Newtown Creek Community Advisory Group
Steering Committee

December 2, 2014

Walter Mugdan, Director
Angela Carpenter, Special Projects Branch Chief
Caroline Kwan, Newtown Creek Remedial Project Manager
Emergency and Remedial Response Division
U.S. EPA, Region 2
290 Broadway
New York, NY 10007

RE: Comments and Questions from the Newtown Creek CAG Steering Committee for the EPA's Phase II Workplan

Dear Mr. Mugdan, Ms. Carpenter and Ms. Kwan,

On behalf of the Newtown Creek Community Advisory Group (CAG), the CAG Steering Committee, and the thousands of members of the public that those voices represent, we submit the following to the EPA regarding the Newtown Creek Superfund Site Phase II workplan presented to the CAG in October, 2014. The comments and questions below were developed initially as a record of the concerns raised by members of the public at the most recent CAG meeting. The public's suggestions were then expanded upon by the CAG Steering Committee.

In Phase II, data gaps identified during Phase I are filled and estimates are made to determine current conditions of the Creek. This Phase will also ultimately identify the nature and extent of contamination at the Site and support the Human Health and Ecological Risk Assessments that inform the development of the remedy. The EPA's Phase II workplan calls for sediment, surface water, point source, and groundwater surveys, as well as wildlife, habitat, biota, bivalve, and toxicity tests. Thus, it is vital that the community's concerns are addressed, the most robust sampling takes place, and therefore the most well-founded assessments and cleanup options developed.

The CAG was informed by the EPA in October 2014 that Phase II research began in May 2014 and is anticipated to be completed in late 2015. Given this quick turnaround time for Phase II, we ask that the EPA provide the CAG with written responses to the questions below in a timely manner.

Vegetation

It may be the case that Newtown Creek's long history of high concentrations of hazardous substances has already limited opportunities for successful plant life at Newtown Creek, but this shouldn't mean that the Phase II workplan not provide for sampling vegetation – an important element of both human health and ecosystem risk. From the phytoplankton, algae, and microbial mats found in the Creek that form the basis of the food web (and the launching point for bioaccumulation problems) to the fruit trees found intermittently in the watershed and along the Creek banks, the vegetation of Newtown Creek must be included in Phase II sampling. Unfortunately, the workplan presentation made

by the EPA indicated that evidence of exposure to CERCLA substances will be gathered solely on the basis of accumulation in animals, not plants. As such we respectfully offer the following questions:

1. In the presentation to the CAG of the Phase II program, EPA Representatives suggested that almost none of the Creek has vegetation.[1] Has there been a, actual study examining proliferation (or lack thereof) of vegetation in or along the Creek?

2. Why has there been little (or no) sampling of vegetation contamination to date?

3. Does the current level of bulkheading (and thereby lack of soft, vegetated shoreline) limit the EPA's review of potential remedies in a way that would obviate the need to study vegetation in Phase II?

4. If the EPA does consent to including vegetation in Phase II, will it include studies of broad arrays of vegetation types such as seaweed, seagrasses, intertidal grasses, weeds, and other flora, and shoreline trees (especially fruit trees and other edible flora)? If not, why not?

Fish and Crab Sampling

In the Phase II workplan presentation, the EPA did not elaborate on the sampling and surveying plans for testing fish and crab contamination in the Creek. CAG members are aware that members of the public regularly fish and crab in the Creek, and given the known risks of eating this catch, a clear understanding of the baseline contamination levels compared to the greater New York Harbor baselines is vital. As such, we have the following questions:

5. Was the suite of organisms chosen for sampling in the currently-proposed Phase II plan chosen for a particular ecological reason? The ecological interactions within the Creek are complex – the EPA should be sampling as widely as possible, so as to capture all elements of this complexity.

6. Has the EPA considered requiring a larger sample size and broader sample locations? This is particularly important for migratory fish – the EPA has no ability to say whether a striped bass caught in the Creek just arrived or has been returning there for years. As such, having more data points, from more basins (e.g., the Hudson River, the NY Bight, Raritan and Sandy Hook Bays, Hutchinson River) would allow for a more robust analysis, and a clearer understanding of the risk.

7. Will the EPA be disclosing diversity and abundance data in real-time, or, at least, able to present such information to the CAG and the community before Phase II is completed? Public input would be a way to ensure that the EPA's adaptive management goals are met; the agency could solicit QA/QC feedback you get on whether sampled species are representative of the known Creek biota.

8. There have been many species of birds that have returned to the Creek in recent years. These species are a significant part of the Creek's ecological health, improving baseline, and ultimate remediation. For Phase II, how will birds be sampled, and why?

