

**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),

Schweitzer-Mauduit International, Inc.

is authorized to discharge from the facility located at

**Schweitzer-Mauduit International, Inc.
701 Greylock Street
Lee, MA 01238**

to receiving water named

Housatonic River, MA-21

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

This permit shall become effective on the date of signature if no comments are received during public notice. If comments are received during public notice, this permit will become effective on the first day of the 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 May 31, 2000.

This permit consists of 8 pages in Part I including effluent limitations, monitoring requirements, and state permit conditions; 25 pages in Part II, Standard Conditions; and Attachment A – Fresh Water Chronic Toxicity Test Procedure and Protocol.

Signed this 26th day of November, 2007.

/S/ SIGNATURE ON FILE

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

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

PART I**A. EFFLUENT LIMITS AND MONITORING REQUIREMENTS**

1. a. Outfalls 002 and 003: During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge filter backwash and process wastewater, which is combined from the four Lee Mills and treated, to the Housatonic River from outfall serial numbers **002 and 003**. Such discharges shall be limited and monitored by the permittee as specified below. Samples taken in compliance with the monitoring requirements specified below shall be taken at locations that provide representative analyses of the effluents prior to discharge to the Housatonic River.⁹

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u>			<u>Monitoring Requirement</u>	
		<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Maximum Daily</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	MGD	Report	----	Report	Continuous ¹	Recorder
BOD ₅ (April 1- Sept 30)	lbs/day	1500	----	2500	2/Week	24 Hr. Composite ²
BOD ₅ (Oct 1 - March 31)	lbs/day	2050	----	3794	2/Week	24 Hr. Composite ²
TSS	lbs/day	1300	----	1800	2/Week	24 Hr Composite ²
pH	std units	(See Condition I.A.3. of this permit)			1/Day	Grab
Total Nitrogen, as N ³	mg/L	----	----	Report	Quarterly	24 Hr. Composite ²
Total Phosphorus, as P (Apr 1 - Sep 30) ¹⁰	lbs/day mg/L	13.0 Report	----	Report Report	1/Week 1/Week	24 Hr. Composite ² 24 Hr. Composite ²
Temperature (Apr 1 – Sep 30)	°F	----	Report	Report	1/Week	Grab
Acute Whole Effluent Toxicity Testing ^{4,6,7}	%	Acute LC ₅₀ ≥ 100%			4/year ⁵	24 Hr. Composite ²
Chronic Whole Effluent Toxicity Testing ^{5,6,7}	%	Chronic C-NOEC ≥ 12%			4/year ⁵	24 Hr. Composite ²

1. b. Outfalls 006 and 007: During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge water supply and fire protection overflow to the Housatonic River from outfall serial numbers **006 and 007**. Such discharges shall be limited and monitored by the permittee as specified below. Samples taken in compliance with the monitoring requirements specified below shall be taken at locations which provide representative analyses of the effluents prior to discharge to the Housatonic River.

<u>Effluent Characteristic</u>	<u>Units</u>	<u>Discharge Limitation</u> <u>Maximum Yearly</u>	<u>Monitoring Requirement⁸</u>	
			<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	GPD	Report	1/Year	Total of Daily Flows
BOD ₅	lbs/day	Report	1/Year	Grab
TSS	lbs/day	Report	1/Year	Grab
pH	Std. units	(See Condition I.A.3. of this permit)	1/Year	Grab

Footnotes:

1. Report maximum and minimum daily rates and total flow for each operating date.
2. A 24-hour composite sample will consist of at least twenty four (24) grab samples taken during one working day at approximately equal intervals. If discharge flow is split between Outfalls 002 and 003, the samples shall be flow-proportioned between the two outfalls.
3. Total Nitrogen shall be determined by performing the "Total Kjeldahl Nitrogen (as N)" test and the "Nitrate-Nitrite (as N)" test and adding the two test results together to produce a value for mg/l of Total Nitrogen.
4. The LC₅₀ is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, the 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than 50% mortality.
5. The C-NOEC (chronic-no observed effect concentration) is defined as the highest concentration of toxicant or effluent to which organisms are exposed in a life cycle or partial life cycle test which causes no adverse effect on growth, survival, or reproduction at a specific time of observation as determined from hypothesis testing where the test results exhibit a linear dose-response relationship. However, where the test results do not exhibit a linear dose-response relationship, the permittee must report the lowest concentration where there is no observable effect. The 12% limit is defined as a sample which is composed of 12% effluent.

