

**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”),

**Clean Harbors of Braintree, Inc.**

is authorized to discharge from a facility located at

**Clean Harbors of Braintree, Inc.  
1 Hill Avenue  
Braintree, MA 02185**

to receiving water named

**Weymouth Fore River  
Boston Harbor Watershed**

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

This Permit shall become effective on [*the first day of the calendar month immediately following 60 days after signature*].<sup>1</sup>

This Permit expires at midnight on [*five years from the last day of the month preceding the effective date*].

This Permit supersedes the Permit issued on May 9, 2011.

This Permit consists of this **cover page, Part I, Attachment A** (Marine Acute Toxicity Test Procedure and Protocol, July 2012), and **Part II** (NPDES Part II Standard Conditions, April 2018).

Signed this        day of

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

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<sup>1</sup> Pursuant to 40 Code of Federal Regulations (CFR) § 124.15(b)(3), if no comments requesting a change to the Draft Permit are received, the permit will become effective upon the date of signature. Procedures for appealing EPA’s Final Permit decision may be found at 40 CFR § 124.19.

**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 treated stormwater and groundwater seepage collected within the facility property, including secondary containment areas and from the adjacent property through Outfall Serial Number 001 to the Weymouth Fore River. The discharge shall be limited and monitored as specified below; the receiving water shall be monitored as specified below.

Effluent Characteristic	Effluent Limitations		Monitoring Requirements <sup>1,2,3</sup>	
	Average Monthly	Maximum Daily	Measurement Frequency <sup>4</sup>	Sample Type <sup>5</sup>
Flow Rate <sup>6</sup>	---	350 gpm	Continuous when discharging	Meter/Recorder
Total Flow <sup>7</sup>	---	Report Mgal/month	Continuous when discharging	Meter/Recorder
Number of Events <sup>7</sup>	---	Report #/month	Continuous when discharging	Count
Total Suspended Solids (TSS)	20 mg/L	30 mg/L	Monthly	Composite
Oil and Grease	---	5 mg/L	Semiannually	Grab
pH <sup>8</sup>	6.5 - 8.5 S.U.		Weekly	Grab
Total Group I PAHs <sup>9</sup>	---	1 ug/L	Semiannually	Composite
Total Group II PAHs <sup>9</sup>	---	10 ug/L	Semiannually	Composite
Total Benzene	---	5 ug/L	Semiannually	Grab
BTEX <sup>10</sup>	---	100 ug/L	Semiannually	Grab
Total Polychlorinated Biphenyls (PCBs) <sup>11</sup>	0.03 ug/L	---	Semiannually	Composite
Fecal Coliform	---	Report cfu/100mL	Monthly	Grab
<i>Enterococcus</i> <sup>12</sup>	---	Report cfu/100mL	Monthly	Grab
Total Antimony	206 ug/L	249 ug/L	Semiannually	Composite
Total Arsenic	36 ug/L	69 ug/L	Semiannually	Composite
Total Cadmium	8.8 ug/L	17.2 ug/L	Semiannually	Composite

Effluent Characteristic	Effluent Limitations		Monitoring Requirements <sup>1,2,3</sup>	
	Average Monthly	Maximum Daily	Measurement Frequency <sup>4</sup>	Sample Type <sup>5</sup>
Total Chromium	323 ug/L	746 µg/L	Semiannually	Composite
Total Cobalt	124 ug/L	192 ug/L	Semiannually	Composite
Total Copper	3.1 ug/L	4.8 ug/L	Semiannually	Composite
Total Lead	8.1 ug/L	210 ug/L	Semiannually	Composite
Total Mercury	0.739 ug/L	1.8 ug/L	Semiannually	Composite
Total Nickel	8.2 ug/L	74 ug/L	Semiannually	Composite
Total Selenium	71 ug/L	290 ug/L	Semiannually	Composite
Total Silver	---	1.9 ug/L	Semiannually	Composite
Total Tin	120 ug/L	409 ug/L	Semiannually	Composite
Total Titanium	61.8 ug/L	94.7 ug/L	Semiannually	Composite
Total Vanadium	66.2 ug/L	218 ug/L	Semiannually	Composite
Total Zinc	81 ug/L	90 ug/L	Semiannually	Composite
Bis(2-ethylhexyl) phthalate	101 ug/L	215 ug/L	Annually	Grab
Butylbenzyl phthalate	88.7 ug/L	188 ug/L	Annually	Grab
Carbazole	276 ug/L	598 ug/L	Annually	Grab
n-Decane	437 ug/L	948 ug/L	Annually	Grab
n-Octadecane	302 ug/L	589 ug/L	Annually	Grab
Perfluorohexanesulfonic acid (PFHxS) <sup>13,14</sup>	---	Report ng/L	Quarterly	Composite
Perfluoroheptanoic acid (PFHpA) <sup>13,14</sup>	---	Report ng/L	Quarterly	Composite
Perfluorononanoic acid (PFNA) <sup>13,14</sup>	---	Report ng/L	Quarterly	Composite
Perfluorooctanesulfonic acid (PFOS) <sup>13,14</sup>	---	Report ng/L	Quarterly	Composite
Perfluorooctanoic acid (PFOA) <sup>13,14</sup>	---	Report ng/L	Quarterly	Composite
Perfluorodecanoic acid (PFDA) <sup>13,14</sup>	---	Report ng/L	Quarterly	Composite

Effluent Characteristic	Effluent Limitations		Monitoring Requirements <sup>1,2,3</sup>	
	Average Monthly	Maximum Daily	Measurement Frequency <sup>4</sup>	Sample Type <sup>5</sup>
Whole Effluent Toxicity (WET) Testing <sup>15,16</sup>				
LC <sub>50</sub>	---	≥100 %	Annually	Composite
NOEC	---	Report %	Annually	Composite
Total Organic Carbon	---	Report mg/L	Annually	Composite
Ammonia Nitrogen	---	Report mg/L	Annually	Composite
Total Cadmium	---	Report mg/L	Annually	Composite
Total Copper	---	Report mg/L	Annually	Composite
Total Nickel	---	Report mg/L	Annually	Composite
Total Lead	---	Report mg/L	Annually	Composite
Total Zinc	---	Report mg/L	Annually	Composite

Ambient Characteristic <sup>17</sup>	Reporting Requirements		Monitoring Requirements <sup>1,2,3</sup>	
	Average Monthly	Maximum Daily	Measurement Frequency <sup>4</sup>	Sample Type <sup>5</sup>
Salinity	---	Report ppt	Annually	Grab
Ammonia Nitrogen	---	Report mg/L	Annually	Grab
Total Cadmium	---	Report mg/L	Annually	Grab
Total Copper	---	Report mg/L	Annually	Grab
Total Nickel	---	Report mg/L	Annually	Grab
Total Lead	---	Report mg/L	Annually	Grab
Total Zinc	---	Report mg/L	Annually	Grab
pH <sup>18</sup>	---	Report S.U.	Annually	Grab
Temperature <sup>18</sup>	---	Report °C	Annually	Grab

**Footnotes:**

1. Effluent samples shall yield data representative of the discharge. A routine sampling program shall be developed in which samples are taken at the discharge pipe of the stormwater treatment system, prior to discharging into the Weymouth Fore River via the Hayward Creek Storm Culvert. Changes in sampling location must be approved in writing by the Environmental Protection Agency Region 1 (EPA). 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 CFR Part 136. Samples shall be collected from a storm event that follows an antecedent dry period of at least 72 hours (three days).
2. In accordance with 40 CFR § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR 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 CFR Part 136 or required under 40 CFR 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 µg/L, if the ML for a parameter is 50 µg/L). For calculating and reporting the average monthly concentration when one or more values are not detected, assign a value of zero to all non-detects and report the average of all the results. The number of exceedances shall be enumerated for each parameter on every Discharge Monitoring Report (DMR).
4. Measurement frequency of weekly is defined as the sampling of one discharge event in each seven-day calendar week. Measurement frequency of monthly is defined as the sampling of one discharge event in each calendar month. Measurement frequency of quarterly is defined as the sampling of one discharge event in each calendar quarter. Calendar quarters are defined as January through March, April through June, July through September, and October through December. Measurement frequency of semiannually is defined as the sampling of one discharge event during each half year. Half years are defined as January through June, inclusive and July through December, inclusive. Measurement frequency of annually is defined as the sampling of one discharge event during one calendar year. Annual sampling is required in August of each calendar year. If no discharge occurs in August, then the annual sample shall be collected during the next discharge event. Semiannual and annual sampling shall be performed concurrently with the monthly monitoring events. If no sample is collected during the

measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator (NODI) Code.

5. Grab samples shall be taken and composite samples shall begin when the discharge includes stormwater from one or more secondary containment areas. At least one sample per year must be taken when the discharge includes stormwater from the dike/tank farm containment area. Each composite sample must be collected proportional to flow, either by collecting a constant sample volume at varying time intervals proportional to the wastewater flow or collected by varying the volume of each individual aliquot proportional to the flow, while maintaining a constant time interval between the aliquots. Each composite sample will consist of at least eight aliquots taken during one consecutive 24-hour period, unless the discharge event lasts for a lesser period but not less than three hours. A composite sample collected over a period less than three hours is not valid.
6. The maximum discharge rate shall not exceed 350 gallons per minute (gpm). The Permittee shall report the maximum instantaneous flow rate of water discharged by the facility during the reporting period. The reported maximum instantaneous flow rate, measured in gpm, shall be based upon an appropriately calibrated flow measuring device.
7. Report total monthly discharge flow. Total monthly flow shall be reported in the units of millions of gallons per month (Mgal/month). The Permittee shall also report the total number of days during the reporting period for which there was a discharge from the outfall (to be noted on DMR form under "Event Total" parameter).
8. The pH shall be within the specified range at all times. The minimum and maximum pH sample measurement values for the month shall be reported in standard units (S.U.) and the number of exceedances shall be reported for each monthly period on DMRs.
9. For the purposes of this Permit, Polycyclic Aromatic Hydrocarbons (PAHs) analysis must be completed using a test method in 40 CFR Part 136 that achieves a minimum level no greater than 0.1 ug/L for each individual Group I PAH compound and 5.0 µg/L for each individual Group II PAH compound.
10. BTEX shall be reported as the sum of the detectable concentrations of benzene, toluene, ethylbenzene and (m,o,p) xylenes. For the purposes of this Permit, BTEX analysis must be completed using a test method in 40 CFR Part 136 that achieves a minimum level of detection no greater than 0.5 µg/L for each individual BTEX compound.
11. For the purposes of this Permit, total polychlorinated biphenyls (PCBs) analysis must be completed using a test method in 40 CFR Part 136 that achieves a minimum level of detection no greater than 0.5 µg/L for each Aroclor compound. **The compliance level for total PCBs is 0.5 µg/L.**
12. After 12 monthly sampling events showing Fecal Coliform and/or *Enterococcus* results that meet the state WQS at 314 CMR 4.05(4)(b)(4), the Permittee may request

discontinuation of sampling. Discontinuation of Fecal Coliform and/or *Enterococcus* sampling will not be in effect until the Permittee receives written notice from EPA.

13. This reporting requirement for the listed PFAS parameters takes effect six months after EPA's multi-lab validated method for wastewater is made available to the public on EPA's CWA methods program website. See <https://www.epa.gov/cwa-methods/other-clean-water-act-test-methods-chemical> and <https://www.epa.gov/cwa-methods>.
14. After one year of monitoring, if all samples are non-detect for all six PFAS compounds, using EPA's multi-lab validated method for wastewater, the Permittee may request to remove the requirement for PFAS monitoring. See Special Condition in Part I.C.3.
15. The Permittee shall conduct acute toxicity tests (LC<sub>50</sub>) annually in accordance with test procedures and protocols specified in **Attachment A** of this Permit. LC<sub>50</sub> is defined in Part II.E. of this Permit. The Permittee shall test Mysid Shrimp (*Americamysis bahia*), and Inland Silverside (*Menidia beryllina*). The complete report for each toxicity test shall be submitted as an attachment to the DMR submittal that includes the results for that toxicity test.
16. For Part I.A.1., Whole Effluent Toxicity Testing, the Permittee shall conduct the analyses specified in **Attachment A**, Part VI. CHEMICAL ANALYSIS for the effluent sample. If toxicity test(s) using the receiving water as diluent show the receiving water to be toxic or unreliable, the Permittee shall follow procedures outlined in **Attachment A**, Section IV., DILUTION WATER. Even where alternate dilution water has been used, the results of the receiving water control (0% effluent) analyses must be reported. Minimum levels and test methods are specified in **Attachment A**, Part VI. CHEMICAL ANALYSIS.
17. For Part I.A.1., Ambient Characteristic, the Permittee shall conduct the analyses specified in **Attachment A**, Part VI. CHEMICAL ANALYSIS for the receiving water sample collected as part of the WET testing requirements. Such samples shall be taken from the receiving water at a point immediately upstream of the permitted discharge's zone of influence at a reasonably accessible location, as specified in **Attachment A**. Minimum levels and test methods are specified in **Attachment A**, Part VI. CHEMICAL ANALYSIS.
18. A pH and temperature measurement shall be taken of each receiving water sample at the time of collection and the results reported on the appropriate DMR. These pH and temperature measurements are independent from any pH and temperature measurements required by the WET testing protocols.

**Part I.A. continued.**

2. The discharge shall not cause a violation of the water quality standards of the receiving water.
3. 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.
4. The discharge shall be free from pollutants in concentrations or combinations that adversely affect the physical, chemical, or biological nature of the banks or bottom of the water course.
5. The discharge shall not result in pollutants in concentrations or combinations in the receiving water that are toxic to humans, aquatic life or wildlife.
6. 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.
7. 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.
8. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify EPA as soon as they know or have reason to believe (40 CFR § 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 ( $\mu\text{g/L}$ );
    - (2) 200  $\mu\text{g/L}$  for acrolein and acrylonitrile; 500  $\mu\text{g/L}$  for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter ( $\text{mg/L}$ ) for antimony;
    - (3) Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
    - (4) Any other notification level established by EPA in accordance with 40 CFR § 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  $\mu\text{g/L}$ ;

- (2) One mg/L for antimony;
  - (3) Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
  - (4) Any other notification level established by EPA in accordance with 40 CFR § 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 that was not reported in the permit application.

## **B. UNAUTHORIZED DISCHARGES**

1. This Permit authorizes discharges only from the outfall listed in Part I.A.1 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 the receiving water of any sand filter backwash solids/sludge, ion exchange column regeneration wastewater, and any sludge and/or bottom deposits from any storage tank or basin at the facility is prohibited.
3. The discharge to the receiving water of any laboratory waste generated at the facility is prohibited.

## **C. SPECIAL CONDITIONS**

1. Best Management Practices (BMPs)

The Permittee shall design, install, and implement control measures to minimize pollutant discharges from the operations at the facility to the receiving water. At a minimum, the Permittee must implement control measures, both structural controls (e.g., oil/water separators, containment areas, holding tanks) and non-structural (e.g., operational procedures and operator training).

- a. The Permittee must comply with the following limitations described in Part 2.1.2 and of EPA's Multi-Sector General Permit (MSGP):
  - (1) Minimize exposure of processing and material storage areas to stormwater discharges;
  - (2) Design good housekeeping measures to maintain areas that are potential sources of pollutants;
  - (3) Implement preventative maintenance programs to avoid leaks, spills, and other releases of pollutants to stormwater that is discharged to receiving waters;
  - (4) Implement spill prevention and response procedures to ensure effective response to spills and leaks if or when they occur. The Permittee shall report immediately the appearance of any size sheen attributable to the discharge from the facility to the

- appropriate U.S. Coast Guard Officer in accordance with Section 311 of the Clean Water Act (CWA);
- (5) 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;
  - (6) Utilize runoff management practices to divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff;
  - (7) Develop proper handling procedures for salt or materials containing chlorides that are used for snow and ice control;
  - (8) Conduct employee training to ensure personnel understand the requirements of this Permit;
  - (9) Evaluate for the presence of non-stormwater discharges. Any non-stormwater discharges not explicitly authorized in the Permit or covered by another NPDES permit must be eliminated.
  - (10) Minimize dust generation and vehicle tracking of industrial materials;
- b. In addition to the general limitations described above, the Permittee must design, install, and implement the following BMPs:
- (1) The Permittee shall comply with the inspection requirements in Part 3.1 and 3.2 of the 2015 MSGP and the corrective action requirements in Part 4.1 through 4.5 of the 2015 MSGP.<sup>2</sup> For the purposes of this Permit, the following must be included: areas exposed to stormwater, potential pollutant sources, discharge points, and control measures.
  - (2) The Permittee shall comply with the control measure requirements in Part 2.1 and 2.1.1 of the 2015 MSGP in order to identify pollutant sources and select, design, install and maintain the pollution control technology necessary to meet the effluent limitations in this Permit that ensure dilution is not used as a form of treatment;
  - (3) The Permittee shall document the measures and methods used to control flow through the stormwater treatment system to ensure that the design flow of the treatment system is not exceeded; and
  - (4) The Permittee shall document monitoring requirements, sample analysis procedures, a schedule for the review of sample results and data validation and reporting processes.

## 2. Stormwater Pollution Prevention Plan (SWPPP)

The Permittee shall maintain a Stormwater Pollution Prevention Plan (SWPPP) to document the selection, design and installation of control measures, including BMPs selected to meet the effluent limitations required in this Permit, and, consistent with Parts 2.1.2 of the 2015 MSGP, minimize the discharge of pollutants from the operations at the facility to the receiving water. The SWPPP shall be a written document and consistent with the terms of this Permit.

