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"),

Chelsea Sandwich LLC

is authorized to discharge from a facility located at

Chelsea Sandwich LLC 11 Broadway Chelsea, MA 02150

to receiving water named

Chelsea River (MA71-06) Mystic River Watershed

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

This permit shall become effective on [DATE].

This permit expires at midnight on [DATE].

This permit supersedes the permit issued on September 24, 2014.

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

KENNETH MORAFF Digitally signed by KENNETH MORAFF Date: 2022.09.30 11:01:17 -04'00'

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

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1.During the period beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge treated stormwater, hydrostatic test water, groundwater remediation effluent from internal Outfall 002, and boiler blowdown/steam condensate through Outfall Serial Number 001 to the Chelsea River. The discharge shall be limited and monitored as specified below; the receiving water shall be monitored as specified below.

Effluent Characteristic	Effluent Limitation		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type
Flow Rate ⁵		700 GPM	When Discharging	Estimate
Total Effluent Flow ⁶		Report MGal/Mo	When Discharging	Meter
Number of Events		Report #	When Discharging	Count
Total Suspended Solids (TSS)	30 mg/L	100 mg/L	2/Month	Grab
Turbidity	Report NTU	Report NTU	2/Month	Grab
pH ⁷	6.5 -	6.5 - 8.5 S.U.		Grab
Chemical Oxygen Demand		Report mg/L	1/Month	Grab
Oil and Grease		15 mg/L	1/Month	Grab
Fecal Coliform ⁸		Report MPN	1/Month	Grab
Enterococcus ⁸		Report CFU	1/Month	Grab

Effluent Characteristic	Effluent Limitation		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type
Benzene ¹⁰		5 μg/L	1/Month	Grab
Ethylbenzene ¹⁰		Report µg/L	1/Year ¹¹	Grab
Toluene ¹⁰		Report μg/L	1/Year ¹¹	Grab
Total Xylenes ¹⁰		Report μg/L	1/Year ¹¹	Grab
Benzo(a)pyrene ¹²	0.00013 μg/L	Report μg/L	1/Month	Grab
Benzo(a)anthracene ¹²	0.0013 μg/L	Report μg/L	1/Month	Grab
Benzo(b)fluoranthene ¹²	0.0013 μg/L	Report μg/L	1/Month	Grab
Benzo(k)fluoranthene ¹²	0.013 μg/L	Report μg/L	1/Month	Grab
Chrysene ¹²	0.13 μg/L	Report μg/L	1/Month	Grab
Dibenzo(a,h)anthracene ¹²	0.00013 μg/L	Report μg/L	1/Month	Grab
Indeno(1,2,3-cd)pyrene ¹²	0.0013 μg/L	Report μg/L	1/Month	Grab
Naphthalene		20 μg/L	1/Month	Grab
Acenaphthene		Report μg/L	1/Year ¹¹	Grab
Acenaphthylene		Report μg/L	1/Year ¹¹	Grab
Anthracene		Report μg/L	1/Year ¹¹	Grab
Benzo(g,h,i)perylene		Report μg/L	1/Year ¹¹	Grab

Effluent Characteristic	Effluent Limitation		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type
Fluoranthene		Report µg/L	1/Year ¹¹	Grab
Fluorene		Report μg/L	1/Year ¹¹	Grab
Phenanthrene		Report μg/L	1/Year ¹¹	Grab
Pyrene		Report μg/L	1/Year ¹¹	Grab
Total Residual Chlorine ¹³		13 μg/L	1/Month	Grab
Total Phthalates ¹⁴		Report μg/L	1/Quarter	Grab
Total Copper		5.8 μg/L	1/Month	Grab
Total Zinc		95.1 μg/L	1/Month	Grab
Cyanide ¹⁵		1 μg/L	1/Month	Grab
Total Ammonia (as N) (April 1 through October 31)		1.8 mg/L	1/Month	Grab
Perfluorohexanesulfonic acid (PFHxS) ^{16,17}		Report ng/L	1/Quarter	Grab
Perfluoroheptanoic acid (PFHpA) ^{16,17}		Report ng/L	1/Quarter	Grab
Perfluorononanoic acid (PFNA) ^{16,17}		Report ng/L	1/Quarter	Grab
Perfluorooctanesulfonic acid (PFOS) ^{16,17}		Report ng/L	1/Quarter	Grab
Perfluorooctanoic acid (PFOA) ^{16,17}		Report ng/L	1/Quarter	Grab
Perfluorodecanoic acid (PFDA) ^{16,17}		Report ng/L	1/Quarter	Grab

Effluent Characteristic	Effluent Limitation		Monitoring Requirements ^{1,2,3}			
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type		
Whole Effluent Toxicity (WET) Testing ^{18, 19}						
LC ₅₀		Report %	1/Year	Grab		
Total Residual Chlorine		Report mg/L	1/Year	Grab		
Salinity		Report g/kg	1/Year	Grab		
рН		Report SU	1/Year	Grab		
Total Solids		Report mg/L	1/Year	Grab		
Total Suspended Solids		Report mg/L	1/Year	Grab		
Ammonia Nitrogen		Report mg/L	1/Year	Grab		
Total Organic Carbon		Report mg/L	1/Year	Grab		
Total Cadmium		Report μg/L	1/Year	Grab		
Total Copper		Report μg/L	1/Year	Grab		
Total Lead		Report μg/L	1/Year	Grab		
Total Nickel		Report μg/L	1/Year	Grab		
Total Zinc		Report μg/L	1/Year	Grab		

