# 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

#### 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 immediately following 60 days after signature.<sup>1</sup>

This permit expires at midnight, five years from the last day of the month preceding the effective date.

This permit supersedes the permit issued on October 19, 2006.

This permit consists of **Part I** and **Part II** (NPDES Part II Standard Conditions, April 2018, 21 pages).

Signed this day of , 2019

Ken Moraff, Director
Water Division
Environmental Protection Agency
Region 1
Boston, MA

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

<sup>&</sup>lt;sup>1</sup> Pursuant to 40 Code of Federal Regulations (C.F.R.) § 124.15(b)(3), if no comments requesting a change to the Draft Permit are received, this permit shall become effective upon the date of signature.

#### **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 stormwater runoff from the roof of the building and a surrounding parking lot through **Outfall Serial Number 001.** This discharge is routed under Bay State Road to a one half mile long surface drainage channel which discharges to the Saugus River. Such discharge shall be limited and monitored by the permittee as specified below.

Effluent Characteristic	Effluent Limitation		Monitoring Requirements <sup>1,2,3</sup>	
	Average Monthly	Maximum Daily	Measurement Frequency <sup>4</sup>	Sample Type <sup>5</sup>
Effluent Flow	Report GPD	Report GPD	2/Year	Estimate
Oil & Grease <sup>6</sup>		15 mg/L	2/Year	Grab
Total Suspended Solids (TSS)		Report mg/L	2/Year	Grab
Escherichia coli		Report cfu/100 mL	2/Year	Grab
pH <sup>7</sup>	6.5 - 8.0 S.U.		2/Year	Grab

Footnotes are listed on Pages 5 and 6

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge non-contact cooling water <u>from the engine dynamometer</u> through **Outfall Serial Number 002A.** This discharge is routed through a series of catch basins on the property and then under Bay State Road to a one half mile long surface drainage channel which discharges to the Saugus River. Such discharge shall be limited and monitored by the permittee as specified below.

Effluent Characteristic	Effluent Limitation		Monitoring Requirements <sup>1,2,3</sup>	
	Average Monthly	Maximum Daily	Measurement Frequency <sup>4</sup>	Sample Type
Effluent Flow <sup>8</sup>	60 gallons per minute (GPM)	60 GPM	1/Quarter	Estimate
Number of Discharge Events		Report Quarterly Count	Daily, when discharging	Count
Temperature <sup>9</sup>		83°F	1/Quarter	Grab <sup>10</sup>
Total Residual Chlorine (TRC) <sup>11</sup>		Report µg/L	1/Quarter	Grab <sup>10</sup>
Oil & Grease <sup>6</sup>		15 mg/L	1/Quarter	Grab <sup>10</sup>
pH <sup>7</sup>	6.5 - 8.0 S.U.		1/Quarter	Grab <sup>10</sup>

Footnotes are listed on Pages 5 and 6

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge non-contact cooling water from the chassis dynamometer through **Outfall Serial Number 002B.** This discharge is routed through a series of catch basins on the property and then under Bay State Road to a one half mile long surface drainage channel which discharges to the Saugus River. Such discharge shall be limited and monitored by the permittee as specified below.

Effluent Characteristic	Effluent Limitation		Monitoring Requirements <sup>1,2,3</sup>	
	Average Monthly	Maximum Daily	Measurement Frequency <sup>4</sup>	Sample Type
Effluent Flow Rate <sup>8</sup>	60 GPM	60 GPM	1/Quarter	Estimate
Number of Discharge Events		Report Quarterly Count	Daily, when discharging	Count
Temperature <sup>9</sup>		83°F	1/Quarter	Grab <sup>10</sup>
Total Residual Chlorine (TRC) <sup>11</sup>	<b></b>	Report μg/L	1/Quarter	Grab <sup>10</sup>
Oil & Grease <sup>6</sup>		15 mg/L	1/Quarter	Grab <sup>10</sup>
pH <sup>7</sup>	6.5 - 8.0 S.U.		1/Quarter	Grab <sup>10</sup>

Footnotes are listed on Pages 5 and 6

#### **Footnotes:**

- 1. Effluent samples shall yield data representative of the discharge. A routine sampling program shall be developed in which samples for Outfall 001 are taken at the parking lot catch basin shown in Fact Sheet Figure 3, before flowing under Bay State Road to the channel leading to the Saugus River and prior to co-mingling with any other waste stream. For Outfalls 002A and 002B, samples shall be taken at the catch basin in the parking lot which is nearest the dynamometer discharges, as shown in Fact Sheet Figure 3. Changes in sampling location must be approved in writing by the Environmental Protection Agency Region 1 (EPA) and the State. The Permittee shall report the results to EPA and the State of any additional testing above that required herein, if testing is done in accordance with 40 C.F.R. § 136.
- 2. In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is "sufficiently sensitive" when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter. The term "minimum level" refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
- 3. When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g.,  $< 50 \mu g/L$ , if the ML for a parameter is  $50 \mu g/L$ ).
- 4. Measurement frequency of 1/day is defined as the recording of one measurement for each 24-hour period. Measurement frequency of 1/week is defined as the sampling of one discharge event in each seven-day calendar week. Measurement frequency of 1/quarter is defined as the sampling of one discharge event during each calendar quarter. Calendar quarters are defined as January through March, inclusive, April through June, inclusive, July through September, inclusive and October through December, inclusive. Measurement frequency of 2/year for Outfall 001 shall be taken during the periods of January through June and July through December. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code (e.g., "C" for "No Discharge").

- 5. All samples for Outfall 001 shall be collected from a rainfall event 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 thirty (30) minutes of the beginning of a rain storm, if practicable.
- 6. The Permittee shall use EPA Method 1664A for oil & grease (O&G) analysis, which has a minimum level (ML) of 5 mg/l, where the ML is the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for a pollutant or pollutant parameter, representative of the lowest concentration at which a pollutant or pollutant parameter can be measured with a known level of confidence.
- 7. The pH shall be within the specified range at all times.
- 8. The effluent flow rate for Outfalls 002A and 002B is limited to 60 gpm.
- 9. Sampling for temperature shall be taken during the portion of the test expected to have the most elevated temperatures (½ to ¾ of the way through the test) in order to record the maximum temperature of the water during the testing process.
- 10. If practicable, grab samples for Outfalls 002A and 002B should be taken after at least 48 consecutive hours without a measurable (i.e., greater than 0.1inch rainfall) rain event to minimize the stormwater component of the sample.
- 11. For the purposes of this permit, TRC analysis must be completed using a test method in 40 C.F.R. § 136 that achieves a minimum level of detection no greater than 30  $\mu$ g/L. The compliance level for TRC is 30  $\mu$ g/L.

#### Part I.A. continued.

- 4. The discharge shall not cause a violation of the water quality standards of the receiving water.
- 5. The discharge shall be free from pollutants in concentrations or combinations that, in the receiving water, settle to form objectionable deposits; float as debris, scum or other matter to form nuisances; produce objectionable odor, color, taste or turbidity; or produce undesirable or nuisance species of aquatic life.
- 6. The discharge shall be free from pollutants in concentrations or combinations that adversely affect the physical, chemical, or biological nature of the bottom.
- 7. The discharge shall not result in pollutants in concentrations or combinations in the receiving water that are toxic to humans, aquatic life or wildlife.
- 8. The discharge shall be free from floating, suspended and settleable solids in concentrations or combinations that would impair any use assigned to the receiving water.
- 9. The discharge shall be free from oil and grease and petrochemicals. The discharge shall be free from oil, grease and petrochemicals that produce a visible film on the surface of the water, impart an oily taste to the water or an oily or other undesirable taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life.
- 10. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 C.F.R. § 122.42):
  - 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) 100 micrograms per liter ( $\mu g/L$ );
  - (2) 200 μg/L for acrolein and acrylonitrile; 500 μg/L for 2,4-dinitrophenol; and one milligram per liter (mg/L) for antimony;
  - (3) Five 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) and State 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)  $500 \mu g/L$ ;
- (2) One mg/L for antimony;
- (3) 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) and State 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.

#### B. UNAUTHORIZED DISCHARGES

- 1. This permit authorizes discharges only from the outfall(s) listed in Part I.A.1, I.A.2, and I.A.3 in accordance with the terms and conditions of this permit. Discharges of wastewater from any other point sources are not authorized by this permit and shall be reported in accordance with Part D.1.e.(1) of the Standard Conditions of this permit (24-hour reporting).
- 2. The discharge to surface water of any water collected or processed through facility floor drains is prohibited.

#### C. SPECIAL CONDITIONS

- 1. Stormwater Pollution Prevention Plan (SWPPP)
  - a. The Permittee shall continue to implement and maintain a SWPPP (formerly designated a Best Management Practices/SWPPP) designed to reduce, or prevent, the discharge of pollutants in stormwater to the receiving water identified in this permit. The SWPPP shall be a written document that is consistent with the terms of this permit. Additionally, the SWPPP shall serve as a tool to document the Permittee's compliance with the terms of this permit.
  - b. The SWPPP shall be updated and certified by the Permittee within ninety (90) days after the effective date of this permit. The Permittee shall certify that its SWPPP has been updated as necessary and shall be signed in accordance with the requirements identified in 40 C.F.R. §122.22. A copy of this initial certification shall be sent to EPA and MassDEP within one hundred and twenty (120) days of the effective date of this permit.
  - c. The SWPPP shall be designed in accordance with good engineering practices and shall be consistent with the general provisions for SWPPPs included in the most current version of the MSGP. In the current MSGP (effective June 4, 2015), the general SWPPP provisions are included in Part 5. See <a href="https://www.epa.gov/sites/production/files/2015-10/documents/msgp2015\_finalpermit.pdf">https://www.epa.gov/sites/production/files/2015-10/documents/msgp2015\_finalpermit.pdf</a>. Some of the activities conducted at the facility fall under Subpart P of the MSGP, which apply to Land Transportation and Warehousing. The Permittee shall incorporate into its SWPPP all the applicable pollution control activities and other requirements found in this Subpart, specifically those in Parts 8.P.3

through 8.P.5 of the MSGP. At a minimum, the SWPPP shall document the selection, design, and installation of control measures and contain the elements listed below:

- (1) A pollution prevention team with collective and individual responsibilities for developing, implementing, maintaining, revising and ensuring compliance with the SWPPP.
- (2) A site description which includes the activities at the facility; a general location map showing the facility, receiving waters, and outfall locations; and a site map showing the extent of significant structures and impervious surfaces, directions of stormwater flows, and locations of all existing structural control measures, stormwater conveyances, pollutant sources, stormwater monitoring points, stormwater inlets and outlets, and industrial activities exposed to precipitation such as, storage, disposal, material handling.
- (3) A summary of all pollutant sources which includes a list of activities exposed to stormwater, the pollutants associated with these activities, a description of where spills have occurred or could occur, a description of non-stormwater discharges, and a summary of any existing stormwater discharge sampling data.
- (4) A listing of all chemicals and products used on the site which have the potential to be discharged to the stormwater drainage system.
- (5) A description of all stormwater controls, both structural and non-structural.
- (6) A schedule and procedure for implementation and maintenance of the control measures described above and for the quarterly inspections and best management practices (BMPs) described below.
- (7) Sector-specific SWPPP provisions included in Sector P of the MSGP for activities of the Land Transportation and Warehousing category that apply to this Facility.
- d. The SWPPP shall describe and document the BMPs implemented or to be implemented at the facility to comply with the provisions of this permit to minimize the discharge of pollutants in stormwater to waters of the United States. At a minimum, these BMPs shall be consistent with the control measures described in the most current version of the MSGP. In the current MSGP (effective June 4, 2015), these control measures are described in Part 2.1.2. and Part 8.P. BMPs must be selected and implemented to satisfy the following effluent limitations:
  - (1) Minimize exposure of manufacturing, processing, and material storage areas to stormwater discharges.
  - (2) Implement good housekeeping measures designed to maintain areas that are potential sources of pollutants.
  - (3) Conduct routine preventative maintenance to avoid leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters.
  - (4) Implement spill prevention and response procedures to ensure effective response to spills and leaks if or when they occur.
  - (5) Control erosion and sediment pollution by stabilizing exposed areas and containing runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants.

- (6) Implement runoff management practices to divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff.
- (7) Implement proper handling procedures for salt, materials containing chlorides, or other commercial products that are used for snow and ice control.
- (8) Conduct training for all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel).
- (9) Implement the sector specific BMPs included in Sector P that apply to this Facility.
- e. The Permittee shall amend and update its SWPPP within fourteen (14) days of any changes at the facility that result in a significant effect on the potential for the discharge of pollutants to the waters of the United States. Such changes may include, but are not limited to: a change in design, construction, operation, or maintenance, materials storage, or activities or chemicals used at the facility; a release of a reportable quantity of pollutants as described in 40 C.F.R. §302; or a determination by the Permittees or EPA that the BMPs included in the SWPPP are ineffective in achieving the general objective of controlling pollutants in stormwater discharges associated with industrial activity.
- f. Any amended, modified, or new versions of the SWPPP shall be re-certified and signed by the Permittee in accordance with the requirements identified in 40 C.F.R. §122.22. The Permittee shall also certify, at least annually, that the previous year's inspections and maintenance activities were conducted, results recorded, records maintained, and that the facility is in compliance with this permit. If the facility is not in compliance with any aspect of this permit, the annual certification shall state the non-compliance and the remedies which are being undertaken. Such annual certifications also shall be signed in accordance with the requirements identified in 40 C.F.R. §122.22. The Permittee shall maintain at the facility a copy of its current SWPPP and all SWPPP certifications (the initial certification, re-certifications, and annual certifications) signed during the effective period of this permit and shall make these available for inspection by EPA and MassDEP upon request. In addition, the Permittee shall document in the SWPPP any violation of numerical or non-numerical stormwater effluent limits with a date and description of the corrective actions taken.

