

U.S. EPA REGION 1

**Determination on Remand from the EPA
Environmental Appeals Board**

**Upper Blackstone Water Pollution Abatement District
NPDES Permit No. MA01022369**

**United States Environmental Protection Agency
Region 1 – New England Office
Office of Ecosystem Protection
5 Post Office Square, Suite 100
Boston, MA 02109**

**Determination on Remand from the EPA Environmental Appeals Board
Upper Blackstone Water Pollution Abatement District
NPDES Permit No. MA0102369**

I. Introduction.

On August 22, 2008, the U.S. Environmental Protection Agency Region 1 (the Region) reissued National Pollution Discharge Elimination System (NPDES) permit number MA0102369 (the Permit) to the Upper Blackstone Water Pollution Abatement District (the District). The District owns and operates a wastewater treatment plant located in Millbury, Massachusetts, which collects and treats sewage and wastewater from several communities in central Massachusetts. The District's treatment plant discharges to the Blackstone River, an interstate freshwater river flowing from its origin in Massachusetts south into Rhode Island and ultimately to Narragansett Bay, a marine water.

The Region issued the Permit under the federal Clean Water Act, 33 U.S.C. § 1251, *et seq.* Among other requirements, the Permit includes effluent limitations for phosphorus and nitrogen to address severe, nutrient-driven impairments in the Blackstone River and upper Narragansett Bay. *See Permit*, Part I.A.1. The Permit's nutrient limits include monthly average effluent limitations during the growing season of 5.0 mg/l total nitrogen and 0.1 mg/l total phosphorus. In addition, the Permit also includes provisions making certain communities who send their waste to the District's treatment facility (the satellite collection systems) responsible for requirements to report unauthorized sanitary sewer overflows and to properly operate and maintain their respective collection systems, including to develop and implement plans to reduce excessive inflow and infiltration (I/I). *See Permit* at p.1 and Parts I.D and E.

Eight parties filed petitions for review before EPA's Environmental Appeals Board (the Board), including the District and four of the satellite collection systems. On November 26, 2008, the Region provided notice to petitioners that the contested conditions were stayed pending the appeals and final agency action, but that the uncontested and severable portions of the Permit were in effect. *See Ex. A.* On May 28, 2010, the Board issued a decision on the appeals. *See In re Upper Blackstone Water Pollution Abatement District*, NPDES Appeal Nos. 08-11 to 08-18 & 09-06, 14 E.A.D. ___ (*Order Denying Review in Part and Remanding in Part*, EAB, May 28, 2010).¹ The Board denied review of the Permit and upheld the Region's analyses in all respects except one: the Board remanded to the Region the Permit's provision adding the satellite collection systems as co-permittees for further consideration.

In its directions on remand, the Board held that the Region may re-issue the Permit with or without the co-permittee provision as the Region determines is appropriate. *See Board's Order* at pp.19-20. Should the Region choose to maintain the co-permittee provision in the Permit, the Board further instructed that the Region provide a more

¹ The decision is available on the Board's website via the following link:
[http://yosemite.epa.gov/OA/EAB_WEB_Docket.nsf/Filings%20By%20Appeal%20Number/34E841C87F346D94852577360068976F/\\$File/Denying%20Review....pdf](http://yosemite.epa.gov/OA/EAB_WEB_Docket.nsf/Filings%20By%20Appeal%20Number/34E841C87F346D94852577360068976F/$File/Denying%20Review....pdf)

comprehensive factual and legal rationale for its decision to regulate the satellite collection systems. *Id.* at 20.

As is detailed more fully below, the Region has determined on remand to remove the co-permittee provision from the Permit as we believe it is imperative to implement the new, more stringent nutrient limits as soon as possible. Under the specific circumstances here, including the severe nutrient-related impairments in the receiving waters and the extent of the District's ongoing contribution to those impairments, an expeditious resolution of the remand and final permit decision is warranted. The Region will fully respond to the Board's concerns in any future issuance or modification of the District's permit that includes regulation of satellite collection systems (or in a permit issuance to another POTW should the issues be raised there first).²

II. Actions and Determinations to Resolve Remanded Issues.

Factors supporting removal of the co-permittee provision include the following:

- The Region anticipates it will take a significant amount of time to develop a comprehensive response to the factual and legal questions posed by the Board and to coordinate broadly within EPA in developing that response.
- In the meantime, it is undisputed that the receiving waters are severely impaired. Nitrogen-driven impairments in the Narragansett Bay include dramatic decline in dissolved oxygen levels, significant fish kills and loss of historic eel grass habitat. *See* Board's Order at 26-27; Response to Comments (RTC) at 29, 96. Phosphorus-driven impairments in the Blackstone River include low dissolved oxygen, high levels of chlorophyll *a*, and high levels of macrophyte and periphyton growth. *See, e.g.*, Board's Order at 73; Fact Sheet at 8 (listing reports documenting adverse impacts).
- The District's discharges of nitrogen and phosphorus are a major contributor to impairments in the receiving waters. The District's discharges dominate the Blackstone River's flows, *see* Board's Order at 74, and the facility is the dominant source of nitrogen loadings to the Blackstone River. *Id.* at 30-31; RTC at 27, 32. The District is also the dominant source of bio-available phosphorus loadings to the Blackstone River under critical low flow conditions. RTC at 40, 41.
- Although the Board has affirmed the Region's finding that limits of 5.0 mg/l total nitrogen and 0.1 mg/l total phosphorus are necessary to ensure applicable water quality standards will be met, these limits are stayed until final resolution of the remand. *See* 40 C.F.R. §§ 124.16(a) and 124.19(f)(1)(iii). Therefore, until final agency action on this Permit, the District will continue to discharge nitrogen and phosphorus at concentrations that are causing or contributing to violations of water quality standards in the receiving waters.

