

**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”),

**Massachusetts Port Authority (Massport) and the Co-Permittees
listed in Attachment B and located at Logan International Airport**

are authorized to discharge from a facility located at

**Logan International Airport
One Harborside Drive
East Boston, Massachusetts 02128-2909**

to receiving waters named

Boston Harbor, Boston Inner Harbor and Winthrop Bay (Boston Harbor Basin)

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

Co-Permittees are responsible for portions of the Stormwater Pollution Prevention Plan (SWPPP) in Part I.C. for stormwater discharges from industrial activities which they conduct. The Co-Permittee Swissport Fueling/BOSFuel is responsible for operating the treatment system associated with the centralized fuel farm. All Co-Permittee tenants that deice aircraft are responsible for complying with Part I.C.2 of this Permit pertaining to glycol reduction.

This permit shall become effective on the first day of the calendar month immediately following 60 days after signature.¹

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

This permit supersedes the permit issued on July 31, 2007.

¹ Procedures for appealing EPA’s Final Permit decision may be found at 40 CFR § 124.19.

This permit consists of **Part I, Attachment A** (Marine Acute Toxicity Test Protocol, July 2012, 10 pages), **Attachment B** (List of Co-Permittees), and **Part II** (NPDES Part II Standard Conditions, April 2018, 21 pages).

Signed this 24th day of August, 2023.

**KENNETH
MORAFF**

Digitally signed by
KENNETH MORAFF
Date: 2023.08.24 12:13:01
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Ken Moraff, Director
Water Division
Environmental Protection Agency
Region 1
Boston, MA

Outfall Designations

Below is a summary of where tables of the effluent limits and monitoring requirements can be found by Permit Part and page number. For reporting purposes, each numbered outfall was given letter designations that apply to different sampling conditions as follows: Wet and/or dry weather (A), deicing episodes (B), treated stormwater from the fuel storage and distribution system (D) and (E). Designations (D) and (E) represent treated discharges which are combined with other stormwater flows within the storm drainage system and eventually discharge to Outfall 001.

Outfall Number (Massport designation)	Wet and/or dry weather flows	Deicing Episode	Above-Ground Storage Tanks (ASTs), Fuel Loading Rack, and Set-up Tank Areas
Outfall 001 (North Outfall)	01A (I.A.1, page 4)	01B (I.A.3, page 15)	01D & 01E (I.A.4, page 18)
Outfall 002 (West Outfall)	02A (I.A.1, page 4)	02B (I.A.3, page 15)	-----
Outfall 003 (Porter Street Outfall)	03A (I.A.2, page 11)	03B (I.A.7, page 24)	-----
Outfall 004 (Maverick Street Outfall)	04A (I.A.1, page 4)	-----	-----
Outfall 005 (Northwest Outfall)	05A (I.A.5, page 20)	-----	-----
Outfall 006 (Perimeter Outfall A21)	06A (I.A.6, page 22)	06B (I.A.7, page 24)	-----
Outfall 007 (Perimeter Outfall A33)	07A (I.A.6, page 22)	07B (I.A.7, page 24)	-----
Outfall 008 (Perimeter Outfall A8)	08A (I.A.6, page 22)	08B (I.A.7, page 24)	-----

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through the expiration date, Massport (“the Permittee”) and Co-Permittees are authorized to discharge stormwater associated **with industrial activity** from vehicle maintenance areas, equipment cleaning areas and deicing activities, and groundwater infiltration through Outfall Serial Number **01A (North) to Winthrop Bay**, and **02A (West) and 04A (Maverick Street) to Boston Inner Harbor**. Such discharges shall be limited as specified below and monitored by Massport as specified below:

Effluent Characteristic	Effluent Limitation		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ⁵
Effluent Flow ⁶	Report MGD	Report MGD	1/month	Estimate
Total Suspended Solids (TSS)	Report mg/L	100 mg/L	1/month	Grab
pH ⁷	6.0 - 8.5 S.U.		1/month	Grab
Oil and Grease ⁸	---	15 mg/l	1/month	Grab
Fecal Coliform ⁹ , Outfall 01A	88 MPN/100 ml	260 MPN/100 ml	1/month	Grab
Outfalls 02A and 04A	Report MPN/100 ml	Report MPN/100 ml	1/month	Grab
<i>Enterococcus</i> ⁹	35 cfu/100 ml	130 cfu/100 ml	1/month	Grab
Benzene, µg/l ¹⁰ (Outfall 01A only)	Report µg/L	Report µg/L	1/month	Grab
Surfactants (Outfalls 01A and 02A)	Report mg/L	Report mg/L	1/year	Grab

Effluent Characteristic	Effluent Limitation		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ⁵
Total Ammonia Nitrogen, as mg/L of N	Report mg/L	Report mg/L	1/quarter	Grab
Polycyclic Aromatic Hydrocarbons (PAHs) ¹⁰	----	Report Total	1/quarter	Grab
1) Benzo(a)anthracene	----	Report µg/L	1/quarter	Grab
2) Benzo(a)pyrene	----	Report µg/L	1/quarter	Grab
3) Benzo(b)fluoranthene	----	Report µg/L	1/quarter	Grab
4) Benzo(k)fluoranthene	----	Report µg/L	1/quarter	Grab
5) Chrysene	----	Report µg/L	1/quarter	Grab
6) Dibenzo(a,h)anthracene	----	Report µg/L	1/quarter	Grab
7) Indeno(1,2,3-cd)pyrene	----	Report µg/L	1/quarter	Grab
8) Naphthalene	----	Report µg/L	1/quarter	Grab
Perfluorohexanesulfonic acid (PFHxS) ^{11,12}	----	Report ng/L	1/quarter	Grab
Perfluoroheptanoic acid (PFHpA) ^{11,12}	----	Report ng/L	1/quarter	Grab
Perfluorononanoic acid (PFNA) ^{11,12}	----	Report ng/L	1/quarter	Grab
Perfluorooctanesulfonic acid (PFOS) ^{11,12}	----	Report ng/L	1/quarter	Grab
Perfluorooctanoic acid (PFOA) ^{11,12}	----	Report ng/L	1/quarter	Grab
Perfluorodecanoic acid (PFDA) ^{11,12}	----	Report ng/L	1/quarter	Grab

Effluent Characteristic	Effluent Limitation		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ⁵
Whole Effluent Toxicity (WET) Testing ^{5,13,14}				
LC ₅₀	---	Report %	1/quarter	Composite
NOAEL	---	Report %	1/quarter	Composite
pH	---	Report S.U.	1/quarter	Composite
Total Solids	---	Report mg/L	1/quarter	Composite
Total Suspended Solids	---	Report mg/L	1/quarter	Composite
Ammonia	---	Report mg/L	1/quarter	Composite
Salinity	---	Report ppt	1/quarter	Composite
Total Organic Carbon	---	Report mg/L	1/quarter	Composite
Total Cadmium	---	Report mg/L	1/quarter	Composite
Total Copper	---	Report mg/L	1/quarter	Composite
Total Nickel	---	Report mg/L	1/quarter	Composite
Total Lead	---	Report mg/L	1/quarter	Composite
Total Zinc	---	Report mg/L	1/quarter	Composite

Ambient Characteristic ¹⁵	Reporting Requirement		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type ⁵
Salinity	---	Report ppt	1/quarter	Grab
Ammonia	---	Report mg/L	1/quarter	Grab
Total Organic Carbon	---	Report mg/L	1/quarter	Grab
Total Cadmium	---	Report mg/L	1/quarter	Grab
Total Copper	---	Report mg/L	1/quarter	Grab
Total Nickel	---	Report mg/L	1/quarter	Grab
Total Lead	---	Report mg/L	1/quarter	Grab
Total Zinc	---	Report mg/L	1/quarter	Grab
pH ¹⁶	---	Report S.U.	1/quarter	Grab
Temperature ¹⁶	---	Report °C	1/quarter	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 point to the receiving water after treatment in the oil/water separator (for Outfalls 01A and 02A), prior to co-mingling with any other wastestream. On its Discharge Monitoring Report (DMR), the Permittee shall note any precipitation events of greater than 0.1 inches in magnitude or equivalent snowmelt that occurred during the 72 hours prior to sampling. Changes in sampling location must be approved in writing by the Environmental Protection Agency Region 1 (EPA) and the State. The Permittee shall report the results to EPA and the State of any additional testing above that required herein, if testing is in accordance with 40 C.F.R. § 136.

2. In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is “sufficiently sensitive” when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter. The term “minimum level” refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
3. When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., < 50 µg/L, if the ML for a parameter is 50 µg/L).
4. Measurement frequency of 1/month is defined as the sampling of one discharge event in each calendar month. Measurement frequency of 1/quarter is defined as the sampling of one discharge event in each calendar quarter. Measurement frequency of 1/year is defined as the sampling of one discharge event during one calendar year. Calendar quarters are defined as January through March, inclusive, April through June, inclusive, July through September, inclusive and October through December, inclusive. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code (e.g., “C” for “No Discharge”).
5. The composite sample for the Whole Effluent Toxicity (WET) testing shall consist of a minimum of eight equally weighted grab samples collected at fifteen-minute intervals or greater during a normal discharge and at the outfall location.
6. The effluent flow rate for Outfalls 01A, 02A, and 04A shall be estimated by the most recent hydraulic flow model developed by Massport or other acceptable method as approved in writing by EPA. Massport shall report the average monthly and maximum daily flow rate for each of the three outfalls, in millions of gallons per day (MGD).
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.). Also see Part I.C.5.

