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January 30, 2008

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

PROJECT NAME		Comprehensive Wastewater Management Planning (CWMP) Project for the South Coast Watersheds
PROJECT MUNICIPALITY	•	Falmouth
PROJECT WATERSHED	:	Cape Cod
EEA NUMBER	:	14154
PROJECT PROPONENT	:	Town of Falmouth
DATE NOTICED IN MONITOR	:	December 24, 2007

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of an Environmental Impact Report (EIR).

The proposed project involves development of a Comprehensive Wastewater Management Plan (CWMP) to address nitrogen loading issues in the South Coast watershed areas of Falmouth. The Environmental Notification Form (ENF) identifies potential solutions and alternative sites for wastewater treatment and disposal. Three alternative plans are considered in the ENF. All of the alternatives include sewering of the planning area. Alternative Plan 1 proposes conveyance of flows to the existing Falmouth Wastewater Treatment Facility (WWTF) and construction of infiltration beds at either the WWTF site or the Falmouth Country Club site. Alternative Plan 2 proposes conveyance of some flow to the existing WWTF with the majority of flow directed to a new WWTF with infiltration beds at the Falmouth Country Club site. Alternative Plan 3 proposes conveyance of flow to a new WWTF at the Massachusetts Military Reservation (MMR), discharge of the majority of flow at an expanded infiltration bed area at MMR, and conveyance of a portion of the flow to the existing Falmouth WWTF. The proposed project involves construction of wastewater treatment and disposal facilities to manage approximately 3 million gallons per day (mgd) of wastewater flows from the planning area. The proposed CWMP for the South Coast watersheds addresses water quality problems that have been documented by the Massachusetts Estuaries Project (MEP) for Little Pond, Great Pond, Green Pond, Bournes Pond, and Waquoit Bay. The MEP technical reports indicated that each of these estuaries is currently receiving excessive nitrogen loads, developed nitrogen thresholds to restore these systems, and determined potential nitrogen reduction scenarios that allow these systems to meet their thresholds. The MEP nitrogen thresholds were subsequently adopted by the Massachusetts Department of Environmental Protection as Total Maximum Daily Loads (TMDLs) under the Federal Clean Water Act. I note that the nitrogen threshold for the main part of Waquoit Bay has not yet been established and will need to be addressed as part of the CWMP and as further detailed in the Scope below.

I commend the Town of Falmouth for its efforts to date in addressing the problem of nutrient pollution in estuaries. The Town of Falmouth has made significant progress towards addressing estuarine water quality problems as evidenced by the Alternatives Screening Analysis Report and the Needs Assessment for the South Coast watersheds, which is included in the ENF. The town has also established a Nutrient Management Group to facilitate planning for nutrient remediation.

The project is undergoing MEPA review and requires a mandatory EIR pursuant to: Section 11.03(5)(a) because it involves construction of a new wastewater treatment and disposal facility with a capacity of 2,500,000 gallons per day (gpd) and Section 11.03(5)(a)(3) because it will result in construction of one or more new sewer mains ten or more miles in length. The project may also meet or exceed mandatory EIR thresholds for land and wetlands. The project is subject to review pursuant to Section 11.03(1)(b)(1) because it will result in alteration of 25 or more acres of land; Section 11.03(1)(b)(3) because it may involve conversion of land held for natural resource purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97; Section 11.03(2)(b)(2)because it may involve a take of an endangered or threatened species; Section 11.03(3)(b)(1)(d) because it may involve alteration of 5,000 or more square feet (sf) of bordering vegetated wetlands; Section 11.03(b)(1)(f) because it may involve alteration of 1/2 or more acres of other wetlands; Section 11.03(b)(10)(b)(2) because it may involve destruction of an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth; and Section 11.03(11)(b) because the project is located within a designated Area of Critical Environmental Concern (ACEC).

