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July 18, 2007

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
SPECIAL PROCEDURE: PHASE III –
DRAFT RECOMMENDED COMPREHENSIVE WASTEWATER MANAGEMENT PLAN

PROJECT NAME : Assabet River Consortium –
Comprehensive Wastewater Management Plan
PROJECT MUNICIPALITY : Hudson, Marlborough, Maynard, Northborough,
Shrewsbury, Westborough
PROJECT WATERSHED : Concord Basin – Assabet River
EOEA NUMBER : 12348
PROJECT PROPONENT : The Assabet River Consortium
DATE NOTICED IN MONITOR : April 25, 2007

As Secretary of Energy and Environmental Affairs, I hereby determine that the Phase III Report: Draft Recommended Plan/Draft Environmental Impact Report (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).

The Comprehensive Wastewater Management Plan (CWMP) being undertaken by the City of Marlborough and the Towns of Hudson, Maynard, Northborough, Shrewsbury, and Westborough (the Assabet Consortium) has the potential to serve as a statewide model for managing and restoring the environmental quality of a major river system. Currently the Assabet River does not meet water quality standards due to eutrophication, largely caused by phosphorus from municipal wastewater treatment facilities (WWTFs). Significantly reducing phosphorus from the four WWTFs will represent a critically important component of a multi-faceted “watershed-based” approach to cleaning up the Assabet River.

Based on the analysis to date, it is clear that wastewater management and the restoration of the Assabet River will likely require significant future reductions in phosphorous contributions from existing sediments (through dredging, dam removal, and/or sediment treatment), and from non-point sources. In addition, a successful watershed-based wastewater management program for the Assabet River must restore water balancing through groundwater discharge and stormwater recharge to stressed subbasins.

The Assabet Consortium's proposed CWMP describes each participating community's significant commitments for making wastewater treatment upgrades at each of the four WWTFs by the year 2010, along with the implementation of aggressive stormwater management and recharge programs, and reduction of wastewater flows through the use of in-basin groundwater discharges sites, reducing infiltration/inflow (I/I) levels, and implementation of aggressive water conservation programs. The results of the Massachusetts Department of Environmental Protection's (MassDEP's) and the US Environmental Protection Agency's (EPA's) long-term comprehensive water quality monitoring program and sediment abatement study for the Assabet River will be evaluated to determine the Consortium communities' progress for making wastewater treatment upgrades at each of the four WWTFs, and will form the basis for any further additional refinements to the CWMP deemed necessary.

I want to acknowledge the significant effort that continues to be put forth by the member communities of the Consortium, MassDEP, EPA, and public commenters to this project on this innovative approach to wastewater planning and watershed management in Massachusetts. This phased adaptive management strategy is an intelligent, responsible and practicable approach for managing and restoring the Assabet River, and will provide a sound basis for regional wastewater treatment and disposal decision-making that will benefit the Assabet River watershed and the residents of the City of Marlborough and the Towns of Hudson, Maynard, Northborough, Shrewsbury, and Westborough alike.

Overview

The goal of the Assabet River Consortium CWMP/EIR is to identify environmentally sustainable treatment alternatives that respond to the communities' needs, meet water quality and public health standards, reduce phosphorous loading, and increase water levels in the Assabet River and its tributaries, on a basin-wide basis. The result will be a set of comprehensive plans outlining how the six Consortium communities, individually and collectively, will treat and dispose of sanitary sewage for the next 20 years. Five of the six communities (excluding Northborough) are largely built out, with between 85% and 100% of the population within existing sewered areas. The six Consortium communities discharge wastewater into the Assabet River via four existing wastewater treatment facilities (WWTFs), located in Westborough (also serving Shrewsbury), Marlborough (also serving Northborough), Hudson, and Maynard.

The project is subject to the Mandatory EIR provisions of the MEPA regulations since it will likely involve construction of more than ten miles of new sewers and may exceed other Mandatory EIR thresholds.

