

**AUTHORIZATION TO DISCHARGE UNDER THE  
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"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

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

is authorized to discharge from the facility located at:

**Boston and Maine Corporation (B&M)  
East Deerfield Rail Yard  
38 Railroad Yard Road  
East Deerfield, MA 01342**

to wetlands and unnamed brooks that flow to the Connecticut River (Connecticut River Basin MA-34) in accordance with the effluent limits, monitoring requirements and other requirements contained in the permit issued on September 23, 2005 with an effective date of July 1, 2006, as specified in the Notice of Uncontested and Severable Conditions letter issued on June 1, 2006, except as set forth herein in italics and summarized as follows:

- Pages 5&6**      Increase the frequency and types of testing for toxic pollutants. Specifically, B&M shall monitor for polynuclear aromatic hydrocarbons and polychlorinated biphenyls on a quarterly basis.
- Page 10**        Submit a data summary report after two years of monitoring from the effective date of this permit modification. B&M shall submit a summary report of two years of data from the discharge monitoring reports (DMRs) to EPA, MassDEP and the National Marine Fisheries Service (NMFS). The summary report shall be submitted within 90 days after the two year anniversary of the effective date of this permit modification.
- Page 11**        Submit the Storm Water Pollution Prevention Plan (SWPPP) to EPA and the MassDEP. B&M is required to submit the SWPPP within 90 days from the effective date of this permit modification.
- Page 17**        Submit DMRs to the NMFS. B&M shall submit an additional copy of all DMRs to the NMFS.

This permit modification shall become effective immediately upon signature.

This permit modification does not effect the expiration date of the permit signed September 23, 2005. The original permit stated, "This permit shall become effective 60 days after the date of signature. This permit and the authorization to discharge expires five years from the effective date." Therefore, the original permit and this permit modification expire November 22, 2010.

This permit includes 17 pages in Part I consisting of the effluent limitations and monitoring requirements, 27 pages in Part II includes General Conditions and Definitions, and 9 pages in Permit Attachment A.

Signed this 11<sup>th</sup> day of August, 2006.

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Linda M. Murphy, Director  
Office of Ecosystem Protection  
Environmental Protection Agency  
Region I

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Glenn Haas, Director,  
Division of Watershed Management  
Bureau of Resource Protection  
Massachusetts Department of Environmental  
Protection

PART I

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge storm water and process waste water treated by a Dissolved Air Flotation system from outfall serial number **004** to an unnamed brook that flows to the Connecticut River. Such discharge shall be limited, monitored and reported by the permittee as specified below.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirement</u>	
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
<b>Outfall 004</b>				
Flow Rate from Sand & Fuel Facility (gpd) <sup>1</sup>	Report	Report	Continuous	Recorder
Flow Rate from Outfall 004 (gpd) <sup>1</sup>	15,000	45,000	Continuous	Recorder
Temperature, Maximum (°F) <sup>3</sup>	Report	Report	Continuous	Recorder
Oil & Grease (mg/l) <sup>2, 4</sup>	*****	3.0	1 / Month	Grab
Surfactants (mg/l) <sup>4</sup>	*****	0.3	1 / Month	Grab
pH (SU) <sup>2, 5</sup>	*****	6.5 to 8.3	Continuous	Recorder
Benzene (ug/l) <sup>4</sup>	*****	51.0	1 / Month	Grab
Total Suspended Solids (mg/l) <sup>2, 4</sup>	*****	50.0	1 / Month	Grab
Whole Effluent Toxicity Testing <sup>6</sup>	*****	Report	1 / Year	Grab
Priority Pollutants (ug/l) <sup>7</sup>	*****	Report	1 / Year	Grab

(See next page for Footnotes)

