## **RECORD OF DECISION**

Operable Unit 2 Newtown Creek Superfund Site Brooklyn, Queens, New York



United States Environmental Protection Agency Region 2 New York, New York April 2020

#### DECLARATION STATEMENT RECORD OF DECISION

#### **SITE NAME AND LOCATION**

Newtown Creek Superfund Site Brooklyn and Queens, New York

EPA Superfund Site Identification Number NYN000206282

#### **STATEMENT OF BASIS AND PURPOSE**

This Record of Decision (ROD) documents the U.S. Environmental Protection Agency's (EPA's) selection of a remedy for Operable Unit 2 (OU2) of the Newtown Creek Superfund Site located in Brooklyn and Queens, New York (the site), which was chosen in accordance with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. §§ 9601-9675, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. This decision document explains the factual and legal basis for selecting No Further Action for OU2. The Administrative Record Index (see Appendix 3) identifies the items that comprise the Administrative Record upon which the selected remedy is based.

The New York State Department of Environmental Conservation (NYSDEC) was consulted on the proposed remedy in accordance with CERCLA Section 121(f), 42 U.S.C § 9621(f), and concurs with the selected remedy (see Appendix 4).

#### DESCRIPTION OF THE SELECTED REMEDY

The selected remedy described in this document addresses OU2 of the site. OU2 relates to current and reasonably anticipated future discharges of the Operable Unit 1 (OU1) chemicals of potential concern (COPCs) from combined sewer overflows (CSOs) to the Newtown Creek Study Area, as the term "Study Area" is described later in this ROD. The selected remedy is No Further Action, where No Further Action in this case assumes that the Long-Term Control Plan (LTCP) that the New York City Department of Environmental Protection (NYCDEP) is under order by NYSDEC to implement is, in fact, implemented as required by the schedule detailed in that order. EPA has concluded that the volume reduction set forth in the LTCP will be sufficient for the purposes of a CERCLA response action regarding current and reasonably anticipated future discharges from the CSOs to the Newtown Creek Study Area. To ensure that the assumptions made in reaching this conclusion remain valid, monitoring will be required at least until it is subsumed by the monitoring requirements of a future remedial decision document for the site.

The monitoring required under this ROD will include analysis of discharges from at least the

<sup>&</sup>lt;sup>1</sup> Order on Consent ("CSO Order"), DEC Case # CO2-20110512-25 modification to DEC Case #CO2-20000107-8, Appendix A.

four major CSOs, including outfalls NCB-015, NCB-083, NCQ-077, and BB-026, for the COPCs identified for the site, and the review of readily obtainable watershed-wide metrics such as discharge volumes to the Creek and frequency of CSO overflows. It is expected that the sampling will initially be conducted quarterly, as possible, for two years to account for potential seasonal and temporal differences in the concentrations of COPCs in the CSO discharges. The frequency and components of sampling may then be adjusted, if appropriate, based on the sampling results.

The decision made herein is focused and applies only to the volume of CSO discharge. If the required monitoring and reviews were to identify significant changes in the system that affect the underlying assumptions of the analysis performed to support this remedial decision, additional mitigation measures may be required. These measures might include a track-back program to determine if additional uplands control, through either regulatory or engineering means, is necessary. Measures may also include actions related to the discharge of solids from CSOs, such as end-of-pipe solids capture, end-of-pipe oil capture, and/or in-Creek dredging of accumulated solids near CSO discharge locations (referred to herein as maintenance dredging), if determined to be necessary. Any decision regarding potential additional actions would be memorialized in a future decision document.

#### **DECLARATION OF STATUTORY DETERMINATIONS**

It has been determined that no remedial action is necessary for OU2 of the site. No Further Action in this case assumes that the LTCP that NYCDEP is under order by NYSDEC to implement is, in fact, implemented as required by the schedule detailed in that order (as described above). No five-year reviews would be associated with the selected remedy. However, regular monitoring and reporting is required to ensure that the assumptions used in reaching this decision remain valid. An evaluation of the final duration and frequency of the monitoring and reporting will be conducted in association with the OU1 site-wide remedy selection process.

#### **AUTHORIZING SIGNATURE**

Evangelista,	∫ Digitally signed by	
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Pat Evangelista, Director	<del></del>	Date
Superfund and Emergence	cy Management Division	

# DECISION SUMMARY Operable Unit 2 Newtown Creek, Superfund Site Brooklyn and Queens, New York



United States Environmental Protection Agency Region 2 New York, New York April 2020

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#### SITE NAME AND LOCATION

The Newtown Creek Superfund Site (site) is located in Kings County and Queens County, New York City, New York (Figure 1). The site includes Newtown Creek and its five tributaries, Whale Creek, Dutch Kills, East Branch, English Kills, and Maspeth Creek.

The site is located within the Newtown Creek Significant Maritime and Industrial Area (SMIA), one of six designated SMIAs in New York City. These areas were designated in the City's 1992 Comprehensive Waterfront Plan, with the purpose of protecting and encouraging concentrated working waterfront uses. The areas are characterized by clusters of industrial firms and water-dependent businesses. The Newtown Creek SMIA, at over 780 acres, is the largest SMIA in New York City, and includes portions of the Greenpoint, Williamsburg, Long Island City, and Maspeth industrial areas.

Newtown Creek and its tributaries comprise an estuarine water body that is generally oriented in an east-west direction, although the easternmost section of Newtown Creek and several of the tributaries are oriented north-south.

#### SITE DESCRIPTION AND HISTORY

Historically, Newtown Creek drained the uplands of western Long Island and flowed through wetlands and marshes. However, because of heavy industrial development and governmental activities dating as far back as the 1800s, the wetlands and marshes have been filled, Newtown Creek has been channelized, and its banks have been stabilized with bulkheads and rip rap (stone-armored shoreline). The historic development has resulted in changes in the nature of Newtown Creek from a natural drainage condition to one that is governed largely by engineered and institutional systems.

In the mid-1800s, the area next to the 3.8-mile-long Creek was one of the busiest industrial areas in New York City. By 1910, more than 50 industrial facilities were located along its banks, including oil refineries, petrochemical plants, fertilizer and glue factories, sawmills, and lumber and coal yards. Newtown Creek was crowded with commercial vessels, including large ships bringing in raw materials and fuel and taking out finished products including petroleum products, chemicals, and metals. In addition to the industrial pollution that resulted from all of this activity, the City began dumping raw sewage directly into the water in 1856. During World War II, the Creek was one of the busiest ports in the nation. Currently, factories, warehouses, public utilities, and municipal facilities operate along the Creek. Various contaminated upland facilities located on or in the immediate vicinity of the Creek have been and continue to be sources of contamination to Newtown Creek.

This industrial development resulted in a major reworking of the Creek banks and channel for drainage and navigation purposes. The channelizing and deepening of Newtown Creek and its tributaries were largely completed by the 1930s, defining its current configuration.

In the early 1990s, New York State declared that Newtown Creek was not meeting water quality standards under the Clean Water Act. Since then, a number of state- and city-sponsored cleanups

of properties in the Newtown Creek area have taken place, and a major upgrade of the Newtown Creek Wastewater Treatment Plant that is located on the Creek was completed in 2012.

The site was added in 2010 to the EPA National Priorities List pursuant to CERCLA. The site was initially being evaluated as one comprehensive operable unit (OU) intended to address the entire Study Area until recently, when two additional OUs were identified. The current OU structure is as follows:

#### OU1

OU1 includes the entire Study Area, as defined in an administrative order on consent (2011 AOC) issued in 2011, CERCLA Docket No. CERCLA-02-2011-2011, between EPA and the following six respondents: New York City, Phelps Dodge Refining Corporation, Texaco, Inc., BP Products North America Inc., the Brooklyn Union Gas Company D/B/A National Grid NY, and ExxonMobil Oil Corporation. These latter five private parties (excluding New York City) have organized as the Newtown Creek Group (NCG). The Study Area is defined in the 2011 AOC, generally, as the water body and sediment of Newtown Creek and its tributaries, up to and including the landward edge of the shoreline.<sup>2</sup>

The respondents to the 2011 AOC are obligated under that order to perform a Remedial Investigation/Feasibility Study (RI/FS) for OU1, which is ongoing under EPA oversight.

#### OU<sub>2</sub>

OU2, the subject of this decision document, relates to current and reasonably anticipated future discharges of identified chemicals of potential concern (COPCs) from combined sewer overflows (CSOs) to the Study Area. A focused feasibility study (FFS) for OU2 was conducted by the New York City Department of Environmental Protection (NYCDEP) pursuant to a 2018 AOC between EPA and New York City (CERCLA Docket No. CERCLA-02-2018-2020), with EPA oversight. The completed FFS report provided the technical basis for the decision contained herein.

#### OU<sub>3</sub>

OU3 relates to the evaluation of a potential interim, early action in the first two miles of the

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<sup>&</sup>lt;sup>2</sup> Per the 2011 AOC, "Study Area" shall mean the portion of the Newtown Creek Superfund Site that encompasses the body of water known as Newtown Creek, situated at the border of the boroughs of Brooklyn (Kings County) and Queens (Queens County) in the City of New York and the State of New York, roughly centered at the geographic coordinates of 40° 42′ 54.69″ north latitude (40.715192°) and 73° 55′ 50.74″ west longitude (-73.930762°), having an approximate 3.8-mile reach, including Newtown Creek proper and its five branches (or tributaries) known respectively as Dutch Kills, Maspeth Creek, Whale Creek, East Branch and English Kills, as well as the sediments below the water, and the water column above the sediments, up to and including the landward edge of the shoreline, and including also any bulkheads or riprap containing the water body, except where no bulkhead or riprap exists, then the Study Area shall extend to the ordinary high water mark, as defined in 33 C.F.R. §328.3(e), of Newtown Creek, and the areal extent of the contamination from such area, but not including upland areas beyond the landward edge of the shoreline (notwithstanding that such upland areas may subsequently be identified as sources of contamination to the water body and its sediments or that such upland areas may be included within the scope of the Newtown Creek Superfund Site as listed pursuant to Section 105(a)(8) of CERCLA)."

Creek from its mouth inward, referred to as the lower two miles of the Study Area. An FFS for OU3 is currently being performed by the NCG members pursuant to a 2019 AOC (CERCLA Docket No. CERCLA-02-2019-2011) between EPA and the five NCG members, with EPA oversight.

#### **COMMUNITY PARTICIPATION**

EPA has worked closely with local residents, public officials, and other interested members of the community since it became involved with the site in 2011. EPA's preferred remedy for OU2 of the site was published in a Proposed Plan and was released for public comment on November 21, 2019. The Administrative Record file containing the documents relied on in developing the alternatives and preferred cleanup plan were made available for public review at <a href="http://www.epa.gov/superfund/newtown-creek">http://www.epa.gov/superfund/newtown-creek</a> and at the EPA information repository, EPA - Region 2, Superfund Records Center, 290 Broadway, 18th Floor, New York, NY, 10007-1866.

The notice of availability of these documents and public meetings was published on November 21, 2019 in five prominent local newspapers: Brooklyn Daily Eagle, Queens Courier, El Diario, Nowy Dziennik, and Sing Tao. The notice was published in English, as well as in Spanish, Polish, and Chinese for the non-English speaking communities surrounding Newtown Creek. The public comment period initially lasted 30 days, but two requests for comment period extensions were granted. Notice of these extensions was published in the same five newspapers on December 12, 2019 and January 21, 2019. The comment period closed on February 28, 2020.

Two public meetings were held to discuss the findings of the FFS and to present EPA's preferred alternative to the community. The meetings were held on December 9, 2019 at the Sunnyside Community Services Center at 43-31 39th Street in Queens, New York and on December 11, 2019 at P.S. 110 located at 124 Monitor Street, Brooklyn, New York. Chinese, Spanish, and Polish interpreters were present at both meetings to provide simultaneous translation services. At these meetings, EPA representatives answered questions about the Proposed Plan and the FFS. Comments that were received by EPA at the public meeting and in writing during the public comment period are addressed in the Responsiveness Summary (see Appendix 5).

#### SCOPE AND ROLE OF RESPONSE ACTION

As with many Superfund sites, the contamination at this site is complex, and the cleanup is being managed through several operable units, or OUs. Information regarding OU1 and OU3 is provided in the Site Description and History section, above. This Record of Decision addresses OU2, which encompasses the current and reasonably anticipated future volume of discharge of identified COPCs from CSOs.

EPA will determine what, if any, future CSO-related response activities, either in-Creek or at CSO points-of-discharge, may be required to meet the yet-to-be-determined remedial action objectives of the overall site. The selection of any such additional control actions, if necessary, would be documented in a future decision document or documents.

In addition, in addressing OU2, EPA's focus is on current and reasonably anticipated future discharges from CSOs, and no determination or findings are being made regarding past discharges of COPCs from CSOs. Past releases and their impact on the Study Area are being evaluated as part of the OU1 RI/FS, which is currently being conducted.

#### RESULTS OF THE REMEDIAL INVESTIGATION

The site has been extensively studied through the OU1 RI/FS process. The results of these studies will be detailed in the OU1 RI and FS reports. No new physical investigations of the site were conducted as part of OU2. Rather, the evaluations conducted to support the OU2 FFS relied upon data collected as part of the OU1 RI/FS.

#### **OU1 Study Area Investigation**

OU1 RI field work began in February 2012 and was substantially completed by May 2014. It was determined that additional data were needed, and these data were obtained as part of the OU1 FS so that preparation of the draft OU1 RI report could proceed. OU1 FS Field work began in Spring of 2017 and was substantially completed in 2019.

A draft OU1 RI report was initially submitted in November 2016, and a revised version was submitted in April 2019. EPA provided comments on the revised RI report in September 2019, and a revised document was submitted in June 2020 and is under review.

The OU1 RI/FS field work included the collection of a robust set of data that are being used to determine the nature and extent of contamination at the Study Area, develop the overall conceptual site model, and ultimately support the selection of an appropriate remedial alternative for OU1. These data include the following: sampling of sediment, surface water, porewater, groundwater, seepage, air, shoreline sediment/soil, biota tissue, point source discharges, non-point source discharges, non-aqueous phase liquid (NAPL), and ebullition (which in this context refers to the formation and migration of gas bubbles through sediment to the surface water column that could act as a contaminant transport mechanism); surveys of ecological communities and bathymetry; and testing of sediment toxicity, NAPL mobility, and geotechnical properties.

Samples were analyzed for a comprehensive list of contaminants, including volatile organic compounds, semi-volatile organic compounds, metals (total and dissolved), polychlorinated biphenyl (PCB) aroclors and congeners, dioxins/furans, and pesticides.

In addition, as part of the OU1 RI/FS, a complex set of inter-related models is being developed. The first two major components (the hydrodynamic and sediment transport models, which include groundwater and point-source sub-models) have been submitted with the draft RI report and are being refined. The remaining portions of the modeling framework (the contaminant fate and transport model and the bioaccumulation model) are still being developed and will be submitted as part of the draft FS report. As such, while development of the conceptual site model for OU1 is well underway, a full understanding of the entire system is still being developed. The draft OU1 FS report is currently scheduled for submittal in 2023.

#### Physical Characteristics of OU1 Study Area

Elevated concentrations of contamination were found throughout the Study Area. Much of this is due to historic inputs of contamination to the Creek. Contaminated sediment, in particular, is found in the surface and subsurface layers and in the underlying native sediment. Ongoing, external inputs of contamination to the Study Area include, but are not necessarily limited to, municipal separate storm sewer system outfalls (MS4s), the Newtown Creek waste water treatment plant treated effluent outfall, permitted industrial discharges, other permitted/non-permitted discharges, overland flow/direct drainage, groundwater, other non-point sources, the tidal effects of and contamination migration from the East River, atmospheric deposition, shoreline seeps/groundwater discharge from upland properties, and shoreline bank erosion, as well as the CSO discharges.

Representative samples from these inputs have been collected as part of the OU1 RI/FS process, providing sufficient data to develop quantitative estimates of the concentrations of hazardous substances entering the Creek from these sources and, where appropriate, the mass/volume.

In-Creek processes that may lead to the spread of this contamination within the Study Area include ebullition, sediment resuspension, and NAPL migration.

Point source discharges to the Study Area include over 300 private and municipal outfalls along the Creek and its tributaries. These point source discharges primarily supply freshwater flows to Newtown Creek during wet weather conditions and include individually permitted stormwater and wastewater discharges, CSO discharges, unpermitted discharges, and treated wastewater discharges from the Newtown Creek Treatment Plant. Stormwater runoff from roadways and overland flow are also discharged to the Creek.

#### **OU2 FOCUSED FEASIBILITY STUDY**

#### **Background of Operable Unit 2**

During wet weather conditions, the Creek receives discharges from point sources, which include CSOs and stormwater (municipal discharges and permitted and unpermitted private point source discharges), as well as from non-point sources, such as overland flow (see Figure 2 for some of these point source discharge locations). In addition to the discharges during wet weather, the Creek also receives freshwater inputs from groundwater. The groundwater enters the Creek through the sediment and from the upland properties adjacent to the Creek. The Creek experiences tidal exchanges with the East River twice daily. The East River and point sources are currently considered the primary sources of solids to the Creek.

Combined sewer systems are sewers that are designed to collect rainwater runoff, domestic sewage, and industrial wastewater in the same pipe. Under normal conditions, such a system transports all of the wastewater it collects to a sewage treatment plant for treatment, then discharges the treated effluent to a water body. The volume of wastewater can sometimes exceed the capacity of the combined sewer system or treatment plant (e.g., during heavy rainfall events or snowmelt). When this occurs, untreated stormwater and wastewater in excess of the treatment

capacity is discharged directly to nearby streams, rivers, and other water bodies through CSOs. For several decades, the control of CSOs to affect improvements in bacteria levels and dissolved oxygen concentrations in waterbodies has been driven by the Clean Water Act (CWA) regulatory programs, including EPA's CSO Control Policy (Section 402 (q) of the CWA), and the New York State Department of Environmental Conservation's (NYSDEC's) promulgation of numeric water quality standards for bacteria and dissolved oxygen. The control of CSOs has focused on volumetric reductions of CSO discharges to meet these standards.

CSO planning for Newtown Creek was initiated in 1990 via the Newtown Creek Water Quality Facility Planning Project. A Waterbody/Watershed Facility Plan for Newtown Creek was issued by NYCDEP and approved by NYSDEC in 2012. That plan included an analysis of operational and structural modifications targeting the reduction of CSOs and improvement of the overall performance of the collection and treatment system within the watershed. In 2017, NYCDEP developed a Combined Sewer Overflow Long Term Control Plan for Newtown Creek (LTCP) to identify, with public input, appropriate CSO controls necessary to achieve waterbody-specific water quality standards consistent with the Federal CSO Control Policy and related guidance. NYSDEC approved that LTCP in 2018. It is estimated that the LTCP will reduce the volume of CSO discharges to the Creek by approximately 61 percent from current baseline conditions.

While efforts to reduce the volume of CSO discharges have historically been focused on the CWA objectives, the volume reduction will also decrease the mass of site-related COPCs that are discharged to the Creek. The overall goal of the OU2 FFS was to determine if the volume controls laid out in the LTCP to meet the requirements of the CWA program are also sufficient to meet CERCLA requirements regarding the CSO discharges at the site.

As part of the OU1 RI/FS efforts, a robust point source sampling program was completed. Thirty-one point source discharges were sampled during 15 wet weather sampling events between June 2014 and December 2015. Samples were collected from CSOs, MS4s, highway drains, stormwater discharging from private properties, and permitted outfalls. Discharges from the CSO outfalls that were sampled accounts for approximately 96 percent of the volume of total CSO discharges to the Creek. Data from these sampling events were used in the OU2 FFS and provided a basis for the lines of evidence evaluation that was conducted. This data will also be incorporated into the ongoing RI/FS and modeling efforts being performed for OU1 at the site. In using a multiple lines of evidence approach in the OU2 FFS, EPA evaluated the volume control question as part of the decision-making process. This approach and the results of the evaluation are described in more detail below, as well as in the OU2 FFS.

#### **FFS Process**

The 2018 AOC between EPA and New York City specified that at least three alternatives should be evaluated in the FFS – no action, no further action (*i.e.*, acknowledging the assumption that the LCTP will be implemented by NYCDEP as per the administrative order between NYCDEP and NYSDEC), and 100 percent CSO control (*i.e.*, elimination of all discharges). Consideration of a "no action" alternative is required under federal regulation so as to establish a baseline. In order to evaluate these three alternatives, a multiple lines of evidence approach was developed,

as is described below. The 2018 AOC had the flexibility to allow, if appropriate based on the results of this evaluation, the inclusion of an additional alternative that could include a greater percentage of volume control, such as something more than the 61 percent reduction anticipated by the LTCP and yet less than 100 percent reduction.

#### **Multiple Lines of Evidence Evaluation**

As mentioned above, the OU1 RI/FS is ongoing, and as such the preliminary remediation goals for the Study Area have not yet been developed. Because there are no remedial goals by which to evaluate the performance of the alternatives evaluated in the OU2 FFS, a multiple lines of evidence approach was used to assess the relative performance of each of the alternatives and to support remedy selection.

Three lines of evidence (LOEs) were evaluated, as described below:

**LOE 1:** comparison of the particulate-phase concentrations of COPCs in CSO discharges to the particulate-phase concentrations in other potential sources of contamination to the Creek;

**LOE 2:** comparison of the mass loading of COPCs from CSO discharges to the mass loading of COPCs from other potential sources of contamination to the Creek; and

**LOE 3:** assessment of the impact of COPCs from CSO discharges on the sediment bed of the Creek assuming that a CERCLA remedy for the entire Study Area has been implemented. This LOE was based on a relatively simple series of models that were developed for use only in the OU2 decision process to determine the resultant concentration of COPCs in the surface sediment from CSO discharges and from other potential sources of contamination to the Creek.

The COPCs used in these evaluations are consistent with those that have been determined to be contributing unacceptable risk to human and ecological receptors for the Study Area as part of the OU1 RI/FS process, as described in the Summary of Site Risks section of this Record of Decision. These COPCs are total polycyclic aromatic hydrocarbons (TPAH17, with 17 referring to the number of individual compounds included in the total), total polychlorinated biphenyls (TPCBs), copper, dioxin/furans, and lead.

The data used in evaluating the LOEs were all obtained as part of the OU1 RI/FS process. In particular, data collected from the following categories of potential sources of contamination to the Study Area were used in the LOE evaluations:

- CSO discharges a total of 20 samples were collected from seven CSO outfalls that are representative of approximately 96 percent of the total CSO discharge volume to the Creek;
- Stormwater discharges 47 samples were collected from MS4s, private properties, highway drains, and other stormwater outlets;
- Treated discharges up to 23 samples were collected from wastewater treated effluent, permitted discharges from groundwater treatment systems, and treated discharges from industrial facilities:
- East River up to 87 samples were collected from the East River; and

• Atmospheric deposition – regional data from various publicly available sources were evaluated.

These potential sources are referred to as the CSO discharges and the "other evaluated inputs" in the OU2 FFS. As described in the "Physical Characteristics of the OU1 Study Area" portion of this ROD, note that these other evaluated inputs do not represent all potential sources of COPCs to the Study Area.

#### **Multiple Lines of Evidence Evaluation Results**

A summary of the results of this evaluation is described below. More details about the evaluation can be found in the OU2 FFS report.

#### LOE 1: Comparison of Concentrations

For LOE 1, the particulate-phase COPC concentrations in CSO discharges to the Study Area were compared to the particulate-phase COPC concentrations in other evaluated inputs to the Study Area. Because the volume of discharges from the CSOs were considered in the alternatives, but not the concentration of COPCs in those discharges, it was not necessary to evaluate each alternative separately through this LOE. Figures 3a to 3e show the results of the LOE 1 comparisons for each of the COPCs.

Overall, LOE 1 revealed that the measured concentrations of COPCs on solids in CSO discharges are generally within the range of concentrations measured on solids from the other evaluated inputs. For each COPC, the average concentrations detected in CSO solids were lower than the average from stormwater solids and greater than the average from treated discharges and the East River.

#### LOE 2: Comparison of Loadings

Contaminant loading is defined as a unit of mass over a unit of time (*e.g.*, kilogram/year). The loading for each COPC was calculated using data on the flow rate of each evaluated input into the Study Area and the associated concentration of COPCs in that input. The COPC loading from CSO discharges was compared to the loading from other evaluated inputs to the Study Area. Figures 4a to 4e show the results of the LOE 2 comparisons for each of the COPCs.

Overall, LOE 2 revealed that the loading from CSOs is generally similar to or less than the loading from the other evaluated inputs. For TPAH17, the largest loading to the Study Area comes from treated discharges, whereas the East River supplies the largest loading of TPCBs, copper, and lead as compared to the other evaluated inputs. The greatest loading of dioxins/furans is estimated to come from atmospheric deposition.

## LOE 3: Post-Remediation Assessment of the Impact of CSOs on the Study Area through Modeling

The third LOE involved the application of a suite of numerical models designed to simulate the fate and transport of contaminants in Newtown Creek. The models were used to predict resultant

COPC concentrations as a result of recontamination from CSO discharges and a subset of the other evaluated inputs based on a hypothetically remediated sediment bed starting with a concentration of zero for each COPC. This modeling was specifically designed to evaluate hypothetical future scenarios for comparison of the OU2 FFS alternatives only, and it should not be applied to other operable units of the site. Specific assumptions included in the modeling efforts make it applicable to only this distinct OU2 evaluation. Although the OU1 dataset was used for the purposes of the OU2 analysis, modeling efforts as part of OU2 are separate from the modeling being performed for OU1 of the site, which is still ongoing. As mentioned above, a separate and comprehensive set of models is being developed as part of the OU1 RI/FS process, with EPA oversight, to support the OU1 remedy selection process.

The modeling framework used for the OU2 FFS included a point source model, groundwater seepage estimates, a hydrodynamic model, a combined eutrophication and sediment transport model, and a chemical fate and transport model. As an overview, the point source model calculated flows to the Creek from CSO discharges, stormwater runoff, and overland flow from upland properties. Flows calculated using the point source model along with horizontal and vertical groundwater seepage rates were then used in the hydrodynamic model. The hydrodynamic model calculated water column transport and mixing, and this information was used in the eutrophication/sediment transport and chemical models. The eutrophication/sediment transport model used nutrient, organic carbon, and sediment loadings (from point sources and the East River) along with the results of the hydrodynamic model to calculate the fate and transport of algae, organic carbon, and sediments, and this was used in the chemical model. Finally, the chemical model used chemical loadings (from point sources, the East River, and other inputs) along with the results of the hydrodynamic and eutrophication/sediment transport models to calculate the fate and transport of COPCs. Additional details about the OU2 modeling that was conducted, including inputs, outputs, and functions of each of these models, can be found in the OU2 FFS and its Appendices. Taken together, and subject to the assumptions and performance of the various models, the modeling framework sought to calculate the transport of COPCs originating from various sources and the deposition of COPCs to the sediment bed in the Creek.

Figures 5a and 5b show the comparison of the modeled surface weighted average concentration of each of the three primary COPCs (TPAH17, TPCBs, and copper) versus the percent reduction of discharge from CSOs. The graphs show that even 100 percent control of CSO discharge (*i.e.*, the elimination of all discharges) has a minimal impact on the resultant concentrations in the sediment of the Study Area. The modeling includes inputs from the East River, other point sources, and groundwater. The results of the modeling indicate that even with 100 percent CSO control, post-remediation sediment bed concentrations do not approach zero because of the inclusion of these other inputs.

#### **Conclusions of FFS**

In summary, the multiple LOE evaluation, based on data from the OU1 RI/FS, shows that (i) the measured concentrations of COPCs on solids in the CSO discharges are generally within the range of concentrations measured on solids from the other evaluated inputs; (ii) loading from

CSOs is generally similar to or less than the loading from the other evaluated inputs; and (iii) that even 100 percent control of CSO discharges has minimal impact on the resultant sediment bed concentrations of COPCs that are a result of recontamination from the other evaluated inputs when starting with a hypothetically clean sediment bed.

Taken together, this evaluation shows that evaluation of an alternative that would achieve a reduction in CSO discharges in the range between no further action (estimated at 61 percent) and a 100 percent reduction/volume control is not necessary because it would not lead to any significantly different conclusions, based on the existing data. Note, however, that the comparisons conducted were all considered relative to each other, which means that if conditions change over time, the conclusions drawn could potentially change. For example, if the concentration of COPCs in the CSO discharge were to increase significantly over time, or if the volume of CSO discharge were to increase significantly over time, thus increasing the loading of COPCs to the system, then the conclusions of the multiple LOE evaluation conducted may need to be re-evaluated. As such, monitoring of all inputs to the system should continue to some extent, either as part of this decision or a future remedial decision.

Note also that re-evaluation of the conclusions herein would not necessarily be triggered if, as per the requirements of the CWA, the LTCP itself were modified. This is because the LOE evaluation shows that, based on current conditions, the amount of volume control has minimal impact on sediment concentrations in the Creek on a relative basis. In the OU1 remedy selection process EPA will evaluate the impacts of all evaluated inputs to the system, including CSOs, on a discrete rather than a relative basis, and additional actions may be determined to be needed for some or all of these inputs.

#### CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES

The site is located within the Newtown Creek SMIA, one of six designated SMIAs in New York City. The Newtown Creek SMIA, at over 780 acres, is the largest in New York City, and it includes portions of the Greenpoint, Williamsburg, Long Island City, and Maspeth industrial areas. The predominant land use in the Newtown Creek area remains industrial with smaller areas of commercial and residential development.

The water in Newtown Creek is currently classified by the NYSDEC as Class SD, saline surface water, with a protected use of fish survival only. The Creek does not presently meet parameters for that protected use (e.g., because of low dissolved oxygen). While the above-mentioned maritime industrial activities are expected to continue into the future, the Creek is also used for recreational uses, including kayaking and canoeing, and there are a limited number of existing and planned waterfront access points. Despite a New York State Department of Health fish advisory to limit fishing in Newtown Creek, posted warnings, and public outreach efforts, fishing and crabbing by residents have been observed on the Creek.

#### SUMMARY OF SITE RISKS

#### **OU1 Risk Assessments**

As part of the OU1 RI/FS process, baseline human health and ecological risk assessments were conducted, and the reports have been approved by EPA. The assessments found unacceptable risk to both human health and the environment. A separate risk assessment was not completed for OU2.

The Baseline Human Health Risk Assessment (BHHRA) for OU1 was approved in June 2017. The results revealed that unacceptable risks associated with ingestion of fish and crab from the Creek exist. The contaminants of potential concern identified in the BHHRA were total non-dioxin-like PCB congeners, total PCB toxicity equivalences (TEQs), and total dioxin/furan TEQs.

The Baseline Ecological Risk Assessment (BERA) for OU1 was approved in September 2018. Overall, the results of the BERA indicate that Study Area sediment, particularly in the Turning Basin and most of the tributaries, is toxic to benthic invertebrates and presents exposure risks for bivalves, blue crabs, fish, and birds. The primary contaminants leading to unacceptable risk were PAHs, PCBs, and copper, with additional risk from dioxins/furans and lead.

Because unacceptable risk was identified in the OU1 risk assessments, there is a basis to evaluate appropriate remedial actions at the site. The OU1 FS, which is underway, will evaluate alternatives for the comprehensive remediation of the entire Study Area.

#### **OU2 Risks**

As is noted above, no separate risk analyses were conducted as part of the OU2 FFS process. The COPCs identified in the OU1 BHHRA and BERA are the COPCs that were evaluated in the OU2 FFS. Therefore, the full list of contaminants evaluated in detail in the OU2 FFS includes TPAH17, TPCBs, copper, dioxin/furans, and lead.

Although remedial action objectives and remedial goals are not needed for the selection of a no further action remedy, the objective developed for the OU2 FFS and Proposed Plan is restated below. This objective helps to further clarify the limited scope of OU2 as well as the appropriateness of the selected alternative.

• To minimize, to the extent practicable, inputs of the site-identified compounds to Newtown Creek from CSO outfalls that may add contamination to the Study Area.

The evaluation conducted as part of the FFS demonstrated that additional reduction in CSO discharge volume, beyond that required by the LTCP, would lead to a relatively small decrease in the resultant concentrations in the sediment of the Study Area. Furthermore, the conclusions of the evaluation indicate that the commensurate reduction in the concentration of COPCs in sediment would be not significant. When considered together, the LOE analysis supports a conclusion that additional volume control of CSO discharges will not significantly reduce risks or change the level of protectiveness. Therefore, the evaluation supports the conclusion that the

CSO volume control set forth in the LTCP to be implemented by NYCDEP is sufficient, and no further CSO volume-reduction measures beyond the implementation of the LTCP are required.

To ensure the assumptions made in reaching this conclusion remain valid, monitoring will be required at least until a monitoring component is subsumed into any future monitoring requirements that may be required as a result of future remedial decisions for the site. The monitoring will include analysis of discharge from at least the four major CSOs, including outfalls NCB-015, NCB-083, NCQ-077, and BB-026, for the identified COPCs at the site, as well as the review of readily obtainable, watershed-wide metrics such as discharge volumes to the Creek and frequency of CSO overflows. It is expected that the monitoring will initially be conducted quarterly, to the extent possible, for two years to account for potential seasonal and temporal differences in the concentrations of COPCs in the CSO discharge. The frequency and components of monitoring may then be adjusted, if appropriate, based on the sampling results.

If the monitoring reveals significant changes in the system that affect the underlying assumptions in the analysis performed to support this remedial decision, additional mitigation measures may be required. These measures might include a track-back program to determine if additional uplands controls, through either regulatory or engineering means, is necessary. Measures may also include actions related to the discharge of solids from CSOs, such as end-of-pipe solids capture, end-of-pipe oil capture, and/or in-Creek maintenance dredging, if determined to be necessary. Any decisions regarding these potential additional actions would be memorialized in a future decision document. If the LTCP were not to be implemented as assumed in making this decision, then the No Further Action decision would be revisited.

The evaluation conducted in reaching this decision supports the conclusion that the selected remedy of No Further Action for this portion of the site will be protective of human health and the environment. If conditions in the future reveal this not to be the case, those conditions can be addressed in future decision documents for the site.

#### **DOCUMENTATION OF SIGNIFICANT CHANGES**

The Proposed Plan for OU2 of the site was released for public comment on November 21, 2019. The Proposed Plan identified No Further Action as the preferred alternative for current and reasonably anticipated future discharges of the COPCs from CSOs to the Newtown Creek Study Area. EPA reviewed all comments received during the public comment period. During the public comment period, the goals set forth in the Proposed Plan for the long-term monitoring program were further discussed by EPA and NYSDEC, including considering whether to monitor to establish a robust baseline dataset of CSO discharges of COPCs and so as to determine whether there are significant variations of COPC loadings discharging from the four major CSO outfalls to Newtown Creek. Therefore, in consultation with NYSDEC, it was decided that the CSO monitoring program specified in the Proposed Plan will be reviewed periodically to allow for modifications of the monitoring program, if appropriate, based on the data.

## APPENDIX 1

## **FIGURES**

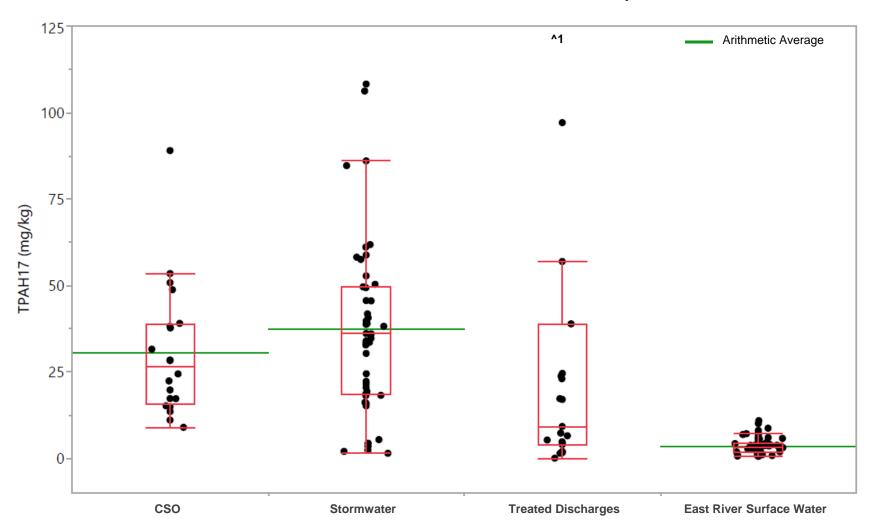
Figure 1 – Newtown Creek Site Location



Figure 2 – Newtown Creek CSO and Outfall Locations



Figure 3a - Comparison of Particulate Concentrations in CSOs with Particulate Concentrations from Other Evaluated Inputs TPAH17



Note: Average concentration of TPAH17 in treated discharges is 2,056 mg/kg, which is outside the scale of the figure.

Figure 3b - Comparison of Particulate Concentrations in CSOs with Particulate Concentrations from Other Evaluated Inputs TPCBs

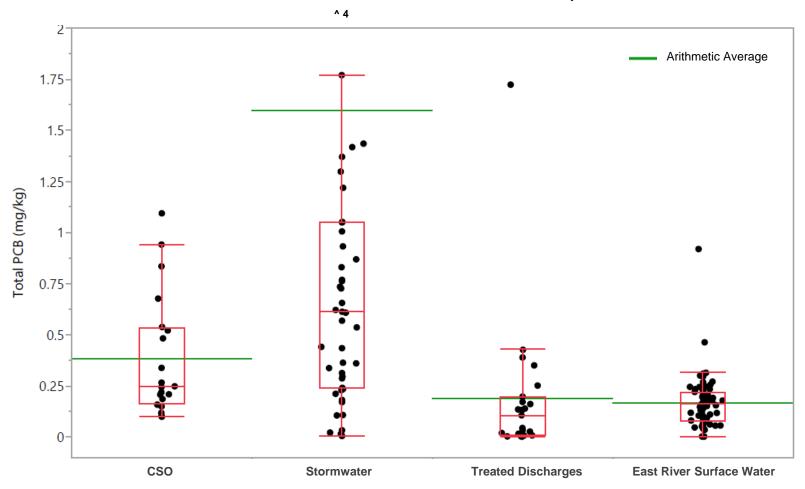


Figure 3c - Comparison of Particulate Concentrations in CSOs with Particulate Concentrations from Other Evaluated Inputs Copper

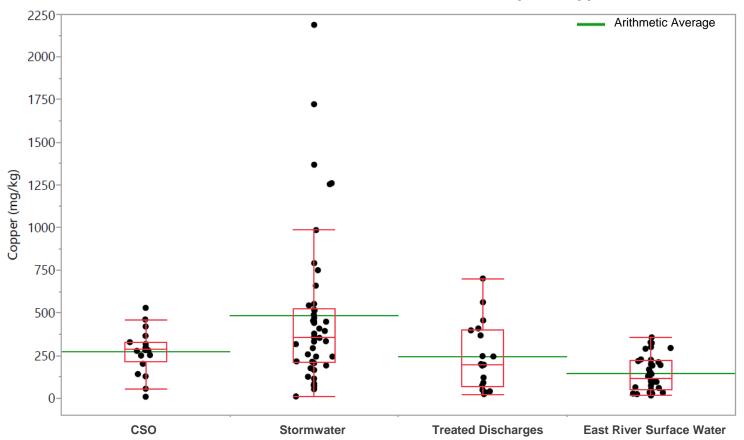


Figure 3d - Comparison of Particulate Concentrations in CSOs with Particulate Concentrations from Other Evaluated Inputs Lead

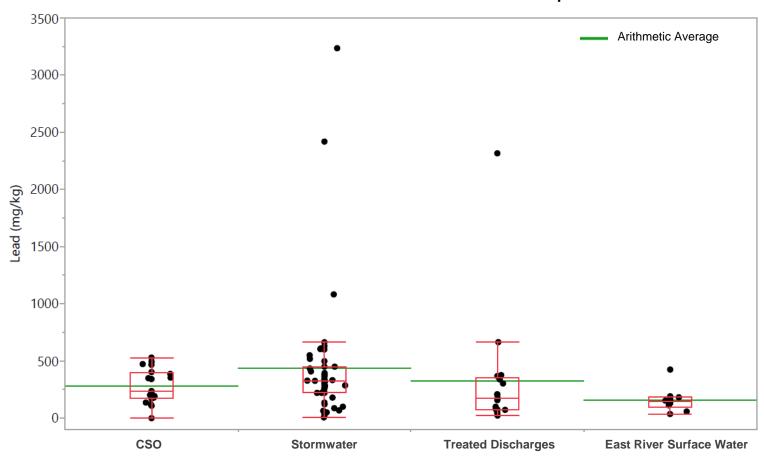
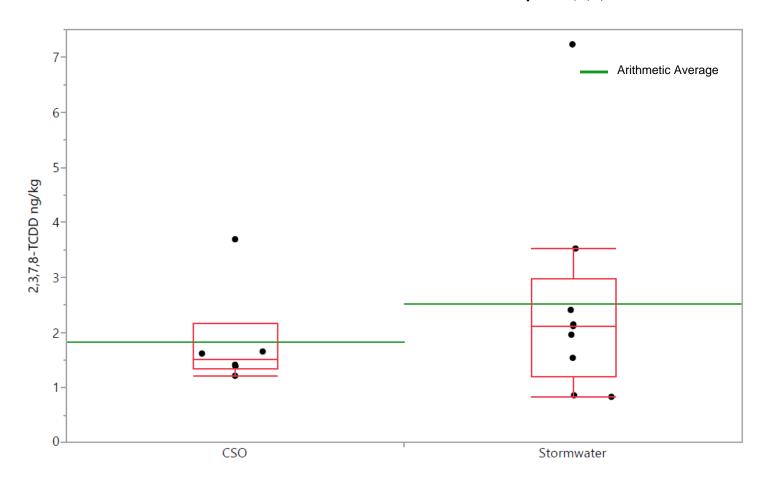


Figure 3e - Comparison of Particulate Concentrations in CSOs with Particulate Concentrations from Other Evaluated Inputs 2,3,7,8-TCDD



#### Notes:

- 1) Due to a large number of non-detected samples in CSOs and other elevated inputs, the figure shows the comparison for detected samples only.
- 2) For East River and treated discharges, only one sample was detected, therefore box plots are not shown for these sources.
- 3) Statistical comparison is conducted only for detected samples.