The project requires a Groundwater Discharge and Sewer Extension/Connection Permits, from the Massachusetts Department of Environmental Protection (MassDEP). The project also requires a 401 Water Quality Certification and Chapter 91 License and may require dredging permits from MassDEP. The project requires an Order of Conditions from the Falmouth Conservation Commission (and, on appeal only, a Superseding Order from MassDEP). The project is subject to review by the Cape Cod Commission as a Development of Regional Impact (DRI) and is undergoing a joint MEPA/Cape Cod Commission review process. The proposed project may require an Act of Legislation for disposition of Article 97 land and may require a Conservation and Management Permit from the Division of Fisheries and Wildlife (DFW), Natural Heritage and Endangered Species Program (NHESP) and other approvals from DFW.

The project will also require a National Pollutant Discharge Elimination System (NPDES) Construction Activities Permit from the U.S. Environmental Protection Agency (EPA).

The proponent will receive financial assistance from the Commonwealth through the State Revolving Fund (SRF). Therefore, MEPA jurisdiction is broad and extends to all aspects of the project with the potential to cause Damage to the Environment as defined in the MEPA regulations.

## SCOPE

### <u>General</u>

The proponent should prepare a Draft EIR (DEIR) in accordance with the general guidance for outline and content found in Section 11.07 of the MEPA regulations as modified by this Scope. The DEIR should include a copy of this Certificate and a copy of each comment letter received. In order to ensure that the issues raised by commenters are addressed, the DEIR should include a response to comments. The proponent should use either an indexed response to comment format, or direct narrative response. The DEIR should present any additional narrative or quantitative analysis necessary to respond to the comments received. 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 this Certificate. In addition to a general response to comments, the proponent shall provide a detailed response to the comment letter submitted by the Cape Cod Commission as part of the joint DRI/DEIR review process, and I hereby incorporate by reference the additional requests for information contained in that letter as part of the scope of the DEIR.

A Project Summary in clear non-technical language should be included in the DEIR. This section of the document should summarize the project, alternatives analyzed, the type and extent of potential impacts, and mitigation measures that the proponent is committed to. It should also include a list of permits required and a timetable and cost estimate for the project. The DEIR should clarify MEPA thresholds for the project including the total amount of land and wetlands alteration associated with the project. The DEIR should describe any changes to the project since the filing of the ENF.

The DEIR should include a description of all aspects of the project and a schedule for construction and other development activities. The DEIR should also include maps and plans at a reasonable scale that clearly locate and delineate project elements, surface water and wetlands resource areas, adjacent land uses, and aquifer protection districts on and adjacent to the project site. Maps and plans should show water supply resources, conservation areas, and any priority and estimated rare species habitat in the project area. The DEIR should include an overlay of the proposed project in the context of sensitive resources on, and in the vicinity of, the project site to facilitate review and assessment of potential impacts. The DEIR should include revised maps and plans with corrections to the boundaries of MMR and the Frances A. Crane Wildlife Management Area (WMA) as further detailed in the comment letter from NHESP.

The proponent should consult with the towns of Bourne, Mashpee and Sandwich during preparation of the DEIR and refinement of the preferred alternative. The town should also consult with the Massachusetts National Air Guard and the Massachusetts Army Environment and Readiness Center regarding the MMR alternative. The proposed project is likely to have regional impacts beyond the Town of Falmouth and I expect that the proponent will consider the comments and recommendations of the neighboring communities in analyzing project impacts and developing appropriate mitigation. The DEIR should provide an update on inter-municipal coordination and consultations with state and federal agencies on issues relating to the draft CWMP.

The town should continue to work closely with the Cape Cod Commission to ensure that the Draft CWMP is consistent with the goals of the Regional Policy Plan (RPP) and that proposed wastewater infrastructure design and construction accounts for the unique aspects of linked groundwater and surface water system that characterizes Cape Cod.

#### Needs Assessment

As further detailed in the comment letter from the Cape Cod Commission, other resources, in addition to estuaries, are impacted by nutrient loading sources and should be considered in the Needs Assessment. There are six public drinking water supply wells, 19 freshwater ponds and three rivers within the study area. The DEIR should include an update on the Needs Assessment that describes how the CWMP process will address water quality impacts to wells, ponds and river in the study area.