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<sup>2</sup> Where the MSGP refers to limitations, conditions or benchmarks, including the SWPPP, for the purposes of this Permit, these shall refer to the limitations and conditions in this Permit.

- a. The SWPPP shall be updated and signed consistent with the signatory requirements in Part II.D.2 of this Permit within 90 days after the effective date of this Permit.
- b. The SWPPP shall be consistent with the general provisions for SWPPPs included in Part 5 of EPA's MSGP. The SWPPP shall be prepared in accordance with good engineering practices and manufacturer's specifications. The SWPPP must identify potential sources of pollution that may reasonably be expected to affect the quality of the stormwater discharges, and document implementation of non-numeric technology based effluent limitations described in Part I.C.1 that will be used to reduce the pollutants and assure compliance with this Permit. Specifically, the SWPPP shall contain the elements listed in Parts 5.2.1 through 5.2.5 of the 2015 MSGP that are briefly described below:
  - Stormwater pollution prevention team;
  - Site description;
  - Drainage area site map;
  - 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.
- c. The Permittee shall amend and update the SWPPP within 14 days of any changes at the facility affecting the SWPPP. Changes that may affect the SWPPP include, but are not limited to: a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States; a release of a reportable quantity of pollutants as described in 40 CFR § 302; a determination by the Permittee or EPA that the SWPPP appears to be ineffective in achieving the general objective of controlling pollutants in stormwater discharges associated with industrial activity; and revisions or improvements are made to the stormwater management program based on new information and experiences with wet weather events. Any amended or new versions of the SWPPP shall be re-certified by the Permittee. Such re-certifications also shall be signed in accordance with the requirements identified in Part II.D.2 of this Permit.
- d. The Permittee shall certify at least annually that the previous year's inspections, corrective actions, control measures, and training activities were conducted, results were recorded, and records were maintained, as described. If the facility is not in compliance with any limitations and/or BMPs, the annual certification shall state the non-compliance and the remedies that are or will be undertaken. Such annual certifications also shall be signed in accordance with the requirements identified in Part II.D.2 of this Permit. The Permittee shall keep a copy of the current SWPPP and all SWPPP certifications (i.e., the initial certification, recertifications, and annual certifications) signed during the effective period of this Permit at the facility and shall make them available for inspection by EPA. All documentation of SWPPP activities shall be kept at the facility for at least three years and provided to EPA upon request.

3. After one year of monitoring, if all samples are non-detect for all six PFAS compounds, using EPA's multi-lab validated method for wastewater, the Permittee may request to remove the requirement for PFAS monitoring. Until written notice is received from EPA indicating that the monitoring requirements have been changed, the Permittee is required to continue the monitoring specified in this Permit. *See Reporting Requirements in Part I.D.3.a.(5).*

#### 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

The Permittee shall continue to submit its monthly monitoring data in discharge monitoring reports (DMRs) to EPA and the State electronically using NetDMR no later than the 15th day of the month following the monitoring period. When the Permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to EPA or the State. NetDMR is accessible through EPA's Central Data Exchange at <https://cdx.epa.gov/>.

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. See Part I.D.5. for more information on State reporting. 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 following the monitoring period), 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 Water Division (WD)

- a. The following requests, reports, and information described in this Permit shall be submitted to the NPDES Applications Coordinator in the EPA WD:
  - (1) Transfer of Permit notice;
  - (2) Request for changes in sampling location;
  - (3) Request discontinuation of Fecal Coliform and/or *Enterococcus* sampling;
  - (4) SWPPP reports and certifications;
  - (5) Request for discontinuation of per- and polyfluoroalkyl substances (PFAS) sampling requirements (see Part I.A.1, footnote 14); and
  - (6) Report on unacceptable dilution water/request for alternative dilution water for WET testing.

- b. These reports, information, and requests shall be submitted to EPA WD electronically at [R1NPDESReporting@epa.gov](mailto:R1NPDESReporting@epa.gov) or by hard copy mail to the following address:

**U.S. Environmental Protection Agency  
Water Division  
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) Prior to December 21, 2020, written notifications required under Part II. Starting on December 21, 2020, such notifications must be done electronically using EPA's NPDES Electronic Reporting Tool ("NeT"), or another approved EPA system, which will be accessible through EPA's Central Data Exchange at <https://cdx.epa.gov/>.

- b. This information shall be submitted to EPA ECAD at the following address:

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

5. State Reporting

Duplicate signed copies of all WET test reports shall be submitted to the Massachusetts Department of Environmental Protection at the following address:

**Massachusetts Department of Environmental Protection  
Bureau of Water Resources  
Division of Watershed Management  
8 New Bond Street  
Worcester, Massachusetts 01606**

6. Verbal Reports and Verbal Notifications

- a. Any verbal reports or verbal notifications required in Parts I and II of this Permit shall be made to both EPA and to the State. This includes verbal reports and notifications that 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 Enforcement and Compliance Assurance Division at:

**617-918-1510**

- c. Verbal reports and verbal notifications shall be made to the State's Emergency Response at:

**888-304-1133**

**E. STATE PERMIT CONDITIONS**

This Permit is in the process of receiving state water quality certification issued by the State under § 401(a) of the CWA and 40 CFR § 124.53. EPA will incorporate by reference all state water quality certification requirements (if any) into the Final Permit.

# MARINE ACUTE TOXICITY TEST PROCEDURE AND PROTOCOL

## I. GENERAL REQUIREMENTS

The permittee shall conduct acceptable acute toxicity tests in accordance with the appropriate test protocols described below:

- **2007.0 - Mysid Shrimp (Americamysis bahia) definitive 48 hour test.**
- **2006.0 - Inland Silverside (Menidia beryllina) definitive 48 hour test.**

Acute toxicity data shall be reported as outlined in Section VIII.

## II. METHODS

The permittee shall use the most recent 40 CFR Part 136 methods. Whole Effluent Toxicity (WET) Test Methods and guidance may be found at:

<http://water.epa.gov/scitech/methods/cwa/wet/index.cfm#methods>

The permittee shall also meet the sampling, analysis and reporting requirements included in this protocol. This protocol defines more specific requirements while still being consistent with the Part 136 methods. If, due to modifications of Part 136, there are conflicting requirements between the Part 136 method and this protocol, the permittee shall comply with the requirements of the Part 136 method.

## III. SAMPLE COLLECTION

A discharge and receiving water sample shall be collected. The receiving water control sample must be collected immediately upstream of the permitted discharge's zone of influence. The acceptable holding times until initial use of a sample are 24 and 36 hours for on-site and off-site testing, respectively. A written waiver is required from the regulating authority for any holding time extension. Sampling guidance dictates that, where appropriate, aliquots for the analysis required in this protocol shall be split from the samples, containerized and immediately preserved, or analyzed as per 40 CFR Part 136. EPA approved test methods require that samples collected for metals analyses be preserved immediately after collection. Testing for the presence of total residual chlorine<sup>1</sup> (TRC) must be analyzed immediately or as soon as possible, for all effluent samples, prior to WET testing. TRC analysis may be performed on-site or by the toxicity testing laboratory and the samples must be dechlorinated, as necessary, using sodium thiosulfate

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<sup>1</sup> For this protocol, total residual chlorine is synonymous with total residual oxidants.  
(July 2012)

prior to sample use for toxicity testing. If performed on site the results should be included on the chain of custody (COC) presented to WET laboratory.

Standard Methods for the Examination of Water and Wastewater describes dechlorination of samples (APHA, 1992). Dechlorination can be achieved using a ratio of 6.7 mg/L anhydrous sodium thiosulfate to reduce 1 mg/L chlorine. If dechlorination is necessary, a thiosulfate control consisting of the maximum concentration of thiosulfate used to dechlorinate the sample in the toxicity test control water must also be run in the WET test.

All samples submitted for chemical and physical analyses will be analyzed according to Section VI of this protocol. Grab samples must be used for pH, temperature, and total residual chlorine (as per 40 CFR Part 122.21).

All samples held for use beyond the day of sampling shall be refrigerated and maintained at a temperature range of 0-6° C.

#### **IV. DILUTION WATER**

Samples of receiving water must be collected from a reasonably accessible location in the receiving water body immediately upstream of the permitted discharge's zone of influence. Avoid collection near areas of obvious road or agricultural runoff, storm sewers or other point source discharges and areas where stagnant conditions exist. EPA strongly urges that screening for toxicity be performed prior to the set up of a full, definitive toxicity test any time there is a question about the test dilution water's ability to achieve test acceptability criteria (TAC) as indicated in Section V of this protocol. The test dilution water control response will be used in the statistical analysis of the toxicity test data. All other control(s) required to be run in the test will be reported as specified in the Discharge Monitoring Report (DMR) Instructions, Attachment F, page 2, Test Results & Permit Limits.

The test dilution water must be used to determine whether the test met the applicable TAC. When receiving water is used for test dilution, an additional control made up of standard laboratory water (0% effluent) is required. This control will be used to verify the health of the test organisms and evaluate to what extent, if any, the receiving water itself is responsible for any toxic response observed.

If dechlorination of a sample by the toxicity testing laboratory is necessary a "sodium thiosulfate" control, representing the concentration of sodium thiosulfate used to adequately dechlorinate the sample prior to toxicity testing, must be included in the test.

If the use of alternate dilution water (ADW) is authorized, in addition to the ADW test control, the testing laboratory must, for the purpose of monitoring the receiving water, also run a receiving water control.

If the receiving water is found to be, or suspected to be toxic or unreliable, ADW of known quality with hardness similar to that of the receiving water may be substituted. Substitution is

species specific meaning that the decision to use ADW is made for each species and is based on the toxic response of that particular species. Substitution to an ADW is authorized in two cases. The first case is when repeating a test due to toxicity in the site dilution water requires an **immediate decision** for ADW use by the permittee and toxicity testing laboratory. The second is when two of the most recent documented incidents of unacceptable site dilution water toxicity require ADW use in future WET testing.

For the second case, written notification from the permittee requesting ADW use **and** written authorization from the permit issuing agency(s) is required **prior to** switching to a long-term use of ADW for the duration of the permit.

Written requests for use of ADW must be mailed with supporting documentation to the following addresses:

Director  
Office of Ecosystem Protection (CAA)  
U.S. Environmental Protection Agency, Region 1  
Five Post Office Square, Suite 100  
Mail Code OEP06-5  
Boston, MA 02109-3912

and

Manager  
Water Technical Unit (SEW)  
U.S. Environmental Protection Agency  
Five Post Office Square, Suite 100  
Mail Code OES04-4  
Boston, MA 02109-3912

Note: USEPA Region 1 retains the right to modify any part of the alternate dilution water policy stated in this protocol at any time. Any changes to this policy will be documented in the annual DMR posting.

*See the most current annual DMR instructions which can be found on the EPA Region 1 website at <http://www.epa.gov/region1/enforcementandassistance/dmr.html> for further important details on alternate dilution water substitution requests.*

## **V. TEST CONDITIONS AND TEST ACCEPTABILITY CRITERIA**

EPA Region 1 requires tests be performed using four replicates of each control and effluent concentration because the non-parametric statistical tests cannot be used with data from fewer replicates. The following tables summarize the accepted Americamysis and Menidia toxicity test conditions and test acceptability criteria:

**EPA NEW ENGLAND EFFLUENT TOXICITY TEST CONDITIONS FOR THE MYSID, AMERICAMYSIS BAHIA 48 HOUR TEST<sup>1</sup>**

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1. Test type	48hr Static, non-renewal
2. Salinity	25ppt $\pm$ 10 percent for all dilutions by adding dry ocean salts
3. Temperature ( $^{\circ}$ C)	20 $^{\circ}$ C $\pm$ 1 $^{\circ}$ C or 25 $^{\circ}$ C $\pm$ 1 $^{\circ}$ C, temperature must not deviate by more than 3 $^{\circ}$ C during test
4. Light quality	Ambient laboratory illumination
5. Photoperiod	16 hour light, 8 hour dark
6. Test chamber size	250 ml (minimum)
7. Test solution volume	200 ml/replicate (minimum)
8. Age of test organisms	1-5 days, <u><math>\leq</math> 24 hours age range</u>
9. No. Mysids per test chamber	10
10. No. of replicate test chambers per treatment	4
11. Total no. Mysids per test concentration	40
12. Feeding regime	Light feeding using concentrated <u>Artemia</u> naupli while holding prior to initiating the test
13. Aeration <sup>2</sup>	None
14. Dilution water	5-30 ppt, +/- 10%; Natural seawater, or deionized water mixed with artificial sea salts
15. Dilution factor	$\geq$ 0.5
16. Number of dilutions <sup>3</sup>	5 plus a control. An additional dilution at the permitted effluent concentration (%)

effluent) is required if it is not included in the dilution series.

17. Effect measured	Mortality - no movement of body appendages on gentle prodding
18. Test acceptability	90% or greater survival of test organisms in control solution
19. Sampling requirements	For on-site tests, samples are used within 24 hours of the time that they are removed from the sampling device. For off-site tests, samples must be first used within 36 hours of collection.
20. Sample volume required	Minimum 1 liter for effluents and 2 liters for receiving waters

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Footnotes:

- <sup>1</sup> Adapted from EPA 821-R-02-012.
- <sup>2</sup> If dissolved oxygen falls below 4.0 mg/L, aerate at rate of less than 100 bubbles/min. Routine D.O. checks are recommended.
- <sup>3</sup> When receiving water is used for dilution, an additional control made up of standard laboratory dilution water (0% effluent) is required.

**EPA NEW ENGLAND TOXICITY TEST CONDITIONS FOR THE INLAND SILVERSIDE, MENIDIA BERYLLINA 48 HOUR TEST<sup>1</sup>**

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1. Test Type	48 hr Static, non-renewal
2. Salinity	25 ppt $\pm$ 10 % by adding dry ocean salts
3. Temperature	20°C $\pm$ 1°C or 25°C $\pm$ 1°C, temperature must not deviate by more than 3°C during test
4. Light Quality	Ambient laboratory illumination
5. Photoperiod	16 hr light, 8 hr dark
6. Size of test vessel	250 mL (minimum)
7. Volume of test solution	200 mL/replicate (minimum)
8. Age of fish	9-14 days; 24 hr age range
9. No. fish per chamber	10 (not to exceed loading limits)
10. No. of replicate test vessels per treatment	4
11. Total no. organisms per concentration	40
12. Feeding regime	Light feeding using concentrated <u>Artemia</u> nauplii while holding prior to initiating the test
13. Aeration <sup>2</sup>	None
14. Dilution water	5-32 ppt, +/- 10% ; Natural seawater, or deionized water mixed with artificial sea salts.
15. Dilution factor	$\geq$ 0.5
16. Number of dilutions <sup>3</sup>	5 plus a control. An additional dilution at the permitted concentration (% effluent) is required if it is not included in the dilution series.
17. Effect measured	Mortality-no movement on gentle prodding.

18. Test acceptability	90% or greater survival of test organisms in control solution.
19. Sampling requirements	For on-site tests, samples must be used within 24 hours of the time they are removed from the sampling device. Off-site test samples must be used within 36 hours of collection.
20. Sample volume required	Minimum 1 liter for effluents and 2 liters for receiving waters.

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Footnotes:

- <sup>1</sup> Adapted from EPA 821-R-02-012.
- <sup>2</sup> If dissolved oxygen falls below 4.0 mg/L, aerate at rate of less than 100 bubbles/min. Routine D.O. checks recommended.
- <sup>3</sup> When receiving water is used for dilution, an additional control made up of standard laboratory dilution water (0% effluent) is required.

V.1. Test Acceptability Criteria

If a test does not meet TAC the test must be repeated with fresh samples within 30 days of the initial test completion date.

V.2. Use of Reference Toxicity Testing

Reference toxicity test results and applicable control charts must be included in the toxicity testing report.

In general, if reference toxicity test results fall outside the control limits established by the laboratory for a specific test endpoint, a reason or reasons for this excursion must be evaluated, correction made and reference toxicity tests rerun as necessary as prescribed below.

If a test endpoint value exceeds the control limits at a frequency of more than one out of twenty then causes for the reference toxicity test failure must be examined and if problems are identified corrective action taken. The reference toxicity test must be repeated during the same month in which the exceedance occurred.

If two consecutive reference toxicity tests fall outside control limits, the possible cause(s) for the exceedance must be examined, corrective actions taken and a repeat of the reference toxicity test must take place immediately. Actions taken to resolve the problem must be reported.

### V.2.a. Use of Concurrent Reference Toxicity Testing

In the case where concurrent reference toxicity testing is required due to a low frequency of testing with a particular method, if the reference toxicity test results fall slightly outside of laboratory established control limits, but the primary test met the TAC, the results of the primary test will be considered acceptable. However, if the results of the concurrent test fall well outside the established **upper** control limits i.e.  $\geq 3$  standard deviations for IC25s and LC50 values and  $\geq$  two concentration intervals for NOECs or NOAECs, and even though the primary test meets TAC, the primary test will be considered unacceptable and must be repeated.

## **VI. CHEMICAL ANALYSIS**

At the beginning of the static acute test, pH, salinity, and temperature must be measured at the beginning and end of each 24 hour period in each dilution and in the controls. The following chemical analyses shall be performed for each sampling event.