#### 2. Discharges of Chemicals and Additives

The discharge of any chemical or additive, including chemical substitution, which was not reported in the application submitted to EPA and the State or provided through a subsequent written notification submitted to EPA and the State is prohibited. Upon the effective date of this permit, any chemicals and/or additives which have been disclosed to EPA and the State may be discharged up to the frequency and level disclosed, provided that such discharge does not violate §§ 307 or 311 of the CWA or applicable State water quality standards. Discharges of a new chemical or additive are authorized under this permit 30 days following written notification to EPA and the State unless otherwise notified by EPA and/or the State. To request authorization to

discharge a new chemical or additive, the Permittee must submit a written notification to EPA and the State in accordance with Part I.D.3 of this permit. The written notification must include the following information, at a minimum:

- a. The following information for each chemical and/or additive that will be discharged:
  - (1) Product name, chemical formula, general description, and manufacturer of the chemical/additive;
  - (2) Purpose or use of the chemical/additive;
  - (3) Safety Data Sheet (SDS), Chemical Abstracts Service (CAS) Registry number, and EPA registration number, if applicable, for each chemical/additive;
  - (4) The frequency (e.g., daily), magnitude (i.e., maximum application concentration), duration (e.g., hours), and method of application for the chemical/additive;
  - (5) The maximum discharge concentration; and
  - (6) The vendor's reported aquatic toxicity, if available (i.e., NOAEL and/or LC<sub>50</sub> in percent for aquatic organism(s)).
- b. Written rationale which demonstrates that the discharge of such chemicals and/or additives as proposed will not: 1) Add any pollutants in concentrations which exceed permit effluent limitations; 2) Exceed any applicable water quality standard; and 3) Add any pollutants that would justify the application of permit conditions that are different from or absent in this permit.

#### D. REPORTING REQUIREMENTS

Unless otherwise specified in this permit, the Permittee shall submit reports, requests, and information and provide notices in the manner described in this section.

#### 1. Submittal of DMRs Using NetDMR

a. The Permittee shall continue to submit its monthly monitoring data in discharge monitoring reports (DMRs) to EPA and the State no later than the 15th day of the month electronically using NetDMR. When the Permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to EPA or the State. NetDMR is accessed from the internet at <a href="https://netdmr.zendesk.com/hc/en-us">https://netdmr.zendesk.com/hc/en-us</a>.

#### 2. Submittal of Reports as NetDMR Attachments

Unless otherwise specified in this permit, the Permittee shall electronically submit all reports to EPA as NetDMR attachments rather than as hard copies. Because the due dates for reports described in this permit may not coincide with the due date for submitting DMRs (which is no later than the 15th day of the month), a report submitted electronically as a NetDMR attachment shall be considered timely if it is electronically submitted to EPA using NetDMR with the next DMR due following the particular report due date specified in this permit.

- 3. Submittal of Requests and Reports to EPA
  - a. The following requests, reports, and information described in this permit shall be submitted to the EPA/WD NPDES Applications Coordinator in the EPA Office Ecosystem Protection (OEP):
    - (1) Transfer of Permit notice;
    - (2) Request for changes in sampling location;
    - (3) SWPPP certifications; and
    - (4) Request to discharge new chemicals or additives;
  - b. These reports, information, and requests shall be submitted to EPA/WD electronically at R1NPDESReporting@epa.gov or by hard copy mailed to the following address:

U.S. Environmental Protection Agency Water Division EPA/WD NPDES Applications Coordinator 5 Post Office Square - Suite 100 (06-03) Boston, MA 02109-3912

- 4. Submittal of Reports in Hard Copy Form
  - a. The following notifications and reports shall be signed and dated originals, submitted in hard copy, with a cover letter describing the submission:
    - (1) Written notifications required under Part II.
  - b. This information shall be submitted to EPA ECAD at the following address:

U.S. Environmental Protection Agency Environmental Compliance Assurance Division Water Compliance Section 5 Post Office Square, Suite 100 (04-SMR) Boston, MA 02109-3912

5. State Reporting

See Part I.D.2

- 6. Verbal Reports and Verbal Notifications
  - a. Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, shall be made to both EPA and to the State. This includes verbal reports and notifications which require reporting within 24 hours (e.g., Part II.B.4.c. (2), Part II.B.5.c. (3), and Part II.D.1.e.).

b. Verbal reports and verbal notifications shall be made to:

EPA's Environmental Compliance Assurance Division: 617-918-1510

and to

MassDEP's Emergency Response: 888-304-1133

#### E. STATE PERMIT CONDITIONS

- 1. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are: 1) a Federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA) pursuant to the Federal Clean Water Act, 33 U.S.C. §§ 1251 et seq.; and 2) an identical State surface water discharge permit issued by the Commissioner of the Massachusetts Department of Environmental Protection (MassDEP) pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53, and 314 CMR 3.00. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 CMR 3.19, are hereby incorporated by reference into this state surface water discharge permit.
- 2. This authorization also incorporates the state water quality certification issued by MassDEP under § 401(a) of the Federal Clean Water Act, 40 C.F.R. 124.53, M.G.L. c. 21, § 27 and 314 CMR 3.07. All of the requirements (if any) contained in MassDEP's water quality certification for the permit are hereby incorporated by reference into this state surface water discharge permit as special conditions pursuant to 314 CMR 3.11.
- 3. 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 EPA. 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.

# NPDES PART II STANDARD CONDITIONS (April 26, 2018)<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> Updated July 17, 2018 to fix typographical errors.

#### A. GENERAL REQUIREMENTS

#### 1. Duty to Comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA or Act) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- a. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- b. Penalties for Violations of Permit Conditions: The Director will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (83 Fed. Reg. 1190-1194 (January 10, 2018) and the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note. See Pub. L.114-74, Section 701 (Nov. 2, 2015)). These requirements help ensure that EPA penalties keep pace with inflation. Under the above-cited 2015 amendments to inflationary adjustment law, EPA must review its statutory civil penalties each year and adjust them as necessary.

#### (1) Criminal Penalties

- (a) Negligent Violations. The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to criminal penalties of not less than \$2,500 nor more than \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation or by imprisonment of not more than 2 years, or both.
- (b) *Knowing Violations*. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.
- (c) *Knowing Endangerment*. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he or she is placing another person in imminent danger of death or serious bodily injury shall upon conviction be subject to a fine of not more than \$250,000 or by imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing

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endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- (d) False Statement. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (2) Civil Penalties. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act, the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).
- (3) Administrative Penalties. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty as follows:
  - (a) Class I Penalty. Not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act, the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).
  - (b) Class II Penalty. Not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).

#### 2. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit

condition.

#### 3. Duty to Provide Information

The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

#### 4. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from responsibilities, liabilities or penalties to which the Permittee is or may be subject under Section 311 of the CWA, or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

#### 5. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### 6. Confidentiality of Information

- a. In accordance with 40 C.F.R. Part 2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 C.F.R. Part 2 (Public Information).
- b. Claims of confidentiality for the following information will be denied:
  - (1) The name and address of any permit applicant or Permittee;
  - (2) Permit applications, permits, and effluent data.
- c. Information required by NPDES application forms provided by the Director under 40 C.F.R. § 122.21 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

#### 7. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. The Permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

#### 8. State Authorities

Nothing in Parts 122, 123, or 124 precludes more stringent State regulation of any activity

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covered by the regulations in 40 C.F.R. Parts 122, 123, and 124, whether or not under an approved State program.

#### 9. Other Laws

The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

#### B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

#### 1. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

#### 2. Need to Halt or Reduce Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### 3. <u>Duty to Mitigate</u>

The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

#### 4. Bypass

#### a. Definitions

- (1) *Bypass* means the intentional diversion of waste streams from any portion of a treatment facility.
- (2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. *Bypass not exceeding limitations*. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this Section.

#### c. Notice

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- (1) Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass. As of December 21, 2020 all notices submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.
- (2) Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in paragraph D.1.e. of this part (24-hour notice). As of December 21, 2020 all notices submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or required to do so by law.

#### d. Prohibition of bypass.

- (1) Bypass is prohibited, and the Director may take enforcement action against a Permittee for bypass, unless:
  - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
  - (c) The Permittee submitted notices as required under paragraph 4.c of this Section.
- (2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 4.d of this Section.

#### 5. Upset

a. *Definition. Upset* means an exceptional incident in which there is an unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or

improper operation.

- b. *Effect of an upset*. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph B.5.c. of this Section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. *Conditions necessary for a demonstration of upset*. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (1) An upset occurred and that the Permittee can identify the cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated; and
  - (3) The Permittee submitted notice of the upset as required in paragraph D.1.e.2.b. (24-hour notice).
  - (4) The Permittee complied with any remedial measures required under B.3. above.
- d. *Burden of proof.* In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

#### C. MONITORING REQUIREMENTS

#### 1. Monitoring and Records

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least 5 years (or longer as required by 40 C.F.R. § 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.
- c. Records of monitoring information shall include:
  - (1) The date, exact place, and time of sampling or measurements;
  - (2) The individual(s) who performed the sampling or measurements;
  - (3) The date(s) analyses were performed;
  - (4) The individual(s) who performed the analyses;
  - (5) The analytical techniques or methods used; and
  - (6) The results of such analyses.
- d. Monitoring must be conducted according to test procedures approved under 40 C.F.R. § 136 unless another method is required under 40 C.F.R. Subchapters N or O.
- e. The Clean Water Act provides that any person who falsifies, tampers with, or

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knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

#### 2. Inspection and Entry

The Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

#### D. REPORTING REQUIREMENTS

#### 1. Reporting Requirements

- a. *Planned Changes*. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 C.F.R. § 122.29(b); or
  - (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements at 40 C.F.R. § 122.42(a)(1).
  - (3) The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

- c. *Transfers*. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Clean Water Act. *See* 40 C.F.R. § 122.61; in some cases, modification or revocation and reissuance is mandatory.
- d. *Monitoring reports*. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
  - (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices. As of December 21, 2016 all reports and forms submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or if required to do so by State law.
  - (2) If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 C.F.R. § 136, or another method required for an industry-specific waste stream under 40 C.F.R. Subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
  - (3) Calculations for all limitations which require averaging or measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- e. Twenty-four hour reporting.
  - (1) The Permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written report shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2020 all

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reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Director may also require Permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section.

- (2) The following shall be included as information which must be reported within 24 hours under this paragraph.
  - (a) Any unanticipated bypass which exceeds any effluent limitation in the permit. *See* 40 C.F.R. § 122.41(g).
  - (b) Any upset which exceeds any effluent limitation in the permit.
  - (c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. *See* 40 C.F.R. § 122.44(g).
- (3) The Director may waive the written report on a case-by-case basis for reports under paragraph D.1.e. of this Section if the oral report has been received within 24 hours.
- f. *Compliance Schedules*. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- g. Other noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs D.1.d., D.1.e., and D.1.f. of this Section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph D.1.e. of this Section. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in paragraph D.1.e. and the applicable required data in Appendix A to 40 C.F.R. Part 127. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), §122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Director may also require Permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this Section.
- h. Other information. Where the Permittee becomes aware that it failed to submit any

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relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

i. *Identification of the initial recipient for NPDES electronic reporting data*. The owner, operator, or the duly authorized representative of an NPDES-regulated entity is required to electronically submit the required NPDES information (as specified in Appendix A to 40 C.F.R. Part 127) to the appropriate initial recipient, as determined by EPA, and as defined in 40 C.F.R. § 127.2(b). EPA will identify and publish the list of initial recipients on its Web site and in the FEDERAL REGISTER, by state and by NPDES data group (see 40 C.F.R. § 127.2(c) of this Chapter). EPA will update and maintain this listing.

#### 2. Signatory Requirement

- a. All applications, reports, or information submitted to the Director shall be signed and certified. *See* 40 C.F.R. §122.22.
- b. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

#### 3. Availability of Reports.

Except for data determined to be confidential under paragraph A.6. above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Director. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA.

#### E. DEFINITIONS AND ABBREVIATIONS

#### 1. General Definitions

For more definitions related to sludge use and disposal requirements, see EPA Region 1's NPDES Permit Sludge Compliance Guidance document (4 November 1999, modified to add regulatory definitions, April 2018).

Administrator means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

Applicable standards and limitations means all, State, interstate, and federal standards and limitations to which a "discharge," a "sewage sludge use or disposal practice," or a related activity is subject under the CWA, including "effluent limitations," water quality standards, standards of performance, toxic effluent standards or prohibitions, "best management practices," pretreatment standards, and "standards for sewage sludge use or disposal" under Sections 301, 302, 303, 304, 306, 307, 308, 403 and 405 of the CWA.

Application means the EPA standard national forms for applying for a permit, including any additions, revisions, or modifications to the forms; or forms approved by EPA for use in

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"approved States," including any approved modifications or revisions.

Approved program or approved State means a State or interstate program which has been approved or authorized by EPA under Part 123.

Average monthly discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

Average weekly discharge limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

Best Management Practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Bypass see B.4.a.1 above.

