MASSACHUSETTS PERMIT TO DISCHARGE POLLUTANTS TO SURFACE WATERS

In compliance with the provisions of the Massachusetts Clean Waters Act, as amended (M.G.L. Chap. 21, §§ 26 - 53) and the implementing regulations at 314 CMR 3.00 and 4.00,

Massachusetts Water Resources Authority (MWRA) Deer Island 33 Tafts Avenue Boston, MA 02128

is authorized to discharge from the facility located at

MWRA Deer Island Treatment Plant (DITP) 190 Tafts Avenue Winthrop, MA 02152 and Four (4) Combined Sewer Overflow (CSO) Treatment Facilities with Five (5) outfalls and Six (6) additional Combined Sewer Overflow Outfalls

to receiving waters named:

Receiving Water	Segment	Outfalls
Massachusetts Bay	"Other waters", see 314 CMR 4.06(5)	Outfall Number T01
Boston Inner Harbor	MA70-02	CSO Treatment Facilities Outfall Numbers MWR203 and MWR215
Charles River	MA72-38	CSO Treatment Facility Outfall Number MWR201; CSO Outfall Numbers MWR010, MWR018, MWR019, MWR020, and MWR023
Upper Mystic River	MA71-02	CSO Treatment Facility Outfall Numbers MWRA205 and MWR205A
Little River	MA71-22	CSO Outfall Number MWR003

in accordance with the following effluent limitations, monitoring requirements and additional conditions:

- 1. This permit shall become effective on [DATE].¹
- 2. This permit shall expire five years after the effective date.

¹ If no comments objecting to the issuance or terms of the permit were received by the Department during the public comment period, then this permit shall be effective upon issuance. If comments objecting to the issuance or the terms of the permit are received by the Department during the public comment period, then this permit shall become effective 30 days after issuance.

- 3. This permit supersedes the permit issued on May 20, 1999, and subsequently modified on July 10, 2000.
- 4. This permit incorporates by reference: Part IA., Effluent Limitations and Monitoring Requirements for Outfall T01; Part IB., Combined Sewer Overflows (CSOs); Part IC., Unauthorized Discharges; Part ID., Notice of Elimination; Part IE., Operation and Maintenance; Part IF., Alternate Power Source, Part IG., Industrial Users and Pretreatment Program, Part IH., Sludge Conditions; Part II., Special Conditions; Part IJ., Reporting Requirements; Part IK., State 401 Certification Conditions; and Part II, Standard Conditions, as set forth in the 2023 Draft NPDES Permit No. MA0103284, issued by the United States Environmental Protection Agency (EPA), Region 1, issued to the Massachusetts Water Resources Authority on May 31, 2023 (the 2023 Draft NPDES Permit) and attached hereto by reference as Appendix A and available on EPA's website at https://www.epa.gov/npdes-permits;; provided, however:

a. that the notification required by Part IA.8 shall also be provided to MassDEP;

- b. that the reporting required by Part IC.3 shall be in accordance with 314 CMR 3.19(20)(e) (24 hour reporting);
- c. that a copy of the requests, reports, and information required by Part IJ.5 to be submitted to EPA shall also be submitted to MassDEP electronically to <u>massdep.npdes@mass.gov</u>;
- d. that, if there is a conflict between the definitions in 314 CMR 3.02 and/or 314 CMR 4.00 and the definitions in Part IIE, the definitions in 314 CMR 3.02 and/or 314 CMR 4.00 shall control, as applicable;
- e. that the notification required by 4.a. above shall be provided to <u>massdep.npdes@mass.gov</u>, or as otherwise specified.
- 5. This permit incorporates by reference the Standard Permit Conditions set forth in 314 CMR 3.19.
- 6. The permittee shall commence annual monitoring of all Significant Industrial Users^{2,3} discharging into the POTW using Draft Method 1633 within six (6) months of the effective date.
- 7. Notwithstanding any other provision of the 2023 Draft Federal NPDES permit to the contrary, all PFAS monitoring results (influent; effluent; sludge; SIUs; and specific industries as specified in the 2023 Draft Federal NPDES permit) shall be reported to MassDEP via the eDEP portal, or as otherwise specified, within 30 days after the permittee receives the sampling results, in addition to the 2023 Draft Federal NPDES Permit reporting requirements. Information regarding the submittal of data via eDEP may be found at https://www.mass.gov/how-to/submit-wastewaterresiduals-pfas-data-via-edep.
- 8. On or before January 31, 2024, the permittee shall submit to MassDEP at <u>massdep.npdes@mass.gov</u> a listing of all industrial dischargers and their addresses to be sampled in accordance with both the 2023 Draft Federal NPDES Permit and this permit and shall include:
 - a. All industries included in the categories listed Part IG, Industrial Users and Pretreatment Program, Paragraph 3 of the 2023 Draft Federal NPDES Permit; and
 - b. All Significant Industrial Users as required by Paragraph 6 of this permit.

