February 6, 2012

Wanda Ayala
Community Involvement Coordinator
Public Affairs Division
U.S. Environmental Protection Agency
ayala.wanda@epa.gov

Dear Ms. Ayala,

I am writing on behalf of Newtown Creek Alliance (NCA), a community organization dedicated to restoring, revealing and revitalizing Newtown Creek. Our membership is well represented on the newly formed Community Advisory Group (CAG) for the Superfund process, and I have volunteered to serve as a co-chair of that body.

As members of the CAG, the NCA requests the EPA make testing and monitoring the Combined Sewer Overflow (CSO) outfalls along Newtown Creek, and characterizing their impacts on water quality, a top priority of the Remedial Investigation.

Contaminant loadings from CSO events are a leading cause of water quality impairments in Newtown Creek. As the Superfund process endeavors to remove historic contamination from the Creek's long industrial past, it is our expectation that ongoing sources of contamination from CSOs will also be eliminated. If the EPA only removes historic contamination while leaving the Creek inundated with billions of gallons of CSOs annually, it not only jeopardizes the hundreds of millions of dollars that will be spent on cleanup, it also contradicts the Superfund Program's statutory preference for remedial actions that demonstrate long-term effectiveness.

The NCA therefore requests that CSOs be fully characterized qualitatively, in terms of their toxicity, and quantitatively, in terms of their volume and frequency.

Qualitative assessment of CSO
The Gowanus Canal Remedial Investigation report notes that "Wet weather [CSO] sampling could occur only after at least 0.10 inches of rainfall within an hour; this sampling needed to begin shortly (within 3–6 hours) after the occurrence of these conditions." Our concern is that sampling CSO outfalls using this methodology greatly underestimates pollutant loading from CSOs, as it entirely misses the concentrated flush of pollutants that are discharged in the first minutes of a CSO event, and may miss smaller, more concentrated, CSO events entirely.

From New York City's "Sustainable Stomwater Management Plan".

> "The connection between precipitation and CSO discharges is not a fixed ratio, nor is the effect of rainfall the same in each watershed. We do know that rainfalls of less than one inch cause most of the CSO events citywide, while larger rainstorms cause most of the CSO discharges by volume… As with the frequency of overflows, the level of pollutants is not proportional to rainfall. Rather, smaller CSO events will have more concentrated pollutant levels than larger CSO events because they contain a smaller amount of diluting stormwater and a larger amount of the first, concentrated flush of pollutants from impermeable surfaces. This characteristic of smaller CSO events is particularly true for fecal coliform and other pathogens; sanitary sewage flows stay relatively constant while stormwater flows are lower during smaller rainfalls, so CSOs during small rainstorms contain a greater percentage of sanitary flow."

Because pollutant loading from CSO events varies dramatically over time and in relation to the intensity and duration of rainfall, taking grab samples 3-6 hours after the beginning of a CSO event will not yield data that accurately assesses pollutant loading from CSOs. We would like to meet with EPA to discuss how the CSO sampling methodology for Newtown Creek can be improved from that which was used on the Gowanus Canal. It would be greatly appreciated a meaningful discussion of this matter, as we consider an accurate accounting of pollutant loadings from CSO events to be vitally important to future decisions regarding the remediation of Newtown Creek.

Quantitative assessment of CSO
It is our understanding that CSO events are not directly monitored by NYCDEP for frequency or volume, but that several CSO regulators (including a handful on Newtown Creek) are telemetered and are monitored for tide gate activity. In these locations, CSO frequency can be inferred based upon telemetric data, tides and regulator elevations. In a more coarse way, CSO frequency could be inferred from throttling events at the Newtown Creek WPCP.

We request that the EPA work with NYCDEP to provide the CAG with inferred estimates of CSO volume and frequency on Newtown Creek based on all currently available data.

While the NYCDEP has recently completed an RFP process to pilot technologies to directly monitor CSO activity at a handful of sites around the city, we are concerned that the data currently available will not sufficiently characterize the frequency and volume of CSO discharges to this severely impaired waterbody.

Therefore, we additionally request that the EPA consider employing inexpensive, effective technology developed by NCA member Leif Percifeld on all CSO outfalls on the Creek. Percifeld's "DontFlushMe" system consists of a network of remote sensors deployed into the sewer system as data collection points. The data can then be presented in real-time using a web interface, an SMS and Twitter alert system, a phone interactive voice response system (IVR) and networked "Visualight" light bulbs, which provide real-time ambient light visualizations of the sewer system level.

This is the kind of nimble, robust monitoring that would serve the short-term need of the EPA to quantitatively characterize CSO activity and support the long-term goal of the

NCA to provide public notification of CSO events to those who work and recreate on Newtown Creek.

In summary, we request the following:

- Discussion of the EPA's CSO qualitative sampling protocol for Newtown Creek
- Presentation of available quantitative CSO data (volume and frequency)
- Discussion of short-term opportunities for real-time CSO monitoring

Thank you in advance for your consideration of these requests.

Sincerely,
Kate Zidar

Executive Director
Newtown Creek Alliance
kzidar@newtowncreekalliance.org
646.580.3411

Cc:
Regional Administrator Judith Enck, USEPA Region 2
Regional Director, Venetia Lannon, NYS DEC Region 2
Commissioner Carter Strickland, NYC DEP
Director, David Bragdon, OLTPS
Congresswoman Nydia M. Velázquez, District 12
Assemblyman Joseph R. Lentol, District 50
Assemblyman Vito Lopez, District 53
Assemblyman Cathy Nolan, District 37
State Senator Michael Gianaris, District 12
State Senator Martin Malavé Dilan, District 17
Councilmember Michael Nelson, Committee on Waterfronts
Councilmember Stephen Levin, District 33
Councilmember Diana Reyna, District 34
Councilmember Jimmy Van Bramer, District 26