	Reporting Requirements		Monitoring Requirements ^{1,2,3}	
Ambient Characteristic ²⁰	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ⁵
Salinity		Report g/kg	1/Year	Grab
Ammonia Nitrogen		Report mg/L	1/Year	Grab
Total Cadmium		Report μg/L	1/Year	Grab
Total Copper		Report μg/L	1/Year	Grab
Total Nickel		Report μg/L	1/Year	Grab
Total Lead		Report µg/L	1/Year	Grab
Total Zinc		Report μg/L	1/Year	Grab
pH ²¹		Report SU	1/Year	Grab
Temperature ²¹		Report °C	1/Year	Grab
Benzene		Report μg/L	1/Year ²²	Grab
Ethylbenzene		Report μg/L	1/Year ²²	Grab
Toluene		Report μg/L	1/Year ²²	Grab
Total Xylenes		Report μg/L	1/Year ²²	Grab
Benzo(a)anthracene		Report μg/L	1/Year ²²	Grab
Benzo(a)pyrene		Report μg/L	1/Year ²²	Grab

Benzo(b)fluoranthene	 Report μg/L	1/Year ²²	Grab
Benzo(k)fluoranthene	 Report µg/L	1/Year ²²	Grab
Chrysene	 Report µg/L	1/Year ²²	Grab
Dibenzo(a,h)anthracene	 Report µg/L	1/Year ²²	Grab
Indeno(1,2,3-cd)pyrene	 Report µg/L	1/Year ²²	Grab
Acenaphthene	 Report µg/L	1/Year ²²	Grab
Acenaphthylene	 Report µg/L	1/Year ²²	Grab
Anthracene	 Report µg/L	1/Year ²²	Grab
Benzo(g,h,i)perylene	 Report μg/L	1/Year ²²	Grab
Fluoranthene	 Report µg/L	1/Year ²²	Grab
Fluorene	 Report µg/L	1/Year ²²	Grab
Naphthalene	 Report µg/L	1/Year ²²	Grab
Phenanthrene	 Report µg/L	1/Year ²²	Grab
Pyrene	 Report µg/L	1/Year ²²	Grab

Footnotes:

1.Grab samples for Outfall 001 shall be collected at the discharge point from the Facility's oil/water separator (OWS), prior to commingling with any other wastestream. Samples shall be collected after treatment through the stormwater treatment system and free from tidal influence. Samples shall be grab samples taken within 15 minutes of the initiation of a discharge where practicable, but in no case later than within the first hour of discharge from the outfall. 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 Code of Federal Regulations (CFR) Part 136.

- 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 sample ML for that parameter (e.g., $< 5 \mu g/L$), if the sample ML for a parameter is $5 \mu g/L$). 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 in the field provided on every Discharge Monitoring Report (DMR).
- 4.Measurement frequency of "when discharging" is defined as the sampling of any measurable discharge event, reported for each calendar month. Sampling frequency of 1/month is defined as the sampling of one discharge event in each calendar month. Sampling frequency of 1/quarter is defined as the sampling of one discharge event in each quarter. Calendar quarters are defined as January through March, inclusive, April through June, inclusive, July through September, inclusive and October through December, inclusive. Sampling frequency of 1/year is defined as the sampling of one discharge event during one calendar year, unless otherwise specified. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code.
- 5.For Flow Rate, the maximum daily value represents the maximum instantaneous flow rate measured by the Facility as passing through the treatment system for each day that a discharge occurs during the reported period. The maximum instantaneous flow rate, which is to be reported in units of gallons per minute (GPM), shall be an estimate based on the summation of the pump curve value(s) for all pumps in operation which control the rate of flow through the OWS when discharge is occurring. The Permittee shall at no time exceed the design flow rate of the treatment system.

- 6.For Total Flow, the value reported represents the sum of the recorded discharge volume for each day that effluent is discharged during that month, measured at the treatment system using a totalizer or similar device. Total Flow shall be reported in the units of millions of gallons per month (Mgal/Mo). The Permittee shall also report the total number of days during the reporting period discharges from the outfall occurred (i.e., a measurable volume of effluent passes through the totalizer or similar device), noted on the DMR form under "Event Total."
- 7. 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.).
- 8.Results must be reported as colony forming units (CFU). After a minimum one year following the effective date of the permit and 12 samples, the sampling frequency for *Enterococcus* shall reduce to 1/year if all sample results are less than the applicable water quality criteria.
- 9.Daily maximum temperature must be taken for the influent (i.e., boiler blowdown/steam condensate), the effluent, and the receiving water at the time of collection and the results reported on the appropriate DMR. Temperature shall be measured using EPA-approved methods in 40 CFR §136 (e.g., Method 2550-B-2000).
- 10. The ML for analysis for benzene, ethylbenzene, toluene and total xylenes shall be no greater than 2 µg/L.
- 11. The Permittee shall conduct annual monitoring of the effluent during the month of April for the following compounds: acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, phenanthrene, pyrene, toluene, ethylbenzene, and total xylenes. Sampling shall be performed during the first Qualifying Event and concurrently with the April monthly monitoring event. A Qualifying Event shall be defined as a discharge that occurs during daylight hours on an outgoing tide at least one hour from both the low and high slack tide. To identify a Qualifying Event, the permittee may use tide charts to predict the two four-hour intervals of an outgoing tide each day that are one hour from both low and high slack tide. If a measurable discharge does not occur such that sampling cannot be completed during the first Qualifying Event of the required sampling frequency, the permittee is to sample the next Qualifying Event. If no discharge occurs during the month of April, the Permittee shall sample the next qualifying event.
- 12. Analysis for the Group I and II Polycyclic Aromatic Hydrocarbons (PAHs) shall use Method 625.1 (low level GC/MS). The expected ML for benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, and chrysene is 0.05 μg/L. The expected ML for dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene is 0.1 μg/L. The expected ML for acenaphthene,

acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, naphthalene, phenanthrene, and pyrene is 5 μ g/L. The compliance level for Group I PAHs with numeric effluent limits less than the minimum level shall be non-detect at any sample ML above the numeric limit.