Figure 4a - Comparison of TPAH17 Loads from CSOs and Other Evaluated Inputs to the Study Area

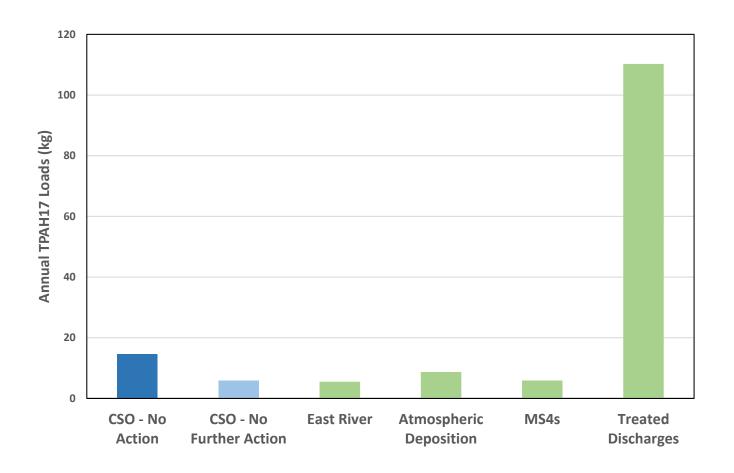


Figure 4b - Comparison of TPCB Loads from CSOs and Other Evaluated Inputs to the Study Area

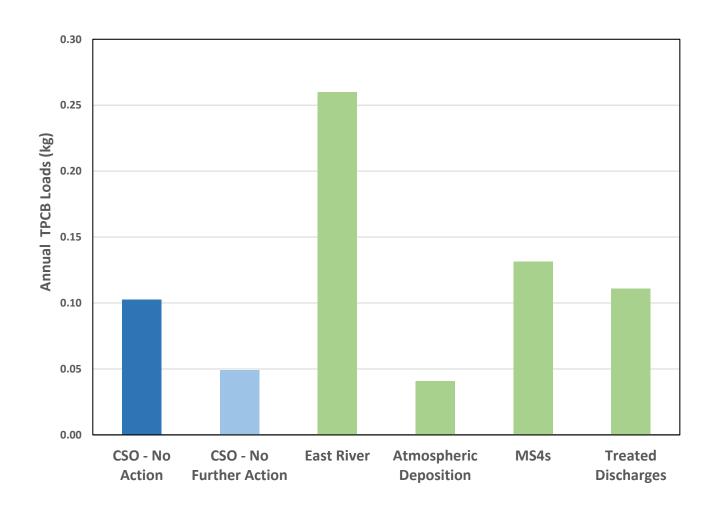


Figure 4c - Comparison of Copper Loads from CSOs and Other Evaluated Inputs to the Study Area

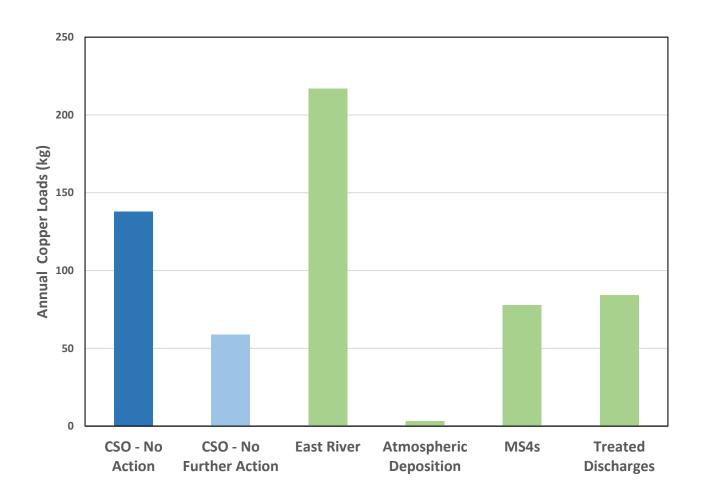


Figure 4d - Comparison of Lead Loads from CSOs and other Evaluated Inputs to the Study Area

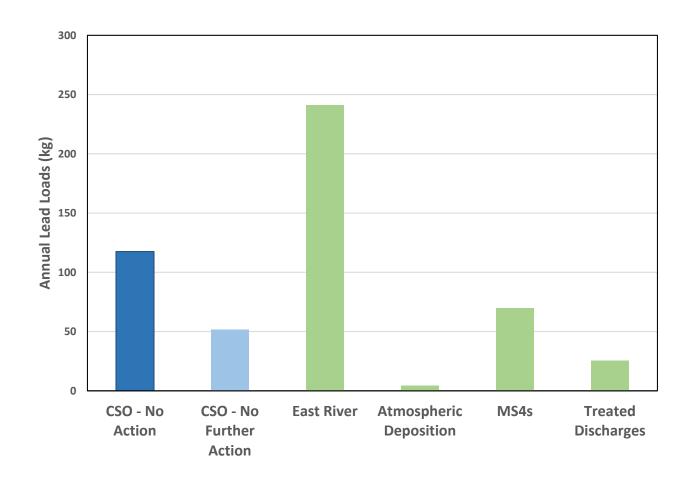


Figure 4e - Comparison of 2,3,7,8-TCDD Loads from CSOs and other Evaluated Inputs to the Study Area

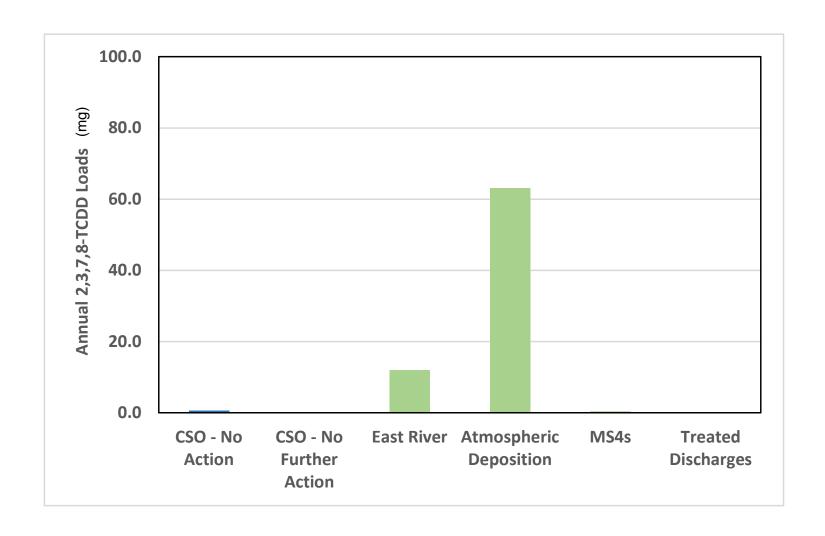
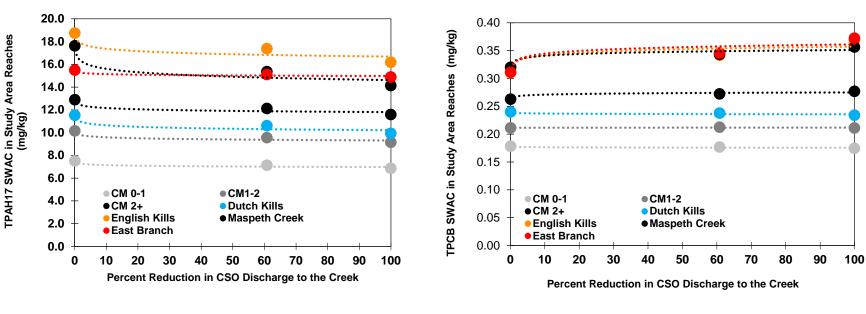


Figure 5a - Comparison of Newtown Creek Modeled SWACs with Percent Reduction in CSO Discharge



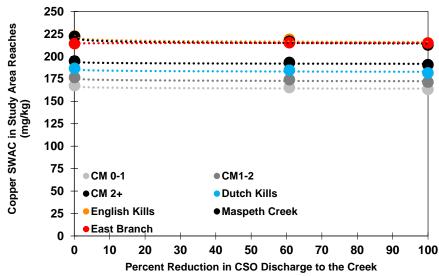
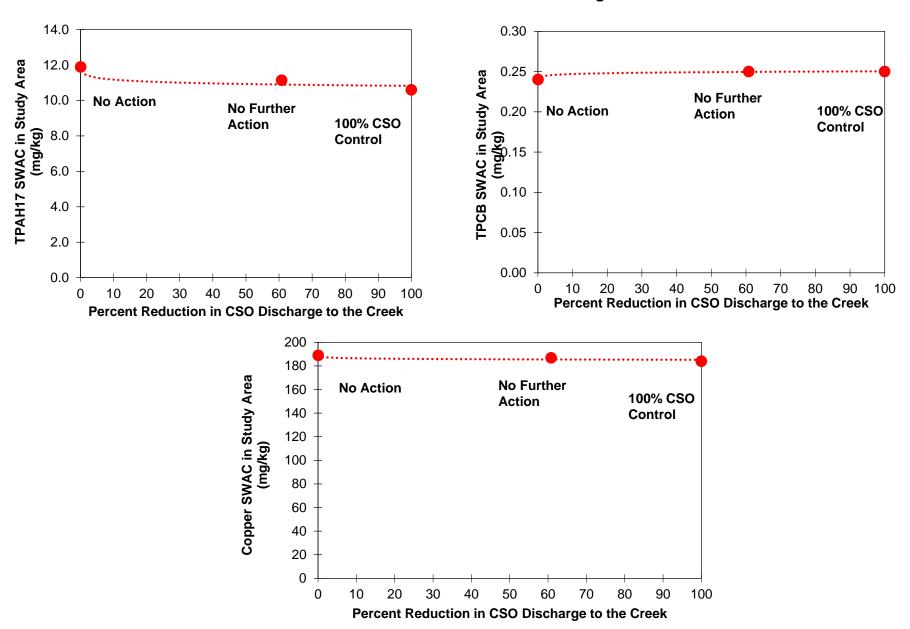


Figure 5b - Comparison of Newtown Creek Modeled SWACs - Study Area Wide with Percent Reduction in CSO Discharge



## APPENDIX 2

## ADMINISTRATIVE RECORD INDEX

## ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL 11/20/2019

**REGION ID: 02** 

Site Name: NEWTOWN CREEK CERCLIS ID: NYN000206282

OUID: 02 SSID: A206 Action:

DocID:	Doc Date:	Title:	Image Count:		Addressee Name/Organization:	Author Name/Organization:
538253	11/20/2019	ADMINISTRATIVE RECORD INDEX FOR OU2 FOR THE NEWTOWN CREEK SITE	2	Administrative Record Index		(US ENVIRONMENTAL PROTECTION AGENCY)
109610	07/07/2011	ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY, U.S. EPA Region 2, CERCLA Docket No. CERCLA-02-2011-2011, Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response,	63	Legal Instrument		EPA (NONE)
503866	06/20/2017	BASELINE HUMAN HEALTH RISK ASSESSMENT WITH ATTACHMENTS A1 AND ATTACHMENTS B TO K FOR THE NEWTOWN CREEK SITE	969	Report		(ANCHOR QEA)
503867	06/20/2017	BASELINE HUMAN HEALTH RISK ASSESSMENT ATTACHMENTS A2 TO A6 FOR THE NEWTOWN CREEK SITE	10636	Report		(ANCHOR QEA)
541451	06/30/2017	COMBINED SEWER OVERFLOW LONG TERM CONTROL PLAN FOR OU2 FOR THE NEWTOWN CREEK SITE	382	Work Plan		(NYSDEC)
541450	06/27/2018	NYSDEC APPROVAL OF THE DRAINAGE BASIN SPECIFIC LONG TERM CONTROL PLAN FOR OU2 FOR THE NEWTOWN CREEK SITE	6	Letter		DIMURA,JOSEPH (NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION)
541452	10/10/2018	COMBINED SEWER OVERFLOW LONG TERM CONTROL PLAN - REVISED APPENDIX D: SUPPLEMENTAL DOCUMENTATION FOR OU2 FOR THE NEWTOWN CREEK SITE	118	Work Plan		(NYSDEC)

## ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL 11/20/2019

**REGION ID: 02** 

Site Name: NEWTOWN CREEK CERCLIS ID: NYN000206282

OUID: 02 SSID: A206 Action:

DocID:	Doc Date:	Title:	Image Count:	Doc Type:	Addressee Name/Organization:	Author Name/Organization:
544529	10/31/2018	FINAL BASELINE ECOLOGICAL RISK ASSESSMENT REMEDIAL INVESTIGATION/FEASIBILITY STUDY FOR THE NEWTOWN CREEK SITE	828	Report		(ANCHOR QEA)
570213	10/31/2018	FINAL BASELINE ECOLOGICAL RISK ASSESSMENT - ATTACHMENTS A01 - A03 FOR THE NEWTOWN CREEK SITE	1675	Report		(ANCHOR QEA)
570214	10/31/2018	FINAL BASELINE ECOLOGICAL RISK ASSESSMENT - ATTACHMENTS A04-A4a FOR THE NEWTOWN CREEK SITE	478	Report		(ANCHOR QEA)
570215	10/31/2018	FINAL BASELINE ECOLOGICAL RISK ASSESSMENT - ATTACHMENTS A04-A4b FOR THE NEWTOWN CREEK SITE	1565	Report		(ANCHOR QEA)
570218	10/31/2018	FINAL BASELINE ECOLOGICAL RISK ASSESSMENT - ATTACHMENTS B - G FOR THE NEWTOWN CREEK SITE	673	Report		(ANCHOR QEA)
528368	12/14/2018	ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR FOCUSED FEASIBILITY STUDY FOR OU2 - CERCLA DOCKET NO. CERCLA-02-2018-2020 FOR RESPONDENT, CITY OF NEW YORK FOR THE NEWTOWN CREEK SITE	54	Legal Instrument		SAPIENZA, VINCENT (NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION)

## ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL 11/20/2019

**REGION ID: 02** 

Site Name: NEWTOWN CREEK CERCLIS ID: NYN000206282

OUID: 02 SSID: A206 Action:

DocID:	Doc Date:	Title:	Image Count:	Doc Type:	Addressee Name/Organization:	Author Name/Organization:
573695		FOCUSED FEASIBILITY STUDY WORK PLAN CERCLA DOCKET NO. CERCLA-02-2018-2020 FOR OU2 FOR THE NEWTOWN CREEK SITE	51	Work Plan		
<u>562696</u>		FOCUSED FEASIBILITY STUDY FOR OU2 FOR THE NEWTOWN CREEK SITE	225	Report		(US ENVIRONMENTAL PROTECTION AGENCY)
562695		PROPOSED PLAN FOR OU2 FOR THE NEWTOWN CREEK SITE	27	Publication		(US ENVIRONMENTAL PROTECTION AGENCY)

# **APPENDIX 3**

# STATE LETTER

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Office of the Director 625 Broadway, 12th Floor, Albany, NY 12233-7011 P: (518) 402-9706 | F: (518) 402-9020 www.dec.ny.gov

September 14, 2020

Mr. Pat Evangelista Division Director Superfund and Emergency Management Division USEPA Region II 290 Broadway, 19<sup>th</sup> Floor New York, NY 10007-1866

Re: Record of Decision

Newtown Creek Operable Unit 2 Early Action

NYSDEC Site No. 241117

NYN000206282 New York City

Dear Mr. Evangelista:

The New York State Department of Environmental Conservation (NYSDEC), has reviewed the Superfund Record of Decision, including the Responsiveness Summary prepared by the United States Environmental Protection Agency (USEPA) for an Early Action to address Operable Unit 2 of the Newtown Creek Superfund Site located between the boroughs of Brooklyn and Queens in New York City.

The selected remedy for this OU includes components of the Newtown Creek Long Term Control Plan (LTCP) approved by NYSDEC in 2018 to reduce the volume of combined sewer overflows (CSOs) entering the Newtown Creek Estuary. The selected remedy is a "No Further Action" remedy that acknowledges New York City's responsibilities under the LTCP to New York State and Clean Water Act authorities. The reduction in CSO volume to the Newtown Creek estuary achieved by this early action is estimated to be approximately 63% of the currently accepted annual estimated volume of CSO discharge and is consistent with the remedial action objective to minimize inputs of site-identified compounds from CSO outfalls. CSO contribution to Newtown Creek will be reduced through the construction of a storage tunnel and pump station(s).

NYSDEC recognizes that under the early action, a CSO monitoring program will be required until subsumed by the monitoring requirements of future decision documents and be conducted quarterly for an initial period of two years. Data from the monitoring program will be used to detect significant variations of COPC concentrations to Newtown Creek from the four major outfalls. NYSDEC understands that the approved monitoring program will be reviewed periodically to allow for modifications to improve



data quality and program efficiency. NYSDEC further understands that, where justified and appropriate, system models may be incorporated into the monitoring program. The Department acknowledges the OU2 early action is being implemented prior to establishing remedial goals for the entire site. NYSDEC will continue to assist in the evaluation of applicable monitoring data and model outputs relevant to this action, as well as, remaining fully engaged in the Newtown Creek RIFS for other current and future operable units.

Accordingly, NYSDEC concurs with the alternative selected by USEPA with the above understanding of the scope of the monitoring program and with assurance from EPA of a consultative role in the development and periodic review of the program. If you have any questions, please contact me at (518) 402-9706.

Sincerely,

Michael J. Ryan. P.I

Director

Division of Environmental Remediation

Ec: D. Garbarini, EPA

P. Mannino, EPA

I. Fredricks, EPA

J. Prince, EPA

S. Vaughn, EPA

S. Edwards, NYSDEC

I. Beilby, NYSDEC

J. O'Connell, NYSDEC

S. Crisafulli, NYSDEC

P. Foster, NYSDEC

C. Vooris, NYSDOH

S. McLaughlin, NYSDOH

S. Surani, NYSDOH

# **APPENDIX 4**

# RESPONSIVENESS SUMMARY

### RESPONSIVENESS SUMMARY Newtown Creek Superfund Site Operable Unit 2 Brooklyn, Queens, New York

#### **INTRODUCTION**

This Responsiveness Summary provides a summary of the public's comments and concerns regarding the Proposed Plan for Operable Unit 2 (OU2) of the Newtown Creek Superfund site (site), and the U.S. Environmental Protection Agency's (EPA's) responses to those comments. All comments summarized in this document have been considered in EPA's decision for the selection of a remedy for OU2 at the site under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

This Responsiveness Summary is divided into the following sections:

I. BACKGROUND ON COMMUNITY INVOLVEMENT AND CONCERNS

This section provides the history of community involvement and interests regarding the site.

II. COMPREHENSIVE SUMMARY OF MAJOR QUESTIONS, COMMENTS, CONCERNS, AND RESPONSES

This section contains summaries of written and verbal comments received by EPA at the two public meetings and during the public comment period, and it contains EPA's responses to these comments.

The last section of this Responsiveness Summary includes attachments which document public participation in the remedy selection process for this site. They are as follows:

**Attachment A** contains the Proposed Plan that was distributed to the public for review and comment; and

**Attachment B** contains the public notices that appeared in five prominent local newspapers: Brooklyn Daily Eagle, Queens Courier, El Diario, Nowy Dziennik, and Sing Tao. This includes the public notices also posted in the newspapers for the two extensions of the public comment period. The first public notice was published on November 21, 2019, and the following notices were published on December 12, 2019 and January 16, 2020, respectively. The notices were published in English, as well as in Spanish, Polish, and Chinese for the non-English speaking communities surrounding Newtown Creek (hereinafter, Newtown Creek or the Creek); and

Attachment C contains the public comments received during the public comment period; and

**Attachment D** contains the transcripts of the two public meetings held on December 9, 2019 at the Sunnyside Community Service Center, Queens, New York, and December 11, 2019 at P.S. 110 in Brooklyn, New York.

#### I. BACKGROUND ON COMMUNITY INVOLVEMENT AND CONCERNS

Since the inclusion of the site on the National Priorities List in 2010, public interest in the site has been high. EPA has strongly encouraged and received public input throughout the history of the site. A Community Involvement Plan was updated and re-published in 2017 by EPA. This 2017 Community Involvement Plan outlined specific outreach tools to facilitate communication with the community in the decision-making process and to solicit public input on site activities. The Community Involvement Plan includes outreach tools to ensure a transparent and accessible decision-making process and meaningful community stakeholder participation.

In 2011, EPA provided Technical Assistance Services for Communities (TASC) support to assist in the formation of the Newtown Creek Community Advisory Group (CAG). The TASC contract provides administrative, organizational, and technical support to the CAG. TASC also provides technical assistance/capacity building services to the CAG with administrative activities and procedural support, as well as a neutral facilitator to provide services to assist the CAG in planning, conducting meetings, and focusing their technical assistance needs.

The CAG has been the primary community-based group serving as a liaison between EPA and the community and has been meeting regularly, typically monthly, since 2011. The CAG holds its meetings in the surrounding community and serves in a technical review and advocacy capacity on behalf of the community. The CAG membership includes representatives from local businesses, environmental organizations, community residents, and other interested parties from Brooklyn and Queens. The CAG regularly engages local and social-media outlets to ensure project information is broadcast widely. In addition, the CAG maintains a webpage and an email list to disseminate project-related information, including the dates of upcoming meetings and milestones.

Since well before OU2 of the site was initiated, the CAG has expressed reservations about the adequacy of the Long-Term Control Plan (LTCP) that New York City Department of Environmental Protection (NYCDEP) is under order by New York State Department of Environmental Conservation (NYSDEC) to implement, as per the requirements of the Clean Water Act. The primary purpose of OU2 is to evaluate whether the volume controls in the LTCP are adequate, for Superfund purposes, to control the current and reasonably anticipated future discharges of chemicals of potential concern (COPCs) from combined sewer overflows (CSOs) to Newtown Creek<sup>1</sup>. In conducting the focused feasibility study (FFS) for OU2, EPA did not in

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<sup>&</sup>lt;sup>1</sup> EPA will determine in future decision documents whether additional CSO-related control actions, either in-Creek or at CSO points-of-discharge, are required to meet the remedial action objectives of the overall site, which are yet

any way evaluate the adequacy of the LTCP in meeting the Clean Water Act needs of the Creek. However, based on its ongoing relationship with the CAG, the EPA Superfund program was aware that evaluations related to the LTCP would be of significant concern to the community. As such, at a meeting on November 14, 2018, prior to any formal agreement with NYCDEP, EPA first mentioned to the CAG the idea of adding what would become OU2 of the site. On February 20, 2019 at one of the monthly CAG meeting, EPA presented the objectives, scope, and process of the OU2 response action selection process. Updates on the status of OU2 were then provided at every CAG meeting prior to the release of the Proposed Plan on November 21, 2019.

On November 21, 2019, EPA released the Proposed Plan for OU2 and supporting documentation for this action to the public for review and comment. EPA made the documents available to the public in the administrative record repository maintained online at <a href="https://www.epa.gov/superfund/Newtown-creek.">https://www.epa.gov/superfund/Newtown-creek.</a>

EPA published a notice of availability of the Proposed Plan and the administrative record for the OU2 decision in the five local newspapers listed above and opened the public comment period on November 21, 2019. The comment period was initially scheduled to end on December 23, 2019. During the comment period, the CAG requested two extensions, both of which were granted. EPA extended the public comment period initially by 30 days, until January 23, 2020, and then by another 30 days, so that the public comment period closed on February 28, 2020. Notices regarding both extensions were published in the newspapers listed above.

A public meeting was held on December 9, 2019, at the Sunnyside Community Service Center, 43-31 39<sup>th</sup> Street, Queens, New York, and a second public meeting was held on December 11, 2019 at P.S. 110, 124 Monitor Street, Brooklyn, New York. The purpose of these meetings was to inform residents, local officials, and interested citizens about the Superfund process, to discuss the Proposed Plan and receive comments on the Proposed Plan, and to respond to questions from area residents and other interested parties.

The sign-in sheets reveal that 25 people attended the December 9, 2019 public meeting and 33 people attended the December 11, 2019 public meeting, not including federal and state officials. The meetings' attendees included residents, interest groups, local business representatives, elected officials, and representatives of NYCDEP.

Over the course of the public comment period, EPA received written comments from five elected officials, one appointed community board, six public organizations, one public school, NYCDEP, the Newtown Creek Group (NCG, which is a group of private parties identified as potentially liable under CERCLA to address conditions at the site), and 73 individuals, as well as verbal comments provided during the two public meetings. The transcripts of the public meetings

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to be determined. Such additional control actions, if necessary, would be implemented through the selection of a future response action. In addition, in addressing OU2, EPA makes no determinations or findings regarding past discharges of COPCs from CSOs. Past releases and their impact on the Study Area are currently being evaluated as part of the ongoing OU1 remedial investigation/feasibility study.

and copies of all written comments received are found in Attachments C and D, respectively. A summary of comments and questions received during the meetings and throughout the comment period are provided in the following section, along with EPA responses.

# II. <u>COMPREHENSIVE SUMMARY OF MAJOR QUESTIONS, COMMENTS, CONCERNS AND RESPONSES</u>

#### Part 1: Written Comments

A comment letter (via electronic format) was submitted by the CAG. Several additional letters were received that were in support of the CAG's comments. Those sending letters supporting the CAG's letter included the following: 64 members of the community; New York State Assemblywoman Catherine Nolan, New York State Senator Julia Salazar, New York City Council Member Stephen Levin, and New York State Assemblyman Joseph Lentol; Community Board 2; and several organizations including Hunters Point Parks Conservancy, Hunters Point Civic Association, North Brooklyn Neighbors, and Stormwater Infrastructure Matters Coalition. In addition, Riverkeeper voiced its support of the CAG's comments and also offered some additional comments that are also discussed and responded to herein.

1. The CAG commented that EPA has a responsibility to address all pollution sources to the Creek, including CSO discharges, and thinks the analysis presented in the Proposed Plan downplays the significance of discharges from CSOs as a source of pollution by comparing them to other significant sources of pollution such as stormwater, treated discharges and East River inputs. It expressed that, in accordance with CERCLA, EPA must protect human and ecological health by eliminating or mitigating all known pollution sources. The CAG notes that reductions in CSO volume directly correlate with reductions in CERCLA chemical loading to the Creek, as highlighted in Figures 4a through 4d of the Proposed Plan, and it thinks that EPA has the responsibility to pursue further action to reduce chemical loading from CSOs.

**EPA Response 1**: CERCLA is a risk-based program. The analyses provided in the Proposed Plan demonstrate that further reduction of the volume of current and future CSO discharges, beyond those required by the LTCP, would not provide a higher level of overall protectiveness for the site. As such, EPA has no basis to select an alternative requiring a higher level of volume control. This is discussed further below.

Clearly, reducing the volume of CSO discharges to the Creek will decrease the CERCLA chemical loading to the Creek, and if the discharges were eliminated then there would be no loading of CERCLA chemicals to the Creek from this source. While it is understandable that this would be an attractive, long-term goal for the Creek, the EPA Superfund program must act within the CERCLA framework, which is based on risk reduction. The evaluation presented in the Proposed Plan included three lines of evidence, one of which (LOE 2) is the subject of this comment; however, these lines of evidence need to be considered together.

The first line of evidence (LOE 1) shows that the measured concentrations of contaminants of potential concern (COPCs) in solids in the CSO discharges at the site are generally within the range of concentrations measured on solids from the other evaluated inputs. These other evaluated inputs include stormwater, treated discharges, and East River surface water. LOE 2, which is the focus of this comment, shows that loading of COPCs from CSO discharges is generally similar to or less than the loading of COPCs from the other evaluated inputs, where loading is defined as the mass of input over time (*i.e.*, kilograms per year), and the other evaluated inputs for this LOE include the East River, atmospheric deposition, municipal separate storm sewer system outfalls (MS4s), and treated discharges. LOE 3 uses modeling to predict the resultant surface sediment concentration post-remediation as a result of recontamination from CSO discharges and other evaluated inputs where the other evaluated inputs in this case include the East River, other point sources, and groundwater. LOE 3 shows that even 100 percent control of CSO discharges does not significantly change the resultant surface sediment concentration.

When taken together, the LOE show that, while current and reasonably anticipated future CSO discharges do contribute COPCs to the Creek, the contribution does not form a basis by which EPA can require further volume reduction under CERCLA as discussed in EPA Responses below.

EPA makes a very narrow determination in the OU2 ROD that the CSO volume reduction as set forth in the LTCP is sufficient to also satisfy CERCLA. As stated in the Proposed Plan and as memorialized in the OU2 remedial decision, future remedial decisions may require other CSO actions, either at the point of discharge or within the Creek, if they are determined to be necessary, such as end-of-pipe solids capture, end-of-pipe oil capture, and/or in-Creek dredging of accumulated solids near CSO discharge locations (referred to herein as maintenance dredging). It may also be determined that control of upland sources of contamination to the CSO discharges may be needed. None of these options are "off the table" for consideration in future decision documents. Impacts from historical CSO discharges will also be addressed as part of future decision documents. Furthermore, a robust CSO monitoring program will be conducted, and if the assumptions used to form the bases of the LOE evaluations change over time, the decisions memorialized in the OU2 ROD can be re-evaluated, if necessary.

2. The CAG commented that since the OU1 (Study Area-wide) remedial selection process remains underway, comprehensive cleanup goals for the site have not yet been selected. As such, comparison of CSO discharges to other sources of pollution to the Creek is illogical, and there is no way to evaluate their impacts or the need to reduce them. Remedial goals should be based on risk factors for both humans and other sensitive receptors, such as benthic organisms, and without established remedial goals, there is no way to assess the impact of the CSO discharges and take them "off the table."

**EPA Response 2**: Study Area-wide cleanup goals have not yet been selected and, as such, the need for reducing the solids loading from CSO discharges or the impact of any of the other ongoing sources to the Creek cannot be fully evaluated at this time. As is discussed in EPA Response 1, the determination made by EPA for OU2 is very narrow in scope and based on EPA's understanding of current conditions, in consultation with New York State. This

determination is made with the knowledge that New York State has already made a determination about the adequacy of the CSO controls to be put in place through the implementation of the LTCP and, therefore, EPA is only assessing whether additional CSO volume reduction would be required to meet a risk-based CERCLA remedial standard. The assumptions used in making this determination will continue to be evaluated, and if EPA determines that changes or additional control measures are needed, they can be made through amendment of this remedial decision or incorporating additional control measure into a future remedial decision, such as that for OU1.

3. The CAG commented that the evaluations presented in the Proposed Plan do not consider the possibility of future reductions to COPC loading and/or concentrations from the other evaluated inputs to the Creek.

**EPA Response 3**: The analyses presented in the Proposed Plan incorporates data generated primarily through EPA-approved investigations as part of the OU1 remedial investigation/feasibility study (RI/FS) process (the exception to this is atmospheric data, which was collected from a state/regional database as described in the OU2 FFS). The specific data for treated discharges as presented on Figures 4a through 4e of the OU2 Proposed Plan are for State Pollution Discharge Elimination System permitted discharges and were derived from direct measurements of COPC concentrations at discharge locations and flow information contained within the permits. None of the data included in the LOE evaluations has received biased treatment either way; rather, it has been incorporated as generated/received.

EPA acknowledges that future concentrations/loads of COPCs from all ongoing inputs to the Creek may change over time and that the impact of COPCs from all of these sources is likely to decrease over time due to greater regulatory control and better practices, overall. At sites like the Newtown Creek site, the EPA expects to work in concert with a broad regulatory framework of environmental laws. Within that framework, the scope of EPA's CERCLA response actions may have limits in its ability to address all contaminants entering the waterway, but the EPA Superfund program personnel can work collaboratively with other regulatory entities, either within EPA or outside of the agency, to improve Newtown Creek. For example, with respect to future estimates of contaminant loading associated with CSOs after implementation of the LTCP, in comparison to contaminant loading from other sources, Figures 4a (total polycyclic aromatic hydrocarbons (TPAH17)) and 4e (2,3,7,8-tetrachlorodibenzodioxin (2,3,7,8-TCDD)) of the Proposed Plan indicate that estimates of current loads of TPAH17 and 2,3,7,8-TCDD from atmospheric deposition alone exceed loads from the CSOs. Control of loading from atmospheric deposition requires region-wide implementation of a regulatory program well beyond the scope of the response activities at the Site and the Superfund program overall. Furthermore, Figures 4b, 4c, and 4d (and 4e) show that current loads of total polychlorinated biphenyls (TPCBS), copper, lead and 2,3,7,8-TCDD from the East River alone exceed loads estimated from the CSOs after implementation of the LTCP. The East River itself is impacted by locally/regionally ubiquitous contamination and loading from this source is unlikely to be eliminated. In all cases (Figures 4a through 4e), the aggregate loading associated with all other sources evaluated is higher as compared to loading anticipated from CSOs after implementation of the LTCP, and in most

cases the aggregate loading exceeds it even without implementation of the LTCP (as demonstrated through the results for the "No Action" alternative for OU2).

While future reductions in contaminant loading from all ongoing sources to the Creek are anticipated, such reductions are not anticipated to change the overall conclusion of the evaluations included in the OU2 FFS, as presented in the Proposed Plan, namely that additional volume reduction of CSO discharges will not significantly affect the protectiveness of any future remedial decisions for the site, including more comprehensive ones. Long-term monitoring of the waterway will result in the assessment of whether future conditions warrant a re-evaluation of this conclusion.

4. The CAG pointed out that the loading of TPAH17 from the treated discharge input is skewed by data from a single Con Edison outfall that has since been reduced through regulatory action by EPA and NYSDEC.

**EPA Response 4:** EPA has received revised data from Con Edison and is evaluating it. However, based on a preliminary review, the overall conclusions of the evaluations conducted in the OU2 FFS are not expected to change because, even without the Con Edison data point, loading of TPAH17 from treated discharges will remain consistent with or higher than loading from CSOs.

5. The CAG points out that NYCDEP is under legal obligation to implement the LTCP. As such, there is no reason for EPA to finalize any decisions regarding the adequacy of the LTCP to meet the needs of the Superfund program at this time.

EPA Response 5: NYCDEP is under legal obligation to fully implement the LTCP by 2042. In order to meet that timeframe, the City must start both its design and its property acquisition process. NYCDEP has also indicated that any significant increase in the volume of CSO capture beyond the level required in the LTCP would require significant revisions to the design of the LTCP, including the need for a new/increased capacity wastewater treatment plant. As such, prior to the implementation of the LTCP, the EPA Superfund program evaluated the LTCP, as currently planned, in the context of the needs of the Superfund program. In order to not delay what the Superfund program understands would be an improvement for Newtown Creek (i.e., implementation of the LTCP), EPA Superfund conducted this analysis now, in advance of the selection of a comprehensive remedy for the entire site, which is still some years away (e.g., not earlier than 2024). Again, the decision contained herein relates to the volume of CSO discharge only; additional mitigative measures can be selected in the future, if required. Furthermore, if NYSDEC and/or EPA were to determine that additional measures are needed to address the needs of the Clean Water Act, those measures can still be implemented and would not negatively impact the decision provided herein.

6. The CAG expressed disappointment that EPA, NYSDEC, and NYCDEP were not able coordinate the timing of the LTCP and Superfund processes for Newtown Creek, and it thinks it puts the community in the unfair predicament of having a full-scale consideration of the Superfund impacts of CSO discharges on the Creek being sacrificed to meet the needs of LTCP. The CAG suggests that design and advancement of the LTCP should continue up to

the point where future Superfund determinations, under OU1, would not significantly disrupt progress.

**EPA Response 6:** EPA agrees that, ideally, it would have been preferable to address the sufficiency of the LTCP holistically as part of the OU1 decision process. However, as discussed in EPA's Response 5, the timing has worked out such that progress on the design and advancement of the LTCP is already at the point where it cannot proceed further without a Superfund determination. As such, EPA is making a limited determination related to the volume of CSO discharge only, as discussed in greater detail in EPA Response 1. This will allow the City to meet its Clean Water Act obligations without the possibility that a later CERCLA decision would require modifications to the LTCP, requiring that the work be redesigned and reinitiated.

7. The CAG commented that adopting the 61 percent reduction in CSO discharge volume from another regulatory program as sufficient for the Superfund needs is arbitrary. Other feasible options between 61 percent and 100 percent control should be evaluated.

**EPA Response 7:** In considering the percent reduction, EPA evaluated 61 percent, as called for in the LTCP, as a baseline, and a 100 percent reduction, as the maximum possible reduction. As discussed in EPA Response 1, even 100 percent control of CSO discharges does not significantly impact overall protectiveness. If the LOE evaluations had shown that reduction beyond 61 percent would have a significant impact on protectiveness, then other options between 61 and 100 percent control would have been evaluated.

8. The CAG commented that CERCLA provides clear federal authority to "respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment" and that the Superfund law authorizes "(l)ong-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening." They assert that CERCLA gives Superfund the authority to go beyond the requirements of the Clean Water Act.

**EPA Response 8:** If warranted, EPA could take actions under CERCLA that go beyond the scope of those required by the Clean Water Act. However, in this case, the evaluations conducted did not provide a basis to require more volume control than will be provided by the LTCP because, as is mentioned in EPA Response 1, CERCLA is a risk-based statute. As discussed in EPA Response 1, the determination made for this remedy for OU2 is very narrow in scope and is based on current conditions. The assumptions used in making this determination will continue to be evaluated, and if any changes or additional control measures are needed, they can be made through amendment of this remedial decision or incorporated into a future remedial decision, such as that for OU1.

9. The CAG commented that the OU2 determination should be protective of both human health and the environment. In particular, it points out that the human health risk assessment acknowledges existing recreational uses along Newtown Creek, including boating, fishing and swimming, and that the baseline ecological risk assessment shows unacceptable risk to

benthic macroinvertebrates. The CAG also pointed out that there is growing community interest in utilizing the waterway.

- **EPA Response 9:** The protection of human health and the environment, which is one of the nine criteria that is required to be evaluated in the remedy selection process, was evaluated in FFS and summarized in the Proposed Plan. EPA concluded that the proposed remedy "will be protective of human health and the environment, either through this action or through additional actions to be determined as part of the OU1 ROD." Current and future use of the waterway are considered as part of the OU1 remedial process, and it is anticipated that the OU1 remedy will include five-year reviews to ensure that the activities and receptors are being protected by the implemented remedies. The decisions made for OU2 are limited in scope and will not preclude the selection of an appropriate response action for the entire OU1 Study Area (see EPA Response 1 for more detail).
- 10. The CAG and Riverkeeper commented that the CSO remedy should be assessed in the context of the OU1 (sitewide) remedy to determine whether the threats from COPCs present in the CSO discharges are adequately addressed.
- **EPA Response 10:** The OU1 remedy will include evaluation of CSO discharges and the OU2 determinations will eventually be subsumed by the OU1 remedy. As such, CSOs will be assessed in the context of OU1. As discussed in EPA Response 1, any potential changes needed to the determinations made for OU2 can be made in the OU1 decision process, or other remedial decisions, if appropriate.
- 11. The CAG and Riverkeeper commented that it is inaccurate to label the proposed plan as "No Further Action." Instead, they comment that it must be categorized as a proposed remedy and subject to National Consistency Review by the National Remedy Review Board (NRRB). The comment goes on to say that the Proposed Plan, which is set to be a "final" remedy, supports a final remedy for OU2 that is contingent upon and effectively requires an action by NYCDEP that is expected to cost roughly \$1.65 billion, and that while the LTCP was developed to address the requirements of the Clean Water Act, it will also serve to control a significant amount of Superfund COPCs entering the Creek by capturing and treating sewage and polluted stormwater runoff.
- **EPA Response 11**: The OU2 decision was reviewed for national consistency. On September 11, 2019, prior to finalization of the draft FFS and release of the Proposed Plan, the Region convened a meeting that included members of the NRRB and the Contaminated Sediment Technical Advisory Group (CSTAG), the stated purpose of which was to gain input from a variety of Superfund programmatic and technical experts on the potential action before proceeding with publishing the Proposed Plan. Their input was incorporated into the development of the FFS and Proposed Plan. While a formal NRRB consultation was not required based on the projected cost of the preferred alternative, the Region nevertheless felt it was important to consult the group informally on this potential decision. Following standard EPA protocols, EPA headquarters also reviewed the Proposed Plan prior to signature.

EPA gave significant consideration to the appropriateness of identifying this as a No Further Action remedy. As is noted in the comment, the LTCP was developed to address the regulatory requirements of the Clean Water Act, and NYCDEP is under order issued by NYSDEC to implement the LTCP. Implementation of the LTCP, as it is currently approved, will move forward with or without EPA Superfund intervention, and No Further Action in this case assumes that the LTCP is, in fact, implemented. If the OU2 evaluations had determined that more volume control would have been needed to address the needs of Superfund than what is required under the approved LTCP to address the needs of the Clean Water Act, then the OU2 remedial decision would have required action beyond implementation of the approved LTCP.

12. The CAG notes that the capacity/design of the LTCP that NYCDEP is under order to implement underlies the FFS evaluations, and it comments that if NYCDEP were to subsequently renegotiate the requirements in its LTCP with NYSCDEC, EPA would have to reopen and reevaluate the OU2 remedy. Therefore, the CAG suggests that the LTCP, and its associated cost, is an essential part of the proposed remedy.

EPA Response 12: The evaluations conducted in the FFS show that the amount of CSO volume control does not significantly affect the conclusions. As such, if the terms of the LTCP were to be renegotiated pursuant to the Clean Water Act, it is expected that the conclusions of the OU2 analysis would remain the same, and therefore determinations made in the OU2 decision process would remain valid. As discussed in EPA Response 11, if OU2 evaluations had resulted in an EPA determination that more volume control would have been needed to address the needs of a CERCLA remedy than is required by the approved LTCP based on the needs of the Clean Water Act, then the OU2 decision document would have required action beyond implementation of the approved LTCP. However, because EPA concluded that more volume control is not needed to meet the needs of Superfund, EPA decided to structure the remedy as no further action so as to allow NYCDEP and NYSDEC the flexibility to renegotiate the terms of the LTCP, if they so determine to be necessary as per the requirements of the Clean Water Act, without necessarily impacting the Superfund decision making process for the Newtown Creek site as a whole. As is stated in EPA Response 1, if the assumptions used to form the basis of this determination change over time, the decisions memorialized in this OU2 ROD can be re-evaluated, if necessary.

13. A. The CAG commented that the LTCP is based on skewed modeling, does not adequately take into account climate change, inflates green infrastructure implementation figures, and likely underestimates future redevelopment in the area. In particular, the CAG asserts that the LTCP modeling conducted by NYCDEP seems to have mixed year-long and seasonal sampling datasets and has relied on separate one-year and ten-year models, depending on the pollutant assessed. In particular, the CAG and others continue to question the appropriateness of using precipitation data from 2008 as representative of future conditions.

**EPA Response 13A**: The OU2 FFS evaluated three alternatives related to the volume of CSO discharge – no action, no further action (which in this case means implementation of the LTCP) and 100 percent control. The evaluations conducted showed that the level of protectiveness in the context of a Superfund response action was roughly the same for all three alternatives. The three scenarios considered in the OU2 FFS were similar to those considered in the development of the LTCP, albeit under a different set of expectations (i.e., requirements of the Clean Water Act),

leading EPA to accept them as valid; alternatively, EPA could have conducted the same type of evaluation of CSO discharge impact without any consideration of the LTCP. For example, the alternatives considered in the Proposed Plan could have been no action, 25 percent control, 50 percent control, 75 percent control, and 100 percent control. The results of the evaluation would have been the same, but they would not have been in any way tied to the LTCP itself.

As noted in Response 1, the purpose of EPA's evaluation within this context was not to evaluate the adequacy of the LTCP for meeting the Clean Water Act. In its evaluation of OU2, EPA considered the approved LTCP as currently planned in the context of the needs of the Superfund program. As such, there may be additional evaluations conducted, outside of the CERCLA process, to address concerns noted by the CAG. For example, both climate change and increased population growth in the vicinity of Newtown Creek could lead to a greater volume of sewerage entering the CSO system than is currently anticipated by the LTCP, particularly after rain events. However, just because the volume of CSO discharge may increase does not mean the concentration of COPCs in that discharge will increase. The composition of the discharge may change over time; the OU2 monitoring program is intended to reveal any such changes and, if necessary, additional actions could be taken to address any significant increases in COPC loading. But volume increases would not in and of themselves negate the appropriateness of the OU2 decision process as related to the Superfund site.

In order to support this conclusion, the FFS included a sensitivity simulation run using precipitation data from 2011, which experienced approximately 50 percent more total precipitation than 2008 and can be considered representative of the impact of higher mean precipitation in the future. The results showed that that the overall conclusions from the assessment of the CSO control alternatives are not altered by the additional rainfall and CSO discharge volumes.

- 13. B. Given its concerns related to the LTCP itself, the CAG questioned the adequacy of EPA Superfund's evaluations which use data and/or modeling related to CSOs, and asked a series of specific technical questions, each of which is addressed below.
  - i. What modeling dataset did EPA use to inform the Proposed Plan?

**EPA Response 13.B.i:** The modeling for the OU2 FFS used point source, hydrodynamic, and sediment transport models developed by New York City for the LTCP. In addition, New York City also developed, with EPA review, a contaminant fate and transport model for the evaluation of the OU2 FFS for Superfund purposes. Both the development and calibration of the various models used data collected as part of the OU1 RI/FS process and data from several other entities such as the U.S. National Oceanic and Atmospheric Administration (NOAA), NYCDEP, Riverkeeper, and the Newtown Creek Alliance.

ii. For what time period is the modeling applicable?

**EPA Response 13.B.ii:** The inputs to the various models, which determine the time frame for which the model results may be considered applicable, are based on current conditions for

sea level, the future population (up to the 2040s, which determines sewage volumes), ongoing and planned green infrastructure (up to the 2040s), and precipitation under current conditions (which controls CSO discharge volumes). Precipitation data from 2008 was used for the modeling because that represents an average year in terms of CSO discharge volumes. Therefore, the modeling may be considered representative of conditions up to the 2040s, but without explicit consideration of future climate change impacts (to sea level and precipitation).