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<u>Parameter</u>	<u>Effluent</u>	<u>Diluent</u>	<u>Minimum Level for effluent<sup>*1</sup> (mg/L)</u>
pH	x	x	---
Salinity	x	x	ppt(o/oo)
Total Residual Chlorine <sup>*2</sup>	x	x	0.02
Total Solids and Suspended Solids	x	x	---
Ammonia	x	x	0.1
Total Organic Carbon	x	x	0.5
<u>Total Metals</u>			
Cd	x	x	0.0005
Pb	x	x	0.0005
Cu	x	x	0.003
Zn	x	x	0.005
Ni	x	x	0.005

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### Superscript:

<sup>\*1</sup> These are the minimum levels for effluent (fresh water) samples. Tests on diluents (marine waters) shall be conducted using the Part 136 methods that yield the lowest MLs.

<sup>\*2</sup> Either of the following methods from the 18th Edition of the APHA Standard Methods for the Examination of Water and Wastewater must be used for these analyses:

- Method 4500-Cl E Low Level Amperometric Titration (the preferred method);
- Method 4500-CL G DPD Photometric Method.

## **VII. TOXICITY TEST DATA ANALYSIS**

### LC50 Median Lethal Concentration

An estimate of the concentration of effluent or toxicant that is lethal to 50% of the test organisms during the time prescribed by the test method.

Methods of Estimation:

- Probit Method
- Spearman-Karber
- Trimmed Spearman-Karber
- Graphical

See flow chart in Figure 6 on page 73 of EPA 821-R-02-012 for appropriate method to use on a given data set.

### No Observed Acute Effect Level (NOAEL)

See flow chart in Figure 13 on page 87 of EPA 821-R-02-012.

## **VIII. TOXICITY TEST REPORTING**

A report of results must include the following:

- Toxicity Test summary sheet(s) (Attachment F to the DMR Instructions) which includes:
  - Facility name
  - NPDES permit number
  - Outfall number
  - Sample type
  - Sampling method
  - Effluent TRC concentration
  - Dilution water used
  - Receiving water name and sampling location
  - Test type and species
  - Test start date
  - Effluent concentrations tested (%) and permit limit concentration
  - Applicable reference toxicity test date and whether acceptable or not
  - Age, age range and source of test organisms used for testing
  - Results of TAC review for all applicable controls
  - Permit limit and toxicity test results
  - Summary of any test sensitivity and concentration response evaluation that was conducted

Please note: The NPDES Permit Program Instructions for the Discharge Monitoring Report Forms (DMRs) are available on EPA's website at

<http://www.epa.gov/NE/enforcementandassistance/dmr.html>

In addition to the summary sheets the report must include:

- A brief description of sample collection procedures;
- Chain of custody documentation including names of individuals collecting samples, times and dates of sample collection, sample locations, requested analysis and lab receipt with time and date received, lab receipt personnel and condition of samples upon receipt at the lab(s);
- Reference toxicity test control charts;
- All sample chemical/physical data generated, including minimum levels (MLs) and analytical methods used;
- All toxicity test raw data including daily ambient test conditions, toxicity test chemistry, sample dechlorination details as necessary, bench sheets and statistical analysis;
- A discussion of any deviations from test conditions; and
- Any further discussion of reported test results, statistical analysis and concentration-response relationship and test sensitivity review per species per endpoint.

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

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

NPDES PART II STANDARD CONDITIONS  
(April 26, 2018)

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 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.
- (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

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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. Duty to Mitigate

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

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- 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.

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- 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 96-483 and 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

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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<sub>50</sub>* means the concentration of a sample that causes mortality of 50% of the test population at a specific time of observation. The LC<sub>50</sub> = 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

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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 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° Centigrade or measured at another temperature and then converted to an equivalent value at 25° 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

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(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
NH <sub>3</sub> -N	Ammonia nitrogen as nitrogen
NO <sub>3</sub> -N	Nitrate as nitrogen
NO <sub>2</sub> -N	Nitrite as nitrogen
NO <sub>3</sub> -NO <sub>2</sub>	Combined nitrate and nitrite nitrogen as nitrogen
TKN	Total Kjeldahl nitrogen as nitrogen
Oil & Grease	Freon extractable material
PCB	Polychlorinated biphenyl
Surfactant	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:** MA0031551

**PUBLIC NOTICE START AND END DATES:** July 17, 2020 – August 15, 2020

**NAME AND MAILING ADDRESS OF APPLICANT:**

Clean Harbors of Braintree, Inc.  
1 Hill Avenue  
Braintree, MA 02185

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

Clean Harbors of Braintree, Inc.  
1 Hill Avenue  
Braintree, MA 02185

**RECEIVING WATER AND CLASSIFICATION:**

Weymouth Fore River (MA74-14)  
Boston Harbor Watershed  
Class SB

**SIC CODE:** 4953 – Refuse Systems  
(NAICS Code: 562211 – Hazardous Waste Treatment and Disposal)

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## 1.0 Proposed Action

Clean Harbors of Braintree, Inc. (the “Permittee”) has applied to the U.S. Environmental Protection Agency (EPA) for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit to discharge from the Clean Harbors of Braintree, Inc. (CHBI or the “Facility”) into the Weymouth Fore River.

The permit currently in effect was issued on May 9, 2011 with an effective date of May 9, 2011 and expired on April 30, 2016 (the “2011 Permit”). The Permittee filed an application for permit reissuance with EPA dated April 16, 2016, as required by 40 Code of Federal Regulations (CFR) § 122.6. Since the permit application was deemed timely and complete by EPA on April 21, 2016, the Facility’s 2011 Permit has been administratively continued pursuant to 40 CFR § 122.6 and § 122.21(d). EPA and the State conducted a site visit on June 13, 2019.

## 2.0 Statutory and Regulatory Authority

Congress enacted the Federal Water Pollution Control Act, codified at 33 U.S.C. § 1251 - 1387 and commonly known as the Clean Water Act (CWA), “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 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 §§ 301(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. 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 CFR §§ 122, 124, 125, and 136.

“Congress has vested in the Administrator [of EPA] broad discretion to establish conditions for NPDES permits” in order to achieve the statutory mandates of Section 301 and 402. *Arkansas v. Oklahoma*, 503 U.S. 91, 105 (1992). *See also* 40 CFR §§ 122.4(d), 122.44(d)(1), and 122.44(d)(5). CWA §§ 301 and 306 provide 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 and 304(b); 40 CFR §§ 122, 125, and 131.

### 2.1 Technology-Based Requirements

Technology-based treatment requirements represent the minimum level of control that must be imposed under CWA §§ 301(b) and 402 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 CFR § 125 Subpart A.

Subpart A of 40 CFR Part 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 CWA § 402(a)(1). EPA promulgates New Source Performance Standards (NSPS) under CWA § 306 and 40 CFR § 401.12. *See also* 40 CFR §§ 122.2 (definition of “new source”) and 122.29.

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 CFR § 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 CWA § 402(a)(1)(B) 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* CWA § 301(b)(1)(C) and 40 CFR §§ 122.44(d)(1), 122.44(d)(5), 125.84(e) and 125.94(i).

### **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 CFR §§ 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) antidegradation 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 CFR § 131.12. The applicable State WQSs can be found in Title 314 of the Code of Massachusetts Regulations, Chapter 4 (314 CMR 4.00).

As a matter of state law, state WQSs specify different waterbody classifications, each of which is associated with certain designated uses and numeric and narrative water quality criteria. When using chemical-specific numeric criteria to develop permit limitations, 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, therefore, are typically applicable to monthly average limits.

When permit effluent limitation(s) are necessary to ensure that the receiving water meets narrative water quality criteria, the permitting authority must establish effluent limits in one of the following three ways: 1) 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,” 2) based on a “case-by-case basis” using CWA § 304(a) recommended water quality criteria, supplemented as necessary by other relevant information; or, 3) in certain circumstances, based on use of an indicator parameter. *See* 40 CFR § 122.44(d)(1)(vi)(A-C).

### **2.2.2 Antidegradation**

Federal regulations found at 40 CFR § 131.12 require states to develop and adopt a statewide antidegradation 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 antidegradation policy ensures maintenance of high-quality waters which exceed levels necessary to support propagation of fish, shellfish, and wildlife and to support recreation in and on the water, 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 antidegradation 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 antidegradation policy, and all existing in-stream uses, and the level of water quality necessary to protect the existing uses of a receiving water body must be maintained and protected.

This permit is being reissued with effluent limitations sufficiently stringent to satisfy the State’s antidegradation requirements, including the protection of the existing 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, 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 essentially provides a pollution budget designed to restore the health of an impaired water body. A TMDL typically identifies the source(s) of the pollutant from point sources and non-point sources, determines the maximum

load of the pollutant that the water body can tolerate while still attaining WQSs for the designated uses, and allocates that load among the various sources, including point source discharges, subject to NPDES permits. *See* 40 CFR § 130.7.

For impaired waters where a TMDL has been developed for a particular pollutant and the TMDL includes a waste load allocation (WLA) for a NPDES permitted discharge, the effluent limitation in the permit must be “consistent with the assumptions and requirements of any available WLA”. 40 CFR § 122.44(d)(1)(vii)(B).

#### **2.2.4 Reasonable Potential**

Pursuant to CWA § 301(b)(1)(C) and 40 CFR § 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 CFR § 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 CFR § 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 CFR § 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, the State waives, or is deemed to have waived, its right to certify. *See* 33 U.S.C. § 1341(a)(1). Regulations governing state certification are set forth in 40 CFR § 124.53 and § 124.55. EPA has requested permit certification by the State pursuant to 40 CFR § 124.53 and expects that the Draft Permit will be certified.

If the State believes that conditions more stringent than those contained in the Draft Permit are necessary to meet the requirements of either CWA §§ 208(e), 301, 302, 303, 306 and 307, or applicable requirements of State law, the State should include such conditions in its certification and, in each case, cite the CWA or State law provisions upon which that condition is based. Failure to provide such a citation waives the right to certify as to that condition. EPA includes properly supported State certification conditions in the NPDES permit. The only exception to this is that the permit conditions/requirements regulating sewage sludge management and

implementing CWA § 405(d) are not subject to the 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 EPA's permit appeal procedures of 40 CFR Part 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 final 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." 40 CFR § 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 limitations based upon WQSS and State requirements are contained in 40 CFR §§ 122.4(d) and 122.44(d).

### 2.3 Effluent Flow Requirements

Generally, EPA uses effluent flow both to determine whether an NPDES permit needs certain effluent limitations 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 CWA § 301(b)(1)(C). Should the effluent flow exceed the flow assumed in these calculations, the in-stream dilution would be reduced, and the calculated effluent limitations might not be sufficiently protective (i.e., might not 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 permit effluent limitation derivations remain sound for the duration of the permit, EPA may ensure the validity of its "worst-case" effluent flow assumptions through imposition of permit conditions for effluent flow.<sup>1</sup> In this regard, the effluent flow limitation is a component of WQBELs because the WQBELs are premised on a maximum level flow. The effluent flow limit is also 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 to carry out the objectives and satisfy the requirements of the CWA. *See* CWA §§ 402(a)(2) and 301(b)(1)(C); 40 CFR §§ 122.4(a) and (d), 122.43 and 122.44(d). A condition on the discharge designed to ensure the validity of EPA's WQBELs and reasonable potential calculations that account for

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<sup>1</sup> EPA's regulations regarding "reasonable potential" require EPA to consider "where appropriate, the dilution of the effluent in the receiving water," *id.* 40 CFR §122.44(d)(1)(ii). Both the effluent flow and receiving water flow may be considered when assessing reasonable potential. *In re Upper Blackstone Water Pollution Abatement Dist.*, 14 E.A.D. 577, 599 (EAB 2010). EPA guidance directs that this "reasonable potential" analysis be based on "worst-case" conditions. *See In re Washington Aqueduct Water Supply Sys.*, 11 E.A.D. 565, 584 (EAB 2004).

“worst case” conditions is encompassed by the references to “condition” and “limitations” in CWA §§402 and 301 and the implementing regulations, as WQBELs are designed to assure compliance with applicable water quality regulations, including antidegradation requirements. Regulating the quantity of pollutants in the discharge through a restriction on the quantity of effluent is also consistent with the CWA.

In addition, as provided in Part II.B.1 of this permit and 40 CFR § 122.41(e), the Permittee is required to properly operate and maintain all facilities and systems of treatment and control. Improper operation and maintenance may result in non-compliance with permit effluent limitations. Consequently, the effluent flow limit is a permit condition that relates to the Permittee’s duty to mitigate (*i.e.*, minimize or prevent any discharge in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment) and to properly operate and maintain the treatment works. *See* 40 CFR §§ 122.41(d), (e).

## 2.4 Monitoring and Reporting Requirements

### 2.4.1 Monitoring Requirements

Sections 308(a) and 402(a)(2) of the CWA and the implementing regulations at 40 CFR Parts 122, 124, 125, and 136 authorize EPA to include monitoring and reporting requirements in NPDES permits.

The monitoring requirements included in this permit have been established to yield data representative of the Facility’s discharges in accordance with CWA §§ 308(a) and 402(a)(2), and consistent with 40 CFR §§ 122.41(j), 122.43(a), 122.44(i) and 122.48. The Draft Permit specifies routine sampling and analysis requirements to provide ongoing, representative information on the levels of regulated constituents in the discharges. The monitoring program is needed to enable EPA and the State to assess the characteristics of the Facility’s effluent, whether Facility discharges are complying with permit limits, and whether different permit conditions may be necessary in the future to ensure compliance with technology-based and water quality-based standards under the CWA. 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 CWA § 304(a)(1), State water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including, but not limited to, those pollutants listed in Appendix D of 40 CFR Part 122.

NPDES permits require that the approved analytical procedures found in 40 CFR Part 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

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<sup>2</sup> Fed. Reg. 49,001 (Aug. 19, 2014).

the permit. The NPDES regulations at 40 CFR § 122.21(e)(3) (completeness), 40 CFR § 122.44(i)(1)(iv) (monitoring requirements) and/or as cross referenced at 40 CFR § 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 CFR Part 136 or required under 40 CFR 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 report monitoring results obtained during each calendar month to EPA and the State electronically using NetDMR. The Permittee must submit a Discharge Monitoring Report (DMR) for each calendar month no later than the 15<sup>th</sup> day of the month following the completed reporting period.

NetDMR is a national web-based tool enabling regulated CWA permittees to submit DMRs electronically via a secure internet application to EPA through the Environmental Information Exchange Network. NetDMR has eliminated the need for participants to mail in paper forms to EPA under 40 CFR §§ 122.41 and 403.12. NetDMR is accessible through EPA's Central Data Exchange at <https://cdx.epa.gov/>. Further information about NetDMR can be found on EPA's NetDMR support portal webpage.<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 Standard Conditions

The standard conditions, included as Part II of the Draft Permit, are based on applicable regulations found in the Code of Federal Regulations. *See generally* 40 CFR Part 122.

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<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* Fed. Reg. 49,001 (Aug. 19, 2014).

<sup>4</sup> <https://netdmr.zendesk.com/hc/en-us>

## 2.6 Anti-backsliding

The CWA's anti-backsliding requirements prohibit a permit from being renewed, reissued or modified to include less stringent limitations or conditions than those contained in a previous permit except in compliance with one of the specified exceptions to those requirements. See CWA §§ 402(o) and 303(d)(4) and 40 CFR § 122.44(l). Anti-backsliding provisions apply to effluent limits based on technology, water quality, and/or state certification requirements.

All proposed limitations in the Draft Permit are at least as stringent as limitations included in the 2011 Permit unless specific conditions exist to justify relaxation in accordance with CWA § 402(o) or § 303(d)(4). Discussion of any less stringent limitations and corresponding exceptions to anti-backsliding provisions is provided in the sections that follow.

## 3.0 Description of Facility and Discharge

### 3.1 Location and Type of Facility

The Facility is located along the western bank of Weymouth Fore River on Hill Avenue in Braintree, Massachusetts. A location map is provided in Figure 1. The Permittee operates a treatment, storage, and disposal facility (TSDF) for hazardous wastes at this location. The Facility functions primarily as a hazardous waste storage and consolidation center, though some treatment does occur on-site including: stabilization<sup>5</sup> of contaminated soils (mostly stabilization of lead); solidification<sup>6</sup> by adding cardboard or saw dust; neutralization of weak acidic and caustic solutions, primarily by blending waste streams, gravity phase separation (mainly for gas, oil and water); and on-site PCB storage. Most wastes that are handled at this Facility are regulated under the Federal Resource Conservation and Recovery Act (RCRA), Subtitle C and the Massachusetts General Law chapter 21C, Massachusetts Hazardous Waste Management Act. Since 1999, the Permittee held both an exclusion letter and then a Remediation General Permit (RGP) MAG910116 for the discharge of treated groundwater, which expired in June 2017. The Permittee did not reapply because they ceased operating the groundwater treatment system in 2012, and subsequently the system was dismantled and partly removed.

All stormwater that collects on the property, including from secondary containment areas<sup>7</sup> and groundwater seepage flow by gravity to lowest part of the property, which is the northeast corner. Here an approximately 300-gallon concrete sump contains two submersible pumps that move all the stormwater through a treatment system prior to discharge. A site plan is provided in Figure 2.

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<sup>5</sup> Stabilization - A waste process that decreases the mobility of waste constituents by means of a chemical reaction. *Development Document for Effluent Limitations Guidelines and Standards for the Centralized Waste Treatment Industry - Final*, EPA 821-R-00-020, August 2000, List of Definitions – 7.

<sup>6</sup> Solidification - The addition of sorbents to convert liquid or semi-liquid waste to a solid by means of adsorption, absorption or both. The process is usually accompanied by stabilization. *Id.*

<sup>7</sup> Secondary containment area stormwater that collects in below-grade sumps is pumped to the above grade paved areas of the property that drain to the stormwater collection sump. The 2011 Permit included authorization for the discharge of this wastewater.

