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CLF Massachusetts

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February 16, 2023 Via Registered Mail—Return Receipt Requested

Mr. Daniel Santos Director Department of Public Works Town of Barnstable 382 Falmouth Road Hyannis, Massachusetts 02601

Mr. Mark S. Ells Town Manager Town of Barnstable 367 Main Street Hyannis, Massachusetts 02601

RE: Notice of Intent to File Suit for Violations of the Clean Water Act at the Barnstable Water Pollution Control Facility, Bearses Way, Hyannis

Dear Mr. Santos and Mr. Ells:

I write on behalf of the Conservation Law Foundation and its members ("CLF"). The Town of Barnstable ("the Town") owns and/or operates the Barnstable Water Pollution Control Facility, located at 617 Bearses Way, Hyannis ("the Facility"). Based on available information, CLF understands that the Town has violated, is violating, and will continue to violate the Clean Water Act ("CWA"), 33 U.S.C. § 1251 et seq., by discharging and adding pollutants from the Facility, a point source, into the surfaces waters of the Lewis Bay System, waters of the United States. This letter puts the Town on notice of CLF's intent to file suit to halt and remedy harms caused by these past and ongoing violations of federal law.

The Facility

The Town owns and/or operates the Facility, located on Bearses Way in Hyannis. The Facility is the primary wastewater treatment facility serving approximately 2,900 properties. It uses a sequence of treatment processes partially to denitrify raw sewage and then discharge the partially treated effluent through sand beds to the ground. The Facility treats an average daily flow of 1.46 million gallons per day. The Town operates the Facility under a Groundwater Discharge Permit issued by the Massachusetts Department of Environmental Protection (Permit

Number 21-1). Under this Permit, the Town is required regularly to monitor and report the concentration of nitrogen in the effluent that it releases from its sand beds to ground water.

The Facility is located within the drainage of the Lewis Bay watershed system. The Lewis Bay watershed system is a complex estuary located within the Towns of Barnstable and Yarmouth on Cape Cod Massachusetts. Its southern shore is bordered by Nantucket Sound. It is comprised of the primarily lagoonal Lewis Bay and the Hyannis Inner Harbor, Mill Creek and Uncle Roberts Cove sub-embayments, as well as the Snow's Creek, Stewarts Creek, and Halls Creek estuaries, Chase Brook, Mill Pond Creek, and Inner Harbor Creek, among other waterbodies. The Lewis Bay watershed system includes multiple freshwater ponds, including Duck Pond, Dunns Pond, Fawcetts Pond, Aunt Betty's Pond, Simmons Pond, Schoolhouse Pond, and several unnamed ponds. The waterbodies in the Lewis Bay watershed system are interconnected and exchange water and its components—including pollutants.

Effluent leaves the Facility's sand beds, pouring through the sandy soil below to reach groundwater. Groundwater then transports the effluent into the waters of the Lewis Bay watershed system. The vast majority of the nitrogen within the Facility's effluent reaches these surface waters. It does so without chemical changes. Massachusetts Estuaries Project Report of Lewis Bay Embayment System ("MEP Report") at 10. The Massachusetts Department of Environmental Protection estimated that this load was 12,947 kilograms per year. MEP Report at 34. Much of this pollution reaches the waters of the Stewarts Creek estuary, a salt marsh that empties into Hyannis Harbor. Stewarts Creek has among the highest nitrogen concentrations in the Lewis Bay system and receives the largest nitrogen load of any waterbody within the watershed.

Nitrogen pollution from the Facility threatens the Lewis Bay watershed system's ecological integrity and its continued use by individuals, including CLF members. In coastal waters, nitrogen is a limiting nutrient for algal populations. This means that algal populations increase in direct proportion to increases in available supplies of nitrogen. In a process known as "eutrophication," when levels of nitrogen increase, algae and aquatic plant concentrations can reach densities that overwhelm the natural ecosystem.