As indicated above, future climate change impacts relevant for this evaluation of contaminant fate and transport in Newtown Creek fall mainly into two broad categories - sea level rise and changes in precipitation. While there is significant uncertainty around the effects of both of these categories, the primary impact of sea level rise within Newtown Creek is expected to be additional trapping of suspended sediment and contaminants entering Newtown Creek from the East River. Particulate-phase concentrations of COPCs from East River surface water are consistent with but generally lower on average than particulate-phase COPC concentrations entering the Creek from the CSOs. Consequently, a possible outcome of sea level rise would be relatively cleaner sediments entering from the East River, resulting in lower contaminant concentrations associated with net deposition to the bed in Newtown Creek. Therefore, the model performance using the current sea level is expected to be the more conservative result for the metric assessed (equilibrium contaminant concentration associated with the net solids depositing to the bed) using the OU2 FFS model. With regard to the impacts of climate change on precipitation, the results of a sensitivity simulation using precipitation data from 2011 (which experienced approximately 50% more total precipitation than 2008 at the La Guardia Airport) included in the OU2 FFS report can be considered representative of the impact of higher mean precipitation in the future. The results show that that the overall conclusions from the assessment of the CSO control alternatives are not altered by the additional rainfall and CSO discharge volumes. Therefore, the conclusions from the OU2 modeling are also considered applicable even considering future climate change impacts of sea level rise and increased annual mean precipitation.

#### iii. Were models based solely on 23 samples?

**EPA Response 13.B.iii:** The various models (point source, hydrodynamic, sediment transport, and contaminant fate and transport) relied on an extensive dataset of measurements over several years and collected as part of the OU1 Remedial Investigation as well as by other entities such as NOAA, NYCDEP, Riverkeeper, and the Newtown Creek Alliance. The sample size of 23 specifically mentioned in the comment appears to be a reference to contaminant measurements for treated water discharging to Newtown Creek from wastewater treated effluent, permitted discharges from groundwater treatment systems, and treated discharges from industrial facilities. These 23 samples were used to define the contaminant loading to the Creek from these sources. A set of 20, 47, and 87 samples were used to characterize CSO discharges, stormwater discharges, and the water entering Newtown Creek from the East River, respectively.

- iv. Were those samples representative of different times of day, different seasons, and different outfall locations (which drain separate sewersheds)?
- **EPA Response 13.B.iv:** Point source sampling was conducted periodically (depending on storm occurrence) during the period from June 2014 through December 2015. Samples from CSOs were collected during a range of seasons, during different times of day, and from multiple sewersheds represented by different interceptor systems, including the Long Island City interceptor system, Morgan Avenue interceptor system, and the West Street interceptor system. In addition, CSO samples were collected during storms of varying intensity and duration.
- v. Are 23 samples from CSO outfalls sufficiently representative of CSO outfalls in all seasons?
- **EPA Response 13.B.v:** CSO samples were collected during various seasons with the majority of the CSO sampling events conducted between December 2014 and December 2015. The resulting data provided a robust data set representative of all seasons.
- vi. Did EPA oversee CSO discharge sampling? How so?
- **EPA Response 13.B.vi:** EPA provided field oversight for all of the point source sampling events conducted during the period from June 2014 through December 2015. EPA obtained, analyzed, and evaluated split samples for approximately 10 percent of all point source samples, including CSO samples, to verify the quality of the point source sampling data.
- vii. Did EPA perform its own CSO sampling or rely on a different CSO sampling protocol to devise the Gowanus Canal Superfund Site remedy? If so, why?
- **EPA Response 13.B.vii:** Sample protocols and methodologies used at the Gowanus Canal Superfund Site were different than those used at the Newtown Creek Superfund Site, though the approach used at each site was based on site-specific needs and utilized acceptable scientific methods. The differences are highlighted below.

The CSO investigation at the Gowanus Canal site was conducted by EPA and CSO samples were collected by EPA contractors. In contrast, CSO sampling at Newtown Creek was performed by the contractor of certain potentially responsible parties (PRPs) that are under an administrative order with EPA to perform the RI/FS. EPA provided direct oversight of this CSO sampling to ensure that sampling was conducted in accordance with EPA-approved methods and protocols. To verify sample data quality, EPA also collected and analyzed split samples and compared the results of the split samples to the PRPs sample results.

Regarding the sampling protocols and methodologies used at each site, at the Gowanus Canal site discrete samples were collected from CSO discharges during three storm events and composite samples were collected from one of the Gowanus Canal CSO sampling locations. At the Newtown Creek site, samples were also collected from CSO discharges during three

storm events. Time-composite samples were collected over the course of storm events to produce samples representative of each CSO event.

viii. Are the samples covering 96 percent of CSO discharges sufficiently representative of all discharges to model local sediment deposition?

**EPA Response 13.B.viii:** The data collected representing 96 percent of CSO discharges are appropriate for modeling local sediment conditions, including impacts from unsampled, but much smaller volume, discharges. Based on consultation with experts in this area, CSOs draining large sewersheds do not typically result in highly variable concentrations of contaminants in discharges. The site-specific CSO data collected during the OU1 RI for Newtown Creek is consistent with this conclusion. Taken together, these lines of evidence support the approach of extrapolating the data to the low-volume CSOs that were not sampled and the conclusion that samples covering 96 percent of CSO discharges to Newtown Creek are sufficiently representative of all discharges so that modeling of local sediment deposition can occur.

14. The CAG expressed concern that the only potential additional actions considered in the OU2 Proposed Plan were monitoring, implementation of a track-back program, end-of-pipe control measures, and in-Creek maintenance dredging. Regarding the potential track-back program, the CAG explained that the Newtown Creek sewershed is approximately 4,642 acres in total and that locating specific sources of contamination may not be possible. The CAG also requested greater detail regarding the logic explaining how the track-back program or the use of end-of-pipe measures (such as sediment traps and sorbent pads) would work within the context of a sitewide remedy.

**EPA Response 14**: As is clarified in the main body of the ROD for OU2, the CSO discharge monitoring would be conducted to ensure the assumptions made in reaching the conclusions supporting the OU2 decision process remain valid. If the assumptions are not supported, then additional actions could be taken either through amendment of the OU2 remedy or, more likely, as part of the OU1 remedial decision process.

The monitoring program would initially include quarterly sampling of discharge directly from the four largest CSOs, NCB-015, NCB-083, NCQ-077, and BB-026. The sampling would be conducted in a manner consistent with the EPA-approved approach used during the OU1 RI/FS process. The reason for collecting quarterly samples is to confirm that there are not any fluctuations in the concentrations of COPCs based on season or time of year, as well as to determine if there are any upward or downward trends in the results. Note that while the goal would be to collect these samples at four evenly-spaced intervals, because the sampling of CSOs is dependent upon large enough storm events to create a CSO discharge, the sampling intervals may not always occur at the desired intervals.

Quarterly sampling will be conducted for at least two years and then reassessed. If, for example, concentrations remain consistent across all seasons and over both years, then the frequency of sampling may be scaled back. If, on the other hand, the data are widely variable or a trend starts

to become apparent, the frequency of sampling may be maintained or even increased. In addition, readily obtainable watershed-wide metrics such as discharge volumes to the Creek and frequency of CSO overflows will be reviewed periodically.

This sampling program will continue at least until an OU1 remedy is selected, at which point the OU2 monitoring component will likely be subsumed in that OU1 remedy. The sampling may then continue after selection of an OU1 remedy, as appropriate.

The idea for the track-back program was based in part on discussions between the EPA Superfund program personnel and the EPA Water Division program. The monitoring may, for example, reveal a persistent increase in the concentration of one COPC from one of the CSOs being sampled. By a persistent increase, EPA means a COPC (or multiple COPCs) that is detected in multiple sampling events, as evaluated against the possibility of short-lived fluctuations. If such a persistent increase is found, it may suggest a potential new source to the system that is significant enough to skew the sampling results higher. EPA recognizes that tracking the source of COPCs within large, complex sewersheds could be challenging. However, along with other information on potential sources, the track-back program could provide data to support identification of the source of the increased COPCs in a CSO discharge, and support actions to then address the source of the COPCs. If implementation of a track-back program is needed, including potential source control, it is anticipated that it would be conducted pursuant to a future response action.

As discussed in EPA Response 1, the decision in this remedy is a very narrow one, related only to the volume of CSO discharge to the Creek. In the OU1 remedial decision process, EPA will determine the remediation goals for the site's Study Area. It is not until those goals are determined that a final decision can be made regarding the need, if any, for additional controls on the discharge entering the Creek through CSOs, beyond that of volume. It is too soon in the overall site decision-making process to determine if additional CSO controls will need to be included in an OU1 remedy and, if so, what exactly those may be. The possibility of additional controls was included in the Proposed Plan for clarity and to stress the point that, by making this decision regarding OU2, EPA is not foreclosing the possibility that additional CSO controls may be needed.

15. The CAG commented that any decisions made for the site should be consistent with the July 9, 2015 CSTAG recommendations to EPA Region 2. In particular, they point out that, in accordance with sediment management Principle 1, which is to control sources early, CSTAG recommended that "the Region work with the appropriate regulatory authorities to develop a plan to eliminate any unpermitted, piped discharges, minimize impacts from CSOs, and address groundwater discharges that may recontaminate the Creek." The CAG goes on to comment that EPA should heed the advice of CSTAG to minimize impacts from CSOs and not attempt to "write-off" the documented chemical loading from CSOs that might recontaminate the Creek.

**EPA Response 15:** As part of the OU1 RI/FS process, EPA is actively working with appropriate regulatory authorities, including NYSDEC and NYCDEP, to better understand and address

potential ongoing sources of COPCs to the Creek. Through the OU1 RI/FS process, EPA is working to determine which ongoing sources may lead to recontamination of the Study Area and, as such, which may need to be controlled in a future remedial response. As discussed in EPA Response 4, control of these sources would then be identified and evaluated as part of the OU1 remedial decision process.

The LTCP was developed within the regulatory framework of the Clean Water Act, and NYCDEP is under order by NYSDEC to implement it. While it was designed to meet the needs of the Clean Water Act, it will also work toward minimizing the impacts of CSOs at the site. Further minimization of impacts from CSOs at the site could be included, as necessary, in the OU1 remedial decision process. As such, the CSTAG recommendations are being followed, and the OU2 decision is consistent with its recommendations.

16. The CAG and Riverkeeper commented that the methodologies used to assess risk, and in particular the potential future risk of recontamination at the site, should be consistent with that used at the Gowanus Canal site, another Superfund site in the Region also in New York City and only about 3.5 miles away. The CAG asserts that the fact that the LTCP is already in place for Newtown Creek is irrelevant.

EPA Response 16: Every Superfund site is unique, and site-specific determinations must be made. That said, the underlying framework used to make remedial decisions is the same for all Superfund sites. Very briefly, a remedial investigation is conducted to determine the nature and extent of contamination. Baseline human health and, where necessary, ecological risk assessments are conducted to determine the chemicals that pose an unacceptable risk at a site based on current and reasonably anticipated future uses. This information is combined with other information, such as how the contamination may move over time and potential ongoing sources of contamination, all to develop preliminary remediation goals for a site that are based on risk but may be modified by site-specific information, such as background conditions and remedial objectives. Alternatives that meet these objectives and address the risks posed by the site are developed. These alternatives are discussed in a feasibility study report that forms the basis for the issuance of a Proposed Plan for remedial action. Prior to releasing the Proposed Plan for public comment, EPA seeks input from regional and national advisory boards, such as NRRB and CSTAG, as appropriate for that site, and any recommendations are considered in developing a Proposed Plan as may be appropriate. Finally, once the public comment period ends and all comments are reviewed, a remedy is selected to address the cleanup of the site, or portion of the site.

Even though the site-specific determinations differ, both the Newtown Creek and Gowanus sites are using this same remedy selection process to make determinations regarding how best to address the risks associated wth each site. This includes addressing the future risks of recontamination. NRRB and CSTAG were consulted for both the Gowanus Canal and Newtown Creek sites.

Several residents in the vicinity of the site submitted written comments electronically.

- 17. Several residents stated that CSOs pose a risk to people seeking to fish in Newtown Creek and also pose risk to biota in the area. The commenters stated that the Creek should be fully remediated so that it can provide the community with uses such as recreation and fishing.
- **EPA Response 17**: As is noted in EPA Response 1, the decision contained herein is limited in scope. Future remedial decisions may require other CSO actions, either at the point of discharge or within the Creek, if they are determined to be necessary, such as end-of-pipe solids capture, end-of-pipe oil capture, and/or in-Creek maintenance dredging. It may also be determined that control of upland sources of contamination to the CSO discharges may be needed. Impacts from historical CSO discharges will also be addressed as part of future decision documents. Furthermore, a robust CSO monitoring program will be conducted, and if the assumptions used to form the basis of this determination change over time, the decisions memorialized in this OU2 ROD can be re-evaluated, if necessary.
- 18. Several residents stated that they did not support postponing the remedy for the Creek and are concerned about the health of community members. Residents also stated their disappointment that EPA is not requiring that the contamination be fully addressed.
- **EPA Response 18:** The decision process for OU2 is not affecting the remedial decision process for OU1. As such, the remedy selection process for the entire Study Area (OU1) is ongoing and not being postponed. The OU1 decision process will fully address the Superfund site-related contamination impacting the Study Area.
- 19. A group of fourth grade students from P.S. 110, the Monitor School, located in the Greenpoint section of Brooklyn and less than one mile from the Creek, submitted several comments on the Proposed Plan as well as ideas on how to address contamination in Newtown Creek as a whole. The students have been learning about the history of the Creek and how it became a Superfund site and are motivated to help both their community and the overall environment. They formed a Green Team that expressed concern that the Proposed Plan did not go far enough in addressing the CSO inputs to the Creek, and they offered creative solutions for addressing the inputs, including the use of filters and trash traps. The students volunteered to help EPA develop solutions that will be effective now and in the future, and they also presented their visions for the Creek.
- **EPA Response 19:** EPA appreciates the input that the P.S. 110 students provided and applauds their creativity and dedication to making a positive difference. The ideas and concerns provided were generally related to the cleanup of the Creek as a whole, which will be addressed in the selection of the OU1 remedy. As such, EPA plans to respond to the students' ideas for the Creek separately and will continue to engage with them throughout the Newtown Creek Superfund process. EPA hopes the students continue to engage and take part in environmental restoration efforts within their community.
- 20. The North Brooklyn Neighbors commented that the proposed plan does not go far enough to reduce contamination in the Creek and that the cleanup pursued by EPA will have "immediate and direct impact" on the lives of community members. They listed several specific concerns with the proposed remedy that include the following: the plan leaves a

significant amount of pollution still entering the Creek; the LTCP has flawed assumptions; that a determination of what is "significant" cannot be assessed until other sources of contamination are addressed; that the track-back program needs to be defined in greater detail; and that monitoring should be done more frequently.

**EPA Response 20**: EPA appreciates the input of the North Brooklyn Neighbors and refers to the Responses to Comments 1-17 to address their concerns.

21. A. A commenter voiced support for the proposed construction design of the LTCP given that a storage tunnel affords greater flexibility for added storage capacity than fixed holding tanks. The commenter also noted that the comparative data presented illustrates that 100% reduction in CSO discharge would not offer significant advantage.

**EPA Response 21A:** EPA acknowledges the comment and the commenter's support for the evaluation presented in the Proposed Plan.

- B. The same commenter stated that additional time and resources of EPA should not be further directed to CSO remediation beyond ensuring that the OU2 proposal is reviewed by NRRB, that a rigorous track-back program be developed, and that OU2 proceeds with the addition of feedback received from NRRB. The commenter added that the track-back program should be developed collaboratively with the NYCDEP, NYSDEC, and the CAG, noting the extensive "citizen science" efforts underway within the greater estuary. They also suggested that the track-back program entail a yearly data review with community representatives.
- **EPA Response 21B:** EPA acknowledges the comments. Please see EPA Response 11 with regard to NRRB review of the OU2 remedy. EPA also agrees that a collaborative approach for any track-back program would be beneficial. See EPA Response Comment 15 in regard to the possible timing and development of a track-back program as a result of the CSO monitoring.
  - C. The same commenter suggested the EPA team focus on other issues that have been delayed that are critical to the remediation of the Creek, including upland sources, non-aqueous phase liquids (NAPL) inputs, ebullition, coal tar migration, and petroleum seepage.

**EPA Response 21C:** As is noted in EPA Response 18, the OU2 remedial selection process has not resulted in a delay in the OU1 decision process, which includes evaluation of the other issues noted in the comment such as upland sources, NAPL inputs, ebullition, coal tar migration, and petroleum seepage.

A comment letter was submitted by Riverkeeper.

22. Riverkeeper commented that in addition to the shortcomings of the LTCP discussed in the CAG comment letter, it should be noted that in the LTCP process there was a failure to evaluate alternatives that would reduce or mitigate impacts from total suspended solids or other pollutants relevant to Superfund because they are not listed as a cause of Newtown

Creek's nonattainment of water quality standards. Therefore, the benefits of potential remedies for toxic solids pollution, such as high rate clarification, were never considered alongside or in lieu of further CSO reduction. Nor was the feasibility of pursuing such remedies in parallel ever assessed. The information in the LTCP relied upon by EPA must be independently scrutinized and confirmed before the OU2 remedy is selected.

**EPA Response 22**: As is described in EPA Responses 14a and 14b, the evaluation conducted by EPA was solely focused on the impact of various levels of volume control of CSO discharges to the resultant sediment concentrations within Newtown Creek. EPA Superfund did not evaluate the adequacy of the LTCP for meeting Clean Water Act goals. Monitoring and EPA's future remedial decision processes at the site will evaluate whether the analysis performed as part of this evaluation remains accurate.

23. Riverkeeper commented that taking action on OU2 at this time would serve no purpose for Newtown Creek, its habitat, or the people who work and recreate on it. It also stated that NYCDEP is required to implement the LTCP, with or without EPA action. Additionally, it commented that it is likely that the LTCP will be renegotiated, at which point EPA would need to reassess the OU2 decision, therefore EPA should wait until OU1 to evaluate the necessary reduction in CSOs for Newtown Creek.

**EPA Response 23**: As is described in the EPA Responses 6 and 7, this determination allows for progress by the NYCDEP on implementation of the LTCP. In the evaluation completed as part of OU2 for the site, EPA determined that additional volume control would not significantly impact the resultant concentrations of the sediments in Newtown Creek, and therefore if changes were to be made to the LTCP with respect to volume control, the conclusions of the OU2 evaluation would be unlikely to change. If during the OU1 evaluation it is determined that additional controls are needed for CSOs, they could be incorporated into an OU1 remedy. Additionally, monitoring to be conducted as part of the OU2 remedy (and likely the OU1 remedy, as well) would ensure that the need for any additional actions to address potential recontamination of the Study Area are taken.

A comment letter was submitted from New York State Assemblyman Joseph R. Lentol.

24. Assemblyman Lentol stated that EPA has a responsibility to the community to continue its efforts to reduce CSOs and must uphold that responsibility no matter how difficult or costly it is. He also commented that the December 11, 2019 presentation was overly technical and complicated, seeming to be designed to prevent discussion of the issues. The Assemblyman also stated that the community wants clean water in the Creek, and he supports the CAG's comments.

**EPA Response 24:** EPA appreciates the Assemblyman's comment and refers to the earlier responses to the CAG's comments (EPA Responses 1-17). Additionally, EPA notes the concern that the Proposed Plan presentation was overly technical. EPA strives to present information to the public that is both understandable and comprehensive. Those who attend public meetings have a wide variety of backgrounds, some of whom are very interested in the technical basis for decisions. It is always difficult to determine the ideal balance of technical versus non-technical

information to include in a presentation to satisfy all attendees of a meeting, but it was in no way EPA's intent to prevent discussion of the issues or obfuscate the matter. The question and answer portion of the public meeting is intended to allow those attending to seek and receive clarification on any information presented. Also, note that EPA provides the CAG with independent technical support through the use of its national Technical Assistance for Communities (TASC) program. Under the TASC contract, an independent contractor is provided, at no cost to the community, to help them evaluate site-related information.

A comment letter was submitted from U.S. Congresswoman Carolyn B. Maloney.

25. Congresswoman Maloney stated that she finds the 61% volume reduction under the CSO inadequate and inconsistent with CERCLA/SARA, as it does not adequately address present or future health and environmental risk. She also stated that she believes it is premature to take full remediation off the table, recognizing that CSOs would need to be eliminated for full remediation of Newtown Creek. The Congresswoman also stated that she supports EPA's remediation efforts but feels the proposals for OU2 fall short of what is required to achieve remediation and permanently remove hazards and restore the Creek.

**EPA Response 25:** EPA appreciates the Congresswoman's comment and refers to the earlier responses to the CAG's comments (EPA Responses 1-17). As is noted in these comments, the OU2 decision is very narrow in scope and in no way is a final remediation of the Study Area, is consistent with CERCLA/SARA, nor does it eliminate future consideration of additional efforts. OU1 of the site will more comprehensively address the Study Area as a whole.

A comment letter was submitted from New York State Senator Julia C. Salazar.

26. Senator Salazar wrote to voice her opposition to the Newtown Creek OU2 Proposed Plan. She also commented that the No Further Action remedy does not provide necessary measures to mitigate the dire situation of ongoing pollution fully. The Senator urges EPA to accept the provisions provided by the CAG and not waste this opportunity.

**EPA Response 26:** EPA appreciates the Senator's comment and refers to the earlier responses to the CAG's comments (EPA Responses 1-17). As is noted in these comments, the OU2 decision is very narrow in scope and in no way takes full remediation of the Study Area off the table. The OU1 remedy at the site is intended to address the Study Area as a whole.

A comment letter was submitted electronically from New York State Assemblywoman Catherine Nolan.

27. Assemblywoman Nolan commented that the LTCP alone is not enough to address the contamination at Newtown Creek. She also noted that it is premature to disregard the possibility of needing to consider Alternative 3, considering the rapidly increasing infrastructural demands of the surrounding area. She also stated that it would be inappropriate to finalize a No Further Action remedy relying on the LTCP "before the City of New York's Department of Environmental Protection has demonstrated the availability of

resources to even complete the Long Term Control Plan's objectives to the satisfaction of federal, state, and local guidelines and regulatory expectations." She objects to the proposed remedy of No Further Action.

**EPA Response 27:** EPA appreciates the Assemblywoman's comment and refers to the earlier responses to the CAG's comments (EPA Responses 1-17). As is noted in these responses, the OU2 decision is very narrow in scope, and in no way is full remediation of the Study Area eliminated from future consideration. The OU1 remedial process at the site is anticipated to address the Study Area as a whole. As is also noted in these comments, the same conclusion regarding the impact of discharges from the CSOs is drawn regardless of the amount of volume reduction. Therefore, if the LTCP is not implemented, the conclusions reached in this decision process would not change.

A comment letter was submitted from New York City Council Member Stephen T. Levin.

28. A. New York City Council Member Stephen T. Levin stated that it is unreasonable to take action on OU2 until cleanup goals have been selected for OU1. He also stated that additional alternatives between 61% and 100% should be evaluated. Additionally, he urged EPA to follow the advice of the CSTAG to minimize impacts of the CSOs and to provide a rationale for why these types of controls are not being required as they were in the Gowanus Canal.

**EPA Response 28:** EPA appreciates the Council Member's comment and refers to the earlier responses to the CAG's comments (EPA Responses 1-17) as well as the response to Comment 46 below.

The City of New York (NYCDEP), a PRP for the Newtown Creek Superfund Site, submitted comments on the Proposed Plan.

29. The City commented that given the tidal nature of the Creek, the contaminants from sources to the Creek, such as NAPL migration from upland properties and subsurface sediments, groundwater, stormwater, atmospheric deposition, and the East River get transported throughout the Creek. The City stated that consequently, it is inappropriate to attribute sources of contamination in sediments to a source based on proximity alone. The City thinks that the need for in-Creek maintenance dredging adjacent to CSO outfalls as part of additional control actions cannot be solely attributed to CSO discharges. It also commented that sediment traps are not a remedial tool but rather a measurement tool and that sediment trap data would capture COPCs from multiple sources, not just CSOs. The City also commented that the use of oil sorbent pads needs to be further clarified and appear to be irrelevant for CSO discharges.

**EPA Response 29:** EPA agrees that there are other sources of contaminants to the Creek, aside from CSO discharges, and that, because of the dynamic nature of the Creek, contamination in sediment cannot necessarily be attributed to a source based solely on proximity. The potential future control actions mentioned in the Proposed Plan apply specifically to contributions that can be determined to be from CSOs through the monitoring program and potentially to discrete sources in the CSO sewershed through the track-back program. Maintenance dredging of

accumulated solids near CSO discharge locations is an example of an in-Creek action that could be considered if the results of periodic monitoring of CSO discharges indicate a persistent increase in COPCs in CSO discharges that cannot be controlled through permit and/or upland actions. The potential future control actions identified in the Proposed Plan, such as point-of discharge control options and in-Creek options, were provided as examples of actions that could be considered for inclusion in future remedial decisions if determined to be necessary.

Note that the term "sediment trap" that EPA used in the Proposed Plan was not meant to refer to the measurement tool typically employed to measure the sediment accumulation over time and/or to characterize sediment deposited in the traps. Instead, EPA used the term to refer to point-of-discharge controls that could be used to capture solids from CSOs before they enter the Creek. Similarly, oil sorbent pads were included as an example of an option to capture oil/sheens from the CSO pipes before they can enter the Creek.

30. The City also commented on the CSO Monitoring Plan described in the Proposed Plan, stating that the frequency and duration of sampling could be considered only if the quarterly data show an increasing trend in the COPCs of concern. They suggested that if the COPC trends remain at the same levels or decrease, then the City would reduce the frequency of sampling, which will be decided with EPA during the development process of the monitoring plan.

EPA Response 30: Based on the results of future CSO monitoring data, monitoring frequency could be optimized as appropriate throughout the duration of the monitoring program. Any proposed optimization of the program would be reviewed and approved by EPA. The monitoring will include analysis of discharge from at least the four major CSOs, including outfalls NCB-015, NCB-083, NCQ-077, and BB-026, for the COPCs at the site, and review of readily obtainable watershed-wide metrics such as discharge volumes to the Creek and frequency of CSO overflows. It is expected that the sampling will initially be conducted quarterly, as possible, for two years to account for potential seasonal and temporal differences in the concentrations of COPCs in the CSO discharge. The frequency and components of sampling may then be adjusted, if appropriate, based on the sampling results.

31. The City also commented on costs discussed in the Proposed Plan noting a typographical error in the monitoring costs discussed in the Proposed Plan on page 8 in the fourth paragraph.

**EPA Response 31:** EPA acknowledges the additional zero (\$5,000,0000) in the \$5 million monitoring cost estimate. The comment is noted; this was a typographical error.

32. The City commented that the description of the data collected for the site on page four of the Proposed Plan document is incomplete. They commented that EPA should provide additional clarification in the Administrative Record that NAPL seeping from upland properties is potentially significant but has not yet been fully characterized in the OU1 RI/FS.

**EPA Response 32:** This comment is noted. The issue raised by this comment is not relevant to OU2, which relates to current and reasonably anticipated future discharges of the OU1 COPCs from CSOs to the Study Area. This topic will be discussed and addressed under OU1.

33. The City also commented that the Proposed Plan fails to identify important sources and inputs to the Creek, including groundwater and NAPL seeps from upland properties.

**EPA Response 33:** As is noted in the FFS for OU2, which was prepared by NYCDEP and modified by EPA for consistency with the CERCLA process, the FFS evaluation did not include a comprehensive list of inputs to the system. Inclusion of additional inputs to the system will not, however, affect the conclusions of the multiple LOE evaluation conducted. As has been noted, inputs other than the CSOs will be evaluated and addressed, as needed, through future remedial decisions.

34. The City commented that LOE 2 evaluates the COPC concentrations on solids in CSOs with other ongoing sources to the Creek such as East River, stormwater, and treated discharges. It stated that the conclusions in the OU2 FFS that the TPCB concentrations on solids from CSOs are comparable to the TPCB concentration in stormwater, and the City believes that this conclusion is incorrect because the FFS relies solely on the p-value and fails to consider the significant differences in the distribution and average TPCB concentrations in the CSO solids versus stormwater (0.38 mg/kg in CSOs vs. 1.6 mg/kg in stormwater). The City further stated that TPCB concentrations in CSOs are lower than those measured in stormwater, especially from the TPCB concentrations in solids from private properties, and this is further evident in the results of LOE 3, which show that when 100% CSO control is evaluated, there is a small increase in the estimated TPCB concentrations in the sediment bed. They commented that this is an important consideration for OU2 and the CSM for OU1 and needs to be discussed accurately.

EPA Response 34: EPA disagrees with the City's conclusion regarding TPCB concentrations on CSO solids as compared to TPCBs on stormwater solids. Notably, the City's comment references LOE 2 of the FFS, whereas the comparison of concentrations on CSO solids to concentrations on solids associated with other inputs to the Creek is addressed in LOE 1 of the FFS. The analysis performed under LOE 1 includes a presentation of the distributional characteristics of the concentration comparisons, both in narrative form and using box plots. The narrative and box plots clearly describe and show the concentration ranges, means, and medians associated with each evaluated input, and specific to TPCB, they indicate that the distribution of data for CSO solids lies within the distribution for stormwater solids while acknowledging the means (1.6 mg/kg for stormwater and 0.38 mg/kg for CSOs). However, visual similarities or differences in concentrations do not always equate to statistically demonstrable similarities or differences in concentrations, and therefore statistical testing is commonly implemented to support conclusions regarding concentration comparisons. LOE 1 in the FFS is supported by a statistical grouped-data comparison test of the various inputs, using the Dunn-Šidák test at the 95% confidence level. The 95 percent confidence level is common in such evaluations, and it was applied uniformly and objectively to interpret the statistical testing results.

35. The City commented that EPA, when considering the first of the nine criteria by which remedial alternatives are evaluated under CERCLA, Overall Protection of Human Health and the Environment, should conclude that any of the alternatives considered (No Action, No Further Action, 100% Control) would be protective of human health and the environment because the LOE 3 evaluation shows that CSOs have minimal impact on the COPC concentrations in the surface sediments of the Creek. The City also states that achievement of the RAO is not as relevant when evaluating the CERCLA regulatory criteria.

**EPA Response 35:** As is discussed in EPA Response 1, the evaluation presented in the Proposed Plan included three lines of evidence, or LOEs, and these LOEs need to be considered together, as no single line of evidence is sufficient to provide a basis on which to make a remedial decision. Accordingly, the evaluation presented in the Proposed Plan of the first of the nine regulatory criteria is based on evidence from all three LOEs, and it states that LOE 3 shows that there is an insignificant change in the modeled surface weighted average concentrations on an assumed clean, post-remediation sediment bed, regardless of whether Alternative 1, 2, or 3 is evaluated. Evaluation of the first of the nine criteria goes on to result in a conclusion that all three alternatives provide roughly the same level of protectiveness.

Cleanup goals for the Site have not yet been selected, so the only conclusions that can be drawn are around the relative contribution of CSO discharges to COPC concentrations in the Creek. It may be determined through the OU1 remedial decision process that additional controls are needed to reduce the impact of CSO discharges on the Creek in order for the Study Area-wide remedy to be protective of human health and the environment. These controls could include, for example, reductions on the input of solids or oils to the Creek through CSO discharges, control of upland sources impacting the Creek, and/or maintenance dredging to reduce the impact of CSO discharges near the points of discharge. The determination made in the OU2 remedy is very narrow in scope and applies only to the impacts based on volume of CSO discharges.

A comment letter was submitted from the Newtown Creek Group, a group of 5 PRPs for the Newtown Creek Superfund Site

36. The NCG commented that the model evaluations presented in the OU2 FFS Report were used to evaluate sediment bed COPC concentrations on a relative basis to support the comparative evaluation of the three CSO control alternatives, and it is important to acknowledge that the OU2 models were developed for a fundamentally different purpose than the more comprehensive suite of models being developed for OU1. The NCG noted that there are a number of limitations to the OU2 models, and their use should be limited to the OU2 FFS. The NCG states that the OU2 models should not be applied to nor used as part of the OU1 RI/FS process, because a separate and more comprehensive modeling framework for OU1 is currently under development under EPA's oversight.

**EPA Response 36:** EPA agrees that the modeling analyses conducted as part of the OU2 decision process were conducted for the narrow and specific purpose of assessing CSO discharge volume-control alternatives. The assumptions and limitations inherent in the models used for the OU2 FFS preclude the use of these models beyond the OU2 FFS. This point is also addressed directly in the body of the OU2 ROD.

#### Part 2: Verbal Comments

#### FIRST PUBLIC MEETING – QUEENS on December 9, 2019

37. **Comment**: The Chair of the Environmental Committee of Community Board 2 asked if there is a way to test the CSO outfall effluent to determine the source of contamination in the discharge water in order to isolate and address the source.

**EPA Response 37:** EPA stated at the meeting that Alternative 2 would require NYCDEP to perform quarterly CSO sampling at least until the OU2 remedy is subsumed by a future decision document and that additional measures such as a track-back program to locate the source of contamination could be implemented if the data showed a persistent increase in the concentration of COPCs.

The ROD for OU2 clarifies and modifies this statement somewhat. The monitoring will include analysis of discharge from the four major CSOs, including outfalls NCB-015, NCB-083, NCQ-077, and BB-026, for the COPCs at the site, as well as tracking of discharge volumes from all CSOs. It is expected that the sampling will initially be conducted quarterly, as possible, for two years to account for potential seasonal and temporal differences in the concentrations of COPCs in the CSO discharge. The frequency and components of sampling may then be adjusted, if appropriate, based on the sampling results. This monitoring would be conducted at least until subsumed by the monitoring requirements of future decision documents for the site to ensure the assumptions made in reaching this conclusion remain valid.

38. **Comment**: The Chair of the Environmental Committee of Community Board 2 asked whether the Borden Avenue pump station will have an aeration facility in it to extend aeration into Dutch Kills and the main stem of Newtown Creek.

**EPA Response 38:** It is EPA Superfund's understanding, based on the LTCP, that the Borden Avenue pump station will not have an aeration facility.

39. **Comment**: A resident, who is also a co-chair of the CAG, noted that the completion date for the LTCP is 2042, which will lead to a purported 61 percent reduction in CSO discharge volumes to Newtown Creek. Between now and when the LTCP is fully implemented, the resident estimates that 1.2 billion gallons per year of sewage will be discharged to the Creek, and asked what power EPA has to comment on the approved LTCP with respect to the time it will take for full implementation, and what power EPA has to change the LTCP plan if the OU1 remedy is selected prior to completion of the LTCP.

**EPA Response 39**: OU2 evaluated the volume controls prescribed by the LTCP in relation to the Superfund Site. EPA Superfund does not control the timeline for implementing the LTCP under the Clean Water Act. If the OU1 RI/FS remains on schedule, a remedy for OU1 will be selected no earlier than 2024, which will establish the cleanup levels for Newtown Creek Study Area. If EPA determines that there is potential for unacceptable recontamination of Newtown Creek from any point sources, including CSOs, EPA could address these sources as part of an OU1 remedy. Based on the modeling performed as part of the OU2 FFS analysis, additional volume control of

the CSOs would not have a significant impact on the resulting Newtown Creek surface sediment concentrations after a hypothetical future remedial action is performed.

- 40. **Comment**: A resident, who is also co-chair of the CAG, asked who collected the data used to inform the decision.
- **EPA Response 40:** All data used to inform the decision was collected under the administrative order on consent for OU1. It was collected by the PRPs, with EPA oversight.
- 41. **Comment**: A resident, who is also co-chair of the CAG, asked if EPA evaluated how surface water is impacted by CSO discharges.
- **EPA Response 41:** The human health risk assessment performed by as part of the OU1 RIFS included the evaluation of various exposure scenarios including surface water exposure during boating. The risk assessment used a conservative assumption as to how much time people might spend on the water and how much of their body would be exposed. The risk assessment showed that impact from CERCLA contaminants of potential concern did not lead to unacceptable risk to human health through exposure to surface water. A similar evaluation was completed for ecological receptors exposed to surface water. The evaluation focused on comparing concentrations of compounds in surface water to surface water criteria associated with protection of zooplankton and aquatic plants, which are the most sensitive receptors for the surface water pathway. The results indicated that there were no unacceptable risks for ecological receptors due to exposure to surface water. Therefore, the OU2 evaluations did not evaluate the impact of CSO discharges on surface water. EPA notes that the OU1 risk assessment, by law, focused on CERCLA contaminants of potential concern; it did not evaluate the impact of the Clean Water Act pollutants, such as pathogens.
- 42. **Comment**: A resident, who is also co-chair of the CAG, asked if EPA evaluated surface water concentrations 24 hours after a major rain event or if the evaluation was just done of surface water overall without a consideration for timing.
- **EPA Response 42:** Surface water sampling occurred periodically over the course of a year, during both wet and dry weather. Periodic sampling was also performed for one year on a monthly basis. This data was then used in the human health and ecological risk assessments. Surface water concentrations were not significantly higher 24 hours following storms, which is likely due to the fact that storm events also bring more fresh water into the system, which can dilute any contaminants from point sources.
- 43. **Comment**: A resident, who is also co-chair of the CAG, commented that the evaluation performed for OU2 is based on current conditions. The LTCP includes an average rainfall amount from 2008 for its modeling. However, rainfall is increasing, and there are chemicals discharged through CSOs that are not currently considered COPCs for OU2 but do present risks to human health. Therefore, in 25 years, the overall CSO discharge volume could be greater than what was evaluated in this FFS as a result of increased rainfall, and other chemicals could be found to be impacting human and ecological health in the Superfund

program. What is the recourse for the community to reconcile these issues if they arise in the future?

**EPA Response 43:** The EPA Superfund remedial process incorporates five-year reviews following implementation of a remedy in certain instances. Five-year reviews provide an opportunity to evaluate the implementation and performance of a remedy to determine whether it remains protective of human health and the environment. No five-year reviews would be associated with the OU2 selected remedy because it is No Further Action. However, regular monitoring and reporting is required to ensure that the assumptions used in reaching this remedial decision remain valid. An evaluation of the final duration and frequency of the monitoring and reporting will be conducted in association with the OU1 site-wide remedial selection process.

Also, as part of the OU2 remedy, NYCDEP will be required to conduct robust monitoring. It is expected that monitoring of CSOs will continue as part of the OU2 or possibly OU1 remedies until the LTCP is fully implemented, estimated to be in 2042. This will provide EPA with a significant amount of data to continually evaluate the composition of the CSO discharges over time as the rainfall volumes at and land development and usage in the vicinity of the Creek evolves. Therefore, if changes to the OU2 remedy are needed, there are ample opportunities in the future to consider them.

44. **Comment**: A resident commented that the 61% reduction in CSO discharge volume assumed in the development of the LTCP is predicated on the 2008 rainfall. However, the City is projected to grow in the next 22 years, and, presumptively, this is going to add to the CSO discharge volume. How effective is the long-term control plan going to be in 25 years given the anticipated population of New York City in 2042? If the CSO discharge volume goes up 10%, the contaminant loading would also go up 10%?

**EPA Response 44:** Population growth of the City and how the City's infrastructure will manage population growth is outside of the CERCLA remedy review process. However, a higher volume of water entering the sewers and CSOs does not necessarily result in a proportional increase in the concentrations of COPCs discharging from those CSOs. The composition of the discharge may change over time; the OU2 monitoring program would identify any such change, and if necessary, additional actions could be selected through a future decision process to address any significant increases in COPC loading.

45. **Comment**: A Queens representative for Congresswoman Carolyn Maloney commented that population in Long Island City is increasing, and the sewers have not been built out to accommodate that. The sewers are not built to accommodate the current population as they back up with almost every rainstorm. She said that the City doesn't have a plan in place to handle the increasing population. Based on that, she recommended that EPA select the 100% CSO Control alternative because in a few years, that 100% reduction would probably amount to 61% reduction. Additionally, she said that she felt it was odd for EPA to indicate that it is positive development to have some CSOs in order to dilute the contaminant concentrations in Newtown Creek.

**EPA Response 45:** Comments noted. Regarding the last point in this comment about the perception that EPA was in favor of CSO discharges to the Creek, EPA was merely explaining the results that were displayed on the graph in the presentation that indicated that total PCB concentrations increase as CSO discharge volumes to Newtown Creek are reduced because of the loss of the effect of dilution related to decreased CSO discharge. EPA did not intend to suggest that CSO discharges entering Newtown Creek are beneficial.

46. **Comment**: A representative for Congresswoman Nydia Velazquez commented that the Gowanus Canal Superfund Site remedy required the City to implement additional control from what it was planning under its long-term control plan, resulting in a CSO reduction of up to 74 percent. The representative asked EPA to provide insight on how that remedy came to a different conclusion or required more CSO reduction than the Proposed Plan for the Newtown Creek site?

**EPA Response 46:** There are two primary differences between the evaluation of CSOs at the Newtown Creek site and the Gowanus Superfund site. The first is timing and sequencing of the evaluation. The LTCP for Gowanus was not yet approved when the remedy for the Gowanus Canal site was selected. Therefore, New York City was in a position to consider EPA's Superfund decision when finalizing its LTCP for the Gowanus Canal site. For the Newtown Creek site, EPA is still some years away from selecting a final remedy for the site, whereas the LTCP has already been approved. Given that EPA's Gowanus remedy requires significant CSO investments by New York City to prevent the CSOs from compromising the in-canal remedy, New York City asked EPA to consider whether similar additional requirements might be necessary for Newtown Creek.

The second difference is the size of the Creek versus the Gowanus Canal; the latter is a much smaller channel – 25 percent of the surface area of Newtown Creek. As indicated by the analysis in the FFS, CSO discharges per unit (e.g., 5a specified number of gallons) have a more significant impact on the smaller Gowanus Canal than they would have on Newtown Creek.

47. **Comment**: A representative for Congresswoman Nydia Velazquez asked whether the difference in CSO requirements for the Gowanus Canal versus this site is a result of different EPA project managers and their approaches on the projects.

**EPA Response 47:** The CERCLA regulations sets out a framework for evaluation of Superfund sites, and EPA uses this process to make remedy decisions at all Superfund sites. Response actions are based on site-specific evaluations. The sites are different, as discussed above in EPA Response 46, and therefore the evaluation completed for the impact of CSOs at each site can lead to different conclusions.

48. **Comment**: A resident noted that the Proposed Plan assumes that copper, lead, and PCB contaminant inputs from the East River to Newtown Creek remain the same. The resident asked where those contaminants in the East River are coming from and if anything is being done to reduce those contaminant concentrations coming into Newtown Creek.

**EPA Response 48:** Over time, there should be improvement in all waterbodies of New York City as the result of better 'best management practices' and plans being implemented that address the issue, such as the Waterbody Watershed Improvement Plan for New York City. These practices should improve water quality in the East River and Newtown Creek over time. However, the specific actions that will be taken to improve the water quality throughout the New York City watershed is outside the purview of this site's EPA Superfund remedial process. Those improvements and trends will continue to be evaluated in the context of the remedial process for OU1 of the site. If there are overall improvements in water quality around New York City, Newtown Creek should show similar improvements over time.

49. **Comment**: A resident commented that it sounds ridiculous to say that reducing the CSO discharge volume is not going to have any effect on the contaminants that are being evaluated. The resident stated that everybody knows CSO discharges impact human health, and protecting human health is the primary mission of the EPA. If it is actually the City's LTCP that is at issue here, then NYCDEP should attend meetings when EPA is discussing this topic.

EPA Response 49: Comment noted. While not stated by EPA at the meeting, for clarification please note that the Proposed Plan did not evaluate the adequacy of the LTCP in meeting the needs of the Clean Water Act requirements, nor did it evaluate the effects of the COPCs in Newtown Creek that are entering the Creek through CSO discharges on human health and the environment. The remedial decision made for OU2 is narrow in scope and focuses only on the volume of CSO discharge. As is memorialized in the remedy's ROD, future decision documents may require solids capture from CSO discharges and/or additional oil mitigation. It may also be determined that control of upland sources of contamination that find their way to the Creek through CSO discharges may be needed and/or that additional in-Creek actions may be needed, such as maintenance dredging near CSO discharge locations. None of these options are eliminated from future consideration. Furthermore, a robust CSO monitoring program will be conducted, and if the assumptions relied upon to form the bases of the LOE evaluations change over time, the remedial decision in this OU2 remedy can be re-evaluated, if necessary. Regarding the LTCP itself and the role of NYCDEP, note that NYCDEP held public meetings to discuss the LTCP, and there was a public comment period prior to finalization of that plan.