The Commission's review indicates that drinking water supplies in the study area do not have any current concerns from wastewater-derived nitrogen. However, the Commission recommends that evaluation of future impacts from build-out and shifts in seasonal occupancy and/or occupancy rates should be considered as part of a supplemental project that is not part of the DEIR. The town should continue working with the Commission on this issue and provide an update on consultations in the DEIR.

I also strongly encourage the town to begin a monitoring program for freshwater ponds as recommended by the Commission, through the Ponds And Lakes Stewardship (PALS) Snapshot, which provides free laboratory services and could be used to obtain valuable data for the CWMP process and inform future pond and watershed management strategies.

#### Alternatives

## Massachusetts Military Reservation (MMR) Alternative

The DEIR should clarify whether the proposed MMR expansion alternative will direct treated effluent to the existing infiltration area (constructed in the mid-90's) or if it will expand upon this to include alteration of undeveloped lands and construction of new infiltration beds. If such an expansion is proposed, the DEIR should describe and quantify proposed land alteration and other potential impacts. As noted in the comment letter from the Environmental Management Commission (EMC) and NHESP, an expansion to lands east and northeast of the

existing infiltration site would extend into the Upper Cape Water Supply Reserve, which is public conservation land dedicated to the natural resource purposes of wildlife habitat protection and drinking water supply under Chapter 47, Acts of 2002.

The DEIR should address whether the siting of a WWTF is an allowable use of the Reserve under the language of Chapter 47, as well as discuss in detail the impact of clearing rare species habitat and any mitigation required to address such impacts. The DEIR should also discuss the MMR site alternative in the context of the Memorandum of Agreement (2001 MOA) between the Commonwealth and the Department of Defense (DOD) agencies and the Environmental Performance Standards (EPSs) established for MMR as recommended in the comment letter from the Massachusetts National Guard (MANG) Environmental and Readiness Center. The DEIR should describe the project's consistency with the goals of water supply and wildlife habitat protection, and compatible military training, in the Upper Cape Water Supply Reserve area.

The DEIR should discuss the project in the context of the Cape Cod Comprehensive Regional Wastewater Management Strategy Development Project (dated June 2003) and the Massachusetts Military Reservation Master Plan Final Report (1998) prepared in conjunction with the Community Working Group by the Cape Cod Commission. As noted in the EMC comment letter, these reports indicate that wastewater treatment and disposal might not be considered a compatible use in the Upper Cape Water Supply Reserve at MMR. The DEIR should also address long-term ownership and maintenance responsibilities and discuss these in the context of the Memorandum of Agreement (MOA) between the United States Coast Guard, National Guard Bureau and the Commonwealth of Massachusetts, which was included in the comment letter from the 102nd Fighter Wing, Massachusetts Air National Guard.

If the DEIR continues to propose the MMR as an alternative site for wastewater treatment and discharge, the alternatives analysis should evaluate the feasibility of maximizing the use of the site while staying in the existing footprint of the existing infiltration beds. The DEIR should evaluate the size of infiltration area footprint required to accommodate 3.1 million gallons of treated effluent per day. The DEIR should evaluate other locations on the MMR that are outside of the Upper Cape Water Supply Reserve. The DEIR should describe and quantify impacts associated with the construction of a pipeline across the Reserve from the proposed treatment facility to the proposed infiltration area. The analysis should consider impacts and costs related to construction in areas that may contain unexploded ordnance.

The siting of the WWTF may constitute a change in use of conservation land protected under Article 97 of the Massachusetts Constitution. The Reserve is under the care and custody of the Division of Fisheries and Wildlife (DFW). The DEIR should discuss the applicability of Article 97 as well as legislative, DFW, and other approvals required. The DEIR should evaluate the project's consistency with the EEA Article 97 Land Disposition Policy.

I note the reference in the ENF and some comment letters to the potential opportunity for a regional approach to wastewater management at MMR. While a regional approach is mentioned in the ENF, the proposed project for the South Coast Watersheds CWMP, as described in the ENF, consists of a CWMP with alternatives to manage approximately 3 mgd of wastewater flows from the Town of Falmouth. The DEIR should include an update on consultations with the Cape Cod Commission, MMR, and neighboring communities, and discuss any evaluations conducted, related to regional wastewater management. If a regional approach is being proposed as an alternative, a Notice of Project Change (NPC) or supplemental DEIR with a modified Scope may be required. The town should consult with the MEPA Office prior to filing a DEIR to discuss the appropriate review process.