The project will require several permits from MassDEP for sewer extensions and connections, as well as compliance with revised water quality discharge limits specified in the federal National Pollution Discharge and Elimination System (NPDES) permits jointly issued by MassDEP and EPA. Because the communities intend to seek state funding or financial assistance from MassDEP under the State Revolving Fund for individual items recommended in the CWMP/EIR, this project is therefore subject to broad scope jurisdiction under MEPA.

Special Review Procedure

A Special Review Procedure (SRP) was established in December 2000 to facilitate the development of environmentally sound wastewater management practices within the member communities and in the Assabet Basin as a whole. The SRP provided for the filing of four documents: Phase I – Needs Assessment (including a definition of existing conditions and an analysis of wastewater management needs); Phase II - Development and Screening of Wastewater Management Alternatives; Phase III - Draft of the Recommended Plan; and Phase IV - Final Recommended Plan.

The Certificate on the Phase I Report asked the Consortium communities to evaluate the technical and economic feasibility for reducing phosphorous concentrations in the wastewater effluent from each of the WWTFs to attain effluent phosphorous levels of 0.1 mg/l and 0.2 mg/l, respectively. The Consortium filed a Phase II Report with the MEPOA Office in May 2002 which evaluated and screened potential treatment alternatives and groundwater disposal sites that could address the needs and problems identified in the Phase I – Needs Analysis document. The treatment alternatives considered included 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 service multiple properties), and decentralized wastewater treatment plants with groundwater discharges, as well as expansion of the existing WWTFs. The Certificate on the Phase II Report (August 15, 2002) determined that the Phase II Report adequately and properly complied with the Massachusetts Environmental Policy Act (G. L., c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00), and required further study of several issues listed below as part of Phase III, so that they can be considered in the evaluation of the most feasible options and a presentation of the Draft Recommended Plan.

The Consortium was also asked to include in the Phase III Report a detailed technical and cost evaluations of groundwater discharges for any additional discharges from the four WWTFs above existing flows, flow limits specified in the federal National Pollution Discharge and Elimination System (NPDES) permits issued by the U.S. Environmental Protection Agency (EPA), the projected “build out” flows. The Consortium was asked to advance for further study potential discharge sites that are located within tributary subbasins that are experiencing water balance deficits. In response to the specific comments of MassDEP, EPA, and others, a number of specific potential groundwater discharge sites were to be retained for further study.

Phosphorous Limits

Concurrently with the CWMP/EIR process, MassDEP conducted a Total Maximum Daily Load (TMDL) study for the Assabet River to predict how the Assabet River will respond to changes in phosphorous pollutant loading from the four WWTFs currently discharging to the river.

As described in MassDEP's 2004 report Assabet River Total Maximum Daily Load for Total Phosphorous, DEP, DWM TMDL Report MA82B-01-2004-01, the water quality modeling conducted to date clearly demonstrates that at their current effluent limits, the WWTFs are the primary source of phosphorous causing eutrophic conditions in the Assabet River. The existing four WWTFs account for between 60% and 80% of the current phosphorus discharges to the Assabet River, with the balance coming from releases from river bottom sediments and stormwater runoff. To achieve the necessary water quality goals for the Assabet River, MassDEP has established an effluent total phosphorous limit of 0.1 mg/L for each of the 4 WWTFs discharging to the Assabet River. In 2005, each of the 4 WWTFs were issued National Pollutant Discharge Elimination System (NPDES) permits with permitted flow amounts and 0.1 mg/L effluent total phosphorous concentrations.

MassDEP's water quality modeling also indicated that a phosphorous concentration of 0.1 mg/l at the four WWTFs, at current wastewater flows, would not result in compliance with applicable water quality standards without significant (90%) reductions of phosphorous from river sediment. In addition to setting stricter limits on WWTF discharges, the Certificate on the Phase II Report asked the Consortium communities to explore cost effective strategies for reducing the phosphorous content of wastewater entering each of the four WWTFs. The Consortium communities were asked to conduct a detailed analysis of and plan for phosphorous source reduction strategies, including water conservation, I/I removal, and stormwater management, to reduce the phosphorous content of wastewater influent. As MassDEP has indicated, reducing the use of phosphorous in industrial processes, commercial applications, and residential uses could significantly reduce the phosphorous content in WWTF effluent and in non-point source runoff.