**Footnotes for Outfall 004 Table, above:**

1. Flow rates shall be continuously monitored at two locations (1) at a representative location to measure the flow from the Fuel and Sand Facility, and (2) after the Dissolved Air Flotation (DAF) system at a location representative of the effluent at Outfall 004. On a monthly basis, B&M shall report the average monthly flow value and maximum daily flow value from each of the two monitoring locations in gallons per day (gpd) on Discharge Monitoring Report Forms (DMRs) before the 15th of the following month. The monitoring and reporting requirements for the flow rate from the Fuel and Sand Facility shall become effective in 90 days from the effective date.
2. Required for State Certification.
3. B&M is required to continuously monitor and record the temperature at a representative location of Outfall 004. Continuous monitoring means monitoring and recording the temperature of the treated water when discharging from the DAF system to the outfall. For each month, B&M shall report on DMRs the maximum daily value and the average monthly value of the average daily values in Fahrenheit (°F) before the 15th of the following month.
4. A monthly grab sample shall be taken during normal operating conditions at the point of discharge. Normal operating conditions means the samples are taken when the maintenance and fueling facilities are operating during normal working hours. On a monthly basis, B&M shall report on DMRs the maximum daily value of the testing results in milligrams per liter (mg/l), except for benzene which shall be reported in micrograms per liter (ug/l), before the 15th of the following month. All samples shall be tested using the NPDES approved EPA analytical methods for the designated effluent characteristic in accordance with 40 CFR §136. Alternative methods can be used if approved by EPA in writing and are in accordance with the procedures in 40 CFR §136.
5. B&M is required to continuously monitor and record the pH in standard units (SU) at a location representative of the effluent at Outfall 004. For each month, B&M shall report on DMRs the minimum daily value and the maximum daily value before the 15th of the following month. See also Part I.A.4, below.
6. B&M shall perform freshwater chronic and modified acute toxicity tests once a year. The test results must establish a chronic no observed effects concentration (C-NOEC) and acute concentration of effluent that is lethal to 50 percent of the exposed organisms (LC<sub>50</sub>). The testing shall be performed in accordance with test procedures and protocols in Permit Attachment A, which specifies the Daphnid (Ceriodaphnia dubia) Survival and Reproduction Test and the Fathead Minnow (Pimephales promelas) Larval Growth and Survival Test. Once a year during the second week in the month of March, B&M shall collect grab samples at the point of discharge during normal operating conditions. B&M shall submit the Whole Effluent Toxicity lab report and report the C-NOEC and the LC<sub>50</sub> from the results of WET testing using The Toxicity Test Summary Sheet (Attachment F of the EPA-Region I NPDES Permit Program Instructions for the Discharge Monitoring Report Forms). The report and summary sheet shall be submitted as a March DMR due before April 30th. B&M may request to end the WET testing after two consecutive years of not detecting an acute toxic effect (an LC<sub>50</sub> ≥ 100%). B&M must receive written approval from EPA to end WET testing.
7. Once a year during the second week in the month of March, B&M shall analyze grab samples for all NPDES Priority Pollutants (PPs). Currently, the PPs include 126 toxic chemicals, which can be found at 40 C.F.R. Part 423, Appendix A. All samples shall be tested using NPDES approved EPA analytical methods found in 40 CFR §136. Alternative methods can be used if approved by EPA in writing and are in accordance with the procedures in 40 CFR §136. A grab sample shall be taken at the point of discharge during normal operating conditions. B&M shall report the analytical results in units of micrograms per liter (ug/l) for each PP in a report attached to the March DMR and report the total of all the PPs on the March DMR due before April 30th. B&M may request a reduction of the number of PPs to be sampled after two consecutive years of not detecting a PP. B&M must receive written approval from EPA to reduce the number of PPs to be sampled.

2. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge storm water from the five storm water outfalls serial numbers **001, 002, 003, 005, and 006** to wetlands or unnamed brooks that flow to the Connecticut River. Such discharges shall be monitored and reported by the permittee as specified below.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirement</u>	
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
<b>Flow Estimate (gpm)</b> <sup>8</sup>	*****	Report	1/Year	Estimate
<b>Conventional Pollutants</b> <sup>9</sup>				
BOD <sub>5</sub> (mg/l)	*****	Report	1 / Year	Grab
Oil & Grease (mg/l)	*****	Report	1 / Year	Grab
TSS (mg/l)	*****	Report	1 / Year	Grab
pH (SU)	*****	Report	1 / Year	Grab
Fecal Coliform (cfu/100ml)	*****	Report	1 / Year	Grab
<b>Priority Pollutants (ug/l)</b> <sup>10</sup>	*****	Report	1 / Year	Grab
14 heavy metals (ug/l) <sup>11</sup>	*****	Report	1 / Quarter	Grab
<i>Polychlorinated Biphenyls (PCBs) (ug/l)</i> <sup>12</sup>	*****	<i>Report</i>	<i>1 / Quarter</i>	<i>Grab</i>
<i>Polynuclear Aromatic Hydrocarbons (PAHs) (ug/l)</i> <sup>13</sup>	*****	<i>Report</i>	<i>1/Quarter</i>	<i>Grab</i>