## Other alternatives

The DEIR should include additional information and analysis on other alternatives as further detailed in this Scope. The DEIR should discuss whether any previously rejected alternatives are being reconsidered based on the outcome of hydrogeological and other evaluations. The DEIR should provide a rationale to explain why certain alternatives are selected and others eliminated from further consideration.

The DEIR should include additional information on other nutrient mitigation alternatives in response to the comment letters received, including the urine diversion alternative as a component of a comprehensive strategy for certain portions of the study area.

### Cumulative Impact Analysis

The cumulative impact analysis in the DEIR should address potential conflicts between proposed wastewater treatment and discharge activities and the use of alternative sites for ongoing military training, remediation and water supply protection. The DEIR should describe how the project is being designed to avoid adverse impacts and promote compatibility among different site uses and between the project and land uses in the vicinity of the site. The DEIR should assess the cumulative impacts of the project, including potential impacts to resources and infrastructure in neighboring communities and the region, pursuant to 301 CMR 11.07(6)(h). The DEIR should include proposed measures to avoid and minimize impacts.

The DEIR should evaluate the secondary impacts associated with construction of a WWTF at MMR in the context of reduced training lands available to the Massachusetts National Guard, which could concentrate training into a smaller footprint and cause additional resource impacts.

The proponent should work closely with the Air Force Center for Engineering and the Environment (AFCEE) in locating infrastructure for the proposed WWTF and water recharge sites to avoid interference with existing remedial infrastructure at the Falmouth Country Club and surrounding area. The proponent should also coordinate with AFCEE, MassDEP and EPA regarding the proposed project and potential impacts on remediation of the Ashumet Valley groundwater plume. The proponent should provide the above agencies with details of proposed treated water recharge design parameters to ensure that groundwater conflicts will be avoided. The DEIR should include an update on consultations with AFCEE, MassDEP and EPA and describe how the project will be designed to avoid conflict with existing or future remediation activities and infrastructure.

The DEIR should clarify the status of the 2001 CWMP and clearly explain which of the recommendations have been implemented, which are scheduled to be implemented, and which may undergo consideration for revision. The DEIR should discuss the 2001 CWMP in the context of the proposed South Coast Watershed CWMP and describe any connections and/or any dependencies among them. I refer the proponent to the Cape Cod Commission comment letter, which discusses MEP technical reports and water quality scenarios, and the findings of the 2001 Facility Upgrade Final EIR. The DEIR should clarify proposed sewering within the Harbor watershed, how this will affect total flows from the WWTF to meet the TMDL, and implications for wastewater solutions in the Needs Assessment study area. The DEIR should include a schedule for sewering the West Falmouth Harbor watershed.

The proponent should consult with the Department of Conservation and Recreation (DCR), Waquoit Bay National Estuarine Research Reserve (WBNERR) regarding an evaluation of the combined effects of expected climate change and infrastructure development in coastal communities. As further detailed in its comment letter, DCR recommends that climate-related impacts to groundwater hydrology and coastal resources be considered as part of Falmouth's long-term wastewater infrastructure planning process. The DEIR should include an update on consultations with DCR and a discussion of climate-related impacts.

## Institutional Issues

The DEIR should include a discussion of institutional issues including the development of a sewer connection policy and plans, funding, and public education. The DEIR should describe potential impacts relating to secondary growth associated with proposed new sewering and discuss the town's growth management plans.

# Land Use and Alteration

The DEIR should quantify the total amount of alteration associated with the proposed project (including areas to be altered for buildings, roadways, sewer mains, wastewater treatment and disposal, and other project components). The DEIR should include a breakdown showing the amount of alteration for different project elements. The DEIR should clarify the location, type and amount of alteration in previously undisturbed areas.

