

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),

**New England Detroit Diesel - Allison, Incorporated**

is authorized to discharge from a facility located at

**New England Detroit Diesel – Allison, Incorporated  
90 Bay State Road  
Wakefield, Massachusetts 01880**

to receiving water named

**a surface drainage channel to the Saugus 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 7, 1986.

This permit consists of 12 pages in Part I including effluent limitations, monitoring requirements, and 27 pages in Part II including General Conditions and Definitions.

Signed this 19<sup>th</sup> day of October, 2006

/s/ SIGNATURE ON FILE

Linda M. Murphy, 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 LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge storm water runoff from the roof of a building and a surrounding parking lot through **Outfall Serial Number 001A** under Bay State Road to a 1-mile long surface drainage channel which flows to the Saugus 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 <sup>(1)(2)</sup>	
		Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Flow Rate	GPD	Report	Report	Bi-annually <sup>(3)</sup>	Estimate
Oil and Grease (O&G) <sup>(4)</sup>	mg/L	----	15	Bi-annually <sup>(3)</sup>	Grab
Total Suspended Solids (TSS)	mg/L	----	Report	Bi-annually <sup>(3)</sup>	Grab
pH <sup>(5)</sup>	S.U.	----	6.5-8.0	Bi-annually <sup>(3)</sup>	Grab

See page 3 for explanation of footnotes.

**Footnotes:**

1. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: at the parking lot manhole before flowing under Bay State Road to the channel leading to the Saugus River.
2. All samples shall be collected from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (i.e., greater than 0.1 inch rainfall) storm event. All samples are to be taken within twenty (20) minutes of the beginning of a rain storm.
3. Sampling frequency of bi-annually is defined as the sampling of two (2) discharge events in each year, when discharge occurs. A bi-annual period is defined as the interval of time between January through June, inclusive; and July through December, inclusive. 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).
4. O&G is to be measured using EPA Method 1664.
5. See Part I.A.5, Page 8, for the pH limitations.

**Part I.A (continued)**

2. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge process water from the engine dynamometer through **Outfall Serial Number 001B** under Bay State Road to a 1-mile long surface drainage channel which flows to the Saugus 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 <sup>(1)</sup>	
		Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Flow Rate	GPM	60	60	Quarterly <sup>(4)</sup>	Estimate
Number of discharge events	----	----	Report	Daily	Count
Temperature <sup>(3)(5)</sup>	°F	----	83	Quarterly <sup>(2)(4)</sup>	Grab
Total Residual Chlorine (TRC)	ug/L	----	Report	Quarterly <sup>(2)(4)</sup>	Grab
Oil and Grease (O&G) <sup>(6)</sup>	mg/L	----	15	Quarterly <sup>(2)(4)</sup>	Grab
pH <sup>(7)</sup>	S.U.	----	6.5-8.0	Quarterly <sup>(2)(4)</sup>	Grab

See page 5 for explanation of footnotes.

**Footnotes:**

1. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: at the parking lot manhole before flowing under Bay State Road to the channel leading to the Saugus River.
2. If practicable, grab samples should be taken after 48 consecutive hours without rain to minimize the storm water component of the sample.
3. Samples shall be taken during the portion of the test expected to have the most elevated temperatures ( $\frac{1}{2}$  to  $\frac{3}{4}$  of the way through the test), in order to record the maximum temperature of the water during the testing process.
4. Sampling frequency of quarterly is defined as the sampling of one (1) discharge event in each quarter, when discharge occurs. Quarters are defined as the interval of time between the months of: January through March, inclusive; April through June, inclusive; July through September, inclusive; and October through December, inclusive. 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(1)(4)(ii).
5. See Part I.A.6., Page 8, for the temperature limitations.
6. O&G is to be measured using EPA Method 1664.
7. See Part I.A.5., Page 8, for the pH limitations.

**Part I.A (continued)**

3. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge process water from the chassis dynamometer through **Outfall Serial Number 001C** under Bay State Road to a 1-mile long surface drainage channel which flows to the Saugus 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 <sup>(1)</sup>	
		Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Flow Rate	GPM	60	60	Annually <sup>(4)</sup>	Estimate
Number of discharge events	----	----	Report	Daily	Count
Temperature <sup>(3)(5)</sup>	°F	----	83	Annually <sup>(2)(4)</sup>	Grab
Total Residual Chlorine (TRC)	ug/L	----	Report	Annually <sup>(2)(4)</sup>	Grab
Oil and Grease (O&G) <sup>(6)</sup>	mg/L	----	15	Annually <sup>(2)(4)</sup>	Grab
pH <sup>(7)</sup>	S.U.	----	6.5-8.0	Annually <sup>(2)(4)</sup>	Grab

See page 7 for explanation of footnotes.