6. The permittee shall conduct chronic (and modified acute) toxicity tests four times per year. The chronic test may be used to calculate the acute LC₅₀ at the 48 hour exposure interval. The permittee shall test the daphnid, *Ceriodaphnia dubia*, only. Toxicity test samples shall be collected in the months of March, June, September, and December. Results are to be submitted by the 30th day of the following month (i.e. April 30th, July 30th, October 30th, and January 30th). See Toxicity Test Procedure and Protocol in **Attachment A**.
7. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall either follow procedures outlined in **Attachment A (Toxicity Test Procedure and Protocol) Section IV., DILUTION WATER** in order to obtain an individual approval for use of an alternate dilution water, or the permittee shall follow the Self-Implementing Alternative Dilution Water Guidance which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. This guidance is found in Attachment G of NPDES Program Instructions for the Discharge Monitoring Report Forms (DMRs) which is sent to all permittees with their annual set of DMRs and may also be found on the EPA, Region I web site at <http://www.epa.gov/region1/enforcementandassistance/dmr.html>. If this guidance is revoked, the permittee shall revert to obtaining individual approval as outlined in **Attachment A**. Any modification or revocation to this guidance will be transmitted to the permittees 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**.
8. A routine sampling program shall be developed in which samples are taken at the same location, same time and same days every month during which monitoring is required. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report (DMR) that is submitted to EPA.
9. When the facility is discharging through Outfall 002 or Outfall 003, the same effluent limitations and monitoring requirements shall apply. When discharging through both Outfalls 002 and 003, both outfalls shall be sampled and the amounts added together for comparison with limits expressed as lbs/day, and results for both outfalls shall be reported separately for the other types of limits. Whole Effluent Toxicity testing shall be done when discharges are only occurring from Outfall 002.
10. The 13 lbs/day total phosphorus limit for April – September is a 60-day rolling average limit. The 60-day average value for each day, beginning on the 60th day after April 1st (May 30), must be calculated and the highest 60-day average value in the month must be reported on the monthly discharge monitoring report (DMR). For the month of April, the monthly average value shall be reported on an attachment to the DMRs.

1. c. Storm Water Discharges

Storm Water discharged from the four Lee Mills is authorized and regulated separately under NPDES General Permit.

I.A. (Continued)

2. The discharge shall not cause a violation of the water quality standards of the receiving waters.
3. The pH of the effluent shall not be less than 6.5 or greater than 8.3 at any time, unless due to natural causes. The discharge shall not cause a pH change of more than 0.5 in the receiving waters or a pH change that would impair any designated use.
4. The discharge shall not cause aesthetically objectionable discoloration or turbidity in the receiving waters, consistent with Massachusetts Water Quality Standards.
5. The effluent shall not contain visible oil sheen, foam, floating solids, or settleable solids at any time. The discharge shall not cause any benthic deposits or impair the flavor of fish.
6. The permittee shall not discharge into the receiving water any pollutant or combination of pollutants in toxic amounts.
7. The permittee shall not use fungicides and slimicides which contain trichlorophenol or pentachlorophenols.
8. The temperature of the discharges shall not cause the receiving water to exceed 83 °F, and the rise in temperature of the receiving water due to the discharge shall not exceed 5 °F.
9. If nutrient addition is necessary to facilitate biological treatment, the permittee shall control the nutrient addition so that the biological process is maintained and nutrient discharges to the Housatonic River are minimized.
10. In accordance with 40 Code of Federal Regulations (CFR) §122.42, 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 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 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) and Massachusetts regulations.
 - 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) and Massachusetts regulations.
 - 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. This permit shall be modified, or alternatively, 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.
12. No components of the effluent shall result in any demonstrable harm to aquatic life or violate any 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, with the permittee being so notified.
13. EPA or MassDEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed under Section 304(a)(1) of the 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.

I.B. UNAUTHORIZED DISCHARGES

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

I.C. MONITORING AND REPORTING

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

Signed and dated originals of the DMRs, and all other reports required herein, shall be submitted to EPA and the MassDEP at the following addresses:

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

Massachusetts Department of Environmental Protection
Western Regional Office
Bureau of Waste Prevention
436 Dwight Street-4th Floor
Springfield, MA 01103

Signed and dated Discharge Monitoring Report Forms and toxicity tests 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

Additional monitoring and recordkeeping requirements are contained in Section C of the Part II Standard Conditions of this permit. Section C includes, but is not limited to, the requirements to record: the date, exact place, and time of sampling, measurements, and analyses; the individual(s) who performed the sampling, measurements, and analyses; the analytical techniques or methods used; and the results of such analyses. Section C of Part II also includes the requirements to retain records of all monitoring information, including all data, for a period of at least 3 years from the date of the sample, measurement, report or application.

Additional reporting requirements are contained in Section D of the Part II Standard Conditions of this permit. Section D requires reporting of monitoring results on a Discharge Monitoring Report (DMR), as well as reporting within 24 hours of any noncompliance which may endanger health or the environment. Section D also requires reporting to EPA if a variety of conditions exist, including planned changes to the facility and anticipated or unanticipated noncompliance. This section also sets the signatory and public availability requirements of reports sent to EPA.

I.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 (MassDEP) under Federal and State law, respectively. As such, all the terms and conditions are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MassDEP 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.