Groundwater Discharge

Groundwater recharge of wastewater and stormwater could serve as an important component of a watershed-based approach, in order to reduce phosphorous loading to the Assabet River and to minimize the existing basin inflow/outflow imbalances affecting the river system. Because more water is currently being withdrawn from certain subbasins and discharged to the River as wastewater effluent than is being returned to the subbasins as groundwater recharge, there is a deficit inflow/outflow water balance within several subbasins. The analysis to date strongly suggests that most of the cost-effective methods of groundwater recharge of WWTF effluent will require wastewater to be transported to existing WWTFs for treatment and then transported from the WWTF to one or more groundwater disposal sites (as opposed to the creation of localized treatment plants).

Stormwater Recharge

The diversion of stormwater recharge from the ground directly to the Assabet River reduces subbasin groundwater levels and impairs natural stream flows. As a result, in most of the Consortium communities the estimated stormwater deficits resulting from the collection and piping of stormwater runoff directly to the Assabet River and its tributaries are larger than the deficits associated with each community's water withdrawals and wastewater discharges. Clearly, stormwater recharge will help to offset subbasin inflow/outflow water imbalances.

The Consortium communities were asked to include in the Phase III document a detailed feasibility study of the costs and benefits associated with the development of detailed stormwater management program to enable the subbasin groundwater recharge of existing and future stormwater run-off. Part of an effective stormwater strategy should be protection of existing forested areas, and incentives for revegetation and on-site recharge at developed sites.

Sediment Abatement

As noted elsewhere in this Certificate, achieving significant reductions in phosphorous releases from sediments in the Assabet River will serve as a key component of a “watershed-based” approach for cleaning up the Assabet River to achieve water quality standards. Nearly all of the commenters to the MEPA review process for the Assabet River Consortium’s CWMP have pointed to MassDEP’s recent TMDL modeling which shows that significant sedimentation treatment (i.e. 90% reduction in the sediment phosphorous contribution), when coupled with effluent phosphorous limits of 0.1 mg/l for the four WWTFs at current flows, could achieve the state’s minimum water quality standard in the Assabet River. The Certificate on the Phase II Report required the proponent to include in the Phase III document a detailed analysis of sediment abatement alternatives, including technical and cost evaluations. Alternatives to be studied included dredging, sediment capping, and full removal or partial breach of the four dams along the Assabet River (George Nicholas dam – Westborough, Ben Smith Dam - Maynard, Assabet River Dam - Northborough, and Washington Street Dam – Hudson).

Wastewater Flows

Reductions in wastewater discharges to the Assabet River will also play a significant role in achieving the low discharge limits of total phosphorous to the Assabet River. Reduction of wastewater flows can be achieved by utilizing in-basin groundwater discharges sites, reducing infiltration/inflow (I/I) levels, increasing wastewater reuse (for example, for irrigation purposes), and implementing aggressive water conservation programs for each Consortium community. As noted in the many comments received to date, the wastewater contribution from I/I represents approximately 25% of the average annual wastewater volume discharged by the four WWTFs to the Assabet River. As a result, the Consortium communities were asked to include in the Phase III document, detailed proposals, with cost estimates, for reducing infiltration/inflow (I/I) levels, increasing wastewater reuse, and implementing aggressive water conservation programs.