[1] To paraphrase, the EPA noted that 99% of the Creek is bulkheaded, and that they weren't aware of any plants, or that if there were plants on the system, there isn't any likely interaction with humans. In the ensuing conversation, and based on later input from the community, there are not only fruit trees along the Creek, but there are extant patches of natural shoreline – most of Maspeth Creek, some stretches of the Queens shoreline upstream of Maspeth, and a few other spots – any and all of which would be good areas for EPA to survey.

Shellfish

During the most recent CAG meeting discussion of the Phase II workplan, much of the conversation on shellfish focused on the testing program that is already underway with caged mussels. In this system, however, ecosystem and human health risk analyses must address concerns about existing, in situ mussels, as well as oysters and clams. Taken together, these three types of shellfish could provide significant ecological restoration benefits, habitat for fish and crab, and flood and storm surge mitigation for the Creek. Clearly, shellfish propagation should be an element of the remedy, and, therefore, must be thoroughly analyzed through the Phase II studies. As such, we have the following questions:

9. Why are there no oysters studied in Phase II? The EPA presentation seemed to show that the workplan development stage simply looked to the Passaic River's workplan for ready-to-implement testing protocols instead of developing Newtown Creek-specific plans. Moreover, there are several datasets of oyster restoration efforts around the City (e.g., the Billion Oyster Project by the Harbor School, NY/NJ Baykeeper's oyster restoration work in the Bronx, and oyster restoration initiatives in Jamaica Bay); it is truly a city-wide effort, the data from which could clearly inform the agency's risk assessments and remedial design, but only after Phase II oyster results have been gathered to establish a baseline.

10. Please explain the scientific basis behind the contention made at the CAG public meeting that mussel contamination research in the Creek will be "representative of all bivalves." Oysters and clams living along the benthos will likely be exposed to significantly different levels (and types) of contamination than mussels in surface cages, along bulkheads, or on derelict boat hulls.

11. Why are caged mussel contamination tests not being compared to the contamination levels of existing mussels which have been living in the Creek their entire lives? As the long-term toxicity of mussels in the Creek is of primary concern, taking samples of mussels that have been in the Creek for the long term should be the primary sampling strategy.

Upland Testing, Public Access Areas & New Development

Upland properties (existing and proposed), site runoff, groundwater flow, contamination, and infiltration can all significantly impact the human and ecological risks posed by the Creek and the remedy. From problems along the Creek's edge (where, in one part of the Creek's edge in Queens, a bulkhead installation resulted in a new oil seep), to problems upland from the water's edge (i.e., properties with legacy pollution still migrating through groundwater), the land surrounding Newtown Creek must be studied, cataloged, and modeled accurately. The EPA mentioned at the October CAG meeting that groundwater monitoring wells will be placed at seven locations around the Creek, and that the soil from the well bore will be analyzed. Beyond these seven soil samples (and groundwater monitoring), the EPA's presentation mentioned that more upland testing sites could happen in the future (on private property), but gave no specifics.

The CAG is concerned that the existing plan for upland sampling is not robust enough, that new development projects (ongoing and proposed) will be rushed through planning, testing, and review so as to be built before the Creek remedy (allegedly) will change or burdens development potential, and that the ongoing land-based impacts on the Creek's ecosystem functions are not fully understood by the EPA,

PRPs, and agencies involved in the site assessment and clean up. As such, we have the following questions:

12. Why are upland sediment and groundwater testing sites limited to the seven sites mentioned by the EPA, and where specifically are those sites?

13. To what extent will new development projects currently in the works be incorporated into the modeling EPA will conduct for the risk assessments and remedy?

14. Will there be any water or soil testing at any of the sites along the Creek currently being redeveloped (or slated for redevelopment), such that the EPA (or the public) will be able to compare post-development water quality and quantity impacts with pre-development Superfund baselines?

15. Does the EPA plan on using information from Phase II testing, remedy development or the risk assessments to comment on or intercede in proposed development projects along the Creek or in the Creek's watershed?

16. Is sampling being conducted inside adjacent businesses, private right-of-ways, or in and under derelict vessels? These areas are just as important to the human health and ecological risk assessments and remedy as the air directly above the Creek and the waters in it. The people of Brooklyn and Queens make varied use of the Creek, and all of their risks should be analyzed, whether on public or private property.

17. Given that open space plays a significant role in human health and ecological risks – from direct public access to the water to esplanades, marshes, restored wetlands, piers and parks – does the EPA plan on sampling any upland open space, such as the Newtown STP Nature Walk Park?

18. Around the Creek, there are many sources of information on water, air, and soil quality. From Clean Water Act and Clean Air Act enforcement data, monitoring and compliance data, and permittee-submitted reports, to Brownfield program tests and monitoring reports, Interstate Environmental Commission data, well tests (from oil spill remediation), and a host of other state, city, and federal information, there is a significant amount we already know about the Creek – even though it has not perhaps been collected as one comprehensive study. What datasets – listed above or not – will the EPA be using (or not using) to augment their sampling data, and why?