(See next 2 pages for Footnotes)

**Footnotes for Outfalls 001, 002, 003, 005 and 006 Table, above:**

8. B&M shall estimate the flow rate during the annual sampling of each storm water outfall. Estimates of the flow rates at the outfalls shall be taken at the point of discharge during wet weather conditions in March or the first storm event in April through May if no storm event occurs in March. Wet weather conditions mean that the estimates must be taken during a storm event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rain fall) storm event. All estimates shall be taken using standard engineering techniques to measure flow. Estimates of the flow shall be taken during the first 30 minutes of the start of the storm event. B&M shall report on DMRs the maximum daily value of the estimated flow rate in gpm for each of the five storm water outfalls (001, 002, 003, 005, 006). Analytical results shall be reported (1) on the March DMRs if sampled in March due before April 30th, (2) on the April DMRs if sampled in April due before May 31st, or (3) on the May DMRs if sampled in May due before June 30th.
9. B&M shall monitor for the Conventional Pollutants (CPs) listed once a year at each storm water outfall. The five outfalls shall have grab samples taken, separately (no combining of outfall samples allowed), at the point of discharge during wet weather conditions (as defined in FN 8, above) in March or the first storm event in April through May if no storm event occurs in March. Grab samples must be taken in the first 30 minutes of the discharge from the storm event. If collection of the grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, provided B&M submits with the DMR a description of why a grab sample during the first 30 minutes was impracticable. All samples shall be tested using the NPDES approved EPA analytical methods for the designated effluent characteristic in accordance with 40 CFR §136. Alternative methods can be used if approved by EPA in writing and are in accordance with the procedures in 40 CFR §136. B&M shall report on DMRs the maximum daily value of the sampling results in mg/l or colony forming units (cfu) per 100 milliliter for fecal coliform or SU for pH for CPs for each of the five storm water outfalls (001, 002, 003, 005, 006). Analytical results shall be reported (1) on the March DMRs if sampled in March due before April 30th, (2) on the April DMRs if sampled in April due before May 31st, or (3) on the May DMRs if sampled in May due before June 30th.
10. B&M shall annually monitor for NPDES Priority Pollutants (PPs) at each of the five storm water outfalls (001, 002, 003, 005, 006), separately (no combining of outfall samples allowed). Currently, the PPs include 126 toxic chemicals, which can be found at 40 C.F.R. Part 423, Appendix A. All samples shall be tested using NPDES approved EPA analytical methods found in 40 CFR §136. Alternative methods can be used if approved by EPA in writing and are in accordance with the procedures in 40 CFR §136. The five storm water outfalls shall have grab samples taken at the point of discharge during wet weather conditions (as defined in FN 9, above) in March or the first storm event in April through May if no storm event occurs in March. Grab samples must be taken in the first 30 minutes of the discharge from the storm event. Analytical results shall be reported (1) on the March DMRs if sampled in March due before April 30th, (2) on the April DMRs if sampled in April due before May 31st, or (3) on the May DMRs if sampled in May due before June 30th. B&M shall report the analytical results in units of micrograms per liter (ug/l) for each PP in a report attached to the DMR and report the total of all the PPs on the DMR for each of the five outfalls. B&M may request a reduction of the number of PPs to be sampled after two consecutive years of not detecting a PP. B&M must receive written approval from EPA to reduce the number of PPs to be sampled.

Footnotes for Outfalls 001, 002, 003, 005 and 006 Table (Continued)

