the City of Taunton's West Water Street Wastewater Treatment Facility (West Water Street WWTF). The West Water Street WWTF has a permitted treatment capacity of 8.4 MGD under its current National Pollution and Discharge Elimination System (NPDES) Permit.

The proposed Phase 6 sewer expansion project represents the most recent component of the Town of Raynham's on-going town-wide sewer construction program (Phases 1-5). As described in the Town of Raynham's Draft Comprehensive Wastewater Management Plan (CWMP), the Town now proposes to extend its existing municipal wastewater collection system with the construction of new sewers to serve the southeast portion of Raynham (Phase 6). The Phase 6 sewer construction work will include approximately 13.0 miles of new gravity and force main sewers and 9 new pumping stations. The wastewater flows from Phase 6 together with Raynham's wastewater flows from previously constructed Phases 1-5 will be conveyed to the City of Taunton's West Water Street Wastewater Treatment Facility (WWTF) for treatment and discharge to the Taunton River. According to the information provided in the DEIR document, the Town's existing sewer collection and conveyance system has the capacity to accommodate the additional wastewater flows anticipated from the proposed Phase 6 sewer expansion project.

Project Permitting

The FEIR should include a detailed discussion of each state permit and approval necessary for the project, and should demonstrate that the project design meets applicable regulatory and performance standards. The FEIR should include a chapter on the proposed project's consistency with the Water Management Act, the MWRA enabling legislation, and the Interbasin Transfer Act (ITA).

Jurisdiction

The project is undergoing review pursuant to Section 11.03 (5)(a)(3) and (5)(b)(3)(a) of the MEPA regulations, because the project involves construction of sewer mains ten or more miles in length (approximately 62.0 miles total) and the expansion in the flow to a wastewater treatment facility by 10% of existing capacity, respectively. The project may also require the preparation of an EIR pursuant to Section 11.03(4)(a)(2) of the MEPA regulations, because it may result in a new inter-basin transfer of water of 1,000,000 or more gallons per day (gpd) and thus may require an Inter Basin Transfer Act (ITA) permit from the Water Resources Commission. The project will require an Order of Conditions from the Raynham 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 (MassDEP). The project must comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site of over one acre. As currently designed, portions of the proposed sewer expansion project may be located close to or within the 100-year floodplain, and will need to meet applicable state building codes (Section 3107.0) and comply with applicable federal flood plain management policies (Executive Order 11988, Flood Plain Management) for the construction of buildings within the 100-year floodplain. Because the proponent is seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction extends to all aspects of the project that may cause significant Damage to the Environment.

While I find that the report contains a great deal of useful information, there are several issues that will require further study as part of FEIR, so that they can be considered in the evaluation of the most feasible alternatives and a presentation of the Final CWMP. The Town of Raynham should work closely with MassDEP and the Water Resources Commission (WRC) during the preparation of the Final CWWMP/FEIR document. The Final CWWMP/FEIR document should provide the information identified below.

SCOPE FOR FINAL CWRMP/EIRProject Permitting

The Final CWRMP/EIR should include a detailed discussion of each state permit and approval necessary for the project, and should demonstrate that the project design meets applicable regulatory and performance standards. The Final CWRMP/EIR should include a separate chapter on the consistency of the proponent's preferred alternative with the Water Management Act (WMA) and the Inter-Basin Transfer Act (ITA).

Projected Wastewater Flows and Sewer System Capacities

As described in the DEIR, the Town of Raynham's existing (Phases 1-5) wastewater flows (777,000 gpd) are conveyed via two separate existing collection systems (South Street collection/pump station system, Route 44 collection/pump station system) to the City of Taunton's West WWTF for treatment and discharge to the Taunton River. The estimated wastewater flow from the proposed Phase 6 sewer expansion project is approximately 95,000 gpd. Raynham's total 2026 design year wastewater flow is approximately 1.20 MGD. Under the recently revised (October 2006) Inter-municipal Agreement (IMA) between the Town of Raynham and the City of Taunton, Raynham's wastewater conveyance limit is 1.3 MGD.

The FEIR must include a detailed discussion and analysis of the Town of Raynham's and the City of Taunton's wastewater transmission and conveyance capacities to accept and convey Raynham's existing wastewater flows, and proposed 2026 design year wastewater flows from the Town of Raynham to the City of Taunton West Water Street WWTF. The Town of Raynham should consult with the City of Taunton in the preparation of this section of the FEIR.