² There are many other POTWs with separately owned satellite collection systems in Massachusetts and New Hampshire, states in which the Region has responsibility to issue NPDES permits.

- The delay that would be associated with resolving the co-permittee issue is in direct conflict with the need to swiftly reduce the level of nutrient loading into receiving waters to address the severe existing nutrient impairments in Narragansett Bay. It is untenable to forestall necessary reductions in the pollutants that are the primary cause of the water quality impairments while reconsideration of issues surrounding the regulation of satellite municipal collection systems undergoes potentially extended assessment by the Agency. Moreover, due to the tendency of nutrients to recycle once released into the system and contribute to future impairment, delay in addressing point source nutrient contributions will only compound the challenges in restoring the receiving waters. In other words, the cycle of eutrophication can be difficult to reverse due to the tendency of nutrients to be retained in sediments, potentially resulting in a long recovery period even after pollutant sources have been reduced. *See, e.g., Nutrient Technical Guidance Manual: Rivers and Streams (US EPA 2000)* at 3; RTC at n.12 and 117. Thus, efforts by the District to initiate planning, design and construction of additional facilities needed to achieve the new limits should begin as soon as possible, as should achievement of these limits.³
- Additionally, all other significant point sources contributing nutrients to the Bay already have final permits including stringent nitrogen limits. These include two other facilities in Massachusetts and seven facilities in Rhode Island. The Region's intent is to work with both Rhode Island and Massachusetts to ensure all these facilities meet their respective nitrogen limits in comparable schedules in order to best assess improvement to water quality. *See* RTC at 58. Further, the Rhode Island Department of Environmental Management, upon review of the Board's Order, has requested that the Region move forward as expeditiously as possible to place the nutrient limits into effect to address the significant water quality impairments to waters in that state. Thus, both equitable considerations and water quality assessment factors weigh in favor of moving forward at this time.

III. Conclusion.

For the reasons above, the Region has after due consideration on remand determined to forego imposition of any co-permittee requirements in the Permit. Although the Region considered all the factors above together in making its decision, the Region believes that each (i.e., water quality considerations, delay to date in putting new nutrient limits in effect, equitable concerns, and the views of the downstream affected state), would independently support a decision to move forward at this time.⁴

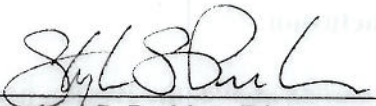
³ Because the District is not anticipated to consistently comply with the new nutrient limits immediately upon final issuance of the Permit, the Region will establish a schedule for the District to design and construct needed treatment facilities in a separate administrative order. *See* RTC at 90.

⁴ The Region has further determined not to exercise its discretion under 40 C.F.R. §124.14 to reopen the record for additional public comment on the determination to issue the permit decision without the remanded co-permittee provision. *See In re NE Hub Partners, L.P.*, 7 E.A.D. 561, 584-85 (EAB 1998) (applying provisions of 40 C.F.R. § 124.14 related to reopening a public comment period in the context of a

Exhibit B, attached hereto, is a Notice of Conforming Changes, which reflects the Region's remand decision to forego imposition of any co-permittee requirements in the Permit. More specifically, and as is reflected in Exhibit B, the Region has removed all requirements that the satellite collection systems implement Parts I.D (Unauthorized Overflows) and I.E (Operation and Maintenance). In addition, as the requirements related to development and implementation of a plan to control inflow/infiltration (Part I.E.3) were initially crafted to apply to both the District (as owner of the treatment plant) and the co-permittees (as owners of the collection systems), the Region has on remand clarified which aspects of plan development, implementation and associated reporting requirements apply only to the extent the District owns any portions of the separate sewer system. These include requirements to identify and physically remove sources of inflow and infiltration to the separate sewer system. The Region has not included a similar caveat for requirements imposed on the District as the owner of the treatment facilities. These include provisions that the District is responsible to ensure that high flows do not cause I/I related effluent violations and that the District require, through appropriate agreements, that all member communities control discharges sufficient to ensure that high flows do not cause or contribute to a violation of effluent limitations or cause overflows from the District's facilities. These requirements remain unchanged as they were drawn from state policy applicable to regional treatment facilities,⁵ were not challenged by any petitioner, and were not the subject of the Board's remand.