11. B&M shall monitor for the fourteen heavy metals from the PP list (antimony, arsenic, beryllium, cadmium, chromium, copper, total cyanide, lead, mercury, nickel, selenium, silver, thallium, and zinc) at each of the five storm water outfalls, separately (no combining of outfall samples allowed). All samples shall be tested using NPDES approved EPA analytical methods found in 40 CFR §136. Alternative methods can be used if approved by EPA in writing and are in accordance with the procedures in 40 CFR §136. The five storm water outfalls shall have grab samples taken at the point of discharge during wet weather conditions (as defined in FN 9, above) in June, September, and December or the first storm event in the following months if no storm event occurs in the month specified. Separate metals sampling is not required in March because the PP monitoring tests for the metals. However, the results of the fourteen metals from PP sampling shall be reported. Grab samples must be taken in the first 30 minutes of the discharge from the storm event. Analytical results shall be reported on the DMR of the month when sampled and submitted before end of the following month. B&M shall report the analytical results in units of micrograms per liter (ug/l) for each heavy metal in a report attached to the monthly DMR for each of the five outfalls. B&M may request a reduction of the number of metals to be sampled after two consecutive years of not detecting the metal. B&M must receive written approval from EPA to reduce the number of heavy metals sampled quarterly.
12. *B&M shall monitor for polychlorinated biphenyls (PCBs) at each of the five storm water outfalls, separately (no combining of outfall samples allowed). All samples shall be tested using NPDES approved EPA analytical methods found in 40 CFR §136. Alternative methods can be used if approved by EPA in writing and are in accordance with the procedures in 40 CFR §136. The five storm water outfalls shall have grab samples taken at the point of discharge during wet weather conditions (as defined in FN 9, above) in June, September, and December or the first storm event in the following months if no storm event occurs in the month specified. Separate PCB sampling is not required in March because the PP monitoring tests for PCBs. However, the results of the PCB monitoring from PP sampling shall be reported. Grab samples must be taken in the first 30 minutes of the discharge from the storm event. Analytical results shall be reported on the DMR of the month when sampled and submitted before end of the following month. B&M shall report the analytical results in units of micrograms per liter (ug/l) for the total PCBs detected on the DMRs and report the specific PCBs detected in a report attached to the monthly DMR for each of the five outfalls. B&M may request a reduction of the number of PCBs to be sampled after two consecutive years of not detecting the PCB. B&M must receive written approval from EPA to reduce the number of PCBs sampled quarterly.*
13. *B&M shall monitor for Polynuclear Aromatic Hydrocarbons (PAHs) at each of the five storm water outfalls, separately (no combining of outfall samples allowed). All samples shall be tested using NPDES approved EPA analytical methods found in 40 CFR §136. Alternative methods can be used if approved by EPA in writing and are in accordance with the procedures in 40 CFR §136. The five storm water outfalls shall have grab samples taken at the point of discharge during wet weather conditions (as defined in FN 9, above) in June, September, and December or the first storm event in the following months if no storm event occurs in the month specified. Separate PAH sampling is not required in March because the PP monitoring tests for many PAHs. However, the results of the PAH monitoring from PP sampling shall be reported. Grab samples must be taken in the first 30 minutes of the discharge from the storm event. Analytical results shall be reported on the DMR of the month when sampled and submitted before end of the following month. B&M shall report the analytical results in units of micrograms per liter (ug/l) for the total PAHs on the DMRs and report the specific PAHs detected in a report attached to the monthly DMR for each of the five outfalls. After two years B&M can request that EPA allow B&M to reduce the sampling from quarterly to semi-annually. B&M must receive written approval from EPA to reduce the frequency of sampling for PAHs.*

### Part I.A Conditions for All Outfalls

3. The discharge shall not cause or have the reasonable potential to cause or contribute to a violation of a water quality standard.
  4. The pH of the effluent shall not be less than 6.5 nor greater than 8.3 at any time.
  5. The discharge shall not cause objectionable discoloration of the receiving waters.
  6. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.
  7. The effluent shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters.
  8. The results of sampling for any parameter above its required frequency must also be reported, in accordance with 40 CFR § 122.41(l)(4)(ii).
  9. This permit shall be modified, or revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
    - (2) controls any pollutant not limited by this permit.
- If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the Act.
10. All existing manufacturing, commercial, mining, and silvi-cultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR 122.42):
    - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “Notification levels”:
      - (1) One hundred micrograms per liter (100 ug/l);
      - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or

(4) Any other notification level established by the Director in accordance with 40 CFR §122.44(f).

b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:

(1) Five hundred micrograms per liter (500 ug/l);

(2) One milligram per liter (1 mg/l) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or

(4) Any other notification level established by the Director in accordance with 40 CFR §122.44(f).

c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

## 11. Toxics Control

a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.