Needs Analysis

As described in the DEIR, the Town has collected and analyzed considerable data on the need for previously constructed Phases 1-5 sewers and the need for new sewers throughout the Phase 6 project area. According to the comments received by MassDEP, the sewer needs analysis provided in the Draft CWWMP/DEIR does not adequately demonstrate the need for extending municipal sewer service to the southeast portion of Raynham as proposed under the proponent's Phase 6 sewer expansion project. The FEIR should provide additional information and analysis to address MassDEP's comments on the adequacy of the proponent's sewer needs analysis which I adopt as a component of the scope for the FEIR.

Inflow and Infiltration

MassDEP's comments also indicate that Taunton's West Water Street WWTF has periodically exceeded its permitted maximum flow rates due to excessive Infiltration and Inflow (I&I) especially during wet weather conditions. MassDEP notes that the City of Taunton has committed to develop and implement an I/I removal program to remove I/I from Taunton's sewer system. The City of Taunton is working closely with MassDEP to develop and implement an I&I Sewer Bank program that will require all new sewer connections to provide I&I removal (5:1) for any/all new wastewater flows before allowing new sewer connections. According to MassDEP, because the Town of Raynham's sewer collection and conveyance system is deemed by MassDEP to be a tributary to Taunton's West Water Street WWTF, the Town of Raynham will be a co-permittee in Taunton's new NPDES permit and will be required to implement an acceptable I&I program. In their comments, MassDEP has noted that the DEIR includes a description of the Raynham's proposed privately financed I&I removal program involving an I&I Sewer Bank that does not meet MassDEP's I&I requirements for a. The FEIR must address MassDEP's comments. The FEIR should include a proposed I&I removal plan that complies with MassDEP's I&I requirements.

The Raynham's I/I Program should be prepared in accordance with MassDEP's Guidelines for Performing Infiltration/Inflow Analyses and Sewer System Evaluation Surveys, (January 1993).

Water Supply

Approximately 95% of the Town of Raynham's potable water supply is provided by the North Raynham Water District (NRWD) and the Raynham Center Water District (RCWD) and derived from local groundwater wells. The water supply source for the remainder of the Town is provided by local private wells. In their comments, MassAudubon has expressed concern with the sewer expansion project's potential impacts to local surface and groundwater resources. According to MassAudubon, extending sewers to service all or most of the Town of Raynham will reduce needed groundwater recharge and may effectively result in the permanent loss of water to the Taunton basin and a future deficit of potable water supply. The FEIR should provide additional information to characterize the potential impacts of the Town's comprehensive sewerage project to local groundwater resources and aquatic resources. I encourage the Town to consider proposing mitigation measures for any such losses, including but not limited to enhanced water conservation and the creation of a water/sewer/stormwater bank.

Interbasin Transfer Act

According to the comments received from MassDEP, the Town of Raynham's comprehensive sewerage project may result in the transfer of wastewater outside watershed boundaries and thus, may be subject to the regulatory requirements under the Interbasin Transfer Act (ITA). The Final CWWMP/FEIR should include a detailed discussion pertaining to the impacts on all source river basins for the Town's proposed wastewater treatment alternative, as required under the Interbasin Transfer Act (ITA). The Town should consult with the Water Resources Commission and MassDEP during the preparation of this section of FEIR.

Water Conservation

The FEIR must identify opportunities for water conservation and water demand management throughout the Town of Raynham. The FEIR should contain a detailed water demand management and conservation plan that meets the standards of the Water Conservation Standards for the Commonwealth of Massachusetts, 1992, and the Guide to Lawn and Landscape Water Conservation, 2002, prepared by the Water Resources Commission. I strongly encourage the Town to design and implement a water conservation program that includes water conservation measures that have the potential for reducing Raynham's wastewater volumes including, outdoor water use restrictions and water use rates, retrofitting of municipal buildings with low flow devices, enactment of a bylaw regulating automatic sprinklers and/or clearing of land for grass lawns, promotion of the use of cisterns for outdoor watering, the use of a water bank, and the promotion of the use of new grey-water systems. The Town of Raynham should incorporate water conservation and water use efficiency in their respective project designs to comply with the March 1989 state plumbing code.

The Town's water conservation program should be consistent with the guidance on water conservation measures provided by the Massachusetts Resources Commission's Lawn and Landscape Water Conservation, An Addendum to the Water Conservation Standards for the Commonwealth of Massachusetts, October 2000. I ask that the Town consider implementing an Irrigation Management Plan (IMP) to further reduce town-wide irrigation water demand. An IMP could involve the use of amended soils and compost, the planting of native and drought-tolerant species of trees, shrubs, and turf grasses, an automated water efficient irrigation system, and a water management protocol for drought conditions. I ask that the Town consult with MassDEP, and refer to the Massachusetts Water Resources Commission's during the final design of the proponent's IMP.