### 3.1.1 Effluent Limitation Guidelines

EPA promulgated the Centralized Waste Treatment (CWT) Effluent Limitations Guidelines (ELGs) and Standards (40 CFR Part 437) in 2000 and amended the rule in 2003. These CWT ELGs are applicable to facilities that discharge from certain activities including “(1) [t]reatment and recovery of hazardous or non-hazardous industrial metal-bearing wastes, oily wastes and organic-bearing wastes received from off-site; and (2) [t]he treatment of CWT wastewater.”

CHBI treats and discharges stormwater runoff and groundwater seepage. As authorized by the 2011 Permit, the Permittee began to treat and discharge stormwater that collected in several secondary containment areas at the Facility. Prior to the that time, secondary containment area stormwater was pumped to tanker trucks and hauled to another facility in Maine for off-site disposal. After reviewing data, EPA had determined that it was reasonable to allow this stormwater to be routed to the on-site stormwater treatment system if the Permittee developed and followed best management practices for spill control in these areas. Therefore, in 2011, EPA considered the secondary containment area stormwater as non-contaminated stormwater – not subject to the CWT ELGs. The 2011 Permit included a combination of water quality-based and BPJ-based technology limits for all the stormwater collected, treated and discharged from this site, including from the secondary containment areas.

For this Draft Permit, EPA and MassDEP (the “Agencies”) re-evaluated whether the discharge from secondary containment areas should still be considered non-contaminated stormwater. During the June 13, 2019 site visit, the Agencies observed a sheen on the stormwater within two of the secondary containment areas. Furthermore, data provided by the Permittee from testing all the containment sumps show certain prevalent pollutants, including barium, chromium, lead, bis (2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons including anthracene, fluoranthene, phenanthrene, pyrene benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene. Appendix C documents which pollutants were detected in each containment area.

EPA and MassDEP determined that the stormwater discharged from CHBI is subject to the CWT ELGs, which defines contaminated storm water as “storm water which comes in direct contact with the waste or waste handling and treatment areas.” EPA developed different limitations and standards for the CWT operations depending on the type of waste that is received for treatment or recovery. Based on activities and operations at the site, described above in Section 3.1, and the contaminants found in the secondary containment areas, the Agencies determined that CHBI stormwater is subject to 40 CFR § 437.13, Subpart D (“multiple wastestream subcategory”). In this case, Subpart D includes a combination of limits that apply to both metal-bearing (Subpart A) and oily wastewater (Subpart B). Table 1 provides the ELG parameters and limitations applicable to CHBI.

**Table 1: CWT ELG, Subpart D (A&B)**

<b>Pollutants</b>	<b>CWT ELG Daily Maximum Daily Limits<sup>1</sup></b>	<b>CWT ELG Daily Maximum Monthly Average Limits<sup>1</sup></b>
Oil and Grease	127	38
pH	( <sup>2</sup> )	( <sup>2</sup> )
TSS	74.1	30.6
Antimony	0.249	0.206
Arsenic	0.162	0.104
Cadmium	0.0172	0.0102
Chromium	0.746	0.323
Cobalt	0.192	0.124
Copper	0.5	0.242
Lead	0.350	0.160
Mercury	0.00234	0.000739
Nickel	3.95	1.45
Silver	0.12	0.0351
Tin	0.409	0.120
Titanium	0.0947	0.0618
Vanadium	0.218	0.0662
Zinc	2.87	0.641
Bis(2-ethylhexyl) phthalate	0.215	0.101
Butylbenzyl phthalate	0.188	0.0887
Carbazole	0.598	0.276
n-Decane	0.948	0.437
Fluoranthene	0.0537	0.0268
n- Octadecane	0.589	0.302

<sup>1</sup>mg/L (ppm).

<sup>2</sup>Within the range 6 to 9.

In accordance with CWA § 402(a)(1)(B) and 40 CFR § 125.3(c)(2), EPA may also establish effluent limitations on a case-by-case basis using BPJ. The NPDES regulations in 40 CFR §125.3(c)(2) state that permits developed on a case-by-case basis under Section 402 (a)(1) of the CWA shall apply the appropriate factors listed in 40 CFR § 125.3(d) and must consider 1) the appropriate technology for the category class of point sources of which the applicant is a member, based on available information, and 2) any unique factors relating to the applicant. To the extent applicable to the Facility, EPA has incorporated technology-based limitations and conditions from EPA Region 1's Remediation General Permit (MAG91000 and NHG91000) for consistency with requirements imposed upon most facilities in Massachusetts and New Hampshire with discharges of contaminated groundwater.

### **3.2 Location and Type of Discharge**

The Permittee has requested authorization to discharge wastewater from the Facility through Outfall 001. Outfall 001 is located at Latitude 42°14'11" N, Longitude -70°58'19", after the

stormwater treatment system. The treatment system discharges to the Weymouth Fore River via the Hayward Creek Culvert located on the western bank of the river. The 2011 Permit requires that all effluent samples shall be "...taken from the discharge pipe of the stormwater treatment system..." During the past permit term, all samples, except for the annual whole effluent toxicity (WET) sample have been taken from the valve at the downstream end of the stormwater treatment system. However, sampling for WET testing has been conducted at the large outfall culvert to the Weymouth Fore River, located within the adjacent Quirk Auto Dealers property.<sup>8</sup>

The discharge consists of site-wide stormwater run-off,<sup>9</sup> including stormwater that collects in secondary containment areas and groundwater seepage. As previously indicated, stormwater and groundwater seepage flow by gravity to the northeast corner of the property and is pumped from a 300-gallon concrete sump through the Facility's stormwater treatment system prior to discharge. A schematic of water flow is provided in Figure 3.

The Facility's current stormwater treatment system<sup>10</sup> has a maximum design capacity of 350 gallons per minute (gpm)<sup>11</sup> and consists of the following process train:

- Three 250 gpm axial flow submersible turbine pumps (one used as backup);
- Two parallel multimedia (gravel, sand, anthracite) filters to remove particulates;
- A micron rated bag filter and into two parallel vessels containing activated carbon to remove organic contaminants;
- Another micron rated bag filters to remove fines; and
- Three cation exchange beds to remove lead (two are run in parallel and the third is a polishing vessel for both units). The sampling location (i.e., spigot) is directly after the cation-exchange beds. The treated stormwater then discharges to the Hayward Creek culvert into the Weymouth Fore River.

The sand filters are periodically backwashed to a backwash hold tank. Solids that settle as sludge in the backwash tank are transported off-site for disposal while the supernates are transferred back to the concrete collection sump prior to the treatment system. The ion exchange columns are not regenerated on site. The media is replaced when the adsorption capacity diminishes.

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 July 2014 through May 2020, is provided in Appendix A of this Fact Sheet.<sup>12</sup>

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<sup>8</sup> This is inconsistent with Part I.A.1 (footnote 1) of the 2011 Permit, which requires that samples be taken "from the discharge pipe of the stormwater treatment system..."

<sup>9</sup> The property is 11.32 acres including 4.5 acres of impervious surfaces.

<sup>10</sup> The treatment system was upgraded in response to an Administrative Consent Order (ACO) issued by MassDEP in 2001. The ACO was issued to address total suspended solids and lead violations.

<sup>11</sup> Although the cation exchange beds have a design capacity of 500 gpm, the carbon beds are limited to 350 gpm.

## 4.0 Description of Receiving Water and Dilution

### 4.1 Receiving Water

The Facility discharges through Outfall 001 to the Weymouth Fore River via a 96" culvert known as the Hayward Creek Culvert. The Weymouth Fore River (Segment MA74-14) is a 2.29 square mile tidal estuary that is a part of the Weymouth and Weir River Basin, which is in the southeast region of the Boston Harbor Watershed.

The river near the Facility is a tidal estuarine waterbody that is subject to semidiurnal tidal flows with a mean tidal range of 9.49 feet. This general area is a designated port area which is heavily used by recreational boat traffic during the summer. Operations in the area include petroleum offloading/storage, manufacturing, power generation and MBTA ferry service. Due to the large amount of industrial activity in the area, the Weymouth Fore River has been significantly modified from its natural state. Large portions of the shoreline are covered by a bulkhead of granite block, steel sheet pile, or stone riprap. In the Weymouth Fore River there is also a dredged shipping channel with a depth of approximately 33 feet at mean lower low water (MLLW) to allow the passage of deep draft vessels.

The Weymouth Fore River is classified as a Class SB water body by the Massachusetts Surface Water Quality Standards (MA WQS). *See* 314 CMR 4.06(5). Class SB waters have the following designated uses:

These waters are 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. In certain waters, habitat for fish, other aquatic life and wildlife may include, but is not limited to, seagrass... These waters shall have consistently good aesthetic value.

314 CMR 4.05(4)(b). Weymouth Fore River is listed in the final *Massachusetts Year 2016 Integrated List of Waters* ("303(d) List") as a Category 5 "Waters Requiring a TMDL."<sup>13</sup> The pollutants requiring a TMDL are *enterococci* and fecal coliform (pathogens) and PCB's in fish tissue. A Final Pathogen TMDL for the Boston Harbor, Weymouth-Weir, and Mystic Watersheds was completed and published October 2018.

According to the *Weymouth and Weir River Basin 2004 Water Quality Assessment Report*,<sup>14</sup> the Weymouth Fore River (Segment MA74-14) waterbody segment is attaining designated uses for primary and secondary contact, while aesthetics and aquatic life designated uses have not been assessed. Although aquatic life has not been assessed, historical observations and recent sampling shows that this segment of the Basin supports one of the largest smelt runs in Massachusetts. Fish Consumption as a designated use is impaired for unknown causes of PCB in fish tissue and other contaminants in fish and shellfish. Therefore, Massachusetts Department of

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<sup>13</sup> *Massachusetts Year 2016 Integrated List of Waters*. MassDEP Division of Watershed Management Watershed Planning Program, Worcester, Massachusetts.

<sup>14</sup> Water Quality Assessment Report. MassDEP Division of Watershed Management, Worcester, Massachusetts; April 2010, Report Number: 74-AC-1.

Public Health has issued a fish and shellfish consumption advisory for this area. In addition, the Shellfish designated use is considered impaired for unknown causes of fecal coliform, although unspecified urban stormwater is suspected to be a contributing factor. Due to this impairment, the Massachusetts Division of Marine Fisheries has classified shellfishing in Weymouth Fore River as prohibited. The status of each designated use is presented in Table 2.

**Table 2: Summary of Designated Uses and Listing Status**

<b>Designated Use</b>	<b>Status</b>
Aquatic Life	Not Assessed
Shellfish Use	Impaired
Aesthetics	Not Assessed
Primary Contact Recreation	Support
Secondary Contact Recreation	Support
Fish Consumption	Impaired

#### **4.2 Ambient Data**

A summary of the ambient data collected in the receiving water in the vicinity of the Facility can be found in Appendix B of this Fact Sheet.

#### **4.3 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.<sup>15</sup> The critical flow in rivers and streams is some measure of the low flow of that river or stream. For rivers and streams where flows are not regulated by dams, 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). In this case, the Facility discharges into a tidal river. The dilution factor for sites that discharge to saltwater receiving waters in Massachusetts is assumed to be 1:1, unless a dilution study is conducted by the permittee.

### **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.

#### **5.1 Effluent Limitations and Monitoring Requirements**

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

<sup>15</sup> [EPA Permit Writer's Manual, Section 6.2.4](#)

### 5.1.1 Effluent Flow

Flow is limited to ensure that the treatment system operates as designed. From July 1, 2014 through May 31, 2020 (Appendix A) the effluent flow rate ranged from 24 to 292 gpm and the total monthly flow ranged from 13,459 to 1,143,128 gallons. The stormwater treatment system has a maximum design capacity of 350 gpm.<sup>16</sup> To ensure proper and complete treatment of the stormwater, the 2011 Permit requires that the maximum instantaneous discharge rate not exceed 350 gallons per minute. Therefore, the Draft Permit maintains this maximum instantaneous flow limit. Whenever there is a discharge, continuous flow measuring is required (i.e., flow measuring is not just required for those events for which samples are collected). Reporting total monthly flow is also carried forward to the Draft Permit. Unlike the 2011 Permit, to ensure that sampling is representative, the Draft Permit proposes that sampling only take place when one or more of the secondary containment areas are contributing to the discharge, instead of sampling within the first 30 minutes of the discharge and that at least one sample per year is taken when the discharge includes stormwater from the 10,000 gallon capacity dike/tank farm containment area, which collects stormwater from the areas where stabilization of contaminated soils takes place.

### 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 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 re-suspension.

The 2011 Permit limits total suspended solids (TSS) concentration to 20 mg/L, average monthly and 30 mg/L, maximum daily at Outfall 001. These technology-based limits were first established in the 1989 permit, based on best professional judgment (BPJ) pursuant to CWA § 402(a)(1), to eliminate the potential carryover of petroleum fractions to the receiving water by adsorption to particulate matter and discharge with the suspended solids. Heavy metals and polynuclear aromatic hydrocarbons are readily adsorbed onto particulate matter and the release of these compounds into the environment can be reduced by regulating the amount of suspended solids discharged. From July 1, 2014 through May 31, 2020, average monthly TSS concentrations ranged from below minimum levels (generally <5 mg/L) to 30 mg/L, and daily maximum TSS concentrations also ranged from below minimum levels (generally <5 mg/L) to 30 mg/L. There were two exceedances of the average monthly TSS limit for samples collected during this time frame. *See* DMR results in Appendix A of this Fact Sheet.

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<sup>16</sup> Although the cation exchange beds have a design capacity of 500 gpm, the carbon beds are limited to 350 gpm.

The 2011 Permit limits are continued in the Draft Permit in accordance with anti-backsliding regulations found in 40 CFR §122.44(l). The monitoring frequency will remain monthly as identified in the existing permit.

### 5.1.3 pH

The hydrogen-ion 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 July 1, 2014 through May 31, 2020 (Appendix A), pH ranged from 6.0 to 7.8 S.U. There were three exceedances of the lower pH limit during this time frame. The Permittee attributes these violations to the acidity of the rainwater. Because there have been exceedances and data in Appendix A shows pH generally near the lower limit, EPA believes it is appropriate to increase monitoring frequency from monthly in the 2011 Permit to weekly in the Draft Permit.

The Draft Permit maintains the 2011 Permit's pH limits range of 6.5 to 8.5 S.U., which must be monitored weekly by grab samples. The pH limitations are based on the State WQSs for Coastal and Marine, Class SB at 314 CMR 4.05(4)(b)3, which require that the pH of the receiving water be in the range of 6.5 to 8.5 S.U. These limitations are based on CWA § 301(b)(1)(C) and 40 CFR § 122.44(d).

EPA is discontinuing the requirement of contemporaneous pH testing of rainfall samples in the 2011 Permit because 314 CMR 4.05(4)(b)(3) states that pH "(s)hall be in the range of 6.5 through 8.5 standard units and not more than 0.2 units outside of the natural background range. There shall be no change from natural background conditions that would impair any use assigned to this Class." Natural background is the receiving water, not rainwater.

### 5.1.4 Oil and Grease

Oil and Grease is not a single 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.

The 2011 Permit's maximum daily effluent limit for oil and grease is 5 mg/L. This limit was established based on the MA WQS narrative water quality criteria for oil and grease, which states: "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.” See 314 CMR 4.05(4)(b)7. From July 1, 2014 through May 31, 2020 (Appendix A), all Oil and Grease results have been below minimum levels (generally <1.4 mg/L). Although, EPA Region 1 has a long-standing practice of using 15 mg/L to represent the concentration at which a visible oil sheen is likely to occur, the Permittee has consistently met the 5 mg/L maximum daily limit and it is therefore carried forward to the Draft Permit in accordance with anti-backsliding regulations at 40 CFR §122.44(l). Given that all analyses of samples collected during the last five years were non-detects, the monitoring frequency has been reduced to semiannually in Draft Permit.

### **5.1.5 Metals**

Metals are naturally occurring constituents in the environment and generally vary in concentration according to local geology. Metals are neither created nor destroyed by biological or chemical processes. However, metals can be transformed through processes including adsorption, precipitation, co-precipitation, and complexation. Some metals are essential nutrients at low levels for humans, animals, plants and microorganisms, but toxic at higher levels (e.g., copper and zinc). Other metals have no known biological function (e.g., lead). The environmental chemistry of metals strongly influences their fate and transport in the environment and their effects on human and ecological receptors. Toxicity results when metals are biologically available at toxic concentrations affecting the survival, reproduction and behavior of an organism.

#### **5.1.5.1 Lead**

From July 1, 2014 through May 31, 2020 (Appendix A), lead ranged from 0.0001 ug/L to 13 ug/L, with one exceedance.

The saltwater acute and chronic 2002 EPA National Recommended Water Quality Criteria for lead are 210 ug/L and 8.1 ug/L, respectively. When appropriate, EPA generally sets maximum daily limits based on or equal to acute water quality criteria and average monthly limits based on or equal to chronic criteria. However, a *maximum daily* limit of 8.1 ug/L for lead in the 2011 Permit is based on the saltwater *chronic* criterion. EPA corrects this error in the Draft Permit, by setting the average monthly limit equal to 8.1 ug/L. Therefore, the limit remains the same as in the 2011 Permit but is simply expressed differently, consistent with aquatic life WQC. In addition, the Draft Permit includes a maximum daily limit equal to 210 ug/L, consistent with saltwater acute WQC. These water-quality based limits are more stringent than the technology-based limits required by the CWT ELG. Given that most analyses of samples collected during the last five years were non-detects, the monitoring frequency has been reduced to semiannually, consistent with other metals monitoring required by the Draft Permit.