8. The Permittee shall use EPA Method 1664A for oil & grease (O&G) analysis, which has a minimum level (ML) of 5 mg/l, where the ML is the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for a pollutant or pollutant parameter, representative of the lowest concentration at which a pollutant or pollutant parameter can be measured with a known level of confidence.
9. Fecal coliform shall be conducted year-round. For Outfalls 002A and 004A, fecal coliform shall be a monitor only requirement, with no limit. **For Outfall 01A**, fecal coliform discharges shall not exceed a monthly geometric mean of 88 Most Probable Number (MPN) per 100 ml, nor shall more than 10% of the samples exceed 260 MPN per 100 ml as a daily maximum. *Enterococcus* monitoring shall be conducted year-round. *Enterococcus* shall not exceed a monthly geometric mean of 35 colony forming units (cfu) per 100 ml, nor shall more than 10% of samples collected within a 30-day interval exceed 130 cfu per 100 ml as a daily maximum.
10. The ML for benzene analysis shall be no greater than 2 µg/l. Polycyclic Aromatic Hydrocarbons (PAH) shall be monitored once per calendar quarter and the results shall be submitted with the DMR for the last month of the quarter. The ML for PAHs shall be no greater than the following: 0.1 µg/L for each Group I PAH (Items 1 to 7 on limits table above) and 5 µg/L for naphthalene. The ML is not the minimum level of detection, but rather the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for an analyte, representative of the lowest concentration at which an analyte can be measured with a known level of confidence. Analysis must be completed using an EPA approved method in 40 C.F.R. §136, Table IC – Non-Pesticide Organic Compounds. The detection limit (DL) for each analyte must be recorded. The DL is the lowest concentration that can be reliably measured within specified limits of precision and accuracy for a specific laboratory analytical method during routine laboratory operating conditions (i.e., the level above which an actual value is reported for an analyte, and the level below which an analyte is reported as non-detect). When an analyte is not detected above the Practical Quantification Level (PQL), the Permittee must report using the data qualifier signifying less than the DL for that analyte (i.e., <0.1 µg/L, if the PQL for an analyte is 0.1 µg/L).
11. This reporting requirement for the listed PFAS parameters takes effect in the first full calendar quarter following 6 months after the effective date of the permit.
12. 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 Conditions in Part I.C.4.
13. The Permittee shall conduct acute whole effluent toxicity tests (WET) four times per year for each of the Outfalls 01A, 02A, and 04A in accordance with test procedures and protocols specified in **Attachment A** of this permit. LC₅₀ is defined in Part II.E. of

this permit. The Permittee shall test the Mysid Shrimp, *Americamysis bahia*, and the Inland Silverside, *Menidia beryllina*. Toxicity test samples shall be collected in February, June, September, and December as shown in the table below. Sampling for February and December shall be conducted during deicing applications for Outfalls 001 and 002 only, or within 12 hours after deicing applications have occurred in the respective drainage areas of these outfalls. The test results and complete report for each toxicity test shall be submitted as an attachment to the March, July, October, and January DMRs, which are due by April 15, August 15, November 15, and February 15, respectively. The tests must be performed in accordance with test procedures and protocols specified in Attachment A of this Permit. If the Permittee is unable to conduct the deicing sampling in February or December, it shall conduct such sampling during the following month.

WET Testing Months	Submit Results With:	Test Species	Acute Endpoints
February (during deicing)	March DMR	Mysid Shrimp, <i>Americamysis bahia</i>	Report NOAEL & Report LC ₅₀
June	July DMR		
September	October DMR	Inland Silverside, <i>Menidia beryllina</i>	
December (during deicing)	January DMR		

14. 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. Minimum levels and test methods are specified in **Attachment A**, Part VI. CHEMICAL ANALYSIS.
15. 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.
16. 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.

2. During the period beginning on the effective date and lasting through the expiration date, Massport and Co-Permittees are authorized to discharge stormwater associated **with industrial activity** from vehicle maintenance areas, equipment cleaning areas and groundwater infiltration from outfall **03A (Porter Street Outfall) to Boston Inner Harbor**. Such discharges shall be limited and monitored by Massport as specified below:

Effluent Characteristic	Effluent Limitation		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type
Effluent Flow ⁵	Report MGD	Report MGD	1/month	Estimate
Total Suspended Solids (TSS)	Report mg/L	100 mg/L	1/month	Grab
pH ⁶	6.0 - 8.5 S.U.		1/month	Grab
Oil and Grease ⁷	---	15 mg/L	1/month	Grab
Fecal Coliform ⁸	Report MPN/100 ml	Report MPN/100 ml	1/month	Grab
<i>Enterococcus</i> ⁸	35 cfu/100 ml	130 cfu/100 ml	1/month	Grab
Total Ammonia Nitrogen, as mg/L of N	Report mg/L	Report mg/L	1/quarter	Grab
Polycyclic Aromatic Hydrocarbons (PAHs) ⁹	----	Report Total µg/L	1/quarter	Grab
1) Benzo(a)anthracene	----	Report µg/L	1/quarter	Grab
2) Benzo(a)pyrene	----	Report µg/L	1/quarter	Grab
3) Benzo(b)fluoranthene	----	Report µg/L	1/quarter	Grab
4) Benzo(k)fluoranthene	----	Report µg/L	1/quarter	Grab
5) Chrysene	----	Report µg/L	1/quarter	Grab

Effluent Characteristic	Effluent Limitation		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type
6) Dibenzo(a,h)anthracene	----	Report µg/L	1/quarter	Grab
7) Indeno(1,2,3-cd)pyrene	----	Report µg/L	1/quarter	Grab
8) Naphthalene	----	Report µg/L	1/quarter	Grab
Perfluorohexanesulfonic acid (PFHxS) ^{10,11}	----	Report ng/L	1/quarter	Grab
Perfluoroheptanoic acid (PFHpA) ^{10,11}	----	Report ng/L	1/quarter	Grab
Perfluorononanoic acid (PFNA) ^{10,11}	----	Report ng/L	1/quarter	Grab
Perfluorooctanesulfonic acid (PFOS) ^{10,11}	----	Report ng/L	1/quarter	Grab
Perfluorooctanoic acid (PFOA) ^{10,11}	----	Report ng/L	1/quarter	Grab
Perfluorodecanoic acid (PFDA) ^{10,11}	----	Report ng/L	1/quarter	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 point to the receiving water and prior to co-mingling with any other wastestream. Changes in sampling location must be approved in writing by the Environmental Protection Agency Region 1 (EPA) and the State. The Permittee shall report the results to EPA and the State of any additional testing above that required herein, if testing is done in accordance with 40 C.F.R. § 136. Outfall 03A samples shall be comprised of two equally weighted samples taken upstream of Outfall 03A that are representative of the discharge and at least one of these shall be from the airside of the property, which is comprised of runways, taxiways and service roads.

2. In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is “sufficiently sensitive” when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter. The term “minimum level” refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
3. When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., < 50 µg/L, if the ML for a parameter is 50 µg/L).
4. Measurement frequency of 1/month is defined as the sampling of one discharge event in each calendar month. Measurement frequency of 1/quarter is defined as the sampling of one discharge event in each calendar quarter. Measurement frequency of 1/year is defined as the sampling of one discharge event during one calendar year. Calendar quarters are defined as January through March, inclusive, April through June, inclusive, July through September, inclusive and October through December, inclusive. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code (e.g., “C” for “No Discharge”).
5. The effluent flow rate for Outfall 03A shall be estimated by the most recent hydraulic flow model developed by Massport or other acceptable method as approved in writing by EPA. Massport shall report the average monthly and maximum daily flow rate for the outfall, in millions of gallons per day (MGD).
6. 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.). Also see Part I.C.5.
7. The Permittee shall use EPA Method 1664A for oil & grease (O&G) analysis, which has a minimum level (ML) of 5 mg/l, where the ML is the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for a pollutant or pollutant parameter, representative of the lowest concentration at which a pollutant or pollutant parameter can be measured with a known level of confidence.

8. Fecal coliform and *Enterococcus* monitoring shall be conducted year-round. *Enterococcus* shall not exceed a monthly geometric mean of 35 cfu per 100 ml, nor shall more than 10% of samples collected within a 30-day interval exceed 130 cfu per 100 ml as a daily maximum. Fecal coliform shall be monitored only with no limit.
9. See footnote 10 in Part I.A.1 regarding PAH analysis requirements. Sampling for PAH compounds shall be conducted once during each calendar quarter of the year.
10. The reporting requirement for the listed PFAS parameters takes effect in the first full calendar quarter following 6 months after the effective date of the permit.
11. 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 Conditions in Part I.C.4.

3. DEICING EPISODES

During the period beginning on the effective date and lasting through the expiration date, Massport and Co-Permittees are authorized to discharge stormwater associated with industrial activity from aircraft and pavement/runway deicing activities from outfalls 01B (North) and 02B (West). Such discharges shall be monitored by Massport as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type
Effluent Flow, MGD ⁵	----	Report, MGD	1/month (October through April only)	Estimate
Propylene Glycol	----	Report mg/L	1/month (Oct-Apr)	Grab
Biochemical Oxygen Demand, 5 day (BOD ₅) ⁶	----	Report mg/L	1/month (Oct-Apr)	Grab
	----	Report lbs/day	1/month (Oct-Apr)	Calculated
Chemical Oxygen Demand (COD) ⁶	----	Report mg/L	1/month (Oct-Apr)	Grab
	----	Report lbs/day	1/month (Oct-Apr)	Calculated
Dissolved Oxygen	----	Report mg/L	1/month (Oct-Apr)	Grab
Tolyltriazoles ⁸ , Total	----	Report µg/L	3/Deicing Season ⁷	Grab
Nonylphenol ⁸ , Total	----	Report µg/L	1/Deicing Season ⁷	Grab
Perfluorohexanesulfonic acid (PFHxS) ^{9,10}	----	Report ng/L	1/quarter	Grab
Perfluoroheptanoic acid (PFHpA) ^{9,10}	----	Report ng/L	1/quarter	Grab
Perfluorononanoic acid (PFNA) ^{9,10}	----	Report ng/L	1/quarter	Grab
Perfluorooctanesulfonic acid (PFOS) ^{9,10}	----	Report ng/L	1/quarter	Grab
Perfluorooctanoic acid (PFOA) ^{9,10}	----	Report ng/L	1/quarter	Grab

Effluent Characteristic	Discharge Limitations		Monitoring Requirements ^{1,2,3}	
	Average Monthly	Maximum Daily	Measurement Frequency ⁴	Sample Type
Perfluorodecanoic acid (PFDA) ^{9,10}	----	Report ng/L	1/quarter	Grab

Footnotes:

1. Sampling taken in compliance with the monitoring requirements specified above shall be taken at a point prior to discharge from Outfalls 01B and 02B. Sampling shall be conducted during or soon after deicing has occurred in the respective drainage areas of these outfalls. On its DMR, the Permittee shall note any precipitation events of greater than 0.1 inches in magnitude or equivalent snowmelt that occurred during the 72 hours prior to sampling. Any change in sampling location must be reviewed and approved in writing by EPA and MassDEP. All samples shall be tested using the analytical methods found in 40 C.F.R. §136, or alternative methods approved by EPA in accordance with the procedures in 40 C.F.R. §136. Any changes in sampling location must be approved in writing by EPA and MassDEP.
2. In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is “sufficiently sensitive” when: 1) The ML is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter. The term “minimum level” refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
3. When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., < 50 µg/L, if the ML for a parameter is 50 µg/L).
4. Measurement frequency of 1/month is defined as the sampling of one discharge event in each calendar month. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code.

