

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION I - NEW ENGLAND  
OFFICE OF ECOSYSTEM PROTECTION  
ONE CONGRESS STREET  
BOSTON, MASSACHUSETTS 02114-2023**

**STATEMENT OF BASIS**

MODIFICATION OF NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
(NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

**DATE OF PUBLIC NOTICE:** June 20, 2006

**NPDES PERMIT NO.:** MA0000272

**NAME AND ADDRESS OF APPLICANT:**

Boston and Maine Corporation  
Iron Horse Park  
North Billerica, MA 01862

**NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:**

Boston and Maine East Deerfield Rail Yard  
39 Railroad Yard Road  
East Deerfield, MA 01342

**RECEIVING WATERS:** Connecticut River Basin (Segment MA34-04)

**CLASSIFICATION:** Class B, Warm Water Fishery

**I. Proposed Action**

On September 23, 2005, the U.S. Environmental Protection Agency ("EPA") and the Massachusetts Department of Environmental Protection ("MassDEP") reissued National Pollutant Discharge Elimination System Permit No. MA0000272 ("Permit") to B&M Corporation ("B&M" or "Permittee"). The Permit, which superseded a prior NPDES permit signed on November 19, 1975 ("1975 Permit"), authorized the discharge of treated waste water and storm water effluent from the B&M East Deerfield Rail Yard to the Connecticut River.

On October 26, 2005, the Connecticut River Watershed Council, Inc. and Jamison E. Colburn filed a petition for review with the Environmental Appeals Board contesting the process by which the Permit was issued and arguing that the Permit should have contained certain additional

conditions. On June 1, 2006, EPA issued a Notice of Uncontested Conditions finding that the petition did not challenge any specific conditions of the Permit, and making the entirety of the Permit effective.

In order to resolve the issues raised in the Petition, EPA now proposes to modify the Permit pursuant to 40 C.F.R. § 124.19(d). For clarity, rather than issue a modification containing only the text of those provisions which have changed, the draft permit modification (“Modified Permit”) includes the entire text of the Permit, as modified. However, pursuant to the regulations found at 40 C.F.R. 124.19(d), **only the conditions subject to modification are reopened and are subject to public comment (see below).**

In summary, the modifications to the Permit include increasing the frequency and types of testing for toxic pollutants to be conducted at the five storm water discharges (Outfalls 001, 002, 003, 005 and 006), requiring B&M to submit a copy of its Storm Water Pollution Prevention Plan to EPA and the MassDEP, requiring B&M to submit its monitoring reports to the National Marine Fisheries Service (NMFS, also known as NOAA Fisheries), and requiring B&M to submit a summary report of the discharge monitoring reports to EPA and the MassDEP after two years from the effective date of the modified Permit.

As part of the process of developing this draft permit modification, EPA consulted with federal wildlife agencies under Section 7(a)(2) of the Endangered Species Act, specifically regarding the results of sampling at five storm water discharges. EPA consulted with NMFS, and determined that the storm water discharges are not likely to adversely affect the shortnose sturgeon or its critical habitat. EPA continues to consult with the Habitat Conservation Division of NMFS regarding the Essential Fish Habitat for the Atlantic salmon, and the U.S. Fish and Wildlife Service regarding other endangered species in the area. EPA is recommending that the storm water discharges are not likely to adversely affect the species of concern.

## **II. Limitations and Conditions**

### **A. Increasing the Frequency and Types of testing for Toxic Pollutants**

Currently, the Permit under appeal requires B&M to annually sample the storm water discharges (Outfalls 001, 002, 003, 005, and 006) for the 126 Priority Pollutants (PP). The sampling was to occur in March because snow melt and wet weather in March would cause the groundwater to be high and, if contaminated groundwater infiltration is an issue, it would be more appropriate to sample in March. However, this sampling regime ignores the other seasonal effects on storm water discharges. Therefore, EPA is requiring B&M to test for certain pollutants on a quarterly basis. In lieu of the full PP testing, EPA limited the pollutants to be tested quarterly based on two factors. The first factor is the likelihood the contaminant would be present due to historical usage of the chemicals at the site. The second factor is the likelihood that if the pollutant was present, the pollutant could cause a negative impact on the water quality of the receiving water body, the Connecticut River.

Based on these two factors, EPA is requiring B&M to test for polychlorinated biphenyls (PCBs) and polynuclear aromatic hydrocarbons (PAHs).

### PCBs

The historical usage of chemicals at the site include PCBs. B&M used to have PCB-containing electrical transformers that supplied power to the buildings and lighting systems at the site. Additionally, PCBs have been found in transformers and capacitors used on railroad locomotives. Therefore, PCBs have the potential to be at the B&M East Deerfield Rail Yard.

In the area of the Connecticut River where the B&M storm water outfalls discharge, high concentrations of PCBs have resulted in the river not attaining water quality standards due to Priority Organics. Therefore, any discharge of PCBs will continue to negatively impact the water quality. Because there is a potential that PCBs are at the site and if the PCBs migrated to the Connecticut River could negatively impact the water quality, B&M shall monitor for PCBs on a quarterly basis. B&M may request a reduction of PCB monitoring after two consecutive years of not detecting PCBs.

