

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

**STATEMENT OF BASIS**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
DRAFT MODIFICATION TO DISCHARGE TO WATERS OF THE UNITED STATES**

NPDES PERMIT NO.: **MA0000787**

PUBLIC NOTICE START AND END DATES: March 21, 2025 – April 21, 2025

NAME OF APPLICANT:

**Massachusetts Port Authority (Massport) and Co-Permittees**

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

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

RECEIVING WATERS: **Boston Harbor, Boston Inner Harbor and Winthrop Bay**

CLASSIFICATION: **SB**

CURRENT PERMIT: **Issued August 24, 2023; Effective November 1, 2023**

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## 1.0 Proposed Action

The United States Environmental Protection Agency's ("EPA") Region 1 office ("Region 1" or the "Region") is proposing a modification to the current National Pollutant Discharge Elimination System permit MA0000787 ("NPDES Permit" or "Final Permit") issued on August 24, 2023, to Massachusetts Port Authority ("Massport" or "Permittee") and the Co-Permittees listed in Attachment B of the Permit for industrial stormwater discharges from Boston Logan International Airport in East Boston, MA. The Final Permit authorized stormwater discharges to the Boston Harbor, Boston Inner Harbor, and Winthrop Bay.

Among other requirements, the Final Permit established water quality-based effluent limits for *Enterococcus* at Outfalls 01A, 02A, 03A, and 04A and fecal coliform at Outfall 01A, as discussed more fully below. On September 25, 2023, Massport filed a Petition for Review of its Final NPDES Permit with the Environmental Appeals Board (EAB). The Petition only requested review of the numeric bacteria limits in Parts I.A.1 and I.A.2 of the Final Permit. Only the bacteria permit limits have been stayed and the remaining permit limits and conditions in the Final Permit became effective on November 1, 2023. With its Petition for Review, Massport included a request to enter the Alternative Dispute Resolution (ADR) process to explore opportunities to resolve its dispute of the numeric bacteria limits. As EPA agreed to participate in ADR with Massport to resolve this matter, the EAB agreed to stay Massport's Motion and all related filing deadlines to allow the parties to pursue a negotiated resolution of their differences. See Joint Notification of Agreement to Participate in the Alternative Dispute Resolution Program, September 29, 2023.

During the ADR process, Massport requested, pursuant to 40 CFR § 122.62, that EPA modify provisions of its NPDES Permit related to the numeric bacteria limits. Specifically, the Permittee requested that EPA modify the Final Permit to allow additional time for the Permittee to meet the water quality-based effluent limits in the Final Permit. As described in more detail below, EPA is proposing this Draft Permit Modification to include a compliance schedule to meet the numeric, water quality-based bacteria limits. After issuance of the Final Permit, and in discussions between the parties during the ADR process, Massport made clear that it could not consistently meet the numeric bacteria limits in Parts I.A.1 and I.A.2 without first determining the sources of bacteria and developing and implementing a plan to eliminate or mitigate sources of bacteria before it enters the receiving water. This new information, the result of which will be a systematic and comprehensive schedule to address bacteria and meet the numeric limits, was not available at the time of permit issuance and is cause for modification. See 40 CFR § 122.62(a)(2).

EPA has issued for public notice only the additional language addressed by this Draft Permit Modification to the 2023 Final Permit established in Part I.C.6 of the Draft Permit modification and reproduced in Attachment A to this Statement of Basis. EPA is seeking, and will accept, only comments that address the proposed compliance schedule as discussed in Section 2.0 of this Statement of Basis. All other aspects of the Final Permit will remain in effect for the duration of

the unmodified permit and are not being reopened for public comment and modification. See 40 CFR § 124.5(c)(2).

### 1.1 The Facility

Massport owns and operates Boston Logan International Airport (“the Facility”). Logan serves the Boston metropolitan area and New England and is located in East Boston, Massachusetts. It occupies approximately 2,400 acres, which include 94 buildings, six runways, and numerous ancillary facilities. With certain exceptions, Massport owns the stormwater system within the property boundary of the Facility. This stormwater system includes storm drains, roads, runways, and other impervious surfaces with drainage systems, catch basins, culverts, curbs, gutters, ditches, and constructed channels at the Facility. A map of the Facility is included as Attachment B to this Statement of Basis. The stormwater discharges associated with industrial activity at the Facility originate from areas and activities operated by Massport and its Co-Permittee tenants.

The facts concerning the Facility and the waterbody that are relevant for the purpose of NPDES permitting are discussed in detail in the Fact Sheet that EPA issued in 2021 together with the draft NPDES permit for the Facility and the Responses to Comments issued by EPA in conjunction with the 2023 Final Permit.<sup>1</sup> These documents are incorporated herein by reference for purposes of providing additional background information concerning the Facility, the Final Permit, and the relevant law.

### 1.2 2023 Final Permit

On August 24, 2023, EPA issued a Final NPDES Permit authorizing discharges of stormwater from industrial activity and water from deicing operations from the Facility to Boston Harbor, Boston Inner Harbor, and Winthrop Bay. Among other permit limits and conditions, the Final Permit established a numeric, water quality-based effluent limit (WQBEL) for *Enterococcus* at Outfalls 01A (North Outfall), 02A (West Outfall), 03A (Porter Street Outfall), and 04A (Maverick Street Outfall) and a numeric, WQBEL for fecal coliform at Outfall 01A. See Final Permit Part I.A.1 and I.A.2. Specifically, fecal coliform discharges from Outfall 01A 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. Final Permit, Fn. 9, p. 9. *Enterococcus* discharges from Outfall 01A, 02A, 03A, and 04A 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. See Final Permit, Part I.A.1 Fn. 9, p. 9 and Part I.A.2, Fn 8, p. 14.

EPA proposed the numeric bacteria limits in the 2021 Draft Permit based on monitoring data collected during the previous permit term that documented exceedances of applicable water

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<sup>1</sup> The Draft and Final NPDES Permits, and associated documents, are available at <https://www.epa.gov/npdes-permits/massport-logan-international-airport-npdes-permit#2023FinalPermit>.

quality standards in samples from all four outfalls. See 2021 Fact Sheet pp. 41-44 and 2023 Response to Comment II.A.1. The monitoring data demonstrated reasonable potential to cause or contribute to an exceedance of water quality standards for bacteria in the receiving waters, including segments of Boston Harbor listed as impaired for pathogens for which there is an EPA-approved total maximum daily load (TMDL). See 2021 Fact Sheet pp. 41-44.

During the public comment period for the 2021 Draft Permit, Massport, Conservation Law Foundation, Mystic River Watershed Association, and GreenRoots submitted comments on the proposed bacteria effluent limits. EPA addressed these comments in the Response to Comments that accompanied issuance of the 2023 Final Permit. See 2023 Response to Comments. As explained above, following issuance of the Final Permit, Massport filed a Petition for Review with the Environmental Appeals Board (EAB) with regard to the numeric WQBELs for bacteria in Parts I.A.1 and I.A.2 of the 2023 Final Permit. Massport argued, in part, that it was not provided time to prepare to meet the new bacteria limits, including time to investigate potential bacteria sources and evaluate options for addressing the discharges. See Petition p. 4. Massport also requested, and EPA agreed, to enter into the EAB's ADR process to explore opportunities to resolve its dispute of the numeric bacteria limits at issue. See Joint Notification of Agreement to Participate in the Alternative Dispute Resolution Program, September 29, 2023. Specifically, Massport and EPA worked toward establishing a reasonable schedule to identify and eliminate or mitigate bacteria sources with the goal of meeting the permit's WQBELs as soon as possible.

