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) ,

Wyman Gordon Company

is authorized to discharge from a facility located at

Wyman Gordon Company
244 Worcester Street
North Grafton, MA 01536

to receiving waters named

Wetlands adjacent to East Brook and Quinsigamond River; the Quinsigamond River (Segment MA51-09)**;**
and
Bonny Brook (Basin Code MA851050)
(Blackstone River Watershed)

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 shall expire at midnight, five (5) years from the last day of the month preceding the effective date.

This permit supersedes the permit issued on June 30, 1997.

This permit consists of 11 pages in Part I including effluent limitations, attachments, monitoring requirements, etc., 11 pages in Attachment A, 1 page in Attachment B, and 27 pages in Part II including General Conditions and Definitions.

Signed this 28th day of September, 2006

/s/ SIGNATURE ON FILE

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

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

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through expiration the permittee is authorized to discharge various process waste waters, non-contact cooling water and storm water from outfall serial number **001** to wetlands adjacent to East Brook and Quinsigamond River. The discharges will occur if there is a hydraulic overflow of the Runoff Management Facility (RMF), occurring first at outfall 010 for overflows up to 1.4 cfs and then at outfall 001 for higher flows. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[1]
Flow, mgd	Report	Report	1/overflow	Estimate
pH[2], S.U.	see PART I.A.7		1/overflow	Grab
Oil and Grease, mg/l	----	15	1/overflow	Grab
TSS[6], mg/l	----	62	1/overflow	Grab
Copper, Total, mg/l	----	.0073	1/overflow	Grab
Trichloroethylene, mg/l	Report	Report	1/overflow	Grab
Tetrachloroethylene, mg/l	Report	Report	1/overflow	Grab
Whole Effluent Toxicity Testing				
LC_{50}[3]	----	$\geq$ 100%	1/overflow[4, 5]	Composite[4]

Footnotes are listed on Page 8.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date and lasting through expiration the permittee is authorized to discharge various process waste waters, non-contact cooling water and storm water from outfall serial number **010** to the Quinsigamond River. The discharges will occur if there is a hydraulic overflow of the Runoff Management Facility (RMF). Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[1]
Flow, mgd	Report	Report	1/overflow	Estimate
pH[2], S.U.	see PART I.A.7		1/overflow	Grab
Oil and Grease, mg/l	----	15	1/overflow	Grab
TSS[6], mg/l	----	62	1/overflow	Grab
Copper, Total, mg/l	----	.0098	1/overflow	Grab
Trichloroethylene, mg/l	Report	Report	1/overflow	Grab
Tetrachloroethylene, mg/l	Report	Report	1/overflow	Grab
Whole Effluent Toxicity Testing				
LC_{50}[3]	----	$\geq$ 100%	1/overflow[4, 5]	Composite[4]

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning on the effective date and lasting through expiration the permittee is authorized to discharge storm water from outfall serial number **007** to Bonny Brook. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[1]
Flow, mgd	Report	Report	1/quarter	Estimate
pH[2], S.U.	see PART I.A.7		1/quarter	Grab
Oil and Grease, mg/l	---	15	1/quarter	Grab
TSS[6], mg/l	Report	Report	1/quarter	Grab
Copper, Total, mg/l	----	.0074	1/quarter	Grab
Aluminum, Total, mg/l	----	.760	1/quarter	Grab
Iron, Total, mg/l	----	1.010	1/quarter	Grab
Whole Effluent Toxicity Testing				
LC_{50}	----	Report	1/year[5,7]	Composite[4]

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

4. During the period beginning on the effective date and lasting through expiration the permittee is authorized to discharge storm water from outfall serial number **008** to Bonny Brook. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[1]
Flow, mgd	Report	Report	1/quarter	Estimate
pH,[2] S.U.	see PART I.A.7		1/quarter	Grab
Oil and Grease, mg/l	----	15	1/quarter	Grab
TSS,[6] mg/l	Report	Report	1/quarter	Grab
Copper, Total, mg/l	----	.0074	1/quarter	Grab
Iron, Total, mg/l	----	1.010	1/quarter	Grab
Aluminum, Total, mg/l	----	.760	1/quarter	Grab
Zinc, Total, mg/l	----	.067	1/quarter	Grab
Whole Effluent Toxicity Testing				
LC_{50}	----	Report	1/year[5,7]	Composite[4]

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

5. During the period beginning on the effective date and lasting through expiration the permittee is authorized to discharge storm water from outfall serial number **009** to wetlands adjacent to East Brook and Quinsigamond River. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[1]
Flow	Report	Report	1/quarter	Estimate
pH[2]	see PART I.A.7		1/quarter	Grab
Oil and Grease, mg/l	----	15	1/quarter	Grab
TSS[6], mg/l	Report	Report	1/quarter	Grab
Copper, Total, mg/l	----	.0073	1/quarter	Grab
Aluminum, Total, mg/l	----	.750	1/quarter	Grab
Iron, Total, mg/l	----	1.000	1/quarter	Grab
Whole Effluent Toxicity Testing				
LC_{50}	----	Report	1/year[5,7]	Composite[4]

Footnotes:

(1) Storm water runoff samples will be collected and analyzed in accordance with 40 CFR Part 136 and EPA's **NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001, July, 1992.** All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. A "representative storm" is defined as a "typical" storm for the area in terms of intensity, volume, and duration, roughly a storm not varying by more than 50 percent from the average rainfall volume and duration. The grab sample shall be taken during the first thirty minutes of the discharge; if this is not feasible, it may be taken within the first few hours of discharge and noted. The composite sample shall either be flow-weighted or time-weighted. Composite samples may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. For those months where there is “no discharge” during the monitoring period, the permittee shall check the box in the upper right hand corner of the DMR form labeled “Check here for No Discharge” and insert the NODI code “C”, which indicates no discharge, anywhere on the report/parameter line and do not fill in anything else.

