

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),

Brookfield Engineering Laboratories

is authorized to discharge from the facility located at

**369 Canton Street
Stoughton, Massachusetts**

to receiving water named

**Unnamed Tributary draining to Town Pond and Neponset River
Neponset River Watershed (73)**

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

This permit shall become effective 60 days from the date of signature.

This permit and the authorization to discharge expire at midnight, five (5) year from the effective date.

This permit consists of 8 pages in Part I including effluent limitations, monitoring requirements, and 35 pages in Part II including General Conditions and Definitions.

Signed this 2nd day of February, 2003

/Signed copy on file/

Linda M. Murphy, Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

PART I

A.1. During the period beginning with the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number 001, treated effluent from a bedrock groundwater remediation system to an unnamed tributary draining to Town Pond then to the east branch of the Neponset River. Such discharges shall be limited and monitored as specified below.

<u>EFFLUENT CHARACTERISTIC</u>	<u>EFFLUENT LIMITS</u>		<u>MONITORING REQUIREMENTS</u>		
	<u>AVERAGE MONTHLY</u>	<u>AVERAGE WEEKLY</u>	<u>MAXIMUM DAILY</u>	<u>MEASUREMENT FREQUENCY</u>	<u>SAMPLE⁴ TYPE</u>
Flow ¹	Report	****	Report	Continuous ²	Recorder
pH	6.5-8.3 SU SEE PERMIT PAGE 4 of 8, PARAGRAPH I.A.2.c.			1/Month	Grab
Total Suspended Solids ³ (TSS)	30 mg/l	****	100 mg/l	1/Month	Grab
Volatile Organic Compounds ³					
1,1,1 - Trichloroethane ⁵	Report	****	200 ug/l	1/Month	Grab
1,1 - Dichloroethene	0.3 ug/l	****	14 ug/l	1/Month	Grab
Tetrachloroethane	4 ug/l	****	5 ug/l	1/Month	Grab

A.2. During the period beginning with the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number 002, treated effluent from the overburden groundwater remediation system an unnamed tributary draining to Town Pond then to the east branch of the Neponset River. Such discharges shall be limited and monitored as specified below.

<u>EFFLUENT CHARACTERISTIC</u>	<u>EFFLUENT LIMITS</u>		<u>MONITORING REQUIREMENTS</u>		
	<u>AVERAGE MONTHLY</u>	<u>AVERAGE WEEKLY</u>	<u>MAXIMUM DAILY</u>	<u>MEASUREMENT FREQUENCY</u>	<u>SAMPLE⁴ TYPE</u>
Flow ¹	Report	****	Report	Continuous ²	Recorder
pH	6.5-8.3 SU SEE PERMIT PAGE 4 of 8, PARAGRAPH I.A.3.c.			1/Month	Grab
Total Suspended Solids (TSS) ³	30 mg/l	****	100 mg/l	1/Month	Grab
Volatile Organic Compounds ³ 1,1,1 - Trichloroethane ⁵ 1,1 - Dichloroethene Tetrachloroethane	Report 0.3 ug/l 4 ug/l	**** **** ****	200 ug/l 14 ug/l 5 ug/l	1/Month 1/Month 1/Month	Grab Grab Grab

Footnotes:

1. For flow, report maximum and minimum daily rates and total flow for each operating date. The flow shall not exceed design flow of the treatment system or bypass the treatment system.
2. An upgraded flow meter shall be installed within thirty days from the effective date of the final permit and be capable of continuous flow recording for outfall 001 and 002. Sample type for flow will be grab prior to the installation of the upgrade of flow meter and sample type flow shall be continuous recording once the upgraded flow meter is installed.
3. Sampling required for influent and effluent.
4. All required effluent samples shall be collected at the point of discharge. Any change in sampling location must be reviewed and approved in writing by EPA. All samples shall be tested using the analytical methods found in 40 Code of Federal Regulations (CFR) §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136.
5. The minimum detection level (ML) 1,1,1 - Trichloroethane using required EPA Method 624 is 1 ug/l therefore sample results of 1 ug/l or less shall be reported as zero on discharge monitoring reports. For effluent limitations less than 1ug/l, compliance/non-compliance will be determined based on ML.
6. If an effluent limit is exceeded, the system must be shut down immediately and the problem corrected. Upon restarting the system, a sample must be taken and there must be a 24 hour turnaround for the result. If the analysis indicates the problem has been corrected, then the sampling schedule shall resume. If not, the system shall remain shut down until the problem is corrected.

When a treatment system shuts down for a period of thirty days or longer, laboratory samples must be obtained from the influent to the treatment system, and from the effluent to the drainage system once each day for the first, third, and sixth day of discharge. These samples must be analyzed with a 72-hour turn around time. If the system is working properly, sampling for the remainder of the month shall be weekly and then monthly thereafter. The turn around time for these samples shall ensure that no more than seven days pass between the sampling event and when the results are reviewed.

Part I.A.3.

- a. The discharge shall not cause a violation of the water quality standards of the receiving waters.
- b. There shall be no discharge of floating solids or visible foam other than in trace amounts.
- c. The pH of the effluent shall not be less than 6.5 nor greater than 8.3 at any time, unless these values are exceeded due to natural causes (314 CMR 4.03(5)).
- d. The discharge shall not impart color, taste, turbidity, or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their use.
- e. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.
- f. EPA may modify this permit in accordance with EPA regulations in 40 CFR §122.62 and §122.63 to incorporate more stringent effluent limitations, increase the frequency of analyses, or impose additional sampling and analytical requirements.
- g. Security provisions shall be maintained at the sites to assure system failure, vandalism, or other incident will be

addressed in a timely fashion, preventing loss of contaminated water to the receiving water. The permittee shall keep a log at the site and note the condition of both treatment systems each week. The log shall include the condition of the systems, any changes to the systems, and the date, the time, and the name of the staff reviewing the treatment systems. The log shall be on-site and available to EPA upon request.