b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

## 12. Numerical Effluent Limitations for Toxics

a. EPA or DEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

- b. *B&M shall submit a report summarizing the first two years of data from the effective date of this permit for all the Outfalls. The 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 should begin, "As required by our NPDES Permit No. MA0000272, B&M is submitting this report that summarizes the first two years of monitoring data from our six outfalls at the B&M East Deerfield Rail Yard." 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 shall have **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 four offices listed below:*

*Manager of the Water Technical Unit (SEW)  
Office of Environmental Stewardship  
Environmental Protection Agency  
One Congress Street, Suite 1100  
Boston, Massachusetts 02114-2023*

*and*

*Regional Engineer  
Bureau of Waste Prevention  
Massachusetts Department of Environmental Protection  
Western Regional Office  
436 Dwight Street  
Springfield, MA 01103*

*and*

*Permits Branch - NPDES  
Division of Watershed Management  
Massachusetts Department of Environmental Protection  
Surface Water Discharge Permit Program  
627 Main Street, 2<sup>nd</sup> Floor  
Worcester, MA 01608*

*and*

*Endangered Species Coordinator (ESC)  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Northeast Region  
One Blackburn Drive  
Gloucester, MA 01930-2293*

## **B. STORM WATER POLLUTION PREVENTION PLAN**

1. The permittee shall amend its Storm Water Pollution Prevention Plan (SWPPP) to include the monitoring required by this permit, which includes the monitoring of Outfall 004, and the PP and Conventional Pollutant monitoring requirements at each storm water outfall. B&M shall assure the SWPPP is consistent with SWPPP requirements of Part 4 of EPA's NPDES Storm Water Multi-Sector General Permit for Industrial Activities and Sector P - Land Transportation, Subsector - Railroad Transportation (see 65 FR 64,745 (2000)). Additionally, the SWPPP shall include the best management practices (BMPs) appropriate for this specific facility to control storm water discharges from activities that could contribute pollutants to waters of the United States through storm water.

The SWPPP for the discharge should address all potential sources of pollutants in the rail yard including, but not limited to, the chemicals stored in rail cars, fuels and oils stored in above ground storage tanks, and materials stored in the rail yard including scrap metal piles, the storage of new railroad ties, chemicals in rail cars, and all other materials stored outside that have the potential to spill or could contribute to the discharges. In addition, the SWPPP shall continue to describe and ensure the implementation of practices, which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.

2. The amended SWPPP shall be completed, signed *and submitted to EPA and MA DEP* within **90 days after the effective date** of this Permit. B&M is required to fully implement the SWPPP for all outfalls. The original SWPPP and the amended SWPPP become enforceable elements on and after the effective date of the permit. Consequently, the SWPPP is as enforceable as any effluent limit.
3. The permittee shall maintain, update and implement the Storm Water Pollution Prevention Plan (SWPPP) to account for any changes that occur at the facility which could impact the plan. The permittee shall be required to provide an annual report that includes the proper certification to EPA and the MADEP documenting that the previous year's inspections and maintenance activities were conducted, results recorded, records maintained, and that the facility is in compliance with the SWPPP. The report with the proper certification shall be signed in accordance with the requirements identified in 40 CFR §122.22 and a copy of the certification will be sent each year to EPA and MADEP **within 30 days of the annual anniversary of the effective date of the permit**. The permittee shall keep a copy of the most recent SWPPP at the facility and shall make it available for inspection by EPA and MADEP.
4. The SWPPP shall contain the following elements:
  - a. Pollution Prevention Team
  - b. Site Description
  - c. Receiving Waters and Wetlands
  - d. Summary of Potential Pollutant Sources

- e. Spills and Leaks
- f. Sampling Data
- g. Storm Water Controls
  - i. Description of Existing and Planned Best Management Practices (BMP)
  - ii. BMP Types to be Considered
  - iii. Non-Structural BMPs
    - 1. Good Housekeeping
    - 2. Minimize Exposure
    - 3. Preventive Maintenance
    - 4. Spill Prevention and Response Procedures
    - 5. Routine Facility Inspections
    - 6. Employee Training
  - iv. Structural BMPs
    - 1. Sediment and Erosion
    - 2. Management of Runoff
    - 3. Example BMPs
  - v. Other Controls

Details of each element, above, can be found in Section 4 of the Storm Water Multi-Sector General Permit at 65 FR 64812-64815 (2000).