C-NOEC or "Chronic (Long-term Exposure Test) – No Observed Effect Concentration" means the highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specified time of observation.

Class I sludge management facility is any publicly owned treatment works (POTW), as defined in 40 C.F.R. § 501.2, required to have an approved pretreatment program under 40 C.F.R. § 403.8 (a) (including any POTW located in a State that has elected to assume local program responsibilities pursuant to 40 C.F.R. § 403.10 (e)) and any treatment works treating domestic sewage, as defined in 40 C.F.R. § 122.2, classified as a Class I sludge management facility by the EPA Regional Administrator, or, in the case of approved State programs, the Regional Administrator in conjunction with the State Director, because of the potential for its sewage sludge use or disposal practice to affect public health and the environment adversely.

*Contiguous zone* means the entire zone established by the United States under Article 24 of the Convention on the Territorial Sea and the Contiguous Zone.

Continuous discharge means a "discharge" which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or similar activities.

*CWA* means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483and Public Law 97-117, 33 U.S.C. 1251 *et seq*.

CWA and regulations means the Clean Water Act (CWA) and applicable regulations promulgated thereunder. In the case of an approved State program, it includes State program requirements.

Daily Discharge means the "discharge of a pollutant" measured during a calendar day or any

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other 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Direct Discharge means the "discharge of a pollutant."

Director means the Regional Administrator or an authorized representative. In the case of a permit also issued under Massachusetts' authority, it also refers to the Director of the Division of Watershed Management, Department of Environmental Protection, Commonwealth of Massachusetts.

#### Discharge

- (a) When used without qualification, discharge means the "discharge of a pollutant."
- (b) As used in the definitions for "interference" and "pass through," *discharge* means the introduction of pollutants into a POTW from any non-domestic source regulated under Section 307(b), (c) or (d) of the Act.

Discharge Monitoring Report ("DMR") means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by Permittees. DMRs must be used by "approved States" as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

#### Discharge of a pollutant means:

- (a) Any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or
- (b) Any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any "indirect discharger."

Effluent limitation means any restriction imposed by the Director on quantities, discharge rates, and concentrations of "pollutants" which are "discharged" from "point sources" into "waters of the United States," the waters of the "contiguous zone," or the ocean.

Effluent limitation guidelines means a regulation published by the Administrator under section 304(b) of CWA to adopt or revise "effluent limitations."

Environmental Protection Agency ("EPA") means the United States Environmental Protection

Agency.

Grab Sample means an individual sample collected in a period of less than 15 minutes.

*Hazardous substance* means any substance designated under 40 C.F.R. Part 116 pursuant to Section 311 of CWA.

*Incineration* is the combustion of organic matter and inorganic matter in sewage sludge by high temperatures in an enclosed device.

*Indirect discharger* means a nondomestic discharger introducing "pollutants" to a "publicly owned treatment works."

*Interference* means a discharge (see definition above) which, alone or in conjunction with a discharge or discharges from other sources, both:

- (a) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- (b) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resources Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SDWA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

*Landfill* means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile.

Land application is the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

Land application unit means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for agricultural purposes or for treatment and disposal.

 $LC_{50}$  means the concentration of a sample that causes mortality of 50% of the test population at a specific time of observation. The  $LC_{50} = 100\%$  is defined as a sample of undiluted effluent.

Maximum daily discharge limitation means the highest allowable "daily discharge."

Municipal solid waste landfill (MSWLF) unit means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 C.F.R. § 257.2. A MSWLF unit also may receive other types of RCRA Subtitle D wastes, such as commercial solid waste, nonhazardous sludge, very small quantity generator waste and industrial solid waste. Such a landfill may be

publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion. A construction and demolition landfill that receives residential lead-based paint waste and does not receive any other household waste is not a MSWLF unit.

#### *Municipality*

- (a) When used without qualification *municipality* means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of CWA.
- (b) As related to sludge use and disposal, *municipality* means a city, town, borough, county, parish, district, association, or other public body (including an intermunicipal Agency of two or more of the foregoing entities) created by or under State law; an Indian tribe or an authorized Indian tribal organization having jurisdiction over sewage sludge management; or a designated and approved management Agency under Section 208 of the CWA, as amended. The definition includes a special district created under State law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in Section 201 (e) of the CWA, as amended, that has as one of its principal responsibilities the treatment, transport, use or disposal of sewage sludge.

National Pollutant Discharge Elimination System means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the CWA. The term includes an "approved program."

New Discharger means any building, structure, facility, or installation:

- (a) From which there is or may be a "discharge of pollutants;"
- (b) That did not commence the "discharge of pollutants" at a particular "site" prior to August 13, 1979;
- (c) Which is not a "new source;" and
- (d) Which has never received a finally effective NPDES permit for discharges at that "site."

This definition includes an "indirect discharger" which commences discharging into "waters of the United States" after August 13, 1979. It also includes any existing mobile point source (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and gas exploratory drilling rig or a coastal oil and gas developmental drilling rig) such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a "site" for which it does not have a permit; and any offshore or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas developmental drilling rig that commences the discharge of pollutants after August 13, 1979, at a "site" under EPA's permitting jurisdiction for which it is not covered by an individual or general permit and which is located in an area determined by the Director in the issuance of a final permit to be in an area of biological concern. In determining whether an area is an area of biological concern, the Director shall consider the factors specified in 40 C.F.R. §§ 125.122 (a) (1) through (10).

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An offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a "new discharger" only for the duration of its discharge in an area of biological concern.

*New source* means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced:

- (a) After promulgation of standards of performance under Section 306 of CWA which are applicable to such source, or
- (b) After proposal of standards of performance in accordance with Section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.

NPDES means "National Pollutant Discharge Elimination System."

Owner or operator means the owner or operator of any "facility or activity" subject to regulation under the NPDES programs.

Pass through means a Discharge (see definition above) which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

*Pathogenic organisms* are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

Permit means an authorization, license, or equivalent control document issued by EPA or an "approved State" to implement the requirements of Parts 122, 123, and 124. "Permit" includes an NPDES "general permit" (40 C.F.R § 122.28). "Permit" does not include any permit which has not yet been the subject of final agency action, such as a "draft permit" or "proposed permit."

*Person* means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

*Person who prepares sewage sludge* is either the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge.

pH means the logarithm of the reciprocal of the hydrogen ion concentration measured at  $25^{\circ}$  Centigrade or measured at another temperature and then converted to an equivalent value at  $25^{\circ}$  Centigrade.

*Point Source* means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff (see 40 C.F.R. § 122.3).

*Pollutant* means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials

Atomic Energy Act of 1954, as amended (42 U.S

(except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

- (a) Sewage from vessels; or
- (b) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well is used either to facilitate production or for disposal purposes is approved by the authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources.

Primary industry category means any industry category listed in the NRDC settlement agreement (Natural Resources Defense Council et al. v. Train, 8 E.R.C. 2120 (D.D.C. 1976), modified 12 E.R.C. 1833 (D.D.C. 1979)); also listed in Appendix A of 40 C.F.R. Part 122.

*Privately owned treatment works* means any device or system which is (a) used to treat wastes from any facility whose operator is not the operator of the treatment works and (b) not a "POTW."

*Process wastewater* means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly owned treatment works (POTW) means a treatment works as defined by Section 212 of the Act, which is owned by a State or municipality (as defined by Section 504(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in Section 502(4) of the Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

Regional Administrator means the Regional Administrator, EPA, Region I, Boston, Massachusetts.

Secondary industry category means any industry which is not a "primary industry category."

*Septage* means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

Sewage Sludge means any solid, semi-solid, or liquid residue removed during the treatment of municipal waste water or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced waste water treatment, scum, septage, portable toilet pumpings, type III marine sanitation device pumpings (33 C.F.R. Part 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.

Sewage sludge incinerator is an enclosed device in which only sewage sludge and auxiliary fuel are fired.

Sewage sludge unit is land on which only sewage sludge is placed for final disposal. This does

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not include land on which sewage sludge is either stored or treated. Land does not include waters of the United States, as defined in 40 C.F.R. § 122.2.

Sewage sludge use or disposal practice means the collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge.

Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substance designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

Significant spills includes, but is not limited to, releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the CWA (see 40 C.F.R. §§ 110.10 and 117.21) or Section 102 of CERCLA (see 40 C.F.R. § 302.4).

Sludge-only facility means any "treatment works treating domestic sewage" whose methods of sewage sludge use or disposal are subject to regulations promulgated pursuant to section 405(d) of the CWA, and is required to obtain a permit under 40 C.F.R. § 122.1(b)(2).

State means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, or an Indian Tribe as defined in the regulations which meets the requirements of 40 C.F.R. § 123.31.

Store or storage of sewage sludge is the placement of sewage sludge on land on which the sewage sludge remains for two years or less. This does not include the placement of sewage sludge on land for treatment.

Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Storm water discharge associated with industrial activity means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

Surface disposal site is an area of land that contains one or more active sewage sludge units.

*Toxic pollutant* means any pollutant listed as toxic under Section 307(a)(1) or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing Section 405(d) of the CWA.

Treatment works treating domestic sewage means a POTW or any other sewage sludge or waste water treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices.

For purposes of this definition, "domestic sewage" includes waste and waste water from humans or household operations that are discharged to or otherwise enter a treatment works. In States where there is no approved State sludge management program under Section 405(f) of the CWA, the Director may designate any person subject to the standards for sewage sludge use and

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disposal in 40 C.F.R. Part 503 as a "treatment works treating domestic sewage," where he or she finds that there is a potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance with 40 C.F.R. Part 503.

Upset see B.5.a. above.

*Vector attraction* is the characteristic of sewage sludge that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

Waste pile or pile means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

Waters of the United States or waters of the U.S. means:

- (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (b) All interstate waters, including interstate "wetlands;"
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands", sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  - (1) Which are or could be used by interstate or foreign travelers for recreational or other purpose;
  - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - (3) Which are used or could be used for industrial purposes by industries in interstate commerce:
- (d) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- (f) The territorial sea; and
- (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 C.F.R. § 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland.

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Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Whole Effluent Toxicity (WET) means the aggregate toxic effect of an effluent measured directly by a toxicity test.

Zone of Initial Dilution (ZID) means the region of initial mixing surrounding or adjacent to the end of the outfall pipe or diffuser ports, provided that the ZID may not be larger than allowed by mixing zone restrictions in applicable water quality standards.

#### 2. Commonly Used Abbreviations

BOD Five-day biochemical oxygen demand unless otherwise specified

CBOD Carbonaceous BOD

CFS Cubic feet per second

COD Chemical oxygen demand

Chlorine

Cl<sub>2</sub> Total residual chlorine

TRC Total residual chlorine which is a combination of free available chlorine

(FAC, see below) and combined chlorine (chloramines, etc.)

TRO Total residual chlorine in marine waters where halogen compounds are

present

FAC Free available chlorine (aqueous molecular chlorine, hypochlorous acid,

and hypochlorite ion)

Coliform

Coliform, Fecal Total fecal coliform bacteria

Coliform, Total Total coliform bacteria

Cont. Continuous recording of the parameter being monitored, i.e.

flow, temperature, pH, etc.

Cu. M/day or M<sup>3</sup>/day Cubic meters per day

DO Dissolved oxygen

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kg/day Kilograms per day

lbs/day Pounds per day

mg/L Milligram(s) per liter

mL/L Milliliters per liter

MGD Million gallons per day

Nitrogen

Total N Total nitrogen

NH3-N Ammonia nitrogen as nitrogen

NO3-N Nitrate as nitrogen

NO2-N Nitrite as nitrogen

NO3-NO2 Combined nitrate and nitrite nitrogen as nitrogen

TKN Total Kjeldahl nitrogen as nitrogen

Oil & Grease Freon extractable material

PCB Polychlorinated biphenyl

Surface-active agent

Temp. °C Temperature in degrees Centigrade

Temp. °F Temperature in degrees Fahrenheit

TOC Total organic carbon

Total P Total phosphorus

TSS or NFR Total suspended solids or total nonfilterable residue

Turb. or Turbidity Turbidity measured by the Nephelometric Method (NTU)

μg/L Microgram(s) per liter

WET "Whole effluent toxicity"

ZID Zone of Initial Dilution

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY NEW ENGLAND - REGION 1 5 POST OFFICE SQUARE, SUITE 100 BOSTON, MASSACHUSETTS 02109-3912

#### **FACT SHEET**

# DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES PURSUANT TO THE CLEAN WATER ACT (CWA)

**NPDES PERMIT NUMBER:** MA0026247

PUBLIC NOTICE START AND END DATES: June 26, 2019 - July 25, 2019

#### NAME AND MAILING ADDRESS OF APPLICANT:

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

#### NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

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

#### RECEIVING WATER AND CLASSIFICATION:

Saugus River, via a surface drainage channel (Segment MA 93-34) North Coastal Watershed Class B, warm water fishery

**SIC CODE: 75** (Automotive Repair Services)

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## 1.0 Proposed Action

The above named applicant (the "Permittee") has applied to the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit to discharge from the New England Detroit Diesel Facility – Allison, Inc. (the "Facility" or "NEDDA") into the Saugus River, via a surface drainage channel.