EPA maintains that the numeric WQBELs are justified and needed to protect the receiving waters and to meet Massachusetts' water quality standards and the goals of the 2018 Boston Harbor TMDL for pathogens. The Clean Water Act ("CWA") requires that water quality-based limits be established when necessary to attain water quality criteria—feasibility is not to be factored into that analysis. See *Upper Blackstone Water Pollution Abatement Dist. v. EPA*, 690 F.3d 9, 33 (1st Cir. 2012); *In re City of Taunton*, 17 E.A.D. 105, 190 (EAB 2016); *In re City of Moscow*, 10 E.A.D. 135, 168 (EAB 2001); *In re City of Fayetteville, Ark.*, 2 E.A.D. 594, 600-601 (CJO 1988) (Section 301(b)(1)(C) "requires unequivocal compliance with applicable water quality standards and does not make any exceptions for cost or technological feasibility."). This Draft Modification is not proposing to revise the WQBELs for bacteria in Parts I.A.1 or I.A.2.

EPA recognizes that, at this time, it may be infeasible for Massport to meet the WQBELs immediately: critical information about the sources of bacteria that contribute to exceedances at the outfalls is limited and that identifying and eliminating or mitigating these sources to meet water quality standards will require a systematic and comprehensive investigation of the storm drain system and drainage areas.

## **2.0 Basis of Proposed Permit Modification**

This Statement of Basis reflects EPA's development of a draft compliance schedule for the bacteria WQBELs that will lead to compliance with the 2023 Final Permit's WQBELs as soon as

possible. *See* 40 CFR 122.47(a)(1).<sup>2</sup> As discussed above, EPA included numeric bacteria WQBELs for Massport for the first time in the 2023 Final Permit, so Massport needs additional time to investigate and take action to meet the WQBELs. Given Massport’s project complexity and the work necessary to derive a proposed permit compliance schedule, technical and legal teams from EPA and Massport met several times between October 2023 and May 2024 to discuss various aspects of the bacteria investigation and determine the schedule’s milestones to ensure that Massport completes the necessary work expeditiously and concertedly to meet the permit’s bacteria WQBELs as soon as possible.

In this proposed Draft Permit Modification, EPA proposes clear, actionable goals and rigorous, regular milestones to ensure that Massport stays on track to complete its work in accordance with the schedule as mutually agreed upon by the parties to meet the bacteria WQBELs at Outfalls 01A, 02A, 03A and 04A no later than October 31, 2038. In fact, Massport has already demonstrated good faith by completing milestones discussed during the negotiations (e.g., submission of a Dry Weather Investigation Plan and updated catchment maps) prior to EPA finalizing the permit modification to incorporate these milestones as permit conditions. All work conducted by the Permittee shall be performed using sound engineering practices to ensure that the construction, management, operation, and maintenance of the separate storm sewer system comply with the CWA, including, as appropriate, practices to improve the resilience of the storm sewer system to the impacts of climate change.

EPA explains each milestone in detail below and demonstrates why the schedule fairly represents the “as soon as possible” concept. EPA has divided the compliance schedule into two separate components: 1) a dry weather investigation, which focuses on identifying and eliminating illicit sources of bacteria within the storm drain system; and 2) a wet weather investigation that targets sources of bacteria in wet weather discharges and requires implementation of non-structural best management practices (BMPs) and/or structural stormwater control measures (SCMs) to meet the WQBELs at the outfalls.

### **2.1 Dry Weather Bacteria Source Investigation and Elimination of Illicit Discharges**

Bacteria levels observed at Outfalls 01A, 02A, 03A, and 04A are regularly above water quality standards during dry weather and discharges from all four outfalls have been found to have reasonable potential to cause or contribute to excursions of water quality standards. *See* 2021 Fact Sheet pp. 41-44 and 2023 Response to Comment pp. 9-14. The receiving waters for all four

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<sup>2</sup> Factors relevant to whether a compliance schedule in a specific permit is “appropriate” under 40 C.F.R. § 122.47(a) include: how much time the discharger has already had to meet the WQBEL(s) under prior permits; the extent to which the discharger has made good faith efforts to comply with the WQBELs and other requirements in its prior permit(s); whether there is any need for modifications to treatment facilities, operations or measures to meet the WQBELs and if so, how long would it take to implement the modifications to treatment, operations or other measures; or whether the discharger would be expected to use the same treatment facilities, operations or other measures to meet the WQBEL as it would have used to meet the WQBEL in its prior permit. *See* generally EPA Memorandum, “Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits,” May 10, 2007, available at [https://www3.epa.gov/npdes/pubs/memo\\_complianceschedules\\_may07.pdf](https://www3.epa.gov/npdes/pubs/memo_complianceschedules_may07.pdf).

outfalls are also impaired for pathogens and there is an EPA-approved Total Maximum Daily Load for pathogens for Boston Harbor.

As a first step to meeting the water quality-based bacteria limits at the outfalls, Massport must investigate the sources of bacteria in its storm drain infrastructure. In EPA's experience, illicit discharges are a potential source of bacteria in stormwater runoff, which can enter the storm drain system directly (e.g., wastewater piping either mistakenly or directly connected to the storm drain) or indirectly (e.g., infiltration from cracked sanitary sewer systems, spills, and dumping). An illicit discharge is any discharge that is not composed entirely of stormwater with limited exceptions that would not be a likely source of bacteria (e.g., uncontaminated groundwater, potable water, landscape irrigation).<sup>3</sup> Massport can identify such illicit discharges by investigating measurable levels of contaminants and bacteria in flows present in the system during dry weather. Massport must identify and eliminate unauthorized non-stormwater discharges from its separate storm sewer system to waters of the U.S. during dry weather in accordance with the schedule and milestones listed in Table 1 below.

Part I.C.1.g of the 2023 Final Permit requires Massport to continue implementing its comprehensive plan to identify and eliminate dry and wet weather illicit discharges to its separate stormwater sewer system and, by November 1, 2025 (i.e., within two years of the effective date of the permit), report the findings associated with the plan and describe measures taken and remediation activities conducted to address illicit connections. The dry weather investigation described in Part I.C.6.b of the Draft Permit Modification is a systematic and comprehensive investigation of potential illicit discharges in the storm drain system and implements management practices to ensure that sediment is not a source of pathogens within the storm drain system. The BMP required in Part I.B.9 of the 2007 Permit required Massport focus on investigation of sanitary sewer system illicit connections. The Permittee reported that, under the 2007 Permit, it completed an investigation of its buildings' sanitary system and identified and eliminated five illicit connections in addition to sewer repair and maintenance work. Unlike that BMP, this Dry Weather Investigation targets illicit discharges to the *stormwater* collection and conveyance system and requires screening and sampling of key drainage points within the storm sewer system.

In accordance with the Part I.C.1.g.1 of the 2023 Final Permit and as a result of discussions between the parties during the ADR process, in August 2024, Massport submitted a Draft Dry Weather Investigation Plan to EPA for review. This document illustrates Massport's plan to systematically investigate dry weather flows throughout its storm drain system in order to address illicit discharges and meet the bacteria limits at the outfalls. The Draft Permit Modification reflects applicable elements of Massport's Draft Plan. All identified dry weather

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<sup>3</sup> For the purposes of the Permit, an illicit discharge is any discharge to the separate storm sewer system that is not composed entirely of stormwater except for discharges listed in Parts I.A.1 through I.A.6 of the 2023 Final Permit or another NPDES permit applicable to the discharges at this Facility, including, but not limited to, discharges listed in Part I.B.2 of the 2023 Final Permit.

illicit discharges for which Massport is responsible shall be eliminated from Outfall 001, 002, 003, and 004 to waters of the U.S. no later than October 31, 2028.

