From: Haberek, Joseph (DEM)
To: Michael B. Hogan

Cc: Borkman, David (DEM); Gray, Terry (DEM); Forcier, Susan (DEM); Mulcahey, Ryan (DEM)

Subject: Quahog Comm - permits and legal authority

Date: Tuesday, March 12, 2024 2:30:49 PM

Attachments: 03-07-2024---DEM authority to issue wastewater treatment facility discharge permits James Boyd RISA.pdf

## Mike,

I noticed a recently submitted e-mail to the Quahog Commission (the "Commission"), dated March 7, 2024, with the subject "DEM authority to issue wastewater treatment facility discharge permits". This e-mail was written from an individual who is not a representative of the Rhode Island Department of Environmental Management (DEM) and contains some incorrect statements regarding DEM's ability to modify the Total Nitrogen limits assigned to the Publicly-Owned Treatment Works (a/k/a Wastewater Treatment Facilities or "WWTFs") that discharge to the Providence River/Narragansett Bay Therefore, this e-mail serves to clarify DEM's authority to modify these permit limits.

The subject e-mail correctly states that DEM issues permits to discharge pollutants to surface waters under the Rhode Island Pollutant Discharge Elimination System ("RIPDES") Program and that DEM was delegated the authority to administer the RIPDES Program by the United States Environmental Protection Agency (EPA). However, the e-mail incorrectly states that "DEM can modify any of the conditions or limits within a DEM-issued wastewater treatment facility (WWTF) discharge permit without needing any new authority. For example, if the Commission agrees and determines that DEM should modify any WWTF discharge permits to allow higher levels of nutrients during winter months, it is not necessary for the General Assembly to pass legislation authorizing DEM to do so."

Section 301(b)(1)(C) of the Clean Water Act ("CWA") requires that permits include effluent limitations necessary to meet water quality standards. This is reflected in section 1.6(A)(3) of the Regulations for the Rhode Island Pollutant Discharge Elimination System (the "RIPDES Regulations"), which prohibits issuing RIPDES permits that "cannot ensure compliance with the applicable water quality requirements of all affected states." Therefore, when developing RIPDES permits, DEM must consider the impact of the proposed discharge on the quality of the receiving water and both the CWA and the RIPDES Regulations require the development of water quality-based effluent limitations that ensure that the state water quality standards are met. Water quality goals for a waterbody are defined by state water quality standards and include a Dissolved Oxygen ("DO") standard.

As mentioned during previous presentation given before the Commission, areas of the Providence and Seekonk Rivers, Upper Narragansett Bay, and Greenwich Bay remain that are impacted by low DO (see Stoffell's 11/15/23 presentation). This low DO is caused by nutrient enrichment. The March 7<sup>th</sup> e-mail seems to imply that the "winter-spring phytoplankton blooms" are solely controlled by the amount of nitrogen discharged from the WWTFs. As explained by Dr. Fulweiler during her 11/15/23 presentation to the Commission, this is not the case. There are many other environmental variables that impact the presence of the winter-spring bloom, including, but not limited to, wind speed, water temperature, precipitation, etc.. Increasing the amount of nitrogen discharged, without

changing these other variables, is unlikely to have a significant impact on the winter-spring bloom.

Based on the above factors, DEM neither supports the position to increase the amount of nitrogen discharged from the WWTFs (because it alone is unlikely to have a significant impact on the winterspring bloom) nor are we able to issue permits with higher nitrogen loadings without the risk of permit appeals from EPA and/or environmental advocacy groups (because the existing DO water quality standards are not being met). DEM is in the process of submitting a comprehensive position paper that discusses the factors DEM believes are impacting the quahog population in Narragansett Bay. This paper will also include DEM's recommendations for future work on this subject. However, I wanted to send this e-mail to address the specific recommendation that DEM modify the WWTF's RIPDES permits to allow for increased nitrogen discharges.

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