#### **5.1.5.2 Arsenic, Cadmium, Copper, Mercury, Nickel, Silver and Zinc**

The CWT ELG stipulates maximum daily and average monthly limits for the following metals: arsenic, cadmium, copper, mercury, nickel, silver and zinc, as shown in Table 1 above. However, with few exceptions, if CHBI discharged these metals at concentrations allowed under the ELG, they would be discharging above water quality standards. This is due, in part, because there is no

dilution afforded to the discharge from the CHBI facility. Therefore, EPA set the Draft Permit limits for these metals equal to the WQSs, with three exceptions. The maximum daily limit of 17.2 ug/L for cadmium in the CWT ELG is more stringent than the saltwater acute criterion of 40 ug/L and the average monthly limit of 0.739 for mercury in the CWT ELG is more stringent than the saltwater chronic criterion of 0.94 ug/L. In these two cases, the more stringent technology-based limit is included in the Draft Permit.<sup>17</sup> In addition, because there is no saltwater chronic criterion for silver, the technology-based limit of 35.1 ug/L from the ELG would typically be applied to the Draft Permit. However, this average monthly limit is significantly higher than the maximum daily water quality-based limit of 1.9 ug/L. Therefore, there is no need for an average monthly limit for silver in the Draft Permit.

See Appendix A of this Fact Sheet for the results of samples collected between July 1, 2014 and May 31, 2020. Appendix D of this Fact Sheet displays the Draft Permit limits, including the basis of those limits, as compared to the CWT ELG and the 2011 Permit limits. Based on the data from the last five years, EPA has determined that semiannual monitoring is appropriate.

#### **5.1.5.3 Antimony, Chromium, Cobalt, Tin, Titanium, and Vanadium**

The CWT ELG also stipulates maximum daily and average monthly limits for the following metals: antimony, chromium, cobalt, tin, titanium, and vanadium. For these metals there are no applicable water quality standards to compare to or evaluate reasonable potential. Therefore, the technology-based limits from the ELG are included in the Draft Permit. Also see Appendix D. EPA has determined that sampling frequency of semiannually is appropriate for these metals, consistent with other metals monitoring required by the Draft Permit.

#### **5.1.6 Organic Compounds**

##### **5.1.6.1 Polynuclear Aromatic Hydrocarbons (PAHs)**

PAHs are a class of organic compounds with molecular structures consisting of polycyclic aromatic rings which are present in oils and petrochemicals. These pollutants will readily adsorb onto suspended particulate matter and biota and their transport will be determined largely by the hydrogeologic condition of the aquatic system. The fate of those PAHs which accumulate in the aquatic sediment is believed to be biodegradation and biotransformation by benthic organisms. Several PAHs are well-known animal carcinogens, while others are not carcinogenic alone but can enhance the response of the carcinogenic PAHs.

There are 16 PAH compounds identified as priority pollutants under the CWA.<sup>18</sup> Group I PAHs are seven well known animal carcinogens. Total Group I PAHs is the sum of: benzo(a)anthracene (56-55-3), benzo(a)pyrene (50-32-8), benzo(b)fluoranthene (205-99-2), benzo(k)fluoranthene (207-08-9), chrysene (218-01-9), dibenzo(a,h)anthracene (53-70-3), and

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<sup>17</sup> Generally, EPA compares water quality-based effluent limits with technology-based effluent limits and chooses the more stringent of the two.

<sup>18</sup> See Appendix A to 40 CFR Part 423. Also, the RGP TBEL reflects the sum of the compliance levels for individual PAH compounds (0.7 ug/L), adjusted upward to 1.0 ug/L to account for variation in analytical MLs expected to be achieved.

indeno(1,2,3-cd)pyrene (193-39-5). Group II PAHs are the nine priority pollutant PAHs not considered carcinogenic alone, but which can enhance or inhibit the response of the carcinogenic PAHs. Total Group II PAHs is the sum of: acenaphthene (83-32-9), acenaphthylene (208-96-8), anthracene (120-12-7), benzo (g,h,i) perylene (191-24-2), fluoranthene (206-44-0)<sup>19</sup>, fluorene (86-73-7), naphthalene (91-203), phenanthrene (85-01-8), and pyrene (129-00-0). Typically, exposure would be to a mixture of PAHs rather than to an individual PAH.

Attachment A of this Fact Sheet provides data collected from December 1, 2014 through December 31, 2019 (11 reported sampling events). The 16 PAH compounds listed above were not detected above their respective reporting levels. As documented in the laboratory reports, the reporting levels were below 5 ug/L, in accordance with Part I.A.1.footnote 6 of the 2011 Permit.

The 2011 Permit contains a daily maximum effluent limit of 10 ug/L for total PAHs (Group I and Group II). This limit was established in the 1989 permit, based on “the practical analytical detection limit for these compounds” with consideration for human health concerns, water quality, and technology requirements. This technology-based limit, however, is less stringent than technology-based limits prescribed in EPA’s most recent 2017 Remediation General Permit (2017 RGP) for the Group I PAH’s.<sup>20</sup>

The 2017 RGP establishes a TBEL of 1.0 ug/L for total Group I PAH’s based on pollution control technologies<sup>21</sup> generally used by sites to remove individual Group I PAH’s below detection levels. The compliance levels, prescribed in the 2107 RGP, for each individual Group I PAH compound is 0.1 µg/L, which is equivalent to the ML that is achievable for analyses by multiple 40 CFR Part 136 test methods using selected ion monitoring (SIM) (e.g., Method 624, 625). SIM is a test method modification included under allowable changes in 40 CFR § 136.6(b)(xv).<sup>22</sup> Based on BPJ and consistent with the 2017 RGP, EPA has determined that it is appropriate to limit total Group I PAH’s at 1.0 ug/L and to require that SIM modified EPA method 624 or 625 is used for the analysis of each individual Group I PAH.

The total Group II PAH limitation of 10 ug/L is retained in the Draft Permit in accordance with anti-backsliding regulations found in 40 CFR §122.44(l). However, the Permittee must use an EPA approved 40 CFR Part 136 method for the analysis of each individual Group II PAH, such as test Method 610 capable of achieving detection limits of less than 5.0 µg/L for each individual PAH compound. RCRA test methods such as Method 8270 or the extractable petroleum hydrocarbon (EPH) method cannot be used for analyses of these parameters.

The monitoring frequency for PAH’s will remain semiannual as identified in the existing permit.

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<sup>19</sup> Although limits for fluoranthene are required by the CWT ELG, the Draft Permit limits are more stringent.

<sup>20</sup> The 2017 Remediation General Permit (RGP) for Massachusetts and New Hampshire represents the majority of permitted facilities that generate PAH’s. See

[https://www3.epa.gov/region1/npdes/remediation/FinalPermit\\_Rev1.pdf](https://www3.epa.gov/region1/npdes/remediation/FinalPermit_Rev1.pdf)

<sup>21</sup> See page 23 of the 2017 RGP for the list of treatment technologies.

<sup>22</sup> As of 77 FR 29759, May 18, 2012. Federal Register Vol. 77, No. 97.

### 5.1.6.2 Benzene, Toluene, Ethylbenzene and Xylene (BTEX)

Refined petroleum products contain numerous types of hydrocarbons. Individual components partition to environmental media on the basis of their physical/chemical properties (e.g., solubility, vapor pressure). In the case of discharges that contain petroleum, limits are typically established for the compounds that would be the most difficult to remove, as well as those that demonstrate the greatest degree of toxicity, rather than attempting to establish effluent limits for every compound that can be found in petroleum products.

Generally, the higher the solubility of a volatile organic compound (VOC) in water, the more difficult it is to remove. VOCs such as benzene, toluene, ethylbenzene, and xylenes (together referred to as BTEX) are normally found at relatively high concentrations in gasoline and light distillates (e.g., diesel fuel) and then at decreasing concentrations in the heavier grades of petroleum distillate products (e.g., fuel oils).

The existing permit contains technology-based effluent limits of 5 ug/L for benzene and 100 ug/L for total BTEX, which is the sum of benzene, toluene, ethylbenzene, and total xylenes (i.e., the sum of the ortho, para, and meta isomers of xylene). The benzene monitoring requirement was originally established based on concerns regarding possible contamination from oil, grease, and gasoline and their respective byproducts that might be associated with accidental spills. The BTEX limit was initially based on limits that had been required by an EPA NPDES Exclusion Letter for groundwater remediation issued to the Permittee on January 5, 1996. This and other similar exclusion letters issued to New Hampshire and Massachusetts facilities have been replaced by the Remediation General Permit (RGP). These limits are continued in the Draft Permit in accordance with anti-backsliding regulations (40 CFR §122.44(1)) and are consistent with the current RGP, which became effective April 8, 2017.<sup>23</sup> The monitoring frequency will remain semiannual as identified in the existing permit.

Attachment A of this Fact Sheet provides data collected between December 1, 2014 through December 31, 2019 (11 reported sampling events). The BTEX compounds listed above were not detected above their respective reporting levels. As documented in the laboratory reports, the reporting level was generally 0.5 µg/L for each analyte, in accordance with Part I.A.1.footnote 7 of the 2011 Permit.

The Draft Permit continues to require that the analytical methods used to measure BTEX shall be capable of achieving a detection limit of less than 0.5 µg/L for each BTEX compound based on the ML of EPA approved test Method 602. Only EPA approved 40 CFR Part 136 methods can be used for the analysis of BTEX compounds.

### 5.1.6.3 Polychlorinated biphenyls (PCBs)

PCBs belong to a class of chemically stable multi-use industrial chemicals that have been distributed widely in the ecosystem. The physical and chemical properties and the chemical formulations of PCBs vary considerably depending on the amount and position of chlorine

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<sup>23</sup> See <https://www.epa.gov/npdes-permits/remediation-general-permit-rgp-massachusetts-new-hampshire>

substitution. Such properties as stability, volatility, and water solubility are particularly important in regard to the rate of occurrence in the environment. PCBs are known carcinogens.

When appropriate, EPA generally sets maximum daily limits based on or equal to acute water quality criteria and average monthly limits based on or equal to chronic criteria. However, a maximum daily limit of 0.03 ug/L for PCB's in the 2011 Permit is based on the saltwater chronic criterion. EPA corrects this error in the Draft Permit, by setting the average monthly limit equal to 0.03 ug/L and removing the maximum daily limit. Therefore, the limit remains the same as in the 2011 Permit but is simply expressed differently, consistent with aquatic life WQC.

Although the effluent limit is 0.03 ug/L, EPA set the compliance limit at 0.5 ug/L based on the ML<sup>24</sup> associated with federally approved test Method 608. This compliance limit is also continued in the Draft Permit in accordance with anti-backsliding regulations found at 40 CFR §122.44(l)). The monitoring frequency will also remain semiannual as identified in the existing permit. Total PCBs is the sum of the following aroclors: PCB-1016, PCB-1221, PCB-1232, PCB1242, PCB-1248, PCB-1254, and PCB-1260.

From December 1, 2014 through December 31, 2019 (11 reported sampling events) (Appendix A), all reported PCB's results were below their respective minimum levels. As documented in the laboratory reports, the more recent reporting levels were generally 0.05 ug/L for each compound, although EPA Method 8082 was used, which is not a method found in 40 CFR Part 136. Again, only EPA approved 40 CFR Part 136 methods can be used for the analysis of parameters limited by the Draft Permit including PCB compounds.

#### **5.1.6.4 Bis(2-ethylhexyl) phthalate, Butylbenzyl phthalate, Carbazole, n-Decane, and n-Octadecane**

The CWT ELG also stipulates maximum daily and average monthly limits for the following organic compounds: bis(2-ethylhexyl) phthalate, butylbenzyl phthalate, carbazole, n-decane, and n-octadecane. For these compounds there are no applicable water quality standards to compare to or evaluate reasonable potential. Therefore, the technology-based limits from the ELG are included in the Draft Permit. See Appendix D for the limits and basis of those limits in the Draft Permit, as compared to the CWT ELG and 2011 Permit limits.

#### **5.1.7 Bacteria**

The Weymouth Fore River is impaired for pathogens. As discussed in Section 4.1, the Final Pathogen TMDL for the Boston Harbor, Weymouth-Weir, and Mystic Watersheds, issued in October 2018, was designed as a framework for addressing pathogen pollution in the watershed. Even though CHBI is not expected to contribute to the existing impairments due to pathogens, based on the nature of the stormwater discharges from the site, the Draft Permit includes monitoring to evaluate any unexpected pathogen sources to ensure the improvement of water quality in the Weymouth Fore River.

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<sup>24</sup> Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte (i.e., the ML represents the lowest concentration at which an analyte can be measured with a known level of confidence).

The State WQS for Class SB waters have different indicator bacteria for shellfishing use and for recreational uses. *See* 314 CMR 4.05(4)(b)(4). For Class SB waters designated for shellfishing and recreational uses, such as the Weymouth Fore River, fecal coliform and *Enterococcus* are the applicable indicators, respectively. MassDEP recommends and EPA concurs that for marine waters, if shellfishing is a designated use (even if the Massachusetts Division of Marine Fisheries lists shellfishing as prohibited), NPDES permits include monitoring for both fecal coliform and *Enterococcus* given there is inadequate correlation between the two and *Enterococcus* is also needed for 303(d) assessments. Furthermore, because there is limited historical data to assess the potential pathogen contributions of CHBI stormwater and industrial runoff into the Weymouth Fore River, MassDEP determined that monitoring once per month for at least one year will result in a reasonable dataset with seasonal variation to provide an adequate assessment. Therefore, the Draft Permit includes these monitoring requirements.

### 5.1.8 Per- and polyfluoroalkyl substances (PFAS)

As explained at <https://www.epa.gov/pfas>, PFAS are a group of synthetic chemicals that have been in use since the 1940s. PFAS are found in a wide array of consumer and industrial products. PFAS manufacturing and processing facilities, facilities using PFAS in production of other products, airports, and military installations can be contributors of PFAS releases into the air, soil, and water. Due to their widespread use and persistence in the environment, most people in the United States have been exposed to PFAS. Exposure to some PFAS above certain levels may increase risk of adverse health effects.<sup>25</sup> EPA is collecting information to evaluate the potential impacts that discharges of PFAS from wastewater treatment plants may have on downstream drinking water, recreational and aquatic life uses.

On January 27, 2020, Massachusetts DEP established an Office of Research and Standards Guideline (ORSG) level for drinking water that applies to the sum of the following PFAS:<sup>26,27</sup>

- Perfluorohexanesulfonic acid (PFHxS)
- Perfluoroheptanoic acid (PFHpA)
- Perfluorononanoic acid (PFNA)
- Perfluorooctanesulfonic acid (PFOS)
- Perfluorooctanoic acid (PFOA)
- Perfluorodecanoic acid (PFDA)

Based on the ORSG, MassDEP recommends that:

1. Consumers in sensitive subgroups (pregnant women, nursing mothers and infants) not consume water when the level of the six PFAS substances, individually or in combination, is above 20 ppt.

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<sup>25</sup> EPA, *EPA's Per- and Polyfluoroalkyl Substances (PFAS) Action Plan*, EPA 823R18004, February 2019. Available at: [https://www.epa.gov/sites/production/files/2019-02/documents/pfas\\_action\\_plan\\_021319\\_508compliant\\_1.pdf](https://www.epa.gov/sites/production/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf)

<sup>26</sup> <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas>

<sup>27</sup> <https://www.mass.gov/doc/massdep-ors-guideline-for-pfas/download>

2. Public water suppliers take steps expeditiously to lower levels of the six PFAS individually or in combination, to below 20 ppt for all consumers.

In December 2019, MassDEP proposed revisions to 310 CMR 22.00: Drinking Water Regulation that would set a new PFAS Maximum Contaminant Level (MCL) of 20 ppt (ng/L) for the sum of the concentrations of six PFAS compounds, including all six compounds addressed by the ORSG (listed above).

Although the Massachusetts water quality standards do not include numeric criteria for PFAS, the Massachusetts narrative criterion for toxic substances at 314 CMR 4.05(5)(e) states:

All surface waters shall be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife.

The narrative criterion is further elaborated at 314 CMR 4.05(5)(e)2 which states:

Human Health Risk Levels. Where EPA has not set human health risk levels for a toxic pollutant, the human health-based regulation of the toxic pollutant shall be in accordance with guidance issued by the Department of Environmental Protection's Office of Research and Standards. The Department's goal is to prevent all adverse health effects which may result from the ingestion, inhalation or dermal absorption of toxins attributable to waters during their reasonable use as designated in 314 CMR 4.00.

Since PFAS chemicals are persistent in the environment and may lead to adverse human health and environmental effects, the Draft Permit requires that the Facility conduct quarterly effluent sampling for PFAS chemicals, six months after appropriate, multi-lab validated test methods are made available by EPA to the public.

The purpose of this monitoring and reporting requirement is to better understand potential discharges of PFAS from this Facility and to inform future permitting decisions, including the potential development of water quality-based effluent limits on a facility-specific basis. EPA is authorized to require this monitoring and reporting by CWA § 308(a), which states:

“SEC. 308. (a) Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, 404 (relating to State permit programs), 405, and 504 of this Act—

- A. the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods

(including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require....”