### PAHs

Locomotives have been fueled by diesel fuel for well over half a century. B&M fuels locomotives at the East Deerfield facility and has for many years. Due to historical spills of diesel fuel at the facility, B&M will be required to monitor the storm water discharges for some of the constituents that make up diesel fuel. Many of the compounds analyzed for by testing for PAHs are also found in diesel fuel. Therefore, EPA has determined that more aggressive monitoring at the storm water discharges is justified.

Many PAHs are also listed compound in the Priority Pollutant (PP) list (see 40 C.F.R. § 423 - Appendix A)). For example, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene are all listed compounds on the PP list. These compounds are also found in diesel fuel. Compounds are listed in the PP for their potential toxic effects on human health and the environment. Since diesel fuel is very prevalent at the East Deerfield facility and PAHs can have a toxic effect on the river and those that use the river, B&M shall monitor for PAHs on a quarterly basis for the first two years. After two years B&M can request in writing to EPA to reduce the sampling from quarterly to semi-annually. B&M shall continue to monitor for PAHs for the life of the permit due to the prevalence of diesel fuel use at the facility.

The annual sampling for PP includes a scan for PCBs and most of the PAHs. The new monitoring requirements will add sampling for PCBs and PAHs during the three quarters when PP are not being sampled (or once per year for PAHs if EPA approves semi-annual testing for PAHs). The draft Modified Permit now includes the requirement to monitor for PCBs and PAHs on a quarterly basis (see the table at Part I.A.2). Footnotes 12 and

13 to the table stipulate the sampling and reporting requirements as stated above.

**B. Submitting the Storm Water Pollution Prevention Plan to EPA and MassDEP**

B&M is required to submit its Storm Water Pollution Prevention Plan (SWPPP) to EPA and the MassDEP within 90 days after the effective date of this permit modification. Incorporating this requirement into the Modified Permit itself eliminates the need for an information request letter under CWA § 308. Similar requirements have been incorporated into other recent NPDES permits.

This requirement was added to Part I.B.2 of the Modified Permit.

**C. Submitting a Data Summary Report After Two Years**

B&M shall submit a report summarizing the first two years of data from the effective date of this permit for all the Outfalls. This summary report will assist the agencies in determining what, if any, further action is appropriate.

The summary report should include the maximum amounts detected of each effluent characteristic at each outfall (Outfalls 001, 002, 003, 004, 005 and 006) during the two-year period. The report shall be sent to EPA's Manager of the Water Technical Unit (SEW) in the Office of Environmental Stewardship. The report shall be also sent to MassDEP's Regional Engineer of the Bureau of Waste Prevention in Springfield, the Permits Branch of the Division of Watershed Management in Worcester, and the Endangered Species Coordinator of the National Marine Fisheries Service. B&M shall provide copies of the DMRs as attachments for the first two years of reporting since the effective date of this Permit. B&M has been given 90 days after the two-year anniversary of the effective date of the Permit to submit a copy of this report with the attachments to each of three offices listed above.

**D. Discharge Monitoring Reports Submitted to National Marine Fisheries Service**

As part of the Endangered Species Act consultation, by letter dated January 12, 2005, NMFS requested that all monitoring reports be submitted to the Endangered Species Coordinator. Therefore, the Modified Permit requires B&M to submit copies of the Discharge Monitoring Reports to NMFS.

### **III. State Certification Requirements**

EPA may not issue an NPDES permit modification in the Commonwealth of Massachusetts unless MA DEP certifies that the effluent limitations contained in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate State Water Quality Standards. MA DEP staff have reviewed this draft Modified Permit and advised EPA that the limitations are adequate to protect water quality. EPA has requested certification by the Commonwealth pursuant to 40 C.F.R. § 124.53 and expects that the draft permit modification will be certified.

### **IV. Comment Period, Hearing Requests, and Procedures for Final Decisions**

**Consistent with regulations found at 40 C.F.R. 124.19(d), only the conditions subject to modification are reopened and are subject to public comment.** All persons, including applicants, who believe any condition of the draft permit modification is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to:

**Mr. Steven J. Calder  
U.S. EPA  
One Congress Street  
Suite 1100 (CMA)  
Boston, Massachusetts 02114-2023**

Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit modification to EPA and MA DEP. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit modification, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator of EPA and the Director of MassDEP/DWM will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice.

## **V. EPA Contact**

Additional information concerning the draft permit modification may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

Mr. Steven J. Calder  
US Environmental Protection Agency  
One Congress Street  
Suite 1100 (CMA)  
Boston, Massachusetts 02114-2023  
Telephone: 617-918-1744  
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and

Mr. Paul Hogan  
Department of Environmental Protection  
Division of Watershed Management  
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6/13/06

Date

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Linda M. Murphy, Director  
Office of Ecosystem Protection  
U.S. Environmental Protection Agency