² Significant Industrial User (SIU) is defined at 40 CFR part 403: All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subpart N; **and** any other industrial user that: discharges an average of 25,000 GPD or more of process wastewater to the POTW, contributes a process wastestream that makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW, or designated as such by the POTW on the basis that the industrial users has a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standards or requirement.

³ This requirement applies to all Significant Industrial Users and not just those within the sectors identified by EPA in the NPDES permit.

The listing shall be maintained by the permittee and updated with any changes. Whenever necessary, a copy of the updated listing reflecting changes shall be forwarded to MassDEP at <u>massdep.npdes@mass.gov</u> on or before the next January 31.

The cities and towns listed in Appendices B and C are co-permittee(s) for Part IC., Unauthorized Discharges, Part IE., Operation and Maintenance of the Treatment and Control Facilities, and Part 1F., Alternative Power Source, as set forth in the 2023 draft Federal NPDES Permit. In addition, these sections include conditions regarding the operation and maintenance of the collection systems owned and operated by the municipalities.

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the terms and conditions of Part IC., Part IE., and Part IF. of the 2023 draft Federal NPDES permit. The Permittee and co-permittees are severally liable under Part IC., Part IE., and Part IF. for their own activities and required reporting with respect to the portions of the collection system that they own or operate. They are not liable for violations of Part IC., Part IE., and Part IF. committed by others relative to the portions of the collection system owned and operated by others. Nor are they responsible for any reporting that is required of other Permittees under Part IB., Part IC., and Part ID. The responsible municipal departments are found in Appendices B and C.

Those cities listed in Appendix C are also CSO-responsible co-permittees for Part 1B., Combined Sewer Overflows (CSOs), and Part 1D, Notice of Elimination. These communities are authorized to discharge stormwater/wastewater from the CSO outfalls listed in Attachment A of the 2023 draft Federal NPDES Permit. Operation and maintenance of the CSO structures shall be in compliance with the General Requirements of Part II and the terms and conditions of Part IB. of the 2023 draft Federal NPDES permit. The Permittee and co-permittees are severally liable under Part IB., Part IE., and Part IF. for their own activities and required reporting with respect to the CSOs that they own or operate. They are not liable for violations of Part IB., Part IE., and Part IF. committed by others relative to CSOs owned and operated by others. Nor are they responsible for any reporting that is required of other Permittees under Part IB. The responsible municipal departments are found in Appendix C.

In addition, the permittee and all co-permittees are responsible for all public notifications, public health warnings and all other applicable requirements of 314 CMR 16.00 as they relate to their own collection systems including any approved CSO Notification Plans and/or SSO Notification Plans.

Signed this _____ day of _____, 20___

Lealdon Langley, Director Division of Watershed Management Department of Environmental Protection

APPENDIX B CO-PERMITTEES

Town of Arlington 51 Grove Street Arlington, MA 02476

Town of Belmont 19 Moore Street Belmont, MA 02478

Town of Burlington 29 Center Street Burlington, MA 01803

City of Everett 19 Norman Street Everett, MA 02149

Town of Holbrook 50 N. Franklin Street Holbrook, MA 02343

City of Medford Department of Public Works 85 George P. Hassett Drive Medford, MA 02155

Town of Natick 75 West Street Natick, MA 01760

Town of Norwood 566 Washington Street Norwood, MA 02062

Town of Reading 16 Lowell Street Reading, MA 01867

Town of Stoughton Department of Public Works 950 Central Street Stoughton, MA 02072 Town of Ashland 20 Ponderosa Road Ashland, MA 01721