5. The effluent flow rate for Outfalls 01B and 02B shall be estimated by the most recent hydraulic flow model developed by Massport or other acceptable method as approved in writing by EPA. Massport shall report the average monthly and maximum daily flow rate for each of the two outfalls, in millions of gallons per day (MGD).
6. Massport will use the monthly sampling requirement during the deicing season for BOD₅ and COD as well as any additional sampling to ensure that the extrapolated loading estimates used in the Deicer Discharge Reduction Plan (DDRP) in Part I.C.2 are reliably accurate and statistically significant. To calculate monthly loadings, Massport shall use the methodology from the technical development document that accompanied the airport Effluent Limitation Guideline document in 2012 and found at: <https://www.epa.gov/sites/production/files/2015-06/documents/airport-deicing-tdd-final-2012.pdf>.
7. The deicing season is defined as October through April. Sampling for nonylphenol and tolyltriazole shall be conducted three times during the deicing season and must be conducted on the same day as sampling for other parameters for Outfalls 01B and 02B.
8. For nonylphenol, the Permittee shall use ASTM Standard Test Method D 7065 (Determination of Nonylphenol, Bisphenol A, p-tert-Octylphenol, Nonylphenol Monoethoxylate and Nonylphenol Diethoxylate in Environmental Waters by Gas Chromatography Mass Spectrometry) or submit an alternative method to EPA for approval. For tolyltriazole, the Permittee shall use a test method capable of achieving a minimum level (ML) of ≤ 1 mg/L tolyltriazole. Tolyltriazoles may be reported as sum of the predominant isomers which are found in the glycol formulations used at the airport.
9. This reporting requirement for the listed PFAS parameters takes effect in the first full calendar quarter following 6 months after the effective date of the permit.
10. After four sampling events, 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 Conditions in Part I.C.4.

4. INTERNAL OUTFALLS ASSOCIATED WITH FUEL FARM AND OUTFALL 001 STORMWATER DRAINAGE SYSTEM

During the period beginning on the effective date and lasting through the expiration date, Massport and the Co-Permittee that operates the centralized fuel farm are authorized to discharge stormwater associated **with industrial activity** from the aboveground storage tank (AST) berms, other bermed areas in the fuel farm area and fuel loading rack area, and from hydrant vaults and pits stored in the Set-up Tank, from internal outfalls **01D and 01E**. These treated stormwater flows ultimately discharge at Outfall 01A and shall be monitored by Massport or the Co-Permittee that operates the centralized fuel farm, as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Total Monthly	Maximum Daily	Measurement Frequency	Sample Type ¹
Flow ²	Report, Gallons	Report, Gallons	1/month	Meter or Estimate
pH Range	Report S.U.	Report S.U.	1/month	Grab
Oil & Grease ³	----	15 mg/L	1/month	Grab
TSS	Report mg/L	100 mg/L	1/month	Grab
Benzene ⁴	Report mg/L	Report mg/L	1/month	Grab

Footnotes:

1. The water from the hydrant vaults and pits which collects in the Set-up tank shall be sampled after the treatment train consisting of an oil/water separator, a bag filter, and two carbon filters in series, prior to commingling with the water from the bermed areas of the fuel farm (including the AST bermed areas) and the water from the fuel loading rack. The sampling location designated Outfall 01E is the outlet of the last carbon filter. The water from the bermed areas of the fuel farm (including the AST bermed areas) and the water from the fuel loading rack combine with the treated water that is discharged at internal outfall 01E and pass through the oil/water separator located at the fuel farm, the outlet of which is designated as Outfall 01D. See **Figures 4A and 5** of the Fact Sheet for diagrams showing these sampling points. A monthly grab sample shall be taken during discharge, at a location representative of the discharge after treatment, as described above for each internal outfall. All samples shall be tested using the

NPDES approved EPA analytical methods for the designated effluent characteristic in accordance with 40 C.F.R. §136. Alternative methods can be used if approved by EPA in writing, in accordance with the procedures in 40 C.F.R. §136. For those months when there are no discharges, the Permittee must report a NODI Code (e.g., “C” for “No Discharge”) on the DMR.

2. Metered readings or estimates of the total monthly and maximum daily amount of treated stormwater discharged to these internal outfalls shall be reported in gallons.
3. The Permittee shall use EPA Method 1664A for oil & grease (O&G) analysis, which has a minimum level (ML) of 5 mg/l, where the ML is the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for a pollutant or pollutant parameter, representative of the lowest concentration at which a pollutant or pollutant parameter can be measured with a known level of confidence.
4. The ML for benzene analysis shall be no greater than 2 µg/l. Analysis must be completed using an EPA approved method in 40 C.F.R. §136, Table IC – Non-Pesticide Organic Compounds. The detection limit (DL) for each analyte must be recorded. The DL is the lowest concentration that can be reliably measured within specified limits of precision and accuracy for a specific laboratory analytical method during routine laboratory operating conditions (i.e., the level above which an actual value is reported for an analyte, and the level below which an analyte is reported as non-detect). When an analyte is not detected above the Practical Quantification Level (PQL), the Permittee must report using the data qualifier signifying less than the DL for that analyte (i.e., <0.1 µg/L, if the PQL for an analyte is 0.1 µg/L).

5. During the period beginning on the effective date and lasting through the expiration date, Massport and Co-Permittees that conduct operations in this outfall’s drainage area are authorized to discharge stormwater associated **with industrial activity** to outfall **05A (Northwest)** to Winthrop Bay. Sampling shall be conducted during wet weather as described below. Such discharges shall be monitored by Massport as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements ¹	
	Average Monthly	Maximum Daily	Measurement Frequency ²	Sample Type ³
Effluent Flow ⁴	Report, MGD	Report, MGD	1/quarter	Estimated
pH, Range	Report S.U.	Report S.U.	1/quarter	Grab
Oil & Grease ⁵	Report mg/L	15 mg/L	1/quarter	Grab
TSS	Report mg/L	100 mg/L	1/quarter	Grab

Footnotes:

1. Sampling taken in compliance with the monitoring requirements specified above shall be taken at Outfall 05A and prior to mixing with any other stream. Any change in sampling location must be reviewed and approved in writing by EPA and MassDEP. All samples shall be tested using the analytical methods found in 40 C.F.R. §136, or alternative methods approved by EPA in accordance with the procedures in 40 C.F.R. §136. Any changes in sampling location must be approved in writing by EPA and MassDEP. Also see footnote 2 in Part I.A.1 regarding the use of sufficiently sensitive test procedures.
2. The sampling frequency of 1/quarter is defined as the sampling of one discharge event per calendar quarter. Samples shall be collected during the calendar quarters of January through March, April to June, July to September, and October through December and the results submitted with the March, June, September, and December DMRs. The Permittee shall submit the results to EPA of any additional testing conducted beyond that required herein, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 C.F.R. §122.41(l)(4)(ii). For those months when there are no discharges, the Permittee must report a NODI Code on the DMR.

3. Grab samples at this outfall shall be taken during wet weather conditions, if practicable. Wet weather conditions are defined as a storm event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rain fall) storm event. The 72-hour interval may be waived when the preceding measurable storm did not yield a measurable discharge, or if the Permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period. The grab sample shall be taken during the first thirty (30) minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, sampling shall be conducted as soon as is practicable after this 30-minute period has elapsed. Massport shall estimate the flow rate for the days that sampling is conducted based on the most recent hydraulic flow model developed by Massport or other acceptable method as approved in writing by EPA.
4. The effluent flow rate shall be estimated by the most recent hydraulic flow model developed by Massport or other acceptable method as approved in writing by EPA.
5. The Permittee shall use EPA Method 1664A for oil & grease (O&G) analysis, which has a minimum level (ML) of 5 mg/l, where the ML is the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for a pollutant or pollutant parameter, representative of the lowest concentration at which a pollutant or pollutant parameter can be measured with a known level of confidence.

6. During the period beginning on the effective date and lasting through the expiration date, Massport and Co-Permittees are authorized to discharge stormwater associated **with industrial activity from pavement and runway activities other than deicing** to outfalls **06A** (airfield outfall A21) and **Outfall 07A** (airfield outfall A33) to Boston Harbor, and to **Outfall 08A** (airfield outfall A8) to Winthrop Bay. **If industrial activity from aircraft and pavement/runway deicing activities has occurred within the last 24 hours, the Permittee will indicate that as a note on the DMR or as an attachment to the DMR.** Sampling shall be conducted during wet weather as described below. Such discharges shall be monitored by Massport as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements ¹	
	Average Monthly	Maximum Daily	Measurement Frequency ²	Sample Type ³
Effluent Flow ⁴	Report MGD	Report MGD	1/quarter	Estimated
pH, Range	Report S.U.	Report S.U.	1/quarter	Grab
Oil & Grease ⁵	Report mg/L	Report mg/L	1/quarter	Grab
TSS ⁶	Report mg/L	Report mg/L	1/quarter	Grab
Dissolved Oxygen	Report mg/L	Report mg/L	1/quarter ⁷	Grab

Footnotes:

1. Sampling taken in compliance with the monitoring requirements specified above shall be taken at Outfalls 06A, 07A, and 08A. Any change in sampling location must be reviewed and approved in writing by EPA and MassDEP. For example, the Permittee may request permission to sample alternative airfield outfalls if the designated outfalls are not easily accessible. All samples shall be tested using the analytical methods found in 40 C.F.R. §136, or alternative methods approved by EPA in accordance with the procedures in 40 C.F.R. §136. Any changes in sampling location must be approved in writing by EPA and MassDEP. Also see footnote 2 in Part I.A.1 regarding the use of sufficiently sensitive test procedures.
2. Samples shall be collected during the calendar quarters of January through March, April to June, July to September, and October through December and the results submitted with the April, June, September, and January DMRs. The Permittee shall submit the

results to EPA of any additional testing conducted beyond that required herein, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 C.F.R. §122.41(l)(4)(ii). For those months when there are no discharges, the Permittee must report a NODI Code on the DMR. If sampling is not conducted during the specified month, the Permittee shall attempt to sample during the following month.