- 13. TRC analysis must be completed using a test method in 40 CFR Part 136 that achieves a minimum level of detection no greater than 30 µg/L. The compliance level for TRC is 30 µg/L. The Permittee may request that this limit and associated monitoring apply only to discharges that have been previously chlorinated or that contain residual chlorine following completion of a source identification study demonstrating the source of TRC and implementation of BMPs to control TRC in the effluent.
- 14. Total Phthalates is the sum of: diethylhexyl phthalate (CAS No. 117-81-7); butyl benzyl phthalate (CAS No. 85-68-7); di-n-butyl phthalate (CAS No. 84-74-2); diethyl phthalate (CAS No. 131-11-3); di-n-octyl phthalate (CAS No. 117-84-0).
- 15. For the purposes of this permit, the analysis must be completed for total cyanide using a test method in 40 CFR Part 136 that achieves a minimum level of detection no greater than 5 μ g/L. The compliance level for total cyanide is 5 μ g/L.
- 16. The monitoring requirement for the listed PFAS parameters takes effect during the first quarter following six months after receiving written notification of availability of the multi-laboratory validation of analytical test Method 1633 for the analysis of PFAS in wastewater and biosolids. Results must be reported in nanograms per liter (ng/L).
- 17. After three years of monitoring or a minimum of 12 samples, 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.
- 18. The Permittee shall conduct acute toxicity tests (LC₅₀) 1/year during the month of April in accordance with test procedures and protocol specified in **Attachment A** of this permit. LC₅₀ is defined in Part II.E. of this permit. Sampling shall be conducted during a Qualifying Event concurrently with the annual effluent monitoring described above. The Permittee shall test the mysid shrimp, *Americamysis bahia*, and the inland silverside, *Menidia beryllina*. The complete report for each toxicity test shall be submitted as an attachment to the monthly DMR submittal immediately following the completion of the test.
- 19. 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.

- 20. 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.
- 21. 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.
- 22. The Permittee shall conduct annual monitoring of the receiving water during the month of April for the following compounds: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, benzene, toluene, ethylbenzene, and total xylenes. The ML for analysis shall be equivalent to the MLs for effluent monitoring. The receiving water sample shall be collected from the Chelsea River at a point immediately outside of Outfall 001's zone of influence at a reasonably accessible location. Sampling shall be performed during a Qualifying Event concurrently with the annual toxicity monitoring and annual effluent monitoring described above.

2. During the period beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge treated stormwater and hydrostatic test water through internal Outfall Serial Number 002 to the Chelsea River via Outfall Serial Number 001. The discharge shall be limited and monitored as specified below; the receiving water shall be monitored as specified below.

Effluent Characteristic	Effluent Limitation		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type
Flow Rate ⁵		25 GPM	When Discharging	Estimate
Total Effluent Flow ⁶		Report MGal/Mo	When Discharging	Meter
pH ⁷	6.5 -	8.5 S.U.	1/Month	Grab
Benzene		5 μg/L	1/Month	Grab
Total BTEX		100 μg/L	1/Month	Grab
Total Petroleum Hydrocarbons		5 mg/L	1/Quarter	Grab

- 1.Grab samples for Outfall 002 shall be collected at the discharge point from the Facility's treatment system, prior to commingling with any other wastestream. Sampling may be conducted inside of the treatment system building at the outlet of the final treatment component. Samples shall be grab samples taken within 15 minutes of the initiation of a discharge where practicable, but in no case later than within the first hour of discharge from the outfall. 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 Code of Federal Regulations (CFR) Part 136.
- 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 sample ML for that parameter (e.g., $< 5 \mu g/L$), if the sample ML for a parameter is $5 \mu g/L$). 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 in the field provided on every Discharge Monitoring Report (DMR).
- 4.Measurement frequency of "when discharging" is defined as the sampling of any measurable discharge event, reported for each calendar month. Sampling frequency of 1/month is defined as the sampling of one discharge event in each calendar month. Sampling frequency of 1/quarter is defined as the sampling of one discharge event in each quarter. Calendar quarters are defined as January through March, inclusive, April through June, inclusive, July through September, inclusive and October through December, inclusive. Sampling frequency of 1/year is defined as the sampling of one discharge event during one calendar year, unless otherwise specified. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code.
- 5.For Flow Rate, the maximum daily value represents the maximum instantaneous flow rate measured by the Facility as passing through the treatment system for each day that a discharge occurs during the reported period. The maximum instantaneous flow rate, which is to be reported in units of gallons per minute (GPM), shall be an estimate based on the summation of the pump curve value(s) for all pumps in operation which control the rate of flow through the OWS when discharge is occurring. The Permittee shall at no time exceed the design flow rate of the treatment system.
- 6.For Total Flow, the value reported represents the sum of the recorded discharge volume for each day that effluent is discharged during that month, measured at the treatment system using a totalizer or similar device. Total Flow shall be reported in the units of millions of gallons per month (Mgal/Mo). The Permittee shall also report the total number of days during the reporting period discharges from the outfall occurred (i.e., a measurable volume of effluent passes through the totalizer or similar device).

7. 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.).

Part I.A. continued.

- 3. The discharge shall not cause a violation of the water quality standards of the receiving water.
- 4. 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.
- 5. The discharge shall be free from pollutants in concentrations or combinations that adversely affect the physical, chemical, or biological nature of the bottom.
- 6. The discharge shall not result in pollutants in concentrations or combinations in the receiving water that are toxic to humans, aquatic life or wildlife.
- 7. 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.
- 8. 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.
- 9.All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director 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 (µg/L);
 - (2) 200 μg/L for acrolein and acrylonitrile; 500 μg/L for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (mg/L) for antimony;
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
 - (4) Any other notification level established by the Director 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) $500 \mu g/L$;
 - (2) One mg/L for antimony;
 - (3) 10 times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or

- (4) Any other notification level established by the Director 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 which was not reported in the permit application.