(2) Required for state certification.

(3) 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.

(4) The permittee shall conduct an acute, whole effluent toxicity (WET) toxicity test on only one overflow that occurs in any calendar quarter (up to four per year) for both outfalls 001 and 010. The permittee shall test the invertebrate, Ceriodaphnia dubia only, as it has been determined to be the more sensitive test species compared to the fathead minnow, Pimephales promelas. A composite sample is preferable, but if this is not possible, a grab sample may be used. Results are to be submitted by the 15th day of the month following the end of the quarter. See Permit Attachment A, Acute Toxicity Test Procedure and Protocol.

(5) After four toxicity tests for any outfall are conducted and acceptable, the permittee may request a reduction in the testing requirements for any or all outfalls. A determination on any such reduction will be made by the EPA and DEP after considering test results.

(6) If the permittee reports TSS results that exceed 100 mg/l, it shall evaluate what caused such a level, review its SWPPP and revise it as necessary to minimize solids runoff.

(7) The permittee shall conduct an acceptable 24 hour static acute toxicity test once per year on outfalls 007, 008 and 009. This test shall be conducted during the period of April 1st and June 30th, and the results shall be due by the 15th of August. The permittee shall test the daphnid, Ceriodaphnia dubia. See Permit Attachment B, Stormwater Toxicity Test Procedure and Protocol. After three consecutive toxicity tests for outfalls 007, 008 and 009 are conducted and acceptable, the permittee may request a reducyion or elimination of the toxicity testing requirement for the outfalls. A determination on any such reduction or elimnation will be made by the EPA and MA DEP after considering test results.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont.)

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

7. The pH of the effluent shall be monitored on a quarterly basis for outfalls 007, 008 and 009. Also, for the first year only, the permittee shall monitor and report the instream pH, immediately upstream and downstream of each of these three outfalls. This shall be done concurrently with the quarterly, effluent pH monitoring. The results of this monitoring shall be included as an attachment with the DMR for that reporting period. For outfalls 001 and 010, the pH of the effluent shall not be less than 6.5 nor greater than 8.3 standard units.

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

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

10. Samples taken in compliance with the monitoring requirements specified above shall be taken at each of the outfalls above prior to mixing with any other stream.

11. After submitting 8 consecutive (quarterly) tests for any of the different metals or volatile organics for any outfall, demonstrating the absence of any such parameters from the particular outfall(s), the permittee may request a reduction in the frequency or the elimination of such testing. The permittee is required to continue testing at the frequency specified in the permit until notice is received by certified mail from the EPA that the frequency for a particular parameter has been changed.

12. The permittee shall maintain the following:

(1) A CWIS intake flow limit of 750 gpm or 1.08 mgd.

(2) The CWIS design with an expanded screen area in the sump that, in combination with the 750 gpm flow limit, reduces the maximum through screen velocity at the ½ inch metal fish screens to 0.07 fps.

(3) Maximum recycling and reuse of process water, storm water, and non-contact cooling water by the facility to result in minimum, intermittent and infrequent withdrawals of river water through the CWIS.

(4) The location of the intake in an inlet, outside the main flow of the river, and in an area where anadromous species are not expected to be present or spawn.

(5) The intake structure with the bottom of the intake pipe a minimum of one foot higher than the bottom of the inlet.

13. The permittee shall update and continue to implement the Storm Water Pollution Prevention Plan (SWPPP) for this facility developed under previous permits and shall provide for compliance with the terms of the permit and the SWPPP no later than 180 days after the effective date of this permit. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity at the facility and mitigate these where possible. This plan shall specifically address runoff mitigation from outdoor storage areas containing spare parts and part dies. The SWPPP shall incorporate all existing and appropriate BMPs, SPCC plan elements and other measures taken by the permittee which satisfy the SWPPP requirements.

14. This permit may be modified, or revoked and reissued, on the basis of new information in accordance with 40 CFR 122.62

15. 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 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 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 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 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) .

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 and which is not limited under Part I.A.1.a and I.A.2.a of the permit. Part I.A.1.a and I.A.2.a pertain to the sampling locations of 001 and 002 respectively, not pollutants limited.

B. STORM WATER BEST MANAGEMENT PRACTICES

The permittee shall maintain, update and implement the Storm Water Pollution Prevention Plan (SWPPP) to account for any changes which might occur at the facility which could impact the plan. The permittee shall be required to provide annual 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 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 as well as appended to the SWPPP within thirty (30) days of the annual anniversary of the effective date of the Draft 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.

C. MONITORING AND 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.**

Original, signed and dated copies 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
Bureau of Waste Prevention
Central Regional Office
627 Main street
Worcester, MA 01608

Additionally, signed and dated copies of all monitoring reports, other notifications and reports required by this permit shall 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 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.