<b>TABLE 1. DRY WEATHER INVESTIGATION COMPLIANCE SCHEDULE</b>	
Milestone	Compliance Date
Submit Dry Weather Investigation Plan to EPA for Review	Completed Aug 1 2024
Update North Drainage Area Map	Completed Aug 13 2024
Finalize Dry Weather Investigation Plan	Completed Sep 11 2024
Update Porter, Maverick, and West Drainage Area Map	Completed Oct 31 2024
Complete North Drainage Dry Weather Investigation & Sediment Removal	Sep 30 2025
Complete Porter & Maverick Drainage Dry Weather Investigation & Sediment Removal	Oct 31 2026
Complete North Drainage "Find It Fix It" Program	Oct 31 2027
Eliminate Illicit Discharges in North Drainage Area	Oct 31 2027
Complete Porter & Maverick Drainage "Find It Fix It" Program	Oct 31 2027
Eliminate Illicit Discharges in Porter & Maverick Drainage Area	Oct 31 2027
Complete West Drainage Dry Weather Investigation & Sediment Removal	Jun 30 2028
Complete West Drainage "Find It Fix It" Program	Oct 31 2028
Eliminate Illicit Discharges in West Drainage Area	Oct 31 2028

### 2.1.1 Catchment Area Maps

Massport submitted to EPA a Drainage Areas and Stormwater and Sanitary Sewer Infrastructure Map (dated July 2022) depicting drainage area, stormwater infrastructure, and sanitary sewer infrastructure for the North, West, Porter, and Maverick outfalls.<sup>4</sup> Part I.C.1.g.2 of the 2023 Final Permit requires Massport to update maps developed under the 2007 Permit depicting key infrastructure identifying potential cross-connections between the sanitary sewer and storm drain system, and potential illicit sanitary sewer discharges by November 1, 2024 (i.e., within one year of the effective date of the Permit). The requirements in Part I.C.1.g of the 2023 Final Permit were not included in Massport's Petition for Review and have not been stayed. Massport submitted an updated map of the North Outfall in August 2024 and updated maps for the Porter, Maverick, and West Outfalls on October 31, 2024. EPA has not proposed any

<sup>4</sup> Note that certain maps may be marked Sensitive Information to the extent they identify critical infrastructure; in this case these maps will be treated as confidential.



modification to system mapping requirement or the permit deadline in Part I.C.1.g of the Permit and EPA is not accepting comments on this system mapping requirement. However, the mapping update is nonetheless included as a milestone in this proposed compliance schedule, since it is a key component of the proposed Dry Weather Investigation Plan at Part I.C.6.b of the Draft Permit Modification.

As Massport undertakes actions to meet the bacteria limits in compliance with the proposed schedule, EPA recommends that Massport consider regularly updating system maps with an appropriate level of detail to inform and track implementation of activities. System infrastructure as depicted in previous maps have sometimes been unclear. For example, EPA notes that the July 2022 map identified areas where the storm drainage lines do not appear to connect to an outfall, areas where the flow is not clearly identified, and areas where drainage identified in one catchment appears to flow into the drainage line for another catchment area. Massport should consider updating the maps to clearly reflect catchment areas that drain to existing pervious area and/or areas where drainage from impervious cover is disconnected. Massport should also consider regular updates to stormwater and sanitary infrastructure maps that depicts appropriate elements for the purposes of informing and tracking activities undertaken in compliance with the proposed schedule including: outfalls, interconnections with other systems, permittee-owned treatment structures, catchment delineations, pipes, manholes, key junction manholes, flow direction, catch basins, existing pervious area, and tidal influence.

As the comprehensive investigation proceeds as described in Statement of Basis Section 2.1.2, EPA expects that Massport will update the Catchment Area Maps to reflect new information, corrections, and modifications made to eliminate illicit discharges. Part I.C.6.d.1 of the Draft Permit Modification proposes that the Permittee include updated catchment maps, as applicable, in the reporting of activities completed in accordance with the dry weather investigation and sediment removal interim milestones. Updated maps required under the proposed annual reports will facilitate planning and demonstrate progress in identifying illicit discharges to the separate storm water sewer system with the objective of complying with numeric bacteria limits. Updated maps should 1) identify drainage areas where sampling and catchment investigations are complete; 2) document locations of suspected or confirmed illicit discharges; 3) document locations where infrastructure improvements or replacements are required or have been completed; and 4) document locations where illicit discharges have been eliminated. The scale and detail of each catchment map must be appropriate to facilitate a clear understanding of the storm water collection and conveyance system and all completed catchment investigations, corrections, and other related capital projects since 2007.

In sum, this proposed permit modification would not require additional mapping efforts beyond what Part I.C.1.g of the 2023 Final Permit already requires. Rather, this modification would simply list the Part I.C.1.g requirement as a contextual milestone in the proposed compliance schedule.

### **2.1.2 Dry Weather Screening and Sampling Program**

Massport must implement a Dry Weather Screening and Sampling Program to comprehensively investigate sources of dry weather flows present in the separate storm sewer system drainage areas to Outfalls 001, 002, 003, and 004. The Screening Program is the first step to assess the storm drain system and identify locations of possible illicit sources of bacterial contamination contributing to exceedances of water quality standards at the four outfalls, including, but not limited to, illicit sanitary sewer connections and lavatory waste handling practices. The Draft Permit Modification proposes a methodical approach to complete dry weather investigations of key junction manholes within the storm drain systems in each of the four drainage areas by the end of the current permit term (June 2028). The investigations will begin in the North drainage area (Outfall 001), then proceed to the Porter (Outfall 003) and Maverick (Outfall 004) drainage areas, and finally to the West (Outfall 002) drainage area. The North drainage area is prioritized for several reasons, including: 1) it discharges to a shellfishing area; 2) its proximity to Constitution Beach; 3) it encompasses both landside and airside drainage; and 4) the stormwater infrastructure is generally contained within the area owned and operated by Massport. Massport will refine its dry weather screening methods in the North drainage area and may apply these methods in the other three outfall areas. Massport submitted to EPA a Draft Dry Weather Investigation Plan in August 2024 in accordance with the first milestone in Table 1, above.

Under this plan, Massport would implement a program to systematically and progressively observe, sample, and evaluate key junction manholes to determine the approximate location of suspected illicit discharges, if any. Dry weather surveys shall be conducted during periods with less than 0.1 inch of rain in at least the preceding 72 hours and no significant snowmelt. During the Dry Weather Screening and Sampling Program, key junction manholes will be opened and visually inspected for evidence of illicit discharges, which may include olfactory evidence, debris, foam, oil sheen, color/odor, excessive sediment, sanitary waste, optical enhancers, and presence of dry weather flows. Samples will be analyzed for key constituents commonly associated with the presence of illicit discharges, including *Enterococcus*, fecal coliform, surfactants, ammonia, total chlorine, and Pharmaceutical and Personal Care Products (PPCP). Sampling results will be used to prioritize targeted investigations within the storm drain catchment area and to identify and eliminate illicit discharges as described in Section 2.1.4 of this Statement. If no evidence of illicit discharge is observed through visual inspection and dry weather sampling, the catchment investigation will be considered complete upon completion of key junction manhole sampling.