Appeals of the Region's decision to forego imposition of the co-permittee requirements may be filed with the Board within 30 days of the date of receipt of this Determination on Remand. See 40 C.F.R. §124.19(a). If no appeal of the Region's remand decision is filed with the Board by this date, the current stay of the Permit's contested conditions will be lifted and these conditions shall become effective upon the Regional Administrator's issuance of a final permit decision. If such an appeal before the Board is filed, those currently stayed conditions will remain stayed until final agency action and appropriate notification occur.

Date: July 7, 2010



Stephen S. Perkins, Director
Office of Ecosystem Protection
USEPA – Region 1

remand proceeding), *aff'd*, *Penn Fuel Gas, Inc. v. EPA*, 185 F.3d 862 (3rd Cir. 1999). The questions raised by the Region's analysis on remand are neither substantial nor new in the context of this permit proceeding.

⁵ Interim Infiltration and Inflow Policy, Massachusetts Department of Environmental Protection, Bureau of Resource Protection (Policy No. BRP01-1, September 6, 2001).

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**Notice of Changes Conforming to the Board's Order on Remand and the
Region's Determination on Remand**

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. § 1251 et seq.; the "CWA"),

Upper Blackstone Water Pollution Abatement District (UBWPAD)

is authorized to discharge from the facility located at:

**Upper Blackstone Water Pollution Abatement District
50 Route 20
Millbury, MA 01527**

to receiving water named: **Blackstone River**

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein. The City of Worcester, the Towns of Millbury, Auburn, Holden, West Boylston, Rutland, Sutton, Shrewsbury, Oxford and Paxton, and the Cherry Valley Sewer District are authorized to discharge wastewater to the UBWPAD facility. Only municipalities specifically listed above are authorized to discharge wastewater into the UBWPAD facility. This permit does not restrict UBWPAD from accepting sludge or septage from other entities.

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D. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfall(s) listed in Part I A.1. of this permit. Discharges of wastewater to waters of the United States from any other point sources, including sanitary sewer overflows (SSOs), are not authorized by this permit and shall be reported to the Chief of the Water Technical Unit, or his/her designee, in accordance with Section D.1.e. (1) of the General Requirements of this permit (Twenty-four hour reporting).

Notification of SSOs to MassDEP shall be made on its SSO Reporting Form (which includes DEP Regional Office telephone numbers). The reporting form and instruction for its completion may be found on-line at <http://www.mass.gov/dep/water/approvals/surffms.htm#sso>.

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E. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions:

1. Maintenance Staff

The permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Preventative Maintenance Program

The permittee shall maintain an ongoing preventative maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program shall include an inspection program designed to identify all potential and actual unauthorized discharges.

3. Infiltration/Inflow Control Plan:

The permittee shall develop and implement a plan to control infiltration and inflow (I/I) to the separate sewer system. The plan shall be submitted to EPA and MassDEP **within six months of the effective date of this permit** (see page 1 of this permit for the effective date) and shall describe the permittee's program for preventing I/I related effluent limit violations, and all unauthorized discharges of wastewater, including overflows and by-passes due to excessive I/I. The permittee is responsible to ensure that high flows do not cause I/I related effluent limit violations.

The plan shall include, but only to the extent the permittee owns the separate sewer system:

- An ongoing program to identify and remove sources of I/I. The program shall include the necessary funding level and the source(s) of funding.

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- An inflow identification and control program that focuses on the disconnection and redirection of illegal sump pumps and roof down spouts. Priority should be given to removal of public and private inflow sources that are upstream from, and potentially contribute to, known areas of sewer system backups and/or overflows
- Identification and prioritization of areas that will provide increased aquifer recharge as the result of reduction/elimination of I/I to the system.
- An educational public outreach program for all aspects of I/I control, particularly private inflow.

The plan shall also include:

- The permittee shall require, through appropriate agreements, that all member communities control discharges to the permittee's POTW sufficiently to ensure that high flows do not cause or contribute to a violation of the permittee's effluent limitations or cause overflows from the permittee's collection system.

Reporting Requirements:

A summary report of all actions taken to minimize I/I during the previous calendar year shall be submitted to EPA and MassDEP annually, **by March 31**. The summary report shall, at a minimum, include:

- A map and a description of inspection and maintenance activities conducted and corrective actions taken during the previous calendar year, but only to the extent the permittee owns the separate sewer system.
- Expenditures for any I/I related maintenance activities and corrective actions taken during the previous year, but only to the extent the permittee owns the separate sewer system.
- A map with areas identified for I/I-related investigation/action in the coming year, but only to the extent the permittee owns the separate sewer system.
- A calculation of the annual average I/I and the maximum month I/I for the reporting year.

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- A report of any I/I related corrective actions taken as a result of unauthorized discharges reported pursuant to 314 CMR 3.19(20) and reported pursuant to the Unauthorized Discharges section of this permit, but only to the extent the permittee owns the separate sewer system.

4. Alternate Power Source

In order to maintain compliance with the terms and conditions of this permit, the permittee shall continue to provide an alternative power source with which to sufficiently operate its treatment works (as defined at 40 CFR §122.2).