Since an EPA method for sampling and analyzing PFAS in wastewater and is not currently available, the PFAS sampling requirement in the Draft Permit includes a compliance schedule which delays the effective date of this requirement until six months after EPA’s multi-lab validated method for wastewater is made available to the public on EPA’s CWA methods program website For wastewater see <https://www.epa.gov/cwa-methods/other-clean-water-act-test-methods-chemical> and <https://www.epa.gov/cwa-methods>. EPA expects this method will be available by the end of 2021. This approach is consistent with 40 CFR § 122.44(i)(1)(iv)(B) which states that in the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters. After one year of monitoring, if all samples are non-detect for all six PFAS compounds, using EPA’s multi-lab validated method for wastewater, the Permittee may request to remove the requirement for PFAS monitoring.

### 5.1.9 Reporting Requirements and Benchmark Values

Attachment A of this Fact Sheet provides benchmark data collected between July 1, 2014 through May 31, 2020. Although CHBI was not eligible for coverage under the 2008 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (2008 MSGP), based on BPJ, the 2011 Permit includes annual monitoring and reporting of pollutant parameters consistent with the 2008 MSGP, Sector K<sup>28</sup>. The Permittee is instructed as part of its Stormwater Pollution Prevention Plan (SWPPP) to compare the analytical results for these parameters to certain benchmark values.<sup>29</sup> The benchmark values were chosen to be consistent with either the 2008 MSGP for ammonia, COD, and magnesium or the saltwater acute WQC for arsenic, cadmium<sup>30</sup>, cyanide, mercury, selenium, and silver. Because EPA has now determined that the Centralized Waste Treatment ELG applies to CHBI, the benchmark requirements are no longer necessary. Generally, the MSGP benchmarks for an industry category are only applicable to stormwater discharges not subject to effluent limitation guidelines for that category. In this case, as previously discussed, the discharge of stormwater from CHBI is subject to 40 CFR § 437. The Draft Permit includes limits based on either WQS, CWT ELG, or BPJ-based TBELs, some which are subject to anti-backsliding. Therefore, the requirement to monitor and compare analytical results to benchmark values as part of the SWPPP is not included in the Draft Permit.

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<sup>28</sup> Sector K of the 2008 MSGP included specific requirements that applied to stormwater discharges associated with industrial activity from facilities that treat, store, or dispose of hazardous wastes, such as CHBI.

<sup>29</sup> The monitoring and benchmark requirements were to be used to trigger the Permittee to review its selection, design, installation and implementation of best management practices (BMPs) and to assess the need for additional numeric effluent limitations in future permitting actions.

<sup>30</sup> Cadmium analysis is required as part of the WET protocol.

As explained in the 2011 Fact Sheet, benchmark values are not effluent limitations, but rather an indication of the effectiveness of the Facility's SWPPP. Because benchmark values are not effluent limitations, they are not subject to anti-backsliding requirements that prohibit a permit from being renewed, reissued or modified to include less stringent limitations or conditions than those contained in a previous permit. Anti-backsliding provisions apply to *effluent limits* based on technology, water quality, and/or state certification requirements. *See* CWA §§ 402(o) and 303(d)(4) and 40 CFR § 122.44(l). Therefore, the removal of benchmark requirements of the SWPPP is not in conflict with anti-backsliding provisions.

#### 5.1.10 Whole Effluent Toxicity

CWA §§ 402(a)(2) and 308(a) provide EPA and States with the authority to require toxicity testing. Section 308 specifically describes biological monitoring methods as techniques that may be used to carry out objectives of the CWA. Whole effluent toxicity (WET) testing is conducted to ensure that the additivity, antagonism, synergism, and persistence of the pollutants in the discharge do not cause toxicity, even when the individual pollutants are present at low concentrations in the effluent. The inclusion of WET requirements in the Draft Permit will assure that the Facility does not discharge combinations of pollutants into the receiving water in amounts that would be toxic to aquatic life or human health.

In addition, under CWA § 301(b)(1)(C), discharges are subject to effluent limitations based on WQSs. Under CWA §§ 301, 303 and 402, EPA and the States may establish toxicity-based limitations to implement narrative water quality criteria calling for “no toxics in toxic amounts.” *See also* 40 CFR § 122.44(d)(1). The Massachusetts WQSs at 314 CMR 4.05(5)(e) state, “All surface waters shall be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife.” In addition, the Massachusetts WQSs at 314 CMR 4.03(2)(a) require no lethality to organisms passing through a mixing zone.

In accordance with current EPA guidance and State policy,<sup>31</sup> whole effluent chronic effects are regulated by limiting the highest measured continuous concentration of an effluent that causes no observed chronic effect on a representative standard test organism, known as the chronic No Observed Effect Concentration (C-NOEC). Whole effluent acute effects are regulated by limiting the concentration that is lethal to 50% of the test organisms, known as the LC<sub>50</sub>.

The acute WET limit in the 2011 Permit is LC<sub>50</sub> greater than or equal to 100% using both Mysid Shrimp (*Mysidopsis bahia*) and Inland Silverside (*Menidia beryllina*). There were no exceedances of the LC<sub>50</sub> permit limit for samples collected between August 2014 through August 2019. (Appendix A). With that said, however, EPA learned that WET samples were not being collected from the permitted location Outfall 001, a valve at the downstream end of the stormwater treatment system, but instead have been collected at the outfall pipe to the Weymouth Fore River. This sampling location conflicts with the requirements of the 2011

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<sup>31</sup> *Massachusetts Water Quality Standards Implementation Policy for the Control of Toxic Pollutants in Surface Waters*. February 23, 1990.

Permit and compliance with permit limits may be attributed to CHBI stormwater co-mingling with offsite stormwater, as well as tidal influences.<sup>32</sup>

Based on: 1) the potential for toxicity in the effluent which may contain centralized waste treatment industry-type pollutants, although the discharge undergoes treatment (sand and bag filters, activated carbon beds, and cation exchange beds); 2) the stormwater discharge from Outfall 001 is intermittent and generally short term; and 3) in accordance with EPA national and regional policy and 40 CFR § 122.44(d),<sup>33</sup> EPA determined that annual acute WET testing is still appropriate, but sampling must occur at Outfall 001. Therefore, the Draft Permit continues the effluent limits from the 2011 Permit. Toxicity testing must be performed during August of each year for two species, in accordance with the EPA Region 1 test procedures and protocols specified in **Attachment A, Marine Acute Toxicity Test Procedure and Protocol** (July 2012) of the Draft Permit.

## 5.2 Special Conditions

### 5.2.1 Best Management Practices

Best management practices (BMPs) may be expressly incorporated into a permit on a case-by-case basis where it is determined that 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 control or abate the discharge of pollutants when: 1) authorized under section 304(e) of the CWA for the control of toxic pollutants and hazardous substances from ancillary industrial activities; 2) authorized under CWA § 402(p) for the control of stormwater discharges; 3) numeric effluent limitations are infeasible; or 4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. *See* 40 CFR § 122.44(k). 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 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. The Draft Permit requires the Permittee to implement and continually evaluate the Facility's structural controls (e.g., treatment systems, containment areas, holding tanks), and non-structural controls (operational procedures, site inspections, and operator training). Proper implementation of BMPs will minimize the potential discharge of pollutants related to inadequate treatment, human error, and/or equipment malfunction. The non-numeric limitations are consistent with the limitations specified in Part 2.1.2 of EPA's Multi-Sector General Permit (MSGP).<sup>34</sup> Non-numeric limitations include:

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<sup>32</sup> Access is through the security fencing at Quirk Auto, adjacent to the Clean Harbors facility. The outfall pipe at this location receives stormwater from the Clean Harbors facility and stormwater from the surrounding areas (i.e., originating off-site of the facility).

<sup>33</sup> See *Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants*, 49 FR 9016, March 9, 1984, EPA-833-K-10-001, September 2010, EPA/505/2-90-001, March 1991, and *Massachusetts Water Quality Standards Implementation Policy for the Control of Toxic Pollutants in Surface Waters*. February 23, 1990.

<sup>34</sup> The MSGP is currently available at: <https://www.epa.gov/npdes/final-2015-msgp-documents>.

- 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; and
- Minimize dust generation and vehicle tracking of industrial materials.

In addition to the general limitations described above, the Draft Permit also includes other BMPs based on EPA's MSGP and RGP.<sup>35</sup> BMP requirements include:

- The Draft Permit requires the Permittee to comply with the inspection requirements in Part 3.1 and 3.2 of the 2015 MSGP and the corrective action requirements in Part 4.1 through 4.5 of the 2015 MSGP;<sup>36</sup>
- The Draft Permit requires the Permittee to comply with the control measure requirements in Part 2.1 and 2.1.1 of the 2015 MSGP in order to identify pollutant sources and select, design, install and maintain the pollution control technology necessary to meet the effluent limitations in the permit that ensure dilution is not used as a form of treatment;<sup>37</sup>
- The Draft Permit requires the Permittee to document the measures and methods used to control flow through the treatment system to ensure that the design flow of the treatment system is not exceeded; and
- The Draft Permit requires the Permittee to document monitoring requirements, sample analysis procedures, a schedule for the review of sample results and data validation and reporting processes.

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

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<sup>35</sup> The 2017 RGP is currently available at: <https://www.epa.gov/npdes-permits/remediation-general-permit-rgp-massachusetts-new-hampshire>.

<sup>36</sup> Where the MSGP refers to limitations, conditions or benchmarks, including the SWPPP, for the purposes of this permit, these shall refer to the limitations and conditions in this permit.

<sup>37</sup> Page 7-113 of EPA-821-R-04-014 states, “[w]astewater requiring primary and/or secondary treatment (because it is contaminated with oil and grease and total petroleum hydrocarbons) is typically tank bottom water, loading/unloading rack water, a portion of the tank basin water, wastewater generated during remediation, and water used for hydrostatic testing.” See Part 2.5.2.d of the 2017 RGP for example technologies and additional resources.

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* CWA §§ 304(e) and 402(a)(1) and 40 CFR § 122.44(k). These requirements will also ensure that discharges from the Facility will meet State WQSS pursuant to CWA § 301(b)(1)(C) and 40 CFR §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.

## 5.2.2 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.<sup>38</sup> 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.<sup>39</sup> This Draft Permit contains BMPs for stormwater associated with industrial activities. In addition to BMPs, the Draft Permit also contains requirements for the Permittee to develop, implement, and maintain a SWPPP for stormwater discharges associated with industrial 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;
- Drainage area site map;
- 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.

The development and 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 90 days of the effective date of the permit to certify that the SWPPP has been prepared, meets the requirements of the permit, and documents the control measures, including BMPs, that have been implemented to reduce or eliminate the discharge of pollutants from stormwater at CHBI. The Permittee must also certify at least annually that the Facility has complied with the BMPs described in the SWPPP, including

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<sup>38</sup> Fed. Reg. 41264 (September 9, 1992).

<sup>39</sup> Fed. Reg. 41242 (September 9, 1992).

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 Prohibited Discharges**

As described previously, the stormwater treatment system sand filters are periodically backwashed to a backwash hold tank. Solids that settle as sludge in the backwash tank are transported off-site for disposal while the supernates are transferred back to the concrete collection sump prior to the treatment system. Further, the ion exchange columns are not regenerated on site. The media is replaced when the adsorption capacity diminishes. Therefore, the Draft Permit (Part I.B) prohibits the discharge of both the sand filter backwash solids/sludge and the ion exchange column regeneration wastewater.

The discharge of laboratory waste is also not allowed under the Draft Permit (see Part I.B). Laboratory waste consists of the Facility streams being tested and reagents used to perform the tests that are typical for maintaining operations at a TSD facility. In the past, the Permittee held an MWRA permit for the discharge of laboratory wastewater to the sanitary sewer. However, now all laboratory wastewater is collected and shipped off site for disposal as industrial wastewater.

## **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 any habitat of such species that has been designated as critical under the ESA (i.e., “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 Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) 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 Clean Harbors of Braintree, Inc. Facility, which discharges site-wide stormwater run-off, including stormwater that collects in secondary containment areas and off-site groundwater seepage, through Outfall 001 via the Hayward Creek Culvert into Weymouth Fore River. Outfall 001 is located at Latitude 42°14’11” Longitude -70°58’19” after the treatment system and before discharging from the culvert on the west bank of Weymouth Fore River. The Draft Permit is

intended to replace the 2011 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 with the Services when required under § 7(a)(2) of the ESA.

EPA has reviewed the federal endangered or threatened species of fish, wildlife, and plants in the expected action area of the outfall to determine if EPA's proposed NPDES permit could potentially impact any such listed species. For protected species under the jurisdiction of the USFWS, one listed threatened species, the northern long-eared bat (*Myotis septentrionalis*), was identified as potentially occurring in the action area of Manchester Bay.<sup>40</sup>

According to the USFWS, the threatened northern long-eared bat is found in "winter – mines and caves, summer – wide variety of forested habitats. This species is not aquatic, so the Weymouth Fore River discharge will have no direct effect on this mammal. Further, the permit action is also expected to have no indirect effect on the species because it is not expected to impact insects, the primary prey of the northern long-eared bat. Therefore, the proposed permit action is deemed to have no impact on this listed species.

Based on the review of the habitat of the species under the jurisdiction of the USFWS listed above, EPA has determined that no federally protected species or their critical habitat overlap with the action area of the Facility. Therefore, ESA section 7 consultation will not be required.

Regarding protected species under the jurisdiction of NOAA Fisheries, a number of anadromous and marine species and life stages likely overlap the action area of the Facility. Subadult and adult life stages of Atlantic sturgeon (*Acipenser oxyrinchus*), adult shortnose sturgeon (*Acipenser brevirostrum*), adult and juvenile life stages of the following sea turtles - leatherback sea turtles (*Dermochelys coriacea*), loggerhead sea turtles (*Caretta caretta*), Kemp's ridley sea turtles (*Lepidochelys kempii*), green sea turtles (*Chelonia mydas*); adult and juvenile life stages of the following whales - North Atlantic right whales (*Eubalaena glacialis*) and fin whales (*Balaenoptera physalus*) are all expected to be present in Massachusetts coastal waters and may overlap the action area of the discharge in the Weymouth Fore River.<sup>41</sup> These protected species life stages are likely influenced by the discharge from this Facility.

Because these species may be affected by the discharge authorized by the proposed permit, EPA has evaluated the potential impacts of the permit action on these anadromous and marine species. On the basis of the evaluation, EPA's preliminary determination is that this action may affect, but is not likely to adversely affect, the relevant life stages of the NOAA Fisheries listed species above that are expected to inhabit the immediate coast near the Facility in the vicinity of the action area of the discharge. Therefore, EPA has judged that a formal consultation pursuant to Section 7 of the ESA is not required. EPA is seeking concurrence from NOAA Fisheries regarding this determination through the information in the Draft Permit, this Fact Sheet, as well as a letter that will be sent to NOAA Fisheries Protected Resources Division under separate cover.

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<sup>40</sup> See §7 resources for USFWS at <https://ecos.fws.gov/ipac/>.

<sup>41</sup> See §7 resources for NMFS at

<https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=1bc332edc5204e03b250ac11f9914a27>

Re-initiation of consultation will take place: (a) if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered in the consultation; (b) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the consultation; or (c) if a new species is listed or critical habitat is designated that may be affected by the identified action.

## 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 *et seq.*, 1998), EPA is required to consult with the NOAA Fisheries if EPA's action or proposed actions that it funds, permits, or undertakes, "may adversely impact any essential fish habitat." 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." 16 U.S.C. § 1802(10). "Adverse impact" means any impact that reduces the quality and/or quantity of EFH. 50 CFR § 600.910(a). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), or 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. *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.

The Federal action being considered in this case is EPA's proposed NPDES permit for the Clean Harbors Facility, which discharges through Outfall 001 via the Hayward Creek Culvert into Weymouth Fore River. The Draft Permit is intended to replace the 2011 Permit in governing the Facility.

A review of the relevant essential fish habitat information provided by NOAA Fisheries<sup>42</sup> indicates that the outfall exists within designated EFH for 24 federally managed species and one Habitat Area of Particular Concern (HAPC). The EFH species and life stages are listed in Table 3.

