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February 27, 2009

BY E-MAIL - timony.meridith@epa.gov
AND HAND DELIVERY

U.S. Environmental Protection Agency
NPDES Permit Unit – CPE
One Congress Street, Suite 1100 (CMP)
Boston, MA 02114-2023
Attention: Meridith Timony

Re: Comments on Draft NPDES Permit Modification
Upper Blackstone Water Pollution Abatement District
NPDES Permit No. MA0102369
Public Notice No. MA-012-09

Dear Ms. Timony:

On behalf of the Upper Blackstone Water Pollution Abatement District (“District”), Bowditch & Dewey, LLP in its capacity as District Legal Counsel, respectfully submits the District’s comments on the draft modification of its NPDES Permit identified above and described in Public Notice No. MA-012-09, dated January 30, 2009 (the “Public Notice”) issued by the U.S. Environmental Protection Agency – Region 1 (“Region”) (the “2009 Modification”). The Public Notice, inclusive of the cover letter to the District, Region’s letter to Mr. Glen Haas of the Massachusetts Department of Environmental Protection (“MA DEP”), and the 2009 Modification are attached as Exhibit A.¹

The Region states that the purpose of the 2009 Modification is to add a numeric effluent limitation and associated monitoring for aluminum to the conditions included in the permit issued in August 2008. See 2009 Modification at page 3. The District believes the 2009 Modification does not accurately describe its discharge and by this letter the District is notifying the Region in writing of its comments prior to the last day of the public comment period, identified by the Region as Saturday, February 28, 2009. This letter constitutes the District’s best effort to raise all reasonably ascertainable issues and to submit all reasonably available

¹ Please note that the cover letter to the District with the Public Notice attached is incorrectly dated January 28, 2008. For clarity in the record, the District received said letter and Public Notice on January 30, 2009.

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arguments supporting the District's position in advance of the close of the public comment period on February 28, 2009 in accordance with the provisions of 40 CFR 124.13, and the District respectfully reserves the right to supplement this record in the future as appropriate to address its concerns with the 2009 Modification.

The District's comments reflect three main concerns. First, the Region, in proposing to add a chronic aluminum effluent limitation and associated monitoring requirements to the District's NPDES Permit, used and relied upon incomplete and incorrect data and as a result reached incorrect conclusions. Second, ambient aluminum levels in the Blackstone River above the District's discharge point routinely exceed the EPA's current National Recommended Water Quality Criteria for aluminum used to establish the proposed aluminum limit in the 2009 Modification and therefore use of EPA's criteria may not be appropriate. Third, the District contends that the Region's approach to establishing and imposing the proposed aluminum effluent limitation is counterproductive, particularly in light of the recent efforts between the Region and a working group inclusive of a variety of municipal officials to discuss the NPDES permitting process. The District's comments are presented in greater detail below.

The Region Uses Incomplete and Incorrect Data, and Reaches Incorrect Conclusions

The Region selectively used the District's whole effluent testing (WET test) data, leaving out data from 2004, a portion of 2005, most of 2006, half of 2007, and most of 2008. This selective use of data allows the Region to form the erroneous conclusion that an aluminum limit is needed in the District's NPDES permit. The Region not only ignored much of the data during the time period it reviewed, but it also incorrectly recorded values for results that were below detection limits as equal to the detection limit value. Specifically, the Region reported values as 100 ug/L, the method detection limit, in June, 2005 and October 2006 where the reported values were below detection limits. A more appropriate approach would be to use one-half the detection limit, or to exclude these values from the calculation.