### **2.1.3 Sediment Removal Plan**

During discussions between the parties in the ADR Process, Massport proposed a plan to remove sediment and debris build up within the storm drain system. EPA supports this effort

and notes that removing sediment build-up within the system is consistent with Part II.B.1 of the 2023 Final Permit for proper operation and maintenance of all systems.<sup>5</sup>

Locations targeted for cleaning will be identified based on dry weather screening data and observations of the storm drain system. Massport intends to evaluate the potential for sediment to contribute to bacteria in stormwater runoff, develop a protocol for removing sediment from the pipes using conventional means (e.g., hydraulic jetter and vacuum truck), and conduct follow-up sampling to assess reductions in bacteria following sediment removal. Massport expects to employ closed-circuit television (CCTV) following or concurrent with cleaning activities to ensure that sediment and debris was removed and to identify any structural or maintenance-related defects in the storm drain. Debris and sediment must be disposed of in accordance with local and state regulations.

#### **2.1.4 Removal of Illicit Discharges**

Where dry weather screening or visual evidence has identified presence of a potential illicit discharge, Massport must implement procedures to isolate and confirm the sources of illicit discharges, including isolating the drainage area for implementation of more detailed investigations and inspecting of manholes along alignment to refine location of potential sources. When the location of an illicit discharge has been approximated, Massport should isolate and identify/confirm the source using more detailed methods, which may include sandbagging key inlets, targeted internal plumbing inspections, dye testing, video inspections, or smoke testing. Inspections must proceed until the location of suspected illicit discharges can be isolated to a pipe segment. The investigation will be considered complete once the specific source of the illicit discharge is determined (for example, a specific building/facility or specific reach of sanitary sewer pipe or other infrastructure). Dry weather investigations and removal of any illicit discharges (i.e., “Find It Fix It”) in all four drainage areas shall be completed in accordance with the milestones and schedule above and no later than October 31, 2028.

Upon detection of an illicit discharge, Massport must eliminate the discharge within 60 days of the date of verification.<sup>6</sup> If elimination within 60 days is not possible, Massport must submit to EPA for approval an alternative schedule that eliminates the illicit discharge as expeditiously as possible. If removal of illicit discharge is responsibility of another property/system owner, Massport shall notify the owner in writing within 30 days of date of verification that it is responsible for eliminating the illicit discharge. Massport must perform confirmatory screening within 60 days following removal of an illicit discharge, provided that weather conditions allow for appropriate dry antecedent conditions. A minimum of one dry- and wet-weather monitoring event must be conducted upstream and downstream of the location of the corrective action to confirm the illicit discharge has been eliminated. For each illicit discharge, Massport must

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<sup>5</sup> Part II of the 2023 Final Permit (including requirements for proper operation and maintenance) is currently in effect and is not addressed by this Draft Permit Modification.

<sup>6</sup> For purposes of the permit, “Date of Verification” of an illicit discharge shall be the date on which the Permittee identified a point of entry from a specific location or address that contributes wastewater flow to the separate sewer system.

report the location, description, method of discovery, date of discovery, date of elimination or planned corrective measures and schedule, results of confirmatory screening, and estimate of the volume of flow removed.

## 2.2 Wet Weather Bacteria Investigation and Stormwater Controls

The Permittee shall achieve compliance with the numeric, water quality-based limits for *Enterococcus* in discharges of stormwater associated with industrial activity at Outfalls 01A, 02A, 03A, and 04A and fecal coliform in discharges of stormwater associated with industrial activity at Outfall 01A as soon as possible in accordance with the schedule below but no later than October 31, 2038 unless otherwise permitted by EPA.

Elimination of illicit discharges through a comprehensive and systematic investigation of dry weather discharges in addition to the sediment removal program are expected to result in a reduction in bacteria at the outfalls between the effective date of the Final Permit Modification and expiration of the current permit on October 31, 2028. However, EPA and Massport anticipate that additional investigation and mitigation of wet weather sources of bacteria will be necessary to meet the numeric permit limits for bacteria. Removal of illicit discharges requires time and effort to systematically sample, identify, and eliminate the sources. However, the source of bacteria associated with an illicit discharge will be permanently eliminated upon removal of the illicit discharge. Sources of bacteria from stormwater runoff during wet weather, however, can prove to be more complex to identify and address. The Facility has large expanses of impervious surfaces in each of the stormwater drainage areas. Stormwater runoff washes off bacteria from a range of sources over impervious cover and into storm drains. Addressing bacteria build-up and wash off from a variety of sources will require an array of potential solutions, which may include, without limitation, non-structural best management practices targeting source control (i.e., reducing build-up of bacteria) and construction and operation of targeted SCMs to eliminate or mitigate bacteria sources in runoff before it enters the storm drain system.

The Wet Weather Compliance Schedule in Table 2 establishes a framework for investigating wet weather sources, implementing BMPs to address sources, evaluating feasibility and effectiveness of SCMs and additional non-structural BMPs to treat stormwater runoff, implementing near-term projects to address areas with the highest potential bacteria loads, and developing and implementing comprehensive plan to install SCMs and/or implement non-structural BMPs to meet the permitted bacteria limits at the outfalls. EPA acknowledges that, at this time, details of control measures lack specificity. This is to be expected as the precise plan for structural and/or non-structural controls hinges first on eliminating illicit sources of bacteria and then on the results of the wet weather sampling to determine the location and extent of remaining wet weather sources. The compliance schedule in Part I.C.6 of the Draft Permit Modification effectively prioritizes eliminating illicit discharges and investigating wet weather sources during the first five years of the schedule and implementing controls for wet weather during the second five years and beyond. The 2023 Final Permit will expire on October 31, 2028, at which time the Permittee will have completed the work related to illicit discharges and

the wet weather investigation and analysis. The specific activities and milestones in Table 2 and in Part I.C.6.c of the Draft Permit Modification are sufficient to ensure adequate progress to achieve the permit limits no later than 2038. At the same time, EPA expects that the next reissuance of the permit will have more information to shape specific activities and milestones related to the Priority Mitigation Projects and implementation of control measures if necessary.

Milestone	Compliance Date
Submit Wet Weather Investigation Plan to EPA	Completed Nov 1 2024
Finalize Wet Weather Investigation Plan	Completed Dec 20 2024
Finalize Plan for Non-structural Controls in All Drainage Areas	Oct 31 2025
Implement the Non-structural Control Plan in All Drainage Areas	Oct 31 2026
Complete Green Infrastructure Suitability Analysis and Description of Structural and/or Non-structural Stormwater Control Measure Pilot Program <sup>1</sup>	Dec 31 2026
Complete Wet Weather Field Investigations in North, Maverick, and Porter Drainage Areas	Oct 31 2027
NPDES Reissuance Application Due	May 4 2028
Complete Wet Weather Field Investigations in West Drainage Area	Jun 30 2028
2023 NPDES Individual Permit Expiration Date	Oct 31 2028
Complete Piloting of Structural and/or Non-structural Stormwater Control Measures to Inform Priority Bacteria Mitigation Projects <sup>2</sup> and Stormwater Master Plan	Oct 31 2029
Complete Priority Bacteria Mitigation Project in One Drainage Area	Oct 31 2030
Complete Priority Bacteria Mitigation Projects in Second Drainage Area	Oct 31 2032
Complete Priority Bacteria Mitigation Project in Two Remaining Drainage Areas	Oct 31 2033
Submit Draft Stormwater Master Plan to EPA	Mar 31 2033
Finalize Stormwater Master Plan to Meet WQBELs at All Outfalls	Oct 31 2033
Meet WQBELs at All Drainage Outfalls	Oct 31 2038

### **2.2.1 Wet Weather Field Investigation**

Massport must develop a systematic procedure to investigate sources of bacteria in stormwater associated with industrial activity within the separate storm sewer system in each of four drainage areas (North, West, Porter Street, and Maverick Street). Massport must submit for EPA review a Wet Weather Investigation Plan for investigation of wet weather flows of stormwater associated with industrial activity from the separate storm sewer system drainage

areas via Outfalls 001, 002, 003, and 004. The Wet Weather Investigation Plan must include a description of planned wet weather sampling and the sampling protocol necessary to identify potential sources of bacteria in stormwater runoff and areas with relatively high levels of bacteria in wet weather samples as target “hotspots” for Priority Mitigation Projects (described in Section 2.2.4, below).