**Table 3: EFH Species and Life Stages in the Vicinity of CHBI Outfall at Latitude 42°14'11", Longitude -70°58'19"**

EFH Species	Lifestage(s) Found at Location
Atlantic Wolffish	ALL
Winter Flounder	Eggs, Juvenile, Larvae/Adult
Little Skate	Juvenile, Adult
Ocean Pout	Adult, Eggs, Juvenile

<sup>42</sup> NOAA EFH Mapper available at <http://www.habitat.noaa.gov/protection/efh/efhmapper/>

<b>EFH Species</b>	<b>Lifestage(s) Found at Location</b>
Atlantic Herring	Juvenile, Adult, Larvae
Atlantic Cod	Larvae, Adult, Juvenile, Eggs
Pollock	Juvenile, Eggs, Larvae
Red Hake	Adult, Eggs/Larvae/Juvenile
Silver Hake	Eggs/Larvae, Adult
Yellowtail Flounder	Adult, Juvenile, Larvae, Eggs
White Hake	Larvae, Adult, Eggs, Juvenile
Windowpane Flounder	Adult, Larvae, Eggs, Juvenile
Winter Skate	Adult, Juvenile
American Plaice	Adult, Juvenile, Larvae, Eggs
Thorny Skate	Juvenile
Northern Shortfin Squid	Adult
Longfin Inshore Squid	Juvenile, Adult
Atlantic Mackerel	Eggs, Larvae, Juvenile, Adult
Bluefish	Adult, Juvenile
Atlantic Butterfish	Eggs, Larvae, Adult
Spiny Dogfish	Sub-Adult Female, Adult Male, Adult Female
Atlantic Surfclam	Juvenile, Adult
Scup	Juvenile, Adult
Black Sea Bass	Juvenile, Adult
<b>HAPC Name</b>	
Inshore 20m Juvenile Cod	

### **EPA's Finding of all Potential Impacts to EFH Species**

- This Draft Permit action does not constitute a new source of pollutants because it is the reissuance of an existing NPDES permit;
- The Facility withdraws no water from Hayward Creek or the Weymouth Fore River, so no life stages of EFH species are vulnerable to impingement or entrainment;
- The effluent discharged consists of *treated* site-wide stormwater run-off, including stormwater that collects in secondary containment areas and off-site groundwater seepage, minimizing the likelihood of any toxic pollutants in the discharge;
- Acute toxicity tests will be conducted annually to ensure that the discharge does not present toxicity problems;
- A maximum daily flow limit of 350 gpm will be implemented year-round in order to allow predicted mixing with the receiving water;
- Discharge limits have been proposed for flow, total suspended solids, oil and grease, pH, total Group I PAHs, total Group II PAHs, total benzene, BTEX, total polychlorinated biphenyls (PCBs), total antimony, total arsenic, total cadmium, total chromium, total

cobalt, total copper, total lead, total mercury, total nickel, total selenium, total silver, total tin, total titanium, total vanadium, total zinc, bis(2-ethylhexyl) phthalate, butylbenzyl phthalate, carbazole, n-decane, n-octadecane and LC<sub>50</sub> in order to meet federal effluent limitations guidelines and state water quality standards;

- The Draft Permit prohibits the discharge of pollutants or combination of pollutants in toxic amounts;
- The effluent limitations and conditions in the Draft Permit were developed to be protective of all aquatic life; and
- The Draft Permit prohibits violations of the state water quality standards.

EPA believes that the conditions and limitations contained within the Clean Harbors Draft Permit adequately protects all aquatic life, including those species with designated EFH in the receiving water, as well as the Habitat Area of Particular Concern. Further mitigation is not warranted. Should adverse impacts to EFH be detected as a result of this permit action, or if new information is received that changes the basis for EPA's conclusions, NOAA Fisheries will be contacted and an EFH consultation will be re-initiated.

In addition to this Fact Sheet and the Draft Permit, information to support EPA's finding is included in a letter under separate cover that will be sent to the NOAA Fisheries Habitat Division after the public comment period has begun.

## **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:

Sharon DeMeo  
EPA Region 1  
5 Post Office Square, Suite 100 (06-4)  
Boston, MA 02109-3912  
Telephone: (617) 918-1995  
Email: [demeo.sharon@epa.gov](mailto:demeo.sharon@epa.gov)

Prior to the close of the public comment period, any person may submit a written request to EPA for a public hearing to consider the Draft Permit. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held if the criteria stated in 40 CFR § 124.12 are satisfied. In reaching a final decision on the Draft Permit, EPA will respond to all significant comments in a Response to Comments document attached to the Final Permit and make these responses available to the public at EPA's Boston office and on EPA's website.

Following the close of the comment period, and after any public hearings, if such hearings are held, 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 submitted written comments or requested notice. Within 30 days after EPA serves notice of the

issuance of the Final Permit decision, an appeal of the federal NPDES permit may be commenced by filing a petition for review of the permit with the Clerk of EPA's Environmental Appeals Board in accordance with the procedures at 40 CFR § 124.19.

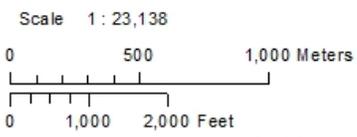
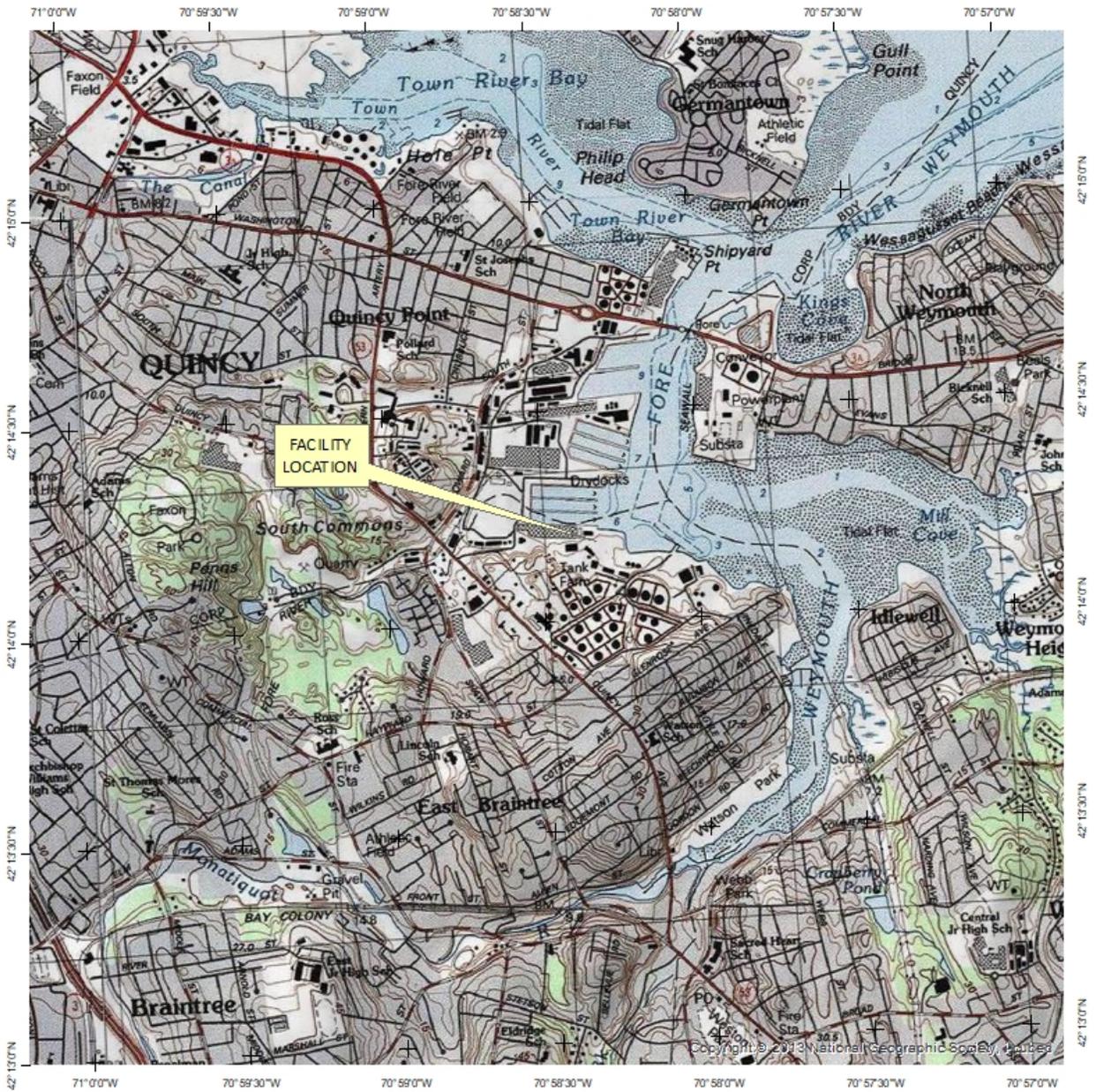
### **8.0 Administrative Record**

The administrative record on which this Draft Permit is based may be accessed at EPA's Boston office by appointment, Monday through Friday, excluding holidays from Sharon DeMeo, EPA Region 1, 5 Post Office Square, Suite 100 (06-1), Boston, MA 02109-3912 or via email to [demeo.sharon@epa.gov](mailto:demeo.sharon@epa.gov).

July 2020

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

Figure 1: Location Map



Regulated Facilities: EPA



**FIGURE 1**  
**Clean Harbors of Braintree, Inc.**  
**Location Map**

Braintree, MA

 ICIS NPDES Outfalls

  
5/22/2019

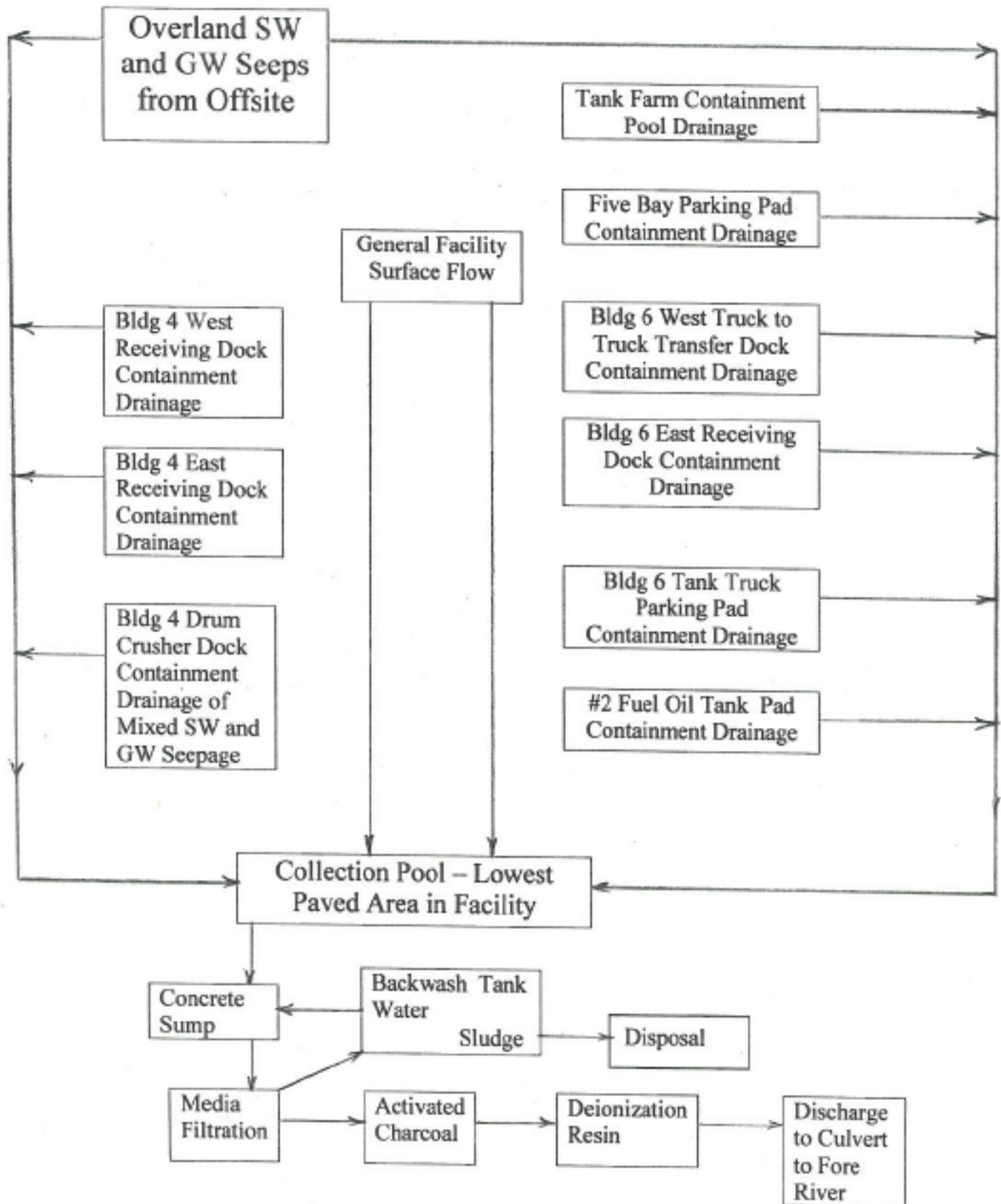
Figure 2: Site Plan



→ Drainage Routes

Source: <http://maps.massgis.state.ma.us/WETLANDS12K/viewer.htm>

Figure 3: Schematic of Water Flow



**Appendix A: Discharge Monitoring Data for Outfall 001**

Outfall 001					
Parameter	Polychlorinated biphenyls (PCBs)	Benzene	BTEX	Total Group I Polycyclic Aromatic Hydrocarbons	
	Maximum	TOTAL	TOTAL	TOTAL	
Units	ug/L	ug/L	ug/L	ug/L	
Effluent Limit	0.03	5	100	10	
Minimum	0	0	0	0	
Maximum	0	0	0	0.03	
Median	Non-Detect	Non-Detect	Non-Detect	Non-Detect	
No. of Violations	0	0	0	0	
12/31/2014	<0.5	< 1	<2	<1	
6/30/2015	<0.5	< 1	<2	<1	
12/31/2015	<0.03	< 2	< 4	0.03	Benz(a)anthracene
6/30/2016	<0.05	<2	<0.1	<2	
12/31/2016	<0.03	<2	<2	<0.1	
6/30/2017	NR	NR	NR	NR	
12/31/2017	<0.05	<2	<2	<0.09	
6/30/2018	<0.05	<2	<2	<0.1	
12/31/2018	<0.05	<2	<2	<0.5	
6/30/2019	<0.05	<2	<2	< 0.5	
12/31/2019	<0.05	<2	<2	< 0.5	

Parameter	Flow	Flow rate	Flow rate	TSS	TSS	pH	pH	Oil & grease	Lead
	EVNT TOT	Daily Max	MO TOTAL	Monthly Ave	Daily Max	Min	Max	Daily Max	Daily Max
Units	gal/mo	gal/min	gal/min	mg/L	mg/L	SU	SU	mg/L	ug/L
Effluent Limit	Report	350	Report	20	30	6.5	8.5	5	8.1
Minimum	13459	100	24	0	0	6	6	0	0
Maximum	1143128	350	292	30	30	7.8	7.8	3.2	13
Median	382023	175	112	Non-Detect	Non-Detect	6.95	7.03	Non-Detect	1
# of Violations	N/A	0	N/A	2	0	3	0	0	1
Monitoring Period End Date									
7/31/2014	426000	329	153	< 5	< 5	7.2	7.2	< 1.4	2
8/31/2014	93889	331	104	< 5	< 5	6.79	6.79	< 1.4	2
9/30/2014	NODI: F	NODI: F	NODI: F	NODI: F	NODI: F	NODI: F	NODI: F	NODI: F	NODI: F
10/31/2014	619971	318	197	< 5	< 5	6.68	6.68	3.2	3
11/30/2014	863933	350	153	< 5	< 5	7.8	7.8	< 1.4	< 1
12/31/2014	676988	185	136	< 5.3	< 5.3	7.23	7.23	< 1.4	3
1/31/2015	315933	105	158	< 5	< 5	7.76	7.76	< 1.4	< 2
2/28/2015	NODI: F	NODI: F	NODI: F	NODI: F	NODI: F	NODI: F	NODI: F	NODI: F	NODI: F
3/31/2015	491221	250	175	< 5	< 5	7.58	7.58	< 1.4	< 2
4/30/2015	242597	205	158	< 5	< 5	6.5	6.5	< 1.4	< 2
5/31/2015	213683	250	239	< 5	< 5	7.8	7.8	< 1.4	< 2
6/30/2015	342962	213	204	NR	NR	7.1	7.1	< 1.4	< 2
7/31/2015	314972	208	185	9.5	9.5	6.3	6.3	< 1.4	< 2
8/31/2015	130065	238	220	< 5	< 5	7.65	7.65	< 1.4	4
9/30/2015	221958	303	250	< 5	< 5	6.95	6.95	< 1.4	3
10/31/2015	440254	308	112	< 5	< 5	7.09	7.09	< 1.4	3

11/30/2015	406376	235	200	< 5	< 5	6	6	< 1.4	3
12/31/2015	570493	150	128	< 5	< 5	6.72	6.72	< 1.4	1
1/31/2016	400123	250	198	< 5	< 5	7.33	7.33	< 1.4	1
2/29/2016	526716	290	237	17.25	28	6.5	6.5	< 1.4	13
3/31/2016	153188	225	202	< 5	< 5	6.59	6.59	< 1.4	1
4/30/2016	441515	225	221	< 5	< 5	6.43	7.53	< 1.4	1
5/31/2016	242321	180	170	< 5	< 5	7.06	7.06	< 1.4	1
6/30/2016	188507	239	233	< 5	< 5	7.47	7.47	< 1.4	< 1
7/31/2016	NODI: 7								
8/31/2016	111318	150	111	< 5	< 5	7.64	7.64	< 1.4	< 2
9/30/2016	281236	150	150	< 5	< 5	7.46	7.46	< 1.4	1
10/31/2016	631062	300	292	< 5	< 5	6.69	6.69	< 1.6	2
11/30/2016	329008	250	250	8	8	6.7	6.7	< 1.4	3
12/31/2016	209135	197	87	< 5	< 5	6.54	6.54	< 1.4	3
1/31/2017	13459	180	75	< 5	< 5	6.53	6.53	< 1.4	3
2/28/2017	561767	100	100	30	30	6.54	6.54	< 1.4	7
3/31/2017	194657	240	239	27	27	6.67	6.67	< 1.4	8
4/30/2017	706358	195	98	< 5	< 5	7.2	7.2	< 1.4	< 1
5/31/2017	594849	250	83	< 5	< 5	7.53	7.53	< 1.4	1
6/30/2017	471335	250	83	< 5	< 5	7.28	7.28	< 1.5	1
7/31/2017	396311	175	140	< 5	< 5	7.67	7.67	< 1.5	3
8/31/2017	NODI: C								
9/30/2017	130733	125	114	< 5	< 5	7.11	7.11	< 1.4	2
10/31/2017	561448	175	175	< 5	< 5	7.25	7.25	< 1.6	1
11/30/2017	171250	120	97	< 5	< 5	6.5	6.5	< 1.5	3
12/31/2017	157738	150	51	< 5	< 5	7.36	7.36	< 1.5	< 1
1/31/2018	460077	175	136	< 5	< 5	7.62	7.62	< 1.5	< 1
2/28/2018	613900	185	185	< 5	< 5	7.34	7.34	< 1.5	< 1
3/31/2018	430398	250	94	7	7	6.85	6.85	< 1.5	< 1
4/30/2018	93000	175	175	< 5	< 5	7.4	7.4	< 1.5	< 1