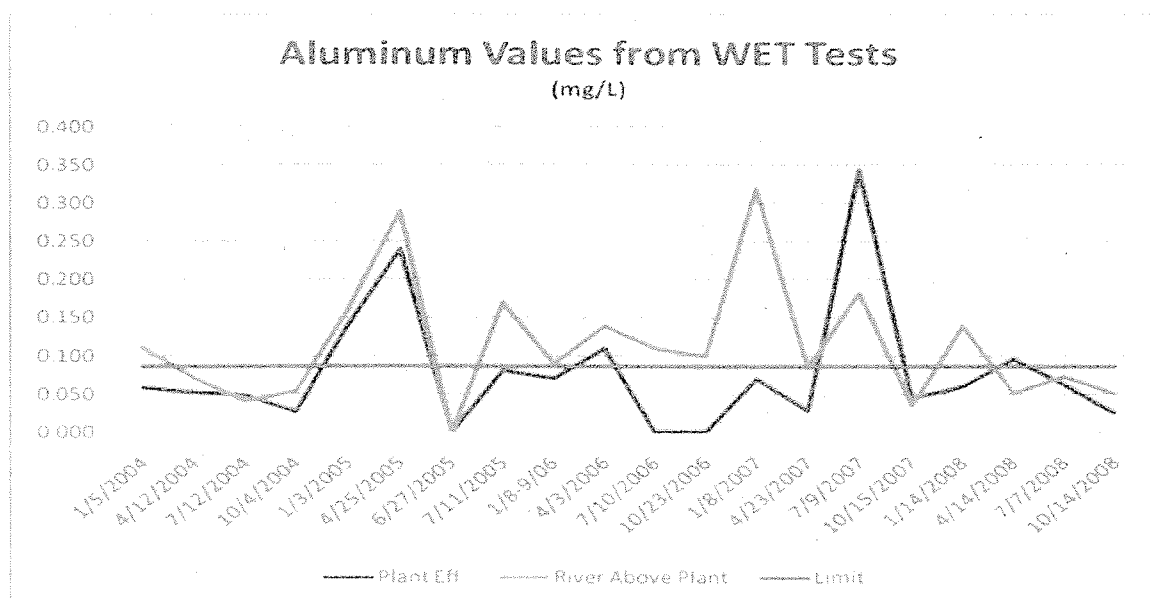
As summarized in Table 1, when all of the data between January, 2004 and the present are properly evaluated (values below the detection limit being excluded), the resulting statistics are quite different from those utilized by the Region as the basis of the 2009 Modification to impose a chronic aluminum effluent limitation with associated monitoring requirements. The results obtained using this full data set, properly analyzed, show that the District's effluent is consistently below ambient levels in the Blackstone River. Indeed, there were only two times where the District's effluent exceeded the proposed aluminum limit when the waters of the Blackstone River above the District's discharge did not.² The complete data set from January 2004 to present is attached as Exhibit B.

² The District's effluent is above the EPA's current National Recommended Water Quality Criteria for aluminum for only 25% of the sampling events depicted in Figure 1.

Table 1			
Aluminum	AVG. (mg/L)	MAX (mg/L)	MIN (mg/L)
Values Per Region Permit Modification Fact Sheet			
District effluent	0.127	0.344	0.045
Ambient River	0.114	0.183	0.035
Corrected values from UBWPAD			
District effluent	0.092	0.344	0.026
Ambient River	0.120	0.320	0.035

As demonstrated by the data provided in Table 1, and supported by the complete data set attached as Exhibit B, the District's effluent values are typically below ambient river values for aluminum. In addition, the District's aluminum values tend to vary with ambient conditions. Figure 1 depicts aluminum values from WET test plant effluent and ambient samples from the river above the District's discharge point. As Figure 1 demonstrates, there is a direct correlation between elevated ambient aluminum levels and the District's effluent values for aluminum.

Figure 1



The ambient conditions can be explained. Increasing episodic acidification of native soils leading to elevated aluminum concentrations in receiving waters is a central hypothesis of

one of the papers submitted by Trout Unlimited in its petition of the District's NPDES Permit currently on appeal before the Environmental Review Board. The Trout Unlimited appeal and referenced paper are attached as Exhibit C. Such increasing episodic acidification of native soils leading to elevated aluminum is the effect observed in the Blackstone River, as shown by the information presented in Figure 1. One reasonable interpretation of Figure 1 is that acid rain is causing aluminum to leach from the soil matrix, a condition which the District can not control. Such a conclusion should not be surprising, as aluminum is the third most abundant element in the Earth's crust, and is present in the granitic rock formations of New England. Taken together, these facts suggest that such aluminum conditions are naturally occurring. Under such circumstances, the EPA's National Recommended Water Quality criterion for aluminum would not apply since pursuant to 314 CMR 4.05(5)(e) MA DEP adopts the EPA criterion as the state water quality criterion, *except* where naturally occurring background concentrations are higher. Since the naturally occurring background concentrations exceed the EPA Recommended Water Quality criterion, the background concentration of aluminum becomes the relevant water quality criterion.

The EPA National Recommended Water Quality Criteria for Aluminum May Not Be Appropriate to Apply to the District's Discharge.

As the Region is aware, its own guidance indicates that the water quality criteria for aluminum may be significantly over-protective. See EPA's National Recommended Water Quality Criteria at footnote L, attached as Exhibit D.³ The Region is also likely aware that other US EPA regional offices have approved revisions of the EPA's National Recommended Water Quality criterion for aluminum. See Letter of Jon M. Capacasa, Director, US EPA Region III Water Protection Division to Lisa McClung, Director Water and Waste management Division, West Virginia Department of Environmental Protection dated January 9, 2006 and attached as Exhibit E. Further, the Region is aware that both water and wastewater utilities are concerned about such low limits because of the value of various aluminum salts in both water and wastewater treatment. Importantly, published studies of aluminum salts in water stand for the proposition that the EPA's National Recommended Water Quality Criteria for aluminum in water used to establish the 2009 Modification aluminum limit on the District's discharge is too conservative, especially in colder climates. See Canada Gazette, Part I, Vol. 143, No. 6 Ottawa, Saturday February 7, 2009, attached as Exhibit F and Canadian Environmental Protection Act, 1999; Priority Substances List Assessment Report Follow-up to the State of Science Report, 2000; Aluminum Chloride, Aluminum Nitrate, Aluminum Sulphate, Chemical Abstracts Service Registry Numbers 7446-70-0, 13473-90-0, 10043-01-3; Environment Canada and Health Canada, November 2008, attached as Exhibit G.