The permit currently in effect was issued on October 19, 2006 with an effective date of January 1, 2007 and expired on December 31, 2011 (the "2006 Permit"). The Permittee filed an application for permit reissuance with EPA dated November 15, 2011, as required by 40 Code of Federal Regulations (C.F.R.) § 122.6. Since the permit application was deemed timely and complete by EPA on April 10, 2012, the Facility's 2006 Permit has been administratively continued pursuant to 40 C.F.R. § 122.6 and § 122.21(d). EPA and the MassDEP conducted a site visit on April 26, 2019.

This NPDES Permit is issued jointly by EPA and MassDEP under federal and state law, respectively. As such, all the terms and conditions of the permit are, therefore, incorporated into and constitute a discharge permit issued by the Director of the Division of Watershed Management pursuant to M.G.L. Chap. 21, § 43.

# 2.0 Statutory and Regulatory Authority

Congress enacted the Clean Water Act (CWA), "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." See CWA § 101(a). To achieve this objective, the CWA makes it unlawful for any person to discharge any pollutant into the waters of the United States from any point source, except as authorized by specific permitting sections of the CWA, one of which is § 402. See CWA §§ 303(a), 402(a). Section 402(a) established one of the CWA's principal permitting programs, the NPDES Permit Program. Under this section, EPA may "issue a permit for the discharge of any pollutant or combination of pollutants" in accordance with certain conditions. See CWA § 402(a). NPDES permits generally contain discharge limitations and establish related monitoring and reporting requirements. See CWA § 402(a)(1) and (2). The regulations governing EPA's NPDES permit program are generally found in 40 C.F.R. §§ 122, 124, 125, and 136.

Section 301 of the CWA provides for two types of effluent limitations to be included in NPDES permits: "technology-based" effluent limitations (TBELs) and "water quality-based" effluent limitations (WQBELs). See CWA §§ 301, 304(b); 40 C.F.R. §§ 122, 125, and 131.

# 2.1 Technology-Based Requirements

Technology-based treatment requirements represent the minimum level of control that must be imposed under §§ 301(b) and 402 of the CWA to meet best practicable control technology currently available (BPT) for conventional pollutants and some metals, best conventional control technology (BCT) for conventional pollutants, and best available technology economically achievable (BAT) for toxic and non-conventional pollutants. *See* 40 C.F.R. § 125 Subpart A.

Subpart A of 40 C.F.R. § 125 establishes criteria and standards for the imposition of technology-based treatment requirements in permits under § 301(b) of the CWA, including the application of EPA promulgated Effluent Limitation Guidelines (ELGs) and case-by-case determinations of effluent limitations under § 402(a)(1) of the CWA.

In general, ELGs for non-POTW facilities must be complied with as expeditiously as practicable but in no case later than three years after the date such limitations are established and in no case later than March 31, 1989. See 40 C.F.R. § 125.3(a)(2). Compliance schedules and deadlines not in accordance with the statutory provisions of the CWA cannot be authorized by a NPDES permit. In the absence of published technology-based effluent guidelines, the permit writer is authorized under § 402(a)(1)(B) of the CWA to establish effluent limitations on a case-by-case basis using best professional judgment (BPJ).

## 2.2 Water Quality-Based Requirements

The CWA and federal regulations require that effluent limitations based on water quality considerations be established for point source discharges when such limitations are necessary to meet state or federal water quality standards that are applicable to the designated receiving water. This is necessary when less stringent TBELs would interfere with the attainment or maintenance of water quality criteria in the receiving water. See § 301(b)(1)(C) of the CWA and 40 C.F.R. §§ 122.44(d)(1) and 122.44(d)(5).

## 2.2.1 Water Quality Standards

The CWA requires that each state develop water quality standards (WQSs) for all water bodies within the State. See CWA § 303 and 40 C.F.R. §§ 131.10-12. Generally, WQSs consist of three parts: 1) beneficial designated use or uses for a water-body or a segment of a water-body; 2) numeric or narrative water quality criteria sufficient to protect the assigned designated use(s); and 3) anti-degradation requirements to ensure that once a use is attained it will not be degraded and to protect high quality and National resource waters. See CWA § 303(c)(2)(A) and 40 C.F.R. § 131.12. The applicable State WQSs can be found in Title 314 of the Code of Massachusetts Regulations, Chapter 4 (314 CMR 4.00).

Receiving water requirements are established according to numerical and narrative standards in WQSs adopted under State law for each water body classification. When using chemical-specific numeric criteria to develop permit limits, acute and chronic aquatic life criteria and human health criteria are used and expressed in terms of maximum allowable in-stream pollutant concentrations. In general, aquatic-life acute criteria are considered applicable to daily time periods (maximum daily limit) and aquatic-life chronic criteria are considered applicable to monthly time periods (average monthly limit). Chemical-specific human health criteria are typically based on lifetime chronic exposure and are therefore typically applicable to monthly average limits.

When permit effluent limits are necessary for a pollutant to meet narrative water quality criteria, the permitting authority must establish effluent limits in one of three ways: based on a

"calculated numeric criterion for the pollutant which the permitting authority demonstrates will attain and maintain applicable narrative water quality criteria and fully protect the designated use," on a "case-by-case basis" using CWA § 304(a) recommended water quality criteria, supplemented as necessary by other relevant information; or, in certain circumstances, based on an indicator parameter. See 40 C.F.R. § 122.44(d)(1)(vi)(A-C).

## 2.2.2 Anti-degradation

Federal regulations found at 40 C.F.R. § 131.12 require states to develop and adopt a statewide anti-degradation policy that maintains and protects existing in-stream water uses and the level of water quality necessary to protect these existing uses. In addition, the anti-degradation policy ensures that high quality waters which exceed levels necessary to support propagation of fish, shellfish, and wildlife and support recreation in and on the water, are maintained unless the State finds that allowing degradation is necessary to accommodate important economic or social development in the area in which the waters are located.

Massachusetts' statewide anti-degradation policy, entitled "Antidegradation Provisions", is found in the State's WQSs at 314 CMR 4.04. Massachusetts guidance for the implementation of this policy is in an associated document entitled "Implementation Procedure for the Antidegradation Provisions of the State Water Quality Standards", dated October 21, 2009. According to the policy, no lowering of water quality is allowed, except in accordance with the anti-degradation policy, and all existing in-stream uses and the level of water quality necessary to protect the existing uses of a receiving water must be maintained and protected.

This permit is being reissued with effluent limitations sufficiently stringent to protect the exiting uses of the receiving water.

## 2.2.3 Assessment and Listing of Waters and Total Maximum Daily Loads

The objective of the CWA is to restore and maintain the chemical, physical and biological integrity of the Nation's waters. To meet this goal, the CWA requires states to develop information on the quality of their water resources and report this information to EPA, the U.S. Congress, and the public. To this end, the EPA released guidance on November 19, 2001, for the preparation of an integrated "List of Waters" that could combine reporting elements of both § 305(b) and § 303(d) of the CWA. The integrated list format allows states to provide the status of all their assessed waters in one list. States choosing this option must list each water body or segment in one of the following five categories: 1) Unimpaired and not threatened for all designated uses; 2) Unimpaired waters for some uses and not assessed for others; 3) Insufficient information to make assessments for any uses; 4) Impaired or threatened for one or more uses but not requiring the calculation of a Total Maximum Daily Load (TMDL); and 5) Impaired or threatened for one or more uses and requiring a TMDL.

A TMDL is a planning tool and potential starting point for restoration activities with the ultimate goal of attaining water quality standards. A TMDL is essentially a pollution budget designed to restore the health of an impaired water body. A TMDL typically identifies the source(s) of the pollutant from direct and indirect discharges, determines the maximum load of the pollutant that

can be discharged to a specific water body while maintaining WQSs for designated uses, and allocates that load to the various pollutant sources, including point source discharges, subject to NPDES permits. *See* 40 C.F.R. § 130.7.

For impaired waters where a TMDL has been developed for a particular pollutant and the TMDL includes a waste load allocation for a NPDES permitted discharge, the effluent limit in the permit may not exceed the waste load allocation. See 40 C.F.R. § 122.44(d)(1)(vii)(B).

#### 2.2.4 Reasonable Potential

Pursuant to CWA § 301(b)(1)(C) and 40 C.F.R. § 122.44(d)(1), NPDES permits must contain any requirements in addition to TBELs that are necessary to achieve water quality standards established under § 303 of the CWA. See also 33 U.S.C. § 1311(b)(1)(C). In addition, limitations "must control any pollutant or pollutant parameter (conventional, non-conventional, or toxic) which the permitting authority determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any water quality standard, including State narrative criteria for water quality." 40 C.F.R. § 122.44(d)(1)(i).

To determine if the discharge causes, or has the reasonable potential to cause, or contribute to an excursion above any WQS, EPA considers: 1) existing controls on point and non-point sources of pollution; 2) the variability of the pollutant or pollutant parameter in the effluent; 3) the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity); and 4) where appropriate, the dilution of the effluent by the receiving water. *See* 40 C.F.R. § 122.44(d)(1)(ii).

If the permitting authority determines that the discharge of a pollutant will cause, has the reasonable potential to cause, or contribute to an excursion above WQSs, the permit must contain WQBELs for that pollutant. *See* 40 C.F.R. § 122.44(d)(1)(i).

## 2.2.5 State Certification

EPA may not issue a permit unless the State Water Pollution Control Agency with jurisdiction over the receiving water(s) either certifies that the effluent limitations contained in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate the State WQSs or it is deemed that the state has waived its right to certify. Regulations governing state certification are set forth in 40 C.F.R. § 124.53 and § 124.55. EPA has requested permit certification by the State pursuant to 40 C.F.R. § 124.53 and expects that the Draft Permit will be certified.

If the State believes that any conditions more stringent than those contained in the Draft Permit are necessary to meet the requirements of either the CWA §§ 208(e), 301, 302, 303, 306 and 307 or the appropriate requirements of State law, the State should include such conditions and, in each case, cite the CWA or State law reference upon which that condition is based. Failure to provide such a citation waives the right to certify as to that condition. The only exception to this is that the sludge conditions/requirements implementing § 405(d) of the CWA are not subject to the § 401 State Certification requirements. Reviews and appeals of limitations and conditions

attributable to State certification shall be made through the applicable procedures of the State and may not be made through the applicable procedures of 40 C.F.R. § 124.

In addition, the State should provide a statement of the extent to which any condition of the Draft Permit can be made less stringent without violating the requirements of State law. Since the State's certification is provided prior to permit issuance, any failure by the State to provide this statement waives the State's right to certify or object to any less stringent condition.

It should be noted that under CWA § 401, EPA's duty to defer to considerations of state law is intended to prevent EPA from relaxing any requirements, limitations or conditions imposed by state law. Therefore, "[a] State may not condition or deny a certification on the grounds that State law allows a less stringent permit condition." *See* 40 C.F.R. § 124.55(c). In such an instance, the regulation provides that, "The Regional Administrator shall disregard any such certification conditions or denials as waivers of certification." *Id.* EPA regulations pertaining to permit limits based upon water quality standards and state requirements are contained in 40 C.F.R. § 122.4(d) and 40 C.F.R. § 122.44(d).

## 2.3 Effluent Flow Requirements

Generally, EPA uses effluent flow both to determine the necessity for effluent limitations in a permit that comply with the CWA, and to calculate the effluent limitations themselves. EPA practice is to use effluent flow as a reasonable and important worst-case condition in EPA's reasonable potential and WQBEL calculations to ensure compliance with WQSs under § 301(b)(1)(C) of the CWA. Should the effluent flow exceed the flow assumed in these calculations, the in-stream dilution would decrease and the calculated effluent limitations may not be protective (i.e., meet WQSs). Further, pollutants that do not have the reasonable potential to exceed WQSs at a lower discharge flow may have reasonable potential at a higher flow due to the decreased dilution. In order to ensure that the assumptions underlying EPA's reasonable potential analyses and derivation of permit effluent limitations remain sound for the duration of the permit, EPA may ensure its "worst-case" effluent flow assumption through imposition of permit conditions for effluent flow. In this regard, the effluent flow limit is a component of WQBELs because the WQBELs are premised on a maximum level flow. The effluent flow limit also is necessary to ensure that other pollutants remain at levels that do not have a reasonable potential to exceed WQSs.

The limitation on effluent flow is within EPA's authority to condition a permit in order to carry out the objectives of the CWA. See CWA §§ 402(a)(2) and 301(b)(1)(C); 40 C.F.R. §§ 122.4(a) and (d); 122.43 and 122.44(d). A condition on the discharge designed to protect EPA's WQBEL and reasonable potential calculations is encompassed by the references to "condition" and "limitations" in §§ 402 and 301 and implementing regulations, as they are designed to assure compliance with applicable water quality regulations, including anti-degradation. Regulating the

<sup>&</sup>lt;sup>1</sup> EPA's reasonable potential regulations require EPA to consider "where appropriate, the dilution of the effluent in the receiving water," which is a function of both the effluent flow and receiving water flow. 40 C.F.R. §122.44(d)(1)(ii). EPA guidance directs that this "reasonable potential" analysis be based on "worst-case" conditions. In *re Washington Aqueduct Water Supply Sys.*, 11 E.A.D. 565, 584 (EAB 2004).

quantity of pollutants in the discharge through a restriction on the quantity of effluent is consistent with the overall structure and purposes of the CWA.

In addition, as provided in Part II.B.1 of this permit and 40 C.F.R. § 122.41(e), the Permittee is required to properly operate and maintain all facilities and systems of treatment and control. Operating the Facility's wastewater treatment systems as designed includes operating within the Facility's design effluent flow. Thus, the effluent flow limitation is necessary to ensure proper facility operation, which in turn is a requirement applicable to all NPDES permits. *See* 40 C.F.R. § 122.41.