Town of Braintree P.O. Box 850903 Braintree, MA 02185-0903

Town of Canton 801 Washington Street Canton, MA 02021

City of Framingham 100 Western Avenue Framingham, MA 01701

Town of Lexington Water & Sewer Department 201 Bedford Street Lexington, MA 02420

City of Melrose Department of Public Works 72 Tremont Street Melrose, MA 02176

Town of Needham 470 Dedham Avenue Needham, MA 02492

City of Quincy Sewer & Water Department 55 Sea Street Quincy, MA 02169

City of Revere Department of Public Works 321 Rear Charger Street Revere, MA 02151

Town of Wakefield 1 Lafayette Street Wakefield, MA 01880 Town of Bedford 314 Great Road Bedford, MA 01730

Town of Brookline 333 Washington Street Brookline, MA 02445

Town of Dedham 55 River Street Dedham, MA 02026

Town of Hingham 210 Central Street Hingham, MA 02043

City of Malden 200 Pleasant Street Malden, MA 02148

Town of Milton 629 Randolph Avenue Milton, MA 02186

City of Newton 1000 Commonwealth Avenue Newton, MA 02459

Town of Randolph Department of Public Works 41 South Main Street Randolph, MA 02368

Town of Stoneham Public Works Department 16 Pine Street Stoneham, MA 02180

Town of Walpole Department of Public Works 135 School Street Walpole, MA 02081

APPENDIX B (cont'd) CO-PERMITTEES

City of Waltham Water, Sewer, Drain 165 Lexington Street Waltham, MA 02452

Town of Westwood Department of Public Works 50 Carby Street Westwood, MA 02090

Town of Winchester Department of Public Works 15 Lake Street Winchester, MA 01890 Town of Watertown 124 Orchard Street Watertown, MA 02472

Town of Weymouth Department of Public Works 120 Winter Street Weymouth, MA 02188

Town of Winthrop Department of Public Works 100 Kennedy Drive Winthrop, MA 02152 Town of Wellesley 455 Worcester Street Wellesley, MA 02481

Town of Wilmington Water & Sewer Division 121 Glen Road Wilmington, MA 01887

City of Woburn Public Works Sewer Division 50 North Warren Street Woburn, MA 01801

APPENDIX C CSO-RESPONSIBLE CO-PERMITTEES

City of Boston Boston Water and Sewer Commission 980 Harrison Avenue Boston, MA 02119

City of Chelsea Department of Public Works 380 Beacham Street Chelsea, MA 02150 City of Cambridge Department of Public Works 147 Hampshire Street Cambridge, MA 02139

City of Somerville Department of Public Works 1 Franey Road Somerville, MA 02144

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION

FACT SHEET SUPPLEMENT

MASSACHUSETTS PERMIT TO DISCHARGE POLLUTANTS TO SURFACE WATERS

MA PERMIT NUMBER: MA0103284

NAME AND MAILING ADDRESS OF APPLICANT:

Massachusetts Water Resources Authority (MWRA) Deer Island 33 Tafts Avenue Boston, MA 02128

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

MWRA Deer Island Treatment Plant (DITP) 190 Tafts Avenue Winthrop, MA 02152 and Four (4) Combined Sewer Overflow (CSO) Treatment Facilities with Five (5) outfalls and Six (6) additional Combined Sewer Overflow Outfalls

Receiving Water	Segment	Outfalls
Massachusetts Bay	"Other waters", see 314 CMR 4.06(5)	Outfall Number T01
Boston Inner Harbor	MA70-02	CSO Treatment Facilities Outfall Numbers MWR203 and MWR215
Charles River	MA72-38	CSO Treatment Facility Outfall Number MWR201; CSO Outfall Numbers MWR010, MWR018, MWR019, MWR020, and MWR023
Upper Mystic River	MA71-02	CSO Treatment Facility Outfall Numbers MWRA205 and MWR205A
Little River	MA71-22	CSO Outfall Number MWR003

RECEIVING WATER AND CLASSIFICATION:

PER – AND POLYFLUROALKYL SUBSTANCES

MassDEP is implementing a number of actions to address the potential health effects of exposure to per- and polyfluoroalkyl substances (PFAS).¹ According to the United States Environmental Protection Agency (EPA),² PFAS are a group of man-made chemicals that includes perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), GenX, and many other chemicals. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body – meaning they do not break down and they can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects.