B. UNAUTHORIZED DISCHARGES

- 1. This permit authorizes discharges only from the outfall(s) listed in Part I.A.1, 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 following discharges are expressly prohibited:
 - a. Discharge of tank bottom water and/or bilge water alone or in combination with stormwater discharge or other wastewater;
 - b. Discharge of any sludge and/or bottom deposits from any storage tank(s), basin(s), and/or diked area(s) to the receiving waters. Examples of storage tanks and/or basins include, but are not limited to: primary catch basins, oil/water separators, petroleum product storage tanks, baffled storage tanks collecting spills, and tank truck loading rack sumps;
 - c. Discharge of liquid hazardous waste alone or in combination with stormwater or other wastewater;
 - d. Discharges of runoff from any vehicle and equipment washing alone or in combination with stormwater or other wastewater, including from the leased property;
 - e. Discharges of ballast water alone or in combination with stormwater or other wastewater;
 - f. Runoff resulting from accidental spill or release, alone or in combination with stormwater or other wastewater;
 - g. Discharges of emulsion chemicals, including surfactants (e.g., detergents and soaps) alone or in combination with stormwater or other wastewater:
 - h. Discharges of contaminated groundwater, including, but not limited to wastewater generated during activities conducted under the Massachusetts Contingency Plan, alone or in combination with stormwater or other wastewater;
 - i. Discharges of aqueous film-forming foam and alcohol resistant foam either in concentrate form or as foam diluted with water during testing or maintenance of the fires suppression system at the Facility's marine vessel dock

C. SPECIAL CONDITIONS

- 1. Best Management Practices (BMPs)
 - a. The Permittee shall design, install, and implement control measures to minimize pollutants discharged from stormwater associated with the Facility operations to the receiving water. At a minimum, the Permittee must implement control measures, both structural controls (e.g., OWS, containment areas, holding tanks) and non-structural (e.g., operational procedures and operator training) consistent with those described in Part 2.1.2 and of EPA's Multi-Sector General Permit (MSGP). The control measures must ensure the following non-numeric effluent limitations are met:
 - (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, including, but not limited to, those required by Section 311 of the CWA, 33 U.S.C. § 1321. The Permittee shall report immediately the appearance of any size sheen attributable to the discharge from the Facility to the appropriate agency of the United States Government in accordance with Section 311 of the 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 and require the elimination of any non-stormwater discharges not explicitly authorized in this permit or covered by another NPDES permit; and
 - (10) Minimize dust generation and vehicle tracking of industrial materials.
 - (11) Demonstrate that no illicit discharges exist, including, but not limited to, sanitary sewer cross connections. If any illicit discharge is detected, the Permittee shall locate, identify, and eliminate the illicit discharge as expeditiously as possible;
 - (12) Use known, available, and reasonable methods to prevent rodents, birds, and other animals from feeding/nesting/roosting at the Facility. Known, available, and reasonable methods do not include methods that would be construed as a violations of

¹ The current MSGP was effective March 21, 2021 and is available at https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp.

- any applicable federal, state, or local statutes, ordinances, or regulations, including the Migratory Bird Act;
- (13) Implement practices to minimize bacteria from known sources (e.g., dumpsters, food waste, or animal waste).
- b. In addition, the Permittee must design, install, and/or implement the following BMPs:
 - (1) The Permittee shall comply with the inspection requirements in Parts 3.1 and 3.2 of the 2021 MSGP, the corrective action requirements in Part 5.1 of the 2021 MSGP, and the corrective action documentation requirements in Part 5.3 of the 2021 MSGP. If any of the following conditions occur or are detected during an inspection, monitoring or by other means, the Permittee shall review and revise, as appropriate, the SWPPP so that the permit's effluent limits are met and pollutant discharges are minimized:
 - i. An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another NPDES permit;
 - ii. A discharge violates a numeric effluent limit listed in Part I.A of this permit;
 - iii. The stormwater control measures are not stringent enough to control stormwater discharges as necessary such that the receiving water will meet applicable water quality standards and/or the non-numeric limits in Part I.C of this permit;
 - iv. A required control measure was never installed, was installed incorrectly, or is not being properly operated or maintained; and
 - v. Whenever a visual assessment shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam).
 - (2) The Permittee shall comply with the control measure requirements in Part 2.1 and 2.1.1 of the 2021 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.
 - (3) The Permittee shall minimize, to the maximum extent practicable, discharging stormwater, hydrostatic test water and groundwater during worst-case conditions (i.e., approximately one hour before and after slack tide and during periods of lowest receiving water flow). The Permittee shall, to the maximum extent practicable, discharge stormwater, hydrostatic test water and groundwater on an outgoing tide. In the event that a discharge outside of the parameters described above cannot be avoided, the Permittee shall document the reason for the discharge in an attachment to the SWPPP;
 - (4) The Permittee shall document the measures and methods used to control flow through both the stormwater and groundwater treatment system to ensure that the design flow of the treatment system is not exceeded;
 - (5) The Permittee shall design and implement response procedures for ethanol, materials that are used for spill and fire control (e.g. aqueous film-forming foam). This must include specific provisions for the treatment of ethanol and/or pollutants in materials that are used for spill and fire control, should release occur;

- (6) The Permittee shall implement structural improvements, enhanced/resilient pollution prevention measures, and/or other mitigation measures to minimize² discharges that result from impacts of major storm and flood events.³ The Permittee must document in the SWPPP its evaluation of the major storm and flood risks at the Facility, and all control measures considered to address discharges resulting from these risks. For all control measures considered, the Permittee must document in the SWPPP the factual basis (i.e., the maps, data sets and calculations for the analysis), for either implementing or not implementing the measure. The factual basis and analysis must be presented in sufficient detail to allow EPA, the public, or an independent qualified person to evaluate the reasonableness of the decision. For control measures already in place, including requirements from state, local or federal agencies, a description of the controls and how they meet the requirement(s) of this permit must be documented in the SWPPP. The Permittee must consider, at a minimum, the following control measures to minimize discharges:^{4,5}
 - i. Reinforce materials storage structures to withstand flooding and additional exertion of force;
 - ii. Prevent floating of semi-stationary structures by elevating above the relative base flood elevation⁶ or securing with non-corrosive device;
 - iii. When a delivery of materials is expected, and a storm is anticipated within 48 hours, delay delivery until after the storm or store materials as appropriate (refer to emergency procedures);
 - iv. Temporarily store materials and waste above the relative base flood elevation;

² For the purposes of this provision, the term "minimize" means to reduce and/or eliminate to the extent achievable using stormwater control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

³ "Major storm and flood events" refers to instances resulting from major storms such as hurricanes, extreme/heavy precipitation events, and pluvial, fluvial, and flash flood events such as high-water events, storm surge, and high-tide flooding. "Extreme/heavy precipitation" refers to instances during which the amount of rain or snow experienced in a location substantially exceeds what is normal. What constitutes a period of heavy precipitation varies according to location and season. "Extreme/heavy precipitation" does not necessarily mean the total amount of precipitation at a location has increased—just that precipitation is occurring in more intense or more frequent events.