**Footnotes:**

1. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: at the parking lot manhole before flowing under Bay State Road to the channel leading to the Saugus River.
2. If practicable, grab samples should be taken after 48 consecutive hours without rain to minimize the storm water component of the sample.
3. Samples shall be taken during the portion of the test expected to have the most elevated temperatures ( $\frac{1}{2}$  to  $\frac{3}{4}$  of the way through the test), in order to record the maximum temperature of the water during the testing process.
4. Sampling frequency of annually is defined as the sampling of one (1) discharge event in each year, when discharge occurs. An annual period is defined as the interval of time between January through December, inclusive. 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).
5. See Part I.A.6., Page 8, for the temperature limitations.
6. O&G is to be measured using EPA Method 1664.
7. See Part I.A.5., Page 8, for the pH limitations.

**Part I.A. (Continued)**

4. The discharges either individually or in combination shall not cause a violation of State Water Quality Standards of the receiving waters.
5. The pH of the effluent shall not be less than 6.5 or greater than 8.0 at any time and not more than 0.5 units outside of the background range unless these values are exceeded as a result of natural causes.
6. The discharge shall not cause the temperature of the receiving stream to exceed 83°F (28.3°C) nor shall the rise resulting from artificial origin exceed 5.0°F (2.8°C).
7. The discharge shall not cause objectionable discoloration of the receiving waters.
8. The discharge shall not contain a visible oil sheen, foam, or floating solids at any time.
9. In the event that the engine dynamometer and chassis dynamometer are run simultaneously, the discharge must be monitored. The total discharge must adhere to permit limits established for Outfall 001B.
10. The use of additives in the dynamometer water to control biological growth, corrosion, and/or scale is prohibited.
11. The discharge shall not contain materials in concentrations or combinations which are hazardous or toxic to human health, aquatic life of the receiving surface waters or which would impair the uses designated by its classification.
12. The discharge shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their use.
13. Notwithstanding specific conditions of this permit, the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.
14. The permittee shall inspect, operate, and maintain the catch basins at the facility to ensure that the Effluent Limitations and Conditions contained in this permit are met. The permittee shall ensure that all components of the facility's Storm Water Pollution Prevention Plan including those which specifically address the maintenance of the catch basins and other components of the storm water conveyance system are complied with.
15. Discharge to the surface water from any floor drains within the facility is prohibited.



16. EPA may modify this permit in accordance with EPA regulations in 40 Code of Federal Regulations (CFR) §122.62 and §122.63 to incorporate more stringent effluent limitations, increase the frequency of analyses, or impose additional sampling and analytical requirements.
17. 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 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 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).
    - (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.
18. 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. BEST MANAGEMENT PRACTICES/STORM WATER POLLUTION PREVENTION PLAN**

1. The permittee shall maintain, update and implement the Best Management Practices Plan to account for any changes that occur at the facility which could impact the plan. The permittee shall be required to provide an annual report that includes the proper certification to EPA and the MassDEP 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 BMPP.
2. The certification shall be signed in accordance with the requirements identified in 40 CFR §122.22 and a copy of the certification shall be sent each year to EPA and MassDEP as well as appended to the BMPP within thirty (30) days of the annual anniversary of the effective date of the Permit. The permittee shall keep a copy of the most recent BMPP at the facility and shall make it available for inspection by EPA and MassDEP.
3. The BMPP shall contain the elements listed below. The detailed requirements for each element can be found in Section 4 of the Storm Water Multi-Sector General Permit at 65 FR 64812-64815 (2000).
  - a. Pollution Prevention Team
  - b. Site Description
  - c. Receiving Waters and Wetlands
  - d. Summary of Potential Pollutant Sources
  - e. Spills and Leaks
  - f. Sampling Data
  - g. Storm Water Controls

**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 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 EPA at the following address:

Environmental Protection Agency, Region 1  
Water Technical Unit (SEW)  
P.O. Box 8127  
Boston, Massachusetts 02114

Signed and dated Discharge Monitoring Report Form(s) and all other reports required by this permit shall also be submitted to the State at the following addresses:

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

and

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