PFAS can be found in:

- **Food** packaged in PFAS-containing materials, processed with equipment that used PFAS, or grown in PFAS-contaminated soil or water.
- **Commercial household products**, including stain- and water-repellent fabrics, nonstick products, polishes, waxes, paints, cleaning products, and fire-fighting foams (a major source of groundwater contamination at airports and military bases where firefighting training occurs).
- **Workplace**, including production facilities or industries (e.g., chrome plating, electronics manufacturing or oil recovery) that use PFAS.
- **Drinking water**, typically localized and associated with a specific facility (e.g., manufacturer, landfill, wastewater treatment plant, firefighter training facility).
- Living organisms, including fish, animals and humans, where PFAS have the ability to build up and persist over time.

Certain PFAS chemicals are no longer manufactured in the United States as a result of phaseouts including the PFOA Stewardship Program, in which eight major chemical manufacturers agreed to eliminate the use of PFOA and PFOA-related chemicals in their products and as emissions from their facilities. Although PFOA and PFOS are no longer manufactured in the United States, they are still produced internationally and can be imported into the United States in consumer goods such as carpet, leather and apparel, textiles, paper and packaging, coatings, rubber and plastics.

Given that PFAS are persistent in the environment and may lead to adverse human health and environmental effects, MassDEP has identified a comprehensive approach for addressing PFAS in wastewater discharges. Additionally, based on review of recent data for residuals produced from wastewater treatment and other processes, MassDEP has concerns regarding the levels of PFAS in residuals land applied in Massachusetts. All residuals products sold, distributed, and applied in Massachusetts are subject to an Approval of Suitability (AOS), which classifies residuals for different uses based on the chemical quality and treatment to reduce pathogens.

¹ To learn more about Per- and polyfluoroalkyl substances (PFAS) in the environment and what Massachusetts is doing to address them, go to: <u>https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas</u>.

² For basic information on PFAS provided by EPA, go to: <u>https://www.epa.gov/pfas/basic-information-pfas</u>

Therefore, MassDEP began including a requirement for PFAS testing in all new or renewed AOSs in January 2019, and as of July 2020, MassDEP began requiring all AOS holders to test their products for PFAS on a quarterly basis.

MassDEP is also concerned about the potential impacts PFAS discharges from wastewater treatment plants may have on downstream drinking water, recreational, and aquatic life uses. The Massachusetts Surface Water Quality Standards do not include numeric criteria for PFAS. However, the narrative criterion for toxic pollutants at 314 CMR 4.05(5)(e) states:

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

In addition, this narrative criterion is further elaborated on at 314 CMR 4.05(5)(e)2(e) which states:

Unlisted Pollutants; Combinations of Pollutants. Any pollutant or combination of pollutants within the meaning of 314 CMR 4.05(5)(e) for which 314 CMR 4.05(5)(e)1. does not establish a generally applicable criterion shall not be discharged to surface waters in a quantity or manner that would: i. exceed safe exposure levels for aquatic life as determined by toxicity testing using methods approved by MassDEP pursuant to 314 CMR 4.03(6); or ii. cause adverse human health effects due to the ingestion, inhalation or dermal absorption of such toxins attributable to such waters during their reasonable use as designated in 314 CMR 4.00; or iii. result in a human health excess lifetime cancer risk level greater than 10 for -6 individual carcinogens.

To assess whether PFAS discharges from the MWRA DITP are occurring and whether they may be contributing to a violation of the narrative toxics criteria, MassDEP is including conditions in the Massachusetts Surface Water Discharge Permit for the permittee to monitor its Significant Industrial Users' discharges for PFAS.