3. Grab sample at these outfalls shall be taken during wet weather conditions, if practicable. Wet weather conditions are defined as a storm event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rain fall) storm event. The 72-hour interval may be waived when the preceding measurable storm did not yield a measurable discharge, or if the permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period. The grab sample shall be taken during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, sampling shall be conducted as soon as is practicable after this 30 minute period has elapsed, Massport shall report the flow rate for the days that sampling occurs based on the model used to estimate flows at the airport.
4. The flow volume shall be estimated by using the most recent hydraulic flow model developed by Massport or other acceptable method during the days of sampling.
5. The Permittee shall use EPA Method 1664A for oil & grease (O&G) analysis, which has a minimum level (ML) of 5 mg/l, where the ML is the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for a pollutant or pollutant parameter, representative of the lowest concentration at which a pollutant or pollutant parameter can be measured with a known level of confidence.
6. Beginning after four quarterly samples have been collected, the Permittee shall calculate a rolling 4 sample average for TSS each subsequent calendar quarter. If any of these rolling average values is greater than 100 mg/L, the Permittee shall assess its SWPPP and BMP Plan and make changes that are designed to result in TSS levels that are below 100 mg/l for subsequent quarterly average values.
7. DO monitoring shall be conducted only during the quarters ending in December and March.

7. During the period beginning on the effective date and lasting through the expiration date, Massport and Co-Permittees are authorized to discharge stormwater associated **with industrial activity** from aircraft and pavement/runway deicing activities to **Outfall 03B, Outfall 06B** (airfield outfall A21), **Outfall 07B** (airfield outfall A33), and **Outfall 08B** (airfield outfall A8). **If industrial activity from pavement and runway activities other than deicing has occurred within the last 24 hours, the Permittee will indicate that as a note on the DMR or as an attachment to the DMR.** Such discharges shall be monitored by Massport as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements ¹	
	Average Monthly	Maximum Daily	Measurement Frequency ²	Sample Type
Propylene Glycol	-----	Report mg/L	3/Deicing Season	Grab
BOD ₅	-----	Report mg/L	3/Deicing Season	Grab
COD	-----	Report mg/L	3/Deicing Season	Grab
Dissolved Oxygen	-----	Report mg/L	3/Deicing Season	Grab
Tolyltriazoles ³ , Total	-----	Report µg/L	3/Deicing Season	Grab
Nonylphenol ³ , Total	-----	Report µg/L	1/Deicing Season	Grab

Footnotes:

1. Sampling taken in compliance with the monitoring requirements specified above shall be taken at Outfalls 06B, 07B, and 08B. For Outfall 03B, sampling shall be conducted only at the catch basin at the airside location where the Permittee is authorized to take a sample that is representative of discharge to Outfall 03B, as described in footnote 1 of Part I.A.2. Sampling shall be conducted during or soon after deicing has occurred in the respective drainage areas of these outfalls. The Permittee may request permission to sample alternative airfield outfalls if the designated outfalls are not easily accessible. Also see footnote 2 in Part I.A.1 regarding the use of sufficiently sensitive test procedures.

2. Sampling frequency of three per deicing season of October through April, when discharge occurs. The Permittee shall submit the results to EPA of any additional testing conducted beyond that required herein, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 C.F.R. §122.41(l)(4)(ii). For those months when there are no discharges, the Permittee must report a NODI Code (e.g., “C” for “No Discharge”) on the DMR.
3. See footnote 8 on Part I.A.3 above for tolyltriazole and nonylphenol analysis requirements.

Part I.A. continued:

8. The discharge shall not cause a violation of the water quality standards of the receiving waters.
9. The discharge shall be free from pollutants in concentrations or combinations that, in the receiving waters, 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.
10. The discharge shall be free from pollutants in concentrations or combinations that adversely affect the physical, chemical, or biological nature of the bottom.
11. The discharge shall not result in pollutants in concentrations or combinations in the receiving water that are toxic to humans, aquatic life or wildlife.
12. The discharge shall be free from floating, suspended and settleable solids in concentrations or combinations that would impair any use assigned to the receiving waters.
13. 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.
14. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 C.F.R. § 122.42):
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
 - (1) 100 micrograms per liter ($\mu\text{g/L}$);
 - (2) 200 $\mu\text{g/L}$ for acrolein and acrylonitrile; 500 $\mu\text{g/L}$ for 2,4-dinitrophenol; and one milligram per liter (mg/L) for antimony;
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. § 122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 C.F.R. § 122.44(f) and State regulations.
 - b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
 - (1) 500 $\mu\text{g/L}$;
 - (2) One mg/L for antimony;

- (3) 10 times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. § 122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 C.F.R. § 122.44(f) and State regulations.
 - c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
15. Massport, as the owner and operator of this airport facility and its stormwater collection system, is ultimately responsible for the discharges from this system to waters of the United States.
 16. Massport shall comply with all existing federal, state, and local laws and regulations that apply to the reuse or disposal of solids, such as those which may be removed from any catch basins or settling basins on the site. At no time shall these solids be discharged to any receiving water.
 17. The use of pavement or runway deicing compounds that contain urea is prohibited. If the Permittee determines that the use of urea is required based on safety considerations or a regulatory requirement of the Federal Aviation Administration (FAA), the Permittee shall notify the EPA and this permit will be modified to establish a total ammonia nitrogen effluent limit of 14.7 mg/l for those outfalls that receive discharges of deicing activities, consistent with the effluent limitation guidelines at 40 C.F.R. §449.

B. UNAUTHORIZED DISCHARGES

1. This permit authorizes discharges only from the outfall(s) listed in Part I.A.1 through I.A.7, in accordance with the terms and conditions of this permit. Discharges are authorized from all 44 airfield, perimeter outfalls. Monitoring that is representative of all airfield outfalls is required for 3 of these outfalls as shown in Parts I.A.6 and I.A.7. 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 prohibited from entering the storm drain system. Appropriate control measures, which are outlined in the SWPPP requirements below, shall be implemented to prevent such discharges.
 - a. Direct discharge of pollutants [any substance, material, or waste other than stormwater associated with industrial activity including but not limited to: oil and grease, vehicle fluids, fuel, waste oil, solvents, degreasing agents, cleaning solutions, battery acid, paint, paint thinners, antifreeze (not including deicing chemicals), pesticides, herbicides, fertilizers, dumpster wastes, sediment, landscape wastes, floatables, sewage, lavatory wastes, potable water chemicals, rubber particles] into the storm drain system;

- b. Discharges of non-industrial stormwater and non-stormwater discharges that cause or threaten to cause pollution, contamination, sedimentation, or nuisance;
- c. Discharge of wash water from equipment, vehicle, aircraft, and lavatory waste truck washing;
- d. Discharge from firefighting training activities other than those from the Fire Training Facility to the permitted outfall as authorized by NPDES Permit #MA0032751;
- e. Discharge from cleaning of floor drains, sumps, and oil/water separators that contains sediment, chemical, and any other pollutants;
- f. Discharges from dewatering, hydrostatic tank testing or pipe pressure testing that contains sediment, chemicals, and any other pollutants;
- g. Disposal of petroleum wastes such as waste oil; and
- h. Disposal of any liquid waste from any dumpster.

C. SPECIAL CONDITIONS

1. Stormwater Pollution Prevention Plan (SWPPP)

Massport shall continue to implement the SWPPP that was developed pursuant to the 2007 Permit for all sources of pollutants generated or present at Logan International Airport, ("Logan"), which have the potential to be discharged to Boston Harbor, Boston Inner Harbor or Winthrop Bay. The SWPPP includes a general section for the control of all sources of water pollutants and four (4) additional discrete sections for each major source of pollutants: (1) deicing and anti-icing chemical sources, (2) potential illicit discharges, (3) fuel and oil sources, and (4) runway rubber removal sources. Pursuant to the SWPPP, BMPs shall continue to be designed and implemented to meet the applicable Best Available Technology Economically Achievable/Best Conventional Pollutant Control Technology (BAT/BCT) standards required by the CWA as well as the following water quality based requirements, at a minimum: (1) Any effluent shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters, and (2) The discharge shall not cause or contribute to a violation of the State water quality standards.

a. Co-Permittees & Other Tenants

Co-Permittees: Many tenants and service providers (often referred to as "fixed-base operators") operating at Logan have been named as "Co-Permittees" due to their industrial activities. See Permit Attachment B for a complete list of tenants that are Co-Permittees as of the issuance of this Final Permit. A Co-Permittee is a Permittee that is only responsible for permit conditions relating to the discharges for which it is an operator as provided at

40 C.F.R. § 122.26(b)(1). An entity meets the definition of a Co-Permittee if such entity performs industrial activities at an air transportation facility such as Logan, is classified under Standard Industrial Classification (SIC) 4581 and has vehicle maintenance shops, and conducts equipment cleaning operations, and/or airport deicing operations (see 40 C.F.R. §122.26(b)(14)(viii)). Vehicle maintenance includes vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication. Furthermore, entities are deemed to be Co-Permittees if they perform industrial activities at an air transportation facility as defined in the NPDES Stormwater Multi-Sector General Permit for Industrial Activities (2021 MSGP, Part 8.S.3), see also <https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>). A Co-Permittee also includes an entity that performs an activity at Logan that EPA has determined can contribute to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States (see 40 C.F.R. §122.26(a)(v)), as it has for entities handling aircraft lavatory waste or any other sanitary waste devices not directly piped to a "Publicly Owned Treatment Works."

The Permittee shall maintain all Stormwater Co-Permittee Applications (SWCPAs) that the Co-Permittee tenants have completed. When a new Co-Permittee begins to operate at Logan or a Co-Permittee ceases to operate at Logan, Massport shall add or delete such SWCPAs from their list. This permit requires Massport to maintain a current list of the Co-Permittees at Logan and each Co-Permittee's contact for environmental issues. All new Co-Permittee tenants shall submit to Massport for approval their own SWPPP for the industrial activities they perform or agree that they will adopt Massport's SWPPP for the discharges resulting from their industrial activities within 60 days of being designated as new Co-Permittee.

When a new Co-Permittee begins to operate at Logan or a Co-Permittee ceases to operate at Logan, Massport shall follow the change in ownership or operational control requirements of 40 C.F.R. §122.63(d). Massport shall retain a signed copy of the SWCPA for each new Co-Permittee as well as each Co-Permittee's Part II form consistent with the Massport SWPPP which meets the requirements of this final permit. Massport shall keep a copy of its current SWPPP including copies of all current Co-Permittees SWPPPs at Massport's Environmental Department offices at Logan and shall make these available upon request to any representative of EPA or MassDEP.

Other Tenants: The presence and operations of other tenants at the airport, such as car rental and food preparation establishments which are not defined separately as having stormwater discharges associated with industrial activity under 40 C.F.R. §122.26(b)(14) shall also be addressed in the SWPPP. Massport shall require private agreements through contracts to ensure that the SWPPP for Logan addresses any potential stormwater contamination from these types of tenants. Massport shall ensure that these tenants manage any potential pollutant sources to stormwater in a manner consistent with this SWPPP.