⁴ To determine the risks at the Facility of discharges from major storm and flood events, you must conduct the evaluation using, at a minimum, the worst-case data relating to changes in precipitation, sea level rise, extreme weather events, coastal flooding, and inland flooding, and relevant to the facility's discharges from: 1) the data generated by the 13 federal agencies that conduct or use research on global change that contributed to the latest National Climate Assessment produced by the U.S. Global Change Research Program (USGCRP); 2) climate data generated by the Commonwealth of Massachusetts; and 3) resiliency planning completed by the municipality in which a given facility is located (i.e., City of Boston, Revere, and Chelsea) and incorporate the results of the evaluation in a manner that demonstrates that the control measures taken are precautionary and sufficiently protective. Evaluation must be completed by a qualified person on a rolling annual basis considering: 1) historical observations from all years the Permittee has operated the facility prior to this permit's term; 2) all observations of events that occurred in the calendar year; and 3) the 25 to 100 years forward-looking from the review year to assess impacts that are likely to occur.

⁵ EPA Region 1 currently maintains a resource of additional data sources for evaluation and incorporation pursuant to this BMP at https://www.epa.gov/npdes-permits/dewatering-and-remediation-general-permit-drgp.

⁶ Relative base flood elevation is the computed elevation to which floodwater is anticipated to rise during the reference flood. BFEs shown on the Federal Emergency Management Agency's Flood Maps, for example, are the elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year. This is the regulatory standard also referred to as the "100-year flood." The base flood is the national standard used by the National Flood Insurance Program (NFIP), accessed at https://msc.fema.gov/portal/search.

- v. Temporarily reduce or eliminate outdoor storage;
- vi. Temporarily relocate any mobile vehicles and equipment to upland areas;
- vii. Develop scenario-based emergency procedures for major storms that are complementary to regular stormwater pollution prevention planning and identify emergency contacts for staff and contractors; and
- viii. Conduct staff training for implementing your emergency procedures at regular intervals.
- (7) The Permittee shall document quality assurance/quality control (QA/QC) practices including, at a minimum:
 - i. A summary of the monitoring requirements specified in the permit;
 - ii. A map and/or treatment system diagram indicating the location of each sampling location with a geographic identifier (i.e., latitude and longitude coordinates);
 - iii. Specifications for the number of samples, type of samples, type and number of containers, type of preservation, type and number of quality assurance samples, if applicable, type and number of field samples, if applicable, and sample storage, holding times, and shipping methods, including chain-of-custody procedures;
 - iv. Specifications for EPA-approved test methods and sufficiently sensitive minimum levels for each required parameter;
 - v. A schedule for review of sample results; and
 - vi. A description of data validation and data reporting processes.
- (8) The Permittee shall implement a stormwater system BMP that ensures the integrity of stormwater system components through elimination of the infiltration of contaminated groundwater to the stormwater conveyance system where such infiltration contributes pollutants but are not otherwise explicitly authorized (i.e., internal Outfall 002, above, or by another NPDES permit). Within one year of the effective date of the permit, the Permittee must complete:
 - i. One-time cross-connection evaluation, to ensure that the stormwater conveyance system does not contribute pollutants to or convey pollutants from a municipal separate storm sewer system (MS4) to the receiving water;
 - ii. A schedule for routine visual or video inspection of the readily accessible portions of the stormwater system installed below grade;
 - iii. Measurement of the flow rate, and flow direction of known areas of groundwater contamination;
 - iv. Sampling of total cyanide at groundwater monitoring points representative of groundwater conditions at the Facility, including known areas of contamination, collected during dry weather absent of tidal influence;
 - v. Sampling of total cyanide at accumulation points within the stormwater system that are likely susceptible to groundwater infiltration, including points located in known areas of contamination, collected during dry weather absent of tidal influence in addition to routine cyanide monitoring at Outfall 001 as required in Part I.A; and
 - vi. A procedure for implementation and confirmation of corrective actions in accordance with Part I.C.1.b.(1), above, to eliminate infiltration of groundwater to the stormwater conveyance system where such infiltration is identified through cyanide sampling as required in Part I.A and/or described above. If cyanide is detected above the minimum level in any of the monthly samples taken within a

calendar year, the Permittee shall repeat the sampling requirements identified in (ii) through (v) during the following calendar year. Confirmation of monitoring the stormwater system integrity shall be documented in the first annual SWPPP certification and, when required based on cyanide detection, in the SWPPP certification for any subsequent years.

2. Stormwater Pollution Prevention Plan

The Permittee shall develop and implement a Stormwater Pollution Prevention Plan (SWPPP) that documents the selection, design and installation of control measures, including BMPs designed to meet the effluent limitations required in this permit to minimize the discharge of pollutants from the Facility's operations to the receiving water. The SWPPP shall be a written document and consistent with the terms of this Permit.