In waters experiencing eutrophication, plants and algae can generate "blooms," meaning they experience explosive population growth. Eutrophic blooms can have severe crowding-out effects on the native aquatic ecosystem, and estuary systems are particularly sensitive to such effects. Blooms result in large quantities of rotting organic matter in the waterbody. The resulting processes of decay exhaust available supplies of dissolved oxygen in the water and render the water so turbid that sunlight cannot reach the seafloor. Fish and shellfish can die from the deprivation of dissolved oxygen. High nitrogen levels also cause red tides, phenomena that occur when toxin-producing algae grow in out-of-control amounts. Algal blooms and red tides are harmful to both animal and human water-users, frequently causing fish kills and beach closures. Eutrophic waterbodies, with algal blooms and red tides, are aesthetically unappealing. Water clarity is reduced in such waterbodies. Algae appear on the surface of the water as a green, green-blue, brown or red film. Algal growth and decay also lead to unpleasant odors.

In the surface waters of the Lewis Bay watershed system, nitrogen pollution from the Facility has contributed to such eutrophication, with algal blooms followed by extreme decreases in dissolved oxygen concentrations. These changes threaten aquatic life and reduced species diversity. The Facility's nitrogen pollution has contributed to the near loss of the benthic community in Lewis Bay. The Facility's nitrogen pollution has contributed to unpleasant odors and scums from blooms in the Lewis Bay system. According to MassDEP, the Lewis Bay system is eutrophic and at risk of further eutrophication from high nutrient loads in the groundwater. MassDEP reports algal blooms, depleted oxygen, elimination of eelgrass meadows, crashes in biodiversity due to nitrogen pollution—including from the Facility—within the drainage. According to MassDEP, this nitrogen pollution is causing "degraded water quality, adverse impacts to ecosystems, and limits on the use of water resources" in the Lewis Bay watershed system. MEP Report at 2.

Clean Water Act Violations

The Clean Water Act prohibits persons from discharging pollutants from a point source to navigable waters without authorization under a National Pollutant Discharge Elimination Scheme ("NPDES") permit. 33 U.S.C. § 1342.

The Town is a person under the Act. The Facility is a "point source" as defined in the Act. 33 U.S.C. §1362(14); *see also Conservation Law Found., Inc. v. Longwood Venues & Destinations, Inc.*, 422 F. Supp. 3d 435, 445 (D. Mass. 2019). The Town adds nitrogen and septic wastewater—pollutants under the Act—from the Facility to the surface waters of the Lewis Bay watershed system, navigable waters of the United States. The Town's discharges reach the surface waters of the Lewis Bay watershed system—including the Stewart's Creek subembayment—via groundwater transfer in a manner functionally equivalent to a direct discharge. The Facility's pollutant discharges to these surface waters are continuous and ongoing. Neither the Town nor anyone else is authorized under a NPDES permit to discharge pollutants from the Facility to these or any other navigable waters.

The Town has discharged pollutants from the Facility to the navigable waters of the Lewis Bay watershed system without authorization under an NPDES permit on each day of the five years preceding the date of this notice; it will continue to do so each day in the future. Each of these unauthorized discharges constitutes a violation of the Clean Water Act.

Conclusion

Additional information, including information in the parties' possession, may reveal further details about the Clean Water Act violations described above. This letter covers all such violations. This letter is being provided pursuant to Section 505(b) of the Clean Water Act. 33 U.S.C. § 1365(b). CLF would welcome the opportunity to discuss this matter with you. If you are interested in discussing the matter, or if you believe any of the above information is incorrect, if you take steps to permanently correct the Clean Water Act violations, if you believe you are currently in compliance with the Clean Water Act, or if you have any questions concerning this notice, please contact me as soon as possible at (617) 850-1712 or at the email address listed

below. If you would like to meet in person to discuss this matter, I am available to meet at a mutually agreeable time and place.

Sincerely,

CONSERVATION LAW FOUNDATION INC.

By its attorney,

Margaret Nivison Conservation Law Foundation 62 Summer Street Boston, MA 02210 (617) 850-1712

cc: By certified mail - return receipt requested

Michael S. Regan Administrator Environmental Protection Agency Office of the Administrator, 1101A 1200 Pennsylvania Ave, NW Washington, DC 20460

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