# Waquoit Bay and Eel Pond Watersheds

The ENF provides for a 55% reduction in nitrogen load for the Waquoit and Eel Pond watersheds in anticipation of the MEP Technical Report and Total Maximum Daily Load (TMDL) for this system. The Waquoit Bay MEP analysis is not scheduled for completion until 2010 or 2011. However, the town indicates that the draft CWMP will be prepared in 2008. As further detailed in the Cape Cod Commission comment letter, a preliminary percentage reduction for nitrogen was assigned to the main Waquoit Bay subwatershed for planning purposes and the required reduction from the MEP will be critical to finalize the CWMP.

The DEIR should discuss how the planning process will retain sufficient flexibility to accommodate different nitrogen reduction requirements once the MEP technical report for the

main portion of the Waquoit Bay is finalized and the TMDL established. The DEIR should discuss the implications for the project design and selection of alternatives if the nitrogen reduction required is significantly different.

The DEIR should clarify if the preliminary nitrogen reduction percentage assigned to the main Waquoit Bay subwatershed takes into account the proposed discharge at the Falmouth Country Club site, which is partially located within the main Waquoit Bay watershed. If not, the DEIR should discuss additional removal that may be required to compensate.

As further detailed in the comment letter from the DCR Waquoit Bay National Estuarine Research Reserve (WBNERR) and Area of Critical Environmental Concern (ACEC) program, the Waquoit Bay vicinity is designated as an ACEC and as a National Estuarine Research Reserve. The entirety of the 2800-acre Reserve is within the project area and the waterbodies and associated wetlands resources of the ACEC are designated as Outstanding Resource Waters (ORW). DCR is supportive of project goals to improve water quality and prevent additional degradation. However, additional information and analysis is required to fully understand the project's potential impacts to sensitive resources, and to develop appropriate mitigation. Hydrologic changes and watershed modifications proposed as part of the project may impact aquatic resources in the area. The DEIR should evaluate project impacts to groundwater and surface water hydrology and sensitive resources, and provide additional information to address other DCR comments including those relating to inter-municipal coordination.

## Wastewater

The DEIR should include a detailed description of the proposed wastewater treatment facility and discharge areas, a hydrogeological analysis of the alternative discharge locations, and an evaluation of impacts associated with all aspects of the project including the proposed effluent discharge, sewering and facility construction. The DEIR should evaluate any limiting factors for the proposed discharge locations including the potential for interaction with existing contamination and the costs associated with permitting and constructing wastewater pipelines. The DEIR should describe measures to avoid and minimize, or mitigate impacts associated with the proposed project.

The DEIR evaluate project impacts on groundwater hydrology, surface water and wetlands resources, wildlife habitat and other sensitive resources in the project area. The DEIR should evaluate potential hydrological impacts related to the proposed change in discharge from many decentralized treatment sites to a few centralized locations. The DEIR should discuss monitoring plans for groundwater and surface water to evaluate impacts and inform a long-term planning process.

The DEIR should evaluate potential impacts associated with the nitrogen load from the proposed effluent in the vicinity of the Cape Cod Canal and potential impacts to Buzzards Bay estuaries. The DEIR should discuss whether the proposed effluent discharge at MMR would result in an exceedance of TMDLs for Phinney's Harbor and the Wareham River, and consider potential impacts to eelgrass beds in Buzzards Bay. I encourage the town to consult with the

Coalition for Buzzards Bay regarding its comments and request for additional information and analysis relating to potential impacts to Buzzards Bay.

The DEIR should evaluate the feasibility of wastewater reuse at the golf course and other locations regardless of the feasibility of infiltration beds. As noted by MassDEP in its comment letter, wastewater reuse may offer opportunities to reduce some of the construction impacts and costs associated with larger treated water recharge facilities.

The DEIR should include graphics that show the proposed recharge sites in relation to watershed boundaries. The DEIR should evaluate potential impacts to those boundaries, and any changes that may be required in nitrogen removal percentages based on the watershed analysis. The DEIR should include the results of groundwater modeling conducted as part of the contract between the town and the Cape Cod Water Protection Collaborative. As further detailed in the Commission's comment letter, this modeling will be used to evaluate potential regional impacts from recharge at the Falmouth Country Club site, which is located on the boundary between the Waquoit Bay and Bournes Pond watershed. If expansion of discharge at the West Falmouth Harbor WWTF is being proposed, beyond what has already been evaluated, similar modeling should be included in the DEIR to justify that increase. The DEIR should include an evaluation of any revision of nitrogen loads using the MEP water quality models as recommended by the Commission.