- a. The SWPPP shall be developed 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 6 of EPA's 2021 MSGP. The SWPPP shall be prepared in accordance with good engineering practices and manufacturer's specifications and must take future conditions into consideration. The SWPPP must identify potential sources of pollution that may reasonably be expected to affect the quality of the stormwater discharges, and document the implementation of non-numeric technology based effluent limitations in Part I.C.1 that will be used to reduce the pollutants and assure compliance with this Permit, including any remedies taken when non-compliance occurs. Specifically, the SWPPP shall contain the elements listed in Parts 6.2.1 through 6.2.5 of the 2021 MSGP and briefly described below:
 - (1) Stormwater pollution prevention team;
 - (2) Site description;
 - (3) Drainage area site map;
 - (4) Summary of potential pollutant sources;
 - (5) Description of all stormwater control measures;⁷ and
 - (6) 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 fourteen (14) days of any changes at the Facility affecting the SWPPP. Changes that may affect the SWPPP include, but are not limited to: 1) 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; 2) a release of a reportable quantity of pollutants as described in 40 CFR § 302; 3) a determination by the Permittee or EPA that the SWPPP appears to be ineffective in achieving the general objective of controlling pollutants in

⁷ For any control measure implemented or considered but not implemented, the Permittee must document in the SWPPP its evaluation of the risks at the Facility and the factual basis for either implementing or not implementing the measure.

stormwater discharges associated with industrial activity; and 4) any revisions or improvements made to the Facility's stormwater management program based on new information and experiences with wet weather events, including major storm events and extreme flooding conditions. Any amended or updated 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 in the SWPPP. Certifications must be submitted by January 15th of the following calendar year. If the Facility is not in compliance with any limitations and/or BMPs described in the SWPPP, the annual certification shall state the non-compliance and the remedies which are being undertaken. Such annual certifications also shall be signed in accordance with the requirements identified in Part II.D.2 of this Permit. The Permittee shall submit 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 to EPA for posting on EPA Region 1's Chelsea River Terminals public website. All documentation of SWPPP activities shall be kept at the Facility for at least five years and provided to EPA upon request.

3. Hydrostatic Test Water

Hydrostatic test water shall be monitored as described below and treated through the stormwater treatment system prior to being discharged through Outfall 001 to Chelsea River and is subject to the Effluent Limitations in Part I.A.1., above.

- a. The flow of hydrostatic test water into the stormwater treatment system shall be controlled to prevent it from exceeding the maximum design flow rate of the system (i.e., 700 gpm at OWS to Outfall 001).
- b. The Permittee shall take a minimum of five representative samples of the hydrostatic test water:
 - (1) For tanks, one in-process sample of the tank water following maintenance or testing, but before draining. The operator shall analyze and review the results of the in-process sample prior to initiating discharge. If the analysis indicates that the tank water does not meet the effluent limitations in this permit, the operator shall not discharge the tank water to the river unless treatment will reduce the pollutant levels below the effluent levels established in this permit;
 - (2) For pipelines, one in-process sample of the pipeline water following depressurization, but before draining. The operator shall analyze and review the results of the in-process sample prior to initiating discharge. If the analysis indicates that the pipeline water does not meet the effluent limitations in this permit, the operator shall not discharge the pipeline water unless treatment will reduce the pollutant levels below the effluent levels established in this permit; and

- (3) Three grab samples of the effluent (at the discharge point for the treatment system), one sample during the first 10% of discharge, one sample at the approximate midpoint of discharge, and one sample during the last 10% of discharge after treatment. One grab sample of the effluent during the first 10% of discharge is sufficient for discharges from tanks with volumes no greater than 50,000 gallons. If at any time analysis indicates that the hydrostatic test water does not meet the effluent limitations in this permit, corrective action must be taken in accordance with Part I.C.1.b(1), above.
- c. The in-process and effluent samples of hydrostatic test water shall be analyzed for the following parameters:
 - (1) Total Flow;
 - (2) Flow Rate;
 - (3) Total Suspended Solids (TSS);
 - (4) Oil & Grease (O&G);
 - (5) pH;
 - (6) Chemical Oxygen Demand (COD);
 - (7) Dissolved Oxygen (DO);
 - (8) Total Surfactants;
 - (9) VOCs (benzene, toluene, ethylbenzene, and total xylenes);
 - (10) PAHs (Group I and II PAHs listed in Part I.A.1., benzo(a)anthracene through pyrene);
 - (11) Metals (total recoverable iron, and total recoverable metals listed in Part I.A.1., Whole Effluent Toxicity, cadmium through zinc);
 - (12) Ethanol, if tank or line has been used to store and/or convey ethanol and/or petroleum products containing ethanol within the previous year; and
 - (13) Total Residual Chlorine, if potable water or a similar source of water which is likely to contain residual chlorine concentrations is used for hydrostatic testing.
- d. The Permittee shall submit a letter/report to EPA and the MassDEP, summarizing the results of the hydrostatic test within 90 days of completion of the test. This report shall contain:
 - (1) The date(s) during which the hydrostatic testing occurred;
 - (2) The volume of hydrostatic test water discharged;
 - (3) A copy of the laboratory data sheets for each analysis, providing the test method, the detection limits for each analyte, and a brief discussion of whether all appropriate QA/QC procedures were met and were within acceptable limits; and
 - (4) A brief discussion of the overall test results and how they relate to the Effluent Limitations in this permit.
- e. EPA reserves the right to re-open this permit, in accordance with 40 CFR § 122.62(a)(2), to examine hydrostatic test water discharges in the event that sampling results indicate that the water quality standards for the assigned classification of the Chelsea River might not be attained.