50. **Comment**: A representative of Riverkeeper asked EPA to provide more information about the differences between the Gowanus Canal site (where additional CSO reduction was ordered by EPA) and the Newtown Creek site with respect to the EPA Superfund process and why these differences occur?

**EPA Response 50:** As mentioned previously in EPA Response 46, the LTCP for the Gowanus Canal was not yet approved when the remedy for the Gowanus Canal site was selected. Therefore, New York City was in a position to consider EPA's Superfund decision, which requires the construction of two CSO storage tanks totaling 12 million gallons, when finalizing its LTCP for the Gowanus Canal. Ultimately, the Gowanus Canal LTCP identified no significant additional infrastructure improvements. By contrast, the 2018 Newtown Creek LTCP requires substantial infrastructure improvements, including the installation of a 39-million gallon CSO storage tunnel, and EPA through this remedy selection process is assessing whether that action is

sufficient in scale for the purpose of CERCLA. In comparing the CERCLA impacts of CSO discharges on the two waterbodies, CSO solids were shown to adversely impact a Gowanus Canal remedy by introducing new contamination on top of a remediated Canal; whereas, the lines of evidence evaluated for Newtown Creek did not reach the same conclusion. The level of CSO solids released into Newtown Creek after implementation of the LTCP CSO controls would only have very localized effects on a remediated Newtown Creek.

- 51. **Comment**: A representative of Riverkeeper noted that the LTCP document itself indicates that the selected alternative will result in a 62.5 percent reduction in volume but the Proposed Plan indicates that the LTCP will result in a 61 percent reduction in volume, and asked whether this difference is due to two different rainfall years being considered.
- **EPA Response 51**: No, the difference is not due to EPA evaluating a different rainfall year. NYCDEP calculations show that implementation of the LTCP would result in a reduction in CSO discharge of approximately 62.5 percent from the current baseline for three of the largest (by volume) CSO outfalls as a result of the construction and implementation of the building of a 39-million gallon CSO storage tunnel. There would be additional reduction attributed to expansion of the Borden Avenue pump station. So overall there would be a reduction in the total annual CSO volume of approximately 61 percent from the current baseline.
- 52. **Comment**: A representative of Riverkeeper noted that the LTCP assumes that New York City will install a significant amount of green infrastructure in the Newtown Creek sewershed to help reduce CSO discharges. The commenter asked whether EPA's analysis relies on the same assumptions. The commenter also asked how implementation of the LTCP will be enforced by EPA if the City does not meet its goals for green infrastructure or if the LTCP is modified, which the commenter felt there is a potential of happening.
- **EPA Response 52:** EPA's analysis assumes the LTCP is implemented as designed. If the LTCP gets modified between now and when it's implemented, EPA would have to reassess the assumptions used in developing the OU2 FFS. NYCDEP will be sampling the CSOs as part of the long-term monitoring under the OU2 selected remedy. EPA will continue to monitor the state of the CSOs and the elements of the LTCP implementation. If monitoring results show significant changes in the inputs to Newtown Creek from CSOs, additional controls would be evaluated as part of the OU1 remedy. Additionally, if the LTCP were to not be implemented as assumed, then the No Further Action decision could be revisited.
- 53. **Comment**: A resident asked if EPA has considered the stability of the City's LTCP for Newtown Creek accounting for the increase in population and development this area will see in the future?
- **EPA Response 53:** The LTCP itself, which was developed per the requirements of the Clean Water Act, was not evaluated in the OU2 FFS. The FFS evaluated the impact of various levels of control of the volume of CSO discharge on a future cleanup of Newtown Creek site. The CSO monitoring included in the OU2 remedy will help to identify the changes in CSOs over time, and EPA will be able to evaluate if additional CSO controls are needed as part of a future decision document.

54. **Comment**: A representative of the Brooklyn Community Board Environmental Protection Committee asked whether there is any situation or circumstance where the existence of pathogens in a waterbody or on land is presenting a significant risk to human health where EPA would intervene and demand some sort of action? Would another Federal agency do that? Could EPA intervene if the State has made a decision that may be severely detrimental to human health and ecology? If the City is being compliant with regards to the bacteria pathogens, why isn't that equally a part of this whole conversation?

**EPA Response 54:** At the meeting, EPA stated that the Clean Water Act is delegated from the Federal government to the NYSDEC, but the Federal program oversees it. Because authority is delegated to the State, the State is in the position to approve the LTCP and could intervene as necessary. Any increase in pathogens entering Newtown Creek could also be addressed under the authority of EPA Region 2's Water Division, but not by EPA Superfund. EPA Superfund would address any situation in which EPA Superfund COPCs in CSO discharge to Newtown Creek significantly increased in concentrations. CSO monitoring will be performed to evaluate these potential situations.

To expand upon what was said at the meeting, the Clean Water Act provides states with primary authority to administer several programs under the Clean Water Act, and EPA with oversight authority over those programs. EPA can also authorize states to administer other programs under the Act with EPA retaining oversight authority over those programs. In the State of New York, NYSDEC has the authority to administer many of these programs. NYSDEC, for example, is responsible for establishing water quality standards for New York waters, including identifying specific uses for each water body, and for setting appropriate criteria, including pathogen criteria, to support the use. Those water quality standards are submitted to EPA for review and approval or disapproval. If the waterbody does not meet its water quality standards (e.g., pathogen criteria), NYSDEC is responsible for developing water quality management plans, such as Total Maximum Daily Loads, and these plans are submitted to EPA for review and approval or disapproval. EPA has authorized NYSDEC to administer the National Pollutant Discharge Elimination System permit program. NYSDEC, therefore, is responsible for issuing permits to dischargers, including CSO dischargers, with pathogen limits and the requirement to develop an LTCP. Once developed, these LTCPs are submitted by permittees to NYSDEC for approval. EPA's Water program has oversight authority, including enforcement authority, over NYSDEC's permit program and oftentimes EPA will assist the state with the issuance of its permits. In circumstances where there is an immediate threat to public health, such as significant sewage/pathogens backing up into people's homes, and these conditions are not being addressed by the local or state authorities, EPA may intervene.

#### SECOND PUBLIC MEETING – BROOKLYN on December 11, 2019

55. **Comment**: A resident asked EPA to explain the LOE 1 graphs. Specifically, the commenter noted that the graph compares the CSOs, stormwater, treated discharges, and the East River surface water, and wondered if the stormwater water is coming out of the CSOs or running off the street.

- **EPA Response 55:** The graph presents the concentrations of COPCs in the particulate phase entering the Creek from CSOs and stormwater, separately. Throughout Newtown Creek, there are a number of stormwater pipes discharging stormwater into the Creek (without any sewer water component), which are different than the CSOs that discharge combined stormwater and sewer system effluent into the Creek.
- 56. **Comment**: A resident, who is also a co-chair of the CAG, asked where the stormwater included in the presentation is coming from. Is it direct runoff or is it runoff from private properties?
- **EPA Response 56:** The stormwater category includes discharge from municipal separate storm sewer systems (MS4s), runoff from private properties, and discharge from highway drains. This category includes any water entering the Creek from a pipe or from channel flow that isn't entering from a CSO outfall. Samples were collected from these inputs.
- 57. **Comment**: A resident asked why the evaluations do not show any improvement in contaminant concentrations going from 61 percent CSO reduction (No Further Action alternative) to 100% CSO reduction.
- **EPA Response 57:** There isn't much difference between the No Further Action and the 100% CSO Control alternative because this graph is presenting resultant concentrations in Newtown Creek sediment as a result of various levels of CSO discharge volume control. There are other inputs to the Creek included in the modeling including stormwater, treated discharges, and inputs from the East River that are impacting the contaminant concentrations in Newtown Creek.
- 58. **Comment**: A resident asked whether addressing other inputs of contamination to Newtown Creek would have an impact on the difference in improvement that can be achieved between the No Further Action alternative and the 100 percent CSO control alternative.
- **EPA Response 58:** As part of the decision process for the overall site (OU1), EPA will set cleanup goals and determine if, and what, additional measures are needed to address other inputs of contamination to the Creek, including those evaluated under OU2 (such as stormwater and treated discharges) and other sources of contamination such as processes within Creek sediments. These decisions would be made as part of the overall site decision document under OU1. Note that the OU1 decision process will also determine if additional CSO-related actions, beyond volume control, are needed. The focus of OU2 is only to evaluate the impacts of various CSO volume reductions, not discharges from other inputs.
- 59. **Comment:** A resident asked whether EPA is making the point that since contamination would still be coming into the Creek from the East River at high concentrations, then nothing needs to be done to address CSOs which enter Newtown Creek at similar concentrations.
- **EPA Response 59:** No, that is not the conclusion of the analysis. The proposed plan for OU2 is based on the OU2 FFS evaluation that indicates that a 61% volume reduction in CSOs provides roughly the same level of protectiveness as complete elimination of CSO discharges to the Creek. However, after Study Area-wide cleanup goals are developed and further site evaluation occurs under OU1, EPA may determine that additional mitigation measures may be required to

address impacts from CSOs. These measures might include a track-back program to determine if additional uplands control, through either regulatory or engineering means, is necessary. Measures may also include actions related to the discharge of solids from CSOs, such as end-of-pipe solids capture, end-of-pipe oil capture, and/or in-Creek maintenance dredging, if determined to be necessary. Decisions regarding these potential additional actions could be included as part of future remedial decisions.

60. **Comment:** A resident noted that concentrations in samples collected from stormwater and CSO discharges can be affected by the time during the storm that the samples are collected because of the stormwater flushing the system as time goes on. Additionally, if the discharge from multiple storms occurring close in time to each other is sampled, lower concentrations in samples from the storms that follow the initial one would be expected as a result of flushing from the previous storms. How did the sampling account for this?

**EPA Response 60:** Samples were collected at various intervals throughout the duration of various storms. Additionally, the storms that were planned for sampling were identified based on a variety of factors including the time between the anticipated storm and the previous storm.

61. **Comment**: A commenter noted that data indicates rainfall will be 15 percent higher by the 2040s as a result of climate change. Therefore, the 2008 rainfall volume used in the model is not appropriate for this evaluation. In 2042, when the LTCP is fully implemented, will this alternative be sufficient to protect Newtown Creek? What is the volume of CSO that the No Further Action alternative will capture in 2042? Has this been modeled?

**EPA Response 61:** The modeling for the LTCP was not performed by EPA Superfund. The LTCP and the modeling performed to support it are available on the NYCDEP website. EPA Superfund's analysis was focused on the impact of volume control (or reduction) of CSOs on the sediment concentrations in Newtown Creek. The FFS evaluation shows that increasing the CSO volume control beyond a 61% reduction would not have a significant impact on the resulting Newtown Creek sediment concentrations after remedial action is performed. Impacts to Newtown Creek such as bacterial loading and dissolved oxygen in surface water are addressed under the Clean Water Act. The LTCP was reviewed and approved by the State as per the requirements of the Clean Water Act.

62. **Comment**: A resident commented that EPA needs to provide the community with a plan and information that is going to address the issue of pollution entering Newtown Creek and not select a no action remedy. They also asked why EPA is not doing anything.

**EPA Response 62:** OU2 addresses only the volume of CSO discharges entering Newtown Creek. EPA is continuing to investigate and evaluate remedial options for Newtown Creek as a whole under OU1.

63. **Comment**: A resident asked if EPA in its studies considered the growing population and added waste given all the development in the area.

**EPA Response 63:** The anticipated development of the area is being considered under OU1 of the site, which is to address all of Newtown Creek Study Area. OU2 relates to only the volume

of CSO discharges entering the Creek and their impact. Under OU1, reasonably anticipated future land use is part of EPA's standard considerations in the remedy selection process.

64. **Comment**: A resident asked EPA to explain the process of how the LTCP (which is the No Further Action alternative here) is decided by the State, and also what a concerned citizen can do to change that decision if not satisfied with it. The resident asked if there is any opportunity for the public to weigh in at a state level.

**EPA Response 64:** In response to the commenter, EPA explained that the LTCP went through a public review process much like the Superfund proposed plan process. Multiple public participation sessions were held over a period of approximately two years. Since then, the LTCP has been approved by New York State. EPA Superfund played no role in approving the LTCP; it is not in our jurisdiction. EPA can provide contact information for the appropriate people with whom to speak at the City and State.

To expand upon what was explained at the meeting, EPA's CSO Control Policy, published April 19, 1994 (59 FR 18688), is the national framework for control of CSOs, and it outlines the process for developing CSO LTCPs. The Policy provides guidance on how communities can develop CSO LTCPs and includes requirements for public participation (i.e. "the permittee will employ a public participation process that actively involves the affected public in the decision-making to select the long-term CSO controls."). This process was followed by NYSDEC. In December 2000, Congress amended the Clean Water Act and added Section 402(q)(1) to require conformance with the CSO Control Policy in permitting and enforcement activities. As draft National Pollutant Discharge Elimination System permits are developed, NYSDEC must provide public notice of the draft permit (i.e., Newtown Creek Wastewater Treatment Plant) and provide at least 30 days for public comment. The permitting agency must respond to the public comments as the final permit is developed.

65. **Comment**: A resident asked that if the State decided they're moving forward with the LTCP as is, then what is the purpose of the public comment on the Proposed Plan.

**EPA Response 65:** EPA responded to the commenter that EPA was taking verbal questions and comments at the OU2 public meeting on the Proposed Plan for Operable Unit 2 of the Newtown Creek Superfund site, not on the already approved LTCP. EPA further observed that a court reporter was present at the meeting to record all the comments and questions submitted verbally at the meeting. People can continue to submit written comments during the comment period until it ends (which was stated to be January 27, 2020 at the public meeting but was subsequently extended to February 28, 2020, with public notice of that extension). EPA said that the Agency would respond to all comments and questions in a written document called a responsiveness summary, which is what this document is.

66. **Comment**: A resident asked if the community has the ability to change the Proposed Plan in light of the comments and questions received, and what that process would be.

**EPA Response 66:** There is an opportunity for the preferred alternative for OU2, as set forth in the Proposed Plan, to change in light of the comments provided during the public comment

process. The path forward for resolving any such changes depends on the nature of the change. Changes to the details of the preferred alternative, or change from the original preferred alternative to another alternative proposed in the Proposed Plan, may be able to be documented in the ROD. However, if there were a significant change to the preferred alternative, including identification of another approach not included among the alternatives presented in the Proposed Plan, EPA could restart the remedy selection process and publish a new Proposed Plan.

67. **Comment:** A resident noted that EPA should explain this information in simpler terms for the community to be able to understand the Proposed Plan and the decisions being made about the community.

## **EPA Response 67**: Comment noted.

68. **Comment**: A resident noted that EPA is using a document with data that dates back to 2008 and asked if there is a reason that EPA is using outdated documents.

**EPA Response 68:** The data that was used for the analysis in the OU2 FFS was collected between 2012 and 2019. The LTCP was approved by New York State in 2018, and it utilized rainfall data from 2008. The LTCP details NYCDEP's rationale for the use of this data set for analysis.

69. **Comment**: A resident, who is also a co-chair of the CAG, commented that the graphs do show that there is a difference in sediment concentrations in Newtown Creek between the three alternatives and asked why EPA is not aiming to get the contaminant input to Newtown Creek reduced to zero?

**EPA Response 69**: Comment noted. While EPA did not provide a detailed response to this comment during the public meeting, the comment is similar to one provided by the CAG in its written comments (See Comment 1). CERCLA is a risk-based program. While it is understandable that reducing all contaminant inputs to zero would be a desirable, long-term goal for the Creek, the EPA Superfund program must act within the CERCLA regulatory framework, which is based on risk reduction. The OU1 decision process will evaluate all inputs to the Creek in developing remedial alternatives for the entire Study Area and will address any inputs that will impact the long-term effectiveness of a remedy, to the extent possible. It should be noted that while EPA will evaluate all inputs of contamination to the Creek, the Superfund program itself has only limited ability to affect regulatory control over some of these sources. For example, the EPA Superfund program has little ability to reduce inputs to the Creek from sources such as the East River and atmospheric deposition. The EPA Superfund program may have limited ability to effectuate greater regulatory control over other sources of contamination to the Creek, such as regulated discharges. Note that contaminant concentrations and/or loads from inputs to the Creek are generally expected to improve over time as tighter regulatory control and improved best management practices are implemented within the region.

70. **Comment**: A resident, who is also a co-chair of the CAG, commented that comparing CSO inputs to other inputs is not a valid comparison. The commenter stated that all sources of

pollution should be addressed and that EPA is using a complicated analysis to show that the difference between the alternatives is minimal.

## **EPA Response 70:** Comment noted.

- 71. **Comment:** A resident, who is also a co-chair of the CAG, asked how a track-back program and maintenance solution for contaminants in the CSO would work and why the track-back program was not being pursued now. The commenter also asked about the size of the watershed draining to Newtown Creek and the feasibility of conducting a track-back program for such a large area watershed.
- **EPA Response 71:** The monitoring program would aid in determining whether additional actions are needed to address contamination entering the Creek through CSO discharges. The track-back program would be conducted if the monitoring data suggests it is necessary. Further action could include a thorough track-back system, permit restrictions, or tighter regulations. These additional actions, if needed, would be memorialized in a future decision document. The details of a track-back program, should one be determined to be needed, would be determined in future technical documents, which would take into account the size of the watershed.
- 72. **Comment**: A representative of Riverkeeper asked EPA to explain clearly why the agency led the action on sewage cleanup for the Gowanus Canal site but is not doing so for the Newtown Creek site, and went on to ask why, if further action regarding CSO inputs to the Creek are not off the table with this decision regarding OU2, why is EPA pursuing this remedy.

EPA Response 72: EPA's remedy for Gowanus was not a decision about sewer discharges from CSOs, which is under the purview of the Clean Water Act. EPA evaluated the solids discharged from CSOs as a release of hazardous substances into the Canal, which is not typically addressed under the Clean Water Act. The LTCP for Gowanus was not yet approved when the remedy for Gowanus was selected. Therefore, New York City was in a position to consider EPA's Superfund decision, that required construction of two CSO storage tanks totaling 12 million gallons, when finalizing the LTCP for the Gowanus Canal site. Ultimately, the Gowanus Canal LTCP identified no significant additional infrastructure improvements. By contrast, the 2018 Newtown Creek LTCP requires substantial infrastructure improvements, including the installation of a 39-million gallon CSO storage tunnel, and EPA through the OU2 remedy, is assessing whether those actions are sufficient for the purposes of CERCLA. In comparing the CERCLA impacts of CSO discharges on the two waterbodies, CSO solids were shown to adversely impact the Gowanus Canal by introducing new contamination on top of what will be a remediated Canal; whereas, the lines of evidence evaluated for Newtown Creek did not reach the same conclusion. The level of CSO solids released into Newtown Creek after implementation of the LTCP CSO controls are evaluated to only have very localized effects on what is anticipated to be a remediated Newtown Creek. EPA will assess those localized effects as part of future decision documents.

Regarding the OU1 decision versus this OU2 decision, EPA continues to evaluate its understanding of the entire Study Area, and it will review any previous decisions to ensure the

decision continues to be appropriate. If the Newtown Creek OU1 RI/FS process results in an EPA determination that additional action is needed to address contamination from the CSO discharges, EPA can address it in the future, such as in the OU1 decision process.

- 73. **Comment**: A resident asked whether only 20 samples were collected from the CSOs and when the most recent ones were collected?
- **EPA Response 73:** EPA responded that this information can be provided, and that CSO discharges will continue to be sampled to evaluate any changes over time. See EPA Response 13Biii in the written comments portion of this Responsiveness Summary for more details.
- 74. **Comment**: A resident asked whether EPA believes that a climate emergency resulting in increased rainfall, higher sea levels, and stresses on our environment is coming to New York City, and whether EPA is taking increased rainfall and new development infrastructure into account in the evaluations. The resident went on to ask whether EPA performed modeling looking at projected conditions for the City in the 2040s and 2050s?
- **EPA Response 74:** Climate change as a whole and modeling for New York City is outside the subject of this meeting. From the EPA Superfund perspective regarding OU2, monitoring of the CSOs will be performed over time to collect data to support an evaluation of any significant change in the nature of CSO discharges entering Newtown Creek.
- **75.** Comment: A resident asked EPA to clarify what kinds of comments EPA is looking for on the Proposed Plan.
- **EPA Response 75:** The public should provide questions and comments to EPA on anything they disagree with, don't understand, or would like additional information on.
- 76. **Comment**: A resident stated that EPA should select the 100% CSO control alternative, noting that any reduction is the best reduction.
- **EPA Response 76:** Comment noted.
- 77. **Comment**: A representative of Riverkeeper asked how the local impacts of the CSO discharges would be addressed where they are actually discharging, such as in Dutch Kills.
- **EPA Response 77:** The effects of CSO discharges are evaluated through the use of modeling. The chemical model utilized for the FFS evaluations can provide spatial representations of concentrations of various areas of the Creek at a resolution of 10 to 20 meters. The average calculations can be used to evaluate the impacts at a greater scale within the Creek. Future monitoring required as part of the remedy will also help to evaluate localized impacts in sediment.
- 78. **Comment**: A resident asked whether future development of the neighborhood is being considered.

**EPA Response 78:** Future development and the increasing population is being considered as part of the OU1 Study Area-wide decision process. Reasonably anticipated future use is taken into consideration during the development and evaluation of remedial alternatives. Information on this evaluation will be included in the OU1 remedial decision process.

## ATTACHMENT A

## PROPOSED PLAN

Superfund Program Proposed Plan

U.S. Environmental Protection Agency
Region 2

## Newtown Creek Superfund Site New York City, New York



November 2019

#### EPA ANNOUNCES PROPOSED PLAN

This Proposed Plan identifies the preferred alternative for addressing a discrete aspect of the Newtown Creek Superfund site, referred to as Operable Unit 2 (OU2), and provides the rationale for the preference. OU2 relates to current and reasonably anticipated future discharges of the Operable Unit 1 (OU1) chemicals of potential concern (COPCs) from combined sewer overflows (CSOs) to the Newtown Creek Study Area, as the term Study Area is as described later in this plan.

The overall site is being addressed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as the Superfund Law). In addition, as per the requirements of the Clean Water Act (CWA), the New York City Department of Environmental Protection (NYCDEP) is under order of the New York State Department of Environmental Conservation (NYSDEC) to implement the CSO Long Term Control Plan for Newtown Creek, approved by NYSDEC in 2018 (LTCP). The LTCP includes a number of components to reduce CSO discharges to Newtown Creek, including construction of a storage tunnel, that will reduce the volume of CSO discharges to Newtown Creek to achieve waterbody-specific water quality standards consistent with the Federal CSO Control Policy and related guidance by approximately 61% from current baseline conditions.

The U.S. Environmental Protection Agency (EPA) evaluated the LTCP in the context of the site to determine if the volume controls prescribed by the LTCP are sufficient to meet the needs of an eventual CERCLA remedy for the Study Area. The evaluation of this discrete aspect of the site is referred to as OU2. EPA's preferred alternative to address the volume of current and reasonably anticipated future discharges of COPCs from CSOs to the Study Area is Alternative 2, No Further Action, that is, no action beyond the anticipated implementation of the LTCP, pursuant to the above-referenced CWA order.

EPA, the lead agency, in consultation with the New York State Department of Environmental Conservation (NYSDEC), the support agency, is issuing this Proposed Plan as part of its public participation responsibilities under CERCLA Section 117(a) of CERCLA and the regulations set forth in Section 300.430(f)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This proposed plan summarizes information that can be found in greater detail in the focused feasibility study

### MARK YOUR CALENDAR

## PUBLIC COMMENT PERIOD:

November 21, 2019 - December 23, 2019

EPA will accept written comments on the Proposed Plan during the public comment period. Written comments should be addressed to:

> Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18<sup>th</sup> Floor New York, NY 10007

Email: schmidt.mark@epa.gov

#### **PUBLIC MEETINGS:**

EPA will hold two public meetings to explain the Proposed Plan and all of the alternatives presented in the Focused Feasibility Study. Oral and written comments will also be accepted at the meetings. The meetings will be held at:

December 9, 2019December 11, 20196:30 to 8:30 P.M.6:30 P.M. to 8:30 P.M.Sunnyside CommunityP.S. 110Services124 Monitor Street43-31 39th StreetBrooklyn, New YorkQueens, New York 1110411222

In addition, documents from the administrative record are available on-line at:

https://www.epa.gov/superfund/newtown-creek

report (FFS) prepared for OU2. This and other documents are part of the publicly available administrative record file and are located in the information repository for the site. EPA encourages the public to review these documents to gain a more comprehensive understanding of the site and the Superfund activities that have been conducted.

EPA, in consultation with NYSDEC, will select the remedy for OU2 after reviewing and considering all information submitted during a public comment period, which will last for at least 30 days. EPA, in consultation with NYSDEC, may modify the preferred alternative or select another response action presented in this Proposed Plan based on new information or public comments. Therefore, the public is encouraged to review and comment on all the information and alternatives presented in this Proposed Plan.

### SCOPE AND ROLE OF ACTION

As with many Superfund sites, the contamination at this site is complex, and the cleanup is being managed through several operable units, or OUs. Additional information regarding OU1 and OU3 is provided in the Site History section, below. This Proposed Plan addresses OU2.

The alternatives evaluated in this Proposed Plan apply only to the current and reasonably anticipated future volume of discharge from CSOs. EPA will determine in future decision documents whether additional control actions, either in-creek or at CSO points-of-discharge, are required to meet the remedial action objectives of the overall site, which are yet to be determined. Such additional control actions, if necessary, would be implemented by a future decision document.

In addition, in addressing OU2, EPA makes no determinations or findings regarding past discharges of COPCs from CSOs. Past releases and their impact on the Study Area are being evaluated as part of the OU1 remedial investigation/feasibility study (RI/FS), which is currently being conducted.

### OVERALL SITE DESCRIPTION

The site is located in Kings County and Queens County, New York City, New York (Figure 1). The site

includes Newtown Creek and its five tributaries, including Whale Creek, Dutch Kills, East Branch, English Kills and Maspeth Creek.

The site is located within the Newtown Creek Significant Maritime and Industrial Area (SMIA), one of six designated SMIAs in New York City. The Newtown Creek SMIA, at over 780 acres, is the largest SMIA in New York City, and includes portions of the Greenpoint, Williamsburg, Long Island City, and Maspeth industrial areas.

Newtown Creek and its tributaries comprise an estuarine water body that is generally oriented in an east-west direction, although the easternmost section of Newtown Creek and several of the tributaries are oriented north-south.

The water in Newtown Creek is currently classified by the NYSDEC as Class SD, saline surface water with a protected use of fish survival only. The Creek does not presently meet parameters for that protected use (e.g., because of low dissolved oxygen). The Creek is used for recreational uses, including kayaking and canoeing and there are existing and planned waterfront access points. Despite a New York State Department of Health fish advisory to limit fishing in Newtown Creek, posted warnings and public outreach efforts, fishing and crabbing have been observed on the Creek.

## **OVERALL SITE HISTORY**

Historically, Newtown Creek drained the uplands of western Long Island and flowed through wetlands and marshes. However, because of heavy industrial development and governmental activities dating from the 1800s, the wetlands and marshes have been filled, Newtown Creek has been channelized, and its banks have been stabilized with bulkheads and rip rap. The historic development has resulted in changes in the nature of Newtown Creek from a natural drainage condition to one that is governed largely by engineered and institutional systems.

In the mid-1800s, the area next to the 3.8-mile-long Creek was one of the busiest industrial areas in New York City. Industrial facilities were located along its banks, including more than 50 oil refineries, petrochemical plants, fertilizer and glue factories,

sawmills, and lumber and coal yards. Newtown Creek was crowded with commercial vessels, including large ships bringing in raw materials and fuel and taking out finished products including petroleum products, chemicals and metals. In addition to the industrial pollution that resulted from all of this activity, the City began dumping raw sewage directly into the water in 1856. During World War II, the Creek was one of the busiest ports in the nation. Currently, factories, warehouses, public utilities and municipal facilities operate along the Creek. Various contaminated facilities upland of the Creek have been sources of the contamination at Newtown Creek.

This industrial development resulted in a major reworking of the Creek banks and channel for drainage and navigation purposes. The channelizing and deepening of Newtown Creek and its tributaries were largely completed by the 1930s, defining its current configuration. This historical development has resulted in changes in the nature of Newtown Creek and its tributaries' natural drainage condition from one with tributary flow, to one that is governed largely by engineered and institutional systems.

In the early 1990s, New York State declared that Newtown Creek was not meeting water quality standards under the Clean Water Act. Since then, a number of state- and city-sponsored cleanups of properties in the Newtown Creek area have taken place, and a major upgrade of the Newtown Creek Wastewater Treatment Plant completed in 2012.

The site was added in 2010 to the EPA National Priorities List pursuant to CERCLA. The site was being addressed as one operable unit (OU) until recently, when two additional OUs were identified. The current OU structure is as follows:

## OU1

OU1 includes the entire Study Area, as defined in an administrative order on consent (AOC) from 2011 between EPA, the New York City Department of Environmental Protection (NYCDEP), and Phelps Dodge Refining Corporation, Texaco, Inc., BP Products North America Inc., the Brooklyn Union Gas Company D/B/A National Grid NY and ExxonMobil Oil Corporation. These five private parties (excluding New York City) have organized as the Newtown Creek

Group (NCG). The 2011 AOC defines the Study Area, generally, as the water body and sediments of Newtown Creek and its tributaries, up to and including the landward edge of the shoreline.

A full RI/FS for OU1 is ongoing under EPA oversight.

#### OU2

The OU2 FFS was conducted by NYCDEP, with EPA oversight, pursuant to a 2018 AOC between EPA and NYCDEP.

## OU3

OU3 refers to the evaluation of a potential interim, early action for the lower two miles of the Creek in the Study Area, as described in a 2019 AOC between EPA and the NCG. An FFS for OU3 is currently being performed by the NCG, with EPA oversight.

### **ENFORCEMENT HISTORY**

As noted previously, six responsible parties have entered into the 2011 AOC to conduct the OU1 RI/FS. OU2 is being conducted per the terms of a 2018 AOC with NYCDEP only, and OU3 is being conducted per the terms of a 2019 AOC with the NCG only.

Additional potentially responsible parties have recently been notified of their potential liability. The role and contribution of these additional parties to each OU at the site is yet to be determined. The search for additional potentially responsible parties continues.

## **OVERALL SITE CHARACTERISTICS**

The site has been extensively studied through the OU1 RI/FS process. The results of these studies will be detailed in the OU1 RI and FS reports. No new physical investigations of the site were conducted as part of OU2. Rather, the evaluations conducted to support the OU2 FFS relied upon data collected as part of the OU1 RI/FS.

## **OU1 Study Area Investigation**

OU1 RI field work began in February 2012 and was substantially completed by May 2014. It was determined that additional data were needed, and these were obtained as part of the OU1 FS so that preparation

of the draft OU1 RI report could proceed. OU1 FS Field work began in Spring of 2017 and was substantially completed in 2019.

A draft OU1 RI report was initially submitted in November 2016 and a revised version was submitted in April 2019. EPA sent comments on the revised RI report to the NCG in September 2019 and a revised document is currently due in early 2020.

The OU1 RI/FS field work included the collection of a robust set of data that are being used to determine the nature and extent of contamination at the Study Area, develop the overall conceptual site model, and ultimately support the selection of an appropriate remedial alternative for OU1. These data include the following: sampling of sediment, surface water, porewater, groundwater, seepage, air, shoreline sediment/soil, biota tissue, point source discharges, non-point source discharges, non-aqueous phase liquid (NAPL), and ebullition; surveys of ecological communities and bathymetry; and testing of sediment toxicity, NAPL mobility and geotechnical properties.

Samples were analyzed for a comprehensive list of contaminants, including volatile organic compounds, semi-volatile organic compounds, metals (total and dissolved), polychlorinated biphenyl (PCB) aroclors and congeners, dioxins/furans and pesticides.

In addition, as part of the OU1 RI/FS, a complex set of inter-related models is being developed. The first two major pieces (the hydrodynamic and sediment transport models, which include groundwater and point-source sub-models) have been submitted with the draft RI report and are being refined. The remaining portions of the modeling framework (the contaminant fate and transport model and the bioaccumulation model) are still being developed and will be submitted as part of the draft FS report. As such, while development of the Conceptual Site Model for OU1 is well underway, a full system understanding is still being developed. The OU1 FS report is currently scheduled for completion in 2022.

## **Physical Characteristics of OU1 Study Area**

Elevated concentrations of contamination were found throughout the Study Area. Much of this contamination

is due to historic inputs of contamination to the Creek, and contaminated sediment, in particular, is found in the surface and subsurface sediment, and the underlying native sediment.

Ongoing, external inputs of contamination to the Study Area include, but are not necessarily limited to, municipal separate storm sewer system outfalls (MS4s), the Newtown Creek waste water treatment plant (WWTP) treated effluent outfall, permitted industrial discharges, other permitted/non-permitted discharges, overland flow/direct drainage, groundwater, other non-point sources, the tidal effects of the East River, atmospheric deposition, shoreline seeps/groundwater discharge from upland properties and shoreline bank erosion, as well as CSO discharges.

Representative samples from these inputs have been collected as part of the OU1 RI/FS process, providing sufficient data to develop quantitative estimates of the concentrations of hazardous substances entering the Creek from these sources and, where appropriate, the mass/volume.

The Creek itself also has elevated concentrations of many contaminants, and there are in-Creek processes that may lead to the spread of this contamination within the Study Area. These processes include ebullition (bubbling), sediment resuspension, and NAPL migration.

Point source discharges to the Study Area include over 300 private and municipal outfalls along the Creek and its tributaries. These point source discharges primarily supply freshwater flows to Newtown Creek during wet weather conditions and include individually permitted stormwater and wastewater discharges, CSO discharges, unpermitted discharges, and treated wastewater discharges from the WWTP. Stormwater runoff from roadways and overland flow are also discharged to the Creek.

## **OU2 FFS**

## **Background of Operable Unit 2**

During wet weather conditions, the Creek receives discharges from point sources, which include CSOs and stormwater (municipal discharges, and permitted and unpermitted private point source discharges), as well as from non-point sources, such as overland flow (see Figure 2 for some of these point source discharge locations). In addition to the discharges during wet weather, the Creek also receives freshwater inputs from groundwater. The groundwater enters the Creek through the sediment and from the upland properties adjacent to the Creek. The East River and point sources are currently considered the primary sources of solids to the Creek.

For several decades, the control of CSOs to affect improvements in bacteria levels and dissolved oxygen concentrations in waterbodies has been driven by CWA regulatory programs, including EPA's CSO Control Policy (Section 402 (q) of the CWA), and the NYSDEC promulgation of numeric water quality standards for bacteria and dissolved oxygen. The control of CSOs has focused on volumetric reductions of CSO discharges to meet these standards.

CSO planning for Newtown Creek was initiated in 1990 via the Newtown Creek Water Quality Facility Planning Project. A Waterbody/Watershed Facility Plan (WWFP) for Newtown Creek was issued by NYCDEP and approved by NYSDEC in 2012. The WWFP included an analysis of operational and structural modifications targeting the reduction of CSOs and improvement of the overall performance of the collection and treatment system within the watershed. In 2017 NYCDEP developed an LTCP to identify, with public input, appropriate CSO controls necessary to achieve waterbody-specific water quality standards consistent with the Federal CSO Control Policy and related guidance. NYSDEC approved the LTCP in 2018.

While efforts to reduce the volume of CSO discharges are focused on the CWA objectives, the volume reduction will also decrease the mass of site-related COPCs discharged to the Creek. The overall goal of the OU2 FFS is to determine if the volume controls prescribed by the LTCP designed to meet the requirements of the CWA program are sufficient to also meet the CERCLA requirements for the site.

As part of the OU1 RI/FS efforts, a robust point source sampling program was completed. Thirty-one point source discharges were sampled during 15 wet weather sampling events between June 2014 and December

2015. Samples were collected from CSOs, MS4s, highway drains, stormwater discharging from private properties and permitted outfalls. These data were used in evaluating the lines of evidence described below. Discharges from the sampled CSOs account for approximately 96 percent of the total CSO discharge to the Creek

## **Multiple Lines of Evidence Evaluation**

As mentioned above, the OU1 RI/FS is ongoing and the preliminary remediation goals for the Study Area have not been developed. Because of this, a multiple lines of evidence approach was used to assess the relative performance of each of the alternatives evaluated in the OU2 FFS.

Three Lines of Evidence (LOEs) were evaluated, as described below.

- LOE 1: comparison of the particulate-phase concentrations of COPCs in CSO discharges to the particulate-phase concentrations in other potential sources of contamination to the Creek;
- LOE2: comparison of the mass loading of COPCs from CSO discharges to the mass loading of COPCs from other potential sources of contamination to the Creek; and
- LOE 3: assessment of the impact of COPCs from CSO discharges on the sediment bed of the Creek assuming that a CERCLA remedy for the entire Study Area has been implemented. A relatively simple series of models was developed to determine the resultant concentration of COPCs in the surface sediment from CSO discharges and from other potential sources of contamination to the Creek.

The COPCs used in these evaluations are consistent with those that have been determined to be contributing the greatest amount of risk to human and ecological receptors for the Study Area as part of the OU1 RI/FS process, as described in the Summary of Site Risks section of this Proposed Plan.

The data used in evaluating the LOEs were all obtained during the OU1 RI/FS process. In particular, data

collected from the following categories of potential sources of contamination to the Study Area were used in the LOE evaluations:

- CSO discharges includes 20 samples collected from seven CSO outfalls representing approximately 96 percent of the total CSO discharges to the Creek;
- Stormwater discharges includes 47 samples collected from MS4s, private properties, highway drains and other stormwater outlets;
- Treated discharges includes up to 23 samples collected from wastewater treated effluent, permitted discharges from groundwater treatment systems and treated discharges from industrial facilities;
- East River includes up to 87 samples collected from the river; and
- Atmospheric deposition regional data from various publicly available sources was used.

These potential sources are referred to as the CSO discharges and the "other evaluated inputs" in the OU2 FFS. As described in the "Physical Characteristics of the OU1 Study Area" portion of this Proposed Plan, note that these other evaluated inputs do not represent all potential sources of COPCs to the Study Area.

The results of the LOE evaluation are discussed in the Evaluation of Alternatives section of this Proposed Plan.

### **SUMMARY OF SITE RISKS**

#### **OU1 Risk Assessments**

As part of the OU1 RI/FS process, baseline human health and ecological risk assessments were conducted and the reports have been approved by EPA. The assessments found unacceptable risk to both human health and the environment. Therefore, there is a basis to take remedial action at the site.

The Baseline Human Health Risk Assessment (BHHRA) was approved in June 2017. It found that unacceptable risks associated with ingestion of fish and crab from the Creek exist. The contaminants of potential concern identified by the BHHRA were total

non-dioxin-like PCB congeners, total PCB toxicity equivalences (TEQs), and total dioxin/furan TEQs.

The Baseline Ecological Risk Assessment (BERA) was approved in September 2018. Overall, the results of the BERA indicate that Study Area sediment, particularly in the Turning Basin and most of the tributaries, is toxic to benthic invertebrates and presents exposure risks for bivalves, blue crabs, fish and birds. The primary contaminants leading to unacceptable risk were PAHs, PCBs, and copper, with additional risk from dioxins/furans and lead.

Because unacceptable risk was identified in the OU1 risk assessments, there is a basis to evaluate appropriate remedial actions at the site, including for OU2. The OU1 FS, which is underway, will evaluate alternatives for the remediation of the overall site.

#### **OU2 Risks**

Separate risk analyses were not conducted as part of the OU2 FFS process. The COPCs identified in the OU1 BHHRA and BERA are the COPCs evaluated in this OU2 FFS.

Therefore, the full list of contaminants evaluated in detail in the OU2 FFS includes total PAHs (TPAH17, with 17 referring to the number of individual compounds included in the total), total PCBs (TPCBs), copper, dioxin/furans and lead.

## REMEDIAL ACTION OBJECTIVES

The remedial action objective (RAO) for OU2 of the site is:

 Minimize, to the extent practicable, inputs of site-identified compounds to Newtown Creek from CSO outfalls that may add contamination to the Study Area.

As described earlier, the COPCs for OU2 are TPAH17, TPCBs, copper, dioxins/furans and lead.

Preliminary remediation goals (PRGs) were not developed for OU2. They are not needed to evaluate the RAO. Instead, the alternatives developed in the OU2 FFS were evaluated relative to each other. PRGs for

#### WHAT IS A "PRINCIPAL THREAT"?

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes an expectation that EPA will use treatment to address the principal threats posed by a site wherever practicable (NCP Section 300.430(a)(1)(iii)(A)). The "principal threat" concept is applied to the characterization of "source materials" at a Superfund Site. A source material is material that includes or contains hazardous substances, pollutants or contaminants that act as a reservoir for migration of contamination to ground water, surface water or air, or acts as a source for direct exposure. Contaminated ground water generally is not considered to be a source material; however, NAPLs in ground water may be viewed as source material. Principal threat wastes are those source materials considered to be highly toxic or highly mobile that generally cannot be reliably contained, or would present a significant risk to human health or the environment should exposure occur. The decision to treat these wastes is made on a sitespecific basis through a detailed analysis of the alternatives using the nine remedy selection criteria. This analysis provides a basis for making a statutory finding that the remedy employs treatment as a principal element.

each COPC will be developed as part of the OU1 RI/FS process.

#### PRINCIPAL THREAT WASTE

Current and reasonably anticipated future discharges of COPCs from CSOs act as a source of contamination to the Study Area. However, this action does not characterize their toxicity and mobility. Therefore, a determination of which sources constitute principal threat waste will be deferred to the OU1 remedy selection process. Please refer to the text box entitled, "What is a Principal Threat" for more information on the principal threat concept, and the Summary of Site Risks Section for more information on the risks posed by the site.

## **SUMMARY OF REMEDIAL ALTERNATIVES**

CERCLA Section 121(b)(1), 42 U.S.C. § 9621(b)(1), mandates that remedial actions must be protective of human health and the environment, be cost-effective, and use permanent solutions and alternative treatment technologies and resource recovery alternatives to the maximum extent practicable. CERCLA Section 121(d), 42 U.S.C. § 9621(d), further specifies that a remedial action must require a level or standard of control of the hazardous substances, pollutants, and contaminants that

at least attains applicable or relevant and appropriate requirements (ARARs) under federal and state laws, unless a waiver can be justified pursuant to CERCLA Section 121(d)(4), 42 U.S.C. § 9621(d)(4).

Remedial alternatives for OU2 are summarized below. Capital costs are those expenditures that are required to construct a remedial alternative. Operation and maintenance (O&M) costs are those post-construction costs necessary to ensure or verify the continued effectiveness of a remedial alternative and are estimated on an annual basis. Present worth is the amount of money which, if invested in the current year, would be sufficient to cover all the costs over time associated with a project. Construction time is the time required to construct and implement the alternative and does not include the time required to design the remedy, negotiate performance of a remedy with the responsible parties, or procure contracts for design and construction.

#### Alternative 1 - No Action

Capital Cost:	\$0
Annual O&M Cost:	\$0
Present Worth Cost:	\$0

Construction Timeframe: 0 years

The NCP requires that a "No Action" alternative be evaluated to establish a baseline for comparison with other remedial alternatives. This alternative assumes that the CSO discharges to the Creek remain as they currently are, without implementation of the LTCP. Under this scenario, the total CSO discharges to the Creek are estimated to be approximately 1.2 billion gallons per year, using conditions detailed in the NYSDEC-approved LTCP.