In-Stream Monitoring

The need for a long term Assabet River monitoring plan will be particularly important if the Consortium’s recommended plan proposes the phasing in of project elements. The Consortium was asked to include in the Phase III report a detailed technical and cost evaluation for a long-term in-stream monitoring program. The in-stream monitoring program would evaluate the effectiveness of the watershed-based wastewater management approach for reducing phosphorous in the Assabet River to be achieved from a phosphorous reductions in WWTF effluent, sediment reduction (dredging, dam removal and sediment treatment), and control of non-point sources.

Notice of Project Change

In June 2005, the Assabet Consortium filed a Notice of Project Change (NPC) with the MEPA Office describing the Consortium's proposed changes to the Phase III Scope of Work. The NPC submittal described the need to develop long-term modeling tools, monitoring programs, and feasibility studies, to be implemented as part of the National Pollution Discharge and Elimination System (NPDES) permit review process or through separately conducted long-term studies, to evaluate the Assabet River's responses to incremental, but significant water quality improvements resulting from reduced phosphorous loadings, and increased groundwater recharge. These modeling tools, monitoring programs, and feasibility studies will have development and implementation timelines that extend well beyond the MEPA review timelines for the Consortium's CWMP. The Consortium communities, together with MassDEP and the US Environmental Protection Agency (EPA), proposed a phased (Phase I, Phase II) 10-year adaptive management approach for the implementation of the Consortium's proposed Assabet River CWMP. The Consortium identified a number of project elements, listed below, that would be addressed under a phased approach and through the NPDES 5-year permit review process, or through alternative mechanisms and time frames outside of the CWMP/EIR process.

Phosphorous Limits

The Consortium communities proposed to design and construct upgrades and improvements to four WWTFs necessary to attain 0.1 mg/l total effluent phosphorous levels by 2010.

Stormwater Recharge and Wastewater Reduction

According to the Consortium, the phased CWMP program and implementation schedule will coincide with the Consortium communities' 2005 and 2010 NPDES Stormwater permitting process. The NPDES permitting process will require each Consortium community to develop and implement a Stormwater Management Plan that maximize infiltration of stormwater flow in stresses basins. Each Consortium community's on-going I/I activities would also be managed under the I/I requirements of their respective NPDES permits. The Consortium agreed to include in the CWMP/FEIR each Consortium community's water conservation plans with implementation schedules.

Groundwater Discharge

The Consortium communities and the agencies agreed to limit the hydrogeological studies and cost estimates for potential groundwater discharge sites originally identified in the CWMP/DEIR Phase II Report only to those potential sites that may be located within those Consortium communities whose projected future wastewater flows exceed their respective NPDES-permitted design flow limits.

Sediment Abatement

As described in the NPC submittal, a Sediment Study is a long-term undertaking that cannot be accomplished within the time frame for completing the CWMP/EIR process. As a result, the Consortium communities proposed to limit their ongoing Sediment Study efforts in the CWMP/EIR process to identifying the legal owners of all existing dams and adjacent property owners.

In-Stream Monitoring

As described in the previous NPC submittal, and reiterated in the Phase III/DEIR report, the Consortium communities and the agencies committed to designing and implementing an in-stream monitoring program through an alternative scope and schedule outside of the CWMP/EIR process.

Draft Recommended Plan – Phase I, Phase II**Phase I**

As described in this Phase III/DEIR document, in Phase I the Assabet Consortium communities will complete improvements and upgrades to the 4 WWTFs discharging to the Assabet River, and will implement their respective water conservation programs, I/I programs, and stormwater management programs.

WWTFs upgrades

The Consortium Communities have identified their preferred treatment technology alternative and commitment to make the necessary upgrades/improvements to the WWTFs to achieve 0.1 mg/L Phosphorous. Under the terms of their respective current (2005) NPDES Permits, the Consortium communities are required to achieve a discharge level of phosphorous of 1.0 mg/L. to reduce the phosphorous levels from each of the four WWTFs to the 0.1 mg/l NPDES permit level by 2009 and within their respective 5-year NPDES permit periods. The proposed WWTF improvements and upgrades will also be designed to accommodate additional new treatment technologies that may be necessary to achieve further phosphorous reductions and improved water quality standards for the Assabet River if deemed necessary as part of the implementation of the CWMP's Phase II requirements. The Phase III/FEIR should provide specific information describing the use of scalable phosphorous removal technologies for each of the four WWTFs.