The DEIR should clarify the proposed discharge volumes at each location, including the existing WWTF in the West Falmouth Harbor watershed, which MassDEP indicates is limited to 1 MGD. The Alternatives Screening Analysis refers to particle tracking modeling in the East Falmouth Harbor watershed that suggests that some of the nitrogen that is generated flows directly out to Buzzards Bay, and that removal credit should be given for that portion of the load. As noted by MassDEP in its comment letter, the original particle tracking was completed on a region-wide scale. If the DEIR is proposing such a credit, it should include further modeling with a more refined grid to determine if such a credit is appropriate. The DEIR should describe how the West Falmouth watershed project alternative would be consistent with TMDL thresholds for the West Falmouth Harbor.

The town should continue to work with the Commission on watershed analysis and other aspects of the CWMP development during preparation of the DEIR. The proponent should also coordinate closely with MassDEP with regard to permitting issues and allowable removal rates. The DEIR should describe how the project will meet applicable MassDEP permit requirements, including requirements for disinfection of water proposed for recharge. The DEIR should provide an update on consultations with MassDEP regarding the groundwater discharge and other applicable permits.

#### <u>Wetlands</u>

The project is expected to impact a variety of inland and coastal resources. The DEIR should describe and quantify all impacts to wetlands resources. The DEIR should include an analysis of cumulative impacts, a breakdown of impacts for different project components, and a comparison of impacts among project alternatives. The DEIR should provide a detailed

evaluation of proposed modification to the ocean inlets of Little Pond and Bourne Pond and proposed watershed modifications to cranberry bog areas. The DEIR should describe how the proposed project will meet Chapter 91 License and 401 Water Quality Certification requirements, and other applicable requirements of the Wetlands Protection Act. Several commenters expressed concern regarding potential erosion impacts associated with the proposed culvert widening to increase tidal flushing at Little Pond. The DEIR should address these comments.

As further detailed in the MassDEP comment letter, activities planned as part of the project may trigger jurisdiction under the Wetlands Protection Act. These activities include sewer collection piping and pump stations, sewer extensions, expanded or new WWTF and discharge areas, sludge management and storage facilities, fertilizer management and storage areas within the watersheds. The DEIR should identify the location of these activities, describe potential wetlands and watershed impacts, and measures to avoid and minimize or mitigate impacts.

All wetlands resource areas and buffer zones on and adjacent to the project site, including Riverfront Area and Bordering Land Subject to Flooding, should be clearly identified and delineated on site plans. Proposed project elements should be superimposed on a plan with existing conditions to facilitate review and assessment. Proposed areas of impact and replication areas should be identified on site plans, and described and quantified. The DEIR should describe measures that will be implemented to avoid and minimize, or mitigate adverse impacts to wetlands and buffer zones.

# Rare Species

For each of the proposed WWTF and discharge locations, the DEIR should include a habitat assessment, additional information on proposed project components, and a description (including a quantification of habitat altered) of potential impacts to state-listed species. The DEIR should describe how the project will be designed to avoid and minimize impacts to state-listed species habitat, and include mitigation commitments. I strongly encourage the proponent to initiate a pre-filing consultation with the NHESP to address state-listed species concerns prior to filing the DEIR.

The existing Falmouth Wastewater Treatment Facility site is mapped as habitat for the Eastern Box Turtle (*Terrapene carolina*), which is a state-listed species of Special Concern. It may be possible to avoid impacts to Eastern Box Turtle if the project reuses existing developed areas which do not currently serve as habitat for the species. However, alteration within undeveloped portions may impact the Eastern Box Turtle. The DEIR should describe, and delineate on site plans, the proposed alteration at this WWTF site and evaluate potential impacts to state-listed species.

The DBT site, a privately owned site north of the Falmouth WWTF, is considered a feasible alternative in the ENF and is mapped as habitat for the Eastern Box Turtle. The DEIR should clarify proposed project development at the DBT location, describe proposed land alteration, and include an assessment of potential impacts to state-listed species.

