



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1  
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BOSTON, MA 02109-3912

May 7, 2015

The Honorable Thomas Hoyer  
Mayor  
Taunton City Hall  
141 Oak Street  
Taunton, MA 02780

**Re: City of Taunton NPDES Permit TN Limit**

Dear Mayor Hoyer,

This letter responds to the March 10, 2015 email correspondence from John Hall (special counsel to the City of Taunton), which summarized his understanding of the Region's approach to deriving the permit's nitrogen limitation for the City and, further, sought clarification from the Region over "what would constitute new information on proper narrative criteria implementation sufficient to reconsider the 3 mg/l TN limit" in the future.

Mr. Hall's bullet-point description of the bases for the permit's nitrogen limitation is as follows:

- [EPA] [u]sed 122.44(d) to set limit by (a) finding system impairment related to DO and (b) concluding that further TN reduction was required to eliminate that condition
- The permit analysis assumes that TN is stimulating chl a levels and the amount of chl a growth is critical to attaining the DO objective.
- Relied on 2004-2006 SMAST study to create the TN and chl a endpoints used in the permit fact sheet analysis with objective of meeting existing DO criteria
- EPA did not conduct additional modeling analyses and did not evaluate system hydrodynamics or effect of other system load reductions occurring since 2006 (like Brayton Pt) but rendered its conclusions that further reductions were required based on the limited more recent (2012) information that was available for the system which indicated DO criteria are still not met in Mount Hope Bay and TN levels are still elevated in the Taunton Estuary

As to the first bullet, the Region relied on 40 C.F.R. § 122.44(d) to determine reasonable potential and to interpret the narrative criteria. We concluded that there was reasonable potential and that TN reductions were necessary to control cultural eutrophication. DO was one key indicator used in the determination. With respect to bullet two, the Taunton River system appears to be phytoplankton (chlorophyll) dominated at this time and controlling this growth is key to controlling cultural eutrophication and attaining the DO criteria. Three, the Region utilized SMAST data as part of a weight of the evidence analysis that also included the scientific literature. Finally, the Region did evaluate the effect of other system load reductions. Reductions in Brockton's TN loads were noted in the Fact Sheet along with EPA's evaluation that this load reduction was not sufficient. This conclusion is supported by the limited more recent information that extends through 2013 (not 2012).

Similarly EPA evaluated the available information regarding impacts of Brayton Point thermal load reductions and concluded that it did not warrant changes in the permit limit analysis; again this conclusion is supported by the limited more recent information which indicated continued algae blooms and DO depletions in Mount Hope Bay.

As to what types of information would serve as sufficient basis for reconsideration of the nitrogen limit based on an alternative interpretation of the Massachusetts narrative nutrient criteria, Mr. Hall's email outlined three possibilities. Specifically:

- MassDEP adoption of less restrictive DO criteria for marine waters
- MassDEP approval of a new narrative criteria implementation method that produces less restrictive TN requirements and /or
- MassDEP approval of a Taunton Estuary water quality model showing that alternative TN requirements would still allow for attainment of the DO criteria.

Under 40 C.F.R. § 122.44(d)(1)(vi)(A), EPA after finding reasonable potential may “[e]stablish effluent limits using a calculated numeric water quality criterion for the pollutant which the permitting authority demonstrates will attain and maintain applicable water quality criteria and will fully protect the designated use.” EPA confirms that each of the scenarios described above, in the event they materialize, could provide cause for reinterpreting the “calculated numeric water quality criterion” target and/or for reconsidering and imposing less restrictive TN requirements. The City should be aware, however, that the calculated target must be demonstrated to attain and maintain all applicable water quality criteria and to fully protect all designated uses for the water body, which include, but are not limited to, DO impacts. Similarly, with respect to any alternative limit, EPA must “ensure that [ ] [t]he level of water quality to be achieved by limits on point sources...complies with *all* applicable water quality standards[.]” 40 C.F.R. § 122.44(d)(1)(vii). (emphasis added) Additionally, to be clear, any revised DO criteria adopted by MassDEP would be subject to EPA review and approval prior to becoming the applicable water quality standard. Lastly, the fact that the scenarios above involve the Commonwealth to some extent interpreting its own water quality standards is clearly an important fact for which the Region will account.<sup>1</sup> Of course, this does not by itself end the inquiry, as the Region has an independent obligation under Section 301(b)(1)(C) to ensure the NPDES permit includes limitations necessary to meet water quality standards.<sup>2</sup>

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<sup>1</sup> See *In re Ina Road Water Pollution Control Facility*, 2 E.A.D. 99 (CJO 1985) (Region should ordinarily defer to State's interpretation of its own water quality standard regulations unless that interpretation is clearly erroneous).

<sup>2</sup> *In re City of Moscow*, 10 E.A.D. 135, 151 (EAB 2001) (EPA has an independent duty under CWA § 301(b)(1)(C) to include a more stringent permit limitation than that specified by a state if the Region reasonably believes it is necessary to achieve a state water quality standard).

We hope you found this response helpful to your decision making.

Sincerely,



Ken Moraff, Director  
Office of Ecosystem Protection  
EPA Region 1

cc. John Hall, Esq.  
Bethany Card, MassDEP