

**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)

**Braintree Electric Light Department
150 Potter Road
Braintree, MA 02184**

is authorized to discharge from the facility located at

**Potter Station
150 Potter Road
Braintree, MA 02184**

to receiving water named

Weymouth Fore River

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on the first day of the calendar month following 60 days after signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the last day of the month preceding the effective date.

This permit supersedes the permit issued on March 20, 2000.

This permit consists of 10 pages in Part I including effluent limitations and monitoring requirements, and 25 pages in Part II including Standard Conditions and Definitions.

Signed this 3rd day of November, 2008

/S/ SIGNATURE ON FILE

Stephen S. Perkins, Director
Office of Ecosystem Protection
Environmental Protection Agency
Region I
Boston, MA

Glenn Haas, Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART 1**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the effective date of the permit and lasting through expiration, the permittee is authorized to discharge combined low volume wastewaters from floor drains, demineralizer wastewater, boiler blowdown, and house service water cooling tower blowdown through **Outfall Serial Number 001** to the Weymouth Fore River. Such discharge shall: 1) be limited and monitored by the permittee as specified below; and 2) not cause a violation of the State Surface Water Quality Standards of the receiving water.

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements ¹	
		Average Monthly	Maximum Daily	Measurement Frequency ²	Sample Type
Flow ³	GPD	40,000	80,000	Continuous	Recorder
Flow Rate	GPM	Report	250 ⁵	Continuous	Recorder
Total Residual Oxidants (TRO)	mg/L	0.1	0.1	1/Week	Grab
Total Suspended Solids (TSS)	mg/L	30.0	100.0	1/Month	Composite ⁶
Oil and Grease (O&G)	mg/L	15.0	15.0	1/Month	Grab
pH	SU	Report	6.5 – 8.5	Continuous	Grab
Temperature ⁴	°F	Report	85	1/Week	Grab

See page 3 for explanation of footnotes.

Footnotes:

1. Samples taken in compliance with the monitoring requirements specified above shall be taken at a point representative of the combined discharges through Outfall 001, prior to mixing with the receiving waters.
2. Sampling frequency of 1/week is defined as the sampling of one (1) discharge event in each calendar week, when discharge occurs. Sampling frequency of 1/month is defined as the sampling of (1) discharge event in each calendar month, when discharge occurs. The permittee shall submit the results to EPA of any additional testing done to that required herein, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR §122.41(l)(4)(ii).
3. Measurements of flow rate in gallons per day (GPD) shall be representative of the total daily flow, as recorded by the flow totalizer.
4. Samples taken in compliance with the temperature monitoring requirements shall be taken upon discharge into the seal weir chamber, at a point representative of the combined discharges through Outfall 001, prior to mixing with the receiving waters.
5. The permittee shall report the instantaneous maximum flow rate for Outfall 001, which shall at no time exceed 250 gpm.
6. Composite samples shall consist of a minimum of eight (8) grab samples of equal volume collected at hourly intervals during a 24-hour period and combined proportional to flow.

PART I**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)**

2. During the period beginning on the effective date of the permit and lasting through expiration, the permittee is authorized to discharge storm water through **Outfall Serial Number 002** to the Weymouth Fore River. Such discharge shall: 1) be limited and monitored by the permittee as specified below; and 2) not cause a violation of the State Surface Water Quality Standards of the receiving water.

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements ^{1,4}	
		Average Monthly	Maximum Daily	Measurement Frequency ²	Sample Type
Flow	GPD	Report	Report	Continuous	Estimate
pH	SU	Report	6.5 – 8.5	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	100	Report	1/Month	Composite ⁶
Oil and Grease (O&G)	mg/L	Report	15.0	1/Month	Grab
Total BTEX ³	µg/L	----	Report	1/Month	Grab
Benzene	µg/L	Report	Report	1/Month	Grab
Toluene	µg/L	Report	Report	1/Month	Grab
Ethylbenzene	µg/L	Report	Report	1/Month	Grab
Xylene	µg/L	Report	Report	1/Month	Grab
Total Recoverable Iron ⁵	mg/L	Report	Report	1/Month	Grab

See page 5 for explanation of footnotes.