The Phase III/DEIR summarizes current wastewater flows, NPDES-permitted wastewater flows, and potential future wastewater flows at full build-out for each of the Consortium communities and the four WWTFs, as follows:

Assabet Consortium Communities – Municipal WWTF Flows (MGD)

Municipal WWTF	Current Flows (mgd)	2005 NPDES Permit Flows (mgd)	Projected Flows 2025 (mgd)	Projected v. NPDES Permit Flows (mgd)
Marlborough/ Northborough	2.13	2.89	4.40	+ 1.51 ^A
Hudson	2.30	3.00	3.05	+ 0.50 ^C
Maynard	1.21	1.45	1.45	No Change
Westborough Shrewsbury	5.30	7.68	7.68 ^B	No Change
Total	10.94	15.02	17.71	+ 1.71

^A City of Marlborough has requested a 1.5 mgd increase in 2005 NPDES Permit Flows to accommodate the future Projected Flows for the City of Marlborough and the Town of Northborough

^B Town of Westborough - 2.89 mgd, Town of Shrewsbury - 4.39 mgd.

^C Town of Hudson proposes to develop a groundwater discharge site for the disposal of treated flows in excess of 3.0 mgd.

Wastewater Flows

Town of Hudson - The Town of Hudson has proposed to construct a groundwater discharge facility, to be located on the Hudson Department of Public Works' (DPW) property off Municipal Drive in Hudson (DPW site), to provide for the groundwater discharge of any future additional wastewater flows in exceedence of Hudson's 2005 NPDES permit (3.0 mgd) flow limit, anticipated from the proposed sewerage of the Lake Boone area in Hudson.

City of Marlborough - The City of Marlborough's recommended plan includes a proposal to increase the City's 2005 NPDES-permitted discharge flow limits and TMDL phosphorous loading allocation established for the Marlborough Westerly Wastewater Treatment Facility (Westerly WWTF) from 2.89 to 4.4 mgd to accommodate the future wastewater flows (1.5 mgd total) anticipated from the Town of Northborough's long term (2030) growth projections and municipal sewer expansion plans. According to the information provided in the Phase III/DEIR, the City's recommended plan appears to be the least costly alternative for serving the design year wastewater flows from the City of Marlborough and the Town of Northborough.

Many commenters have expressed significant concern with the City of Marlborough's recommended plan, and its potential impacts to the water quality standards established for the Assabet River, and the restoration of streamflow and water balance in the watershed. According to the comments received from EPA, the EPA-approved TMDL for phosphorous for the Assabet River (September 2004) can not accommodate wastewater flows and phosphorous loading from the Marlborough Westerly WWTF in excess of the facility's current NPDES permitted wastewater flow of 2.89 mgd. I have also received numerous comments indicating that along with the City of Marlborough's proposed increased wastewater discharge flows, the Town of Northborough's extensive sewerage planning activities and proposed activation of local municipal water supply wells will result in serious streamflow deficits and water quality impacts to the sub-watersheds and tributaries to the Assabet River. The Phase III/FEIR should respond to these comments.

I note that the City of Marlborough will need to file an NPDES Permit Modification with MassDEP and EPA, and will need to provide sufficient information and analysis to demonstrate compliance with the anti-backsliding provisions of the Federal Clean Water Act (Section 402(o) and 303 (d)), and the anti-degradation policy pursuant to the Massachusetts Surface Water Quality Standards (314 CMR 4.05). As part of the NPDES Permit Modification review process, the City of Marlborough will also be required to satisfactorily demonstrate that no feasible alternatives exist to the City's proposed wastewater flow increase. The City of Marlborough should include as a separate chapter of the Phase III Report/FEIR, a detailed discussion of the City's proposed wastewater flow increase and its consistency with the Federal Clean Water Act and the Massachusetts Surface Water Quality Standards. I note that some of the information required below may have been included in prior Assabet River Consortium CWMP submittals to the MEPA Office. The Phase III Report/FEIR should contain sufficient information for MassDEP and EPA to evaluate the City of Marlborough's proposed wastewater flow increase in light of their respective NPDES permit modification review obligations. Specifically, this section of the Phase III Report/FEIR should provide an analysis of the direct and indirect environmental impacts associated with the City's proposed increase of effluent discharge flows.

