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NY's clean water advocate

January 10, 2014

Angela Licata
Deputy Commissioner for Sustainability
NYC Department of Environmental Protection
96-05 Horace Harding Expressway
Flushing, NY 11373

Dear Angela,

I am writing on behalf of Hudson Riverkeeper, Inc. ("Riverkeeper"), Newtown Creek Alliance, and the North Brooklyn Boat Club ("NBBC") to follow up with you regarding the New York City Department of Environmental Protection's ("DEP") development of the Long Term Control Plan for Newtown Creek, specifically DEP'S plan to significantly expand the aeration system in order to comply with the Creek's current waterbody designation. On behalf of the above-referenced groups, I am requesting a meeting with you and other DEP staff, as needed, to discuss our concerns related to this initiative, and to receive an update on the status of the expanded aeration project.

Newtown Creek (or the "Creek") is a unique waterway in New York City, with a long history as an industrial waterway. Over the years, the Creek has received a heavy burden of industrial chemicals and regular releases of sewage from combined sewer overflows ("CSO"). Compounding the impact of pollution in the Creek is the extremely limited natural flow of water from the head of the Creek into the East River. As a result of Newtown Creek's industrial past and the lingering hazardous pollution, the Creek was designated a Federal Superfund site in 2010. As you are of course aware, the Environmental Protection Agency's ("EPA") process for assessing contamination and designing a remedy for the Creek continues to move forward.

However, the Creek is still being affected by CSO events. Even though the Creek supports numerous recreational activities, including canoe trips with the North Brooklyn Boat Club, the Creek is currently only classified as Class I by New York State, meaning its water quality is only suitable for fish, shellfish and wildlife survival, the lowest level of water quality under state law.[1] Moreover, the Creek is considered impaired due to insufficient levels of dissolved oxygen in the

[1] *See* 6 NYCRR Part 701.14. Classifying waters suitable for fish, shellfish, and wildlife survival and not meeting the requirements for primary and secondary contact recreation and fish propagation as "Class SD Saline Surface Waters."

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waterway.[2]

In order to address the pollution in Newtown Creek, as well as other New York City waterways, DEP entered into an Administrative Order on Consent ("CSO Consent Order") with the New York State Department of Environmental Conservation ("NYSDEC"). The CSO Consent Order requires DEP to prepare a Waterbody/Watershed Plan providing a detailed assessment of the Creek and the actions that will be taken to improve water quality. The Plan is the first step towards developing a Long Term Control Plan for the Creek by 2017 as required by the CSO Consent Order.

In June 2011, DEP released the Plan for the Creek. The goal of the Plan is to reduce CSOs in Newtown Creek through cost-effective reductions of CSO volume and to attain the existing Class SD water quality standard.[3] After assessing the effectiveness of controls already in place and acknowledging the remaining shortfalls in attaining the water quality standard, the Plan recommends a number of actions to achieve its goals. Chief among them is the recommendation to construct an enhanced aeration system in order to increase dissolved oxygen levels in the Creek.[4] This is because DEP considers "[d]issolved oxygen [to be] perhaps the most meaningful measure of the impact of the [] Plan because it is due to low levels of dissolved oxygen that Newtown Creek is currently on [New York State Department of Environmental Conservation's] 303(d) list of impaired waterbodies."[5] Nevertheless, we believe that DEP's recommended plan to increase dissolved oxygen levels through an enhanced aeration system is flawed because it only addressed the symptom of contamination to the waterway (low dissolved oxygen) rather than the cause of the contamination (CSOs). In addition, this enhanced aeration system may have unintended consequences on air quality, as detailed below and in previous comments submitted to DEP.