- b. SWPPP Certification and Annual Report - Massport shall maintain, update and ensure the proper implementation of its SWPPP and any separate Co-Permittee's SWPPP. With respect to the SWPPP, Massport is responsible for its own activities, each Co-Permittee is responsible for their own activities, and Massport has the overall responsibility for coordination and oversight. Massport and the Co-Permittees shall account for any changes that occur at Logan which could impact the SWPPP and amend it as necessary to reflect any changes at the airport.

Massport shall provide an Annual Report that includes a proper certification to EPA and the MassDEP documenting that the previous year's inspections and maintenance activities were conducted, results recorded, records maintained, and demonstrating compliance with the SWPPP. Massport shall revise its SWPPP within one year of the effective date of the permit to include any changes or additional elements required by this Permit. In this first year SWPPP revision, Massport shall also ensure that its SWPPP incorporates any of the technology-based effluent limits at Part 8.S.4 and SWPPP requirements at Part 8.S.5 of the 2021 MSGP that were not previously included. The report with the proper certification shall be signed in accordance with the requirements identified in 40 C.F.R. § 122.22. A copy of this certification will be due no later than **January 31** of each year to cover the prior calendar year and include a complete listing of Co-Permittees and their respective contacts, incorporating additions and deletions through the calendar year. Massport shall obtain certifications (meeting the same requirements as described above for Massport) from all current Co-Permittees for their industrial activities and include these with the Annual Report submittal.

- c. SWPPP Objectives - The SWPPP shall continue to focus on two major objectives: (1) to identify sources of pollution that have the potential to affect the quality of the water discharged from the airport's outfalls including, but not limited to, stormwater, process water, and wastewater associated with activities performed throughout the airport; and (2) to ensure implementation of measures to minimize and control pollutants in stormwater, wastewater and process water discharges associated with activities performed throughout the airport, so as to meet the CWA standards set out in Part I.C.1 of this permit.

The SWPPP for Massport and the Co-Permittees shall address all sources of pollutants within their areas of operation that have the potential to drain to the stormwater sewer system including, but not limited to, where (1) chemicals or fuels are stored, (2) deicing and anti-icing chemicals are applied to airplanes, (3) aircraft are fueled, (4) solid wastes and raw materials with the potential to leak are stored, (5) solid wastes and raw materials stored indoors and have a potential to spill and flow to inside floor drains that drain to the stormwater system or to the outside, (6) automotive maintenance and cleaning activities occur, (7) aircraft maintenance activities occur, (8) deicing and anti-icing chemicals are spread on runways and roadways, (9) maintenance of the runways to remove rubber particles to improve the surface friction levels occurs, (10) sewer connections to the stormwater drainage system are identified, (11) aircraft lavatory wastes are removed and transported, (12) food or food wastes are stored that have the potential to attract birds and animals, and (13) birds tend to flock.

Massport and the Co-Permittees shall thoroughly evaluate all potential pollution sources at the site and select and implement appropriate measures designed to prevent or control the discharge of pollutants to the outfalls, in order to meet the CWA standards set out in Part I.C.1 of this permit. Massport shall designate an Environmental Representative (ER) that will be responsible for developing and implementing the facility wide SWPPP. Each Co-Permittee listed in Attachment B shall designate an ER responsible for implementing the SWPPP required for the Co-Permittee's facility and its activities. Massport shall: (1) maintain a team of qualified environmental airport personnel who are responsible for implementing the SWPPP and assisting Massport's ER responsible in its implementation; (2) continually assess the sources of water pollution; (3) select and implement appropriate environmental management practices and controls; and (4) periodically evaluate the effectiveness of the plan to prevent the release of pollutants to the stormwater sewer system.

Massport and the Co-Permittees shall develop management practices that use pollution prevention approaches to control the discharge of pollutants. The following classes of management practices are generally employed at industrial facilities and shall continue to be employed at Logan and outlined in the SWPPP:

- (1) A pollution control program that implements practices such as good housekeeping, employee training, and spill response and prevention procedures; and
- (2) Management practices that address containment, mitigation, and cleanup.

d. Outline of the SWPPP - The SWPPP shall contain the following elements:

- (1) Details of the SWPPP
 - i. Pollution Prevention Team
 - ii. Description of the Facility Regarding Potential Pollution Sources
 - iii. Description of the Facility Site and Receiving Waters/Wetlands
 - iv. Description of Potential Pollutant Sources
 - v. Stormwater Management Controls
 - vi. Site Inspection
 - vii. Consistency with Other Plans
 - viii. Amending the SWPPP
- (2) BMPs for Identifying and Reducing Deicing and Anti-Icing Sources
- (3) BMPs for Identifying and Reducing Potential Illicit Discharges
- (4) BMPs for Identifying and Reducing Fuel and Oil Sources
- (5) BMPs for Minimizing and Reducing Rubber Removal Sources

e. Details of the SWPPP

(1) Pollution Prevention Team

Massport shall maintain a team of individuals that includes an ER from each Co-Permittee, who shall be responsible for implementing the SWPPP and assisting the Massport ER in its implementation. When selecting members of the team, Massport's ER should draw on the expertise of all relevant departments and Co-Permittees within the airport to ensure that all aspects of airport operations are considered when the plan is developed. The plan must clearly describe the responsibilities of each team member as they relate to specific components of the plan. In addition to enhancing the quality of communication between team members and other personnel, clear delineation of responsibilities will ensure that every aspect of the plan is addressed by a specified individual or group of individuals.

(2) Description of the Facility Regarding Potential Pollution Sources

The SWPPP shall describe activities, materials, and physical features of the facility that may potentially contribute pollutants to stormwater runoff or, during periods of dry weather, result in pollutant discharges through the separate storm sewers or stormwater drainage systems throughout the facility. This assessment of stormwater pollution risk shall support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques, if necessary.

(3) Description of the Facility Site and Receiving Waters/Wetlands

The plan must contain a map or maps of the site that shows the location of outfalls covered by the permit (or by other NPDES permits), the pattern of stormwater drainage, an indication of the types of discharges contained in the drainage areas of the outfalls, structural features that control pollutants in runoff,² surface water bodies (including wetlands), areas where significant materials³ are exposed to rainfall and runoff, and locations where any spills and leaks of toxic or hazardous materials have occurred in the past five (5) years. Such maps shall display the locations where the following activities take place: (1) chemicals or fuels are stored, (2) deicing and anti-icing chemicals are

² Non-structural features such as grass swales and vegetative buffer strips also should be shown.

³ Significant materials include, but are not limited to the following: raw materials, fuels, solvents, detergents, and plastic pellets, finished materials, such as metallic products, raw materials used in food processing or production, hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), any chemical the facility is required to report pursuant to the Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313, fertilizers, pesticides, and waste products, such as ashes, slag, and sludge that have the potential be released with stormwater discharges. (See 40 C.F.R. §122.26(b)(8)).

applied to aircraft, (3) aircraft fueling, (4) outdoor solid waste and raw materials storage, (5) indoor solid waste and raw materials storage areas that have a potential to spill and flow to floor drains that drain to the stormwater system, (6) automotive maintenance and cleaning activities, (7) aircraft maintenance activities, and (8) application of deicing chemicals on impervious (paved) surfaces. For areas of the facility that generate stormwater discharges with a reasonable potential to contain significant amounts of pollutants, the map shall indicate the probable direction of stormwater flow and the pollutants likely to be in the discharge.

Flows with a significant potential to cause soil erosion also must be identified. In order to increase the readability of the map, the inventory of the types of discharges contained in each outfall may be kept as an attachment to the site map.

(4) Description of Potential Pollutant Sources

The SWPPP shall provide a description of potential sources which contribute pollutants to stormwater discharges or which may result in the discharge of pollutants draining from the facility. The description shall address each pollutant for which monitoring is required. The SWPPP must identify all activities and significant materials, which may potentially be significant pollutant sources. The SWPPP shall include:

- i. A topographic map extending one-quarter of a mile beyond the property boundary of the facility;
- ii. An estimate of the overall runoff coefficient for the site, determined by an acceptable method, such as area weighting;
- iii. Methods of on-site storage or disposal of these materials; materials management practices employed to minimize contact of these materials with stormwater runoff; materials loading and access areas; the location and description of existing structural and nonstructural control measures to reduce pollutants in stormwater runoff; and description of any treatment the stormwater receives;
- iv. A list of all spills and leaks of toxic or hazardous materials that have occurred at the facility five years prior to the effective date of this permit to the present;
- v. A list of any non-stormwater discharges that are known or are reasonably expected to be present at the site.

(5) Stormwater Management Controls

Massport shall describe stormwater management controls appropriate for an airport and continue to implement such controls, in order to meet the CWA standards set out in Part I.C.1 of this permit. The appropriateness for implementing controls listed in the SWPPP must reflect identified potential sources of pollutants at the facility. The description of stormwater management controls must address the following minimum components, including a schedule for implementing such controls:

- i. Pollution Prevention Team – as described in Part I.C.1.e.(1) above. The activities and responsibilities of the team must address all aspects of Logan's SWPPP.
- ii. Risk Identification and Assessment/Material Inventory - The SWPPP must assess the potential of various sources at Logan that could contribute pollutants to stormwater discharges associated with industrial activity. The SWPPP must include an inventory of the types of materials handled. Each of the following areas or activities must be evaluated for the reasonable potential for contributing pollutants to runoff: (1) storage of chemicals or fuels, (2) applications of deicing and anti-icing chemicals to aircraft, (3) fueling of planes, (4) storage of solid wastes and raw materials with the potential to leak, (5) indoor storage of solid wastes and raw materials that have with a potential to spill and flow to inside floor drains that drain to the stormwater system, (6) automotive maintenance and cleaning activities, (7) airplane maintenance activities, (8) application of deicing chemicals on tarmac or other areas, (9) identification of sewer connections to the stormwater drainage system, (10) removal and transporting of aircraft lavatory wastes, (11) storage of food or food wastes that could potentially attract birds and animals, (12) flocking of birds, and (13) maintenance of runways to remove rubber particles to improve the surface friction levels. Factors to consider include the toxicity of chemicals; quantities of chemicals used, produced, or discharged; the likelihood of their contact with stormwater, and the history of significant leaks or spills of toxic or hazardous pollutants.
- iii. Preventative Maintenance - A preventative maintenance program must be comprised of inspections and maintenance of stormwater management devices (i.e., oil/water separators, catch basins, track mats) as well as the periodic inspection and testing of facility equipment and systems to uncover conditions that could cause breakdown or failures resulting in discharges of pollutants to surface waters.
- iv. Good Housekeeping - The SWPPP shall address good housekeeping, which requires the maintenance of a clean orderly facility. Examples of these practices are included in an existing component of Massport's SWPPP which is entitled "General – Baseline BMPs." These practices include actions such as frequent equipment cleanings, maintenance of clean floor and pavement areas, and proper centralized storage of chemical containers.
- v. Spill Prevention and Response Procedure - Areas where potential spills can occur and their accompanying drainage points, must be identified clearly in the SWPPP. The potential for spills to enter the stormwater drainage system must be eliminated whenever feasible. Where appropriate, specific material handling procedures, storage requirements, and procedures for cleaning up spills must be identified in the SWPPP and made available to the appropriate personnel. The stormwater discharges shall be tested for pollutants contained in the material spilled, in the event that the spill has reached the stormwater drain, within 24 hours from the initial occurrence of the spill as directed by the EPA or the MassDEP during clean up associated with such occurrence. Massport is responsible for the sampling and analysis of storm drain discharges.