This section of the Phase III Report/FEIR should also include a detailed discussion of alternative wastewater treatment options to accommodate the future anticipated increase in wastewater flows from the Town of Northborough and the City of Marlborough. This analysis should include but not be limited to:

Environmental Impacts

- potential impacts to the minimum water quality standards and designated uses established for the Assabet River and its tributaries;
- potential impacts to stream flows and watershed imbalances to the Assabet River and its tributaries;
- potential downstream impacts to the Concord River, a designated Wild and Scenic River;

Alternatives

redirection of wastewater flows from the Westerly WWTF to the City of Marlborough's Easterly Wastewater Treatment Facility (Easterly WWTF), located off Route 20 near the Sudbury town line. The Easterly WWTF, operating below its permitted (5.5 mgd) capacity, discharges to Hop Brook, a tributary to the Sudbury River;

potential groundwater discharge locations within the City of Marlborough and/or the Town of Northborough for discharge of treated wastewater directly from the City's WWTF; and,

- the Town of Northborough's use of an in-Town decentralized wastewater treatment and disposal alternatives for any future wastewater flow needs that can not be satisfactorily addressed through a comprehensive program of water conservation, I/I removal and water reuse.

Many comments received on the Phase III/DEIR have also expressed concern for the City of Marlborough's and Town of Northborough's projected future water use and wastewater flow estimates. According to EPA, the City of Marlborough has the second highest per capita water use rate (80 gallons per capita per day), and the highest I/I rate (32 % of total flow) of all Consortium communities. EPA believes that the City of Marlborough could realize a reduction of more than 1 million gallons per day of wastewater flow by meeting the State's water conservation standard (65 gallons per capita per day), and significantly reducing its I/I flows. Numerous commenters have noted that the Town of Northborough's projected future wastewater flow of 1.5 mgd, a near four-fold increase of the Town's current wastewater flow (approximately 0.4 mgd), may be excessive. The Conservation Law Foundation (CLF), the Organization for the Assabet River (OAR), and others have indicated that the Town of Northborough may be proposing to expand its sewer collection system to areas of Town that may be able to accommodate on-site Title 5 septic systems, or advanced decentralized wastewater treatment alternatives including cluster and package treatment facilities. As currently planned, the expansion of Northborough's sewer collection system could significantly reduce or eliminate needed recharge of groundwater, extract limited groundwater supply through I/I, and may result in decreased streamflows and water quality degradation to tributaries of the Assabet River.

I ask that the City of Marlborough and the Town of Northborough include as separate chapters of the Phase III/FEIR document a comprehensive evaluation of water conservation, I/I removal and water reuse alternatives to identify opportunities for significantly reducing their respective future wastewater flow estimates and eliminating the need for City's proposal to increase its NPDES-permitted wastewater discharge flows.

Institutional Controls

In their comments, MassDEP has requested that the Phase III/FEIR document include a detailed discussion of legal and institutional mechanisms that each Consortium community proposes to employ to control sewer connections and extensions in accordance with their respective comprehensive wastewater management plans. The Phase III/FEIR should respond to MassDEP's comments and should include a description of those legal and institutional mechanisms that each Consortium community proposes to employ to control sewer connections and extensions in accordance with their respective comprehensive wastewater management plans.