³The District has attached two publications of the EPA's National Recommended Water Quality Criteria list. The first as published by the US EPA Office of Water, Office of Science and Technology, National Recommended Water Quality Criteria, 2006 (4304T); the second as presented on the US EPA website. Footnote L appears on pages 17 and 7 respectively.

The Region's Approach to Effluent Limits is Counterproductive

The District fully appreciates the need to establish practical effluent limits on aluminum to protect ecologically important resources. However, the Region's proposed aluminum limit in the 2009 Modification does not serve this objective well. Indeed, the Region has recently entered into extensive discussions with various dischargers and trade associations to discuss ways to resolve the issues associated with aluminum effluent limits prior to the issuance of a general permit for water treatment plant discharges.

Presently, the District does not use any aluminum salts in its treatment process, but may in the future. Since the District is not a user of aluminum salts and because the data indicate a strong correlation between ambient aluminum water quality and the District's effluent quality (see Exhibit B and prior discussion), it is the District's position that a more comprehensive approach to the resolution of the aluminum limit should be followed. Specifically, we request that the Region withdraw the draft permit, and then enter into a dialog with a variety of stakeholders concerning the development of a Blackstone River specific strategy for aluminum control. The District suggests that the stakeholders should include dischargers, governmental regulatory agencies and nongovernmental groups with a strong interest in this issue, such as Trout Unlimited. It is the District's position that such an approach will maximize the successful resolution of the aluminum issue, in the shortest time frame possible. Continuing attempts to address aluminum within the District's permit process will likely hamper the ability of all interested parties to have a fruitful dialog.

The District believes that withdrawal of the proposed permit modification and development of a working group is consistent with six months of discussions recently concluded between the Agency and a variety of municipal officials over the NPDES process. In the course of these discussions, there was agreement among the parties that enhanced communications is desirable. The parties subsequently issued a report which in its conclusion section reflected the following:

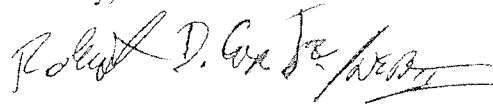
Communication. All parties agreed that better communication is needed between regulators and permittees. There was also recognition that internal communications within regulatory agencies and a breakdown of regulatory permitting silos is necessary. EPA committed to an early and open dialogue with permittees and all stakeholders in a given watershed at least relative to major watersheds, while adding that permittees also need to let the agencies know that they are interested in such a dialogue.

See Massachusetts Coalition for Water Resources Stewardship Report to the Massachusetts Congressional Delegation on Regulatory Reform, December 2008, at page 12, attached as Exhibit H.

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In conclusion, the District respectfully requests that the Region withdraw the 2009 Modification for all the reasons set forth in these comments inclusive of all attachments and referenced materials.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert D. Cox, Jr.", with a stylized flourish at the end.

Robert D. Cox, Jr.
Bowditch & Dewey, LLP
Legal Counsel, Upper Blackstone Water
Pollution Abatement District

cc: Thomas K. Walsh, P.E. Engineer-Director
Roger Jansen, EPA
John Gall, CDM
Glen Haas, MA DEP

EXHIBIT B

Aluminum Values, mg/L

WET	Plant	Ambient
Test	Effluent	River
Date		

1/5/2004	0.059	0.110
4/12/2004	0.052	0.072
7/12/2004	0.048	0.041
10/4/2004	0.027	0.054
1/3/2005	0.140	0.160
4/25/2005	0.240	0.290
6/27/2005	<0.100	<0.100
7/11/2005	0.080	0.170
1/8-9/06	0.070	0.090
4/3/2006	0.110	0.140
7/10/2006	<0.100	0.110
10/23/2006	<0.100	0.100
1/8/2007	0.070	0.320
4/23/2007	0.028	0.084
7/9/2007	0.344	0.183
10/15/2007	0.045	0.035
1/14/2008	0.060	0.140
4/14/2008	0.096	0.051
7/7/2008	0.063	0.073
10/14/2008	0.026	0.051

Avg.	0.092	0.120
Min.	0.026	0.035
Max.	0.344	0.320