As further detailed in the NHESP comment letter, the Falmouth Country Club site is not currently mapped as Priority Habitat for state-listed species. However, the site may be mapped in the next (13th) edition of the Natural Heritage Atlas. The DEIR should clarify which portions of the site will be altered for the various components of the project, including buildings, access roads, discharge areas and pipelines. The DEIR should describe and quantify impacts, including land alteration, vegetation clearing and any wetlands impacts, and discuss potential impacts to Eastern Box Turtle habitat. The proponent should explore the feasibility of utilizing existing disturbed and landscaped areas at the Country Club site to avoid and/or minimize impacts to Eastern Box Turtle. The proponent should consider infiltration of treated wastewater within existing fairways and use of wastewater for irrigation to avoid habitat loss.

One of the alternatives in the ENF includes a new or expanded WWTF at the existing MMR WWTF site, which is mapped as Priority Habitat for state-listed species. Portions of this site are mapped as habitat for Eastern Box Turtle, the Frosted Elfin (*Callophrys irus*, Special Concern), the Purple Tiger Beetle (*Cicindela purpurea*, Special Concern), the Melsheimer's Sack Bearer (*Cicinnus melsheimeri*, Threatened), the Chain Dot Geometer (*Cingilia cateneria*, Special Concern), the Unexpected Cycnia (*Cycnia inopinatus*, Threatened), the Pink Streak (*Faronta rubripennis*, Threatened), the Barrens Buckmoth (*Hemileuca maia*, Special Concern), and New England Bluet (*Enallagma laterale*, Special Concern). The DEIR should include additional information on the proposed project at the MMR WWTF site, a habitat assessment and an evaluation of potential impacts to state-listed species.

The MMR site alternative in the ENF includes discharge at the existing infiltration area, located several miles to the northwest of the MMR WWTF. As further detailed above in the alternatives section of this Scope, an expansion of the existing infiltration site at MMR may impact the Upper Cape Water Supply Reserve. I expect the DEIR to address the question of whether the siting of WWTF infiltration beds is an allowable use of the Reserve under Chapter 47, and to discuss state agency approvals that would be required.

The MMR infiltration site is mapped as Priority Habitat for state-listed species. Portions of the site are mapped as habitat for the Barrens Daggermoth (*Acronicta albarufu*, Threatened), the Straight Lined Mallow Moth (*Bagisara rectifascia*, Special Concern), the Gerhard's Underwing Moth (*Catocala herodias gerhardi*, Special Concern), the Melsheimer's Sack Bearer (*Cicinnus melsheimeri*, Threatened), the Barrens Buckmoth (*Hemileuca maia*, Special Concern) the Pine Barrens Itame (*Itame sp. 1 nr. Inextricata*, Special Concern). The Eastern Box Turtle has also been documented in the vicinity of the site. The DEIR should include additional information on the proposed project at the MMR infiltration site, a habitat assessment and an evaluation of potential impacts to state-listed species. The impacts analysis should include consideration of the pipeline required to convey treated wastewater from the facility to the discharge location.

#### Stormwater and Drainage

The DEIR should clarify the amount of new impervious area associated with the project. The DEIR should describe how the proposed stormwater management system will achieve MassDEP stormwater management policy standards and avoid and minimize adverse impacts associated with any new impervious area. The DEIR should describe proposed measures to manage stormwater during construction.

## Historical and Archaeological Resources

As further detailed in the comment letter from the Massachusetts Historical Commission (MHC), the historic resource information provided in the ENF was based on review of the MassGIS database which only includes properties listed in the State Register of Historic Places up to 1997. The town should consult with MHC to identify any additional state register properties and resources listed in the MHC Inventory of Historic and Archaeological Assets of the Commonwealth that may be affected by the project. The town should provide additional information to MHC as requested in its letter and the DEIR should include an update on consultations with MHC. The DEIR should describe potential impacts of the project to historic and archaeological resources and identify measures to avoid and minimize, or mitigate impacts to cultural resources. As noted in the MHC comment letter, an archaeological survey may be required in archaeologically sensitive areas.