Footnotes:

1. Samples taken in compliance with the monitoring requirements specified above shall be taken at a point representative of the combined discharges through Outfall 002, prior to mixing with the receiving waters.
2. Sampling frequency of 1/month is defined as the sampling of (1) discharge event in each calendar month, when discharge occurs. The permittee shall submit the results to EPA of any additional testing done to that required herein, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR §122.41(l)(4)(ii).
3. Benzene, Ethylbenzene, Toluene, Xylene Combination.
4. Samples shall be taken at Outfall 002 during wet weather conditions, if practicable. Wet weather conditions mean during a storm event greater than 0.1 inches in magnitude that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rain fall) storm event. The 72-hour interval is waived when the preceding measurable storm did not yield a measurable discharge, or if the permittee is able to document that less than a 72-hour interval is representative of local storm events during the sampling period. The grab sample shall be taken during the first 30 minutes of discharge. If it is not practicable to take the sample during the first 30 minutes, sample as soon as practicable and describe why a grab sample during the first 30 minutes was impracticable. Submit this information on or with the DMR.
5. If monitoring for total recoverable iron shows that the benchmark monitoring cutoff concentration of 1.0 mg/L required by Sector O of the MSGP (Steam Electric Generating Facilities) is exceeded, the permit may be modified to require effluent limitations for iron, and/or development of BMPs, pursuant to the SWPPP, to reduce the level of iron in the discharge from the facility.
6. Composite samples shall consist of a minimum of eight (8) grab samples of equal volume collected at hourly intervals during a 24-hour period and combined proportional to flow.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

3. The permittee is authorized to discharge combined low volume wastewaters from floor drains, demineralizer wastewater, boiler blowdown, and house service water cooling tower blowdown.
4. The discharge shall not cause objectionable color, odor, or turbidity to the receiving waters.
5. The discharge shall not contain a visible oil sheen, foam, or floating solids at any time.
6. Chlorine and Stabrom 909 Biocide may be used as biocides. No other biocide shall be used without explicit approval from the EPA and the MassDEP.
7. The discharges shall not jeopardize any Class SB use of the Weymouth Fore River and shall not violate applicable water quality standards. Pollutants which are not limited by this permit, but which have been specifically disclosed in the permit application, may be discharged at the frequency and level disclosed in the application, provided that such discharge does not violate Section 307 or 311 of the Clean Water Act (CWA) or applicable state water quality standards.
8. 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.
9. If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the CWA.
10. Pursuant to 40 CFR §423.13(a), there shall be no discharge of polychlorinated biphenyl compounds (PCBs) such as those commonly used for transformer fluid. Any PCB's at the facility must be disposed of in accordance with 40 CFR §761.
11. All existing manufacturing, commercial, mining and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine 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 µg/l);
 - (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-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 C.F.R. §122.21(g)(7); or

- (4) Any other notification level established by the Director in accordance with 40 C.F.R. §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 µg/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 C.F.R. §122.21(g)(7).
 - (4) Any other notification level established by the Director in accordance with 40 C.F.R. §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.

12. 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.

B. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

- 1. The permittee shall develop, implement, and maintain a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce, or prevent, the discharge of pollutants in storm water to the receiving waters identified in this permit. The SWPPP shall be a written document and consistent with the terms of this permit. The permittee shall comply with the terms of its SWPPP.
- 2. The SWPPP shall be completed or updated and signed by the permittee within 90 days after the effective date of this permit. The permittee shall certify that the SWPPP has been completed or updated and that it meets the requirements of the permit. The certification shall be signed in accordance with the requirements identified in 40 CFR §122.22. A copy of this initial certification shall be sent to EPA and MassDEP within one hundred and twenty (120) days of the effective date of the permit.
- 3. The SWPPP shall be consistent with the general provisions for SWPPPs included in the most current version of the Multi-Sector General Permits for Storm Water Discharges Associated

with Industrial Activities. (The current MSGP was issued September 29, 2008.) The SWPPP shall include best management practices (BMPs) for on-site activities that will minimize the discharge of pollutants in storm water to waters of the United States.