### **2.2.2 Non-structural Control Plan**

Preventing pollutants from entering a waterway can be less costly and more efficient than addressing pollution after it has reached a waterway or conveyance. Non-structural BMPs are designed to address pollutants at the source and preventing them from entering the storm drain system. Non-structural BMPs include, but are not limited to, activities that minimize exposure of stormwater to pollutants, such as proper storage, disposal, and handling procedures, spill prevention, and training as well as maintenance activities such as sweeping of impervious surfaces, leaf and litter collection, wildlife management, and catch basin cleaning.<sup>7</sup>

Massport must submit a plan that describes the implementation of non-structural BMPs to reduce bacteria in industrial stormwater runoff from impervious surfaces at the Facility. The non-structural control plan should define and may expand upon control measures that the Permittee is already responsible for implementing under Part I.C.1 of the Final Permit. The plan must specifically target controls to address sources of bacteria in stormwater runoff in each of the drainage areas to Outfalls 01A, 02A, 03A, and 04A and may include existing and new non-structural controls. The plan should describe the planned measures in sufficient detail to determine how the BMPs will minimize sources of bacteria in the drainage areas, the locations where measures will be implemented, the frequency and schedule of all planned maintenance activities, and the sampling protocol to determine the bacteria reductions achieved through non-structural controls. The sampling protocol must include sampling locations at the outfalls and within the drainage system and must be appropriate to determine the effectiveness of non-structural controls in reducing bacteria levels. Implementation of the non-structural control plan shall be ongoing and the plan shall be evaluated and updated to incorporate revisions recommended by the Permittee based on experience implementing the plan.

### **2.2.3 Green Infrastructure Suitability Analysis & Structural and/or Non-Structural Control Pilot**

This proposed permit modification would require Massport to complete a Green Infrastructure Suitability Analysis. The Green Infrastructure Suitability Analysis must clearly describe all data inputs required (potentially including but not limited to soil and groundwater information, ground cover, pipe depth limitations, land use, airport operations and accessibility, and

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<sup>7</sup> Part I.C.6.b of the Draft Permit Modification also includes a milestone for “sediment removal” in each of the drainage areas (as discussed in Section 2.1.3 of this Statement of Basis). The non-structural control plan may also include sediment removal and storm drain line cleaning to the extent that this is a routine and on-going activity to ensure proper operation and maintenance of the separate storm sewer system, and to the extent it produces water quality benefits.

applicable Federal Aviation Administration requirements), structural and/or non-structural control measures considered, the criteria used to evaluate suitability for each structural or non-structural control measure, and a justification for conclusions regarding suitability of each structural or non-structural control measure. The Analysis must include a list of potential and feasible structural and/or non-structural control pilot opportunities for each drainage area.

The Green Infrastructure Suitability Analysis, in combination with results from the wet weather field investigation, will form the basis for a structural and/or non-structural pilot program. Massport will develop and implement a Pilot Program to install and evaluate structural and/or non-structural control measures recommended for implementation in the Suitability Analysis. The structural and/or non-structural control pilot program will describe the framework, including an approximate schedule, for implementation and monitoring of pilot projects in targeted catchment areas with the understanding that the pilot program is an iterative process and certain aspects may be revised to adapt to the results of earlier findings. Non-structural controls investigated during the Pilot Program would generally be more operationally complex and/or innovative than those implemented under the Non-Structural Control Plan above and warrant additional time to evaluate. The results of the structural and/or nonstructural control pilot studies must be reported to EPA, including the location and type of structural and/or non-structural control, a description of the study and sampling methodology, and discussion of the effectiveness of each piloted structural and/or non-structural control measure to control bacteria in stormwater runoff. The results will inform development of Priority Bacteria Mitigation Projects and the Stormwater Master Plan to achieve water quality-based bacteria limits at the Outfalls by October 31, 2038.

#### **2.2.4 Priority Bacteria Mitigation Projects**

EPA maintains that numeric bacteria limits at Outfalls 01A, 02A, 03A, and 04A are warranted because there is reasonable potential for the discharges to cause or contribute to exceedances of water quality standards in waterbodies that are impaired for pathogens. Full compliance with the water quality-based numeric bacteria limits will require considerable effort and time to determine where and when bacteria loads contribute to exceedances, followed by the development and implementation of a plan to reduce such loads. EPA acknowledges the challenges in controlling bacteria in the four drainage areas, all of which have a high degree of impervious cover and several possible bacteria sources (some of which may originate beyond the property boundary of the Facility), along with the added complexity of planning and implementing sampling and installation of controls in an active airport. At the same time, the Permittee should capitalize on opportunities to make measurable progress to reduce bacteria in stormwater runoff in the near-term while it develops a longer-term comprehensive plan.

The Draft Permit Modification proposes that Massport complete a minimum of one “Priority Bacteria Mitigation Project” within each of the four drainage areas in accordance with the schedule in Table 2. These Mitigation Projects must target areas within each drainage having higher bacteria concentrations relative to other locations during system sampling (i.e., “hotspots”). The objective is to prioritize impervious areas with the greatest potential to cause

or contribute to exceedances of bacteria limits within each drainage area. The Projects may include targeted non-structural BMPs to eliminate or minimize sources of bacteria, installation of a structural SCM to treat bacteria (e.g., infiltration or filtration), or a combination of the two. If feasible, the Permittee shall include a description of planned Priority Project(s) with the Annual Report submitted the year preceding the project(s). If opportunities to complete Priority Projects are identified earlier than anticipated, Massport will notify EPA of its intent to perform certain work as a Priority Project as soon as possible. For each Priority Project, the Permittee must implement follow-up monitoring of the targeted area following implementation of control measures to determine the reduction in bacteria achieved. The results of the Priority Projects should inform development of a plan and implementation schedule for the entire facility in the Stormwater Master Plan described below.

### **2.2.5 Stormwater Master Plan**

Massport must prepare and submit for review a Stormwater Master Plan that presents the approach to meet the bacteria limits at Outfalls 01A, 02A, 03A, and 04A by October 2038 based on the results of investigations, the Green Infrastructure Suitability Analysis, the pilot studies of structural controls, and the Priority Bacteria Mitigation Projects. The Stormwater Master Plan must include a description of the control measures designed to reduce bacteria in runoff from impervious surfaces, the expected performance of each control, an implementation schedule for installing each control, and a description of post-construction monitoring for each drainage area. Massport shall design, permit, and install or implement control measures based on the recommendations and schedule in the Stormwater Master Plan.

### **2.3 Compliance with Final Permit Water Quality-based Effluent Limitations**

Massport shall achieve compliance with the 2023 Final Permit's water quality-based effluent limits for *Enterococcus* in discharges of stormwater associated with industrial activity at Outfalls 01A, 02A, 03A, and 04A (Parts I.A.1 and I.A.2) and fecal coliform in discharges of stormwater associated with industrial activity at Outfall 01A (Part I.A.1) as soon as possible but no later than October 31, 2038.