4. Discharges of Chemicals and Additives

The discharge of any chemical or additive, including chemical substitution, which was not reported in the application submitted to EPA or provided through a subsequent written notification submitted to EPA is prohibited. Upon the effective date of this permit, chemicals and/or additives which have been disclosed to EPA may be discharged up to the frequency and level disclosed, provided that such discharge does not violate §§ 307 or 311 of the CWA or applicable State water quality standards. Discharges of a new chemical or additive are authorized under this permit 30 days following written notification to EPA unless otherwise notified by EPA. To request authorization to discharge a new chemical or additive, the Permittee must submit a written notification to EPA in accordance with Part I.D.3 of this permit. The written notification must include the following information, at a minimum:

- a. The following information for each chemical and/or additive that will be discharged:
 - (1) Product name, chemical formula, general description, and manufacturer of the chemical/additive;
 - (2) Purpose or use of the chemical/additive;
 - (3) Safety Data Sheet (SDS), Chemical Abstracts Service (CAS) Registry number, and EPA registration number, if applicable, for each chemical/additive;
 - (4) The frequency (e.g., daily), magnitude (i.e., maximum application concentration), duration (e.g., hours), and method of application for the chemical/additive;
 - (5) The maximum discharge concentration; and
 - (6) The vendor's reported aquatic toxicity, if available (i.e., NOAEL and/or LC₅₀ in percent for aquatic organism(s)).
- b. Written rationale which demonstrates that the discharge of such chemicals and/or additives as proposed will not: 1) add any pollutants in concentrations which exceed any permit effluent limitation; and 2) add any pollutants that would justify the application of permit conditions different from, or in addition to those currently in this permit.
- c. Discharges of glutaraldehyde, ethylene glycol, butoxyethanol, alkylacrelate nitrito styrene polymer, coco alkylamine, 1,2,3 and 4-trimethylbenzene, 1,3,5-trimethylbenzene and methyl isobutyl ketone are prohibited.

5. Bioassessment

The Permittee shall design and implement a bioassessment to characterize the extent to which, if any, pollutants discharged from the Facility to the receiving water affect the benthic morphology, substrate, and/or biota. Unless otherwise specified below, data collection activities shall be conducted: 1) quarterly for one year starting 90 days following the effective date of the permit; and 2) quarterly for one year in the fifth year of the permit. Within 60 days of the effective date of the permit, the Permittee shall submit a plan for conducting the bioassessment to EPA and MassDEP. EPA and MassDEP will provide any comments on the plan within 30 days of receipt of the plan and comments will be reasonably considered by the Permittee for inclusion into the

plan. The bioassessment must comply with applicable local, state and federal regulations, and shall consist of the following elements, at a minimum:

a. Water Column Characterization

- (1) One water quality monitoring station shall be established within the vicinity of Outfall 001. The station must be positioned to collect water quality data representative of incoming and outgoing tides.
- (2) For each monitoring period, relative water quality data must be collected at the water quality monitoring station during the months of January, April, July and October at approximately:
 - i. one foot below the surface;
 - ii. mid-depth; and
 - iii. one foot above the bottom.
- (3) At each collection depth, the following data shall be collected:
 - i. depth from the surface (feet);
 - ii. water temperature (degrees Fahrenheit);
 - iii. pH (Standard Units);
 - iv. dissolved oxygen (milligrams per liter);
 - v. salinity (parts per thousand);
 - vi. turbidity (nephelometric turbidity units);
 - vii. nutrients; and
 - viii. current velocity (feet per second).
- (4) During each quarterly data collection period, all water quality data at all station depths shall be collected over a 48-hour period during the apex of the spring tide and the neap tide.
 - i. Continuous recording data sondes shall be used to collect water quality data for all parameters (except where noted otherwise in Part I.C.6) at all depths. The recording frequency shall be at least one reading for all parameters, every 15 minutes over the course of the 48-hour sampling period.
 - ii. Current velocity data may be collected manually at the water monitoring station, at the three depths, every three hours (when deemed safe to do so), over the course of the 48-hour sampling period.
- (5) The following supporting environmental data, recorded concurrent with continuous water quality data collection, shall be obtained from a near-by official weather station and a near-by official tide gauge:
 - i. local air temperature (degrees Fahrenheit), collected at least once per hour, over the 48-hour sampling period;
 - ii. local total precipitation (inches) for each 24-hour period, beginning 48 hours before water quality data is collected through the end of the 48-hour sampling period (four days in total);
 - iii. the river level in relation to mean low water level when data is collected over the 48-hour sampling period; and
 - iv. the tidal stage (flood current, ebb current) when data is collected over the 48-hour sampling period.

b. Substrate Characterization

- (1) For each year that data collection is required, substrate characterization shall be conducted once. The Permittee shall collect samples of the substrate as follows:
 - i. Along a transect upstream of the outfall from the bank to the approximate edge of the navigation channel and a transect downstream of the outfall from the bank to the approximate edge of the navigation channel. Transects shall be positioned perpendicular to river current.
 - ii. At each location, three substrate samples must be collected at evenly spaced intervals between the bank and the edge of the main navigational channel.
 - iii. The location, depth, and analysis of each substrate sample shall be recorded. The depth information must be calibrated to the mean low water level.
 - iv. The analysis of each substrate sample must include, at a minimum, grain size composition (percent of silt, sand and clay); total organic carbon (TOC); and benthic infauna.
 - v. Secchi disk readings shall be recorded at each location.

c. Benthic Pollutant Analysis

- (1) Concurrent with substrate data collection and in the same locations, the Permittee shall collect additional substrate samples to determine contamination present within the benthic habitat. The parameters required for analysis shall include:
 - i. Table I.A.1 pollutants;
 - ii. Total volatile solids, acid volatile sulfides, sediment oxidation reduction potential; and
 - iii. Sediment toxicity test (i.e., 10-day static test).
- (2) Analysis shall be performed using the test method for each constituent in accordance with EPA-600-R-97-072.8

d. Qualitative Biological Monitoring

- (1) The permittee shall conduct a qualitative biological assessment to determine the organisms present in the vicinity of the water quality monitoring station.
- (2) The collection effort shall take place, at a minimum, in April, July and October, as specified above, and on a sequential basis during year four
- (3) The biological survey shall be designed to collect:
 - i. fish (early life stages, juvenile, and adult);
 - ii. benthic macroinvertebrates;
 - iii. aquatic macrophytes;
 - iv. phytoplankton;
 - v. zooplankton;
 - vi. epibenthos; and
 - vii. paleoenvironmental remains (e.g., diatoms, dinoflagellates, and foraminifera)

⁸ Methods for the Determination of Chemical Substances in Marine and Estuarine Environmental Matrices - 2nd Edition: EPA-600-R-97-072. Office of Research and Development, U.S. EPA, Washington, D.C. 1997, as specified in 314 CMR 4.03(6)(f).