## Alternative 2 - No Further Action

Capital Cost:	<i>\$0</i>
Annual O&M Cost:	<i>\$0</i>
Present Worth Cost:	<i>\$0</i>
Construction Time Frame:	0 months

This alternative assumes that NYCDEP will implement the LTCP as ordered pursuant to the CWA CSO orders issued by NYSDEC, the state authority delegated by EPA to implement the CWA. Milestones for design and construction are contained in the CSO orders, which indicate the LTCP will be implemented as the CERCLA process is conducted. No additional CSO discharge volume control measures beyond those required by the LTCP are included in this alternative.

To support this alternative, in light of the many changes anticipated for Newtown Creek in the coming years, including the selection of future response actions under CERCLA, EPA anticipates requiring the following monitoring activity going forward:

- Sampling of discharge from the four major CSOs to Newtown Creek on a quarterly basis until the LTCP is fully implemented, with regular reporting to EPA.

Furthermore, EPA and NYSDEC will consider a track-back program to address any persistent increases in COPC concentrations from CSO discharges, if any are found. If required, a track-back program would identify sources of elevated contaminant concentrations within the sewershed, so they can be addressed either through tighter permit controls or upland action, as appropriate. The CSO monitoring, and potential track-back program, that would be required under this Alternative would be used to confirm that the assumptions used in developing this alternative, pursuant to CERCLA, remain appropriate until the LTCP is fully implemented.

The costs for conducting this monitoring are estimated to be \$5,000,000 for the quarterly sampling of CSO discharges for approximately 22 years (the time until the LTCP is fully implemented) plus an additional \$5,000,0000 to track sources of contamination, if necessary. The cost of any monitoring of a "no action" or "no further action" remedy is not considered to constitute a remedy under CERCLA, so the costs associated with this alternative are listed as zero.

No five-year reviews would be associated with Alternative 2. However, there would be regular reporting requirements until the LTCP is implemented, the results of which would be used to inform the effectiveness of this decision. An evaluation of the final duration and frequency of the monitoring and reporting

would be conducted in association with the OU1 sitewide remedy selection process.

### Alternative 3 – 100% CSO Control

Capital Cost: Annual O&M Cost: -

Present Worth Cost: At least \$1.65 billion Construction Time Frame: At least 22 years

This alternative assumes that all CSO discharges to the Creek are controlled. As compared to Alternative 2, this alternative would require the construction of a larger diameter tunnel, to be connected to all CSOs discharging to Newtown Creek, and additional wastewater treatment facilities.

In the OU2 FFS, the costs associated with developing this alternative were not fully determined. However, the NYSDEC-approved LTCP does include an evaluation of the cost to control all discharges from the four largest CSOs. This present worth cost was estimated to be \$1,650,000,000. Since Alternative 3 goes beyond what was evaluated in the LTCP, it is estimated that it would cost more than \$1.6 billion to implement full CSO control and more than the 22 years it is expected to take to implement the approved LTCP.

Similar to Alternative 2, Alternative 3 would also require monitoring, coupled with the implementation of a track-back program for reducing COPC loading from CSOs, until such time as the CSO controls are fully implemented.

No five-year reviews would be associated with this alternative. However, there would be regular reporting requirements until Alternative 3 is implemented, the results of which would be used to inform the effectiveness of this decision. An evaluation of the final duration and frequency of the monitoring and reporting would be conducted in association with the OU1 sitewide remedy selection process.

### **EVALUATION OF ALTERNATIVES**

### **Multiple Lines of Evidence Evaluation**

As described earlier in this plan, three LOEs were used to evaluate each alternative. A summary of the results

of this evaluation is described below. More details about the evaluation can be found in the OU2 FFS report.

## LOE 1: Comparison of Concentrations

For LOE 1, the particulate-phase COPC concentrations in CSO discharges to the Study Area were compared to the particulate-phase COPC concentrations in the other evaluated inputs to the Study Area. The other evaluated inputs for LOE1 are stormwater, treated discharges and East River surface water. Since the alternatives impact the volume of discharges from the CSOs, but not the concentration of COPCs in the discharges, it was not necessary to evaluate each alternative separately through this LOE. Figures 3a to 3e show the results of the LOE 1 comparisons for each of the OU2 COPCs.

Overall, LOE 1 shows that the measured concentrations of COPCs on solids in the CSO discharges are generally within the range of concentrations measured on solids from the other evaluated inputs. For each COPC, the average concentrations detected in CSO solids was less than the average from stormwater solids and higher than the average from treated discharges and the East River.

## LOE 2: Comparison of Loadings

Contaminant loading is defined as a unit of mass over a unit of time (e.g., kg/year). The loading for each COPC was calculated using data on the flow rate of each evaluated input and the associated concentration of COPCs in that input. The COPC loading from CSO discharges was compared to the loading from the other evaluated inputs to the Study Area. For LOE 2, the other evaluated inputs were the East River, atmospheric deposition, MS4s and treated discharges. For this LOE, the loadings under both Alternative 1 and Alternative 2 were compared to the other evaluated inputs. Alternative 3 was not evaluated as part of LOE 2 because the loading under this alternative would be eliminated. Figures 4a to 4e show the results of the LOE 2 comparisons for each of the OU2 COPCs.

Overall, LOE2 shows that the loading from CSOs is generally similar to or less than the loading from the other evaluated inputs. Alternative 2 results in significantly less loading than Alternative 1, which

makes sense since the volume of discharges to the Study Area would be reduced by approximately 61 percent through implementation of the LTCP (as per the requirements of the CWA). For TPAH17, the largest loading to the Study Area comes from treated discharges, whereas the East River supplies the largest loading of TPCBs, copper and lead as compared to the other evaluated inputs. The greatest loading of dioxins/furans is estimated to come from atmospheric deposition.

# LOE 3: Post-Remediation Assessment of the Impact of CSOs on the Study Area through Modeling

The third LOE involved the application of a suite of numerical models designed to simulate the fate and transport of contaminants in Newtown Creek. The models were applied to all three remedial alternatives evaluated in the OU2 FFS and the predicted COPC concentrations in a remediated sediment bed were compared to provide a relative assessment of the alternatives.

The modeling framework used for the OU2 FFS included a point source model, groundwater seepage estimates, a hydrodynamic model, a combined eutrophication and sediment transport model, and a chemical model. The point source model calculated flows to the Creek from CSO discharges, stormwater runoff, and overland flow from upland properties. Flows calculated by the point source model along with horizontal and vertical groundwater seepage rates were passed to the hydrodynamic model. The hydrodynamic model calculated water column transport and mixing and passed this information to the eutrophication/ sediment transport and chemical models. The eutrophication/sediment transport model used nutrient, organic carbon, and sediment loadings (from point sources and the East River) along with the results of the hydrodynamic model to calculate the fate and transport of algae, organic carbon, and sediments and passed this information to the chemical model. Finally, the chemical model used chemical loadings (from point sources, the East River, and other inputs) along with the results of the hydrodynamic and eutrophication/ sediment transport models to calculate the fate and transport of COPCs. Taken together, and subject to the assumptions and performance of the various models, the modeling framework calculated the transport of

COPCs originating from various sources and the deposition of COPCs to the sediment bed in the Creek.

Figures 5a and 5b show the comparison of the modeled surface weighted average concentration (SWAC) of each of the three primary COPCs (TPAH17, TPCBs and copper) versus the percent reduction of discharge from CSOs. The graphs show that even 100 percent control of CSO discharge has a minimal impact on the resultant concentrations in the sediment of the Study Area. The modeling includes inputs from the East River, other point sources and groundwater, and the results of the modeling indicate that even with 100 percent CSO control, post-remediation sediment bed concentrations do not approach zero. In fact, the modeling shows that 100 percent CSO control actually increases the resultant TPCB concentration in certain portions of the Study Area.

The 2018 AOC with the City governing the OU2 FFS included a statement that at least three alternatives should be evaluated – no action, no further action and 100 percent control. The results of LOE 3 show that evaluation of another alternative, with CSO volume controls between what is prescribed by the LTCP and 100 percent control is not necessary because even 100 percent reduction of CSO discharge volume has little impact on the sediment bed concentrations of the COPCs at the Study Area.

## **Nine Criteria Evaluation**

Nine criteria are used to evaluate the different remediation alternatives individually and against each other in order to select a remedy (see table below, Evaluation Criteria for Superfund Remedial Alternatives). This section of the Proposed Plan describes the relative performance of each alternative against the nine criteria, noting how each compares to the other options under consideration. A detailed analysis of the alternatives can be found in the OU2 FFS Report.

# 1. Overall Protection of Human Health and the Environment

The LOE 1 comparison showed that COPCs being discharged to the Study Area from CSOs are within the range of concentrations from other evaluated inputs to

the Study Area. LOE 2 showed that Alternative 2 would decrease loading of COPCs to the Study Area as compared with Alternative 1, and that Alternative 3 would further reduce loading to the Study Area by eliminating CSO discharges. However, LOE 3 shows that there is an insignificant change in the modeled SWACs on an assumed clean post-remediation sediment bed, regardless of whether Alternative 1, 2 or 3 is evaluated.

The LOE evaluation shows that all three alternatives provide roughly the same level of protectiveness.

# 2. Compliance with Applicable or Relevant and Appropriate Requirements

Actions taken at any Superfund site must meet all applicable or relevant and appropriate requirements under federal and state laws or provide grounds for invoking a waiver of those requirements. For alternatives 1 and 2 there are no ARARs because there is no CERCLA-related action required. Alternative 3 would comply with ARARs.

## 3. Long-Term Effectiveness and Permanence

Alternative 2, once implemented, would be more effective in the long-term than Alternative 1 since it would reduce the volume of CSO discharges to the Study Area. Alternative 3 would provide the greatest level of effectiveness and permanence by effectively eliminating CSO discharges to the Study Area upon implementation.

# 4. Reduction of Toxicity, Mobility, or Volume through Treatment

While there is no significant difference in COPC concentrations in the modeled surface sediment concentrations of the Creek under the different alternatives, Alternative 1 would not provide any additional reduction of the CSO discharges so there is no additional reduction in mobility, and volume of contaminants. Both Alternatives 2 and 3 would reduce the mobility, and volume of contaminants through capture and reduce toxicity through treatment/discharge of most or all CSO discharges. However, Alternative 3 would provide a higher degree of reduction in mobility, and volume of contaminants because it provides a

higher level of CSO volume capture and treatment as compared to Alternative 2.

## 5. Short-Term Effectiveness

For Alternatives 1 and 2, there would be no short-term impacts to the community or site workers since no remedial activities would be required under CERCLA.

Alternative 3 would have significant impacts on the community in the short-term. Expanding the size of the LTCP beyond what NYCDEP is already under order to implement would likely results in a longer time-frame for implementation and would require a larger footprint to construct.

## 6. Implementability

Neither Alternative 1 nor Alternative 2 requires any remedial action, so an evaluation of the implementability criterion under the NCP is not necessary for these two alternatives. It should be noted that while Alternative 2 includes no action, the Alternative presumes that the independent obligation under the City's State CWA Order to implement the LTCP will occur, and that action, although not selected under CERCLA, has been determined to be implementable by NYSDEC.

Alternative 3 would be very difficult to implement, both from an engineering and an administrative perspective.

## 7. Cost

There is no CERCLA-related cost associated with Alternative 1 or Alternative 2.

The estimated cost of Alternative 3 is greater than \$1,650,000,000. This was estimated based on calculations provided in the LTCP.

### 8. State Acceptance

The State of New York is reviewing EPA's preferred alternative as presented in this Proposed Plan.

## 9. Community Acceptance

Community acceptance of the preferred alternatives will be evaluated after the public comment period ends and will be addressed in the record of decision (ROD) for OU2. Based on public comment, the preferred alternatives could be modified from the version presented in this proposed plan. The ROD is the document that formalizes the selection of the remedy for a site.

### PREFERRED ALTERNATIVE

EPA's preferred alternative for OU2 is Alternative 2, No Further Action, where No Further Action in this case assumes that the LTCP that NYCDEP is under order to implement is, in fact, timely implemented. EPA has concluded that the volume reduction achieved by the LTCP will be sufficient for the purposes of a CERCLA response action.

To support this decision in light of the many changes anticipated for Newtown Creek in the coming years, including the selection of future response actions under CERCLA, EPA anticipates requiring the following monitoring activity going forward:

 Sampling of discharge from the four major CSOs to Newtown Creek quarterly until the LTCP is fully implemented.

Furthermore, EPA and NYSDEC will consider a track-back program to address any persistent increases in COPC concentrations from CSO discharges, if any are found. If required, a track-back program would identify sources of elevated contaminant concentrations within the sewershed, so they can be addressed either through tighter permit controls or upland action, as appropriate. The CSO monitoring, and potential track-back program, would be used to confirm that the assumptions used in developing this alternative, pursuant to CERCLA, remain appropriate until the LTCP is fully in place and functioning, which is expected to be in 2042.

Alternative 2 applies to the volume of discharge from the CSOs only. EPA will determine in future remedy selection decisions for other OUs whether additional control actions, either in-creek or at CSO points-ofdischarge, are needed. These additional control actions could include, but are not necessarily limited to, the placement of sediment traps and/or oil sorbent pads at the end of CSO discharge pipes and in-creek maintenance dredging to address potential accumulation of contaminated solids near the CSO discharges.

The multiple LOE evaluation conducted supports the conclusion that no further action is required (beyond the approved LTCP once implemented) for volume reduction of CSO discharges to the Creek. Modeling conducted as part of LOE 3 shows that the incremental reduction in COPC concentrations in the Study Area if a 100 percent control option, or something between the NYSDEC-approved LTCP and the 100 percent control option were to be selected, would not be significant.

Through the LOE analysis, it was determined that each of the alternatives evaluated provides roughly the same level of protectiveness; therefore, the volume control prescribed by the LTCP approved by NYSDEC, to be implemented by NYCDEP, is sufficient for the purposes of a CERCLA action and no further volume-reduction measures are needed. In addition, Alternative 3 would have significantly higher impacts in the short-term, would be very difficult to implement, would cost significantly more than Alternative 2 and would not result in a significant reduction of COPC loading to the Creek.

No five-year reviews would be associated with the preferred alternative. However, there will be regular reporting requirements until the LTCP is implemented, the results of which will be used to inform the effectiveness of this decision. An evaluation of the final duration and frequency of the monitoring and reporting will be conducted in association with the OU1 site-wide remedy selection process.

Based on information currently available, EPA believes the preferred alternative meets the threshold criteria and provides the best balance of tradeoffs among the alternatives with respect to the balancing and modifying criteria. EPA expects the preferred alternative to satisfy the following statutory requirements of CERCLA Section 121(b) because (1) it will be protective of human health and the environment, either through this action or through additional actions to be determined as part of the OU1 ROD; (2) it meets a level or standard of

control of the hazardous substances, pollutants, and contaminants that at least attains the legally applicable or relevant and appropriate requirements under federal and state laws because no ARARs are required for no further action remedies; (3) it is cost-effective; and (4) it utilizes permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable. In addition, CERCLA Section 121 includes a preference for remedies that permanently and significantly reduce the volume, toxicity or mobility of hazardous substances as a principal element (or requires a justification for not satisfying the preference). While no further action is required under the selected remedy, implementation of the LTCP will substantially reduce the volume of CSO discharges, a source of contaminant loading, to Newtown Creek.

Consistent with EPA Region 2's Clean and Green policy, EPA will evaluate the use of sustainable technologies and practices with respect to implementation of a selected remedy.

### **COMMUNITY PARTICIPATION**

EPA encourages the public to gain a more comprehensive understanding of the site and the Superfund activities that have been conducted there.

The dates for the public comment period, the date, location and time of the public meeting, and the locations of the Administrative Record files, are provided in the text box entitled, "Mark Your Calendar" located on the front page of this Proposed Plan. Instructions for submitting written comments on the Proposed Plan are provided in the highlight box, below.

EPA Region 2 has designated a public liaison as a point-of-contact for the community concerns and questions about the federal Superfund program in New York, New Jersey, Puerto Rico, and the U.S. Virgin Islands. To support this effort, the Agency has established a 24-hour, toll-free number (1-888-283-7626) that the public can call to request information, express their concerns, or register complaints about Superfund.

# For further information on the Newtown Creek Superfund Site, please contact:

Mark Schmidt Natalie Loney

Remedial Project Manager Community Involvement Coordinator

(212) 637-3886 (212) 637-3639 schmidt.mark@epa.gov loney.natalie@epa.gov

Written comments on this Proposed Plan should be mailed to Mr. Schmidt at the address below or sent via email.

Mark Schmidt

Remedial Project Manager

U.S. Environmental Protection Agency

290 Broadway, 18th Floor New York, NY 10007

Email: <a href="mailto:schmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

#### The public liaison for EPA's Region 2 is:

George H. Zachos Regional Public Liaison Toll-free (888) 283-7626 (732) 321-6621

U.S. EPA Region 2

2890 Woodbridge Avenue, MS-211 Edison, New Jersey 08837-3679

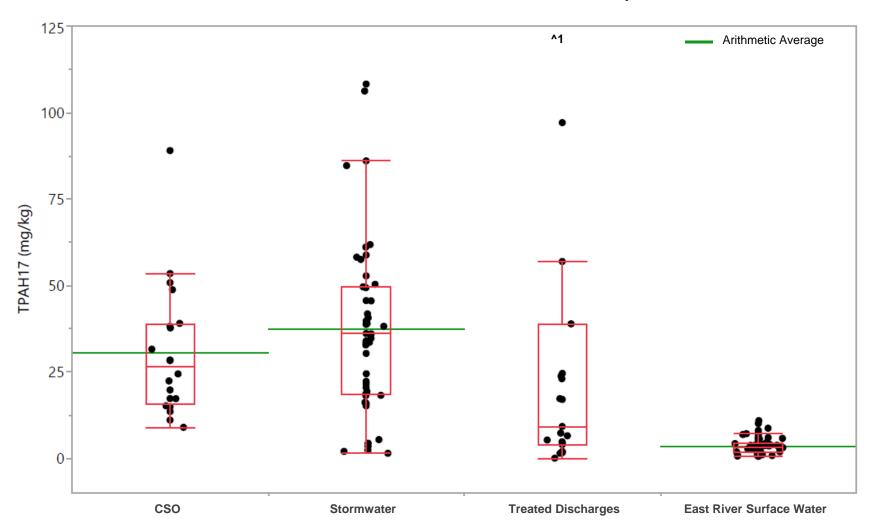
Figure 1 – Newtown Creek Site Location



Figure 2 – Newtown Creek CSO and Outfall Locations



Figure 3a - Comparison of Particulate Concentrations in CSOs with Particulate Concentrations from Other Evaluated Inputs TPAH17



Note: Average concentration of TPAH17 in treated discharges is 2,056 mg/kg, which is outside the scale of the figure.

Figure 3b - Comparison of Particulate Concentrations in CSOs with Particulate Concentrations from Other Evaluated Inputs TPCBs

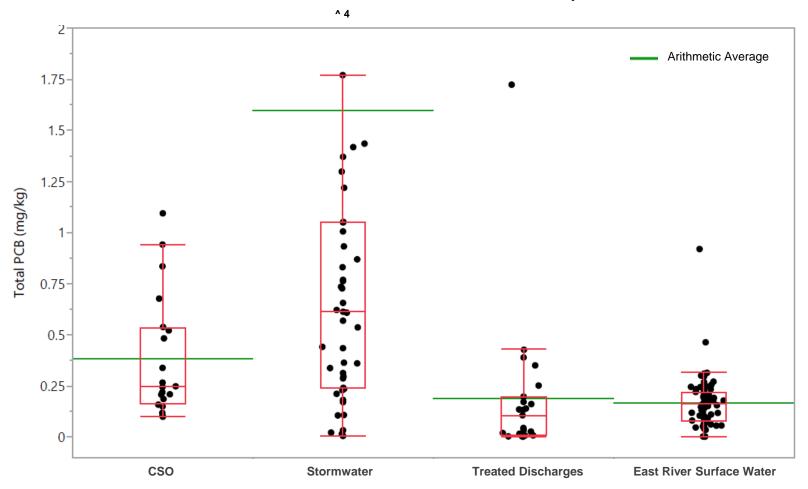


Figure 3c - Comparison of Particulate Concentrations in CSOs with Particulate Concentrations from Other Evaluated Inputs Copper

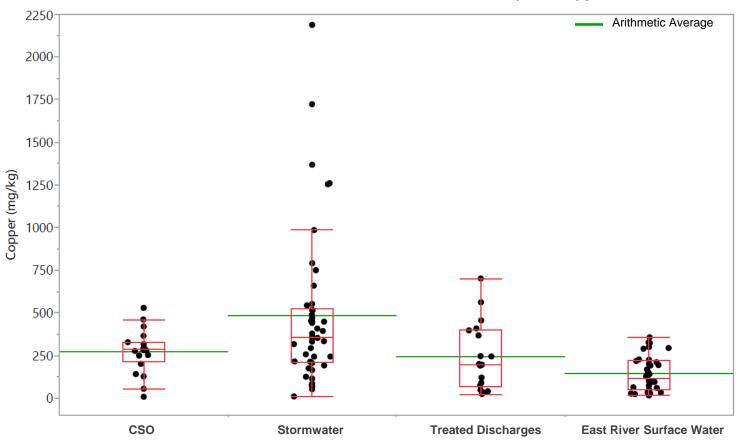


Figure 3d - Comparison of Particulate Concentrations in CSOs with Particulate Concentrations from Other Evaluated Inputs Lead

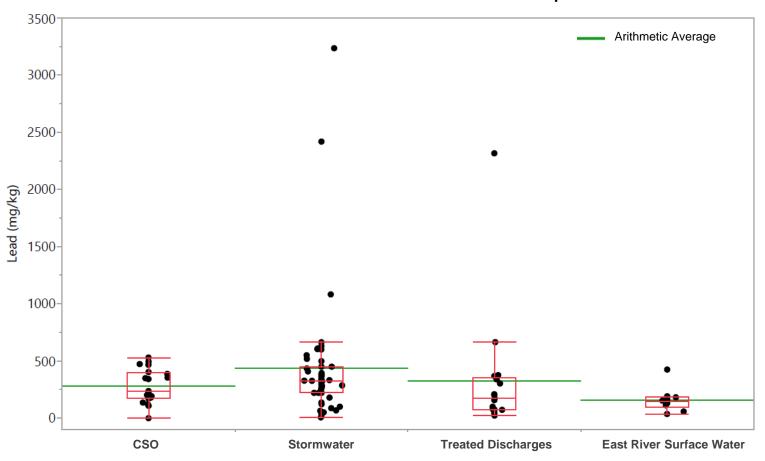
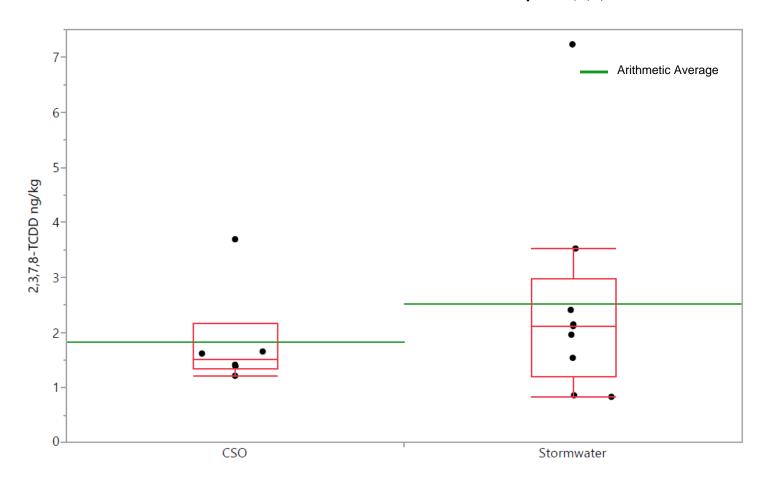


Figure 3e - Comparison of Particulate Concentrations in CSOs with Particulate Concentrations from Other Evaluated Inputs 2,3,7,8-TCDD



#### Notes:

- 1) Due to a large number of non-detected samples in CSOs and other elevated inputs, the figure shows the comparison for detected samples only.
- 2) For East River and treated discharges, only one sample was detected, therefore box plots are not shown for these sources.
- 3) Statistical comparison is conducted only for detected samples.

Figure 4a - Comparison of TPAH17 Loads from CSOs and Other Evaluated Inputs to the Study Area

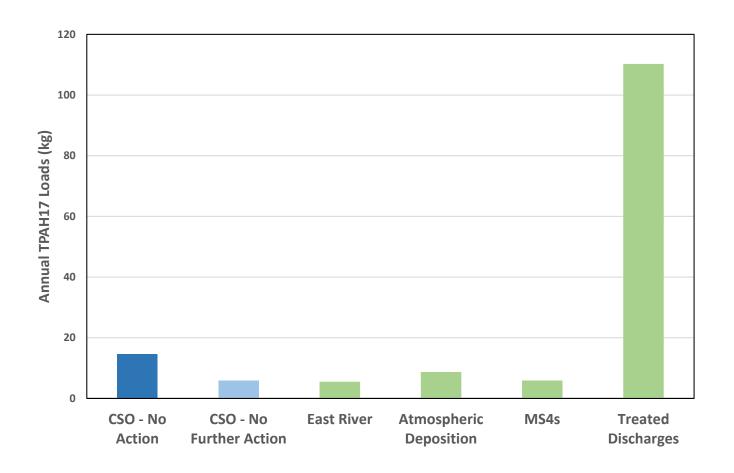


Figure 4b - Comparison of TPCB Loads from CSOs and Other Evaluated Inputs to the Study Area

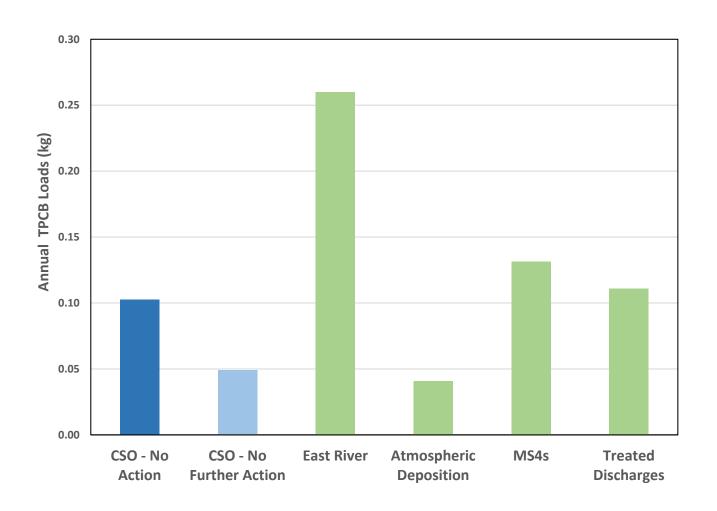


Figure 4c - Comparison of Copper Loads from CSOs and Other Evaluated Inputs to the Study Area

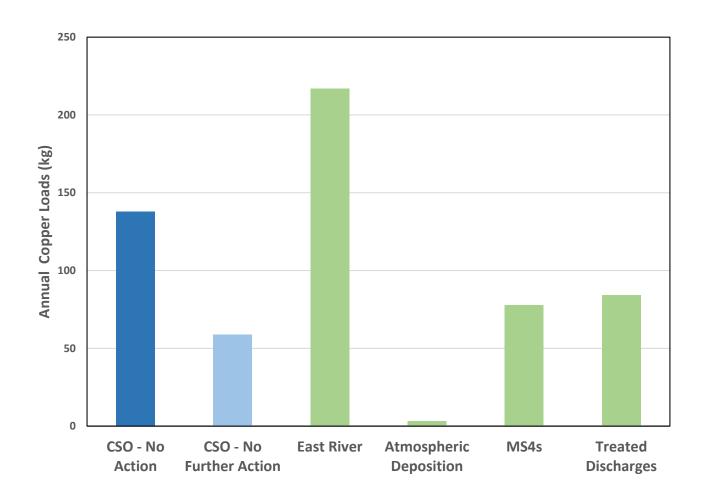


Figure 4d - Comparison of Lead Loads from CSOs and other Evaluated Inputs to the Study Area

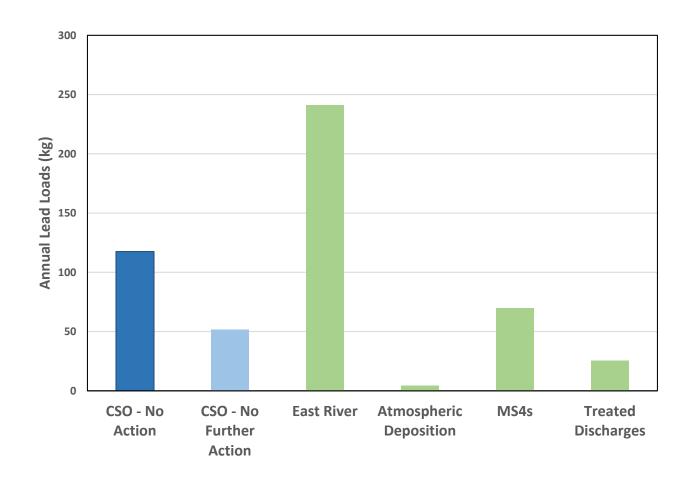


Figure 4e - Comparison of 2,3,7,8-TCDD Loads from CSOs and other Evaluated Inputs to the Study Area

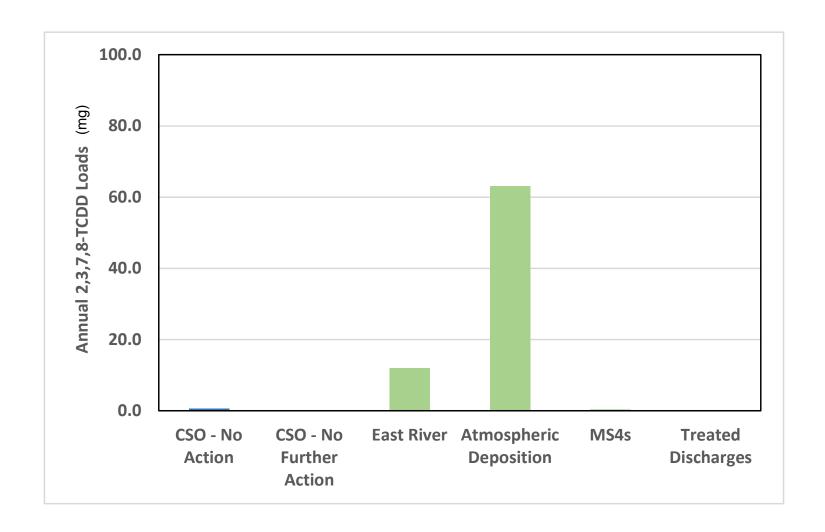
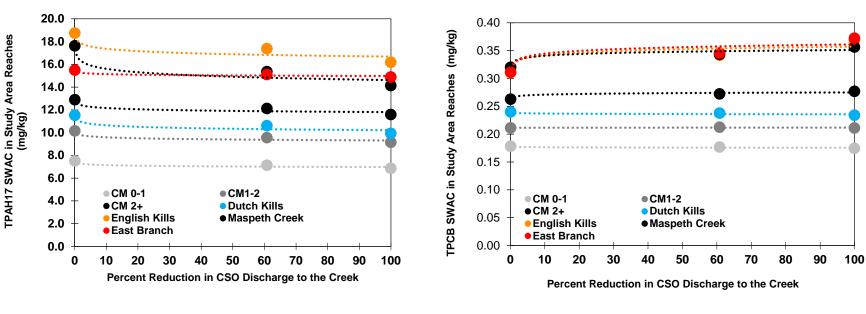


Figure 5a - Comparison of Newtown Creek Modeled SWACs with Percent Reduction in CSO Discharge



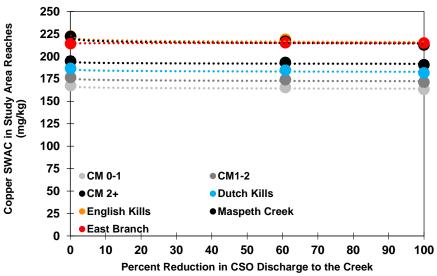
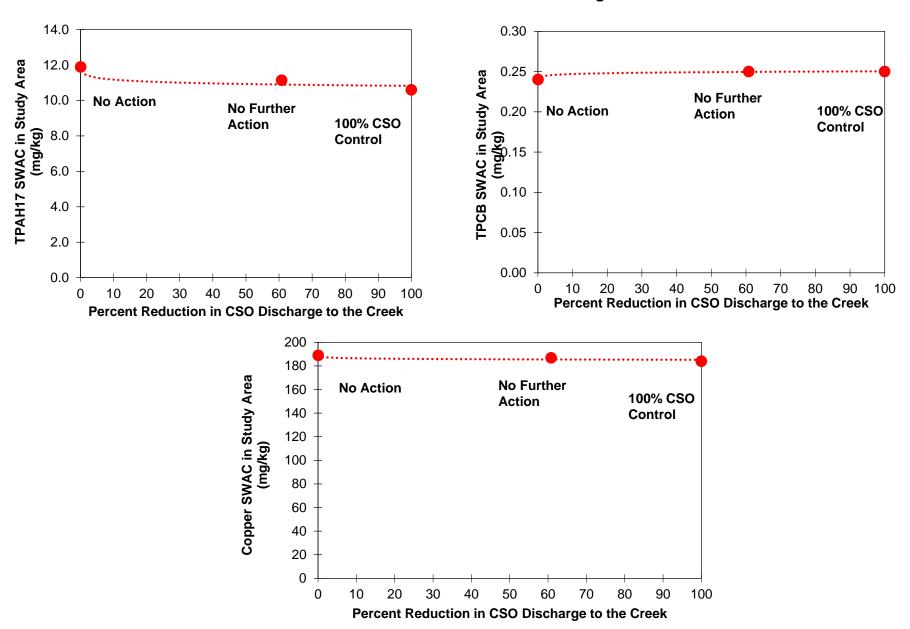


Figure 5b - Comparison of Newtown Creek Modeled SWACs - Study Area Wide with Percent Reduction in CSO Discharge



## Programa de Superfund Plan propuesto

## Agencia de Protección Ambiental de los EE. UU. Región 2

## Sitio Superfund de Newtown Creek Ciudad de Nueva York, Estado de Nueva York



Noviembre de 2019

### LA EPA ANUNCIA EL PLAN PROPUESTO

Este Plan propuesto identifica la alternativa preferida para abordar un aspecto discreto del sitio Superfund de Newtown Creek, denominado Unidad Operable 2 (OU2), e indica el razonamiento que llevó a determinar la preferencia. La OU2 se relaciona con descargas actuales y futuras razonablemente previstas de agentes químicos con potencial preocupante (COPC) de la Unidad Operable 1 (OU1) provenientes de desbordes de alcantarillado combinados (CSO) al Área de estudio de Newtown Creek, tal como se describe el término Área de estudio más adelante en este plan.

En general, el sitio está cubierto por la Ley de Responsabilidad, Compensación y Recuperación Ambiental (CERCLA, conocida también como Ley Superfund). Además, según los requisitos de la Ley de Agua Limpia (CWA), el Departamento de Protección Ambiental de la Ciudad de Nueva York (NYCDEP) está bajo la orden del Departamento de Conservación Ambiental del Estado de Nueva York (NYSDEC) para implementar un Plan de Control a Largo Plazo (LTCP) de Desborde de Alcantarillado Combinado (CSO) en Newtown Creek, aprobado por el NYSDEC en 2018. EL LTCP incluye varios componentes para reducir descargas de CSO a Newtown Creek, incluida la construcción de un túnel de almacenamiento, que reducirá el volumen de descargas de CSO a Newtown Creek a fin de lograr normas de calidad del agua específicas de cuerpos de agua congruentes con la Política federal de control de CSO y lineamientos relacionados en aproximadamente el 61% de las condiciones base actuales.

La Agencia de Protección Ambiental de los EE. UU. (EPA) evaluó el LTCP en el contexto del sitio para determinar si los controles de volumen indicados por el LTCP son suficientes para satisfacer las necesidades de un remedio eventual conforme a CERCLA para el Área de estudio. La evaluación de este aspecto discreto del sitio se denomina OU2. La alternativa preferida de la EPA para abordar el volumen de descargas actuales y

futuras razonablemente previstas de COPC de los CSO al Área de estudio es la Alternativa 2, Ninguna otra medida, es decir, ninguna medida más allá de la implementación prevista del LTCP, conforme a la orden de CWA mencionada anteriormente.

La EPA, la agencia que lidera esta iniciativa, en consulta con el Departamento de Conservación Ambiental del Estado de Nueva York (NYSDEC), la agencia de apoyo, está emitiendo este Plan propuesto como parte de sus responsabilidades de participación pública conforme a la Sección 117(a) de CERCLA y las reglamentaciones estipuladas en la Sección

#### **MARQUE SU CALENDARIO**

# PERÍODO DE COMENTARIOS DEL PÚBLICO: 21 de noviembre de 2019 – 23 de diciembre de 2019

La EPA aceptará comentarios escritos sobre el Plan propuesto durante el período de comentarios del público. Los comentarios escritos se deben dirigir a:

#### Mark Schmidt

Gerente de proyectos de remediación Agencia de Protección Ambiental de los EE. UU. 290 Broadway, 18<sup>th</sup> Floor New York, NY 10007

Correo electrónico: schmidt.mark@epa.gov

## **REUNIONES PÚBLICAS:**

La EPA sostendrá dos reuniones públicas para explicar el Plan propuesto y todas las alternativas presentadas en el Estudio de factibilidad enfocado. En la reunión, también se aceptarán comentarios orales y escritos. Las reuniones se llevarán a cabo:

9 de diciembre de 2019 6:30 a 8:30 P.M. Sunnyside Community Services 43-31 39<sup>th</sup> Street Queens, New York 11104 11 de diciembre de 2019 6:30 P.M. a 8:30 P.M. P.S. 110 124 Monitor Street Brooklyn, New York 11222

Además, encontrará en línea ciertos documentos del expediente administrativo en:

https://www.epa.gov/superfund/newtown-creek

300.430(f)(2) del Plan nacional de contingencia sobre contaminación de petróleo y sustancias peligrosas (NCP). Este plan propuesto resume información que se puede ver en mayor detalle dentro del informe del estudio de factibilidad enfocado (FFS) preparado para la OU2. Este y otros documentos forman parte del expediente administrativo disponible públicamente y se hallan en el depósito de información correspondiente al sitio. La EPA alienta al público a revisar estos documentos para lograr un mejor entendimiento integral del sitio y de las actividades de Superfund que se han realizado.

La EPA, en consulta con el NYSDEC, seleccionará el remedio de la OU2 después de evaluar y considerar toda la información presentada durante un periodo de comentarios del público, el cual durará por lo menos 30 días. La EPA, en consulta con el NYSDEC, puede modificar la alternativa preferida o seleccionar otra medida de respuesta presentada en este Plan propuesto dependiendo de nueva información o de los comentarios del público. Por lo tanto, se invita al público a revisar y comentar sobre toda la información y las alternativas presentadas en este Plan propuesto.

## ALCANCE Y FUNCIÓN DE LA MEDIDA

Tal como en muchos sitios Superfund, la contaminación en este sitio es compleja, y la limpieza se está gestionando a través de varias unidades operables (OU, por sus siglas en inglés). Hay información adicional sobre la OU1 y la OU3 en la sección Historia del sitio, a continuación. Este Plan propuesto aborda la OU2.

Las alternativas evaluadas en este Plan propuesto son aplicables solo al volumen actual y futuro razonablemente previsto de la descarga de los CSO. La EPA determinará en documentos futuros de decisión si se requieren medidas de control adicionales en el arroyo o en puntos de descarga de CSO, para cumplir con los objetivos de medidas de remediación del sitio en general, los cuales todavía están por determinarse. Dichas medidas adicionales de control, si es necesario, se implementarían mediante un documento futuro de decisión.

Además, al abordar la OU2, la EPA no efectúa determinaciones o hallazgos en cuanto a descargas pasadas de COPC de los CSO. La liberación pasada y

su impacto en el Área de estudio se está evaluando como parte del estudio de investigación/factibilidad de remediación (RI/FS) de la OU1, que se está realizando actualmente.

## DESCRIPCIÓN GENERAL DEL SITIO

El sitio está ubicado en el Condado de Kings y el Condado de Queens, Ciudad de Nueva York, Estado de Nueva York (Figura 1). El sitio incluye Newtown Creek y sus cinco tributarios, incluidos Whale Creek, Dutch Kills, East Branch, English Kills y Maspeth Creek.

El sitio está ubicado dentro del Área Marítima e Industrial Significativa de Newtown Creek (SMIA), que es una de seis SMIA designadas en la Ciudad de Nueva York. El SMIA de Newtown Creek, que tiene más de 780 acres, es la SMIA de mayor tamaño en la Ciudad de Nueva York, e incluye partes de las áreas industriales de Greenpoint, Williamsburg, Long Island City y Maspeth.

Newtown Creek y sus tributarios comprenden un cuerpo de agua estuarino orientado en general en dirección este-oeste, aunque la sección más al este de Newtown Creek y varios de los tributarios tienen orientación norte-sur.

El agua en Newtown Creek está clasificada actualmente por el NYSDEC como Clase SD, agua de superficie salina con un uso protegido solo de supervivencia de peces. El arroyo no cumple actualmente con los parámetros para dicho uso protegido (por ej. debido al bajo nivel de oxígeno disuelto). El arroyo se usa para fines recreativos, como navegar en kayak y canoas y hay puntos existentes y planificados de acceso frente al agua. A pesar de una advertencia sobre los peces emitida por el Departamento de Salud del Estado de Nueva York para limitar la pesca en Newtown Creek, pese a advertencias publicadas y labor de difusión pública desplegada, se ha observado pesca de peces y cangrejos en el arroyo.

### HISTORIA GENERAL DEL SITIO

Históricamente, Newtown Creek drenaba las tierras altas de la zona oeste de Long Island y fluía atravesando humedales y pantanos. Sin embargo, debido al intenso desarrollo industrial y actividades

gubernamentales desde el siglo XIX, los humedales y pantanos se han rellenado, se ha canalizado Newtown Creek, y sus orillas se han estabilizado con muros de retención y refuerzos. El desarrollo histórico ha producido cambios en la naturaleza de Newtown Creek de haber sido un drenaje natural hasta convertirse en un cuerpo de agua regido en gran medida por sistemas de ingeniería e institucionales.

A mediados del siglo XIX, el área junto al arroyo de 3.8 millas de largo era una de las áreas industriales más ocupadas en la Ciudad de Nueva York. Había instalaciones industriales a lo largo de sus orillas, incluso más de 50 refinerías de petróleo, plantas petroquímicas, fábricas de fertilizantes y adhesivos, aserraderos, barracas de madera y almacenes de carbón. Newtown Creek rebosaba de embarcaciones comerciales, incluso grandes buques que traían materias primas y combustible y se llevaban productos terminados como productos de petróleos, agentes químicos y metales. Además de la contaminación industrial resultante de toda esta actividad, la ciudad comenzó a liberar aguas servidas sin tratar directamente al agua en 1856. Durante la Segunda Guerra Mundial, el arroyo era uno de los puertos más activos en el país. Actualmente, operan fábricas, almacenes, servicios públicos e instalaciones municipales a lo largo del arroyo. Diversas instalaciones contaminadas advacentes en terrenos altos con respecto al arroyo han originado contaminación en Newtown Creek.

Este desarrollo industrial produjo un retrabajo importante de las orillas del arroyo y canalización para fines de drenaje y navegación. La canalización y profundización de Newtown Creek y sus tributarios se terminó en gran medida en la década de 1930, definiendo su configuración actual. El desarrollo histórico ha producido cambios en la naturaleza de Newtown Creek y las condiciones de drenaje natural de sus tributarios de haber tenido flujo de tributarios hasta convertirse en un cuerpo de agua regido en gran medida por sistemas de ingeniería e institucionales.

A principios de la década de 1990, el Estado de Nueva York declaró que Newtown Creek no cumplía con las normas de calidad del agua conforme a la Ley de Agua Limpia. Desde entonces, ha habido varias limpiezas auspiciadas por el estado y por la ciudad de las propiedades en el área de Newtown Creek, y se terminó una mejora importante de la Planta de tratamiento de aguas residuales de Newtown Creek en 2012.