DRAFT

Section 401 Water Quality Certification For the Proposed 2023 NPDES Permit For the Massachusetts Water Resources Authority Deer Island Treatment Plant Permit No. MA0103284

The Massachusetts Department of Environmental Protection (MassDEP), having examined Massachusetts Water Resources Authority (MWRA)'s National Pollutant Discharge Elimination System (NPDES) permit application for the Deer Island Treatment Plant, reviewed the United States Environmental Protection Agency (EPA) – Region 1's draft 2023 NPDES permit for the Deer Island Treatment Plant (Permit No. MA0103284), issued May 31, 2023 ("2023 NPDES permit"), and having considered the public comments received on MassDEP's draft Section 401 Water Quality Certification for the draft NPDES Permit for the Deer Island Treatment Plant, and in consideration of the relevant water quality considerations, hereby certifies:

- that subject to the following conditions, together with the terms and conditions contained in the 2023 NPDES permit for the Deer Island Treatment Plant, the proposed discharge will comply with the applicable provisions of the Federal Clean Water Act Sections 208(e), 301, 302, 303, 306, and 307 and with appropriate requirements of State law, including, without limitation, the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53, and the Massachusetts Surface Water Quality Standards published at 314 CMR 4.00:
 - a. Pursuant to M.G.L. c. 21, §§ 26-53, and 314 CMR 3.00 and 4.00, including 314 CMR 3.11 (2)(a)6., and in order to ensure the maintenance of surface waters free from pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife, in accordance with 314 CMR 4.05(5)(e), MassDEP has determined that it is necessary that beginning six (6) months after the effective date of the 2023 NPDES permit, the permittee shall commence annual monitoring of all Significant Industrial Users^{1,2} discharging into the POTW using Draft Method 1633. Notwithstanding any other provision of the 2023 NPDES permit to the contrary, PFAS monitoring results for the 2023 NPDES permit and for the 2023 Massachusetts Surface Water Discharge ("SWD") Permit shall be reported to MassDEP's electronic database (eDEP) in accordance with the information available at the following website: the https://www.mass.gov/how-to/submit-wastewaterresiduals-pfas-data-via-edep., or as otherwise specified, within 30 days after the permittee receives the sampling results.
 - b. On or before January 31, 2024, the permittee shall submit to MassDEP at <u>massdep.npdes@mass.gov</u> a listing of all industrial dischargers with their addresses to

¹ Significant Industrial User (SIU) is defined at 40 CFR part 403: All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subpart N; **and** any other industrial user that: discharges an average of 25,000 GPD or more of process wastewater to the POTW, contributes a process wastestream that makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW, or designated as such by the POTW on the basis that the industrial users has a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standards or requirement.

² This requirement applies to all Significant Industrial Users and not just those within the sectors identified by EPA in the NPDES permit.

be sampled in accordance with both the 2023 NPDES permit and the 2023 SWD and shall include:

i. All industries included in the categories listed in the 2023 NPDES permit Section IG, Industrial Users and Pretreatment Program, Paragraph 4; and

ii. All Significant Industrial Users as required by Paragraph 6 of the 2023 SWD. The listing shall be maintained by the permittee and updated with any changes. Whenever necessary, a copy of the updated listing reflecting changes shall be forwarded to MassDEP at <u>massdep.npdes@mass.gov</u> on or before the next January 31.

2. that there is a reasonable assurance that the activity will be conducted in a manner which will not violate applicable state water quality standards.

To meet the requirements of Massachusetts laws, each of the conditions cited in the draft 2023 NPDES permit and this certification shall not be made less stringent unless new data or other information is presented and MassDEP determines modification of this certification is appropriate in consideration of the relevant water quality considerations.

If any condition in the draft 2023 NPDES permit for the Deer Island Treatment Plant is changed during EPA's review in any manner inconsistent with this certification, the Department reserves the right to modify this certification to ensure that the discharge(s) will comply with all applicable federal and state laws and regulations. In addition, the Department reserves the right to modify this certification if there is a change in the Massachusetts laws or regulations upon which this certification is based, or if a court of competent jurisdiction or the MassDEP Office of Appeals and Dispute Resolution stays, vacates or remands this certification, as provided by 40 C.F.R. § 124.55.

Signed this _____ day of _____, 20____

Lealdon Langley, Director Massachusetts Department of Environmental Protection Bureau of Water Resources Division of Watershed Management