

MEMORANDUM

To: Sudbury Ponds & Waterways Committee

From: Susan Crane¹

Date: November 10, 2006

Re: Summary of EPA and MassDEP Final NPDES Permit to the Marlborough Easterly Wastewater Treatment Plant

On October 19, 2006, EPA and DEP jointly issued its final NPDES permit modification to the Marlborough Easterly Wastewater Treatment Plant for the discharge of treated wastewater into Hop Brook. The permit will go into effect in 60 days (December 18, 2006), unless appealed within thirty days. No appeals are anticipated. The permit's expiration date is January 16, 2010.

Phosphorus limits

Interim limits until June 18, 2013² from April through October: 0.5 mg/l Total Phosphorus (TP)

Limits post-June 18, 2013 from April through October: 0.1 mg/l TP (60-day rolling average)

November through March: 0.75 mg/l TP (monthly average)

Comment by HBPA: There is no requirement that a percentage of the TP discharged at the higher permitted winter level be dissolved (*i.e.*, presumably enabling it to pass through the system) versus particulate (raising the concern that it might more readily precipitate out and adhere to sediments).

Compliance schedule

1. **Feasibility Study:** Marlborough and other interested parties, including the Town of Sudbury, have voluntarily agreed to participate in a feasibility study funded by MassDEP and conducted by the Army Corps of Engineers. To

¹ This summary is the opinion of the author, a member of the Sudbury Towns & Waterways Committee, but does not necessary reflect the view of the Committee.

² Interim limits will be in effect until the upgraded facility goes online.

ensure compliance with water quality standards with respect to P in Hop Brook, it will:

- Develop and evaluate effective and feasible alternative plans
- Present recommended options

Then EPA and MassDEP will determine which (if any) of the options would ensure compliance when implemented in combination with the permitted P effluent limits (the “Approved Option(s)”), and Marlborough will review and comment on drafts of the Feasibility Study.

Anticipated date of completion by the Corps: April 2007

Comment: Among the options being studied is the removal of dams in the Hop Brook system, which effectively would eliminate the existence of the ponds.

2. **MOU among Marlborough, Sudbury and MassDEP:** These entities will enter into a Memorandum of Understanding providing for their collaboration in developing a strategy and action plan concerning the implementation of the nonpoint source (i.e., P-laden sediments) reductions associated with the Approved Option(s). It shall not impose legal obligations, however, on any party.

Timing: no deadline specified

3. **Initiate Facility Improvements Planning:** Marlborough must initiate planning of facility improvements for TP reductions and submit a status report.

Deadline: December 18, 2007

4. **Initiate Facility Improvements Design:** Marlborough must initiate design for TP reductions and submit a status report.

Deadline: December 18, 2008

5. **Design Status Report:** Marlborough must submit a status report to MassDEP and EPA relative to the design.

Deadline: December 18, 2009

6. **Completion of Planning and Design:** Marlborough must complete the facility improvements planning and design which, to the extent practicable and approved by MassDEP, shall be consistent with the Approved Option(s).

Deadline: June 18, 2010

7. **Initiate Construction:** Marlborough must initiate construction of the facility improvements.

Deadline: December 18, 2010

8. **Construction Status Report:** Marlborough must submit a status report to EPA and MassDEP pertaining to construction of the facility improvements.

Deadline: December 18, 2011

9. **Second Construction Status Report:** Marlborough must submit a second status report to EPA and MassDEP pertaining to construction of the facility improvements.

Deadline: December 18, 2012

10. **Construction Completion:** Marlborough must complete construction of the facility improvements.

Deadline: June 18, 2013

Comments: This is a very long construction/implementation schedule. In part, this was to allow Marlborough to stagger its construction upgrade plans and associated costs pertaining to both this facility and the Marlborough Westerly Wastewater Treatment Plant, which discharges to the Assabet River pursuant to a separate NPDES permit.

According to an August 2006 EPA Fact Sheet, this schedule is intended to address both point and nonpoint sources of nutrient impairment in Hop Brook. EPA believes this approach will restore designated uses more rapidly than with an immediate imposition of more stringent point source P limits alone. “Even with a more stringent phosphorus effluent limit, existing accumulations of phosphorus in the sediment will continue to cycle through the water column for a long period of time before abating and thus continue to contribute to the nutrient impairment of the receiving waters.”

Agency Reopener

EPA shall reopen the permit before its expiration date and either modify or revoke and reissue the permit to include limits and conditions (including a new compliance schedule) necessary to ensure compliance standards *if*:

EPA and MassDEP determine that nonpoint source P reductions associated with the Approved Option(s) have not been assured by October 1, 2009, either through voluntary agreements or activities and/or regulatory agency action.

Actual implementation of nonpoint source reductions is not necessary to demonstrate compliance.

Deadline: Before January 16, 2010

Comment: According to the August 2006 EPA Fact Sheet, if the nonpoint source (i.e., sediment) reductions have not been assured, a more stringent point source effluent limitation will be imposed. The construction schedule is intended to provide Marlborough and other interested parties with a limited opportunity to explore the potential for sediment P remediation.