In response to DEP's solicitation of public comments on the Plan, Riverkeeper submitted comments highlighting the Plan's failure to adequately assess the potential public health risks of expanding the aeration system throughout the Creek, the inadequacy of the proposal to reduce the impacts of CSOs on the Creek, and the Plan's reliance on expanding the existing aeration system as the primary method of meeting state and federal water quality standards while ignoring the actual uses of the Creek. Specifically, Riverkeeper noted that DEP did not provide any information regarding sampling for airborne bacteria This omission is particularly concerning since it brings into question the adequacy of any study of the effects of the aeration system on air quality or the potential of aerosolizing sewage related bacteria and

[2] Newtown Creek is not included on the 2012 Section 303(d) list, but is included on a list of other impaired waters for which no Total Maximum Daily Load ("TMDL") will be prepared. A TMDL is not necessary because other required control measures are expected to result in restoration in a reasonable period of time. Specifically, Newtown Creek pollution is being addressed through the CSO Consent Order to meet pathogen standards. *See* NYS Dep't of Envtl. Conservation, Impaired/Delisted Waters NOT on the 2012 Section 303(d) List, *available at www.dec.ny.gov/docs/water_pdf/303dnotlisted12.pdf.*

[3] Plan at ES-1.

[4] *Id.* at *8*-1. Other recommended elements included: Continued operation the Brooklyn Pumping Station at up to 400 MGD during wet weather; Construction of bending weirs; Floatables Control at or around the four largest annual average volume CSO; and Continued Implementation of Programmatic Controls.

[5] *Id.* at 8-16.

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other contaminants into the surrounding air.[6] To that end, Riverkeeper cited a number of scientific studies linking surface waters to aerosolized particles and pathogenic bacteria in the surrounding air and described the experience of its own staff regarding localized effects of the aeration system.

On April 27, 2012, DEP met with Riverkeeper and Newtown Creek Alliance regarding the concerns raised. During the meeting, Riverkeeper described a study performed by Eli Dueker, a researcher at Columbia University's Lamont Doherty Earth Observatory. Although still ongoing at the time of the meeting, the research indicated that aeration of the Newtown Creek could potentially transfer bacterial contamination in the water to the air. You and your staff noted our concerns, but responded that you do not believe the aeration system poses a real concern, based on the lack of health impacts to sewage treatment plant workers who routinely work in the vicinity of aeration systems. We would simply note that sewage treatment plants are highly controlled environments, and plant workers are trained and equipped to be aware of and prepare for their industrial work environment. Conversely, people who work near or on Newtown Creek, and those members of the public who use it for recreation, are encountering an uncontrolled environment without, of course, any training, access to personal protective equipment, or advance knowledge of potential health risks from the aeration system.

Subsequently, a study was published detailing the results of Lamont Doherty Earth Observatory's research.[7] The study concluded that aeration remediation of this waterway resulted in increased aerosol production from surface waters. Bacterial aerosols above this waterway included sewage-associated bacteria indicating a connection between water surface contamination and air quality.[8] The study further concluded that this increased aerosolization of bacteria from the water had the potential for unintended and unexplored health impacts on surrounding urban populations.[9] Accordingly, we believe that more sampling for airborne bacterial pathogens must be conducted in order to determine the potential health risks that increased aeration will present to those working, recreating, and living on and along the Creek. Improvement of Newtown Creek's water quality must not come at the expense of surrounding air quality, or in a way that increases public health risks in a community that has already suffered decades of environmental pollution.

To ensure that Newtown Creek's water quality improves and that citizens continue to use and benefit from the Creek, we request a second meeting with DEP to discuss these issues. We look forward to our continued participation in DEP's development of the Long Term Control Plan for this unique and vital waterway.

Respectfully,

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[6] Letter from Phillip Musegaas, Riverkeeper Inc., to Gary E. Kline, NYS Dep't. of Envtl. Conservation and Keith Mahoney, NYC Dep't of Envtl Prot. (Mar. 9, 2012).
[7] M. Elias Dueker, Gregory D. O'Mullan, Andrew R. Juhl, Kathleen C. Weathers and Maria Uriarte, *Local Environmental Pollution Strongly Influences Culturable Bacterial Aerosols at an Urban Aquatic Superfund Site,* Environmental Science and Technology, September 6, 2012, appended hereto as Attachment A.
[8] M. Elias Dueker et al., Local Environmental Pollution Strongly Influences Culturable Bacteria at an Urban Aquatic Superfund Site, Envtl. Sci. & Tech., Sept. 6, 2012, at 10930.
[9] *Id.* at 10931.

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cc:
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