## 2.4 Monitoring and Reporting Requirements

## 2.4.1 Monitoring Requirements

EPA has the authority in accordance with several statutory and regulatory requirements established pursuant to the CWA, 33 USC § 1251 et seq., the NPDES program (see § 402 and the implementing regulations generally found at 40 C.F.R. §§ 122, 124, 125, and 136), CWA § 308(a), 33 USC § 1318(a), and applicable state regulations to include requirements such as monitoring and reporting in NPDES permits.

The monitoring requirements included in this permit have been established to yield data representative of the discharges under the authority of §§ 308(a) and 402(a)(2) of the CWA, and consistent with 40 C.F.R. §§ 122.41(j), 122.43(a), 122.44(i) and 122.48. The monitoring requirements included in this permit specify routine sampling and analysis, which will provide ongoing, representative information on the levels of regulated constituents in the wastewater discharge streams. The monitoring program is needed to assess effluent characteristics, evaluate permit compliance, and determine if additional permit conditions are necessary to ensure compliance with technology-based and water quality-based requirements, including WQSs. EPA and/or the state may use the results of the chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to § 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 C.F.R. § 122. Therefore, the monitoring requirements in this permit are included for specific regulatory use in carrying out the CWA.

NPDES permits require that the approved analytical procedures found in 40 C.F.R. § 136 be used for sampling and analysis unless other procedures are explicitly specified. Permits also include requirements necessary to comply with the *National Pollutant Discharge Elimination System (NPDES): Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting Rule.*<sup>2</sup> This Rule requires that where EPA-approved methods exist, NPDES applicants must use sufficiently sensitive EPA-approved analytical methods when quantifying the presence of pollutants in a discharge. Further, the permitting authority must prescribe that only sufficiently sensitive EPA-approved methods be used for analyses of pollutants or pollutant parameters under the permit. The NPDES regulations at 40 C.F.R. § 122.21(e)(3) (completeness), 40 C.F.R. §

<sup>&</sup>lt;sup>2</sup> Federal Register, Vol. 79, No. 160, Tuesday, August 19, 2014; FR Doc. 2014–19557.

122.44(i)(1)(iv) (monitoring requirements) and/or as cross referenced at 40 C.F.R. § 136.1(c) (applicability) indicate that an EPA-approved method is sufficiently sensitive where:

- The method minimum level<sup>3</sup> (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or
- In the case of permit applications, the ML is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or parameter in the discharge; or
- The method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter.

## 2.4.2 Reporting Requirements

The Draft Permit requires the Permittee to electronically report monitoring results obtained during each calendar month as a Discharge Monitoring Report (DMR) to EPA and the State using NetDMR no later than the 15<sup>th</sup> day of the month following the completed reporting period.

NetDMR is a national web-based tool for regulated CWA permittees to submit DMRs electronically via a secure internet application to EPA through the Environmental Information Exchange Network. NetDMR has allowed participants to discontinue mailing in hard copy forms to EPA under 40 C.F.R. §§ 122.41 and 403.12. NetDMR is accessed from the following website: <a href="https://netdmr.zendesk.com/hc/en-us">https://netdmr.zendesk.com/hc/en-us</a>. Further information about NetDMR can be found on the EPA Region 1 NetDMR website.<sup>4</sup>

With the use of NetDMR, the Permittee is no longer required to submit hard copies of DMRs and reports to EPA and the State unless otherwise specified in the Draft Permit. In most cases, reports required under the permit shall be submitted to EPA as an electronic attachment through NetDMR. Certain exceptions are provided in the permit such as for providing written notifications required under the Part II Standard Conditions.

## 2.5 Anti-backsliding

A permit may not be renewed, reissued or modified with less stringent limitations or conditions than those contained in a previous permit unless in compliance with the anti-backsliding requirements of the CWA. See §§ 402(o) and 303(d)(4) of the CWA and 40 C.F.R. § 122.44(l)(1 and 2). Anti-backsliding provisions apply to effluent limits based on technology, water quality, and/or state certification requirements.

<sup>&</sup>lt;sup>3</sup> The term "minimum level" refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor. EPA is considering the following terms related to analytical method sensitivity to be synonymous: "quantitation limit," "reporting limit," "level of quantitation," and "minimum level." *See* Federal Register, Vol. 79, No. 160, Tuesday, August 19, 2014; FR Doc. 2014–19557.

<sup>&</sup>lt;sup>4</sup> https://netdmr.zendesk.com/hc/en-us/articles/209616266-EPA-Region-1-NetDMR-Information.

All proposed limitations in the Draft Permit are at least as stringent as limitations included in the 2006 Permit unless specific conditions exist to justify one of the exceptions listed in 40 C.F.R. § 122.44(l)(2)(i) and/or in accordance with § 303(d)(4). Discussion of any applicable exceptions are discussed in sections that follow. Therefore, the Draft Permit complies with the antibacksliding requirements of the CWA.

## 3.0 Description of Facility and Discharge

## 3.1 Location and Type of Facility

NEDDA is located in Wakefield Massachusetts and consists of one large building surrounded by a parking lot. Eight (8) interconnected catch basins are located throughout the parking lot. See Figure 1 for a location map of the property, Figure 2 for a site plan, and Figure 3 for a water flow schematic.

The discharge permitted at the facility consists of stormwater from the surrounding parking lot and intermittent discharge of non-contact cooling water from two dynamometers. A dynamometer is an instrument that simulates loads on engines and chassis by creating a competing load through use of pressurized water to turn veins, similar to the way a turbine functions.

The parking lot may contain various automotive, truck, and marine machinery and components which are situated on pallets. The permitted flows at the facility combine with flow from an adjacent (unnamed) wetland before leaving the site. The wetland is on the property of the Camp Curtis Guild National Guard Reservation and is bordered by Bay State Road and the NEDDA facility. Interstate 95 runs parallel to Bay State Road in the vicinity of the facility.

The facility's services have shifted over time, resulting in significantly less use of the engine and chassis dynamometers since the 2006 permit issuance. The facility has not used either dynamometer since 2012, and the testing equipment is now stored at NEDDA's Maine facility. However, the facility may use either dynamometer during the permit term and wishes to retain permit coverage for the dynamometer discharges in case of future use at the facility.

The dynamometers that were previously used at the facility were water brake dynamometers rated at 1000 horsepower (HP), although the engine dynamometer was usually run at a higher HP than the chassis dynamometer. The two dynamometers previously used onsite served to simulate various driving conditions and engine loads in order to diagnose vehicle problems. The amount of HP that the dynamometer is run at varies depending upon the size of the engine or vehicle tested and the test performed. Up until the use of the dynamometers were discontinued, tests using the engine dynamometer occurred about once per year and lasted up to 2-4 hours. Tests run with the chassis dynamometer occurred about once per month and lasted approximately 30 minutes to 1 hour. Thus, the water discharge from the engine dynamometer is expected to be at a higher temperature. In general, it is expected that the water within the dynamometer is at its highest temperature about ½ to ¾ of the way through any test.

Within both dynamometers, circulating water is used to absorb the vehicle's mechanical energy output (through friction and conversion to heat) in order to test either engine function or vehicle driving performance. The engine dynamometer has a shaft which is coupled to the engine crankshaft during testing in order to deliver torque to the dynamometer, where it can be measured. The chassis dynamometer is equipped with two large circular rollers which are turned by the wheels of the vehicle being tested.

The source of water for the dynamometers is the city of Wakefield municipal water supply, which is a combination of water from the MWRA (Quabbin and other reservoirs) as well as local groundwater. The facility does not use any additives in the water for either dynamometer. The spent water from the dynamometers discharges through a one-inch pipe to a catch basin in the parking lot adjacent to the building. This Draft Permit requires that sampling for Outfalls 002A and 002B be taken at the catch basin closest to the dynamometer discharge, as shown on Figure 3 of this Fact Sheet. This catch basin then flows to another catch basin which also collects flow from the wetland adjacent to the facility. This water then flows to a catch basin near the front entrance of the building where the sampling point for the stormwater discharge, Outfall 001, is located. This flow is then routed under Bay State Road to a surface drainage channel which travels under Route 95 and then runs about one half mile to the Saugus River.

During the prior operation of these dynamometers, any spills and any washing of parts inside the building were directed to several floor drains. These discharges flow to three (3) "invert" catch basins that function in series to remove any oil and then to storage tanks located inside the building. These storage tanks would periodically pump water to an evaporator which used a heat exchanger to heat the water and increase the rate of water evaporation. The residual from the evaporator was taken offsite and disposed. The facility previously treated approximately 500 gallons per day of water collected from the floor drains. No surface water discharges result from the operation of this system.

## 3.1.1 Effluent Limitation Guidelines

EPA has not promulgated technology-based effluent limitation guidelines (ELGs) for Automotive Repair Services (SIC 75).

## 3.2 Location and Type of Discharge

Outfalls 001, 002A, and 002B are located at Latitude 42° 31' 45" Longitude 71° 4' 30". These outfalls are routed through a series of catch basins on the property which connect to a surface drainage channel which runs about one half mile before discharging to the Saugus River. The Permittee has requested authorization to discharge non-contact cooling water from Outfalls 002A and 002B and stormwater through Outfall 001 into the Saugus River via this surface drainage channel. See Figures 2 and 3 to this Fact Sheet.

NEDDA rebuilds and performs diagnostic testing on automotive, truck, and marine engines and transmissions at this facility. There are three separate discharges from the facility and property, one stormwater discharge and two equipment testing process discharges. These discharges

combine with runoff from a wetland adjacent to the facility and discharge through a series of catch basins before being routed to a surface drainage channel. For the purposes of this permit, Outfall 001 is sampled at the catch basin at the front of the building and Outfalls 002A and 002B are sampled at the catch basin closest to the dynamometer discharges, as shown on Figure 3 of this Fact Sheet. These outfalls are characterized as follows:

## Outfall 001 (formerly 001A):

Stormwater from the parking lot and roof of the facility. Stormwater is collected from eight catch basins located throughout the property. No vehicle or equipment maintenance is performed in the parking lot, but various parts are sometimes stored outside in the parking lot. The stormwater discharge has been sampled twice a year pursuant to the 2006 Permit (see Appendix A to this Fact Sheet).

## Outfall 002A (formerly 001B):

Discharge from the engine dynamometer. This discharge was required to be sampled quarterly in the 2006 Permit, but since the issuance of this permit, the engine dynamometer was only used four times (see Appendix A to this Fact Sheet). Since the potential future use of the engine dynamometer is expected to be similar to its past use, the quarterly monitoring frequency for the engine dynamometer discharge has been carried forward in the Draft Permit.

#### Outfall 002B (formerly 001C):

Discharge from the chassis dynamometer. The chassis dynamometer at the facility was not frequently used and required sampling annually; the discharge has not been recorded since 2007 (see Appendix A to this Fact Sheet). Although the potential future use of the chassis dynamometer is expected to be similar to its past use, monitoring for the chassis dynamometer discharge has been changed from once per year to once per quarter to match the engine dynamometer sampling. Sampling would only be conducted during those calendar quarters when a discharge occurs.

A quantitative description of the discharge in terms of effluent parameters, based on monitoring data submitted by the Permittee, including Discharge Monitoring Reports (DMRs), from January 2007 through December 2012 for the dynamometer NCCW, and 2012 through 2018 for the stormwater discharges, are provided in Appendix A of this Fact Sheet. The Permittee has not discharged flows from either dynamometer since December 2012.

## 4.0 Description of Receiving Water and Dilution

## 4.1 Receiving Water

The Facility discharges through Outfalls 001, 002A, and 002B to the Saugus River, which is part of the North Coastal Watershed, via a surface drainage channel (Segment ID MA93-34). This segment of the Saugus River originates at the outlet of Lake Quannapowitt and runs 3.1 miles to

the Lynn Water and Sewer Commission diversion canal which discharges to Hawkes Pond in Wakefield.

Saugus River is classified as Class B, warm water fishery in the Massachusetts WQSs, 314 Code of Massachusetts Regulations (CMR) 4.05(4)(a). Class B waters are described in the Commonwealth of Massachusetts Water Quality Standards (314 CMR 4.05(3)(b)) as follows: "designated as a habitat for fish, other aquatic life, and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation. Where designated in 314 CMR 4.06, they shall be suitable as a source of public water supply with appropriate treatment (Treated Water Supply). Class B waters shall be suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses. These waters shall have consistently good aesthetic value."

Saugus River is listed in the final *Massachusetts Year 2014 Integrated List of Waters* ("303(d) List") as a Category 5 "Waters Requiring a TMDL.<sup>5</sup> This segment is impaired for nutrients, noxious aquatic plants, turbidity, pathogens, as well as other flow alteration and other habitat alteration. The status of each designated use is presented in Table 1 from MassDEP's "North Shore Coastal Watersheds – 2002 Water Quality Assessment Report<sup>6</sup> (March 2007)".