- vi. Stormwater Management - The SWPPP must contain a narrative evaluation of the appropriateness of traditional stormwater management practices. Based on an assessment of the potential of various sources at the facility to contribute pollutants to the stormwater discharge, the SWPPP must provide measures, determined to be reasonable and appropriate, to be implemented and maintained, in order to meet the CWA standards set out in Part I.C.1 of this permit.
 - vii. Sediment and Erosion Prevention - The SWPPP must implement ongoing measures to protect receiving water quality from impacts due to construction activities that disturb less than one acre and are not subject to EPA's NPDES Construction General Permit (CGP).
 - viii. Employee Training - Employee training programs must inform personnel responsible for implementing activities identified in the SWPPP, or otherwise responsible for stormwater management at all levels, of the components and goals of the SWPPP. Training should address topics such as spill response, good housekeeping and material management practices. The SWPPP must identify periodic dates for such training, which shall be conducted annually, at a minimum.
 - ix. Visual Inspections - Qualified facility personnel must be identified to inspect designated equipment and facility areas. Material handling areas must be inspected for evidence of, or the potential for, pollutants entering the drainage system. Along with the monitoring required at three (3) of the forty-four (44) airfield outfalls, the discharge at each of the 44 outfalls shall be inspected annually during dry weather conditions. Inspections shall be conducted near low tide when many of these outfalls should be accessible. The inspector shall record evidence of any sheen, odors, or staining which would indicate the presence of pollutants. Weather conditions shall be recorded at the time of the inspection. A tracking or follow up procedure must be used to ensure that appropriate actions have been made in response to problems observed during the inspection (e.g. visible sheen, damaged outfall pipe). Records of inspections must be maintained for six (6) years, pursuant to Part II.C.1.b of the permit.
 - x. Recordkeeping and Internal Reporting Procedures - Incidents such as spills, or other discharges, along with other information describing the quality and quantity of stormwater discharges must be included in the SWPPP records. All inspections and maintenance activities must be documented and maintained on site for six (6) years.
- (6) Site Inspection - An annual site inspection must be conducted by the Pollution Prevention Team, as named in the SWPPP, to verify that the description of potential pollutant sources is accurate, that the drainage map has been updated or otherwise modified to reflect current conditions, and controls to reduce pollutants in stormwater and process water discharges identified in the SWPPP are being implemented and are adequate. A tracking or follow-up procedure must be used to ensure that the appropriate action has been taken in response to any issues of concern identified during each inspection. Records documenting significant observations made during the site inspection must be retained as part of the SWPPP for six years.

- (7) Consistency with Other Plans - Stormwater management controls may reflect requirements for Spill Prevention Control and Countermeasure (SPCC) plans under Section 311 of the CWA and may incorporate any part of such plans into the SWPPP by reference.
- (8) Amending the SWPPP - Massport and the Co-Permittees shall amend and implement an amended SWPPP whenever there is a substantial change in any aspects of design, construction, operation, or maintenance, which have a significant effect on the potential for the discharge of pollutants to any of the receiving waters; a release (as defined by 40 C.F.R. § 300.5) of reportable quantities of hazardous substances and oil; or if the SWPPP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges. Any such amended SWPPP shall be implemented within 30 days.

f. BMPs for Identifying and Reducing Deicing and Anti-icing Sources

Massport and Co-Permittees that store, handle or apply deicing and/or anti-icing compounds⁴ at Logan International Airport shall continue to implement BMPs for Deicing and Anti-Icing Chemicals. The SWPPP shall include the following information:

- (1) Potential Pollution Sources – All Permittees that apply deicing and/or anti-icing chemicals must maintain a record of the types of such chemicals (including the Safety Data Sheets [SDS]) used and the monthly quantities, either as measured or, in the absence of metering, as estimated to the best of their knowledge. This includes all deicing and anti-icing chemicals, not only glycol formulations, because large quantities of such chemicals may have an adverse impact on receiving waters. Co-Permittees that conduct deicing operations shall provide a copy of the above information to Massport for inclusion in the Massport SWPPP and each annual Glycol Reduction Report described in I.C.1.f.7 below.⁵
- (2) Source Reduction – All applicators of anti-icing and deicing chemicals shall consider alternatives to the use of these chemicals to reduce the aggregate amount of these chemicals used and/or lessen their environmental impact while maintaining flight safety.

Co-Permittees that deice aircraft shall implement a blend-to-temperature program for tracking and reducing the use of glycols, the documentation of which, shall be collectively managed and reported by Massport. This program requirement is detailed in Part I.C.2. below, which specifies a timeline by which this program is required to be implemented and an annual assessment of the reduction in glycol use and corresponding levels of effluent BOD and COD discharged to the

⁴ "Deicing" generally refers to both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and/or deicing activities.

⁵ MSGP 2021, Part 8.S.3.2

receiving waters. It also requires the long-term reduction of the discharge of glycols. Massport shall continue to assess other measures to implement which will continue to reduce the levels of deicing chemicals that it applies on runways and taxiways at the airport.

Co-Permittees that are not subject to the blend-to-temperature program (small commuter and general aviation departures) shall continue to implement other measures described in the SWPPP above to minimize the use of glycols. **Co-Permittees shall communicate their findings to Massport for inclusion in each annual Glycol Reduction Report described in Part I.C.2.** Massport shall also continue to assess other measures to reduce the use and discharge of glycol compounds that it applies on runways and taxiways and include its findings in each annual Glycol Reduction Report described in Part I.C.2.

- (3) Runway Deicing and Anti-icing— Massport and Co-Permittee tenants that conduct deicing operations shall ensure that only the necessary amount of deicing and anti-icing chemicals are used, consistent with considerations of flight safety and protocols established by the Federal Aviation Administration (FAA). Massport and applicable Co-Permittee tenants shall also consider the following BMP options (or their equivalents): metered application of chemicals; pre-wetting dry chemical constituents prior to application; installing a runway ice detection system; implementing anti-icing operations as a preventative measure against ice buildup.⁶ The use of any deicing or anti-icing products that contain urea, consistent with the requirement established by 40 C.F.R. § 449, is prohibited.
- (4) Aircraft Deicing –Co-Permittees shall ensure that only the necessary amounts of deicing chemicals are used, consistent with considerations of flight safety and protocols established by the FAA. This evaluation should be carried out by personnel most familiar with the particular aircraft and flight operations in question. Co-Permittees tenants that are not subject to the Deicer Discharge Reduction Plan (DDRP) in Part I.C.2 (small commuter and general aviation aircraft) shall also consider the following BMP options (or their equivalents) for reducing deicing fluid use: forced-air deicing systems, computer controlled fixed-gantry systems, infrared technology, hot water, enclosed-basket deicing trucks, mechanical methods, solar radiation, hangar storage, aircraft covers, and thermal blankets. Massport and its Co-Permittee tenants shall also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.⁷
- (5) Management of Runoff - Where deicing and anti-icing operations occur, Massport and its Co-Permittee tenants shall describe and implement a program to control or manage contaminated runoff to reduce the amount of pollutants being discharged from the site. Massport and its Co-Permittee tenants shall consider the following BMP options (or

⁶ MSGP 2021, Part 8.S.4.1.6

⁷ MSGP 2021, Part 8.S.4.1.6

their equivalents): a dedicated deicing facility with a runoff collection/recovery system; using vacuum/collection trucks; storing contaminated stormwater/deicing fluids in tanks and releasing controlled amounts to a POTW; and directing runoff into vegetative swales or other infiltration measures. Massport and its Co-Permittee tenants shall also consider recovering deicing materials when these materials are applied during non-precipitation events (e.g. covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of stormwater contamination. Used deicing fluid should be recycled whenever possible.

- (6) Inspections – Massport shall specify the frequency of inspections in the SWPPP. At a minimum, inspections shall be conducted by qualified personnel monthly during the deicing season (e.g., October through April). Also, if significantly or deleteriously large quantities of deicing chemicals are being spilled or discharged, or if water quality impacts have been reported, Massport shall increase the frequency of inspections to weekly until such time as the deicing chemical spills/discharges and their associated impacts are minimized to the extent practicable.
- (7) Re-evaluation of BMPs - The BMPs for deicing shall be re-evaluated after each deicing season, to determine if revised or supplemental BMPs are necessary in order to protect the water quality of the receiving waters. As described in Part I.D. below, the Permittee shall submit an annual Glycol Reduction Report, no later than September 30th each year, which will track the effluent levels of BOD and COD loading and the total usage of glycols for deicing on the airport.

g. BMPs for Identifying and Reducing Potential Illicit Discharges

(1) Purpose

Massport, with the cooperation of the Co-Permittees, will continue to implement a comprehensive plan to identify and eliminate dry and wet weather illicit discharges to its separate stormwater sewer system. The plan will focus on all potential sources of contamination, including but not limited to, the sanitary sewer system, lavatory handling practices, and illegal connections. These BMPs shall consist primarily of visual observations of the stormwater sewer and sanitary sewer systems including, video inspection of the sanitary sewer system and dye testing of the sewer pipes and building plumbing. The protocol may be modified to address atypical situations such as surcharged pipelines, groundwater or backwater conditions that preclude adequate inspection, or the presence of non-human wastes.

Massport may also employ additional investigative techniques, including indicator bacteria sampling, tracers (such as fluorescent whitening agents, caffeine, and sucralose), and genetic microbial source tracking, to identify potential inputs from the sanitary sewer system to the stormwater sewer system.