## Construction

The DEIR should include a draft Construction Management Plan (CMP) describing project activities and their schedule and sequencing, site access and truck routing, and best management practices (BMPs) that will be used to avoid and minimize adverse environmental impacts. The CMP should address potential impacts and mitigation relating to: land disturbance; military ordnance/munitions; oil, hazardous material and/or other contamination; noise; dust; odor; nuisance; vehicle emissions; construction and demolition debris; and construction-related traffic. The CMP should discuss plans for reuse and recycling of construction materials. The CMP should include an erosion control component to address protection of water quality and wetlands resources during construction.

I strongly encourage the proponent to commit to participation in the MassDEP Diesel Retrofit Program and to use ultra low sulfur diesel (ULSD) in off-road engines. The DEIR should describe how the proponent will minimize construction-period diesel emissions

The Alternative Plan 3 in the ENF includes an expansion of the existing WWTF and discharge areas at MMR, which would include eight or more miles of underground pipeline through Camp Edwards. If this alternative is being brought forward, the DEIR should address public safety issues relating to military ordnance/munitions as recommended by MassDEP and EMC. The DEIR should also describe plans to manage any contamination that may be encountered during excavations, as further detailed by MassDEP in its comment letter.

## Greenhouse Gas Emissions (GHG) and Sustainable Development

I acknowledge the limited scale of the proposed buildings and air quality impacts related to energy use and transportation. However, the project requires an EIR and will receive financial assistance from the Commonwealth. Therefore, the project is subject to the requirements of the EEA/MEPA Greenhouse Gas Emissions (GHG) Policy and Protocol. The DEIR should quantify GHG emissions associated with the proposed WWTF and propose mitigation measures.

The Town of Falmouth is participating in the Massachusetts Energy Management Pilot for Wastewater and Drinking Water Plants for its existing treatment facilities. I strongly encourage the town to use the principles of the pilot and explore the use of renewable and energy-efficient equipment when designing treatment facilities, pump stations and other components of the proposed wastewater system. The Appendix of the EEA/MEPA Greenhouse Gas Emissions Policy and Protocol includes additional suggestions for mitigation measures that the town may consider in reducing GHG emissions associated with proposed project.

### **Mitigation**

The DEIR should include a separate chapter on mitigation measures, which should include proposed Section 61 Findings for all state permits and a summary table of all mitigation proposed. The mitigation chapter of the DEIR should describe proposed mitigation measures, contain clear commitments to mitigation and a schedule for implementation, and identify parties responsible for funding and implementing the mitigation measures.

#### **Comments**

The DEIR should respond to the comments received on the ENF to the extent that the subject matter of the comment is within the Scope. The proponent should use either an indexed response to comment format, or direct narrative response. The DEIR should present any additional narrative or quantitative analysis necessary to respond to the comments received.

### **Circulation**

The DEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent to the list of "comments received" below. A copy of the DEIR should be made available for public review at the Falmouth, Bourne, Mashpee and Sandwich Public Libraries.

January 30, 2008 DATE

Ian A. Bowles, Secretary

IAB/AE/ae

# Comments Received

1/09/08	Massachusetts Historical Commission
1/09/08	Betsy Adams
1/10/08	Department of Conservation and Recreation, Waquoit Bay National Estuarine
	Research Reserve
1/11/08	Department of Conservation and Recreation, ACEC Program
1/11/08	102nd Fighter Wing, Massachusetts Air National Guard
1/12/08	Oliver C. Zafiriou
1/13/08	Pio S. Lombardo
1/14/08	State Representative Matthew C. Patrick
1/14/08	Jayne B. Abbott
1/15/08	Michael McGrath
1/18/08	Department of the Army and Air Force, Massachusetts National Guard
	Environmental and Readiness Center
1/22/08	Cape Cod Commission
1/22/08	Executive Office of Energy and Environmental Affairs,
	Environmental Management Commission
1/22/08	Department of Environmental Protection
1/22/08	Coalition for Buzzards Bay
1/22/08	Division of Fisheries and Wildlife, Natural Heritage and Endangered Species
	Program
1/22/08	Mimi McConnell