In EPA's view, the proposed compliance schedule is a reasonable plan with sufficient milestones, based on information that the parties currently have, to achieve compliance with the Final Permit limits as soon as possible. At the same time, EPA recognizes that the compliance dates beyond the term of the 2023 Final Permit may be influenced by information gathered during the dry and wet weather investigations and analyses in the near-term. When Massport submits its permit renewal application in 2028, EPA and Massport can evaluate the Permittee's progress to date and discuss the next permit's compliance schedule terms, including whether any changes to the schedule are warranted. At that time, the parties will have the benefit of being able to analyze how the work has proceeded to date, review data collected in the first permit term, and consider then-current water quality conditions. The parties would also expect to have updated information about available stormwater management strategies and/or new technologies. EPA will then be able to assess such



information and explain if additional time may be necessary for Massport to meet the bacteria WQBELs as soon as possible or whether, based on new information and results of earlier investigations, EPA anticipates that the Permittee may be able to achieve compliance sooner than 2038. Any request to change the compliance schedule in the future must be fully explained and justified based on new information.

### 2.3.1 Reporting

The Draft Permit Modification proposes a 15-year schedule to achieve full compliance with the numeric bacteria limits in Part I.A.1 and I.A.2 of the 2023 Final Permit. The schedule sets forth a series of activities and milestones designed to achieve incremental, but measurable, progress in reducing concentrations of bacteria in the discharges. This incremental progress requires regular reporting to EPA to ensure that the Permittee complies with the requirements of the schedule and to ensure that the actions described in the schedule are sufficient to reduce bacteria in the storm drain system with the objective of achieving full compliance by 2038. In accordance with 40 CFR § 122.47(a)(4), the Draft Permit Modification requires that the Permittee report on compliance or non-compliance with each interim milestone within 14 days of the interim date unless the compliance milestone is the submission of a report, plan, or application, in which case the submission satisfies the requirement to report compliance. The reporting requirement is applicable to interim dates beginning after the effective date of the Permit Modification through October 2030. After October 2030, the time necessary for completion of interim requirements is more than 1 year and is not readily divisible into stages for completion. Beginning in October 2031 and until the bacteria limits in Parts I.A.1 and I.A.2 are met, the Permittee must submit annual progress reports before November 14 of each year. See 40 CFR § 122.47(a)(3)(ii).

Milestone Reports must demonstrate compliance (or explain non-compliance) with the interim requirements and shall include a description of activities planned to achieve compliance with the next milestone. Reporting of activities completed in accordance with the dry weather investigations and sediment removal interim milestones in Part I.C.6.b, as described in Section 2.1, above, shall include, where appropriate:

- (a) Updated Catchment Area Investigation Maps for each drainage area reflecting newly developed and/or discovered information, corrections, and modifications in conjunction with the catchment investigations and removal of illicit discharges. Maps shall depict the following elements for the separate storm system in each drainage area:
  - Segments of drainage area investigated during the reporting period;
  - Alignments, dates, and thematic representation of work completed during the reporting period (key manhole junctions sampled, flow isolation, dye testing, CCTV, etc.);
  - Segments of drainage infrastructure where sediment removal was conducted;
  - Locations of illicit discharges identified (with dates and flow estimates);
  - Locations of all corrective actions initiated or completed (with start and end dates); and

- Location and dates of planned infrastructure remediation or capital projects.
- (b) A Dry Weather Investigation Update summarizing progress in screening for dry weather flows, cleaning and removing sediment from drainage infrastructure, and identifying and eliminating illicit discharges in each drainage area, including:
- The percentage of each drainage area investigated during reporting period;
  - The cumulative percentage of dry weather investigations completed;
  - The number and percentage of key manhole junctions investigated in each drainage area;
  - The linear feet of storm drain infrastructure investigated and by what means;
  - The linear feet of sanitary sewer infrastructure investigated and by what means;
  - All dry and wet weather screening and sampling results;
  - A listing of all illicit discharges identified in each drainage area during the previous reporting period. For each illicit discharge Massport will provide:
    - Estimated volume
    - Date of verification
    - Corrective action taken
    - Date removed
    - Results of confirmatory sampling

Annual Progress Reports (beginning after October 2031) must summarize activities performed during the reporting period and activities planned in next reporting period to achieve compliance with the requirements of the Wet Weather Compliance Schedule.

### **3.0 Federal Permitting Requirements**

#### **3.1 Endangered Species Act**

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

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

The Federal action being considered in this case is EPA’s proposed NPDES permit modification to the 2023 Final Permit for Logan Airport. The Draft Permit Modification does not modify any

of the current permit limits or conditions but establishes a compliance schedule, with interim milestones and requirements, to achieve compliance with the permit limits for *Enterococcus* in Parts I.A.1 and I.A.2 and fecal coliform in Part I.A.1. As the federal agency charged with authorizing stormwater discharges from this Facility, EPA determines potential impacts to federally listed species, and initiates consultation, when required under Section 7(a)(2) of the ESA.

EPA reviewed the federal endangered or threatened species of fish, wildlife, and plants in the expected action area for the issuance of the Final Permit. See 2021 Fact Sheet pp. 68-69. EPA does not consider the near shore urban areas of Boston Harbor adjacent to the Massport Logan International Airport Facility to be suitable habitat for federally-listed marine mammals or sea turtles. Based on the normal distribution of these species, it is unlikely that any of the coastal NOAA Fisheries listed species identified in coastal Massachusetts waters would be expected to be present in the vicinity of the action area. In addition, shortnose sturgeon (*Acipenser brevirostrum*) and Atlantic sturgeon (*Acipenser oxyrinchus*) are not expected to be associated with the tidal rivers that flow into Boston Harbor or the near shore urban areas associated with the Massport Logan Airport Facility. Based on the normal distribution of these anadromous species, it is unlikely that the protected sturgeon species identified above would be expected to be present in the vicinity of the action area.

For protected species under the jurisdiction of the USFWS, one terrestrial listed threatened species, the northern long-eared bat (*Myotis septentrionalis*) was identified as potentially occurring in the action area of the Facility discharge. According to the USFWS, the threatened northern long-eared bat is found in the following habitats based on seasons, “winter – mines and caves; summer – wide variety of forested habitats.” This species is not considered aquatic. However, because the Facility’s projected action area in the Boston Inner Harbor and Boston, Massachusetts area overlaps with the general statewide range of the northern long-eared bat, EPA prepared an Effects Determination Letter for the Massport Logan Facility’s NPDES Permit Reissuance and submitted it to USFWS. Based on the information submitted by EPA, the USFWS notified EPA by letter, dated March 18th, 2021, that the permit reissuance is consistent with activities analyzed in the USFWS January 5, 2016, Programmatic Biological Opinion (PBO). The PBO outlines activities that are excepted from “take” prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.). The USFWS consistency letter concluded EPA’s consultation responsibilities for the Massport Logan NPDES permitting action under ESA Section 7(a)(2) with respect to the northern long-eared bat. No further ESA Section 7 consultation is required with USFWS.

EPA previously determined no ESA consultation was required for the federal action in the 2023 Final Permit. The proposed modification to establish a compliance schedule to achieve compliance with the numeric, water quality-based limits for *Enterococcus* and fecal coliform as soon as possible does not change the previous determination regarding the impacts to federally-listed species or critical habitat. As such, EPA maintains that no ESA consultation is required as a result of this permitting action. EPA notified USFWS and NOAA Fisheries Protected Resources Division that the Draft Permit Modification and Statement of Basis were available for

review and provided a link to the EPA NPDES Permit website to allow direct access to the documents.

Consultation may be initiated if requested by EPA or by the Services where discretionary Federal involvement or control over the action has been retained or is authorized by law and if: 1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered in the analysis; 2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this analysis; 3) a new species is listed or critical habitat designated that may be affected by the identified action; or 4) there is any incidental taking of a listed species.

