

PUBLIC NOTICE

Notice is hereby given that the Massachusetts Department of Environmental Protection (MassDEP), under authority granted by the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 – 53, is proposing to: (1) issue a federal Clean Water Act (CWA) section 401 certification for the U.S. Environmental Protection Agency's (EPA) proposed 2022 Draft NPDES Permit (Federal Permit) (MA Permit No. MA0024368) to the Massachusetts Maritime Academy for its wastewater treatment plant's pollutant discharges to the Cape Code Canal (MA95-14); and (2) issue the 2022 Draft Massachusetts Permit to Discharge Pollutants to Surface Waters (State Permit) for the same discharge pursuant to the Massachusetts Clean Waters Act. The Massachusetts Maritime Academy Wastewater Treatment Plant is located at 101 Academy Drive in Buzzards Bay. The proposed section 401 certification, proposed State Permit, and proposed Federal Permit are all available at <https://www.mass.gov/service-details/massdep-public-hearings-comment-opportunities>. Alternatively, a copy of the documents can be obtained by contacting Claire Golden, MassDEP Surface Water Discharge Program, at 617-997-8874 or at claire.golden@mass.gov. Written comments on both the proposed section 401 certification and the proposed State Permit will be accepted until 5:00 p.m. on Tuesday, February 8, 2022. MassDEP strongly encourages written comments to be submitted by email to massdep.npdes@mass.gov; subject line: Massachusetts Maritime Academy WWTP. If not possible, please send by mail to Claire Golden, MassDEP, Surface Water Permitting Program, 205 B Lowell Street, Wilmington, MA 01887.

Following the close of the comment period, MassDEP will issue a final CWA section 401 certification and final State Permit and forward copies to the applicant and each person who has submitted written comments or requested notice.

For special accommodations, please call the MassDEP Diversity Office at 617-292-5751. TTY# MassRelay Service 1-800-439-2370. This information is available in alternate format upon request.

By Order of the Department

Martin Suuberg, Commissioner

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 Maritime Academy
101 Academy Drive
Buzzards Bay, MA 02532

is authorized to discharge from the facility located at

Massachusetts Maritime Academy
101 Academy Drive
Buzzards Bay, MA 02532

to receiving water named

Cape Cod Canal
Buzzard Bay Watershed

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.
3. This permit supersedes the permit issued on February 25, 2011.
4. This permit incorporates by reference Part IA., Effluent Limitations and Monitoring Requirements, Part IB., Unauthorized Discharges, Part IC., Operation and Maintenance of the Sewer System, Part ID. Alternate Power Source, Part IE. Sludge Conditions, Part IF. Special Conditions, Part IG. Reporting Requirements, and Part II, Standard Conditions, as set forth in the 2022 draft NPDES Permit No. MA0024368, issued by the United States Environmental Protection Agency (EPA), Region 1, issued to the Massachusetts Maritime Academy on January 10, 2022 (the 2022 Draft NPDES Permit) and attached hereto by reference as Appendix A and available on EPA's website at <https://www.epa.gov/npdes-permits/massachusetts-draft-individual-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 IB.1 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 IH.4. to be submitted to EPA shall also be submitted to MassDEP electronically to massdep.npdes@mass.gov;
 - 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;

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.

e. that the notification required by 4.a. above shall be provided as follows:

Susannah King, NPDES Section Chief
 Division of Watershed Management
 Department of Environmental Protection
 1 Winter Street – 5th Floor
 Boston, MA 02108

5. This permit incorporates by reference the Standard Permit Conditions set forth in 314 CMR 3.19.
6. Beginning six (6) months after the permittee has been notified by EPA of a multi-lab validated method for wastewater, or two (2) years after the effective date of the 2022 Federal NPDES permit, whichever is earlier, the permittee shall conduct monitoring of the influent, effluent, and sludge for PFAS compounds as detailed in the tables below. If EPA's multi-lab validated method is not available by twenty (20) months after the effective date of the 2022 Federal NPDES permit, the permittee shall contact MassDEP (massdep.npdes@mass.gov) for guidance on an appropriate analytical method. Notwithstanding any other provision of the 2022 Federal NPDES permit to the contrary, monitoring results shall be reported to MassDEP electronically, at massdep.npdes@mass.gov, or as otherwise specified, within 30 days after they are received.