Historic and Archaeological Resources

In their comments, the Massachusetts Historical Commission (MHC) has proposed to review each Consortium communities' phased wastewater management plans as they are designed. The Consortium communities should refer to the Inventory of Historic and Archaeological Assets of the Commonwealth to accurately determine the presence and location of any significant historic and archaeological resources that may be located within their respective wastewater management project areas. Specifically, the City of Marlborough and the Towns of Northborough, Shrewsbury and Hudson, will need to provide MHC with detailed information for each wastewater management project phase as they are developed, including a USGS topographic map, scaled project plans depicting existing and proposed conditions within the project area to determine what effect the proposed phased sewer expansion project may have on historic and archaeological resources. The Consortium communities should also provide MHC with detailed information on any proposed directional drilling work, including, but not limited to, the proposed depth of drilling and the proposed locations for drilling set-up and access areas. I strongly encourage the proponent to work closely with MHC in the completion of its archeological investigations for the proposed phased sewer expansion project.

The information I am requesting to be included as part of the Phase III/FEIR document is necessary to ensure that the requirements of 301 CMR 11.07 are met, that the aspects and issues of the entire project have been clearly described, that a range of project alternatives have been fully analyzed, that the proponent has committed to a set of mitigation 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. Based on the information and analysis provided in the Phase III/FEIR, I reserve the right to require further analysis of the Town of Northborough's sewer expansion plans and/or the City of Marlborough's proposed increase in wastewater discharge flows to the Assabet River.

To allow the review of the Phase III/FEIR to proceed in a timely manner, I will consider requiring the Town of Northborough and/or the City of Marlborough to submit a separate Notice of Project Change (NPC) document to the MEPA Office to provide a detailed analysis and evaluation of the potential environmental impacts associated with Northborough's future sewer expansion activities and the City of Marlborough's proposed increase in wastewater discharge flows.

Water Conservation Program

According to the information provided in the Phase III/DEIR, some Assabet Consortium communities may have begun implementing water conservation programs that may 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. The Phase III Report/FEIR should include a description of each Consortium's community's water conservation plan with a schedule for its implementation within their respective 5-year Water Management Act permit periods. I strongly encourage each Consortium community to incorporate water conservation and water use efficiency in their respective project designs to comply with the March 1989 state plumbing code. Specifically, each Consortium community should commit to employing efficient residential water conservation technologies for the project including water saving devices, low flow toilets, and low flow appliances (dishwashers, washing machines). Consortium communities should also consider implementing an Irrigation Management Plan (IMP) to further reduce the project's 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 each Consortium community consult with MassDEP, and refer to the Massachusetts Water Resources Commission's during the final design of the proponent's IMP. The Phase III Report/FEIR should include a summary description of each Consortium community's Water Conservation Program plan with a proposed schedule for its implementation.

I/I Program

Each Consortium community will be required to complete an I/I Analysis and complete a Sewer System Evaluation Survey (SSES) to determine the existence, amount and location of extraneous water entering the sewer system. The I/I Analysis and SSES will be prepared in accordance with MassDEP's Guidelines for Performing Infiltration/Inflow Analyses and Sewer System Evaluation Survey, (January 1993). The Consortium communities are required to take corrective action to remove Infiltration and Inflow (I/I) from their respective sewer collection systems. The Phase III Report/FEIR should include a summary description of each Consortium community's I/I Program plan with a proposed schedule for its implementation.

Stormwater Management Plan

Each Consortium community has agreed to include in the CWMP/FEIR a Stormwater Management Plan that maximizes infiltration of stormwater flow in stressed basins. I ask that the Phase III Report/FEIR include a summary description of each Consortium community's Stormwater Management Program plan with a proposed schedule for its implementation.

Sediment Removal

The Consortium communities, MassDEP and EPA, have indicated that a Sediment Study is a long-term undertaking that cannot be accomplished within the time frame for completing the CWMP/EIR process. As described in the Phase III document, the Consortium communities have proposed to limit their ongoing Sediment Study efforts in the CWMP/EIR process to identifying the legal owners of all existing dams and adjacent property owners.