- 5. The SWPPP shall include, at a minimum, the following items:
  - a. Description of Potential Pollutant Sources - The SWPPP must provide a description of potential sources which may be reasonably expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutant draining the facility. The description must address each pollutant for which monitoring is required (see Sections I.A.1 & 2, above). The SWPPP must identify all activities and significant materials, which may potentially be significant pollutant sources. The SWPPP shall include:
    - i. A drainage site map indicating: a delineation of the drainage area of each storm water outfall, each existing structural control measure to reduce pollutants in storm water runoff, locations where significant materials are exposed to storm water, locations where significant leaks or spills have occurred, a delineation of all impervious surfaces, all surface water bodies, all separate storm sewers, and the locations of the following activities where such areas are exposed to storm water: fueling stations, vehicle and equipment maintenance and/or cleaning areas, material handling areas, process areas and waste disposal areas;

- ii. A topographic map extending one-quarter of a mile beyond the property boundaries of the facility;
- iii. An estimate of the overall runoff coefficient for the site, determined by an acceptable method, such as area weighting;
- iv. A narrative description of significant materials that have been treated, stored or disposed of in a manner to allow exposure to storm water between the time of three years prior to the issuance of this permit to the present; method of on-site storage or disposal; materials management practices employed to minimize contact of these materials with storm water runoff between the time of three years prior to the issuance of this permit and the present; materials loading and access areas; the location and description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and description of any treatment the storm water receives;
- v. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at the facility three years prior to the effective date of this permit to the present;
- vi. A list of any pollutants limited in effluent guidelines to which the facility is subject under 40 CFR Subchapter N, any pollutants listed on the NPDES permit to discharge process waste water, and any information required under 40 CFR 122.21(g)(iii)-(v);
- vii. For each area of the facility that generates storm water discharges with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow and an estimate of the types of pollutants, which are likely to be present in storm water;
- viii. A summary of existing sampling data describing pollutants in storm water discharges from the facility; and
- ix. A list of any allowable non-storm water discharges, except discharges from fire fighting activities that are known or are reasonably expected to be present at the site. Allowable non-storm water discharges are limited to fire hydrant flushings; external building washdown that do not use detergents; lawn watering; uncontaminated ground water; springs; air conditioning condensate; potable waterline flushings; irrigation drainage; and foundation or footing drains where flows are not contaminated with process materials, such as solvents, or contaminated by contact with soils, where spills or leaks of toxic or hazardous materials has occurred. If any of these discharges may reasonably be expected to be present and to be mixed with storm water discharges, they must be specifically identified and addressed in the facility's SWPPP.

- b. Storm Water Management Controls - The facility must develop a description of storm water management controls appropriate for the facility and implement such controls. The appropriateness for implementing controls listed in the SWPPP must reflect identified potential sources of pollutants at the facility. The description of storm water management controls must address the following minimum components, including a schedule for implementing such controls:
  - i. Pollution Prevention Team - The SWPPP must identify a specific individual(s) within the facility organization as members of a team that are responsible for developing the SWPPP and assisting the facility manager in its implementation, maintenance, and revision. The SWPPP must clearly identify the responsibilities of each team member. The activities and responsibilities of the team must address all aspects of facility's SWPPP.
  - ii. Risk Identification and Assessment/Material Inventory - The SWPPP must assess the potential of various sources at the facility to contribute pollutants to storm water discharges associated with the industrial activity. The SWPPP must include an inventory of the types of materials handled. Each of the following must be evaluated for the reasonable potential for contributing pollutants to runoff: loading and unloading operations, outdoor manufacturing or processing activities, significant dust or particulate generating processes, and on-site waste disposal practices. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced, or discharged; the likelihood of contact with storm water, and the history of significant leaks or spills of toxic or hazardous pollutants.
  - iii. Preventative Maintenance - A preventative maintenance program must involve inspections and maintenance of storm water management devices (i.e. oil/water separators, catch basins, track mats) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdown or failures resulting in discharges of pollutants to surface waters.
  - iv. Good Housekeeping - Good housekeeping requires the maintenance of a clean orderly facility.
  - v. Spill Prevention and Response Procedure - Areas where potential spills can occur and their accompanying drainage points, must be identified clearly in the SWPPP. The potential for spills to enter the storm water drainage system must be eliminated whenever feasible. Where appropriate, specific material handling procedures, storage requirements, and procedures for cleaning up spills must be identified in the SWPPP and made available to the appropriate personnel. The nearby storm water discharges should be tested for pollutants contained in the material spilled within 24 hours from the spill and as directed by the EPA or the MA DEP during the clean up.