Influent and Effluent (Outfall 001)

Parameter	Units	Measurement Frequency	Sample Type
Perfluorohexanesulfonic acid (PFHxS)	ng/L	Quarterly ²	24-hour Composite
Perfluoroheptanoic acid (PFHpA)	ng/L	Quarterly	24-hour Composite
Perfluorononanoic acid (PFNA)	ng/L	Quarterly	24-hour Composite
Perfluorooctanesulfonic acid (PFOS)	ng/L	Quarterly	24-hour Composite
Perfluorooctanoic acid (PFOA)	ng/L	Quarterly	24-hour Composite
Perfluorodecanoic acid (PFDA)	ng/L	Quarterly	24-hour Composite

Sludge

Parameter	Units	Measurement Frequency	Sample Type
Perfluorohexanesulfonic acid (PFHxS)	ng/g	Quarterly	Composite ³
Perfluoroheptanoic acid (PFHpA)	ng/g	Quarterly	Composite
Perfluorononanoic acid (PFNA)	ng/g	Quarterly	Composite
Perfluorooctanesulfonic acid (PFOS)	ng/g	Quarterly	Composite
Perfluorooctanoic acid (PFOA)	ng/g	Quarterly	Composite
Perfluorodecanoic acid (PFDA)	ng/g	Quarterly	Composite

² Quarters are defined as January to March, April to June, July to September, and October to December. Samples shall be taken during the same month each quarter and shall be taken 3 months apart (e.g., an example sampling schedule could be February, May, August, and November).

³ Sludge sampling shall be as representative as possible based on guidance found at <https://www.epa.gov/sites/production/files/2018-11/documents/potw-sludge-sampling-guidance-document.pdf>.

Signed this ____ day of _____, 20__

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

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION

FACT SHEET SUPPLEMENT

MASSACHUSETTS PERMIT TO DISCHARGE POLLUTANTS TO SURFACE WATERS

MA PERMIT NUMBER: MA024368

NAME AND MAILING ADDRESS OF APPLICANT:

Massachusetts Maritime Academy
101 Academy Drive
Buzzards Bay, MA 02532

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Massachusetts Maritime Academy
101 Academy Drive
Buzzards Bay, MA 02532

RECEIVING WATER AND CLASSIFICATION:

Cape Cod Canal, Buzzards Bay Watershed, Class SB – restricted shellfishing

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).

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

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

- **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 phase-outs 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.

Scientific information and regulatory actions on PFAS are rapidly evolving. Currently, there are no enforceable federal standards for these substances in public drinking water. However, in May 2016, EPA issued a lifetime drinking water Health Advisory (HA) of 70 nanograms per liter (70 ng/L, which equals 70 parts per trillion or ppt) for any combination of PFOA and PFOS. In June 2018, MassDEP extended this advisory to include three additional related PFAS chemicals - perfluorononanoic acid (PFNA), perfluorohexanesulfonic acid (PFHxS) and perfluoroheptanoic acid (PFHpA). This Massachusetts value, called a MassDEP Office of Research and Standards Guideline (ORSG), is a maximum recommended level for drinking water. It is set to be protective against adverse health effects for all people consuming the water for a lifetime and also applies to shorter-term exposures of weeks to months during pregnancy and breast-feeding.