- h. All solids and/or residuals from the treatment system such as used filters, spent carbon, settled solids, cleaning materials, etc. shall be handled according to Massachusetts Contingency Plan (MCP) regulations, 310 CMR 40.0030 and any other applicable federal, state, or local requirements to solid and/or hazardous waste management.

Part I.A.4.

Toxics Control

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

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.

Part I.A.5.

Numerical Effluent Limitations for Toxicants

EPA may use the results of 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. BEST MANAGEMENT PRACTICES PLAN

The permittee shall develop and implement a Best Management Practices (BMP) plan to achieve the stated objectives and which conforms to the following requirements:

1. General Conditions

a. General Objectives

The objectives of the BMP plan are to minimize the potential for violations of terms of the permit; to protect the designated water uses of the surrounding surface water bodies, and to mitigate pollution plant site runoff and accidental spills. Both wet-weather and dry-weather conditions are to be considered in the BMP plan.

b. Implementation

A BMP plan shall be developed within 60 days of the effective date of the permit and a copy of the final BMP plan shall be available to EPA upon request. Implementation of all aspects of the plan shall commence no later than 90 days after the effective date of the permit. (see part I.B.3 Implementation Schedule below) unless a later date is approved in writing by the Regional Administrator.

c. General Requirements

The BMP plan shall:

- (1) Be documented in narrative form, and shall include any necessary plot plans, drawings, or maps.
- (2) Establish specific objectives for the control of toxic and hazardous pollutants.
 - (a) Each facility component or system will be examined for its potential for causing a release of significant amounts of toxic and hazardous pollutants to surface waters due to equipment failure, improper operation, natural phenomena such as precipitation, etc.
 - (b) Where experience indicates a reasonable potential for equipment failure (e.g. a tank overflow or leakage), natural phenomena (e.g., precipitation), or other circumstances to result in significant amounts of toxic or hazardous pollutants reaching surface waters, the plan shall include a prediction of the direction, rate of flow and total quantity of toxic or hazardous pollutants which could be discharged, from the facility as a result of each condition or circumstances.
- (3) Establish specific best management practices to meet the objectives identified under Part I.B.1.c.(2) of this section, addressing each component of system capable of causing a release of significant amounts of toxic or hazardous pollutants to surface waters.
- (4) Be reviewed by the license site engineer and the terminal manager.

d. Standard Company Operational Procedures

Any promulgated Standard Company Operational procedures may be incorporated into the BMP plan by reference. Copies of the operational procedures will be attached to the BMP plan for convenience in referencing the appropriate sections.

e. Hazardous Waste Management

The permittee shall assure the proper management of solid and hazardous waste in accordance with regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1978 (40 U.S.C. 6901 et seq), or amendments thereto. Management practices required under RCRA regulation shall be referenced in the BMP plan.

f. Documentation

The permittee shall maintain a copy of the BMP plan at the facility and shall make the plan available to the EPA upon request.

g. BMP Plan Modification

The permittee shall amend the BMP plan within 30 days of a change in the physical facility or a change in the operational procedures of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of hazardous or toxic pollutants.

h. Modification for Ineffectiveness

If the BMP proves to be ineffective in achieving the general objective of preventing the release of significant amounts of toxic or hazardous pollutants to surface waters and the specific objectives and requirements under Part I.B.2. herein, the permit and/or the BMP plan shall be subject to modification (40 CFR §122.64 and §122.63) to

incorporate revised BMP requirements.

2. Specific Conditions

- (a) Treatment, at a minimum, shall consist of an efficiently operated groundwater remediation system.
- (b) A schedule for routinely monitoring and cleaning the treatment system shall be specified in the BMP plan. In addition, the BMP plan shall establish procedures for insuring compliance with part I.B.1 General Conditions and part I.B.2. Specific Conditions during such cleaning or maintenance periods.
- (c) The disposal procedures for sediment, and any washdown waters containing detergent will be addressed in the BMP plan.

3. Implementation Schedule

- a. All aspects of the BMP plan which do not require construction shall be implemented 60 days after the effective date of the permit. All other requirements and conditions shall be implemented upon completion of the respective construction, or within 12 months of the effective date of the permit or at a later date as may be approved by the Regional Administrator.
- b. If EPA comments on the BMP plan, the permittee will be given a written explanation of the exact nature of any problems and a reasonable period of time (usually not to exceed 90 days) to modify the BMP plan addressing those concerns.

C. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from those outfalls listed in Part I A.1. and 2. of this permit. Discharges of wastewater from any other point source are not authorized and shall be reported in accordance with Section D.1.e. (1) of the General Requirements of this permit (Twenty-four hour reporting).

D. MONITORING AND REPORTING

Reporting

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Form(s) 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 the following addresses:

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

E. PERMIT CONDITIONS

This Discharge Permit is issued by the U. S. Environmental Protection Agency (EPA) under Federal law. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued the Agency pursuant to 40 CFR Part 122.

The 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.