Wetlands and Drainage

The DEIR contains plans identifying all environmental resources and resource areas located within those areas previously sewered in Phases 1-5, and within the area proposed for sewerage in Phase 6 including; wetlands, drinking water supplies, fisheries, water bodies, sensitive habitats, parklands, recreational resources, historic resources, and agricultural lands. According to the proponent, nearly all of Raynham's sewer system, completed and proposed, is located within existing roadway right-of-ways. The proponent has proposed to construct new Phase 6 sewers either under or over existing roadway culverts and where necessary to employ horizontal directional drilling to construct cross-country sewer segments within or adjacent to bordering vegetated wetlands (BVW) and surface water bodies including Furnace Brook.

Rare Species

The Division of Marine Fisheries' Natural Heritage & Endangered Species Program (NHESP), indicated that the Phase 6 project area contain priority habitat for seven listed species of Special Concern including: the Eastern Box Turtle (*Terrepenne carolina*); the Spotted Turtle (*Clemmys guttata*); the Wood Turtle (*Clemmys insculpta*); the Eastern Pondmussel (*Ligumia nasuta*); the Tidewater Mucket (*Leptodea ochracea*); the Triangle Floater (*Alasmidonta undulate*); and the Plymouth Gentian (*Sabatia kennedyana*).

According to NHESP, the proponent's sewer expansion activities proposed under Phase 6 - Contracts 3 and 4 will involve a crossing of the Taunton River and a crossing of Furnace Brook, and may result in impacts to state protected wildlife. The DEIR includes Phase 6 project plans for all portions of the proposed Phase 6 sewer expansion project (Contracts 1-4). In their comments on the DEIR, NHESP has indicated that while portions of the project as currently designed are located within Priority and Estimated habitats, these project components are either exempt from review under the Massachusetts Endangered species Act (MESA – 321 CMR 10.14(6)), or will be constructed in a manner that will not adversely impact habitat areas.

Because the project site contains rare species habitat for the Eastern Box Turtle (*Terrepenne Carolina*), NHESP has asked the proponent to voluntarily develop a plan to protect turtles during project construction. The proponent may wish to consider the use of Cape Cod curbing for any new roadway or parking areas throughout the project site to enable unimpeded turtle movement across roadways and parking areas, and the implementation of mitigation activities including the removal of turtles and installation of temporary turtle barriers surrounding any/all construction areas. I strongly encourage the proponent to consult with NHESP in the evaluation of the project's construction period impacts and the design and implementation of an appropriate turtle protection plan during project construction.

Construction Period

The construction period will be the major source of impacts from the project, 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 FEIR should evaluate construction period impacts and should include a discussion of the proponent's plans to reseed and replant those portions of the construction corridor located adjacent to wetland resource areas, endangered species habitat, Article 97 lands and residential properties with appropriate native species of grasses, woody shrubs and trees. The Town may wish to consult with the Raynham Conservation Commission, MassDEP and abutting property owners in the development and scheduling of re-seeding and re-planting activities. I strongly encourage the Town to commit to using lower emission equipment in addition to requiring its contractors to retrofit diesel-powered equipment with emissions controls, such as particulate filters or traps, and use low-sulfur diesel fuel. The Town should require its contractors to use On-Road Low Sulfur Diesel (LSD) fuel in their off-road construction equipment which can increase the removal of particulate matter (PM) by approximately 25% beyond that which can be removed by retrofitting diesel-powered equipment. All construction-related refueling and equipment maintenance activities should be conducted under cover on impervious surface areas with containment, and outside of any wetlands resource areas, endangered species habitat areas, residential areas and wellhead protection areas.

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. I recommend that the Town use either an indexed response to comments format, or else direct narrative response.


Mitigation/Section 61

The FEIR 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.

Distribution

The 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 the municipal officials for the Town of Raynham and the City of Taunton. A copy of the FEIR should be made available for public review at the public libraries for the Town of Raynham and the City of Taunton.

March 14, 2008
DATE



Ian A. Bowles, Secretary

Comments received:

- 03/07/08 MassAudubon
- 03/07/08 **MA Department** of Environmental Protection (MassDEP) – SERO
- 03/10/08 Division of Fisheries & Wildlife (NHESP)

DEIR #13507
IAB/NCZ/ncz