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Vincent J. Mesolella Chairman

Laurie A. Horridge Executive Director

April 3, 2024

Re: Narraganset Bay Commissions Letter to Rhode Island's Special Legislative Commission to Study and Provide Recommendations on the Issues Relating to the Reduced Catch of Quahogs in Narragansett Bay

Dear Commission Members:

The Narragansett Bay Commission (NBC) appreciates the opportunity to serve on Rhode Island's Special Legislative Commission to Study and Provide Recommendations on the Issues Relating to the Reduced Catch of Quahogs in Narragansett Bay (Commission).

As we have learned through the work of the Commission and its members, the ecosystem within Narragansett Bay is both highly complex and multifaceted. The Commission has identified many potential environmental impacts regarding the declining quahog population in Narraganset Bay, including but not limited to climate change, a changing ecology within the Bay, and a reduction of nitrogen loadings to the Bay.

NBC, in accordance with permits issued by the Rhode Island Department of Environmental Management (RIDEM), has invested great resources, primarily funded through NBC rate payer dollars, into the collection and treatment of municipal and combined wastewater. These efforts which include the construction of two Combined Sewer Overflow storage tunnels and multiple upgrades to the collection system and the Field's Point and Bucklin Point Wastewater Treatment Facilities (WWTFs) have resulted in vastly improved water quality within the Bay and the opening of historically closed shellfish areas.

During a tour of the Field's Point WWTF Commission members saw firsthand how a complex combination of physical, biological, and chemical treatment processes need to be properly operated to transform highly polluted wastewater influent into a high-quality treated effluent that can be safely released back into the environment. NBC's Field's Point and Bucklin Point WWTFs, much like all other 17 WWTFs in the State of Rhode Island, are designed to operate within specific engineered design criteria that in turn are based on facility specific permit requirements.

To address concerns regarding the reduction of nitrogen loadings to the Bay it has been proposed that RI WWTFs, including NBC, be allowed by the RIDEM to increase current discharge levels of nitrogen to the Bay from their treatment facilities. While this suggestion seems practical on its surface, in actuality it is difficult to effectuate because the biological treatment process is so complex. The nitrogen removal processes at wastewater treatment plants are integrated into the overall biological treatment process and cannot be disconnected or turned off separately. NBC's WWTFs were redesigned with major internal tank and flow reconfigurations and treatment equipment upgrades specifically designed for nitrogen

removal. Any attempts to operate these facilities other than within design parameters may produce unknown and unwanted results.

During winter months NBC's WWTFs discharge higher levels of nitrogen than during the nitrogen permit season (May – October). These increased nitrogen loadings are a factor of varying weather conditions and resulting process changes that are needed to maintain a healthy, functioning biomass during the colder months while also assuring that this biomass can withstand the seasonal change into the warmer months. NBC's two WWTFs must always be operated within design parameters that will assure compliance with permit requirements.

NBC supports the recommendation of the RIDEM (March 18, 2024) and those of URI's Department of Fisheries, Animal and Veterinary Sciences (March 28, 2024). NBC however, for reasons stated above, cannot support recommendations with respect to increasing nitrogen discharges from WWTFs. In closing, NBC is sympathetic to Rhode Island's commercial quahoggers and will continue its work to help ensure that Narragansett Bay is protected from municipal wastewater and stormwater pollutants. To the extent we can continue to measure and quantify water quality in the Bay, participate in Bay improvement research efforts, and coordinate shellfish transplants we remain at the service of the Commission and future efforts to help support Rhode Island's shell-fishing industry.

Sincerely,

Lauire Horridge Executive Director