### 3.2 Essential Fish Habitat

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

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

EFH is only designated for fish species for which federal Fisheries Management Plans exist. *See* 16 U.S.C. § 1855(b)(1)(A). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999.

The Federal action being considered in this case is limited to EPA's proposed NPDES permit modification to the 2023 Final Permit for Logan Airport. The Draft Permit Modification does not modify any of the current permit limits or conditions but establishes a compliance schedule, with interim milestones and requirements, to achieve compliance with the permit limits for *Enterococcus* in Parts I.A.1 and I.A.2 and fecal coliform in Part I.A.1. EPA previously determined that the conditions and limitations in the NPDES Permit, which have not been modified as a result of this federal action, adequately protect all aquatic life, including those with designated EFH in the receiving water and that further mitigation is not warranted. EPA provided an assessment to NOAA Fisheries Habitat Division. *See* 2015 Fact Sheet pp. 173-174, Attachment D. The proposed modification to establish a compliance schedule leading to full compliance with the bacteria limits in the Final Permit will not measurably alter the impact on aquatic life, including those with designated EFH in the receiving water. As such, EPA maintains that the Draft Permit Modification does not alter the determination under the Final Permit that this action requires no further mitigation. EPA notified NOAA Fisheries Habitat and Ecosystem

Services Division that the Draft Permit Modification and Statement of Basis were available for review and provided a link to the EPA NPDES Permit website to allow direct access to the documents. Should adverse impacts to EFH be detected as a result of this permit action, or if new information is received that changes the basis for EPA's conclusions, NOAA Fisheries Habitat Division will be contacted and an EFH consultation will be re-initiated.

### 3.3 Coastal Zone Management Act

The Coastal Zone Management Act (CZMA), 16 U.S.C. 1451 et seq., and its implementing regulations (15 CFR Part 930) require a determination that any federally licensed or permitted activity affecting the coastal zone with an approved Coastal Zone Management Program (CZMP) is consistent with the enforceable policies of the CZMP. EPA is prohibited from issuing a NPDES permit for any activity affecting any land or water use or natural resource of the coastal zone until the applicant certifies that the proposed activity complies with the State Coastal Zone Management program, and the State or its designated agency concurs with the certification or the Secretary of Commerce overrides the State's nonconcurrence.

In Massachusetts, the Massachusetts Division of Coastal Zone Management (MassCZM) is responsible for issuing federal consistency decisions. The Permittee submitted the required federal consistency certification and necessary data and information to the MassCZM for the issuance of the 2023 Final Permit. The Draft Permit Modification does not modify any of the current permit limits or conditions but establishes a compliance schedule, with interim milestones and requirements, to achieve compliance with the permit limits for *Enterococcus* in Parts I.A.1 and I.A.2 and fecal coliform in Part I.A.1. As such, EPA expects the MassCZM will find the discharge consistent with the CZMA and its enforceable policies.

### 3.4 State Certification

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

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

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

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

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

#### **4.0 Administrative Record, Public Comment Period, Hearing Requests, and Procedures for Final Decision**

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

Danielle Gaito  
Water Division  
5 Post Office Square - Suite 100 - Mailcode 06-4  
Boston, MA 02109-3912  
Email: [gaito.danielle@epa.gov](mailto:gaito.danielle@epa.gov)  
Telephone: (617) 918-1297

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

Following the close of the comment period, and after any public hearings, if such hearings are held, EPA will issue a Final Permit decision, forward a copy of the final decision to the applicant,

and provide a copy or notice of availability of the final decision to each person who submitted written comments or requested notice. Within 30 days after EPA serves notice of the issuance of the Final Permit decision, an appeal of the federal NPDES permit may be commenced by filing a petition for review of the permit with the Clerk of EPA's Environmental Appeals Board in accordance with the procedures at 40 CFR § 124.19.

The administrative record on which this Draft Permit Modification is based may be accessed by contacting Danielle Gaito at (617) 918-1297 or via email: [gaito.danielle@epa.gov](mailto:gaito.danielle@epa.gov).

Date

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

**Attachment A: Proposed Draft Permit Modification****PART I****C. SPECIAL CONDITIONS****6. Compliance Schedule for Bacteria**

- a. The fecal coliform and *Enterococcus* limits in Parts I.A.1 and I.A.2 of this Permit shall be met no later than October 31, 2038, according to the schedule provided in this Part.
- b. The Permittee shall implement a systematic investigation of dry weather flows in the storm drain system within the drainage areas for Outfalls 001, 002, 003, and 004. The investigation must, at a minimum, include the activities described below. The investigation of the storm drain system and elimination of any illicit discharges in all four drainage areas shall be completed no later than October 31, 2028, in accordance with the schedule in Table 1.
  - (1) The Permittee must finalize a plan to systematically inspect key manhole junctions for illicit discharges in the drainage areas to Outfalls 001, 002, 003, and 004.
  - (2) The Permittee must complete dry weather sampling investigations, which shall include sampling key manhole junctions for evidence of illicit discharges and cleaning and removal of sediment build-up in the storm drain system that has been determined to contribute to bacteria concentrations in drainage areas. Where active dry weather flow is observed at a key junction, the Permittee must collect a minimum of three dry weather samples and analyze the sample for *Enterococcus*, fecal coliform, surfactants, ammonia, total chlorine, and Pharmaceutical and Personal Care Products (PPCP). The analysis for PPCP must use a method that achieves reporting limits at least as sensitive as EPA Method 1694 (high-performance liquid chromatography-mass spectrometry method).
  - (3) The Permittee must eliminate illicit discharges within 60 days of the date of verification. Date of verification shall be the date on which the Permittee identifies the point of entry of an illicit discharge from a specific location or address. If elimination within 60 days is not feasible, the Permittee must submit to EPA for approval an alternative schedule that eliminates the illicit discharge as expeditiously as possible. If removal of an illicit discharge is the responsibility of a third party, the Permittee shall notify the owner in writing within 30 days of the date of verification of its responsibility to eliminate the illicit discharge within 60 days of the third party becoming aware of the illicit discharge. The Permittee will not be held responsible should the third party fail to eliminate the illicit discharge within the required time.
  - (4) The Permittee shall perform confirmatory screening within 60 days following the elimination of an illicit discharge.



<b>TABLE 1. DRY WEATHER COMPLIANCE SCHEDULE</b>	
<b>Milestone</b>	<b>Compliance Date</b>
Submit Dry Weather Investigation Plan to EPA	Completed Aug 1 2024
Update North Drainage Area Map	Completed Aug 13 2024
Finalize Dry Weather Investigation Plan	Completed Sep 11 2024
Update Porter, Maverick, and West Drainage Area Map	Completed Oct 31 2024
Complete North Drainage Dry Weather Investigation & Sediment Removal	Sep 30 2025
Complete Porter & Maverick Drainage Dry Weather Investigation & Sediment Removal	Oct 31 2026
Complete North Drainage "Find It Fix It" Program	Oct 31 2027
Eliminate Illicit Discharges in North Drainage Area	Oct 31 2027
Complete Porter & Maverick Drainage "Find It Fix It" Program	Oct 31 2027
Eliminate Illicit Discharges in Porter & Maverick Drainage Area	Oct 31 2027
Complete West Drainage Dry Weather Investigation & Sediment Removal	Jun 30 2028
Complete West Drainage "Find It Fix It" Program	Oct 31 2028
Eliminate Illicit Discharges in West Drainage Area	Oct 31 2028

