DISCLAIMER

The full text of certain NPDES permits and the associated fact sheets has been made available to provide online access to this public information. EPA is making permits and fact sheets available electronically to provide convenient access for interested public parties and as a reference for permit writers. The ownership of these documents lies with the permitting authority, typically a State with an authorized NPDES program.

While EPA makes every effort to ensure that this web site remains current and contains the final version of the active permit, we cannot guarantee it is so. For example, there may be some delay in posting modifications made after a permit is issued. Also note that not all active permits are currently available electronically. Only permits and fact sheets for which the full text has been provided to Headquarters by the permitting authority may be made available. Headquarters has requested the full text only for permits as they are issued or reissued, beginning November 1, 2002.

Please contact the appropriate permitting authority (either a State or EPA Regional office) prior to acting on this information to ensure you have the most up-to-date permit and/or fact sheet. EPA recognizes the official version of a permit or fact sheet to be the version designated as such and appropriately stored by the respective permitting authority.

The documents are gathered from all permitting authorities, and all documents thus obtained are made available electronically, with no screening for completeness or quality. Thus, availability on the website does not constitute endorsement by EPA.

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),

Factory Mutual Engineering Corporation

is authorized to discharge from the facility located at

1151 Boston - Providence Highway
Norwood, Massachusetts 02062

to receiving water named **Wetland tributary to the Neponset River**- Code 73 NEPO

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

This permit shall become effective on date of signature.

This permit and the authorization to discharge expire at midnight, five (4) years from the effective date.

This permit supersedes the permit issued on March 2, 1998.

This permit consists of 5 pages in Part I including effluent limitations, monitoring requirements, Attachments A and 35 pages in Part II including General Conditions and Definitions.

Signed this 26th day of March, 2002

Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

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

PART I

A.1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number **002,** treated effluent from **Sprinkler testing operations to the Wetland tributary to the Neponset River**. Such discharges shall be limited and monitored as specified below.

EFFLUENT CHARACTERISTIC			EFFLUENT LIMITS			MONITORING REQUIREMENTS	
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE[3] TYPE**
FLOW- Gallons per Month (GPM)[2]	*********	*********	15,000	********	15,000	MONTHLY	RECORDER
TEMPERATURE [1,4]	*********	*********	********	********	83 °F	MONTHLY	GRAB
OIL AND GREASE[1]	*********	*********	********	********	15 mg/l	MONTHLY	GRAB
TOTAL SUSPENDED SOLIDS	*********	*********	20 mg/l	*********	30 mg/l	MONTHLY	GRAB
pH RANGE[1]	6.5 - 8.3 s.u. SEE PERMIT PAGE 4 OF 5 PARAGRAPH I.A.1.b.					MONTHLY	GRAB
Heptane	**********	**********	Report mg/l	*********	Report mg/l	MONTHLY	GRAB
Cu	**********	**********	*********	********	14 ug/l	MONTHLY	GRAB
Zn	**********	**********	**********	**********	117 ug/l	MONTHLY	GRAB
WHOLE EFFLUENT TOXICITY SEE FOOTNOTES 5, 6 and 7.	Acute $LC_{50} \geq 100\%$					2/YEAR	COMPOSITE

Sampling for effluent parameters shall be conducted at the collection trench located outside Building 18, before it comes in contact with the receiving water.

Footnotes:

1. Required for State Certification.

2. For flow, report maximum, average, and total flow rates, each day the sprinkler testing is in operation. Report results each month. If, on any month of the year, no testing is done submit a letter of certification with the Discharge Monitoring Reports (DMR), indicating that no discharge occurred during the month in question.

3. All required effluent samples shall be collected at the point specified in the permit on Page 2. Any change in sampling location must be reviewed and approved in writing by EPA and MADEP. All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136. Grab samples analyses shall be done also in accordance with 40 CFR §136.

4. During the Months of July and August of every year, the permittee shall monitor the temperature of the discharge on a daily basis and report a summary with the August and September's DMR.

5. The permittee shall conduct acute toxicity tests two times per year. The permittee shall test the daphnid, Ceriodaphnia dubia, only. Toxicity test samples shall be collected and the results submitted according to the schedule in the following table. The tests must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Dates Second week	**Submit Results By:**	**Test Species**	**Acute Limit LC_{50}**	**Chronic Limit C-NOEC**
June November	July 31st December 30th	Ceriodaphnia dubia (Daphnid) See Attachment A	≥ 100%	Not required

6. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.

7. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in the **Attachment A, Toxicity Testing Procedures and Protocol, Section IV., DILUTION WATER** in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required **in Attachment A**, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment A**. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation to this "Guidance Document" will be transmitted to the

permittee as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment A**.

Part I.A.1. (Continued)

a. The discharge shall not cause a violation of the water quality standards of the receiving waters.

b. 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 as a result of an approved treatment process.

c. The discharge shall not cause objectionable discoloration of the receiving waters.

d. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.

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

f. Report results of the concentrations reported in the metal analyses conducted as part of the toxicity testing protocols of Section VI - Chemical Analyses.

2. The permittee 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 or frequent basis, of any toxic pollutant which is not limited in the permit.

b. 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.

B. UNAUTHORIZED DISCHARGES

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

C. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during each calendar month shall be summarized and reported on Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the following month.

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

The State Agency is:

Massachusetts Department of Environmental Protection
Northeast Regional Office, Bureau of Waste Prevention
205 Lowell Street
Wilmington, MA 01887

Signed and dated Discharge Monitoring Report Forms and toxicity test reports required by this permit shall also be submitted to the State at:

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

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.