El sitio fue agregado en 2010 a la Lista nacional de prioridades de la EPA conforme a CERCLA. El sitio estaba siendo abordado como unidad operable (OU) hasta hace poco, cuando se identificaron dos OU adicionales. La estructura actual de OU es la siguiente:

#### OU1

La OU1 incluye toda el Área de estudio, como se define en una orden administrativa sobre consentimiento (AOC) de 2011 entre la EPA, el Departamento de Protección Ambiental de la Ciudad de Nueva York (NYCDEP), y Phelps Dodge Refining Corporation, Texaco, Inc., BP Products North America Inc., la Brooklyn Union Gas Company D/B/A National Grid NY y ExxonMobil Oil Corporation. Estas cinco partes del sector privado (excluida la Ciudad de Nueva York) se han organizado como Newtown Creek Group (NCG). La AOC de 2011 define el Área de estudio, en general, como el cuerpo de agua y los sedimentos de Newtown Creek y sus tributarios, hasta el borde de tierra adentro de la línea costera inclusive.

Se está realizando un RI/FS completo de la OU1 bajo la supervisión de la EPA.

#### OU2

El FFS de la OU2 fue realizado por el NYCDEP, bajo la supervisión de la EPA, conforme a una AOC de 2018 entre la EPA y el NYCDEP.

#### OU3

La OU3 se refiere a la evaluación de una medida temprana interina potencial para las dos millas más bajas del arroyo en el Área de estudio, como se describe en una AOC de 2019 entre la EPA y el NCG. Actualmente el NCG está realizando un FFS de la OU3, con la supervisión de la EPA.

#### HISTORIAL DE FISCALIZACIÓN

Tal como se observó previamente, hay seis partes responsables que han celebrado una AOC de 2011 para efectuar el RI/FS de la OU1. La OU2 se está realizando conforme a los términos de una AOC de 2018 solo con el NYCDEP, y la OU3 se está realizando según los términos de una AOC de 2019 solo con el NCG.

Se ha notificado recientemente a otras partes

potencialmente responsables de su responsabilidad potencial. El rol y la contribución de estas partes adicionales a cada OU en el sitio están todavía por determinarse. Continúa la búsqueda de otras partes potencialmente responsables.

#### CARACTERÍSTICAS GENERALES DEL SITIO

El sitio ha sido estudiado ampliamente a través del proceso de RI/FS de la OU1. Los resultados de estos estudios se detallarán en los informes de RI y FS de la OU1. No se realizaron nuevas investigaciones físicas del sitio como parte de la OU2. En cambio, las evaluaciones efectuadas para apoyar el FFS de la OU2 utilizaron datos reunidos como parte del RI/FS de la OU1.

## Investigación del área de estudio de la OU1

El trabajo de campo de RI de la OU1 comenzó en febrero de 2012 y concluyó sustancialmente en mayo de 2014. Se determinó que se necesitaban datos adicionales, y se obtuvieron estos como parte del FS de la OU1 de tal modo que se pudiera proceder con la preparación del informe preliminar de RI de la OU1. El trabajo de campo del FS de la OU1 comenzó en la primavera de 2017 y concluyó sustancialmente en 2019.

Se presentó inicialmente un informe preliminar de RI de la OU1 en noviembre de 2016 y se presentó una versión revisada en abril de 2019. La EPA envió comentarios sobre el informe revisado de RI al NCG en septiembre de 2019 y hay un documento revisado que debiera llegar a principios de 2020.

El trabajo de campo del RI/FS de la OU1 incluía la recolección de un conjunto robusto de datos que se están usando para determinar la naturaleza y la extensión de la contaminación en el Área de estudio, desarrollar el modelo del sitio conceptual general y en definitiva apoyar la selección de una alternativa de remediación adecuada para la OU1. Estos datos incluyen lo siguiente: muestreo de sedimentos, agua superficial, poros de agua, agua subterránea, afloramiento, aire, sedimento/tierra de línea costera, tejido de biota, descargas de fuentes puntuales, descargas de fuentes no puntuales, líquido de fase no acuosa (NAPL), y ebullición; sondeos de comunidades ecológicas y batimetría; y pruebas de toxicidad de

sedimentos, movilidad de NAPL y propiedades geotécnicas.

Se analizaron las muestras en cuanto a una lista integral de contaminantes, incluidos compuestos orgánicos volátiles, compuestos orgánicos semivolátiles, metales (totales y disueltos), bifenilo policlorado (PCB) arocloros y congéneres, dioxinas/furanos y pesticidas.

Además, como parte del RI/FS de la OU1, se está desarrollando un conjunto complejo de modelos interrelacionados. Las primeras dos partes importantes (los modelos de hidrodinámica y transporte de sedimentos, que incluyen submodelos de agua subterránea y de fuentes puntuales) se han presentado junto con el informe de RI preliminar y se están refinando. Las partes restantes de la estructura de modelado (el modelo de destino y transporte de contaminantes y el modelo de bioacumulación) están todavía en desarrollo y se presentarán como parte del informe preliminar de FS. Así, aunque el desarrollo del Modelo conceptual del sitio para la OU1 está avanzando bien, todavía se está desarrollando un entendimiento de todo el sistema. Actualmente está programado para concluir en 2022 el informe de FS de la OU1.

#### Características físicas del área de estudio de la UO1

Se encontraron concentraciones elevadas de contaminación en toda el Área de estudio. Gran parte de esta contaminación se debe a entradas históricas de contaminación al arroyo, y sedimento contaminado, en particular, que se halla en el sedimento de superficie y bajo la superficie, además del sedimento nativo subyacente.

Las entradas externas continuas en el Área de estudio incluyen, pero no se limitan necesariamente a, desagües municipales separados de alcantarillado de tormenta (MS4s), el desagüe de efluente tratado de la planta de tratamiento de aguas residuales de Newtown Creek (WWTP), descargas industriales permitidas, otras descargas permitidas/no permitidas, drenaje de flujo sobre terreno y directo, agua subterránea, otras fuentes no puntuales, los efectos de mareas del East River, depósitos atmosféricos, filtraciones de la línea costera y descarga de agua subterránea de propiedades en tierras altas y erosión de la ribera de la línea costera así como descargas de CSO.

Se han tomado muestras representativas de estas entradas como parte del proceso de RI/FS de la OU1, dando suficientes datos para desarrollar estimaciones cuantitativas de las concentraciones de sustancias peligrosas que ingresan al arroyo de estas fuentes y, según corresponda, la masa y el volumen.

El arroyo mismo también tiene elevadas concentraciones de muchos contaminantes, y hay procesos dentro del arroyo que pueden causar la propagación de esta contaminación dentro del Área de estudio. Estos procesos incluyen ebullición (burbujas), resuspensión de sedimentos y migración de NAPL.

Las descargas de fuentes puntuales al Área de estudio incluyen más de 300 desagües privados y municipales a lo largo del arroyo y sus tributarios. Estas descargas de fuentes puntuales suministran principalmente flujos de agua dulce a Newtown Creek cuando haya precipitaciones e incluyen descargas permitidas individualmente de aguas de tormenta y aguas residuales, descargas de CSO, descargas no permitidas, y descargas de aguas residuales tratadas de la WWTP. La escorrentía de aguas de tormenta de las calles y el flujo sobre terreno también se descargan en el arroyo.

#### FFS de la OU2

#### Antecedentes de la Unidad Operable 2

Cuando hay precipitaciones, el arroyo recibe descargas de fuentes puntuales, las cuales incluyen CSO y aguas de tormenta (descargas municipales, y descargas permitidas y no permitidas de fuentes puntuales privadas), así como de fuentes no puntuales, como flujo sobre el terreno (consulte la Figura 2 para ver donde se hallan algunas de estas descargas de fuentes puntuales). Además de las descargas cuando hay precipitaciones, el arroyo también recibe entradas de agua dulce provenientes de agua subterránea. El agua subterránea entra al arroyo a través del sedimento y desde las propiedades en tierras altas adyacentes al arroyo. El East River y las fuentes puntuales se consideran actualmente las principales fuentes de sólidos que van al arroyo.

Durante varias décadas, el control de CSO para afectar mejoras en niveles de bacterias y concentraciones de oxígeno disuelto en cuerpos de agua ha estado impulsado por programas reguladores de la CWA, incluida la Política de control de CSO de la EPA (Sección 402 (q) de la CWA), y la promulgación por parte del NYSDEC de normas numéricas de calidad del agua para bacterias y oxígeno disuelto. El control de CSO se ha enfocado en reducciones volumétricas de descargas de CSO para cumplir con estas normas.

La planificación de CSO para Newtown Creek se inició en 1990 mediante el Proyecto de planificación de instalaciones de calidad del agua de Newtown Creek. El NYCDEP emitió un Plan de instalaciones de cuerpos de agua y cuencas (WWFP) para Newtown Creek que fue aprobado por el NYSDEC en 2012. El WWFP incluyó un análisis de modificaciones operativas y estructurales apuntando a reducir CSO y mejorar el desempeño general del sistema de recolección y tratamiento dentro de la cuenca. En 2017 el NYCDEP desarrolló un LTCP para identificar, con comentarios del público, los controles de CSO adecuados y necesarios para lograr las normas de calidad del agua específicas del cuerpo de agua congruentes con la Política federal de control de CSO y lineamientos relacionados. El NYSDEC aprobó el LTCP en 2018.

Aunque la labor de reducir el volumen de descargas de CSO se enfoca en los objetivos de la CWA, la reducción de volumen también disminuirá la masa de COPC relacionados con el sitio y descargados al arroyo. La meta general del FFS de la OU2 es determinar si los controles de volumen indicados por el LTCP diseñado para cumplir los requisitos del programa de la CWA son suficientes para cumplir también los requisitos de CERCLA para el sitio.

Como parte de la labor de RI/FS de la OU1, se completó un robusto programa de muestreo de fuentes puntuales. Se muestrearon treinta y una descargas de fuentes puntuales durante 15 eventos de muestreo con precipitaciones entre junio de 2014 y diciembre de 2015. Se recogieron las muestras de CSO, MS4, desagües de carreteras, descargas de aguas de tormenta de propiedades privadas y desagües permitidos. Se utilizaron estos datos al evaluar las líneas de evidencia descritas a continuación. Las descargas de los CSO muestreados representan aproximadamente el 96 por ciento de la descarga total de CSO al arroyo.

#### Evaluación de múltiples líneas de evidencia

Tal como se menciona más arriba, el RI/FS de la OU1 está en curso y no se han desarrollado las metas de remediación preliminar para el Área de estudio. Debido a esto, se utilizó una estrategia de múltiples líneas de evidencia para evaluar el desempeño relativo de cada una de las alternativas analizadas en el FFS de la OU2.

Se evaluaron tres Líneas de evidencia (LOE), como se describe a continuación.

- LOE 1: comparación de las concentraciones de la fase de partículas de COPC en descargas de CSO con las concentraciones de la fase de partículas en otras fuentes potenciales de contaminación al arroyo;
- LOE 1: comparación de la carga de masa de COPC de las descargas de CSO con la carga de masa de COPC de otras fuentes potenciales de contaminación al arroyo; y
- LOE 3: evaluación del impacto de COPC de descargas de CSO en el lecho de sedimento del arroyo suponiendo que se ha implementado un remedio de CERCLA para toda el Área estudio. Se desarrolló una serie relativamente simple de modelos para determinar la concentración resultante de COPC en el sedimento de superficie de las descargas de CSO y de otras fuentes potenciales de contaminación al arroyo.

Los COPC utilizados en estas evaluaciones son congruentes con aquellos que se ha determinado que contribuyen la mayor cantidad de riesgo a receptores humanos y ecológicos en el Área de estudio como parte del proceso de RI/FS de la OU1, como se describe en la sección de Resumen de riesgos del sitio de este Plan propuesto.

Todos los datos utilizados al evaluar las LOE se obtuvieron durante el proceso de RI/FS de la OU1. En particular, se utilizaron los datos reunidos de las siguientes categorías de fuentes potenciales de contaminación al Área de estudio en las evaluaciones de LOE:

 Descargas de CSO – incluye 20 muestras recogidas de siete desagües de CSO que representan aproximadamente 96 por ciento de las descargas totales de CSO al arroyo;

- Descargas de aguas de tormenta incluye 47 muestras recogidas de MS4, propiedades privadas, desagües de carreteras y otras salidas de aguas de tormenta;
- Descargas tratadas incluye hasta 23 muestras recogidas de efluente de aguas residuales tratadas, descargas permitidas de sistemas de tratamiento de agua subterránea y descargas tratadas de instalaciones industriales;
- East River incluye hasta 87 muestras recogidas del río; y
- Depósitos atmosféricos se utilizaron datos regionales de diversas fuentes disponibles públicamente.

Estas fuentes potenciales se denominan descargas de CSO y las "otras entradas evaluadas" en el FFS de la OU2. Tal como se describe en la parte "Características físicas del Área de estudio de la OU1" de este Plan propuesto, nótese que estas otras entradas evaluadas no representan todas las fuentes potenciales de COPC en el Área de estudio.

Los resultados de la evaluación de LOE se discuten en la sección Evaluación de alternativas de este Plan propuesto.

#### RESUMEN DE LOS RIESGOS DEL SITIO

#### Evaluaciones de riesgo de la OU1

Como parte del proceso de RI/FS de la OU1, se efectuaron evaluaciones base de salud humana y ecológicas, y los informes han sido aprobados por la EPA. Las evaluaciones encontraron un riesgo inaceptable tanto para la salud humana como para el medioambiente. Por lo tanto, existe una base para tomar medidas de remediación en el sitio.

La Evaluación base de riesgo para la salud humana (BHHRA) fue aprobada en junio de 2017. Encontró que había riesgos inaceptables relacionados con la ingestión de pescados y cangrejos del arroyo. Los contaminantes identificados por la BHHRA como potencialmente preocupantes fueron congéneres totales de PCB similares a no dioxina, equivalencias totales de toxicidad de PCB (TEQ) y TEQ totales de dioxina/furano.

La Evaluación base de riesgo ecológico (BERA) fue

#### ¿QUÉ ES UNA "AMENAZA PRINCIPAL"?

El Plan de nacional contingencia (NCP) sobre contaminación de petróleo y sustancias peligrosas establece la expectativa de que la EPA utilice un tratamiento para abordar las amenazas principales que presenta un sitio siempre que se pueda poner en práctica [Sección 300.430(a)(1)(iii)(A) del NCP]. El concepto de "amenaza principal" se aplica a la caracterización de "materiales fuente" en un Sitio Superfund. Un material fuente es material que incluye o contiene sustancias peligrosas o contaminantes que actúan como un reservorio para la migración de la contaminación hacia las aguas subterráneas, las aguas superficiales o el aire, o bien, actúan como una fuente de exposición directa. Las aguas subterráneas contaminadas, por lo general, no se consideran un material fuente; no obstante, los líquidos de fase no acuosa (NAPL) en las aguas subterráneas pueden considerarse como material fuente. Los desechos que son una amenaza principal son aquellos materiales fuente considerados altamente tóxicos o móviles que, generalmente, no se pueden contener de un modo confiable o que podrían presentar un riesgo importante para la salud humana o el medio ambiente en caso de exposición. La decisión de tratar estos desechos se toma según el sitio específico mediante un análisis detallado de las alternativas usando los nueve criterios para seleccionar remedios. Este análisis aporta la base para determinar un hallazgo respaldado por la ley de que el remedio emplea tratamiento como elemento principal.

aprobada en septiembre de 2018. En general, los resultados de la BERA indican que el sedimento del Área de estudio, particularmente en la Cuenca Turning y la mayoría de los tributarios, es tóxico para invertebrados bentónicos y presenta riesgos de exposición para bivalvos, cangrejos azules, peces y pájaros. Los contaminantes principales que causan riesgo inaceptable fueron PAH, PCB y cobre, con riesgo adicional de dioxinas/furanos y plomo.

Dado que se identificó un riesgo inaceptable en las evaluaciones de riesgo de la OU1, existe una base para evaluar medidas adecuadas de remediación en el sitio, incluyendo para la OU2. El FS de la OU1, que está en curso, evaluará alternativas para la remediación del sitio en general.

#### Riesgos de la OU2

No se efectuaron análisis separados de riesgo como parte del proceso de FFS de la OU2. Los COPC identificados en la BHHRA y la BERA de la OU1 son los COPC evaluados en este FFS de la OU2.

Por lo tanto, la lista completa de contaminantes evaluados en detalle en el FFS de la OU2 incluye PAH totales (TPAH17, con 17 que se refieren al número de compuestos individuales incluidos en el total), PCB totales (TPCB), cobre, dioxina/furanos y plomo.

#### OBJETIVOS DE LA MEDIDA DE REMEDIACIÓN

El objetivo de la medida de remediación (RAO) para la OU2 del sitio es:

 Minimizar, en lo que sea practicable, las entradas de compuestos identificados en el sitio a Newtown Creek desde desagües de CSO que pueden agregar contaminación al Área de estudio.

Tal como se describe anteriormente, los COPC de la OU2 son TPAH17, TPCB, cobre, dioxinas/furanos y plomo.

No se desarrollaron las metas preliminares de remediación (PRG) para la OU2. No son necesarias para evaluar el RAO. En cambio, las alternativas desarrolladas en el FFS de la OU2 fueron evaluadas relativamente entre sí. Las PRG para cada COPC se desarrollarán como parte del proceso de RI/FS de la OU1.

#### DESECHO QUE ES LA AMENAZA PRINCIPAL

Las descargas actuales y futuras razonablemente previstas de COPC de los CSO actúan como fuente de contaminación del Área de estudio. Sin embargo, esta medida no caracteriza su toxicidad y movilidad. Por lo tanto, la determinación de cuáles fuentes constituyen desecho que es amenaza principal será diferida al proceso de selección de remediación de la OU1. Remítase al cuadro de texto titulado "¿Qué es una amenaza principal?" para obtener más información sobre el concepto de amenaza principal, y la sección Resumen de los riesgos del sitio para más información sobre los riesgos que presenta el sitio.

# RESUMEN DE LAS ALTERNATIVAS DE REMEDIACIÓN

La Sección 121(b)(1), 42 U.S.C. § 9621(b)(1) de CERCLA, estipula que las medidas de remediación deben proteger la salud humana y el medioambiente, ser económicas y usar soluciones permanentes y tecnologías de tratamiento alternativas y opciones de recuperación de recursos en el máximo grado que sea practicable. La Sección 121(d), 42 U.S.C. § 9621(d) de CERCLA, especifica además que una medida de

remediación debe requerir un nivel o norma de control de las sustancias peligrosas y contaminantes que por lo menos cumpla los requisitos aplicables o pertinentes (ARAR) según las leyes federales y estatales, a menos que pueda justificarse una exención conforme a la Sección 121(d)(4), 42 U.S.C. § 9621(d)(4) de CERCLA.

Las alternativas de remediación para la OU2 se resumen a continuación. Los costos de capital son aquellos gastos que se requieren para construir una alternativa de remediación. Los costos de operación y mantenimiento (O&M) son aquellos costos posteriores a la construcción para asegurar o verificar la eficacia continua de una alternativa de remediación y se estiman anualmente. El valor actual es la cantidad en dinero que, si se invierte en el año actual, sería suficiente para cubrir todos los costos a lo largo del tiempo relacionados con un proyecto. El tiempo de construcción es el tiempo requerido para construir e implementar la alternativa y no incluye el tiempo requerido para diseñar el remedio, negociar el desempeño de un remedio con las partes responsables o adquirir contratos para diseñar y construir.

## Alternativa 1 - Ninguna medida

Costo de capital: \$0
Costo anual de O&M: \$0
Costo del valor actual: \$0

Plazo de construcción: 0 años

El NCP solicita que se evalúe una alternativa de "ninguna medida" para establecer una referencia para la comparación con otras alternativas de remediación. Esta alternativa supone que las descargas de CSO en el arroyo se mantienen como son ahora, sin implementar el LTCP. En estas circunstancias, las descargas totales de CSO en el arroyo se estiman aproximadamente en 1,200 millones de galones al año, aplicando las condiciones detalladas en el LTCP aprobado por el NYSDEC.

#### Alternativa 2 – Ninguna otra medida

Costo de capital: \$0
Costo anual de O&M: \$0
Costo del valor actual: \$0
Plazo de la construcción: 0 meses

Esta alternativa supone que el NYCDEP implementará el LTCP como se establece en las órdenes de CSO de la CWA emitidas por el NYSDEC, la autoridad estatal delegada por la EPA para implementar la CWA. Los hitos para el diseño y la construcción están contenidos en las órdenes de CSO, las cuales indican que se implementará el LTCP a medida que se realiza el proceso de CERCLA. No se incluye en esta alternativa ninguna medida adicional de control del volumen de descarga de CSO más allá de aquellas requeridas por el LTCP.

A fin de respaldar esta alternativa, en vista de los numerosos cambios previstos para Newtown Creek en los años venideros, incluida la selección de medidas futuras de respuesta según CERCLA, la EPA prevé que se requerirá la siguiente actividad de monitoreo en lo sucesivo:

 Muestreo de descarga de los cuatro CSO más importantes a Newtown Creek trimestralmente hasta que se implemente plenamente el LTCP, con informes regulares a la EPA.

Asimismo, la EPA y el NYSDEC considerarán un programa de rectificación para abordar aumentos persistentes en las concentraciones de COPC de las descargas de CSO, si se encuentran. Si fuese necesario, un programa de rectificación identificaría las fuentes de las concentraciones elevadas de contaminantes dentro del alcantarillado, para poder abordarlas a través de controles de permisos más estrictos o medidas en tierras altas, según corresponda. El monitoreo de CSO, y el programa potencial de rectificación, que se requeriría conforme a esta Alternativa se usaría para confirmar que los supuestos utilizados al desarrollar esta alternativa, según CERCLA, siguen siendo adecuados hasta que el LTCP se implemente plenamente.

Los costos de realizar este monitoreo se estiman en \$5,000,000 para el muestreo trimestral de las descargas de CSO durante aproximadamente 22 años (el tiempo hasta que el LTCP quede plenamente implementado) más otros \$5,000,0000 para el seguimiento de las fuentes de contaminación, si es necesario. El costo de todo monitoreo del remedio de "ninguna medida" o de "ninguna otra medida" no se considera que constituye un remedio según CERCLA, por eso los costos relacionados con esta alternativa aparecen como cero.

No habría evaluaciones de cinco años relacionadas con la Alternativa 2. Sin embargo, habría requisitos de informes regulares hasta que quede el LTCP totalmente implementado, los resultados de los cuales serían utilizados para informar la efectividad de esta decisión. Una evaluación de la duración final y frecuencia del monitoreo y generación de informes se realizaría junto con el proceso de selección del remedio en todo el sitio de la OU1.

#### Alternativa 3 – Control al 100% de CSO

Costo de capital: Costo anual de O&M: -

Costo del valor actual: Por lo menos \$1,650

millones

Plazo de la construcción: Por lo menos 22 años

Esta alternativa supone que todas las descargas de CSO al arroya son controladas. En comparación con la Alternativa 2, esta alternativa requeriría la construcción de un túnel de mayor diámetro, para estar conectado a todas las descargas de CSO a Newtown Creek, e instalaciones adicionales de tratamiento de aguas residuales.

En el FFS de la OU2, no se determinaron plenamente los costos asociados con desarrollar esta alternativa. Sin embargo, el LTCP aprobado por el NYSDEC efectivamente incluye una evaluación del costo para controlar todas las descargas de los cuatro CSO más grandes. Este costo del valor actual fue estimado en \$1,650,000,000. Dado que la Alternativa 3 supera lo que fue evaluado en el LTCP, se estima que costaría más de \$1,600 millones implementar el pleno control de CSO y más de los 22 años que se espera para implementar el LTCP aprobado.

Similar a la Alternativa 2, la Alternativa 3 también requeriría monitoreo, junto con la implementación de un programa de rectificación para reducir la carga de COPC de los CSO, hasta que queden totalmente implementados los controles CSO.

No habría evaluaciones de cinco años relacionadas con esta alternativa. Sin embargo, habría requisitos de informes regulares hasta que quede totalmente implementada la Alternativa 3, los resultados de la cual serían utilizados para informar la efectividad de esta

decisión. Se realizaría una evaluación de la duración final y la frecuencia del monitoreo y generación de informes junto con el proceso de selección de remedio en todo el sitio de la OU1.

#### EVALUACIÓN DE LAS ALTERNATIVAS

#### Evaluación de múltiples líneas de evidencia

Tal como se describe antes en este plan, se usaron tres LOE para evaluar cada alternativa. Se describe un resumen de los resultados de esta evaluación a continuación. Hay más detalles sobre la evaluación en el informe del FFS de la OU2.

# LOE 1: Comparación de concentraciones

Para la LOE 1, se compararon las concentraciones de COPC de la fase de partículas en las descargas de CSO al Área de estudio con las concentraciones de COPC de la fase de partículas en las otras entradas evaluadas al Área de estudio. Las otras entradas evaluadas para la LOE1 son aguas de tormenta, descargas tratadas y agua superficial del East River. Dado que las alternativas impactan el volumen de descargas de los CSO, pero no la concentración de COPC en las descargas, no fue necesario evaluar cada alternativa por separado a través de esta LOE. Las Figuras 3a a 3e muestran los resultados de las comparaciones de LOE 1 para cada uno de los COPC de la OU2.

En general, la LOE 1 muestra que las concentraciones medidas de COPC en sólidos en las descargas de CSO se hallan dentro del rango de las concentraciones medidas en sólidos de las otras entradas evaluadas. En cada COPC, las concentraciones promedio detectadas en los sólidos de CSO fueron menores que el promedio de sólidos de aguas de tormenta y mayor que el promedio de descargas tratadas y el East River.

#### LOE 2: Comparación de cargas

La carga de contaminantes se define como una unidad de masa por unidad de tiempo (por ej., kg/año). Se calculó la carga de cada COPC usando datos sobre la velocidad de flujo de cada entrada evaluada y la concentración asociada de COPC en esa entrada. La carga de COPC de descargas de CSO fue comparada con la carga de las otras entradas evaluadas al Área de estudio. Para la LOE 2, las otras entradas evaluadas

fueron el East River, depósitos atmosféricos, MS4 y descargas tratadas. Para esta LOE, las cargas tanto en la Alternativa 1 como en la Alternativa 2 fueron comparadas con las otras entradas evaluadas. La Alternativa 3 no fue evaluada como parte de LOE 2 porque se eliminaría la carga en esta alternativa. Las Figuras 4a a 4e muestran los resultados de las comparaciones de LOE 2 para cada uno de los COPC de la OU2.

En general, la LOE2 muestra que la carga de los CSO es similar o menor que la carga de las otras entradas evaluadas. La Alternativa 2 produce considerablemente menos carga que la Alternativa 1, lo cual tiene sentido dado que el volumen de descargas al Área de estudio se vería reducido en aproximadamente el 61 por ciento a través de la implementación del LTCP (conforme a los requisitos de la CWA). Para TPAH17, la carga más grande al Área de estudio proviene de descargas tratadas, mientras que el East River suministra la mayor carga de TPCB, cobre y plomo en comparación con las otras entradas evaluadas. Se estima que carga más grande de dioxinas/furanos proviene de depósitos atmosféricos.

# LOE 3: Evaluación posterior a la remediación del impacto de los CSO en el área de estudio a través de modelado

El LOE implicó aplicar una serie de modelos numéricos diseñados para simular el destino y transporte de contaminantes en Newtown Creek. Se aplicaron los modelos a las tres alternativas de remediación evaluadas en los FFS de la OU2 y las concentraciones de COPC pronosticadas en un lecho de sedimentos a fin de proporcionar una evaluación relativa de las alternativas.

El marco de modelado empleado para el FFS de la OU2 incluyó un modelo de fuentes puntuales, estimaciones de afloramiento del agua subterránea, un modelo hidrodinámico, un modelo combinado de eutroficación y transporte de sedimentos, y un modelo químico. El modelo de fuentes puntuales calculó flujos al arroyo de las descargas de CSO, escorrentía de aguas de tormenta y flujo sobre el terreno desde las propiedades en tierras altas. Los flujos calculados por el modelo de fuentes puntuales junto con las velocidades de afloramiento horizontal y vertical del agua subterránea se trasladaron al modelo hidrodinámico. El modelo hidrodinámico

calculó el transporte de la columna de agua y la mezcla, y se trasladó esta información a los modelos de eutroficación/ transporte de sedimentos y químicos. El modelo de eutroficación/transporte de sedimentos utilizó cargas de nutriente, carbono orgánico y sedimentos (de fuentes puntuales y del East River) junto con los resultados del modelo hidrodinámico para calcular el destino y transporte de algas, carbono orgánico y sedimentos y se trasladó esta información al modelo químico. Por último, el modelo químico utilizó cargas químicas (de fuentes puntuales, del East River y de otras entradas) junto con los resultados de los modelos hidrodinámico y de eutroficación/transporte de sedimentos para calcular el destino y transporte de COPC. Tomado en conjunto, y sujeto a los supuestos y el desempeño de los diversos modelos, el marco de modelado calculó el transporte de COPC originado de diversas fuentes y el depósito de COPC al lecho de sedimento en el arroyo.

Las Figuras 5a y 5b muestran la comparación de la concentración promedio ponderada de la superficie modelada (SWAC) de cada uno de los principales COPC (TPAH17, TPCBs y cobre) frente a la reducción porcentual de descarga de los CSO. Los diagramas muestran que incluso un 100 por ciento de control de la descarga de CSO tiene un impacto mínimo en las concentraciones resultantes en el sedimento del Área de estudio. El modelado incluye entradas del East River, otras fuentes puntuales y agua subterránea, y los resultados del modelado indican que incluso con un 100 por ciento de control de CSO, las concentraciones del lecho de sedimentos posterior a la remediación no se acercan a cero. De hecho, el modelado muestra que el 100 por ciento de control de CSO en realidad aumenta la concentración resultante de TPCB en ciertas partes del Área de estudio.

La AOC de 2018 con la Ciudad que rige el FFS de la OU2 incluyó una declaración de que se deben evaluar al menos tres alternativas – ninguna medida, ninguna otra medida y 100 por ciento de control. Los resultados de la LOE 3 muestran que no es necesaria la evaluación de otra alternativa, con controles de volumen de CSO entre lo indicado por el LTCP y un 100 por ciento de control porque incluso el 100 por ciento de reducción del volumen de descarga de CSO tiene poco impacto en las concentraciones del lecho de sedimentos de COPC en el Área de estudio.

#### Nueve criterios de evaluación

Se utilizan nueve criterios para evaluar las distintas alternativas de remediación individualmente y entre ellas a fin de seleccionar un remedio (vea la tabla a continuación, Criterios de evaluación para alternativas de remediación de Superfund). Esta sección del Plan propuesto incluye el desempeño relativo de cada alternativa contra los nueve criterios, observando cómo se compara con otras opciones que se consideran. Se puede hallar un análisis detallado de las alternativas en el informe del FFS de la OU2.

# 1. Protección general de la salud humana y el medio ambiente

La comparación de la LOE 1 mostró que los COPC descargados en el Área de estudio de los CSO se hallan dentro del rango de las concentraciones de otras entradas evaluadas en el Área de estudio. La LOE 2 mostró que la Alternativa 2 disminuiría la carga de COPC al Área de estudio en comparación con la Alternativa 1, y que la Alternativa 3 reduciría aún más la carga al Área de estudio al eliminar descargas de CSO. Sin embargo, la LOE 3 muestra que hay un cambio insignificante en los SWAC modelados en un lecho de sedimentos limpio supuesto posterior a la remediación, sin importar si se evalúa la Alternativa 1, la 2 o la 3.

La evaluación de LOE muestra que las tres alternativas aportan alrededor del mismo nivel de protección.

# 2. Cumplimiento con requisitos aplicables o pertinentes y adecuados

Las medidas tomas en cualquier sitio Superfund deben cumplir con los requisitos aplicables o pertinentes y adecuados conforme a las leyes federales y estatales o aportar la base para invocar una exención de dichos requisitos. Para las alternativas 1 y 2 no hay ARAR porque no se requieren medidas relacionadas con CERCLA. La Alternativa 3 cumpliría con ARAR.

#### 3. Eficacia y permanencia a largo plazo

La Alternativa 2, una vez implementada, sería más efectiva a largo plazo que la Alternativa 1 porque reduciría el volumen de las descargas de CSO al Área de estudio. La Alternativa 3 proporcionaría el mayor

nivel de efectividad y permanencia al eliminar en efecto las descargas de CSO al Área de estudio al ser implementada.

# 4. Reducción de la toxicidad, movilidad o volumen mediante el tratamiento

Aunque no hay una diferencia considerable en las concentraciones de COPC en las concentraciones de sedimentos de la superficie modeladas del arroyo con las diferentes alternativas, la Alternativa 1 no aportaría ninguna reducción adicional de las descargas de CSO así que no han reducción adicional en cuanto a movilidad y volumen de contaminantes. Ambas Alternativas 2 y 3 reducirían la movilidad y el volumen de contaminantes mediante la captura y disminuirían la toxicidad mediante tratamiento y descarga de la mayor parte o la totalidad de las descargas de CSO. Sin embargo, la Alternativa 3 proporcionaría un grado más alto de reducción en movilidad y volumen de contaminantes porque aporta un nivel más alto de captura y tratamiento de volumen de CSO en comparación con la Alternativa 2.

#### 5. Eficacia a corto plazo

Para las Alternativas 1 y 2, no habría impactos a corto plazo para la comunidad o los trabajadores del sitio dado que no se requerirían actividades de remediación conforme a CERCLA.

La Alternativa 3 tendría impactos significativos en la comunidad a corto plazo. Ampliar el tamaño del LTCP más allá de lo que el NYCDEP ya tiene ordenado implementar probablemente produce un plazo más prolongado para la implementación y requeriría un espacio más grande para construir.

# 6. Posibilidad de implementación

Ni la Alternativa 1 ni la Alternativa 2 requieren ninguna medida de remediación, por eso no es necesaria una evaluación del criterio de posibilidad de implementación según el NCP para estas dos alternativas. Se debe observar que, aunque la Alternativa 2 no incluye ninguna medida, la Alternativa supone que se cumplirá la obligación independiente conforme a la Orden de CWA estatal de la Ciudad a fin de implementar el LTCP, y que esa medida, aunque no es seleccionada según CERCLA, ha sido determinada

como implementable por el NYSDEC.

La Alternativa 3 sería muy difícil de implementar, tanto desde una perspectiva de ingeniería como de administración.

#### 7. Costo

No hay costo relacionado con CERCLA con la Alternativa 1 o la Alternativa 2.

El costo estimado de la Alternativa 3 es mayor de \$1,650,000,000. Esto fue estimado basándose en cálculos provistos en el LTCP.

#### 8. Aceptación estatal

El Estado de Nueva York está de acuerdo con la Alternativa preferida de la EPA tal como se presenta en este Plan propuesto.

#### 9. Aceptación de la comunidad

La aceptación de la comunidad de las alternativas preferidas se evaluará después de que finalice el período de comentarios del público y se abordará en el registro de decisiones (ROD) correspondiente a la OU2. Dependiendo de los comentarios del público, las alternativas preferidas podrían modificarse de la versión presentada en este plan propuesto. El ROD es el documento que formaliza la selección del remedio para un sitio.

#### ALTERNATIVA PREFERIDA

La alternativa preferida de la EPA para la OU2 es la Alternativa 2, Ninguna otra medida, donde Ninguna otra medida en este caso supone que el LTCP que tiene orden el NYCDEP de implementar sea, de hecho, implementado puntualmente. La EPA ha concluido que la reducción de volumen lograda por el LTCP será suficiente para los fines de una medida de respuesta conforme a CERCLA.

A fin de respaldar esta decisión, en vista de los numerosos cambios previstos para Newtown Creek en los años venideros, incluida la selección de medidas futuras de respuesta según CERCLA, la EPA prevé que se requerirá la siguiente actividad de monitoreo en lo sucesivo:

 Muestreo de descarga de los cuatro CSO más importantes a Newtown Creek trimestralmente hasta que se implemente plenamente el LTCP.

Asimismo, la EPA y el NYSDEC considerarán un programa de rectificación para abordar aumentos persistentes en las concentraciones de COPC de las descargas de CSO, si se encuentran. Si fuese necesario, un programa de rectificación identificaría las fuentes de las concentraciones elevadas de contaminantes dentro del alcantarillado, para poder abordarlas a través de controles de permisos más estrictos o medidas en tierras altas, según corresponda.

El monitoreo de CSO y el programa de rectificación potencial serían utilizados para confirmar que los supuestos utilizados en desarrollar esta alternativa, conforme a CERCLA, sigan siendo adecuados hasta que esté plenamente aplicado el LTCP y en funciones, lo cual se prevé que será en 2042.

La Alternativa 2 es aplicable al volumen de descarga solo de los CSO. La EPA determinará en decisiones futuras de selección de remedios para otras OU si se necesitan medidas adicionales de control, ya sea en el arroyo o en los puntos de descarga de CSO. Estas medidas adicionales de control podrían incluir, sin limitarse necesariamente a ellas, la colocación de trampas de sedimento y/o almohadillas absorbentes de petróleo en el extremo de las tuberías de descarga de CSO y dragado de mantenimiento en el arroyo para abordar la acumulación potencial de sólidos contaminados cerca de las descargas de CSO.

La evaluación de múltiples LOE efectuada respalda la conclusión de que no se requieren otras medidas (más allá del LTCP aprobado una vez que se implemente) para reducir el volumen de descargas de CSO al arroyo. El modelado realizado como parte de LOE 3 muestra que no sería considerable la reducción incremental en concentraciones de COPC en el Área de estudio en caso de que se seleccionara la opción del 100 por ciento de control, o algo entre el LTCP aprobado por el NYSDEC y la opción del 100 por ciento.

Mediante el análisis de LOE, se determinó que cada una de las alternativas evaluadas aporta aproximadamente el mismo nivel de protección; por lo tanto, el control de volumen indicado por el LTCP aprobado por el NYSDEC, a ser implementado por el NYCDEP, es suficiente para los fines de una medida conforme a CERCLA y no se necesita ninguna otra medida de reducción de volumen. Además, la Alternativa 3 tendría impactos significativamente más altos a corto plazo, sería muy difícil de implementar, costaría considerablemente más que la Alternativa 2 y no produciría una reducción significativa de la carga de COPC en el arroyo.

Ninguna evaluación de cinco años estaría asociada con la alternativa preferida. Sin embargo, habrá requisitos de informes regulares hasta que quede el LTCP totalmente implementado, los resultados de los cuales serán utilizados para informar la efectividad de esta decisión. Se realizará una evaluación de la duración final y la frecuencia del monitoreo y generación de informes junto con el proceso de selección de remedio en todo el sitio de la OU1.

Según la información disponible actualmente, la EPA cree que la alternativa preferida cumple con los criterios de umbral y aporta el mejor equilibrio entre ventajas y desventajas en comparación con las otras alternativas, con respecto a los criterios de equilibrio y modificación. La EPA espera que la alternativa preferida satisfaga los siguientes requisitos legales de la Sección 121(b) de CERCLA porque (1) protegerá la salud humana y el medioambiente, ya sea mediante esta medida o a través de medidas adicionales por determinar como parte del ROD de la OU1; (2) cumple con un nivel o norma de control de las sustancias peligrosas y contaminantes que al menos logra los requisitos legalmente aplicables o pertinentes y adecuados según las leyes federales y estatales porque no se requieren ARAR para remediaciones sin ninguna otra medida; (3) es económica; y (4) utiliza soluciones permanentes y tecnologías de tratamiento alternativo (o recuperación de recursos) en el máximo grado practicable. Asimismo, la Sección 121 de CERCLA incluye una preferencia por remedios que reduzcan permanente y significativamente el volumen, la toxicidad o la movilidad de sustancias peligrosas como elemento principal (o requiere una justificación por no cumplir con la preferencia). Aunque no se requiere

ninguna otra medida según el remedio seleccionado, la implementación del LTCP reducirá sustancialmente el volumen de descargas de CSO, una fuente de carga de contaminantes a Newtown Creek.

De manera congruente con la política Limpia y Verde de la Región 2 de la EPA, la EPA evaluará el uso de tecnologías y prácticas sostenibles con respecto a la implementación del remedio seleccionado.

#### PARTICIPACIÓN COMUNITARIA

La EPA alienta al público a lograr un mejor entendimiento integral del sitio y de las actividades de Superfund que se han realizado allí.

Las fechas para el periodo de comentarios públicos, la fecha, sede y hora de la reunión pública, y las ubicaciones de los archivos de Expedientes administrativos, se indican en el recuadro titulado "Marque su calendario" situado en la portada de este Plan propuesto. Se dan instrucciones para presentar comentarios por escrito acerca del Plan presentado en el recuadro destacado a continuación.

La Región 2 de la EPA ha designado a un contacto público como intermediario para contactarlo en lo que respecta a preocupaciones y preguntas de la comunidad acerca del programa federal de Superfund en Nueva York, Nueva Jersey, Puerto Rico y las Islas Vírgenes Estadounidenses. Para apoyar esta labor, la Agencia ha establecido un número gratis las 24 horas (1-888-283-7626) que puede usar el público para llamar y pedir información, expresar sus inquietudes o presentar quejas sobre Superfund.

#### Para obtener más información sobre el sitio Superfund de Newtown Creek, póngase en contacto con:

Mark Schmidt Natalie Loney
Gerente de proyectos de remediación Coordinadora de

participación comunitaria (212) 637-3886

(212) 637-3639

schmidt.mark@epa.gov

loney.natalie@epa.gov

Deben enviarse los comentarios por escrito sobre este Plan propuesto al Sr. Schmidt a la dirección postal indicada a continuación o por correo electrónico.

Mark Schmidt

Gerente de proyectos de remediación Agencia de Protección Ambiental de los EE. UU. 290 Broadway, 18th Floor

New York, NY 10007

Correo electrónico: schmidt.mark@epa.gov

#### El contacto público para la Región 2 de la EPA es:

George H. Zachos Contacto público regional Línea gratis (888) 283-7626 (732) 321-6621

EPA de EE. UU., Región 2 2890 Woodbridge Avenue, MS-211 Edison, New Jersey 08837-3679

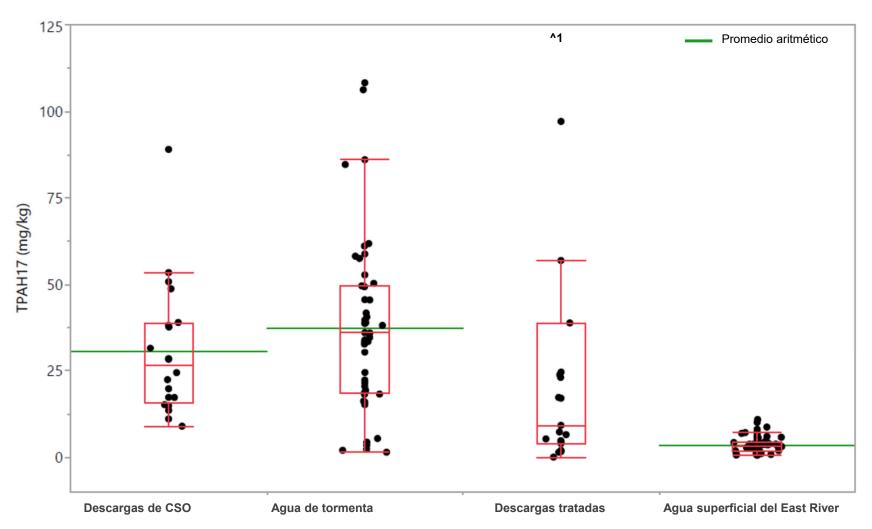
Figura 1 – Ubicación del sitio de Newtown Creek



Figura 2 – Ubicaciones de CSO y desagües de Newtown Creek



Figura 3a - Comparación de concentraciones de partículas en los CSO con concentraciones de partículas de otras entradas evaluadas - TPAH17



Nota: La concentración promedio de TPAH17 en descargas tratadas es de 2,056 mg/kg, que está fuera de la escala de la figura.