Phase II

In Phase II, MassDEP, EPA and the Consortium communities will evaluate the results of MassDEP's In-Stream Monitoring Program and the Sediment Study, and will identify the need for additional (Phase II) Assabet River CWMP program initiatives to achieve and maintain the water quality standards established for the Assabet River including, but not limited to, additional upgrades and improvements to the four WWTFs' effluent phosphorous concentrations, and in-stream sediment removal.

In-Stream Monitoring

As part of Phase I, MassDEP will implement a long-term in-stream monitoring program (In-Stream Monitoring Program) to evaluate the results of the 0.1 mg/L Phosphorous effluent on the water quality of the Assabet River. In Phase II, MassDEP, in consultation with EPA and the Assabet Consortium communities, will evaluate the results of the a In-Stream Monitoring Program and the Sediment Study and will identify appropriate Phase II CWMP initiatives for further reducing phosphorous loading in the Assabet River to achieve required water quality standards. The Phase II program may include activities related to sediment reduction (dredging, dam removal and sediment treatment), and control of non-point sources. MassDEP and EPA have requested that the Consortium communities identify local funding sources and staff to participate with the agencies in the development and implementation of a monitoring program.

Sediment Study

In July 2005, MassDEP, together with the US Army Corps of Engineers (ACOE), initiated a study of sediment abatement alternatives (Sediment Study), including dredging, sediment capping, and full removal or partial breach of the four dams along the Assabet River (George Nicholas dam – Westborough, Ben Smith Dam - Maynard, Assabet River Dam - Northborough, and Washington Street Dam – Hudson). MassDEP is sponsoring the majority of the Sediment Study with partial funding to be provided by the Consortium communities. As described in the Phase III Report/DEIR, the Consortium communities will participate in the completion of its evaluation and make decisions on sediment remediation activities to be pursued as part of the CWMP's Phase II program plan.

I ask that the Assabet Consortium members continue to work with MassDEP, EPA and other Assabet River stakeholders to address the outstanding issues identified in this Certificate. The Phase III/FEIR Report should include a summary description of each Consortium community's I/I Program plan, Water Conservation Program plan, and Stormwater Management Program plan, with proposed schedules for their implementation.

I ask that the proponent and MassDEP consult with the MEPA office prior to the filing of the Phase III Report /FEIR to determine how the results of MassDEP's Sediment Study and the In-Stream Monitoring Program and the Phase II Program Plan, or elements thereof, will be filed with MEPA for public review and comment.

The Phase III Report/FEIR should also include a Response to Comments section to respond to the comments received on the Phase III/DEIR Report. The Assabet Consortium should distribute copies of the Phase III Report/FEIR to all commenters to the Assabet River Consortium's CWMP review process. Copies of the Phase III Report /FEIR should also be made available in the public libraries located within each of the Assabet River Consortium communities.

July 18, 2007

DATE



Ian A. Bowles, Secretary

Comments received:

05/14/07 Massachusetts Historical Commission (MHC)
05/15/07 Massachusetts Historical Commission (MHC)
05/17/07 Massachusetts Historical Commission (MHC)
05/18/07 Massachusetts Historical Commission (MHC)
06/12/07 U.S. Environmental Protection Agency (EPA)
06/14/07 Raytheon Company
06/19/07 Massachusetts Riverways Program
06/20/07 Ken's Foods
06/21/07 Town of Northborough, Depart of Public Works
06/21/07 Marlborough 2010
06/21/07 Organization for the Assabet River (OAR)
06/22/07 Sudbury, Assabet and Concord Wild & Scenic Stewardship Council
06/22/07 Town of Stow, Conservation Commission
06/25/07 Conservation Law Foundation (CLF)
06/26/07 Rohm and Haas Electrical Materials
06/26/07 Charles River Watershed Association
07/02/07 Massachusetts Department of Environmental Protection (MassDEP) – Boston

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