Within two years after the effective date of the permit, Massport shall submit a report to EPA and MassDEP outlining the findings associated with this BMP, describing measures that were taken to address any discovered illicit connections or damaged sewer lines as well as any additional remediation activities that were conducted or that are planned to address any impairments or illicit connections to the storm drainage system. Recently conducted assessments of any portions of the stormwater drainage system may be used to satisfy this requirement. The following metrics shall be considered:

- i. Number/Percentage of manholes/structures inspected,
- ii. Number/Percentage of buildings inspected/dye tested,
- iii. Footage/Percentage of pipe cleaned and inspected by video,
- iv. Infrastructure defects identified and repaired,
- v. Number/Percentage of illicit discharges and cross-connections identified,
- vi. Number/Percentage of illicit discharges and cross-connection removed,
- vii. Unit and total costs of removal of illicit discharges and cross-connections, and
- viii. Reduction in indicator bacteria (fecal coliform and *Enterococci*) densities at outfalls.

This report shall provide a narrative description of this BMP, plans for the duration of the permit term, and an evaluation of overall system health. If any major projects or improvements are identified as a result of this annual evaluation, then a schedule to address such projects shall be provided, particularly if their scope goes beyond the following year.

(2) Mapping

The 2007 Permit's SWPPP required the Permittee to develop maps showing a comprehensive depiction of key infrastructure and identifying potential cross-connections between the sanitary sewer and stormwater sewer systems and potential illicit sanitary sewer discharges. Within one year of the effective date of the permit, the Permittee shall update these maps to reflect new information, corrections, modifications, and improvements to the sewer systems and incorporate these into its SWPPP.

(3) Drainage Tributary Area Prioritization

The Permittee will continue to focus these investigative efforts on the prioritization of the drainage areas that it determined was appropriate pursuant to the current SWPPP. This prioritization shall be reviewed with the reissuance of this permit to ensure that it is still appropriate and revised as necessary.

(4) Sewer Rehabilitation, Cross-Connection Removal and Operational Improvements

Cross-connections as well as debris and grease build-up, structural deficiencies, and other system problems will be identified based on ongoing inspections and maintenance. Appropriate rehabilitation solutions will be implemented. Following removal of a cross-connection, illicit discharge, or other rehabilitation, dye testing will be used to verify the correction.

h. BMPs for Identifying and Reducing Discharges from Fuel and Oil Sources

(1) Above Ground Storage Tanks (ASTs) at Fuel Farm

The accumulated stormwater in the large AST secondary containment areas shall be combined with the flow from the fuel loading rack and the treated flow from the hydrant vaults and pits (Outfall 01E) and sent to the treatment system at the fuel farm to discharge at internal Outfall 01D. See I.A.4 of the permit, above, for additional requirements and applicable effluent limits associated with these internal outfalls.

(2) SPCC Plan

These BMPs can reference and must be consistent with the Spill Prevention Control and Countermeasures (SPCC) Plan for the ASTs at the site. The SPCC Plan requires an owner or operator of certain ASTs to prepare and comply with written, site-specific, spill prevention plans (see 40 C.F.R. Part 112). Any more stringent requirement below must be incorporated into the SPCC Plan/SWPPP.

(3) Minimum Requirements for ASTs

These BMPs shall require at a minimum that all spilled or leaked jet fuel (JET-A) or any other fuel from the ASTs be removed from the secondary containment system as quickly as practicable and in all cases within 24 hours of such an occurrence. Following any such spills or leaks, the secondary containment system (the bermed area around the ASTs) must be thoroughly cleaned to remove any residual contamination.

(4) Underground Storage Tanks

At the fuel farm, there is a 20,000-gallon underground storage tank (UST) referred to as the equalization/holding tank. Stormwater from the hydrant vaults and pits of the centralized fueling system is stored in this UST. This water undergoes treatment and is sampled at internal Outfall 01E in accordance with Part I.A.4 of the Permit.

A 12,000-gallon underground storage tank (UST) stores diesel fuel used by onsite trucks and two 12,000-gallon UST store gasoline for fueling on-site vehicles. A 1,000-gallon UST stores diesel fuel for an on-site electrical generator. These USTs and any

additional USTs which provide fueling shall require the following BMPs, as defined in Part (5) below.

(5) Minimum Requirements for USTs and Loading Rack Area at the Fuel Farm and any other facilities providing fueling

BMPs shall include the following, at a minimum:

- i. Install, inspect, maintain, test, and monitor all USTs in accordance with local, state and federal requirements.
- ii. Divert stormwater flows away from fueling areas through the use of grade control, berms, or curbing to avoid stormwater contact with contaminated surfaces.
- iii. Use fuel dispensing equipment with "breakaway" hoses and emergency shutdown of flow feature.
- iv. Use automatic shutoff valves on fuel tanker trucks.
- v. Develop a standard operating procedure (SOP) and enforce the procedures prohibiting the "topping off" of on-site vehicles to prevent the spilling of fuel.
- vi. Post "No Topping Off" signs on fuel pumps intended for vehicular fueling to prevent overfills.
- vii. Provide and maintain an adequate supply of spill response materials and equipment in fueling areas and on fueling trucks.
- viii. Collect and properly dispose of any spilled fuel.

(6) Fueling Aircraft

Each Co-Permittee at the facility shall develop a SOP for each type of equipment that fuels aircraft including fueling from the centralized fuel line or remote fueling by tanker truck. The SOP shall include procedures for responding to minor spills (less than Reportable Quantities (RQs) as defined by 40 C.F.R. § 302.4) and major spills (greater than or equal to RQs). SOPs shall include the documentation of any quantity of JET-A or any other fuel spilled including the time and location and stipulate the spill control equipment that will be available. SOPs from Co-Permittees that fuel aircraft shall be reviewed and approved by Massport's ER to ensure consistency with Massport's Aircraft Fueling BMPs. Massport shall ensure that all Co-Permittees that conduct aircraft fueling provide ongoing refresher training for their employees or contractors that conduct fueling operations.

Each operator of fueling equipment shall have a communication device available for the purpose of alerting management of any spill. Any major spill shall be reported within two hours to the proper authorities in accordance with local, state and federal requirements.

Upon learning of a major spill, any Co-Permittee manager shall immediately alert the ER for Massport, after notifying the proper authorities.

(7) BMPs for Fueling Practices

The following BMPs are designed to prevent stormwater from contacting pollutants associated with fueling activities. Massport and Co-Permittees must implement the BMPs applicable to their facility and specific operations:

- i. Describe and implement measures that prevent or minimize the discharge of fuel to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Consider the following fueling BMPs (or their equivalents): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling); using dry cleanup methods; and collecting stormwater runoff.
- ii. Collect and properly dispose of any spilled fuel.
- iii. Provide and maintain an adequate supply of spill response materials and equipment on all fueling trucks.
- iv. Manage the disposal of water that collects in fuel tanks and fueling hydrant sumps by disposing off site or treating before disposing. Avoid any contact with stormwater or stormwater catch basins.
- v. Record all maintenance activities and inspections relating to fueling equipment, containers, and tanks in dedicated logbooks for the centralized fuel line and fuel trucks.
- vii. Massport shall post information, with wording such as "Do Not Dump. Drains to Boston Harbor" by catch basins and other inlets that convey stormwater within 100 yards of any aircraft fueling location, if practicable.

(8) Aircraft Maintenance Activities at Hangars (includes washing)

Minor maintenance activities are permitted at the terminals and the terminal aprons. Minor maintenance activities include addition of fluids, changing tires, batteries and hoses, and other maintenance activities that do not have the potential of a release of pollutants. Fluid changes are not considered to be minor maintenance.

Major maintenance is permitted inside hangars and other buildings designed for maintenance of aircraft. Major maintenance includes fluid changes, engine repairs or engine disassembly. Major maintenance activities shall be performed indoors, except in case of an emergency or other compelling circumstance. The emergency or compelling circumstance and details of the maintenance activity shall be documented.

The following BMPs are designed to prevent stormwater from contacting pollutants associated with aircraft maintenance activities. Co-Permittees must implement the BMPs applicable to their facility and specific operations. Below is a list of best management practices that shall be considered in the development of the SWPPP.

- i. Maintenance activities shall occur indoors at designated maintenance facilities.

- ii. Equipment shall be maintained in a clean condition and stored indoors in properly designed and suitably designated areas.
 - iii. "Dry" cleaning and surface preparation techniques shall be used when possible.
 - iv. Use water-based cleaning agents or non-chlorinated solvents shall be used to clean equipment parts when possible.
 - v. Maintenance shall be conducted in buildings equipped with runoff controls to prevent discharges to stormwater.
 - vi. Maintenance activities or equipment staging shall not be conducted near stormwater catch basins or any stormwater drainage feature.
 - vii. Install and maintain catch basin filter inserts that assist in the removal of oil and grease, sediments and floating pollutants that may discharge from maintenance work areas, active construction sites, and other areas that may experience higher than average loadings of such materials.
 - viii. Use drip pans, absorbent materials, booms, etc. to collect fluid drippings.
 - ix. Use absorbent materials at potential problem areas. Collect/remove absorbent and used spill control materials promptly. The materials shall be properly stored and disposed of offsite according to applicable state and federal regulations.
 - x. Conduct periodic cleaning of any catch basins (annually at a minimum) that receive runoff within 100 yards of an aircraft maintenance area, including catch basins outside a hangar. Wastes from catch basins must be contained and properly disposed of off-site. The flushing of contents of catch basins to receiving waters is prohibited.
 - xi. Store all parts and equipment for aircraft maintenance indoors.
 - xii. Store and properly dispose of all fluids generated from aircraft maintenance. Provide secondary containment while storing waste fluids such as greases, oils, antifreeze, brake fluid, cleaning solutions, hydraulic fluid, batteries, transmission fluid, and filters.
 - xiii. Whenever possible, use biodegradable products and substitute materials with less hazardous properties.
 - xiv. Post information, with wording such as "Do Not Dump. Drains to Boston Harbor" by catch basins and other inlets that convey stormwater within 100 yards of any aircraft maintenance location including outside aircraft hangars, if practicable.
 - xv. No wash waters from cleaning aircraft are to be discharged to a stormwater drainage system.
- (9) Automotive and Ground Service Equipment Maintenance Activities (including washing)

Automotive and ground service equipment (GSE) maintenance activities performed on airport property shall be performed indoors in maintenance garages or maintenance facilities, except in case of an emergency or other compelling circumstance or in the case of minor activities as described below. No maintenance activities shall be performed on terminal aprons at any time, except in case of an emergency. The emergency or compelling circumstance and details of the maintenance activity shall be documented in the SWPPP files. Minor maintenance activities are permitted outdoors.

Minor maintenance activities include addition of fluids, changing tires, batteries and hoses, and other maintenance activities that do not produce the potential for release of pollutants. Fluid changes are not considered to be minor maintenance. Major maintenance is permitted indoors. Major maintenance includes fluid changes, engine repairs, and engine disassembly.