- vi. Storm Water Management - The SWPPP must contain a narrative consideration of the appropriateness of traditional storm water management practices. Based on an assessment of the potential of various sources at the facility to contribute pollutants to the storm water discharge, the SWPPP must provide that measures, determined to reasonable and appropriate, must be implemented and maintained.
  - vii. Sediment and Erosion Prevention - The SWPPP must identify areas which, due to topography, activities, or factors, have a high potential for significant soil erosion and identify measures to limit erosion.
  - viii. Employee Training - Employee training programs must inform personnel responsible for implementing activities identified in the SWPPP, or otherwise responsible for storm water management at all levels, of the components and goals of the SWPPP. Training should address topics such as spill response, good housekeeping and material management practices. The SWPPP must identify periodic dates for such training.
  - ix. Visual Inspections - Qualified facility personnel must be identified to inspect designated equipment and facility areas. Material handling areas must be inspected for evidence of, or the potential for, pollutants entering the drainage system. At a minimum, each discharge shall be inspected once per month and the person performing the inspection shall estimate the flow rate of the water being discharged using standard engineering techniques. Weather conditions shall be recorded at the time of the inspection. A tracking or follow up procedure must be used to ensure that appropriate actions have been made in response to problems observed during the inspection. Records of inspections must be maintained for five (5) years.
  - x. Recordkeeping and Internal Reporting Procedures - Incidents such as spill, or other discharges, along with other information describing the quality and quantity of storm water discharges must be included in the records. All inspections and maintenance activities must be documented and maintained on site for at least five (5) years.
- c. Site Inspection - An annual site inspection must be conducted by appropriate personnel named in the SWPPP to verify that the description of potential pollutant sources required under part B.1 is accurate, that the drainage map has been updated or otherwise modified to reflect current conditions, and controls to reduce pollutants in storm water discharges identified in the SWPPP are being implemented and are adequate. A tracking or follow-up procedure must be used to ensure that the appropriate action has been taken in response to the inspection. Records documenting significant observations made during the site inspection must be retained as part of the SWPPP for a minimum of five (5) years.

- d. Consistency with Other Plans - Storm water management controls may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the CWA or Best Management Practices (BMP) Programs otherwise required by an NPDES permit and may incorporate any part of such plans into the SWPPP by reference.
- e. Amending the SWPPP - The permittee shall immediately amend the SWPPP whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the State; a release of reportable quantities of hazardous substances and oil; or if the SWPPP proves to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges.

### C. MONITORING AND REPORTING

Monitoring results obtained during each month shall be summarized and reported on DMRs postmarked **no later than the 15th day of the following month**. Other monitoring results, reports, and certifications shall be submitted as required by the permit.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Environmental Protection Agency  
Water Technical Unit (SEW)  
P.O. Box 8127  
Boston, Massachusetts 02114

and

Massachusetts Department of Environmental Protection  
Bureau of Waste Prevention  
Western Regional Office  
436 Dwight Street  
Springfield, MA 01103

In addition, copies of all Discharge Monitoring Reports required by this permit shall also be submitted to the State at the following address:

Massachusetts Department of Environmental Protection  
Division of Watershed Management  
Surface Water Discharge Permit Program  
627 Main Street, 2<sup>nd</sup> Floor  
Worcester, MA 01608

and

*Endangered Species Coordinator (ESC)  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Northeast Region  
One Blackburn Drive  
Gloucester, MA 01930-2293*

#### **D. STATE PERMIT CONDITIONS**

This Discharge Permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP) under Federal and State law, respectively. As such, all the terms and conditions of this Permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MA DEP pursuant to M.G.L. Chap. 21 § 43.

Each Agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this Permit is declared invalid, illegal or otherwise issued in violation of State law, such permit shall remain in full force and effect under Federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this Permit is declared invalid, illegal or otherwise issued in violation of Federal law, this Permit shall remain in full force and effect under State law as a Permit issued by the Commonwealth of Massachusetts.