In December 2019, MassDEP promulgated final regulations at 310 CMR 40.0000 establishing groundwater and soil limits at waste cleanup sites for 6 PFAS compounds - PFOS, PFOA, PFHxS, PFNA, PFHpA, and perfluorodecanoic acid (PFDA). In January 2020, MassDEP updated the ORGS, which is now 20 ng/L for the sum of the concentrations of the same six PFAS compounds included in the waste site clean up regulations. The updated ORSG replaces the June 2018 guideline for PFAS in drinking water. See the updated ORSG and technical support document here: <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas#health-advisories-and-downloadable-fact-sheets->

Based on the current ORSG, MassDEP recommends that:

- 1) consumers in sensitive subgroups (pregnant women, nursing mothers, and infants) not consume water when the level of the six PFAS substances, individually or in combination, is above 20 ppt; and,
- 2) public water suppliers take steps expeditiously to lower levels of the six PFAS, individually or in combination, to below 20 ppt for all consumers.

In October 2020, MassDEP promulgated revisions to the Massachusetts drinking water regulations that established a regulatory drinking water standard or Massachusetts Maximum Contaminant Level (MMCL) for PFAS. These revisions established a MMCL of 20 ng/L (or parts per trillion) for the sum of the concentrations of the same six PFAS included in the waste site

clean up regulations and the ORSG. The proposed standard is supported by recent scientific developments in understanding the health effects of PFAS and is aligned with PFAS cleanup standards promulgated by the Waste Site Cleanup Program. For information on the MMCL see: <https://www.mass.gov/regulations/310-CMR-22-the-massachusetts-drinking-water-regulations>.

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. 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 which states:

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

DRAFT

Clean Water Act Section 401 Certification
For the Proposed 2022 Federal NPDES Permit
For the Massachusetts Maritime Academy
MA Permit No. MA0024368

The Massachusetts Department of Environmental Protection (MassDEP), having examined the Massachusetts Maritime Academy's National Pollutant Discharge Elimination System (NPDES) permit application for the Massachusetts Maritime Academy, reviewed the United States Environmental Protection Agency (EPA) – Region 1's draft 2022 Federal NPDES permit (MA Permit No. MA024368) for the Massachusetts Maritime Academy issued January 10, 2022, and considered the public comments received on MassDEP's proposed Clean Water Act Section 401 Certification for the draft 2022 Federal NPDES Permit for the Massachusetts Maritime Academy, and in consideration of the relevant water quality considerations, hereby certifies:

1. that the following conditions, together with the terms and conditions contained in the proposed 2022 Federal NPDES permit for the Massachusetts Maritime Academy, are necessary to assure compliance 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 Water Quality Standards published at 314 CMR 4.00:
 - a. Pursuant to 314 CMR 3.11 (2)(a)6., and in accordance with MassDEP's obligation under 314 CMR 4.05(5)(e) to maintain surface waters free from pollutants in concentrations or combinations that are toxic to humans, aquatic life, or wildlife, beginning six (6) months after the permittee has been notified by EPA of a multi-lab validated method for wastewater, or two (2) years after the effective date of the 2022 Federal NPDES permit, whichever is earlier, the permittee shall conduct monitoring of the influent, effluent, and sludge for PFAS compounds as detailed in the tables below. If EPA's multi-lab validated method is not available by twenty (20) months after the effective date of the 2022 Federal NPDES permit, the permittee shall contact MassDEP (massdep.npdes@mass.gov) for guidance on an appropriate analytical method. Notwithstanding any other provision of the 2022 Federal NPDES Permit to the contrary, monitoring results shall be reported to MassDEP electronically, at massdep.npdes@mass.gov, or as otherwise specified, within 30 days after they are received.

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Perfluorooctanoic acid (PFOA)	ng/g	Quarterly	Composite
Perfluorodecanoic acid (PFDA)	ng/g	Quarterly	Composite

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 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 2022 Federal NPDES permit for the Massachusetts Maritime Academy is changed during EPA's review in any manner inconsistent with this certification, the Department reserves the right to modify this certification in consideration of the relevant water quality considerations. In addition, the Department reserves the right to modify this certification if there is a change in Massachusetts law or regulation upon which this certification is based, or if a court of competent jurisdiction or 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 _____, 2022

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

² Sludge sampling shall be as representative as possible based on guidance found at <https://www.epa.gov/sites/production/files/2018-11/documents/potw-sludge-sampling-guidance-document.pdf>.