<b>Designated Use</b>	Status				
Aquatic Life	Not Assessed				
Aesthetics	Impaired				
	Causes: Turbidity; Sources: Unknown				
	Suspected Sources: Discharges from separate storm sewer systems				
Primary Contact	Impaired				
Recreation	Causes: Elevated fecal coliform, turbidity; Sources: Unknown				
	Suspected Sources: Discharges from separate storm sewer systems				
Secondary Contact	Impaired				
Recreation	Causes: Turbidity; Sources: Unknown				
	Suspected Sources: Discharges from separate storm sewer systems				
Fish Consumption	Not Assessed				

Table 1: Summary of Designated Uses and Listing Status

One TMDL was completed in 2012 for this waterbody: the North Coastal Pathogen TMDL, which addresses freshwater and coastal waterbodies impaired for indicator bacteria on the north shore of Massachusetts. Segment MA93-34 of the Saugus River is listed as a "medium" priority for dry weather and a "high" priority for wet weather implementation of the TMDL, due to wet weather fecal coliform concentrations greater than 10,000 cfu/100 mL reported for this segment in the Saugus River Watershed 2003 Water Quality Report. The TMDL and stormwater effluent limits are discussed further in Section 5.3.2 of this fact sheet.

<sup>&</sup>lt;sup>5</sup> Massachusetts Year 2014 Integrated List of Waters. MassDEP Division of Watershed Management Watershed Planning Program, Worcester, Massachusetts; December 2015.

<sup>&</sup>lt;sup>6</sup> North Shore Coastal Watersheds 2002 Water Quality Assessment Report. MassDEP Division of Watershed Management, Worcester, Massachusetts; March 2007, Report Number: 93-AC-2.

#### 4.2 Available Dilution

To ensure that discharges do not cause or contribute to violations of WQSs under all expected conditions, WQBELs are derived assuming critical conditions for the receiving water. The critical flow in rivers and streams is some measure of the low flow of that river or stream. State WQSs require that effluent dilution be calculated based on the receiving water lowest observed mean river flow for seven consecutive days, recorded over a 10-year recurrence interval, or 7-day 10-year low flow (7Q10). See 314 CMR 4.03(3)(a).

Since the facility's outfalls discharge to a surface drainage channel which may have little to no flow when there is no stormwater flow or NCCW flows from the facility, there would be limited dilution available to any discharges authorized by this permit. However, neither the 2006 Permit nor this Draft Permit contain any WQBELs which are based on dilution.

## 5.0 Proposed Effluent Limitations and Conditions

The proposed effluent limitations and conditions derived under the CWA and State WQSs are described below. These proposed effluent limitations and conditions, the basis of which is discussed throughout this Fact Sheet, may be found in Part I of the Draft Permit. In accordance with 40 CFR § 122.45(b)(2), EPA based the calculation of effluent limitations upon a reasonable measure of actual production of the Facility, or flow. EPA determined that the measure appropriate for this Facility is flow rate of NCCW that exits the dynamometers. The maximum design flow rate for both dynamometers is 60 gallons per minute (gpm).

## 5.1 Effluent Limitations and Monitoring Requirements at Outfall 001

The State and Federal regulations and data regarding discharge characteristics described above, were used during the effluent limitations development process. Discharge data are included in Appendix A.

#### **5.1.1** Effluent Flow

From January 2012 through December 2018, effluent flow ranged from 11,527 gpd to 468,873 gpd. The 2006 Permit required reporting of the estimated flow with no limit. These estimated flows are based on the storm event that occurs during the sampling event. The Draft Permit will continue to require the estimated flow of stormwater during the sampling periods.

#### **5.1.2** Total Suspended Solids

Solids could include inorganic (e.g., silt, sand, clay, and insoluble hydrated metal oxides) and organic matter (e.g., flocculated colloids and compounds that contribute to color). Solids can clog fish gills, resulting in an increase in susceptibility to infection or asphyxiation. Suspended

<sup>&</sup>lt;sup>7</sup> EPA Permit Writer's Manual, Section 6.2.4

solids can increase turbidity in receiving waters and reduce light penetration through the water column or settle to form bottom deposits in the receiving water. Suspended solids also provide a medium for the transport of other adsorbed pollutants, such as metals, which may accumulate in settled deposits that can have a long-term impact on the water column through cycles of resuspension.

Massachusetts has a narrative WQS for solids that states, "[t]hese waters shall be free from floating, suspended and settleable solids in concentrations and combinations that would impair any use assigned to this Class, that would cause aesthetically objectionable conditions, or that would impair the benthic biota or degrade the chemical composition of the bottom."

From January 2012 through December 2018, daily maximum total suspended solids (TSS) concentrations have ranged from below detection limits to 10 mg/L. The Draft Permit requires twice per year monitoring for TSS, with no limit, consistent with the requirement of the 2006 Permit. Since many of the samples have not detected TSS and all other samples are 10 mg/l or below, the Permittee is controlling solids in its stormwater flows. This Draft Permit contains a revised and more detailed Stormwater Pollution Prevention Plan (SWPPP) which is designed to reduce, or prevent, the discharge of pollutants in stormwater to the receiving water. Therefore, the TSS monitoring will remain in order to assure that the Permittee is taking measures that control the discharge of solids.

## 5.1.3 pH

The hydrogen-ion (H<sup>-</sup>) concentration in an aqueous solution is represented by the pH using a logarithmic scale of 0 to 14 standard units (S.U.). Solutions with pH 7.0 S.U. are neutral, while those with pH less than 7.0 S.U. are acidic and those with pH greater than 7.0 S.U. are basic. Discharges with pH values markedly different from the receiving water pH can have a detrimental effect on the environment. Sudden pH changes can kill aquatic life. pH can also have an indirect effect on the toxicity of other pollutants in the water.

From January 2012 through December 2018, pH has ranged from 6.0 to 7.7 S.U. with one violation of the permitted range.

Massachusetts Water Quality Standards for a Class B inland waterbody require pH to be in the range of 6.5 to 8.3 standard units (see 314 CMR 4.05(3)(b)3). However, the Draft Permit maintains the pH range of 6.5 to 8.0 S.U. from the 2006 Permit based on anti-backsliding requirements found in 40 CFR § 122.44(1).

#### 5.1.4 Oil and Grease

Oil and Grease is not a definitive chemical constituent, but includes a large range of organic compounds, which can be both petroleum-related (e.g., hydrocarbons) and non-petroleum (e.g., vegetable and animal oils and greases, fats, and waxes). These compounds have varying physical, chemical, and toxicological properties. Generally, oils and greases in surface waters either float on the surface, are solubilized or emulsified in the water column, adsorb onto floating or suspended solids and debris, or settle on the bottom or banks. Oil and grease, or certain

compounds within an oil and grease mixture can be lethal to fish, benthic organisms and water-dwelling wildlife.

State WQSs for Inland Waters, Class B at 314 CMR 4.05(3)(b)7, state "These waters shall be free from oil, grease and petrochemicals that produce a visible film on the surface of the water, impart an oily taste to the water or an oily or other undesirable taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life." An oil and grease concentration of 15 mg/L is recognized as the level at which many oils produce a visible sheen and/or cause an undesirable taste in fish.<sup>8</sup>

From January 2012 through December 2018, the Permittee reported all oil and grease concentrations at < 4 mg/L. The Draft Permit maintains the daily maximum limit of 15 mg/L for Outfall 001, monitored bi-annually by grab sample. This limitation has been continued from the Facility's 2006 Permit in accordance with anti-backsliding requirements found in 40 C.F.R. § 122.44(1) and ensures that the discharge will not cause or contribute to a violation of State WQSs.

## 5.1.5 TMDL parameters

In the 2012 North Coastal Pathogen TMDL (discussed in Section 4.1 of this Fact Sheet), stormwater is listed among the causes of bacteria impairments in the watershed, although potential sources of bacteria in the Saugus River segment MA93-34 are unknown. The waste load allocation for regulated discharges (including stormwater) in the North Coastal watershed is set at the MASWQS for E. coli for Class A and B freshwaters. For stormwater, the expectation of the TMDL is that waste load allocations will be met through implementing BMPs and other controls (consistent with Part C.1. of the Draft Permit).

The receiving water is listed as impaired for one or more designated uses and *Escherichia coli* is listed as a pollutant in the 2012 TMDL. EPA does not currently have information regarding presence of *E. coli* in the stormwater discharges from the Facility. Therefore, the Draft Permit includes a twice per year monitor-only requirement for *E. coli* to ensure bacteria are not present in discharges from the Facility at concentrations that could cause or contribute to an excursion above State WQSs. If *E. coli* is not detected and not expected to be present in the discharge or is detected but the Permittee demonstrates that its presence is caused solely by natural background sources, the Permittee may provide sampling data and any determination that the presence of *E. coli* is due solely to natural background sources with the next application for permit reissuance.

For impairments in the Saugus River without a TMDL, including nutrient-related impairments and turbidity, the non-numerical TBELs and the BMPs required in the SWPPP are designed to minimize the discharge of these pollutants, which are common in stormwater, and likely present in the NEDDA stormwater discharge.

<sup>&</sup>lt;sup>8</sup> USEPA. 1976. The Red Book – Quality Criteria for Water. July 1976.,

## 5.2 Effluent Limitations and Monitoring Requirements at Outfalls 002A and 002B

## 5.2.1 Effluent Flow

From January 2007 through December 2012, the effluent flow rate from these 2 dynamometer discharges ranged from 44.88 to 60 gallons per minute (gpm). The 2006 Permit limited both discharges to a flow rate of 60 gpm, based on the operating capacity of the dynamometers. These flow rates will continue to be limited in the Draft Permit. The Draft Permit will continue to require the Permittee to report the number of discharge events that occur for each calendar quarter for each dynamometer.

## 5.2.2 Temperature

The Saugus River is designated as a warm water fishery at 314 CMR 4.06. The State WQSs for Inland Water, Class B warm water fisheries at 314 CMR 4.05(3)(b)(2), requires a temperature not to exceed 83°F (28.3°C) and a rise in temperature due to a discharge not to exceed 5°F (1.7°C). State WQSs require that natural seasonal and daily variations necessary to protect existing and designated uses must be maintained. The WQSs also prohibit changes from natural background conditions that would impair any use assigned to this Class, including those conditions necessary to protect normal species diversity, successful migration, reproductive functions or growth of aquatic organism. Therefore, the temperature limits in the Draft Permit must protect existing and designated uses for the warm water fishery classification in the river.

The 2006 Permit limited Outfalls 002A and 002B to a maximum daily temperature of 83°F, to be measured quarterly for Outfall 002A and annually for Outfall 002B, when discharging. The temperature limits in the Draft Permit remain unchanged from the 2006 permit and are set at WQS for a warm water fishery. The process water discharge from the engine dynamometer exceeded this limit once in 2008 (91°F: 110% of temperature limit). There are very limited effluent temperature data from the dynamometers during the last permit term available with which to predict future performance of the dynamometers. However, EPA believes that the facility's drainage configuration provides the opportunity for heat to dissipate in the drainage channel in order to protect the receiving water quality in the Saugus River. Therefore, the temperature limit of 83°F will remain for both discharges.

## **5.2.3** Total Residual Chlorine (TRC)

Chlorine and chlorine compounds are toxic to aquatic life. Free chlorine is directly toxic to aquatic organisms and can react with naturally occurring organic compounds in receiving waters to form toxic compounds such as trihalomethane. Potable water sources are typically chlorinated to minimize or eliminate pathogens. 40 C.F.R. § 141.72 stipulates that a public water system's residual disinfectant concentration in the water entering the distribution system cannot be less than 0.2 mg/L for more than four hours. EPA's acute and chronic aquatic water quality criteria that have been adopted into the MASWQS are  $19 \mu \text{g/L}$  and  $11 \mu \text{g/L}$ , respectively. Since the

Permittee uses the City of Wakefield's drinking water for its dynamometers, the 2006 Permit included monitoring requirements for TRC.

The dynamometer discharges have been sampled only three times during the last permit term and in all cases TRC was not detected, at a detection level of 50 ug/l. There is not enough information available on the receiving water flow to determine the expected dilution of the discharge in the drainage channel or the downstream Saugus River. However, due to the discharge traveling about a half mile in a surface drainage channel before entering the Saugus River, EPA has determined that a significant portion of any available residual chlorine should degrade during this transit time and distance as well as experience an unknown level of dilution. For these reasons and since these discharges, if restarted in the future, will only discharge occasionally, EPA has determined to maintain the monitoring requirement for TRC only and not set a limit at this time. The current detection limit for EPA-approved methods to measure residual chlorine is 30 ug/L (0.030 mg/L). If the facility resumes these dynamometer discharges in the future and monitoring detects TRC or the discharges become more frequent, EPA may determine that a TRC limit may be necessary at that time.

#### 5.2.4 Oil and Grease

See Oil and Grease discussion in Section 5.1.4 above. Out of the 4 samples taken for the dynamometer discharges during the permit term, only one sample was detected at 6.4, below the effluent limitation of 15 mg/l. This limitation has been continued from the Facility's 2006 Permit in accordance with anti-backsliding requirements found in 40 C.F.R. § 122.44(1) and ensures that the discharge will not cause or contribute to a violation of State WQSs.

#### 5.2.5 pH

See pH discussion in Section 5.1.3 above. From 2007 through 2012, the pH for the dynamometer discharges has ranged from 6.0 to 7.7 S.U. with one exceedance of the permitted range for Outfall 002B.

Massachusetts Water Quality Standards for a Class B inland waterbody require pH to be in the range of 6.5 to 8.3 standard units (see 314 CMR 4.05(3)(b)3). However, the Draft Permit maintains the pH range of 6.5 to 8.0 S.U. from the 2006 Permit for both Outfalls 002A and 002B, based on anti-backsliding requirements found in 40 CFR § 122.44(l).