(4) The organisms shall be identified to species. For larger bodied organisms that are collected, an evaluation of overall condition shall be recorded (e.g., spawning condition, lesions, or deformities).

e. Summary Report

- (1) The Permittee shall prepare and submit a report to EPA and MassDEP within 60 days of the first permit year's (four quarters) data collection and the fifth permit year's (four quarters) data collection in accordance with Part I.D.3 of this Permit.
- (2) The summary report shall consist of the following, at a minimum:
 - i. A description of the sampling locations, including a figure depicting the geographic locations, a figure depicting the vertical distribution relative to mean low tide, and a copy of the laboratory data sheets for each analysis.
 - ii. A brief discussion of the overall bioassessment results and how they relate to the effluent limitations in this permit.
 - iii. A description of the results of water column characterization, and a table summarizing the sample results.
 - iv. A description of the substrate characterization results, and a table summarizing the sample results.
 - vi. A description of the benthic pollutant analysis, and a table summarizing the sample results.
 - vii. A description of the biological assessment results, and a table summarizing the the total number of each species of organisms found for each monitoring period, the date they were collected, the depth (if available), and location where they were collected.
 - viii. A brief discussion of whether any of the requirements of the QA/QC BMP were not met. If any QA/QC requirements impact the usability of data, the Permittee must repeat collection of the unacceptable data.

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 DMRs to EPA and the State no later than the 15th day of the month electronically using NetDMR. When the Permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to EPA or the State. NetDMR is 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), 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 EPA WD:
 - (1) Transfer of Permit notice;
 - (2) Request for changes in sampling location;
 - (3) BMP/SWPPP reports and certifications;
 - (4) Request to discharge new chemicals or additives;
 - (5) Request for change in WET testing requirements;
 - (6) Bioassessment reports; and
 - (7) Report on unacceptable dilution water/request for alternative dilution water.
 - b. These reports, information, and requests shall be submitted to EPA WD electronically at 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) Written notifications required under Part II, Standard Conditions. Beginning December 21, 2025, 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 Region 1's Enforcement and Compliance Assurance Division 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, Division of Watershed Management, 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, if required, in Parts I and/or II of this permit, shall be made to both EPA and to the State. This includes verbal reports and notifications which require reporting within 24 hours (e.g., Part II.B.4.c. (2), Part II.B.5.c. (3), and Part II.D.1.e.).
- b. Verbal reports and verbal notifications shall be made to EPA's Enforcement and Compliance Assurance Division at:

617-918-1510

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

888-304-1133

E. REOPENER CLAUSE

- 1. This permit may be modified or revoked and reissued in accordance with 40 C.F.R. §122.62. The reason for modification or revocation may include, but is not limited to:
 - a. Material and substantial alterations or additions to the Terminal or activity have occurred.
 - b. New information is received which was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance.
 - c. An applicable effluent standard or limitation is issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the CWA, which:
 - (1) Contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
 - (2) Controls any pollutant not limited by this permit.

2.If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the CWA.

F. STATE PERMIT CONDITIONS

EPA has received the state water quality certification issued by the State under § 401(a) of the CWA and 40 CFR § 124.53. EPA incorporates by reference the following state water quality certification requirements into this final permit.

- 1. Pursuant to 314 CMR 3.11 (2)(a)(6), and in accordance with MassDEP's obligation under 314 CMR 4.05(5)(e) to maintain surface waters free from pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife, within 6 months of the effective date of the 2021 Federal NPDES permit, the permittee shall submit to MassDEP an evaluation of whether the facility uses any products containing any per- and polyfluoroalkyl substances (PFAS) and whether use of those products can be reduced or eliminated. The analysis shall be submitted electronically to massdep.npdes@mass.gov.
- 2. Pursuant to 314 CMR 3.11 (2)(a)(6), and in accordance with MassDEP's obligation under 314 CMR 4.05(5)(e) to maintain surface waters free from pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife, within 6 months after the permittee has been notified by EPA of a multi-lab validated method for wastewater, or two years from the effective date of the 2021 Federal NPDES permit, whichever is earlier, the permittee shall conduct monitoring of the effluent for PFAS compounds as detailed in the table below. If the permittee has not been notified by EPA of a multi-lab validated method for wastewater by two years from the effective date of the 2021 Federal NPDES permit, the permittee shall conduct monitoring of the effluent for PFAS compounds as detailed in the table below using a method specified by MassDEP. If EPA's multi-lab validated method is not available by 20 months after the effective date of the 2021 Federal NPDES permit, the permittee shall contact MassDEP (massdep.npdes@mass.gov) for guidance on an appropriate analytical method.

Effluent (Outfall 001)

Parameter Units Measurement Frequency Sample Type Perfluorohexanesulfonic acid (PFHxS) ng/L Quarterly⁹ Grab Perfluoroheptanoic acid (PFHpA) ng/L Quarterly Grab Perfluorononanoic acid (PFNA) ng/L Quarterly Grab Perfluorooctanesulfonic acid (PFOS) ng/L Ouarterly Grab Perfluorooctanoic acid (PFOA) Quarterly ng/L Grab Perfluorodecanoic acid (PFDA) ng/L Ouarterly Grab

⁹ Quarters are defined as January to March, April to June, July to September, and October to December. Samples shall be taken during the same month each quarter and shall be taken 3 months apart (e.g., an example sampling schedule could be February, May, August, and November).

3. Pursuant to 314 CMR 3.11 (2)(a)(6), and in accordance with MassDEP's obligation under 314 CMR 4.05(5)(e) to maintain surface waters free from pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife, after completing one year of monitoring, if 4 consecutive samples are reported as non-detect for all 6 PFAS compounds, then the permittee may submit a request to MassDEP to discontinue PFAS monitoring. Any such request shall be made in writing and sent to massdep.npdes@mass.gov. The permittee shall continue such monitoring pending written approval from MassDEP to discontinue it.