5/31/2018	638172	175	175	< 5	< 5	7.12	7.12	< 1.5	< 1
6/30/2018	129552	150	66	< 5	< 5	7.03	7.03	< 1.5	1
7/31/2018	427392	140	83	5	5	6.92	6.92	< 1.5	1
8/31/2018	463600	125	109	9	9	6.9	6.9	< 1.5	<1
9/30/2018	969948	150	75	< 5	< 5	6.67	6.67	< 1.5	<1
10/31/2018	538064	125	83	< 5	< 5	6.76	6.76	< 1.5	< 3
11/30/2018	1143128	250	140	< 5	< 5	6.83	6.83	< 1.5	1
12/31/2018	443554	250	68	< 5	< 5	7.35	7.36	< 1.6	1
1/31/2019	522331	180	58	< 5	< 5	6.91	6.91	< 1.6	< 1
2/28/2019	306292	130	120	15	15	6.66	6.66	< 1.6	3
3/31/2019	405219	150	80	7	7	6.82	6.82	< 1.4	3
4/30/2019	90048	125	44	NR	NR	6.72	6.72	< 1.6	< 1
5/31/2019	1096190	150	106	7	7	6.84	6.84	< 1.6	< 1
6/30/2019	336929	187	105	9	9	7.75	7.75	< 1.6	1
7/31/2019	174820	155	105	< 5	< 5	7.17	7.17	< 1.6	< 1
8/31/2019	467159	150	100	< 5	< 5	7.03	7.03	< 1.4	< 1
9/30/2019	222036	150	100	11	11	7.19	7.19	< 1.6	1
10/31/2019	408518	150	120	< 5	< 5	7.6	7.6	< 1.6	< 1
11/30/2019	22864	112	112	6	6	7.17	7.17	< 1.4	1
12/31/2019	789843	150	24	20	20	6.52	6.52	< 1.4	< 3
1/31/2020	129751	150	79	14	14	6.64	6.64	< 1.4	< 1
2/29/2020	382023	125	52	< 5	< 5	6.55	6.55	< 1.4	1
3/31/2020	373303	150	91	2.5	2.5	7.79	7.79	< 1.4	1
4/30/2020	837786	125	54	< 2.5	< 2.5	6.76	6.76	< 1.4	1
5/31/2020	146811	100	78	< 5	< 5	7.49	7.49	< 1.4	1

Parameter	Arsenic	Chemical Oxygen Demand (COD)	Cyanide	Magnesium	Mercury	Selenium	Silver
	Daily Max	Daily Max	Daily Max	Daily Max	Daily Max	Daily Max	Daily Max
Units	ug/L	mg/L	ug/L	mg/L	ug/L	ug/L	ug/L
Effluent Limit	Report	Report	Report	Report	Report	Report	Report
Minimum	0	14	ND	0.08	ND	ND	ND
Maximum	5	29	ND	2.67	ND	ND	ND
Median	Non-Detect	20	ND	0.76	ND	ND	ND
# of Violations	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Monitoring Period End Date							
8/31/2014	< 4	25	< 10	0.08	< 0.2	< 10	< 1
8/31/2015	< 4	29	< 10	1.35	< 0.2	< 10	< 5
8/31/2016	< 4	20	< 10	1.58	< 0.2	< 10	NR
1/31/2017			<5	0.111			<1
8/31/2017	NODI: C	NODI: C	NODI: C	NODI: C	NODI: C	NODI: C	NODI: C
9/30/2017	<4	14	<10	0.965	< 0.2	< 10	< 1
8/31/2018	5	26	< 10	2.67	< 0.2	< 10	< 1
8/31/2019	<4	18	<10	0.555	<0.2	<10	<1

Parameter	LC50 Acute Menidia	LC50 Static 48 Hr Acute Mysid. Bahía	Total Solids	Ammonia as Nitrogen	TOC	Aluminum	Cadmium	Chromium	Copper	Lead	Nickel	Zinc	A-NOEC Menidia	A-NOEC Mysid. Bahía
	Daily Min	Daily Min	Daily Max	Daily Max	Daily Max	Daily Max	Daily Max	Daily Max	Daily Max	Daily Max	Daily Max	Daily Max	Daily Min	Daily Min
Units	%	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	%	%
Effluent Limit	100	100	Report	Report	Report	Report	Report	Report	Report	Report	Report	Report	Report	Report
Minimum	0	0	23	0.03	3	0.035	0	0	0	0.001	0.002	0.011	0	No Data
Maximum	0	0	180	1.99	9.9	0.253	0	0	0	0.004	0.006	0.045	0	No Data
Average	0	0	87	0.853	6.7	0.163	0	0	0	0.00225	0.004	0.0288	0	No Data
No. of Violations	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/31/2014	>100	NODI: 8	96	0.37	9.9					0.002			>100	invalid test
8/31/2015	>100	>100	67	0.92	9.1	0.253	<0.001	<0.001	<0.005	0.004	0.005	0.022	>100	>100
8/31/2016	>100	>100	70	1.99	5.3		<0.001	<0.001	<0.005	<0.002	0.003	0.011	>100	>100
9/31/2017	>100	>100	86	0.73	4.1	0.133	<0.001	<0.001	<0.005	0.002	0.002	0.045	>100	>100
8/31/2018	>100	>100	180	1.08	8.8	0.035	< 0.001	<0.001	<0.005	<0.001	0.006	0.042	>100	>100
8/31/2019	>100	>100	23	0.03	3	0.23	< 0.005	<0.005	<0.025	0.001	<0.005	0.024	>100	>100

ND - non-detected; NR – not reported; N/A – not applicable

NODI Codes: 7 – no influent; 8 – other; C – no discharge; E – analysis not conducted/no sample; F – insufficient flow for sampling

**Appendix B: Ambient Data**

Parameter	pH	Total Solids	TSS	PCB	Aluminum	Arsenic	Cadmium	Chromium	Copper	Lead	Magnesium	Mercury	Nickel	Selenium	Silver	Zinc	Salinity	TOC
Units	S.U.	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ppt	mg/L
8/31/2014	7.85	29000	36		0.263		<0.001	<0.001	0.013	<0.002			0.003			0.051	26.6	4.3
8/31/2015	7.22	11000	21	<0.058	0.186	<0.020	<0.005	<0.005	<0.025		166	<0.0002	0.008	<0.05	<0.005	0.022	9.3	7.2
8/31/2016	7.88	36000	7.5	<0.026	0.133	<0.004	<0.001	<0.001	<0.005		1120	<0.0002	<0.001	<0.010	<0.001	0.018	33	3.8
8/31/2017	7.87	33000			0.576	<0.020	<0.005	<0.005	<0.025		1030	<0.0002	<0.005	<0.05	<0.005	0.018	29.7	3.6
8/31/2018	7.17	1100	43		1.03	<0.004	<0.001	0.006	0.014	0.006	32	<0.0002	0.003	<0.01	<0.01	0.091	0.9	3.3
8/31/2019	7.91	35000	23		0.23	<0.020	<0.005	<0.005	<0.025		1290	<0.0002	<0.005	<0.05	<0.005	0.024	29.2	3

	TF Pool	6 W Slots	6 PCBS Slots	5 Bay Pad	4 Slots
Arsenic	✓	✓			
Cadmium	✓				
Chromium	✓	✓	✓	✓	✓
Lead	✓	✓	✓	✓	✓
Barium	✓	✓	✓	✓	✓
PCB -1260	✓	✓			
PCB -1248		✓	✓	✓	✓
PCB - 1254			✓		
Total PCB's		✓	✓		
Benzene	✓				✓
1,2,4-Trimethylbenzene		✓			
1,3,5-Trimethylbenzene		✓			
Ethylbenzene		✓			
n-Propylbenzene		✓			
Bis (2-ethylhexyl) phthalate	✓	✓	✓	✓	✓
Di-n-butylphthalate	✓				
Di-n-octylphthalate	✓				
Phenol	✓				
Acetone	✓				
4-methyl-2-pentanone		✓			✓
Methyl ethyl ketone	✓				
Methyl t-butyl ether (MTBE)		✓			
Naphthalene	✓	✓			✓
p-Isopropyltoluene	✓				
Acenaphthene	✓		✓	✓	
Tetrahydrofuran	✓	✓			✓
Chloromethane		✓			
2,4-Dimethylphenol					✓
m&p-Xylene	✓	✓			
o-Xylene	✓	✓			
Toluene	✓	✓			
Total Xylenes	✓	✓			
Benzen(a)anthracen	✓	✓	✓	✓	✓
Benzo(a)pyrene	✓	✓	✓	✓	✓
Benzo(b)flouranthene	✓	✓	✓	✓	✓
Benzo(k)flouranthene	✓	✓	✓	✓	✓
Chrysene	✓	✓	✓	✓	✓
Dibenz(a,h)anthracen	✓	✓	✓	✓	✓
Indeno(1,2,3-cd)pyrer	✓	✓	✓	✓	✓
Anthracene	✓	✓	✓	✓	✓
Fluoranthene	✓	✓	✓	✓	✓
Fluorene	✓			✓	
Hexachlorobenzene			✓		
Pentachlorophenol	✓				
Phenanthrene	✓	✓	✓	✓	✓
Pyrene	✓	✓	✓	✓	✓
Pyridine	✓				
Endosulfan I	✓				
Endosulfan sulfate		✓	✓	✓	✓
Endrin aldehyde			✓		
Dalapon				✓	

**Appendix C: Pollutants Found in Secondary Containment Areas at CHBI**

**Appendix D: Limits Comparison between CWT ELG, 2011 Permit and Draft Permit**

Pollutants	Units	CWT ELG Maximum Daily Limits	CWT ELG Average Monthly Limits	2011 Permit Maximum Daily Limits	Basis of 2011 Permit Requirements	2019 Draft Permit Requirements		Basis of 2019 Draft Permit Requirements
						Maximum Daily	Average Monthly	
Oil and Grease	mg/L	127	38	5	WQS/anti-backsliding	5		anti-backsliding
pH		$\geq 6$ and $\leq 9$	$\geq 6$ and $\leq 9$	$\geq 6.5$ and $\leq 8.5$	WQS	$\geq 6.5$ and $\leq 8.5$		WQS
TSS	mg/L	74.1	30.6	30 20 Ave monthly	BPJ/anti-backsliding	30	20	anti-backsliding
COD	mg/L			Report	Benchmark 120			remove
Total PAHs	ug/L			10	TBEL/anti-backsliding			Split into 2 groups below
Total Group I PAHs	ug/L					1		BPJ TBEL
Total Group II PAHs	ug/L					10		anti-backsliding
Total Benzene	ug/L			5	TBEL/anti-backsliding	5		anti-backsliding
BTEX	ug/L			100	TBEL/anti-backsliding	100		anti-backsliding
Total PCBs	ug/L			0.03	WQS (chronic)		0.03	anti-backsliding WQS
Ammonia	mg/L			Report	Benchmark 2.14			remove
Antimony	ug/L	249	206			249	206	ELG
Arsenic	ug/L	162	104	Report	Benchmark 69	69	36	WQS
Cadmium	ug/L	17.2	10.2	Report	Benchmark 40	17.2	8.8	ELG/WQS
Cyanide	ug/L			Report	Benchmark 1.0	1.0	1.0	remove
Chromium	ug/L	746	323			746	323	ELG
Cobalt	ug/L	192	124			192	124	ELG
Copper	ug/L	500	242			4.8	3.1	WQS

Lead	ug/L	350	160	8.1	WQS	210	8.1	WQS
Magnesium	ug/L			Report	Benchmark 64			remove
Mercury	ug/L	2.34	0.739	Report	Benchmark 1.8	1.8	0.739	WQS/ELG
Nickel	ug/L	3950	1450			74	8.2	WQS
Selenium	ug/L			Report	Benchmark 290	290	71	remove
Silver	ug/L	120	35.1	Report	Benchmark 1.9	1.9	35.1	WQS/ELG
Tin	ug/L	409	120			409	120	ELG
Titanium	ug/L	94.7	61.8			94.7	61.8	ELG
Vanadium	ug/L	218	66.2			218	66.2	ELG
Zinc	ug/L	2870	641			90	81	WQS
Bis(2-ethylhexyl) phthalate	ug/L	215	101			215	101	ELG
Butylbenzyl phthalate	ug/L	188	88.7			188	88.7	ELG
Carbazole	ug/L	598	276			598	276	ELG
n-Decane	ug/L	948	437			948	437	ELG
Fluoranthene	ug/L	53.7	26.8					Part of PAH's
n- Octadecane	ug/L	589	302			589	302	ELG

UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY – REGION 1 (EPA)  
WATER DIVISION  
5 POST OFFICE SQUARE  
BOSTON, MASSACHUSETTS 02109

MASSACHUSETTS DEPARTMENT OF  
ENVIRONMENTAL PROTECTION (MASSDEP)  
COMMONWEALTH OF MASSACHUSETTS  
1 WINTER STREET  
BOSTON, MASSACHUSETTS 02108

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

PUBLIC NOTICE PERIOD: **July 17, 2020 – August 15, 2020**

PERMIT NUMBER: **MA0031551**

PUBLIC NOTICE NUMBER: **MA-020-20**

NAME AND MAILING ADDRESS OF APPLICANT:

Clean Harbors of Braintree, Inc.  
1 Hill Avenue  
Braintree, MA 02185

NAME AND ADDRESS OF THE FACILITY WHERE DISCHARGE OCCURS:

Clean Harbors of Braintree, Inc.  
1 Hill Avenue  
Braintree, MA 02185

RECEIVING WATER AND CLASSIFICATION:

Weymouth Fore River (MA74-14) (Class SB)

PREPARATION OF THE DRAFT PERMIT AND EPA REQUEST FOR CWA § 401 CERTIFICATION:

EPA is issuing for public notice and comment the Draft NPDES Permit for Clean Harbors of Braintree, Inc., which discharges treated stormwater runoff and groundwater seepage. The effluent limits and permit conditions imposed have been drafted pursuant to, and assure compliance with, the CWA, including EPA-approved State Surface Water Quality Standards at 314 CMR 4.00. MassDEP cooperated with EPA in the development of the Draft NPDES Permit. MassDEP retains independent authority under State law to issue a separate Surface Water Discharge Permit for the discharge, not the subject of this notice, under the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53.

In addition, EPA has requested that MassDEP grant or deny certification of this Draft Permit pursuant to Section 401 of the CWA and implementing regulations. Under federal regulations governing the NPDES program at 40 Code of Federal Regulations (CFR) § 124.53(e), state certification shall contain conditions that are necessary to assure compliance with the applicable provisions of CWA sections 208(e), 301, 302, 303, 306, and 307 and with appropriate requirements of State law, including any conditions more stringent than those in the Draft Permit that MassDEP finds necessary to meet these requirements. In addition, MassDEP may provide a statement of the extent to which each condition of the Draft Permit can be made less stringent without violating the requirements of State law.

## INFORMATION ABOUT THE DRAFT PERMIT:

The Draft Permit and explanatory Fact Sheet may be obtained at no cost at <https://www.epa.gov/npdes-permits/massachusetts-draft-individual-npdes-permits> or by contacting:

Sharon DeMeo  
U.S. Environmental Protection Agency – Region 1  
5 Post Office Square, Suite 100 (06-1)  
Boston, MA 02109-3912  
Telephone: (617) 918-1995  
[demeo.sharon@epa.gov](mailto:demeo.sharon@epa.gov)

Following U.S. Centers for Disease Control and Prevention (CDC) and U.S. Office of Personnel Management (OPM) guidance and specific state guidelines impacting our regional offices, EPA's workforce has been directed to telework to help prevent transmission of the coronavirus. While in this workforce telework status, there are practical limitations on the ability of Agency personnel to allow the public to review the administrative record in person at the EPA Boston office. However, any documents relating to this Draft Permit can be requested from the individual listed above.

## PUBLIC COMMENT AND REQUESTS FOR PUBLIC HEARINGS:

All persons, including applicants, who believe any condition of this Draft Permit is inappropriate must raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by **August 15, 2020**, which is the close of the public comment period. Comments, including those pertaining to EPA's request for CWA § 401 certification, should be submitted to the EPA contact at the address or email listed above. Upon the close of the public comment period, EPA will make all comments available to MassDEP.

Any person, prior to the close of the public comment period, may submit a request in writing to EPA for a public hearing on the Draft Permit under 40 CFR § 124.10. 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 if 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.

Due to the COVID-19 National Emergency, if comments are submitted in hard copy form, please also email a copy to the EPA contact above.

## 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 notify the applicant and each person who has submitted written comments or requested notice.

KEN MORAFF, DIRECTOR  
WATER DIVISION  
UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY – REGION 1

LEALDON LANGLEY, DIRECTOR  
DIVISION OF WATERSHED MGMT  
MASSACHUSETTS DEPARTMENT OF  
ENVIRONMENTAL PROTECTION