#### **5.3** Special Conditions

#### **5.3.1** Best Management Practices

Pursuant to § 304(a) of the Act and 40 C.F.R. § 122.44(k), best management practices (BMPs) may be expressly incorporated into a permit on a case-by-case basis where it is determined they are necessary to achieve effluent limitations and standards or to carry out the purpose and intent of the CWA under § 402(a)(1). BMPs may be necessary to meet effluent limitations because the discharge may contain pollutants listed as toxic under § 307(a)(1) of the CWA or pollutants listed as hazardous under § 311 of the CWA, for the control of stormwater discharges under §

402(p) of the CWA, or where numeric effluent limits are infeasible. Pollutants may be present because they are generated during Facility operations, which could result in significant amounts of these pollutants reaching waters of the United States via discharges of non-contact cooling water and stormwater.

In this case, the Draft Permit requires the selection, design, installation, and implementation of control measures for stormwater associated with the Facility operations to comply with the non-numeric technology-based effluent limits in the Draft Permit. These non-numeric limitations are consistent with the limitations specified in Part 2.1.2 and Part 8, Sector P (Land Transportation and Warehousing) of EPA's Multi-Sector General Permit (MSGP) effective June 4, 2015. Requirements include:

- Minimize exposure of processing and material storage areas to stormwater discharges;
- Design good housekeeping measures to maintain areas that are potential sources of pollutants;
- Implement preventative maintenance programs to avoid leaks, spills, and other releases of pollutants to stormwater that is discharged to receiving waters;
- Implement spill prevention and response procedures to ensure effective response to spills and leaks if or when they occur;
- Design of erosion and sediment controls to stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants;
- Utilize runoff management practices to divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff;
- Develop proper handling procedures for salt or materials containing chlorides that are used for snow and ice control;
- Conduct employee training to ensure personnel understand the requirements of this permit;
- Minimize dust generation and vehicle tracking of industrial materials; and
- Comply with applicable sector specific non-numeric technology-based effluent limitations included in Sector P (Land Transportation and Warehousing) of the MSGP.

These non-numeric effluent limitations support, and are equally enforceable as, the numeric effluent limitations included in the Draft Permit. The purpose of these requirements is to reduce or eliminate the discharge of pollutants to waters of the United States. They have been selected on a case-by-case basis based on those appropriate for this specific facility. See §§ 304(e) and 402(a)(1) of the CWA and 40 C.F.R. § 122.44(k). These requirements ensure that discharges from the Facility will meet State WQSs pursuant to CWA section 301(b)(1)(C) and 40 C.F.R. 122.44(d)(1). Unless otherwise stated, the Permittee may select, design, install, implement and maintain BMPs as the Permittee deems appropriate to meet the permit requirements. The selection, design, installation, implementation and maintenance of control measures must be in accordance with good engineering practices and manufacturer's specifications.

<sup>&</sup>lt;sup>9</sup> The MSGP is currently available at: <a href="https://www.epa.gov/npdes/final-2015-msgp-documents">https://www.epa.gov/npdes/final-2015-msgp-documents</a>.

#### 5.3.2 Stormwater Pollution Prevention Plan

On September 9, 1992, EPA issued its general permit for stormwater discharges associated with industrial activity, which, among other things, required all facilities to prepare a Stormwater Pollution Prevention Plan (SWPPP) to implement technology-based pollution prevention measures in lieu of numeric limitations [57 FR 41264]. The general permit established a process whereby the operator of the industrial facility evaluates potential pollutant sources at the site and selects and implements appropriate measures designed to prevent or control the discharge of pollutants in stormwater runoff [57 FR 41242]. This Draft Permit contains BMPs for stormwater associated with Facility operations. In addition to BMPs, the Draft Permit also contains requirements for the Permittee to continue to implement and maintain a SWPPP for stormwater discharges associated with Facility operations. These requirements are consistent with EPA's MSGP effective June 4, 2015. The Draft Permit specifies that the SWPPP must include the following, at a minimum:

- Stormwater pollution prevention team;
- Site description;
- Summary of potential pollutant sources;
- Description of all stormwater control measures; and
- Schedules and procedures pertaining to implementation of stormwater control measures, inspections and assessments, and monitoring.

In the 2012 North Coastal Pathogen TMDL (discussed in Section 4.1 of this Fact Sheet), stormwater is listed among the causes of bacteria impairments in the watershed, although potential sources of bacteria in the Saugus River segment MA93-34 are unknown. The waste load allocation for regulated discharges (including stormwater) in the North Coastal watershed is set at the Massachusetts 2007 *E. coli* or *Enterococci* water quality criteria for Class A and B freshwaters. For stormwater, the expectation of the TMDL is that waste load allocations will be met through implementing BMPs and other controls consistent with Part C of the Draft Permit. As noted in Section 5.1.5 above, the Draft Permit includes a twice per year monitor-only requirement for *E. coli* for Outfall 001 to ensure bacteria are not present in stormwater discharge from the Facility at concentrations that could cause or contribute to an excursion above State WQSs.

For impairments in the Saugus River without a TMDL, including nutrient-related impairments and turbidity, the non-numerical TBELs and the BMPs required in the SWPPP are designed to minimize the discharge of these pollutants, which are common in stormwater, and likely present in the NEDDA stormwater discharge.

The continued implementation of the SWPPP is an enforceable element of the permit. The Draft Permit directs the Permittee to incorporate BMPs, as described above, directly into the SWPPP, which serves to document the selection, design and installation of control measures selected to meet the permit effluent limitations. The goal of the SWPPP is to reduce or prevent the discharge of pollutants to waters of the United States either directly or indirectly through stormwater runoff.

The Draft Permit requires the Permittee within ninety (90) days of the effective date of the permit to certify that the SWPPP has been prepared, meets the requirements of the permit, and reduces or eliminates the discharge of pollutants from stormwater associated with this site. The Permittee must also certify at least annually that the Facility has complied with the BMPs described in the SWPPP, including inspections, maintenance, and training activities. The Permittee is required to amend and update the SWPPP if any change occurs at the Facility affecting the SWPPP, such as changes in the design, construction, operation, or maintenance of the Facility. The SWPPP must be maintained on site at the Facility and provided to EPA and/or the State upon request. All SWPPP records must be maintained on-site for at least three years.

## 5.3.3 Discharges of Chemicals and Additives

Chemicals and additives include, but are not limited to: algaecides/biocides, antifoams, coagulants, corrosion/scale inhibitors/coatings, disinfectants, flocculants, neutralizing agents, oxidants, oxygen scavengers, pH conditioners, and surfactants. The Draft Permit allows the discharge of only those chemicals and additives specifically disclosed by the Permittee to EPA and the State, provided that such discharge does not violate § 307 or 311 of the CWA or applicable State WQSs. The Permittee has stated that it uses no chemicals in its dynamometer discharges.

However, EPA recognizes that the Permittee may determine that chemicals and additives may need to be used at a Facility during the term of the permit. As a result, the Draft Permit includes a provision that requires the Permittee to notify EPA and the State in writing of the discharge a new chemical or additive; allows for EPA and State review of the change; and provides the factors for consideration of such changes. The Draft Permit specifies that the Permittee must submit the following information for each chemical or additive, at a minimum, in writing to EPA and the State:

- Product name, chemical formula, and manufacturer of the chemical/additive.
- Purpose or use of the chemical/additive.
- Safety Data Sheet (SDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive.
- The frequency (e.g., hourly, daily), magnitude (e.g., maximum and average), duration (e.g., hours, days), and method of application for the chemical/additive.
- If available, the vendor's reported aquatic toxicity (i.e., NOAEL and/or LC<sub>50</sub> in percent for aquatic organism(s)).

The Permittee must also provide an explanation which demonstrates that the discharge of such chemical or additive: 1) Will not add any pollutants in concentrations which exceed permit effluent limitations; 2) Will not exceed any applicable water quality standard; and 3) Will not add any pollutants that would justify the application of permit conditions that are different from or absent in this permit.

Discharges of a new chemical or additive is authorized under the permit upon notification to EPA and the State unless otherwise notified by EPA or the State.

#### 5.4 Standard Conditions

The standard conditions of the permit are based on 40 C.F.R. § 122, Subparts A and D and 40 C.F.R. § 124, Subparts A, D, E, and F and are consistent with management requirements common to other permits.

## **6.0** Federal Permitting Requirements

## 6.1 Endangered Species Act

Section 7(a) of the Endangered Species Act of 1973, as amended (ESA), grants authority to and imposes requirements on Federal agencies regarding endangered or threatened species of fish, wildlife, or plants (listed species) and habitat of such species that has been designated as critical (a "critical habitat").

Section 7(a)(2) of the ESA requires every Federal agency, in consultation with and with the assistance of the Secretary of Interior, to ensure that any action it authorizes, funds or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. The United States Fish and Wildlife Service (USFWS) administers Section 7 consultations for freshwater species. The National Marine Fisheries Service (NMFS) administers Section 7 consultations for marine and anadromous species.

The Federal action being considered in this case is EPA's proposed NPDES permit for the Facility. The Draft Permit is intended to replace the 2006 Permit in governing the Facility. As the federal agency charged with authorizing the discharge from this Facility, EPA determines potential impacts to federally listed species, and initiates consultation, when required under § 7(a)(2) of the ESA.

EPA has reviewed the federally listed species and critical habitat in the vicinity of the discharge using the USFWS's Information, Planning, and Conservation System online tool. One listed species, the Small Whorled Pogonia (threatened), is known or believed to occur in Middlesex County, where the discharge occurs. The Small Whorled Pogonia is a plant species and is not expected to occur in the vicinity of the discharge. The Northern long-eared bat is listed as endangered in this area and may be potentially affected by activities in this area. However, this species does not have any critical habitat at this location. Therefore, EPA has determined that the actions authorized or required under the permit will have no adverse effect on listed species or critical habitats. EPA believes that effluent limitations and other permit conditions in place in the Draft Permit will preclude any adverse effects to any other endangered species due to incidental contact. During the public comment period, EPA will provide a copy of the Draft Permit and Fact Sheet to USFWS for concurrence on this determination.

There are no ESA-listed species under the jurisdiction of NMFS within the area of the discharge, as determined by endangered species information available on the NMFS website.

EPA has structured the proposed limitations to be sufficiently stringent to assure that State WQSs will be met, including for protection of aquatic life. The effluent limitations established in this permit ensure the protection of aquatic life and maintenance of the receiving water as an aquatic habitat.

Therefore, EPA finds that adoption of the proposed permit will have no effect on any threatened or endangered species or its critical habitat, EPA finds that adoption of the proposed permit is not likely to adversely affect any threatened or endangered species or its critical habitat, and consultation with NMFS or USFWS under Section 7 of the ESA is not required.

## **6.2** Essential Fish Habitat

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (*see* 16 U.S.C. § 1801 <u>et seq.</u>, 1998), EPA is required to consult with the National Marine Fisheries Service (NMFS) if EPA's action or proposed actions that it funds, permits, or undertakes, "may adversely impact any essential fish habitat". *See* 16 U.S.C. § 1855(b).

The Amendments broadly define "essential fish habitat" (EFH) as: "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity". See 16 U.S.C. § 1802(10). "Adverse impact" means any impact that reduces the quality and/or quantity of EFH, 50 C.F.R. § 600.910(a). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

EFH is only designated for fish species for which federal Fisheries Management Plans exist. <sup>10</sup> See U.S.C. § 1855(b)(1)(A). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999.

EPA has determined that the Saugus River is not covered by the EFH designation for riverine systems at this location where discharges from the surface drainage channel enter it as determined by the NOAA EFH Mapper. <sup>10</sup> EPA's review of available EFH information indicated that this waterbody is not designated EFH for any federally managed species. Therefore, consultation with NMFS under the Magnuson-Stevens Fishery Conservation and Management Act is not required. During the public comment period, EPA will provide a copy of the Draft Permit and Fact Sheet to NMFS for concurrence on this determination.

## 7.0 Public Comments, Hearing Requests, and Permit Appeals

All persons, including applicants, who believe any condition of the Draft Permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to George Papadopoulos, U.S. EPA,

<sup>&</sup>lt;sup>10</sup> NOAA EFH Mapper available at <a href="http://www.habitat.noaa.gov/protection/efh/efhmapper/">http://www.habitat.noaa.gov/protection/efh/efhmapper/</a>

Water Division, Industrial Permits Branch, 5 Post Office Square, Suite 100, Boston, Massachusetts 02109-3912 or via email to papadopoulos.george@epa.gov.

Any person, prior to the close of the public comment period, may submit a request in writing for a public hearing to consider the Draft Permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public meeting may be held if the criteria stated in 40 C.F.R. § 124.12 are satisfied. In reaching a final decision on the Draft Permit, the EPA will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after any public hearings, if such hearings are held, the EPA will issue a Final Permit decision, forward a copy of the final decision to the applicant, and provide a copy or notice of availability of the final decision to each person who has submitted written comments or requested notice. Within 30 days following the notice of the Final Permit decision, any interested person may submit a petition for review of the permit to EPA's Environmental Appeals Board consistent with 40 C.F.R. § 124.19 and/or submit a request for an adjudicatory hearing to MassDEP's Office of Appeals and Dispute Resolution consistent with 310 CMR 1.00.

