

FINAL

Clean Water Act Section 401 Water Quality Certification  
For the 2025 Proposed NPDES Permit  
For the South Essex Wastewater Treatment Facility  
Permit No. MA0100501

The Massachusetts Department of Environmental Protection (MassDEP), having examined the South Essex Sewerage District's ("Permittee") National Pollutant Discharge Elimination System (NPDES) permit application for the South Essex Wastewater Treatment Facility to discharge to Salem Sound (Segment MA95-56), and having reviewed the United States Environmental Protection Agency (EPA) – Region 1's 2025 draft NPDES permit for the South Essex Wastewater Treatment Facility (Permit No. MA0100501), issued January 23, 2025 ("2025 draft NPDES Permit"), and considered the public comments received on MassDEP's proposed Clean Water Act Section 401 Certification for the 2025 draft NPDES Permit, presented for public notice pursuant to Clean Water Act Section 401(a)(1) from January 23, 2025 to April 10, 2025, hereby certifies that there is a reasonable assurance that the proposed discharge will not violate applicable Massachusetts water quality requirements, if made in accordance with the provisions of the 2025 draft NPDES Permit and the conditions set forth below, and provided that the 2025 draft NPDES Permit is not modified in a manner inconsistent with this certification:

The following conditions are necessary to ensure that 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 the first full calendar quarter following 6 months after the effective date of the final version of the 2025 draft NPDES Permit ("final NPDES Permit"), the Permittee shall collect, or require to be collected, annual samples of discharges from of all Significant Industrial Users<sup>1,2</sup> discharging into the South Essex Wastewater Treatment Facility Publicly Owned Treatment Works ("POTW") using Method 1633.
- b. Notwithstanding any other provision of the final NPDES Permit to the contrary, all PFAS monitoring results (influent; effluent; sludge; SIUs; and specific industries as specified in the final NPDES permit) and Adsorbable Organic Fluorine monitoring results shall be reported to MassDEP via the eDEP portal, or as otherwise specified in writing by MassDEP to the

---

<sup>1</sup> 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.

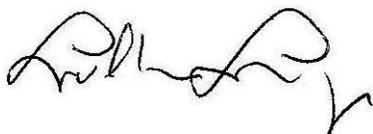
<sup>2</sup> This requirement applies to all Significant Industrial Users and not just those within the sectors identified by EPA in the NPDES permit.

Permittee, within 30 days after the Permittee receives the sampling results, in addition to the final 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>.

- c. Pursuant to M.G.L. c. 21, §§ 26-53, and 314 CMR 3.00 and 4.00, including 314 CMR 3.11(3), 314 CMR 3.19(1), and 314 CMR 4.05, MassDEP has determined that it is necessary to include the following conditions:
- i. The discharge shall be free from pollutants in concentrations or combinations that settle to form objectionable deposits; float as debris, scum or other matter to form nuisances; produce objectionable odor, color, taste or turbidity; or produce undesirable or nuisance species of aquatic life.
  - ii. The discharge shall be free from pollutants in concentrations or combinations that adversely affect the physical or chemical nature of the bottom, interfere with the propagation of fish or shellfish, or adversely affect populations of non-mobile or sessile benthic organisms.
  - iii. The discharge shall be free from floating, suspended and settleable solids in concentrations and combinations that would impair any use assigned to the receiving water, that would cause aesthetically objectionable conditions, or that would impair the benthic biota or degrade the chemical composition of the bottom.
  - iv. The discharge shall be free from color and turbidity in concentrations or combinations that are aesthetically objectionable or would impair any use assigned to the receiving water.
  - v. The discharge shall be free from oil, grease and petrochemicals that produce a visible film on the surface of the receiving water, impart an oily taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or become toxic to aquatic life.
  - vi. The discharge shall be free from taste and odor in such concentrations or combinations that are aesthetically objectionable, that would impair any use assigned to the receiving water, or that would cause tainting or undesirable flavors in the edible portions of aquatic life.
  - vii. The discharge shall be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife.

To meet the requirements of Massachusetts laws, each of the conditions in the 2025 draft 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.

Signed this 9<sup>th</sup> day of May 2025,



---

Lealdon Langley, Director

Massachusetts Department of Environmental Protection  
Bureau of Water Resources  
Division of Watershed Management