- c. The Permittee shall implement a plan to address bacteria in wet weather flows in the storm drain system within the drainage areas for Outfalls 001, 002, 003, and 004. The plan to address bacteria in wet weather flows must, at a minimum, include the activities described below and in accordance with the schedule in Table 2.
- (1) The Permittee shall complete and implement a plan for wet weather investigations to identify sources of bacteria in the drainage areas for Outfalls 001, 002, 003, and 004 and prioritize areas of high bacteria loads.
  - (2) The Permittee shall complete and implement a plan to identify, execute, and evaluate non-structural controls in the drainage areas for Outfalls 001, 002, 003, and 004 to target reductions in sources of bacteria.
  - (3) The Permittee shall complete a Green Infrastructure Suitability Analysis to evaluate the feasibility of stormwater structural controls and identify structural controls recommended for further consideration.
  - (4) The Permittee shall implement a Pilot Program to evaluate the effectiveness of non-structural and/or structural BMPs to address bacteria.
  - (5) The Permittee, shall, either independently or in connection to the BMP Pilot Program, execute a Priority Bacteria Mitigation Project in each drainage area to

include installation of BMPs to address areas of high bacteria loads (identified in I.C.6.c.1, above).

- (6) The Permittee shall develop and submit a Stormwater Master Plan to EPA that includes a plan to meet the applicable bacteria limits in Part I.A.1 and I.A.2 at Outfalls 001, 002, 003 and 004 no later than October 31, 2038.

<b>TABLE 2. WET WEATHER COMPLIANCE SCHEDULE</b>	
<b>Milestone</b>	<b>Compliance Date</b>
Submit Wet Weather Investigation Plan to EPA	Completed Nov 1 2024
Finalize Wet Weather Investigation Plan	Completed Dec 20 2024
Finalize Plan for Non-structural Controls in All Drainage Areas	Oct 31 2025
Implement the Non-structural Control Plan in All Drainage Areas	Oct 31 2026
Complete Green Infrastructure Suitability Analysis and Description of Structural and/or Non-structural Stormwater Control Measure Pilot Program <sup>1</sup>	Dec 31 2026
Complete Wet Weather Field Investigations in North, Maverick, and Porter Drainage Areas	Oct 31 2027
NPDES Reissuance Application Due	May 4 2028
Complete Wet Weather Field Investigations in West Drainage Area	Jun 30 2028
2023 NPDES Individual Permit Expiration Date	Oct 31 2028
Complete Piloting of Structural and/or Non-structural Stormwater Control Measures to Inform Priority Bacteria Mitigation Projects <sup>2</sup> and Stormwater Master Plan	Oct 31 2029
Complete Priority Bacteria Mitigation Project in One Drainage Area	Oct 31 2030
Complete Priority Bacteria Mitigation Projects in Second Drainage Area	Oct 31 2032
Complete Priority Bacteria Mitigation Project in Two Remaining Drainage Areas	Oct 31 2033
Submit Draft Stormwater Master Plan to EPA	Mar 31 2033
Finalize Stormwater Master Plan to Meet WQBELs at All Outfalls	Oct 31 2033
Meet WQBELs at All Drainage Outfalls	Oct 31 2038

<sup>1</sup> Massport will pilot structural and/or non-structural best management practices (BMPs) through October 31, 2029. BMP pilot projects will be selected utilizing information gathered from sampling and the Green Infrastructure Suitability Analysis.

<sup>2</sup> The Priority Bacteria Mitigation Project may be a structural or non-structural BMP, or combination of the two. Mitigation Projects shall be located in targeted sub-catchment areas exhibiting relatively high bacteria concentrations and considering airport operations, spatial constraints, or future land use priorities. Bacteria reductions for the Projects shall be measured at a storm drain structure immediately downstream of the project area.

- d. Beginning in November 2024 and continuing through November 2030, the Permittee must submit a progress report no later than 14 days following each compliance date.<sup>8</sup> Beginning in October 2031 and continuing until full compliance with the bacteria limits in Parts I.A.1 and I.A.2 is met, the Permittee shall submit an Annual Progress Report no later than November 14 of each year. All progress reports must summarize activities completed over the prior reporting period and preview activities that will be continued or implemented in the next reporting period to address bacteria. All progress reports shall be submitted in accordance with reporting requirements in Part I.D.3.b of this Permit. Copies of all progress reports shall also be sent to MassDEP at [massdep.nerowastewater@mass.gov](mailto:massdep.nerowastewater@mass.gov). Reporting of activities completed in accordance with the dry weather investigations and sediment removal interim milestones in Part I.C.6.b above shall include, where appropriate.
- (1) Updated Catchment Area Maps for each drainage area reflecting new information, corrections, and modifications discovered during the investigations. Maps shall depict:
- i. Segments of drainage area investigated during the reporting period;
  - ii. Alignments, dates, and thematic representation of work completed during the reporting period (key manhole junctions sampled, flow isolation, dye testing, CCTV, etc.);
  - iii. Segments of drainage infrastructure where sediment removal was conducted;
  - iv. Locations of illicit discharges identified (with dates and flow estimates);
  - v. Locations of all corrective actions initiated or completed (with start and end dates); and
  - vi. Location and dates of planned infrastructure remediation or capital projects.
- (2) A Dry Weather Investigation Update summarizing progress in screening for dry weather flows, sediment removal, and identifying and eliminating illicit discharges, including:
- i. The percentage of each drainage area investigated during reporting period;
  - ii. The cumulative percentage of dry weather investigations completed;
  - iii. The number and percentage of key manhole junctions investigated in each drainage area;
  - iv. The linear feet of storm drain infrastructure investigated and by what means;
  - v. The linear feet of sanitary sewer infrastructure investigated (if applicable) and by what means;
  - vi. Screening and sampling results;
  - vii. A listing of all illicit discharges identified in each drainage area during the previous reporting period. For each illicit discharge Massport will provide:
    - Estimated volume
    - Date of verification
    - Corrective Action taken

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<sup>8</sup> Where the milestone required in Tables 1 and 2 is the submission of a plan or an application, submission of the plan or application satisfies the requirement to submit a progress report no later than 14 days following the compliance date.

- Date removed
  - Results of confirmatory sampling
- (3) Reporting of activities completed in accordance with the wet weather investigations in Part I.C.6.c above shall include, where appropriate:
- i. Results of wet weather sampling;
  - ii. Results of all sampling associated with evaluating effectiveness of non-structural and structural controls;
  - iii. Results of the Green Infrastructure Suitability Analysis;
  - iv. Results of Structural Control Pilot Projects;
  - v. Results of ongoing or completed activities associated with Priority Bacteria Mitigation Projects;
  - vi. Results of ongoing or completed activities in the Stormwater Master Plan.
- e. The schedule for meeting the fecal coliform and Enterococcus limits in Parts I.A.1 and I.A.2 of this Permit is based on information presently available to the Permittee and EPA. At such time(s) as Permittee submits NPDES permit renewal applications in the future, notwithstanding any provision contained to the contrary herein, the Permittee may request EPA extend the schedule. EPA will review and consider the Permittee's compliance with the compliance schedule, analysis of the impacts of completed activities, data collected, then-current water quality conditions, and any new data discovered by the Permittee in the course of its compliance activities. EPA will also consider updated information regarding available stormwater management strategies and technologies, and any other relevant information. If EPA determines that additional time is necessary for Permittee to meet the bacteria WQBELs as soon as possible, EPA will adjust the schedule as appropriate. Any request to change in the compliance schedule in the future must be fully explained and justified based on new information.

Attachment B: Map of Facility and Outfalls