4. The SWPPP shall be prepared in accordance with good engineering practices, identify potential sources of pollution that may reasonably be expected to affect the quality of the storm water discharges, and describe and ensure implementation of practices which will be used to reduce the pollutants and assure compliance with this permit. Specifically, the SWPPP shall contain the elements listed below:
 - a. A pollution prevention team responsible for developing, implementing, maintaining, revising and ensuring compliance with the SWPPP.
 - b. A site description which includes a list of activities at the facility; a site map showing drainage areas and direction of storm water flows; receiving waters and outfall location; the location of industrial activities, storage, disposal, material handling; and all structural controls.
 - c. A summary of all pollutant sources which includes all areas where spills have occurred or could occur. For each source, identify the expected drainage and the corresponding pollutant.
 - d. A summary of any existing storm water discharge sampling data.
 - e. A description of all storm water controls, both structural and non-structural. BMPs must include good housekeeping measures, preventative maintenance programs, spill prevention and response procedures, runoff management practices, and proper handling of salt or materials containing salt that are used for deicing activities. The SWPPP shall describe how the BMPs are appropriate for the facility. All BMPs shall be properly maintained and be in effective operating conditions.
5. All areas identified in the SWPPP shall be inspected, at least on a quarterly basis. Inspections shall occur beginning the 1st quarter after the effective date of the permit. EPA considers quarters as follows: January to March; April to June; July to September; and October to December.
6. The permittee shall amend and update the SWPPP within 14 days for any changes at the facility affecting the SWPPP. Changes which may affect the SWPPP include, but are not limited to, the following activities: 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 United States; a release of a reportable quantity of pollutants as described in 40 CFR §302; or a determination by the permittee or EPA that the SWPPP appears to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Any amended or new versions of the SWPPP shall be re-certified by the permittee. Such re-certifications also shall be signed in accordance with the requirements identified in 40 CFR §122.22.
7. The permittee shall certify at least annually that the previous year's inspections and maintenance activities were conducted, results were recorded, records were maintained, and that the facility is in compliance with the SWPPP. If the facility is not in compliance with any

aspect of the SWPPP, the annual certification shall state the non-compliance and the remedies which are being undertaken. Such annual certifications also shall be signed in accordance with the requirements identified in 40 CFR §122.22. The permittee shall keep a copy of the current SWPPP and all SWPPP certifications (the initial certification, re-certifications, and annual certifications) signed during the effective period of this permit at the facility and shall make it available for inspection by EPA and MassDEP.

8. The permittee shall develop and implement site specific BMPs:
 - a. To prevent, to the maximum extent practicable, exposure of stored chemicals and fuels to storm water (including the sulfuric acid storage tank and secondary containment area);
 - b. To visually inspect the storm water which collects in the fuel oil, lubricating oil, ultra low sulfur diesel fuel, and emergency generator secondary containment areas for sheen prior to discharge to the storm water drainage area. In the event that sheen is observed, the permittee shall eliminate the sheen prior to discharging the water from the containment area.

C. REOPENER CLAUSES

1. This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable standard or limitation promulgated 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:
 - a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - b. Controls any pollutants not limited in the permit.

D. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate discharge monitoring report (DMR) forms postmarked no later than the 15th day of the month following the effective date of 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:

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

The State Agency is:

Massachusetts Department of Environmental Protection - SERO
Bureau of Waste Prevention
20 Riverside Drive
Lakeville, MA 02347

In addition, copies of all Discharge Monitoring Reports shall be submitted to the following address:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street
Worcester, MA 01608

E. STATE PERMIT CONDITIONS

1. This discharge permit is issued jointly by the EPA and the MassDEP 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 MassDEP pursuant to M.G.L. Chap. 21, §43.
2. 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 a 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.