Air Quality

The CAG acknowledges that the EPA air monitoring data presented in October shows air quality at the Creek as being below New York City background levels. However, in explaining its air data collection methods, the EPA stated that it collected this Phase I air data over the course of one single 24-hour period. The CAG is concerned that the Phase I air sampling program was not robust enough to capture periods of worse-than-normal air quality, incidents of toxic and hazardous air pollution events, or changes in air quality baselines that may occur across the seasons. As such, the CAG has the following questions:

19. Did the EPA consider continuous air emissions monitoring stations?

20. Why doesn't Phase II have more air quality sampling (even to confirm the Phase I test results)?

21. As with storm-event water testing (where the EPA has developed a rapid response team to test water quality during events), will the EPA consider a similar program for air, where, during large storm events, toxic releases, or other air-quality-affecting events, the Agency will test air quality?

22. The community has raised concerns at CAG meetings about how aeration may lead to exposure to bacteria, pathogens, particulate matter, and other potentially hazardous substances for people boating on the Creek, walking in the Creekside neighborhoods, or working on the Creek. Is EPA planning on taking air samples to specifically determine the risks associated with the DEP's aeration sites within the Creek? If not, why not? If so, given such data's clear utility in public safety protection, would the EPA consider releasing those results before the complete Phase II data?

Water Sampling Plans

At the CAG meeting in October, the community discussion on Phase II sampling focused heavily the specifics of the proposed water runoff and effluent sampling that EPA plans for wet-weather events (including CSOs, MS4 sources, and private property stormwater outfalls). Among the questions for EPA on the Phase II water sampling plans were:

23. Will CSO sampling test for flow, floatables, indicator chemicals, prescriptions/pharmaceuticals, personal care products, or pesticides? For each, if not, why not; if so, to what extent?

24. At the CAG meeting, the EPA noted that it was preparing a rapid-response sampling program for several sites along the Creek; our concern is that even the most rapid-response sampling program for CSOs (and MS4s outfalls) will miss a great deal of pollution discharged in the early few minutes of a storm. For context see the below passage from New York City's Sustainable Stormwater 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 even an hour after a storm begins will not yield data that accurately assesses pollutant loading from those CSOs. Debris, oils and grease, and a host of other contaminants from industrial sites and roadways along the Creek would be similarly discharged in the first few minutes of a storm from MS4 outfalls, permitted private outfalls, and direct discharge. As such, will the Phase II sampling at point sources and CSOs involve any fixed, real-time, continuous monitoring devices? If not, why not, and how is the EPA intending on capturing the first-flush pollutant loading problems in the Creek?

25. Will EPA take any water samples in the Creek itself near CSO stormwater discharge points? If not, why not?

26. Will the EPA commit to testing stormwater (through any conveyance – CSOs, MS4s, sheet flow, or private stormwater discharges, for example), during snowmelt? If not, why not?

27. Will the EPA commit to testing stormwater (through any conveyance – CSOs, MS4s, sheet flow, or private stormwater discharges, for example), during periods of heavy use of road salt or other deicing chemicals, fluids, or materials? If not, why not?

28. To what extent is the EPA requiring samples from highways, bridges, and other high-volume roadways? For any of the bridges over the Creek with stormwater runoff that will not be sampled during Phase II, please provide bridge-specific rationale for the decision not to require testing. In addition, please provide information on the Kosciuszko/New Bridge construction project (including its impacts on the Creek, on the Phase II sampling, and the development of the risk assessments).

We appreciate the opportunity to submit these questions, and encourage the EPA to fully and seriously consider each of these recommendations for expanded sampling. The information gathered, should EPA commit to these programs, would directly and reasonably inform the agency's main objectives – namely, forming a basis for future risk assessments, remedy development, and quantifying and qualifying the Creek's contamination baseline.

Please do not hesitate to contact the Newtown Creek Steering Committee with any questions about the above requests for information. We look forward to your written responses.

Sincerely,

On behalf of the Newtown Creek CAG Steering Committee,
Ryan Kuonen & Mike Schade, Newtown Creek CAG Co-Chairs

CC: U.S. Senator Charles Schumer
U.S. Senator Kirsten Gillibrand
U.S. Representative Carolyn Maloney
U.S. Representative Nydia Velazquez
New York Assembly Member Joseph Lentol
New York Senator Martin Dilan
New York Senator Daniel Squadron
New York City Council Member Stephen Levin
New York City Council Member Antonio Reynoso
New York City Council Member Jimmy Van Bramer
Brooklyn Community Board 1 Chairwoman Dealice Fuller
Brooklyn Community Board 2 Chairman Joseph Conley
Regional Administrator Judith Enck, U.S. EPA Region 2
New York State DEC Region 2 Director Venetia Lannon
New York City DEP Commissioner Emily Lloyd
New York City DEP Director Eileen Mahoney
Kevin Thompson, ExxonMobil, Newtown Creek Group