

**RESPONSE TO COMMENTS**  
**REISSUANCE OF NPDES PERMIT NO. MA0101044**  
**SHELBURNE FALLS WASTEWATER TREATMENT FACILITY**  
**BUCKLAND, MASSACHUSETTS**

During the period from September 28, 2003, to October 28, 2003, EPA and the Massachusetts Department of Environmental Protection Agency solicited comments on the draft National Pollutant Discharge Elimination System (NPDES) permit to be issued to Town of Buckland, Massachusetts, for the discharge of treated effluent from its secondary wastewater treatment plant to the Deerfield River in the Town of Buckland, Massachusetts. Comments were received from the following:

1. **State of Connecticut, Department of Environmental Protection(Betsy Wingfield, Interim Director, Planning and Standards Division, Bureau of Water Management) letter dated October 17, 2003.**
2. **(John R. Stothoff, Senior Project Manager, Tighe & Bond, Inc. Consulting Engineers, Westfield, MA for Town of Buckland, MA) dated October 24, 2003.**

Following is a response to comments received during the public comment period, including identification and explanation of those provisions of the draft permit which have changed in the final permit.

1. **State of Connecticut, Department of Environmental Protection(Betsy Wingfield, Interim Director, Planning and Standards Division, Bureau of Water Management) letter dated October 17, 2003.**

**COMMENT # 1**

CT DEP notes that there is no requirement for monitoring of TKN and nitrite/nitrate in the permit, possibly because of small volume of discharge. While the operational data provided with the permit shows an average monthly flow of only 0.09 mgd, which would translate into a very small nitrogen load, the permit does allow up to 0.25 mgd on an average monthly basis. Should the plant increase its operation flow near the permit limit, a meaningful load of nitrogen, perhaps exceeding 30 lbs/day, may be contributed to the Connecticut River Basin.

Since Connecticut and New York had the TMDL for nitrogen loading to Long Island Sound approved by EPA in 2001, both states are implementing projects that will reduce total nitrogen loadings to Long Island Sound. The states and the Long Island Sound Study are committed to about a 60% reduction from Connecticut and New York by 2014. EPA has been working with Massachusetts, New Hampshire, and Vermont for over two years now in a Connecticut River work group coordinated by NEIWPC to develop a nitrogen reduction plan for those states by 2003 to compliment efforts in Connecticut and New York as recommended in the TMDL.

Understanding the sources of nitrogen in states north of Connecticut is the key to developing a supportable management program. Institution of regular point source monitoring for nitrogen is an important first step. My recommendation would be to discuss sampling needs with EPA staff involved in the Connecticut River work group or with the NEIWPC staff involved in that effort. For a small plant like Shelburne Falls, a practical approach may be to identify a threshold discharge volume (e.g.,

0.2 mgd) that if exceeded on a monthly average basis for two consecutive months, would kick in a monthly nitrogen monitoring requirement.

#### **RESPONSE # 1**

EPA and MA DEP agree with the above comment and have included a once/quarter monitoring requirement for total nitrogen in the final permit.

**2. (John R. Stothoff, Senior Project Manager, Tighe & Bond, Inc. Consulting Engineers, Westfield, MA for Town of Buckland, MA) dated October 24, 2003.**

#### **COMMENT # 1**

The design capacity of the original facility was 0.25 mgd and has been the permitted flow since the plant was constructed in the 1960s. Many upgrades and operational improvements include installation of reed beds for the application of digested sludge, eliminating the constraints imposed by the sludge drying beds, and the conversion from surface aerators to a more efficient and flexible diffused aeration system.

In 1999, Tighe & Bond conducted an evaluation of the facility to determine its actual capacity and to provide the Town with a planning document for potential future improvements and upgrades. Enclosed is a copy of that report which concluded that the actual capacity of the facility is 0.33 mgd.

It is therefore requested that the new NPDES permit to be issued to reflect the findings of the evaluation and that the permitted flow to be increased to 0.33 mgd.

#### **RESPONSE # 1**

Upon completion of a Comprehensive Wastewater Management Plan (CWMP) EPA will consider a request for a flow increase, subject to TMDL and anti-degradation requirements.

#### **COMMENT # 2**

We would also like to make a correction to the FACT SHEET that accompanied the draft permit. The second Paragraph of Section IV. C on page 5 states “ Currently, the permittee landfills its sludge at its own property as a general landfill”. Sludge is not landfilled on site, but rather applied to reed beds. At some point of time, currently estimated to be 8 to 10 years, the material in the reed beds will have to be removed and transported to an offsite landfill. The application of sludge to the reed beds is governed by the loading rates established during the design of the reed beds. Landfill regulations do not apply to this process application.

#### **RESPONSE # 2**

EPA acknowledges the above statement. The Fact Sheet is not part of the final permit, so it will not be modified to correct this error. However, this response document will serve to amend the administrative record relative to the Fact Sheet.