Figura 3a - Comparación de concentraciones de partículas en los CSO con concentraciones de partículas de otras entradas evaluadas - TPCB

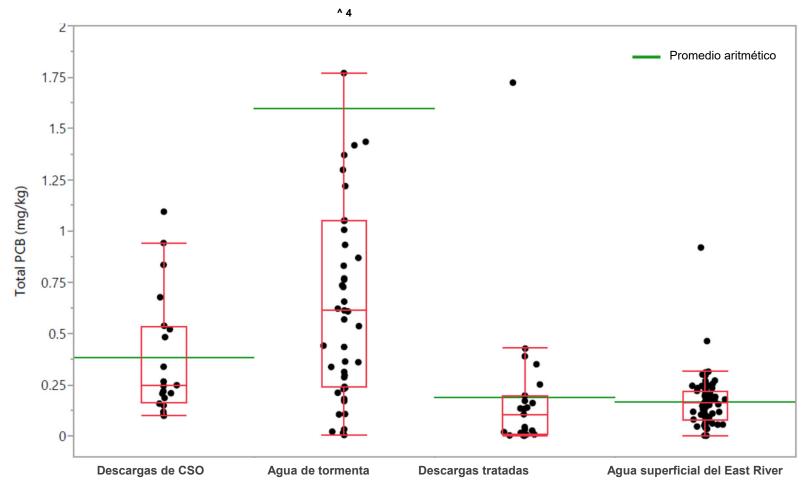


Figura 3c - Comparación de concentraciones de partículas en los CSO con concentraciones de partículas de otras entradas evaluadas - Cobre

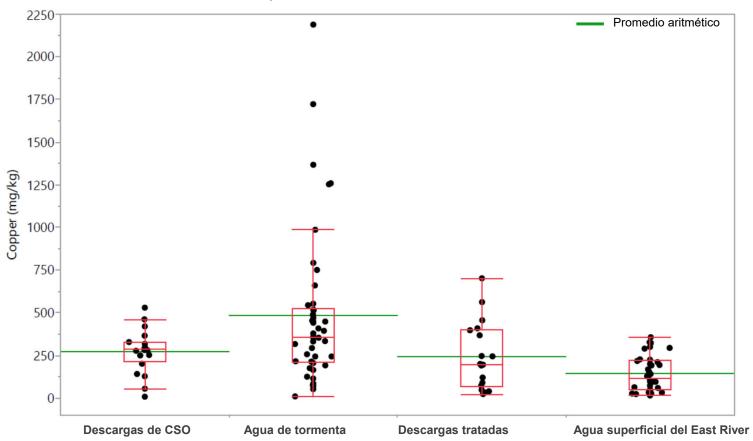


Figura 3d - Comparación de concentraciones de partículas en los CSO con concentraciones de partículas de otras entradas evaluadas - Plomo

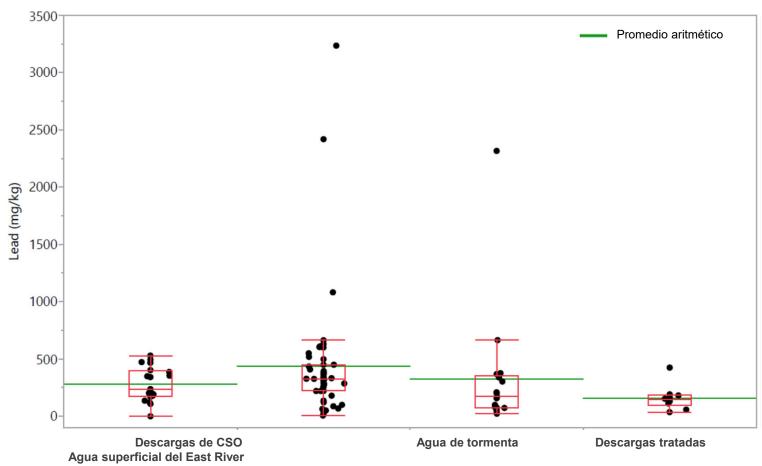
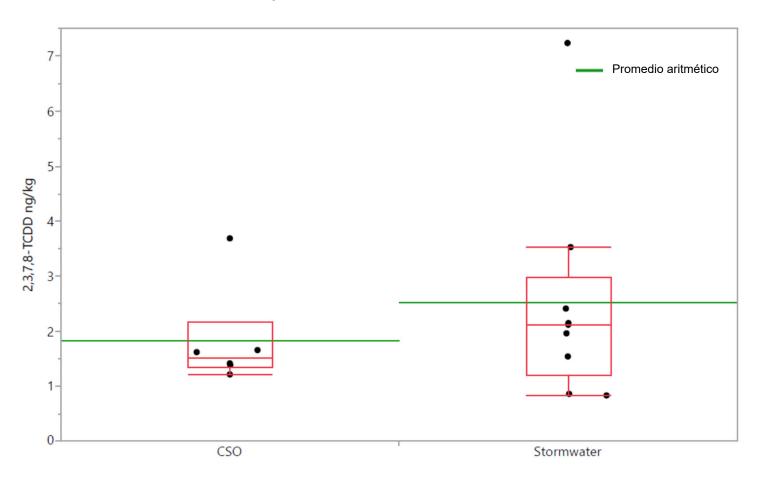


Figura 3e - Comparación de concentraciones de partículas en los CSO con concentraciones de partículas de otras entradas evaluadas 2,3,7,8-TCDD



#### Notas:

<sup>1)</sup>Debido a un gran número de muestras no detectadas en desbordes de alcantarillado combinados y otras entradas elevadas, la figura muestra la comparación solo de muestras detectadas.

<sup>2)</sup>Para descargas del East River y tratadas, solo se detectó una muestra, por lo tanto no se muestran diagramas de cajas de estas fuentes.

<sup>3)</sup> Se realiza la comparación estadística solo de muestras detectadas.

Figura 4a - Comparación de cargas de TPAH17 de CSO y otras entradas evaluadas al área de estudio

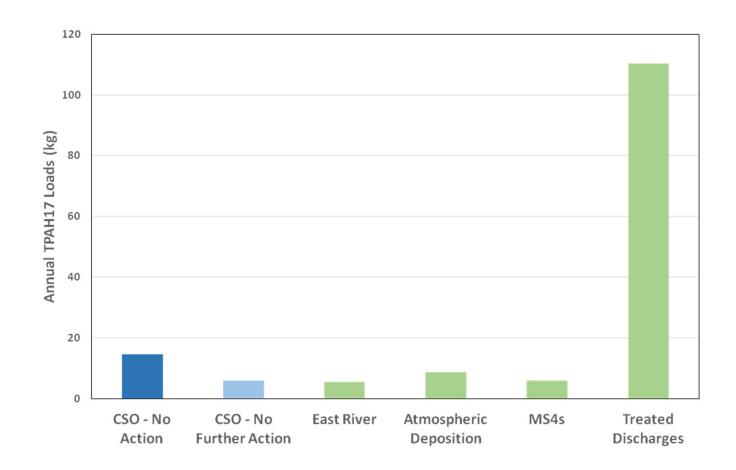


Figura 4b - Comparación de cargas de TPCB de CSO y otras entradas evaluadas al área de estudio

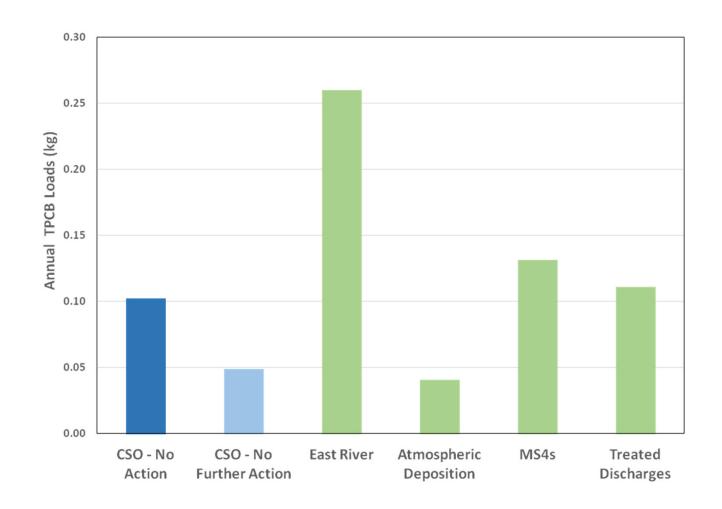


Figura 4c - Comparación de cargas de Cobre de CSO y otras entradas evaluadas al área de estudio

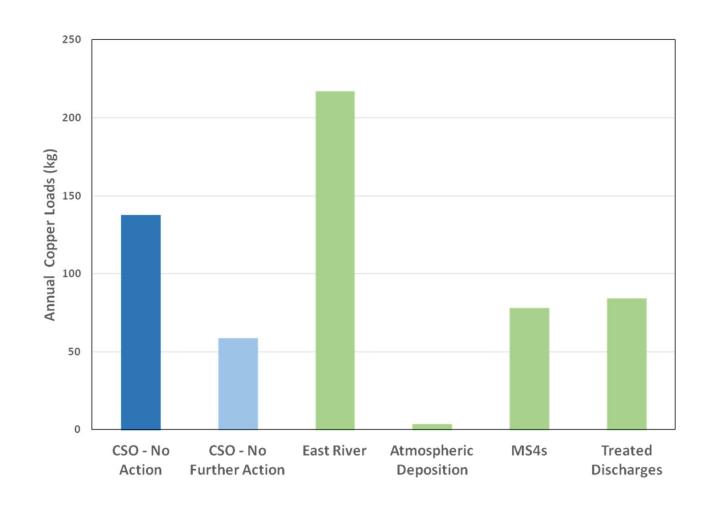


Figura 4d - Comparación de cargas de Plomo de CSO y otras entradas evaluadas al área de estudio

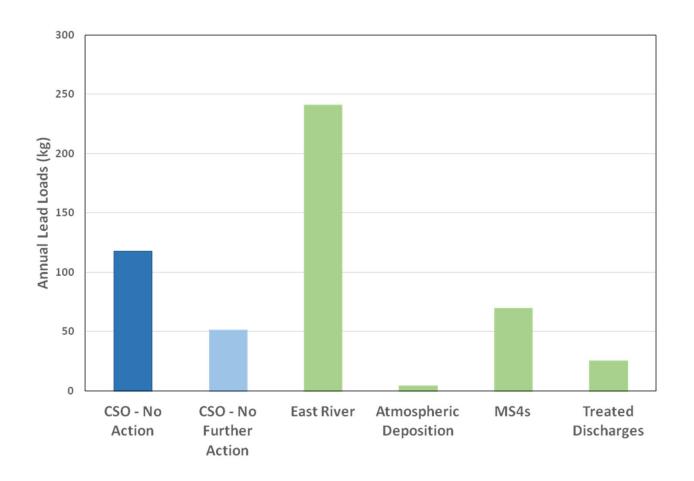


Figure 4e - Comparación de cargas de 2,3,7,8-TCDD de CSO y otras entradas evaluadas al área de estudio

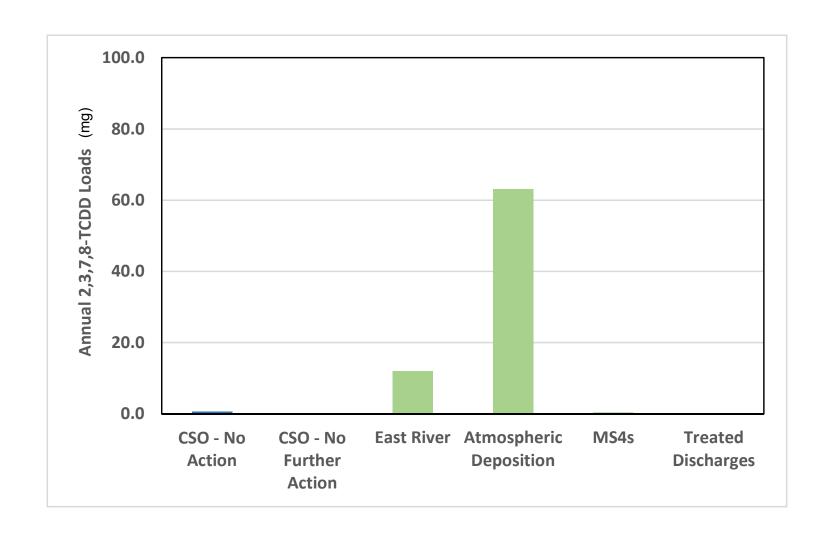
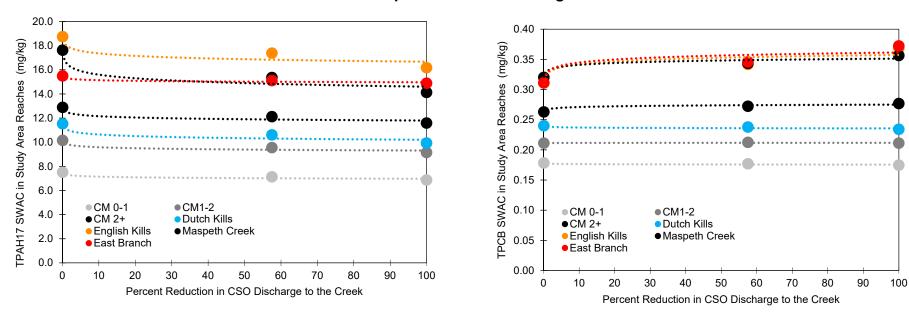


Figura 5a - Comparación de SWAC modeladas de Newtown Creek con reducción porcentual en descarga de CSO



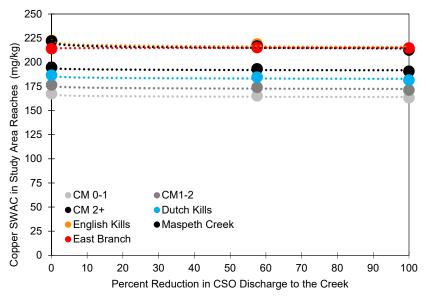
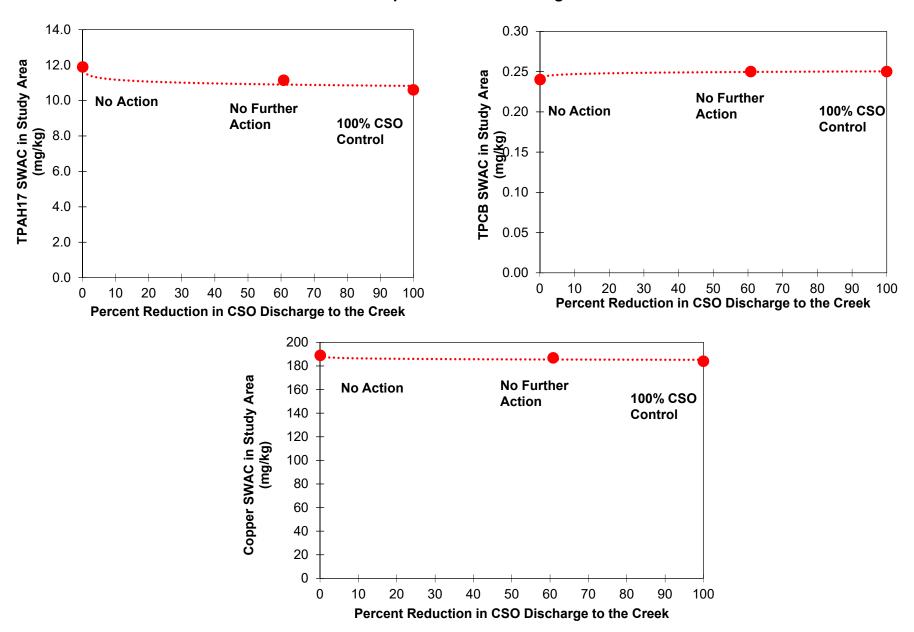


Figura 5b - Comparación de SWAC modeladas de Newtown Creek – en toda el área de estudio con reducción porcentual en descarga de CSO



超级基金计划建议计划

# 美国环保署 地区 2

# Newtown Creek 超级基金地点 纽约州,纽约市



2019年11月

# 环保署宣布建议计划

此建议计划识别处理 Newtown Creek 超级基金地点,即称为可操作单位 2(OU2)之一个分开的部份,并提供选择的理由。OU2 指目前以及合理预期未来从可操作单位 1(OU1)合流污水管溢流(CSO)至 Newtown Creek 研究地区之潜在关注化学品(COPC),此计划将在后面说明研究地区一词之意义。

整个地点是根据全面环境回应、补偿和责任法(CERCLA,亦称为超级基金法)予以处理。此外,根据清洁水法(CWA),纽约州环境保护部(NYSDEC)已指令纽约市环境保护部(NYCDEC)为 Newtown Creek 实施 CSO 长期控制计划,该计划已于 2018 年经 NYSDEC 通过(LTCP)。长期控制计划包括减少 CSO 排放人Newtown Creek 的多个部份,并兴建一条储存隧道,可减少 CSO 排到 Newtown Creek 的量约为目前基线情况的 61%,以达到和联邦 CSO 控制政策与有关指导之水体特定水质素标准一致。

美国环保署(EPA)从地点情况评估 LTCP,以决定 LTCP 所订的量控制,是否足够符合最后 CERCLA 补救研究地区的需要。评估地点此分开之部份,称为 OU2。环保署选择处理目前和合理预期未来从 CSO 排出到研究地区的 COPC 称为选项 2,并无进一步行动,意指根据上述的 CWA 令,除预期实施 LTCP 之外,不另作行动。

主导部门环保署在与支援部门纽约州环境保护部(NYSDEC)谘询下,目前发出此建议计划,作为其根据 CERCLA 第 117(a)款以及国家石油和危险物质污染应变计划(NCP)第 300.430(f)(2)款所订,徵求公众参与责任之部份。此建议计划摘要可以在更详尽的聚焦可行性研究报告(FFS)找到的资料。此计划和其他文件,属可供给公众之管理纪录档案部份,存于为地点而设的资料库。环保署鼓励

公众评审这些文件,俾掌握对地点和进行之超级基 金活动,有更全面之理解。

环保署在和 NYSDEC 谘询下,将在评审和考虑所有在公众评论期内提供的资料后,为 OU2 选择一个补救方案;公众评论期维期至少 30 天。环保署在和NYSDEC 谘询下,根据公众评论的新资料,可修订选择的方案,或选择另一个在此建议计划提出的回应行动。所以,鼓励公众评审在建议计划提出之所有资料和方案,并予置评。

# 記下日期

#### 公眾評論期:

### 2019年11月21日至2019年12月232日

環保署將在公眾評論期內接受對建議計劃之書面評論。書面評論應發到:

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18<sup>th</sup> Floor New York, NY 10007

電郵: schmidt.mark@epa.gov

#### 公眾會議

環保署將舉行兩個公眾會議,說明建議計劃和所有在 集中可行研究提出之方案。在會議中亦接受口頭或書 面的評論。會議將於以下日期舉行:

2019年12月9日

2019年12月11日

下午 6:30-8:30 Sunnyside Community 下午 6:30-8:30 P.S. 110

Services
43-31 39<sup>th</sup> Street

124 Monitor Street Brooklyn, New York

Queens, New York 11104

11222

# 此外,管理紀錄文件可上網查閱:

https://www.epa.gov/superfund/newtown-creek

# 行动范畴和角色

正如众多超级基金地点一样,在此地点的污染是复杂的,清理由多个可操单位或 OU 管理。有关 OU1 和 OU3 的其他资料,请参看下面地点历史部份。此建议计划是处理 OU2。

在此建议计划评估的选择,只应用于目前和合理预期未来之 CSO 排出量。环保署将在未来的决定文件中,决定在河中或 CSO 排放点是否需额外的控制行动,以符合整个地点补救行动之目的,这将有待决定。如有此必需的额外控制行动,将在一份未来决定文件中予以实施。

此外,在处理 OU2 时,环保署对来自 CSO 过去排放的 COPC,没有决定或发现。过去有关研究地区之排放和它们的影响,属 OU1 补救调查/可行性研究(RI/FS)之部份,目前正在进行中。

# 整体地点说明

此地点位于纽约州纽约市 Kings 县和 Queens 县(图 1)。地点包括 Newtown Creek 和它的五条支流,包括 Whale Creek, Dutch Kills, East Branch, English Kills 和 Maspeth Creek。

此地点位于 Newtown Creek Significant Maritime and Industrial Area (SMIA)内,这是纽约市指定的六个重要海事和工业地区之一。Newtown Creek SMIA,占地超过 780 亩,是纽约市最大的 SMIA,并包括Greenpoint, Williamsburg, Long Island City 和Maspeth 工业区的部份。

Newtown Creek 和它的支流,包括河口的一个水体,一般是东西走向,虽然 Newtown Creek 最东面部份和多条支流是南北走向的。

Newtown Creek 的水,目前被 NYSDEC 界别为级别 SD,属咸水地表水,仅能用来保护鱼类的生存。河流并未符合保护使用的参数(例如,因为溶解氧含量低)。河流用于康乐目的,包括皮划艇和独木舟,现时有并计划增设滨水的接入点。虽然纽约州卫生部的鱼类公告限制在 Newtown Creek 钓鱼,贴有警告牌和作出公众宣传,但仍可看到有人在河流钓鱼和捕蟹。

# 地点整体历史

历史上,Newtown Creek 排干了西长岛的高地,流经湿地和沼泽。但是,因为从 1800 年代起的重工业的发展和政府的活动,湿地和沼泽已被填土,Newtown Creek 已被疏通,它的河岸已被舱壁和乱石巩固。历史的发展改变了 Newtown Creek 的性质,从一个自然的排水系统,变为一个大部份由工程和制度系统控制的排水系统。

在 1800 年代中,在 3.8 哩长的河流侧地区是纽约市最繁忙的工业区。工业设施位于河的河岸,包括超过 50 家炼油厂、石油化学工厂、肥料和胶水厂、锯木厂,和木材场与煤场。Newtown Creek 挤满了商船,包括带来原料和燃料和带走制成品包括石油产品、化学品和金属品的商船。除从这些活动引致的工业污染外,城市在 1856 年开始将未经处理的污水直接排入河内。在二次大战时,河流是国家最繁忙的港口之一。目前,工厂、仓库、公用事业和市设施仍在此处营运。在河流高地的多个污染设施,是造成 Newtown Creek 污染的来源。

此工业发展引致对河岸和水道的重大改造,以用于排水和导航。Newtown Creek 和它的支流在 1930 年代的渠化和深化大部份已告完成,定义了今天的结构。此历史性的发展改变了 Newtown Creek 和它的支流的自然排放系统,成为一个大部份由工程及制度系统控制的排放系统。

在 1990 年代初,纽约州宣布 Newtown Creek 不符合清洁水法所订的标准。自此之后,在 Newtown Creek 地区进行多个州和州主持的清理项目,而一个重大升格 Newtown Creek 废水治理厂,亦于 2012 年完成。

此地点在 2010 年根据 CERCLA 加入环保署的国家 优先名单内。直至最近,地点以一个可操作单位 (OU)予以处理,然后识别出两个额外的 OU。目前的 OU 结构如下:

#### OU1

OU1包括整个研究地区,如来自 2011年环保署、纽约环境保护部(NYCDEP)和 Phelps Dodge Refining Corporation, Texaco, Inc., BP Products North America Inc., the Brooklyn Union Gas Company D/B/A National Grid NY 与 ExxonMobil Oil Corporation 之间所订的同意行政令(AOC)所定义者。这五个私人方(不包括纽约市)已组成 Newtown Creed Group (NCG)。2011年的 AOC 定义研究地区,一般是 Newtown Creek 及其支流的水体和沉积物,至并包括海岸线向陆地的边缘。

一个全面的 OU1 的 RI/FS,持续由环保署监察。

#### OU2

OU2 FFS 由 NYCDEP 进行,由环保署监察,以环保署和 NYCDEP 在 2018 年所订的 AOC 为根据。

#### OU3

OU3 指评估在研究地区河流下游两哩的可能临时早期行动,如 2019 年环保署和 NCG 所订的 AOC 所说明者。OU3 的一个 FFS 目前由 NCG 执行,由环保署监察。

# 执行历史

如前所述,在 2011 年有六个责任方订立了 AOC,以执行 OU1 RI/FS。OU2 目前只根据在 2018 年和 NYCDEP 所订的 AOC 条件执行,而 OU3 只根据在 2019 年和 NCG 订立的 AOC 条件执行。

其他可能的负责方,最近已收到他们可能须负责的通知。这些额外方对地点每个OU之角色和责任有待决定。寻找其他可能负责方的工作一直继续。

#### 地点整体特色

通过 OU1 RI/FS 过程广泛的研究地点。这些研究的结果,详见于 OU1 RI 和 FS 报告。OU2 在地点并无进行新的实质调查。而是进行支持 OU2 FFS 之评估,有赖于 OU1 RI/FS 所收集的数据。

#### OU1 研究地区调查

OU1 RI 的实地工作于 2012 年 2 月开始,到 2014 年 5 月已相当完成。调查决定需要额外的资料,而这

些是从作为 OU1 FS 部份所取得,因而可以进行准备草拟 OU1 RI 报告。OU1 FS 的实地工作于 2017 年春季开始,并在 2019 年大部份完成。

一份 OU1 RI 的报告,在 2016年 11 月提交,而一份修订本于 2019年 4 月提交。环保署在 2019年 9 月向 NCG 发出对修订 RI 报告之评论,新的修订版本在 2020年初到期。

OU1 RI/FS 的实地工作包括收集稳健的数据,用以决定研究地区污染的性质和范围、制订整体概念地点模式,和最后支持选择 OU1 的适当补救方案。这些数据包括以下项目:沉积物的样本、表面水、孔隙水、地下水、渗流、空气、海岸线沉积物/土壤、生物组织、点源排放、非点源排放、非水相液体(NAPL),和沸腾;生态群落调查和水深测量;以及沉积物毒性;NAPL流动性和岩土特性的测试。

样本予以分析,以制定一份全面的污染体名单,包括发挥性有机化合物,半发挥性有机化合物,金属(总和溶解),多氯联苯(PCB)及其衍生物,二恶英/呋喃和杀虫剂。

此外,作为 OU1 RI/FS 的部份,目前正在发展一组复杂的互相关联的模式。头两个主要模型(水动力和泥渣迁移模式,包括地下水点源次模型)已连同草拟的 RI报告提交,目前正在完善化。模型架构的其他部份(污染物迁移和迁移模型以及生物积累模型)仍在发展中,将以 FS 报告草本部份提交。因此,虽然 OU1 的概念地点模型发展进行顺利,一个全面系统之理解,仍在发展中。OU1 FS 目前订于在 2022 年完成。

## OU1 研究地区的物理特性

在研究地区各处发现污染浓度升高。很多此类污染,是河流过去之污染造成,特别是污染的沉积物,在表面和次表面的沉积物上,及潜在的原生沉积物上发现。

对研究地区持续的,外部的污染输入包括但不一定限于市政雨水管系统分开排放口(MS4)、Newtown Creek 废水处理厂(WWTP)处理废水排泄口、准许的工厂排放、其他准许的/不准许的排

放、地面水流/直接排水、地下水、其他非点源、 East River 的潮汐影响、大气沉积、来自高地属性和 海岸线侵蚀排放的海岸线渗漏/地下水,以及 CSO 排放。

来自这些输入的代表性样本,已收集作为 OU1 RI/FS 过程的部份,提供足够的数据以制定从这些源流进入河流的危险性物质浓度的定量评估,以及如适当的话,作质量/体积之定量评估。

河流本身亦有很多污染体浓度之升高,有可能导致 此污染体在研究地区扩散人溪的过程。这些过程包 括沸腾(起泡),沉积物再浮悬,以及 NAPL 迁 移。

点源排放人研究地区,包括沿河及其支流超过300个私人和市政的排放口。这些点源排放,主要是在潮湿天气下供应流入Newtown Creek的淡水,并包括个别许可的雨水和废水排放、CSO排放、未经许可的排放,和来自WWTP的经处理过的废水排放。来自道路和地面的雨水径流,亦排放入河流。

#### **OU2 FFS**

## 可操作单位 2 的背景

在潮湿天气的情况下,河流从点源收到排放,包括 CSO和雨水(市政排放、和许可与不许可的私人点 源排放),以及来自非点源例如地面水流的排放 (参看图2一些这些点源排放地点)。除在潮湿天 气的排放外,河流亦接收来自地下水的淡水。地下 水通过沉积物和来自毗邻河流高地属性进入河流。 East River和点源目前被认为是河流主要固体的来 源。

数十年来,CSO控制改善在水体中之细菌水平和溶解氧浓度一直由CWA的管制计划驱动,包括环保署的CSO控制政策(CWA的第402(q)款),和NYSDEC颁布的细菌和溶解氧数字水质标准。CSO控制一直集中于减少CSO的体量,以符合这些标准。

为Newtown Creek订出CSO计划,是通过Newtown Creek水质设施计划专案于1990年开始。NYCDEP发出一个Newtown Creek的水体/分水岭设施计划

(WWFP),并经NYSDEC于2012年批准。WWFP包括修改减少CSO的分析操作性和结构性,并改善在分水岭内收集和治理系统之整体表现。在2017年,NYCDEP制定一个LTCP,包括公众的意见,订出所需之CSO控制,俾达到和联邦CSO控制政策与有关指导一致之水体水质标准。NYSDEC在2018年通过LTCP。

虽然减少CSO排放量是CWA聚焦的目的,量的减少同时亦减少地点有关排放入河流COPC的质量。 OU2 FFS的整体目标,是决定LTCP所订之量控制是 否符合CWA计划之规定,足够同时达到地点之 CERCLA规定。

作为OU1 RI/FS工作之部份,一个稳健的点源采样计划已告完成。在2014年月和2015年12月15次的潮湿天气采样活动中,共收集三十一个点源排放的样本。收集了来自CSO,MS4,高速公路下水道,来自私人物业和许可的雨水排放的样本。这些数据用于评估以下所述之证据。来自采样CSO的排放,占河流总CSO排放将百分之96。

# 多线证据评估

正如上述,OU1 RI/FS 是持续的,而初步补救研究 地点之目标尚未制定。因此,一个多线的证据评估 用于衡量每个在 OU2 FFS 评估选择之相对表现。

三线证据(LOE)已予评估,说明如下:

- LOE 1:比较在微粒相浓度于其他潜在污染 河流的来源与 CSO 排放 COPC 之微粒相浓 度;
- LOE2:比较 CSO 排放的 COPC 质量负载和 其他潜在污染源排放的 COPC 质量;和
- LOE 3: 衡量来自河流沉积物河床 CSO 排放的 COPC 的影响,假设已在整个研究地区实施一个 CERCLA 的补救。一个相对简单的模型系列已告发展,以决定表面沉积物和来自 CSO 排放和来自河流其他潜在污染源排放结果之 COPC 浓度。

在这些评估所用的COPC,与那些已决定在研究地

区对人类和生态接受者带来最大的风险,那是OU1 RI/FS过程的一部份,如此建议计划的地点风险摘要 部份所述者。

用于评估LOE的数据,全部是在OU1 RI/FS过程中取得的。特别是,从以下潜在于研究地区之污染源种类中收集的数据,用于LOE评估:

- CSO排放-包括20个从七个代表河流总CSO 排放约百分之96CSO排放所收集的数据;
- 雨水排放-包括47个收集自MS4、私人物业、高速公路下水道和其他雨水网点的样本;
- 经处理的排放-包括23个收集自经废水处理的废水、来自地下水处理系统许可的排放和来自工业设施经处理的排放之样本;
- East River 包括至收集自此河的87个样本;和
- 大气沉积-使用来自多个公共来源使用之地区数据。

这些潜在来源,在OU2 FFS中称为CSO排放和「其他评估输入」。如同此建议计划「OU1研究地区物理特性」部份所述,请注意这些其他的评估输入,并不代表研究地区之所有潜在COPC来源。

LEO评估的结果,见于此建议计划的方案评估之讨论。

# 地点风险摘要

# OU1 风险评估

作为 OU1 RI/FS 过程的部份,进行了基线人类健康和生态风险评估,而报告已经环保署通过。评估发现对人类健康和环境均有不可接受的风险。所以,在地点采取补救行动是有根据的。

基线人类健康风险评估(BHHRA)于2017年6月通过。它发现和吃进来自河流的鱼和蟹有关之不可接受的风险。BHHRA识别之潜在关注是总非二恶英类PCB同类,总PCB毒性等量(TEQ),总二恶英/趺喃TEQ

基线生态风险评估(BERA)于2018年9月通过。

整体来说,BERA 结果指出研究地区沉积物,特别是在 Turning Basin 和大部份的支流,对底栖无脊椎动物有毒,并对双壳类、蓝蟹、鱼和鸟有曝险。导致不可接受风险的主要污染体是 PAH, PCB 和铜,连同来自二恶英/趺喃与铅的额外风险。

因为在 OU1 风险计估识别之不可接受风险,因而有一个在地点评估适当补救行动之根据,包括 OU2 在内。OU1 FS 正在进行中,将评估整体地点之补救方案。

# OU2 风险

在 OU2 FFS 过程中,并无进行分开的风险分析。在 OU1 BHHRA 和 BERA 所识别的 COPC,是在此 OU2 FFS 评估的 COPC。

所以,在 OU2 FFS 详细评估的完整的污染体名单中,包括总 PAH (TPAH17,连同 17,乃指包括在总数中之个别化合物之数目),总 PCB (TPCB),铜,二恶英/趺喃和铅。

# 补救行动目的

地点 OU2 之补救行动目的(RAO):

 在可行的范围内,尽量减少从 CSO 排放到 Newtown Creek 地点识别化合物之输入,以 免增加研究地区的污施。

如前述,OU2 之 COPC 是总 PAH,总 PCB,铜,二恶英/趺喃和铅。

OU2未有制定初步补救目标(PRG)。在评估RAO时无此必要。反而是,在OU2FFS制定之方案就彼此之关系曾予以评估。将为每个COPC制定PRG,作为OU1RI/FS过程之部份。

## 主要威胁废料

# 什么是「主要威胁」?

国家石油和危险物质污染应变计划(NCP)设定环保署在任何地方可行时,将用治理于一个地点构成之主要威胁之期望(NCP Section 300.430(a)(1)(iii)(A))。「主要威胁」概念,应用于一个超级基金地点之「来源材料,特性描述。一个来源材料是一种包括或含有危险物质,污染物或污染体的材料,作为污染体迁移到地下水水的水型。一般不认为是来源材料;但是,在地下水的 NAPL可视作来源材料。主要威胁废料是那些被认为高度事的地下水一般不认为是来源材料;但是,在地下水的 NAPL可视作来源材料。主要威胁废料是那些被认为高度制的话。处理这些废料之决定,是通过使用九个补救选择标准在特定的地点作方案之详细分析。此分析提供一个根据,制定法令发现,以主要威胁元素予以治理作出补救。

目前和合理预期未来从 CSO 排放的 COPC,作为研究地区的污染来源。但是,此行动并未特定它们的毒性和行动。所以,什么来源构成威胁废料之决定,将延迟至 OU1 的选择补救过程。请参看《什么是主要威胁》文字格,了解主要威胁概念更多资料,以及参看地区风险摘要部份有关地区构成之风险详情。

# 补救方案摘要

CERCLA 第 121(b)(1), 42 U.S.C. § 9621(b)(1)款规定补救行动必须保护人类健康和环境、符合成本效益,并使用永久的解决方案和治理科技与恢复资源之选择,至最大切实可行的范围。CERCLA 第 121(d), 42 U.S.C. § 9621(d)款进一步订明一个补救行动,必须规定一个控制危险物质、污染物和污染体之水平或标准,至少达到联邦和州订法律之适用或相当和适当之规定(ARAR),根据 CERCLA 第 121(d)(4), 42 U.S.C. § 9621(d)(4)款可予豁免者除外。

以下摘要 OU2 补救选择。资本是指那些建造补救方案规定的支出。操作和维修(O&M)是那些施工后所需以确保或证明补救方案持续有效的成本,并按年估计。现时价值是指如在当年投资的金额,足以承担与一个工程在一段时间之费用。施工时间是规

定建造和实施选择和不包括规定设计补救、和负责 方谈判一个补救计划之表现、或取得设计和施工合 同之时间。

## 方案 1-无行动

资本成本:\$0每年O&M成本:\$0现时价值成本:\$0施工期长:0年

NCP规定评估「无行动」之方案,以设定一个基线和其他补救方案比较。此方案假设CSO排放与目前相同,无须实施LTCP。根据此设想,总CSO排放入河流估计每年约十二亿加仑,那是使用在NYSDEC通过之情况作此估计。

# 方案 2-无进一步行动

资本成本:\$0每年O&M成本:\$0现时价值成本:\$0施工期长:0月

此方案假设 NYCDEP 将实施根据由 NYSDEC 发出之 CWA CSO 指令,那是由环保署任命之州政府部门以实施 CWA。在 CSO 指付令的设计和施工里程,指出在进行 CERCLA 过程时,将实施 LTCP。除包括在此方案内规定者,并无额外的 CSO 开放量控制措施。

要支持此方案,鉴于在未来年月预期在 Newtown Creek 会出现之很多改变,包括选择根据 CERCLA 未来之回应行动,环保署预期未来需要做以下之监察活动:

- 从四个主要 CSO 排放至 Newtown Creek 之 采样,每季一次,直至充份实施 LTCP 为 止,并定期向环保署报告。

此外,环保署和 NYSDEC 将考虑一个追溯计划,以处理任何来自 CSO 排放的 COPC 浓度,如有任何发现的话。如规定,追溯计划将识别在下水道流内之升高的污染体浓度,因而可通过适当的更严格的许可控制或高地行动予以处理。根据此方案,规定有

CSO 之监察以及可能的追溯计划,根据 CERCLA,将用于确实在制定此方案之假设,继续适当直至充实施 LTCP 为止。

估计进行此监察之成本,为\$5,000,000,供每季采样 CSO 用,约共 22 年(直至完全实施 LTCP),加上额外的\$5,000,000 以追溯污染的来源,如需要的话。任何一个「无行动」或「无进一步行动」补救之监察成本,根据 CERCLA,将不构成补救论,因而与此方案有关之成案乃属零。

没有和方案 2 有关之五年评审。但是,将有定期之报告规定,直至实施 LTCP 止,其结果将用于说明此决定之有效性。一个最后维期以及监察和报告之频密性的评估,将和 OU1 整个地点之补救选择过程同时进行。

# 方案 3-100% CSO 控制

资本成本:

每年O&M成本:

现时价值成本: 至少十六点五亿元

施工期长: 至少22年

此方案假设所有 CSO 排放人均被控制。和方案 2 比较,此方案须建造更大直径的隧道,以连接所有排放人 Newtown Creek 之排放,以及增加额外的废水处理设施。

在 OU2 FFS,和制定此方案有关的成本,并未完全决定。但是,NYSDEC 通过的 LTCP 包括评估所有来自四个最大 CSO 排放的费用。此目前价值成本估计是\$1,650,000,000。因为方案 3 超出 LTCP 之评估以外,估计要完全实施 CSO 控制,成本将超过十六亿元,和超过 22 年预期可实施通过的 LTCP 的时间。

与方案 2 类似,方案 3 亦将规定监察,连同实施一个追溯的计划以减少来自 CSO 之 COPC 负载,直至此时 CSO 控制已完全实施止。

此方案并无五年之评审。但是,将有定期的报告规定,直至方案3实施为止,报告的结果将用于认识此决定之有效性。一个最后维期和监煮与报告的频密性,将连同OU1全地点补救选择过程进行。

# 方案评估

# 多线证据评估

正如在此计划较早期所述,有三个 LOE,用于评估每个方案。一份此评估结果之摘要见下述。有关评估详情,可在 OU2 FFS 报告找到。

## LOE 1: 比较浓度

LOE 1 比较在微粒相浓度于其他潜在污染河流的来源与 CSO 排放 COPC 之微粒相浓度。其他 LOE 1 的评估输入是雨水、经处理之排放以及 East River 的表面水。因为方案影响来自 CSO 之排放量,而不是排放的 COPC 浓度,在此 LOE 并无必要分开评估每个方案。图 3a 至 3e 显示 LOE 1 比较每个 OU2 COPC 之结果。

整体来说,LOE 1显示在 CSO 排放于固体上之测量浓度,一般是在来自其他评估输入固体的浓度测量范围内。就每个 COPC 而言,在 CSO 固体测到的平均浓度,比来自雨水回体的平均低,但比来自经处理排放和 East River 的平均高。

# LOE 2: 比较负载

污染体负载之定义,为质量单位除以时间单位(例如,公斤/年)。每个 COPC 负载,是用每个评估干人之流率的数据,以及在该输入相关的浓度。来自 CSO 排放的 COPC 负载,与来自研究地区其他评估输入比较。就 LOE 2 而言,其他评估输入是 East River,大气沉积,MS4 和经处理的排放。就此 LOE 而言,方案 1 和方案 2 的负载,与其他评估输入进行比较。方案 3 作为 LOE 2 部份未作评估,因为此方案的负载将会取消。图片 4a 至 4e 显示 LOE 2 和每个 OU2 COPC 比较的结果。

整体来说,LOE2显示来自 CSO 的负载,一般与其他评估输入之负载类似或较少,那是合情理的,因为排放到研究地区的量,将会通过实施 LTCP (按 CWA 之规定)而减少约百分之 61。就 TPAH17而言,对研究地区最大的负载,来自经处理的排放,而 East River 供应 TPCB 最大的负载,铜与铅与其他评估输入之比较。最大二恶英/跌喃之负载,何

计来自大气沉积。

# LOE 3:通过模型作补救后在研究地区之影响 评估

第三个 LOE 涉及应用一组数字模型设计,以模拟 Newtown Creek 的命运和运输。模型应用于所有在 OU2 FFS 评估的三个补救方案,而在补救沉积床之 COPC 浓度,互作比较,俾提供一个相对的方案衡量。

用于 OU2 FFS 的模型架构,包括一个点源模型、地 下水渗透估计、一个水动力模型、一个结合富营养 化和沉积物运输模型,以及一个化学模型。点源模 型计算来自CSO流入河的水流、雨水径流、和来自 高地的地面水流。由点源模型计算的水流,连同纵 横的地下水渗透率,转到水动力模型。水动力模型 计算水柱之运输和混合,并将此资料转到富营养/ 沉积物运输和化学模型。富营养/沉积运输模型使 用营养素、有机碳气和沉积物负载(来自点源和 East River),连同水动力模型计算海藻、有机碳, 和沉积物,并将此资料转到化学模型。最后,化学 模型使用化学负载(来自点源、East River 和其他输 人),连同水动力和富营养/沉积运输模型,计算 COPC 的命运和运输。将所有合在一起,并受多个 模型之假设和表现限制,模型架构计算原生于多个 来源的 COPC,和河沉积在河沉积床的 COPC。

图 5a 和 5b 显示三种主要 COPC(TPAH17,TPCB 和铜的模至表面加权平均浓度(SWAC)与从排放减少的百分比之比较。图表显示即使百分之一百的控制 CSO 排放,其对研究地区之合成浓度,影响甚少。模型包括来自 East River、其他点源和地下水,以及指出即使有百分之一百的 CSO 控制,补救后沉积床之浓度不会达到零等输入。事实上,模型显示百分之一百的 CSO 控制,事实上增加研究地区某些部份的合成 TPCB 浓度。

2018年由城市管理 OU2 FFS 的 AOC,包括一个至少应有三个评估的声明——不作行动,不作进一步的行动和百分之一百的控制。LOE 3 的结果显示评估另一方案,即 CSO 量控制在 LTCP 所订和百分之一百控制之间是不必要的,因为即使百分之一百减少 CSO 排放量,对在研究地区沉积床 COPC 浓度少有影响。

# 九个标准评估

九个标准是用来个评估不同的补救方案,互相对抗,以选择一个补救(见下表,超级基金补救方案评估标准)。建议计划此部份说明每个方案在九个标准的相对表现,请注意每个方案如何比较其他考虑的选择。一个有关方案详细的分析,可在 OU2 FFS 报告中找到。