#### **8.0 EPA and MassDEP Contacts**

The administrative record on which this Draft Permit is based may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays, from the EPA and MassDEP contacts below:

George Papadopoulos EPA Region 1 5 Post Office Square - Suite 100 - Mailcode 06-1 Boston, MA 02109-3912 Telephone: (617) 918-1579

Email: papadopoulos.george@epa.gov

Xiaodan Ruan MassDEP Surface Water Discharge Permit Program 1 Winter Street, Boston, Massachusetts 02108

Telephone: (617) 654-6517 Email: xiaodan.ruan@state.ma.us

June 10, 2019
Date

Ken Moraff, Director Water Division U.S. Environmental Protection Agency

# Appendices

# **Appendix A: Discharge Monitoring Data**

Outfall 001 – Facility stormwater (formerly 001A)

Date	flow rate avg monthly (GPD)	flow rate max daily (GPD)	O&G max daily (mg/L)	TSS max daily (mg/L)	pH min daily (S.U.)	pH max daily (S.U.)
Limit	report	report	15	report	6.5	8.0
6/30/2012	13763	233657	< 4	< 5	7.1	7.1
12/31/2012	29747	260139	< 4	< 5	7.5	7.5
6/30/2013	15868	294408	< 4	< 5	7.7	7.7
12/31/2013	29375	253908	< 4	< 5	6.7	6.7
6/30/2014	15895	295966	< 4	< 5	7.6	7.6
12/31/2014	58358	417468	< 4	8.8	7.1	7.1
6/30/2015	11527	294408	< 4	10	7.0	7.0
12/31/2015	49025	423699	< 4	10	6.7	6.7
6/30/2016	12258	166676	< 4	< 5	6.8	6.8
12/31/2016	42020	252350	< 4	< 5	6.9	6.9
6/30/2017	17944	263254	< 4	< 5	7.3	7.3
12/31/2017	51315	468873	< 4	10	6.5	6.5
6/30/2018	16935	387871	< 4	7.6	6.5	6.5
12/31/2018	24318	297524	< 4	9	6.0	6.0
max	58358	468873	< 4	10	7.7	7.7
min	11527	166676	< 4	< 5	6.0	6.0
avg	27739	292871	< 4	5.4	6.9	6.9
median	21131	278831	< 4	6	6.9	6.9

Notes:

Permit exceedance highlighted in yellow

Outfall 002A – Engine dynamometer process water (formerly 001B)

Date	flow avg monthly (GPM)	flow max daily (GPM)	O&G max (mg/L)	pH min (S.U.)	pH max (S.U.)	temperature max (F)	TRC max (ug/L)
Limit	60	60	15	6.5	8.0	83	report
3/31/2007	60	60	NA	NA	NA	NA	NA
6/30/2007	44.88	44.88	< 4	7.0	7.0	59	NA
9/30/2007	nd	nd	nd	nd	nd	nd	nd
12/31/2007	nd	nd	nd	nd	nd	nd	nd
3/31/2008	nd	nd	nd	nd	nd	nd	nd
6/30/2008	44.88	44.88	6.4	7.1	7.1	91	< 50
9/30/2008	nd	nd	nd	nd	nd	nd	nd
12/31/2008	nd	nd	nd	nd	nd	nd	nd
3/31/2009	nd	nd	nd	nd	nd	nd	nd
6/30/2009	nd	nd	nd	nd	nd	nd	nd
9/30/2009	nd	nd	nd	nd	nd	nd	nd
12/31/2009	nd	nd	nd	nd	nd	nd	nd
3/31/2010	nd	nd	nd	nd	nd	nd	nd
6/30/2010	nd	nd	nd	nd	nd	nd	nd
9/30/2010	nd	nd	nd	nd	nd	nd	nd
12/31/2010	nd	nd	nd	nd	nd	nd	nd
3/31/2011	nd	nd	nd	nd	nd	nd	nd
6/30/2011	nd	nd	nd	nd	nd	nd	nd
9/30/2011	nd	nd	nd	nd	nd	nd	nd
12/31/2011	nd	nd	nd	nd	nd	nd	nd
3/31/2012	nd	nd	nd	nd	nd	nd	nd
6/30/2012	nd	nd	nd	nd	nd	nd	nd
9/30/2012	nd	nd	nd	nd	nd	nd	nd
12/31/2012	44.88	44.88	< 4	7.5	7.5	70	< 50

## Notes:

nd = no discharge, as indicated on the facility's DMR reports

NA = Not analyzed during the monitoring period – ice and snow rendering sampling point inaccessible

Permit exceedance highlighted in yellow

# Outfall 002B – Chassis dynamometer process water (formerly 001C)

Date	flow avg monthly (GPM)	flow max daily (GPM)	O&G max (mg/L)	pH min (S.U.)	pH max (S.U.)	temperature max (F)	TRC max (ug/L)
Limit	60	60	15	6.5	8.0	83	report
12/31/2007	44.88	44.88	< 4	6.0	6.0	34	< 50
12/31/2008	nd	nd	nd	nd	nd	nd	nd
12/31/2009	nd	nd	nd	nd	nd	nd	nd
12/31/2010	nd	nd	nd	nd	nd	nd	nd
12/31/2011	nd	nd	nd	nd	nd	nd	nd
12/31/2012	nd	nd	nd	nd	nd	nd	nd

#### Notes:

nd = no discharge, as indicated on the facility's DMR reports

Permit exceedance highlighted in yellow

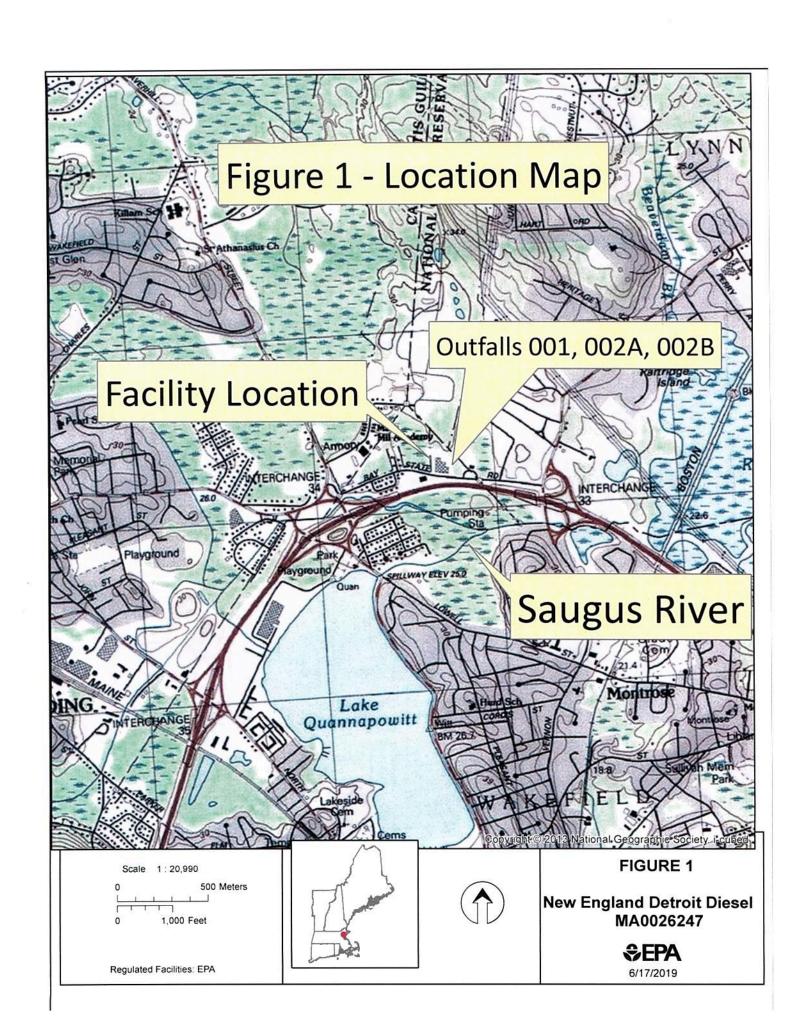
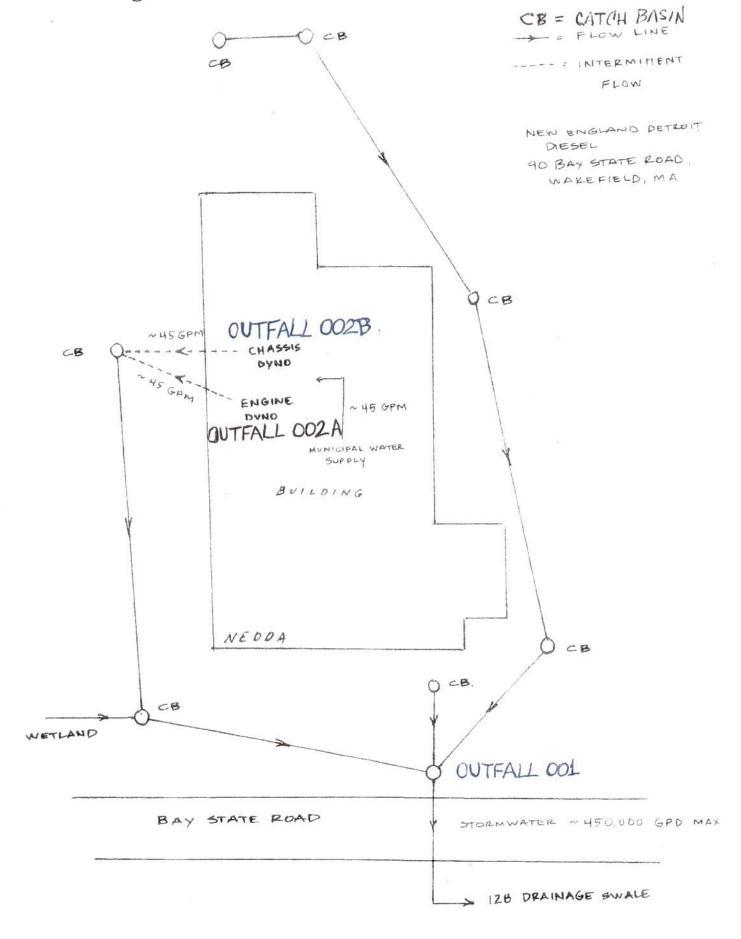


Figure 2 - Site Plan



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Figure 3 - Water Flow Schematic



MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION COMMONWEALTH OF MASSACHUSETTS 1 WINTER STREET BOSTON, MASSACHUSETTS 02108 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY – REGION 1 WATER DIVISION 5 POST OFFICE SQUARE BOSTON, MASSACHUSETTS 02109

JOINT PUBLIC NOTICE OF A DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE INTO WATERS OF THE UNITED STATES UNDER SECTIONS 301 AND 402 OF THE CLEAN WATER ACT, AS AMENDED, AND SECTIONS 27 AND 43 OF THE MASSACHUSETTS CLEAN WATERS ACT, AS AMENDED, AND REQUEST FOR STATE CERTIFICATION UNDER SECTION 401 OF THE CLEAN WATER ACT.

PUBLIC NOTICE PERIOD: June 26, 2019 - July 25, 2019

PERMIT NUMBER: MA0026247

PUBLIC NOTICE NUMBER: MA-017-19

NAME AND MAILING ADDRESS OF APPLICANT:

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

NAME AND ADDRESS OF THE FACILITY WHERE DISCHARGE OCCURS:

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

RECEIVING WATER: Saugus River, via a surface drainage channel (Segment MA 93-34)
North Coastal Watershed, Class B, warm water fishery

The U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) have cooperated in the development of a draft permit for New England Detroit Diesel – Allison, Incorporated (NEDDA), which discharges non-contact cooling water from engine and chassis dynamometers and stormwater. The effluent limits and permit conditions imposed have been drafted to assure compliance with the Clean Water Act, 33 U.S.C. sections 1251 et seq., the Massachusetts Clean Waters Act, G.L. c. 21, §§ 26-53, 314 CMR 3.00, and State Surface Water Quality Standards at 314 CMR 4.00. EPA has requested that the State certify this draft permit pursuant to Section 401 of the Clean Water Act and expects that the draft permit will be certified.

#### INFORMATION ABOUT THE DRAFT PERMIT:

The draft permit and explanatory fact sheet may be obtained at no cost at <a href="http://www.epa.gov/region1/npdes/draft">http://www.epa.gov/region1/npdes/draft</a> permits listing ma.html or by contacting:

George Papadopoulos
U.S. Environmental Protection Agency – Region 1
5 Post Office Square, Suite 100 (06-1)
Boston, MA 02109-3912
Telephone: (617) 918-1579
Papadopoulos.George@epa.gov

The administrative record containing all documents relating to this draft permit including all data submitted by the applicant may be inspected at the EPA Boston office mentioned above between 9:00 a.m. and 5:00 p.m., Monday through Friday, except holidays.

## PUBLIC COMMENT AND REQUEST FOR PUBLIC HEARING:

All persons, including applicants, who believe any condition of this draft permit is inappropriate, must raise all issues and submit all available arguments and all supporting material for their arguments in full by **July 25, 2019**, to the address or email address listed above. Any person, prior to such date, may submit a request in writing to EPA and MassDEP for a public hearing to consider this draft permit. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on this draft permit, the Regional Administrator will respond to all significant comments and make the responses available to the public at EPA's Boston office.

#### FINAL PERMIT DECISION:

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice.

LEALDON LANGLEY, DIRECTOR DIVISION OF WATERSHED MANAGEMENT MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION KEN MORAFF, DIRECTOR WATER DIVISION EPA – REGION 1