The following BMPs apply to maintenance activities such as fluid changes, engine repairs or engine disassembly of automotive vehicles or ground service equipment. The BMPs are designed to prevent stormwater from contacting pollutants associated with automotive and ground service equipment maintenance activities. Co-Permittees must implement the BMPs applicable to their facility and specific operations. Below is a list of best management practices that shall be considered in the development of the SWPPP.

- i. Maintenance activities shall occur indoors at designated garage or maintenance facilities.
- ii. Equipment shall be maintained in a clean condition and parts and equipment shall be stored indoors at properly designed and suitably designated areas.
- iii. "Dry" cleaning and surface preparation techniques shall be used when possible.
- iv. Use water-based cleaning agents or non-chlorinated solvents to clean equipment parts when possible.
- v. Eliminate excessive buildup of oil and grease on vehicles, equipment and work area surfaces.
- vi. Conduct maintenance in buildings equipped with runoff controls to prevent discharges to stormwater.
- vii. Maintenance activities or equipment staging shall not be conducted near stormwater catch basins or any stormwater drainage feature.
- viii. Install and maintain catch basin filter inserts that assist in the removal of oil and grease, sediments and floating pollutants that may discharge from maintenance work areas.
- ix. Use drip pans, absorbent materials, booms, etc. to collect fluid drippings.
- x. Use absorbent materials at potential problem areas. Collect/remove absorbent and used spill control materials promptly. The materials shall be properly stored and disposed of offsite according to applicable state and federal regulations.
- xi. Store oil filters and empty lubricant containers in leak-proof containers staged on secondary containment indoors. Spent hydraulic oil cans, filters, or used absorbent materials are not to be placed in trash receptacles or dumpsters.
- xii. Conduct periodic cleaning of any catch basins (annually at a minimum) that receive runoff within 100 yards of a maintenance garage or maintenance facility including catch basins outside of a facility. Wastes from catch basins must be collected and properly disposed of off-site. The flushing of contents of catch basins to receiving waters is prohibited.
- xiii. Store and properly dispose of all fluids generated from automotive or GSE maintenance. Remove and properly dispose of batteries from automotive or GSE operations. Provide secondary containment while storing waste fluids such as

- greases, oils, antifreeze, brake fluid, cleaning solutions, hydraulic fluid, batteries, transmission fluid, and filters.
- xiv. Whenever possible, use biodegradable products and substitute materials with less hazardous properties.
 - xv. Post information, with wording such as "Do Not Dump. Drains to Boston Harbor" by catch basins and other inlets that convey stormwater within 100 yards of any automotive or GSE maintenance location, if practicable.
 - xvi. No wash waters from cleaning automotive and GSE are to be discharged to a stormwater drainage system.
- i. BMPs for Minimizing and Reducing Rubber Removal Sources

Runway Maintenance - Over time, materials such as tire rubber, oil and grease, paint chips, and jet fuel can build up on the surface of a runway causing a reduction in the friction of the pavement surface. When the friction level of a runway falls below a specific level, maintenance must be performed. The FAA recommends several methods for removing rubber deposits and other contaminants from a runway surface including the use of high pressure water, chemical solvents, high velocity particle impact, and mechanical grinding. If not properly managed, the materials removed from the runway surface could be discharged into nearby surface waters. Similarly, if chemical solvents are used in these operations, improper management practices could result in discharges of the chemical solvents in the stormwater runoff from runway areas.

Massport uses high pressure water spray to periodically remove rubber deposits from the runways. Massport is required to implement measures to minimize the discharge of the dislodged material from runways during these operations into the drainage system. All collected rubber debris from this operation shall be disposed of according to local or State ordinances. Any washwaters from rubber removal operations shall not be discharged to the storm drain system or sanitary sewer. Such washwaters may be discharged to grassy areas of the airfield, provided all of the catch basins in the vicinity of such areas are covered. Massport shall notify the EPA and MassDEP of any changes to this procedure.

2. Long Term Reduction in Glycol Usage and BOD/COD Loading

Beginning the first full deicing season that is at least two years after the effective date of this permit, Co-Permittees that conduct deicing of aircraft, shall implement a Blend-to-Temperature program for the use of aircraft deicing products containing glycol as part of an overall Deicer Discharge Reduction Plan (DDRP). The use of a Blend-to-Temperature program has been determined through Best Professional Judgement (BPJ) to constitute Best Available Technology (BTA) for the control of discharges of aircraft deicing fluids at Logan Airport. The DDRP will not require the Blend-to-Temperature program to be implemented by small commuter and general aviation aircraft, although these entities must implement other Pollution Reduction Technologies (PRTs) described in the SWPPP in Part I.C.1.f. PRTs are defined as technologies employed to control discharges resulting from aircraft deicing that are required to support normal flight operations at Logan Airport. For purposes of this permit,

“Blend-to-Temperature” shall mean a system to blend Type I aircraft deicing fluids (ADF) based on temperature and other factors, including ensuring compliance with all FAA regulations and operational safety, that will reduce the use of these fluids.

The DDRP shall be incorporated into Massport’s SWPPP within twenty-four (24) months of the effective date of this permit. Co-Permittees that conduct aircraft deicing operations shall implement these updated SWPPP requirements no later than the first full deicing season that is at least two years after the effective date of this permit.

Massport shall submit the DDRP to EPA and MassDEP within six (6) months of the effective date of the permit. The permittee shall address any comments received by EPA or MassDEP on the DDRP within six (6) months of receipt of such comments. The Co-Permittees, with Massport’s support as needed, shall implement the DDRP no later than the first full deicing season that is at least two years after the effective date of this permit. The DDRP shall be made available to the public to the extent allowable by law.

The DDRP shall include:

- A description of the Blend-to-Temperature program.
- A description of the methods and data that will be used to calculate and report the annual relative aircraft glycol use and COD/BOD loading reductions resulting from the implementation of the Blend-to-Temperature program.
- Descriptions of other PRTs implemented to further reduce the application and/or discharges of aircraft glycol in comparison to the absence of such PRTs.
- A requirement that Co-Permittees that deice aircraft quantify the volume of ADF used throughout each deicing season, a period that runs from October 1 through April 30. Massport shall implement data collection and analysis measures to quantify such use by Co-Permittees and submit its findings in a report to the agencies.
- Consideration of other deicer reduction practices described in the Airport Cooperative Research Program (ACRP) Report 14: Deicing Planning Guidelines and Practices for Stormwater Management Systems (2nd Edition, April 2020) as well as other industry publications, and
- Consideration of product substitution and operational changes for runway deicers that reduce the oxygen demand of deicer discharges, such as using products that contain a lower percentage of glycols and/or other oxygen demanding substances.

Massport, in cooperation with the Co-Permittees, shall submit an annual Glycol Reduction Report by September 30th each year, which tracks the implementation of the DDRP. The Glycol Reduction Report shall include:

- Each air carrier or FBO conducting deicing operations (excluding those entities that are exempt from the BTT requirement), shall certify annually for each deicing season that BTT technologies were implemented for each deicing season.
- The annual relative (i.e., percent) reduction in the volume of glycol applied using the Blend-to-Temperature program compared to the volume of glycol that would have been applied in the absence of the Blend-to-Temperature program for the deicing season. All analyses and assumptions underlying this reduction estimate shall be provided.
- The annual relative (i.e., percent) reduction in COD/BOD loadings discharged to Outfalls 001 and 002 compared to the loadings that would have been discharged in the absence of the Blend-to-Temperature program for the deicing season. Massport will use the monthly sampling requirement for BOD/COD during each deicing season as well as any additional sampling results to assure that the extrapolated effluent loading estimates are reliably accurate and statistically significant. All analyses and assumptions underlying this reduction estimate shall be provided.
- The estimated total annual amounts of glycol applied and potentially available for discharge via Outfalls 001 and 002 as a result of aircraft deicing operations.
- Consideration of weather and other factors that affect the performance of the Blend-to-Temperature program.
- An assessment of whether the glycol reduction target of 30% has been met. Massport, in coordination with its Co-Permittee tenants, shall explain why the 30% reduction target was not met and describe the measures that the Co-Permittee tenants will take towards attaining this reduction target in subsequent years, if feasible.
- Massport shall also reduce the use of acetate formulations for the deicing of ramps, taxiways, and runways to the extent practicable.

3. 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 is 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 permit effluent limitations; 2) Exceed any applicable water quality standard; and 3) Add any pollutants that would justify the application of permit conditions that are different from or absent in this permit.
4. 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 PFAS 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(8).*
5. pH Study

In order to continue the pH limit range of 6.0 - 8.5 S.U. in future permits, within three (3) years of the effective date of the permit, the Permittee shall conduct a study to demonstrate that the pH in the receiving water does not exceed the range of 6.5-8.5 S.U. At least six (6) months prior to beginning to conduct the study, the Permittee shall contact MassDEP (massdep.npdes@mass.gov) for guidance on how to complete the study. The completed pH study shall be submitted in accordance with Part I.D.2. and Part I.D.5 below.

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 no later than the 15th day of the month electronically using NetDMR. When the Permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to EPA or the State. NetDMR is accessed from the internet at <https://netdmr.zendesk.com/hc/en-us>.

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/WD

- a. The following requests, reports, and information described in this permit shall be submitted to the EPA/WD NPDES Applications Coordinator in EPA's Water Division:
- (1) Transfer of Permit notice;
 - (2) Request for changes in sampling location;
 - (3) SWPPP reports and certifications, if required;
 - (4) Request to discharge new chemicals or additives;
 - (5) Request for change in WET testing requirements;
 - (6) Report on unacceptable dilution water/request for alternative dilution water for WET testing;
 - (7) Deicer Discharge Reduction Plan/Glycol Reduction Report; and
 - (8) Request for discontinuation of per- and polyfluoralkyl substances (PFAS) sampling requirements.
- b. These reports, information, and requests shall be submitted to EPA/WD electronically at R1NPDESReporting@epa.gov or by hard copy mailed to the following address:

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

4. Submittal of Reports in Hard Copy Form

- a. The following notifications and reports shall be signed and dated originals, submitted in hard copy, with a cover letter describing the submission:
- (1) Written notifications required under Part II. 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 ECAD at the following address:

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

5. State Reporting

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**

An electronic copy of the pH Study described in Part I.C.5 shall be submitted to massdep.npdes@mass.gov.

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:

617-918-1510

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

888-304-1133

E. STATE 401 CERTIFICATION 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 C.F.R. § 124.53. EPA will incorporate by reference all State water quality certification requirements (if any) into the Final Permit.