# 1. 整体保护人类健康和环境

LOE 1 比较显示从 CSO 排放出研究地区的 COPC,是在来自其他给研究地区评估输入之浓度范围内。 LOE 2 显示方案 2,与方案 1 比较,将减少研究地区的 COPC 负载;而方案 3 将从消除 CSO 排放,更进一步减少研究地区的负载。但是,LOE 3 显示在模型 SWAC 中,以假设补救后清洁之沉积床而言,并无重大的改变,不论方案 1,2 或 3 的评估是什么。

LOE 评估显示所有的三个方案均提供差不多同样水平的保护性。

# 2. 遵守适用或有关和合适的规定

在任何超级基金采取的行动,必须符合所有根据联邦和州订法适用或有关和合适之规定,或提供根据要求豁免该等规定。就方案 1 和 2 而言,并无ARAR,因为并无需要 CERCLA 有关之行动。方案 3 将遵守 ARAR。

# 3. <u>长期有效性和永久性</u>

方案 2 于一旦实施后,将比方案 1 长期来说更为有效,因为它减少了 CSO 排放到研究地区的量。方案 3 将于实施时,从消除 CSO 排放人研究地区,提供最大水平的有效性和永久性。

# 4. 通过处理减少毒性,流动性或量

虽然河的模型表面沉积物浓度在不同方案下之 COPC 并无重大的不同,方案 1 将不会提供任何额 外减少 CSO 排放,因而无额外污染体行动和量的减少。但方案 2 和 3 将通过处理/排放大部份或所有 CSO 排放,从捕捉和减少毒性,减少污染体的行动和量。但是,方案 3 将提供较大污染体行动和量的减少,因为和方案 2 比较,它提供较高捕捉和处理 CSO 的量。

## 5. 短期有效性

就方案1和2,将无对社区或地点工人短期之影响,因为根据CERCLA,并无补救活动。

方案 3 对社区在短期内有相当的影响。扩大 LTCP 超出已根据指令实施的 NYCDEP 规模,将可能导致 更长时间之实施,并需要更大的足迹来构建。

# 6. 可实施性

鉴于方案 1 或方案 2 无须做任何补救行动,因而根据 NCP 做可实施性标准之评估并无需要。应注意的是虽然方案 2 不包括行动,方案假设根据市之州 CWA 令独立责任实施 LTCP 将会发生,而该行动,虽然并非根据 CERCLA 选择,NYSDEC 已决定是可实施的。

从行政和工程角度来看,实施方案 3 将会十分困难。

# 7. <u>成本</u>

方案1和方案2并无CERCLA有关之成本。

方案 3 的估计成本是超过\$1,6509,000,000。此估计是以 LTCP 提供之计算为根据。

# 8. 州接受

纽约州目前正评审环保署在此建议计划提出之方 案。

# 9. 社区接爱

社区接受选择的方案,将在公众评论期结束之后予以评估,并将在 OU2 的决定纪录(ROD)中予以处理。根据公众评论,选择的方案可修订此建议计划提供的版本。ROD 是一份为地点选择补救正式化之文件。

# 选择方案

环保署为 OU2 选择之方案是方案 2,不作进一步行动,即在此个案中不作进一步行动,假设 NYCDEP 根据指令实施的 LTCP 事实上是会准时实施的。环保署已做出结论,LTCP 达到之量的减少,将足够满足一个 CERCLA 的回应行动。

支持此决定,乃鉴于在未来年月预期为 Newtown Creek 会出现很多改变,包括根据 CERCLA 选择未来的回应行动,环保署预期规定未来会执行以下的监察活动:

每季从 Newtown Creek 四个主要 CSO 做排放采样,直至充份实施 LTCP 为止。

此外,环保署和 NYSDEC 将考虑一个追溯计划,以处理任何来自 CSO 排放之 COPC 的持续增加,如有发现的话。如规定,一个追溯计划将识别在下水道流增加之污染体浓度之来源,因而可以通过合适的更严格之许可控制或高地行动予以处理。

CSO 监察以及追溯计划将用于确实在此方案制定之假设,根据 CERCLA,保持适当直至充份实施 LTCP和发挥功能为止,那预期在 2042 年 2 发生。

方案 2 只适用于来自 CSO 的排放量。环保署将决定在是否须为其他 OU 作之补救选择之决定,在河中或在 CSO 排放点是否有此额外控制行动之需要。这些额外控制行动可包括但不一定限于在 CSO 排放管终端设置沉积物捕集器及/或吸油垫,并作河内疏浚维护以处理在近 CSO 排放处不能累积污染的固体之可能。

多个 LOE 评估支持结论无须进一步之行动(一旦在通过之 LTCP 实施后)作减少 CSO 排放人河流的量。LOE 3 之模型显示在研究地区将增加 COPC 浓度之减少,如选择一个百分之一百的控制项目,或选择一个 NYSDEC 通过之 LTCP 和百分之一百控制选择之间的项目,并不重要。

通过 LOE 分析,决定每个评估的方案提供差不多同一水平之保护性;所以,由 NYSDEC 通过和由 NYCDEP 实施的 LTCP 所订的量控制,足够满足 CERCLA 行动和无需进一步减少量的措施。此外,

方案 3 将短期内将有相当较高之影响,实施十分困难,比方案 2 所费大得多,并且不会导致相当减少 COPC 沉载人河。

并无和选择方案有关之五年评论。但是,将有定期的报告规定,直至实施LTCP为止,结果将用于说明此决定的有效性。一个评估最后维期和监察与报告 频密性之评估,将连同OU1全址补救选择过程中进行。

根据目前备有的资料,环保署相信选择之方案可满 足门槛之标准,并就平衡和修订标准,提供所有方 案之折衷平衡。环保署期望选择方案可满足以下 CERCLA 121(b)款之法令规定,因为(1)它将保护 人类健康和环境,通过此行动或通过作为 OU1 ROD 部份之额外行动;(2)它符合控制危险物 质、污染物和污染体之控制水平或标准,至少达到 联邦和州订法律适用或有关和合理之规定,因为无 须 ARAR 作进一步之补救;(3)它符合成本效 益;和(4)它使用永久的方案和另类治理(或恢 复资源)科技,俾可行范围最大化。此外, CERCLA 第 121 款包括一个永久和相当减少作为一 个主要元素危险物质量,毒性或行动(或需要证明 不符合选择之理由)。虽然根据所选的补救不作进 一步之行动,实施 LTCP 将重大减少 CSO 的排放, 那是污染体载人 Newtown Creek 之来源。

与环保署地区 2 的清理和环保政策一致,环保署将评估使用可持续之科技和实践,以实施选择的补救。

### 社区参与

环保署鼓励公众对地点和超级基金在该处已进行之 活动,有更全面的理解。

公众评论期之日期和公众会议之日期,地点和时间,以及管理纪录档案见于「记下日期」的文字格内,那是位于此建议计划的前面。提交建议计划之书面评论,见以下的突出格。

环保署地区 2 已指定一名公众联络人作为社区对联邦超级基金计划在纽约、新泽西、波多黎各和美属处女岛之联络点。为支持此工作,部门设有一个 24小时免费电话(1-888-283-7626),供公众来电要求资料、表示他们的关注、或登记投诉超级基金事官。

#### 有关 Newtown Creek 超级基金地点详情,请联络:

Mark Schmidt Natalie Loney 补救计划经理 社区参与统筹 (212) 637-3886 (212) 637-3639 schmidt.mark@epa.gov loney.natalie@epa.gov

对此建议计划之书面评论,应寄到下址给 Mr. Schmidt,或用电邮发出。

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18<sup>th</sup> Floor New York, NY 10007

Email: schmidt.mark@epa.gov

#### 环保署地区2的公众联络人是:

George H. Zachos Regional Public Liaison Toll-free (888) 283-7626 (732) 321-6621

U.S. EPA Region 2 2890 Woodbridge Avenue, MS-211 Edison, New Jersey 08837-3679

图1- Newtown Creek 地点位置



图2 - Newtown Creek CSO 和排放地点

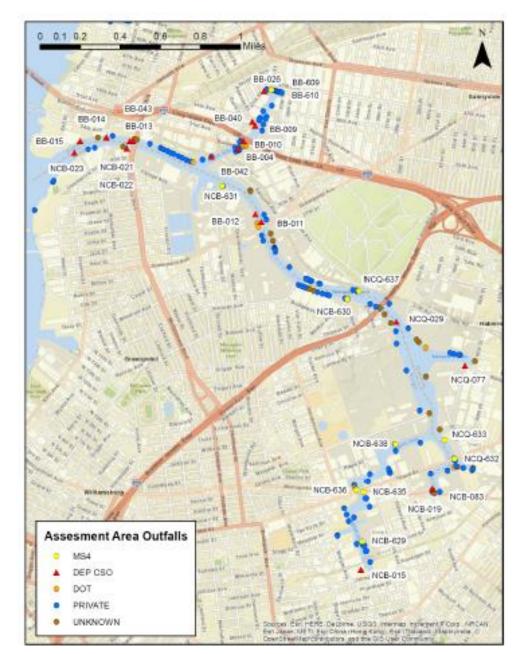
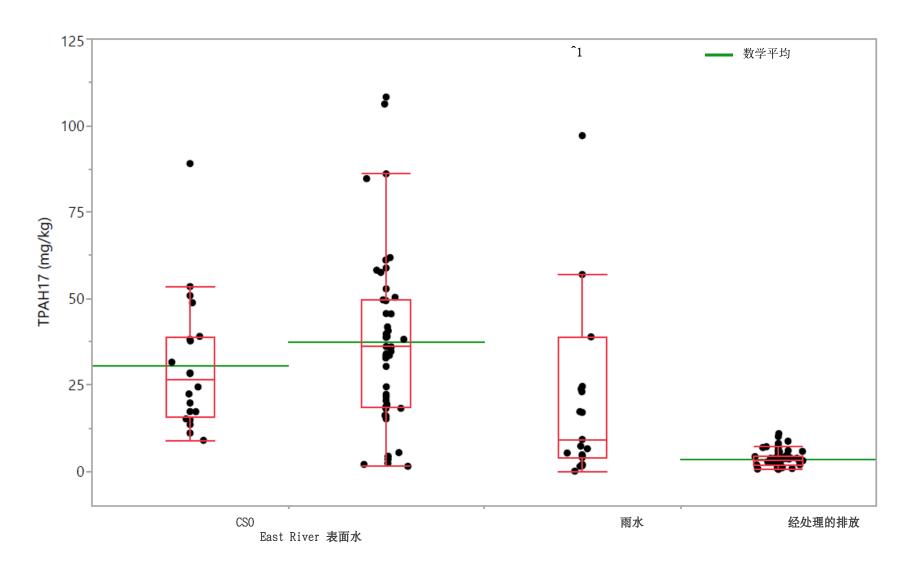


图 3a - 比较CSO微粒浓度和来自其他评估输入之微粒浓度TPAH17



注意:TPAH17在经处理的排放之平均浓度是2,056 mg/kg,超出了图中的数字。

图 3b -比较CSO微粒浓度和来自其他评估输入之微粒浓度TPAH17

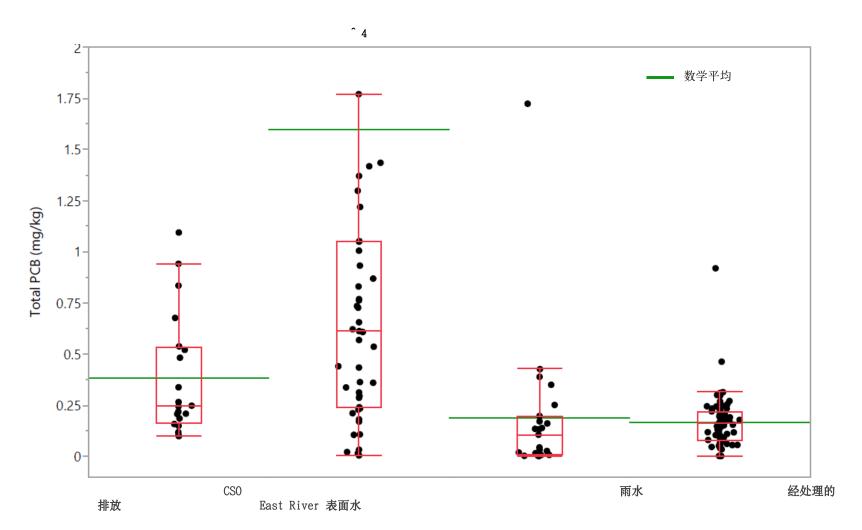


图3c - C比较CSO微粒浓度和其他评估输入铜之微粒浓度

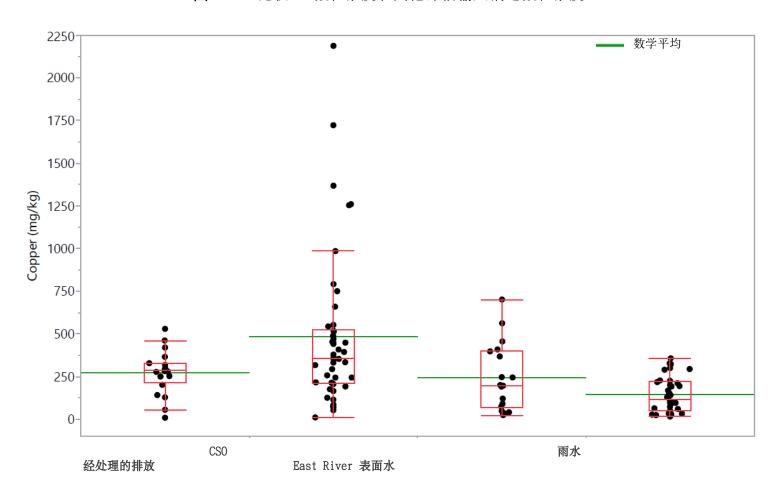
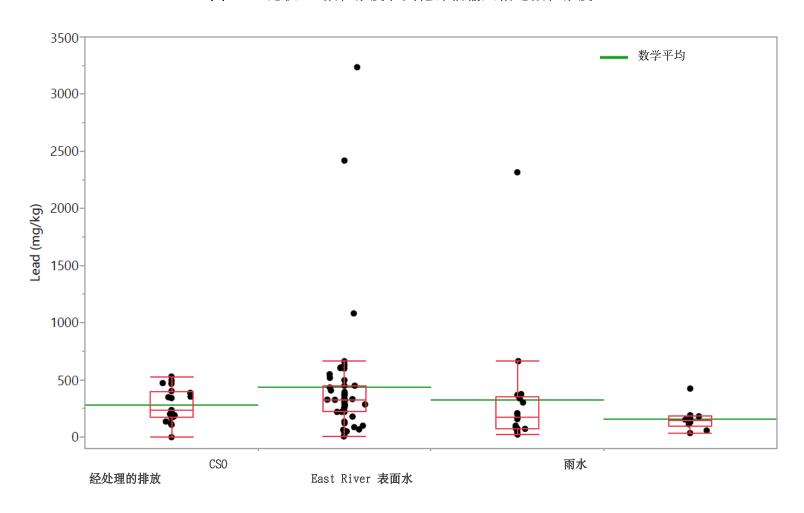
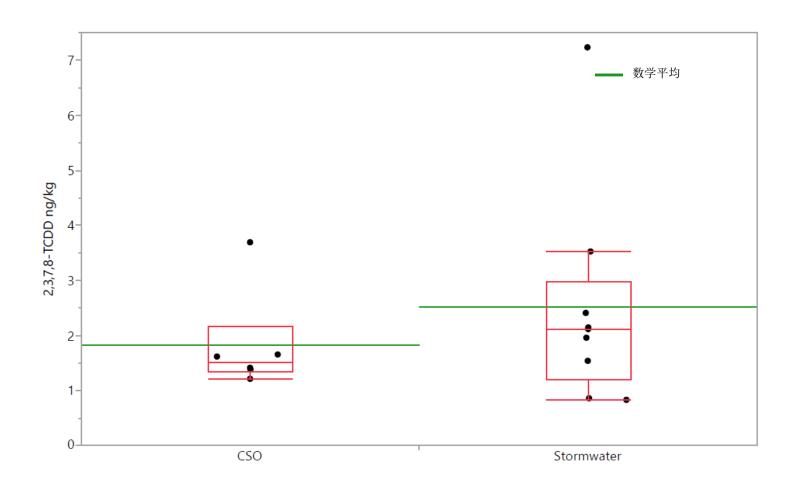


图3d - 比较CSO微粒浓度和其他评估输入铅之微粒浓度



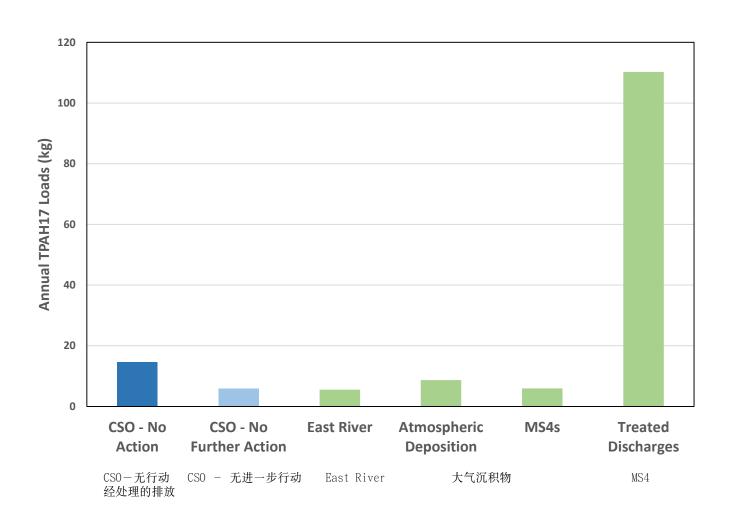
### 图 3e - 比较CSO微粒浓度和其他评估输入2,3,7,8之微粒浓度-TCDD



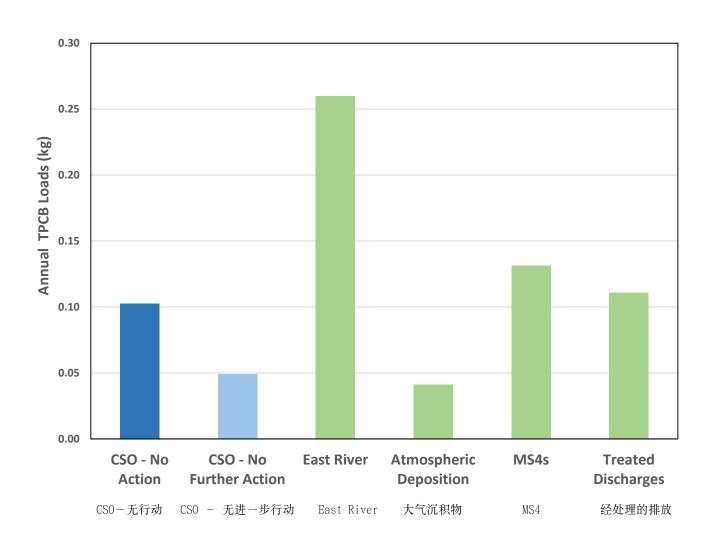
#### 附注:

- 1. 因为在CSO有大量未检出的样本和其他升高的输入,数字只比较已检出的样本。
- 2. 就East River和经处理的排放,只检出一个样本,因而不会显示这些来源的箱形图。
- 3. 只在已检出的样本进行统计比较。

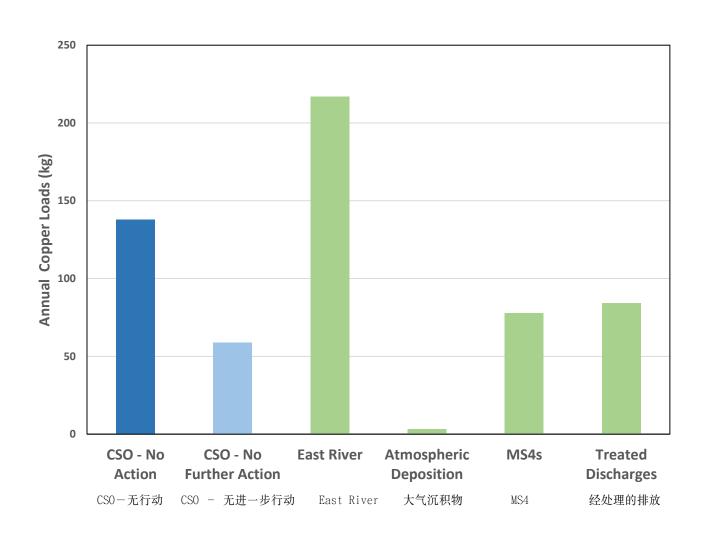
## 图 4a - 比较来自TPAH17的负载和研究地区之其他评估输入



### 图 4b - 比较来自CSO的TPCB负载和其他研究地区之评估输入



### 图 4c - 比较来自CSO的铜负载和研究地区的其他评估输入



### 图4d - 比较来自CSO的铅负载和研究地区的其他评估输入

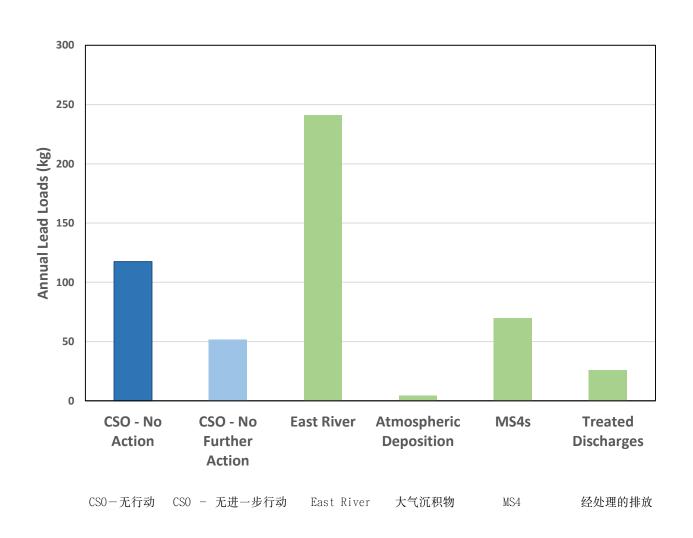


图 4e - 比较来自CSO的2,3,7,8-TCDD 负载和研究地区的其他评估输入

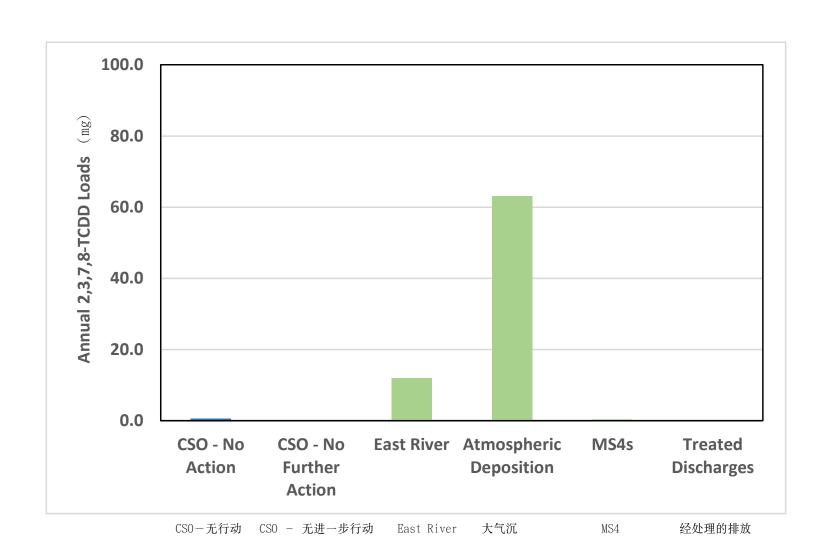
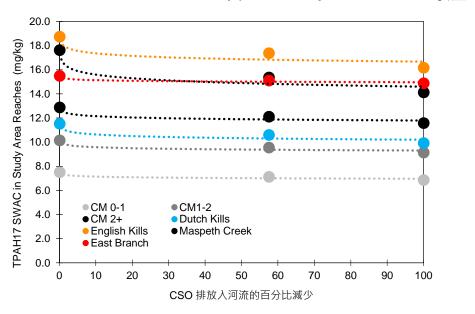
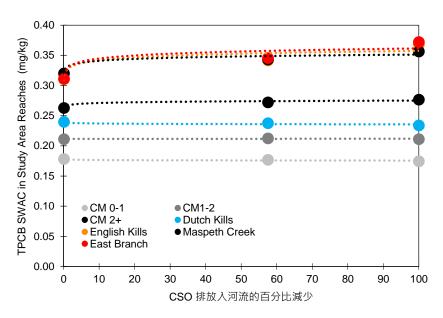


图 5a - 比较Newtown Creek模型SWAC和在CSO排放之百分比减少





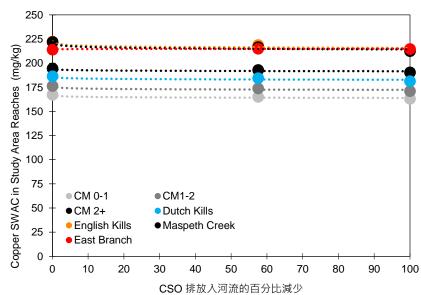
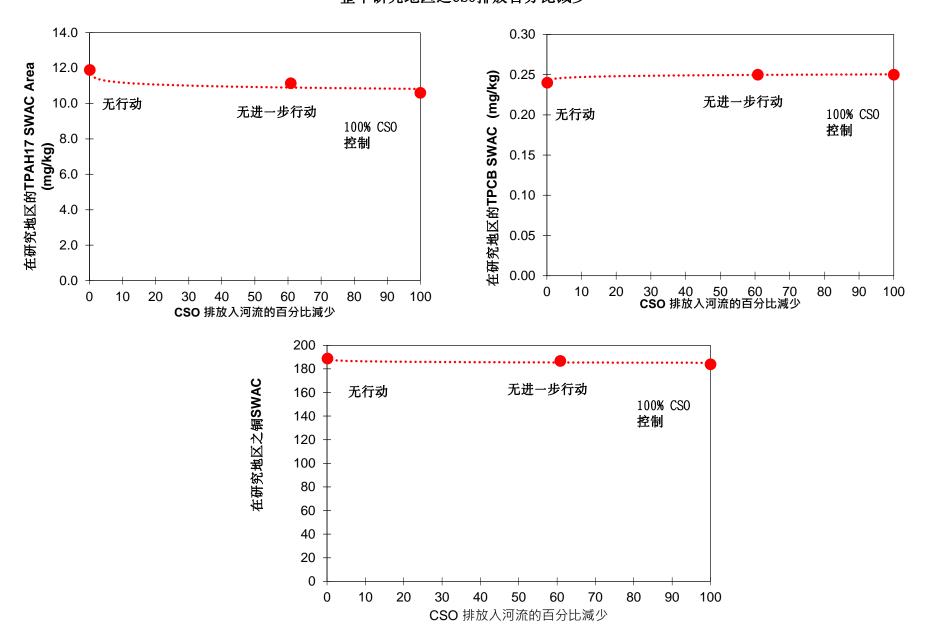


图5b - 比较Newtown 模型SWAC - Study Area Wide 整个研究地区之CSO排放百分比减少



Program Superfund Proponowany plan

### Amerykańska Agencja Ochrony Środowiska Region 2

# Obiekt Superfund Newtown Creek Miasto Nowy Jork, stan Nowy Jork



listopad 2019 r.

#### EPA OGŁASZA PROPONOWANY PLAN

Niniejszy Proponowany plan wskazuje preferowaną alternatywę dla rozwiązania jednego aspektu obiektu Newtown Creek Superfund, zwanego Jednostką Operacyjną 2 (OU2) i zawiera przesłanki na rzecz tego wyboru. OU2 jest związana z obecnymi i zasadnie oczekiwanymi w przyszłości zrzutami potencjalnie ryzykownych chemikaliów (COPC) z Jednostki Operacyjnej 1(OU1) z połączonych zbiorników retencyjno-przelewowych (CSO) do Badanego obszaru Newtown Creek, zgodnie z objaśnieniem terminu "Badany obszar" w dalszej części tego planu.

Cały obiekt rozpatrywany jest w ramach Ustawy o kompleksowych działaniach środowiskowych, odszkodowaniach i odpowiedzialności (CERCLA, zwana również Ustawą Superfund). Ponadto, zgodnie z wymogami Ustawy o czystej wodzie (CWA), Departament Ochrony Środowiska Miasta Nowy Jork (NYCDEP) obejmuje nakaz wydany przez Departament Ochrony Środowiska Stanu Nowy Jork (NYSDEC) wdrożenia Długofalowego planu kontroli CSO dla Newton Creek, zatwierdzonego przez NYSDEC w 2018 r. (LTCP). LTCP obejmuje kilka elementów ukierunkowanych na ograniczenie zrzutów CSO do rzeki Newtown Creek, w tym budowę tunelu retencyjnego, który ograniczy ilość zrzutów z CSO do Newtown Creek, aby osiągnąć właściwe dla danego akwenu wodnego normy jakości wody, zgodne z Federalną Polityką Kontroli CSO oraz związanymi z tym wytycznymi na poziomie ok. 61% obecnych warunków wyjściowych.

Amerykańska Agencja Ochrony Środowiska (EPA) oceniła LTCP w kontekście tego obiektu, aby ustalić czy mechanizmy kontroli ilości odpadów zalecane przez LTCP są wystarczające dla zaspokojenia potrzeb ewentualnych środków naprawczych CERCLA dla Badanego obszaru. Ocena tego pojedynczego aspektu obiektu jest określana jako OU2. Preferowaną przez EPA alternatywą dla rozwiązania problemu ilości obecnych i zasadnie oczekiwanych w przyszłości zrzutów COPC z CSO do Badanego obszaru jest Alternatywa nr 2, Brak dalszych działań, tzn. brak działań poza oczekiwanym wdrożeniem LTCP, na mocy wyżej wymienionego nakazu CWA.

EPA, agencja nadzorująca, w porozumieniu z Departamentem Ochrony Środowiska Stanu Nowy Jork (NYSDEC), agencją wspierającą, wydaje Proponowany plan w ramach swoich obowiązków uczestnictwa w życiu publicznym na mocy ustawy CERCLA, Część 117(a) CERCLA oraz regulacji wymienionych w Części 300.430(f)(2) Krajowego planu na wypadek zagrożenia zanieczyszczeniem olejami i substancjami niebezpiecznymi (NCP). Proponowany plan stanowi podsumowanie informacji, które można

znaleźć w formie bardziej szczegółowej w raporcie z ukierunkowanego studium wykonalności (FFS) przygotowanego dla OU2. Zarówno ten, jak i inne dokumenty stanowią część publicznie dostępnych rejestrów administracyjnych i znajdują się w repozytorium danych obiektu. EPA zachęca opinię publiczną do przeglądu tych

#### **WAŻNE DATY**

## OKRES PUBLICZNEGO ZGŁASZANIA UWAG: 21 listopada 2019 — 23 grudnia 2019

EPA będzie przyjmować sporządzone na piśmie uwagi do Proponowanego planu w okresie publicznego zgłaszania uwag. Pisemne uwagi należy kierować na adres:

> Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18<sup>th</sup> Floor New York, NY 10007

E-mail: schmidt.mark@epa.gov

#### SPOTKANIA OTWARTE:

EPA zorganizuje dwa spotkania otwarte w celu objaśnienia Proponowanego planu oraz wszystkich alternatyw prezentowanych w Ukierunkowanym studium wykonalności (FFS). Na spotkaniu będą również przyjmowane uwagi pisemne i ustne. Spotkanie odbędzie się:

9 grudnia 2019 r. od 18.30 do 20.30. Sunnyside Community Services
11 grudnia 2019 r. od 18.30 do 20.30. P.S. 110
124 Monitor Street
43 Broadway, 39<sup>th</sup> Floor
Queens, New York 11104
11222

Ponadto dokumenty z rejestrów administracyjnych są dostępne w Internecie na stronie:

https://www.epa.gov/superfund/newtown-creek

dokumentów dla szerszego zapoznania się z obiektem oraz działaniami prowadzonymi w ramach Superfund.

W porozumieniu z NYSDEC EPA dokona wyboru środków zaradczych dla OU2 po przeanalizowaniu i rozważeniu wszystkich informacji przedstawionych w okresie publicznego zgłaszania uwag, który potrwa co najmniej 30 dni. W porozumieniu z NYSDEC EPA może dokonać modyfikacji preferowanej alternatywy lub wyboru innego działania w ramach reakcji, przedstawionego w niniejszym Proponowanym planie, w oparciu o nowe dane lub zgłoszone publicznie uwagi. W związku z tym zachęca się opinię publiczną do zapoznania się z wszystkimi informacjami i alternatywami przedstawionymi w niniejszym Proponowanym planie oraz zgłaszania uwag.

#### ZAKRES I ROLA DZIAŁANIA

Tak jak w przypadku wielu obiektów Superfund, zanieczyszczenie tego obiektu ma charakter złożony, a oczyszczanie odbywa się za pośrednictwem kilku jednostek operacyjnych, tzw. OU. Dodatkowe informacje na temat OU1 i OU3 znajdują się w części "Historia obiektu" poniżej. Niniejszy Proponowany plan dotyczy OU2.

Alternatywy ocenione w niniejszym Proponowanym planie dotyczą wyłącznie obecnych i zasadnie oczekiwanych przyszłych ilości zrzutów z CSO. EPA określi w przyszłych dokumentach decyzyjnych czy do zrealizowania celów związanych z działaniami naprawczymi na terenie całego obiektu, które należy jeszcze ustalić, wymagane są dodatkowe działania kontrolne w obszarze rzeki lub w punktach zrzutu CSO. Tego rodzaju działania kontrolne, o ile okażą się konieczne, zostałyby wdrożone kolejnym dokumentem decyzyjnym.

Ponadto, rozpatrując sprawę OU2, EPA nie dokonuje żadnych rozstrzygnięć ani ustaleń dotyczących zrzutów COPC z CSO, które miały miejsce w przeszłości. Wcześniejsze zrzuty oraz ich wpływ na Badany obszar są poddawane ocenie w ramach obecnie prowadzonego dochodzenia naprawczego OU1/studium wykonalności (RI/FS).

#### OGÓLNY OPIS OBIEKTU

Obiekt znajduje się w okręgu Kings i okręgu Queens, w Nowym Jorku w stanie Nowy Jork (Ryc. 1). Obiekt obejmuje rzekę Newtown Creek i jej pięć dopływów, w tym Whale Creek, Dutch Kills, East Branch, English Kills i Maspeth Creek.

Obiekt znajduje się na terenie Ważnego Obszaru Morskiego i Przemysłowego (SMIA) Newtown Creek, jednego z sześciu wyznaczonych SMIA w Nowym Jorku. SMIA Newtown Creek, zajmujący ponad 780 akrów, jest największym SMIA w Nowym Jorku i obejmuje części obszarów przemysłowych Greenpointu, Williamsburga, Long Island City i Maspeth.

Newtown Creek i jej dopływy stanowią przyujściowy akwen wodny położony ogólnie w kierunku wschodnim i zachodnim, mimo że najbardziej wysunięta na wschód część Newtown Creek oraz kilka jej dopływów są ukierunkowane na północ i południe.

Woda w Newtown Creek jest obecnie sklasyfikowana przez NYSDEC jako woda klasy SD, słona woda powierzchniowa z użytkowaniem chronionym wyłącznie w celu ochrony ryb. Rzeka nie spełnia obecnie parametrów właściwych dla tego użytkowania chronionego (np. z uwagi na niski poziom rozpuszczonego tlenu). Rzeka jest wykorzystywana do celów rekreacyjnych, w tym do spływów kajakowych. Znajdują się na niej nabrzeżne punkty dostępu i planowane jest rozmieszczenie kolejnych. Pomimo zalecenia Departamentu Zdrowia stanu Nowy Jork aby ograniczyć rybołówstwo w Newtown Creek, publikowania ostrzeżeń i organizowania akcji społecznych, na rzece łowi się ryby i kraby.

#### OGÓLNA HISTORIA OBIEKTU

W przeszłości Newtown Creek osuszała wysoczyzny zachodniej Long Island i płynęła przez tereny podmokłe i bagna. Jednak z uwagi na rozwój przemysłu ciężkiego oraz działania rządu podejmowane od 1800 r., tereny podmokłe i bagna zostały zasypane, rzeka Newtown Creek - skanalizowana, a jej brzegi ustabilizowane grodziami i narzutami kamiennymi. Przeszłe rozbudowy zmieniły charakter Newtown Creek, z rzeki naturalnie odprowadzającej wodę na rzekę regulowaną w głównej mierze przez systemy inżynieryjne i instytucjonalne.

W połowie lat 00. XIX wieku obszar położony obok ciągnącej się na odległość 6,11 km rzeki był jednym z najbardziej aktywnych obszarów przemysłowych w Nowym Jorku. Wzdłuż brzegów rzeki położone były obiekty przemysłowe, w tym ponad 50 rafinerii ropy, zakładów petrochemicznych, fabryk nawozów i kleju, tartaków oraz składów drewna i węgla. Na Newtown Creek pełno było statków handlowych, w tym dużych okrętów dostarczających surowce i paliwo oraz wywożących towary gotowe, w tym produkty petrochemiczne, chemikalia i metale. Oprócz zanieczyszczeń przemysłowych będących wynikiem tej działalności, w 1856 r. miasto zaczęło zrzucać nieoczyszczone ścieki bezpośrednio do rzeki. Podczas drugiej wojny światowej Creek było jednym z najbardziej zatłoczonych portów w kraju. Obecnie wzdłuż rzeki działają fabryki, magazyny, obiekty pożytku publicznego i obiekty komunalne. Źródłem zanieczyszczenia Newtown Creek są

różne zanieczyszczone obiekty położone powyżej rzeki.

Rozwój przemysłowy doprowadził do znaczącej przebudowy brzegów i kanału rzeki do celów nawigacyjnych i związanych z odprowadzaniem wody. Kanalizowanie i pogłębianie Newtown Creek oraz jej dopływów ukończono w dużej mierze do końca lat 30. XX wieku, ustalając w ten sposób jej obecny układ. Przeszłe rozbudowy zmieniły charakter Newtown Creek oraz jej naturalnie odprowadzających wodę dopływów z przebiegu dopływowego na rzekę regulowaną w głównej mierze przez systemy inżynieryjne i instytucjonalne.

We wczesnych latach 90. XX wieku władze stanu Nowy Jork ogłosiły, że Newtown Creek nie spełnia norm jakości wody określonych w ustawie o czystej wodzie (CWA). Od tamtej pory kilkakrotnie odbyło się sponsorowane przez stan i miasto oczyszczanie obiektów w obszarze Newtown Creek, a w 2012 r. zakończyła się znacząca modernizacja oczyszczalni ścieków Newtown Creek.

W 2010 r., na mocy CERCLA, wpisano obiekt na Krajową Listę Priorytetów EPA. Do niedawna obiekt określano jako jedną jednostkę operacyjną (OU); obecnie wyznaczono dwie dodatkowe OU. Obecna struktura OU przedstawia się następująco:

#### **OU1**

OU1 obejmuje cały Badany obszar zdefiniowany w nakazie administracyjnym wydanym za porozumieniem stron (AOC) z 2011 r., zawartym pomiędzy EPA, Departamentem Ochrony Środowiska Nowego Jorku (NYCDEP) oraz podmiotami Phelps Dodge Refining Corporation, Texaco, Inc., BP Products North America Inc., the Brooklyn Union Gas Company D/B/A National Grid NY oraz ExxonMobil Oil Corporation. Wspomnianych pięć podmiotów prywatnych (z wyłączeniem miasta Nowy Jork) zorganizowało się w Grupę Newtown Creek (NCG). AOC z 2011 r. definiuje w sposób ogólny Badany obszar jako akwen wodny oraz osady rzeki Newtown Creek i jej dopływów włącznie do lądowej krawędzi linii brzegowej.

Pod nadzorem EPA odbywa się na bieżąco pełne RI/FS dla OU1.

#### OU2

FFS dla OU2 zostało przeprowadzone przez NYCDEP, pod nadzorem EPA, na mocy AOC zawartego w 2018 r. pomiędzy EPA i NYCDEP.

#### OU3

OU3 dotyczy oceny potencjalnego okresu przejściowego, wczesnych działań dotyczących dolnego odcinka rzeki o długości 3,2 km na terenie Badanego obszaru, zgodnie z

opisem w AOC zawartym w 2019 r. pomiędzy EPA a NCG. FFS dla OU3 jest obecnie realizowane przez NCG, pod nadzorem EPA.

#### HISTORIA WYKONAŃ

Jak wcześniej odnotowano, do zawartego w 2011 r. AOC na przeprowadzenie RI/FS dla OU1 przystąpiło sześć odpowiedzialnych podmiotów. OU2 jest prowadzone na warunkach AOC zawartego z samym NYCDEP w 2018 r., natomiast OU3 jest prowadzone na warunkach AOC zawartego z samym NCG w 2019 r.

Ostatnio kolejne, potencjalnie odpowiedzialne podmioty zostały poinformowane o ich potencjalnej odpowiedzialności. Rola i wkład tych dodatkowych podmiotów w odniesieniu do każdego OU w tym obiekcie zostaną jeszcze ustalone. Trwa poszukiwanie kolejnych potencjalnie odpowiedzialnych podmiotów.

#### OGÓLNA CHARAKTERYSTYKA OBIEKTU

Obiekt poddano rozległym badaniom w ramach procesu RI/FS dla OU1. Wyniki tych badań zostaną szczegółowo przedstawione w raportach RI i FS dla OU1. W ramach OU2 nie przeprowadzono żadnych nowych badań fizycznych obiektu. Oceny przeprowadzone na poparcie FFS dla OU2 opierały się raczej na danych zgromadzonych w ramach R1/FS dla OU1.

#### Rozpoznanie Badanego obszaru OU1

Prace terenowe RI na obszarze OU1 rozpoczęły się w lutym 2012 roku, a zasadniczo zakończono je w maju 2014 r. Ustalono, że niezbędne są dodatkowe dane, które uzyskano w ramach FS dla OU1, co umożliwiło dalsze sporządzanie roboczej wersji raportu z R1 na terenie OU1. Prace terenowe FS na obszarze OU1 rozpoczęły się na wiosnę 2017 roku, a zasadniczo zakończono je w 2019 r.

Roboczą wersję raportu z RI na terenie OU1 przedstawiono wstępnie w listopadzie 2016 r., a wersję poprawioną - w kwietniu 2019 r. EPA nadesłała NCG uwagi do poprawionego raportu z RI we wrześniu 2019 r. Zaktualizowany dokument ma zostać przedstawiony na początku 2020 r.

Prace w terenie RI/FS na obszarze OU1 obejmowały zgromadzenie solidnego zestawu danych używanych do określania charakteru i stopnia zanieczyszczenia Badanego obszaru, opracowanie ogólnego, konceptualnego modelu obiektu oraz, finalnie, wsparcie procesu wyboru odpowiedniej alternatywy naprawczej dla OU1. Dane te obejmowały: próbki osadów, wód powierzchniowych, wód

porowych, wód gruntowych, przesiąkania, powietrza, osadów na linii brzegowej/glebie, tkanki fauny i flory, zrzutów ze źródeł punktowych, zrzutów ze źródeł innych niż punktowe, cieczy w fazie niewodnej (NAPL) oraz wzburzonej; badania społeczności ekologicznych i batymetrię; a także badania toksyczności osadów, mobilności i właściwości geotechnicznych NAPL.

Próbki zostały poddane analizie na obecność całej listy zanieczyszczeń, w tym lotnych związków organicznych, półlotnych związków organicznych, metali (całkowitych i rozpuszczonych), polichlorowanych aroklorów i kongenerów bifenylu (PCB), dioksyn/furanów i pestycydów.

Ponadto, w ramach RI/FS dla OU1, opracowywany jest kompleksowy zestaw wzajemnie powiązanych modeli. Pierwsze dwie duże części (modele transportu hydrodynamicznego i transportu osadów, obejmujące wody gruntowe oraz pod-modele źródeł punktowych) zostały przedstawione wraz z roboczym raportem RI i są obecnie dopracowywane. Pozostałe części struktury modelowania (model przeznaczenia i transportu zanieczyszczeń oraz model bioakumulacji) są nadal w opracowaniu i zostaną przedstawione w ramach raportu roboczego FS. W związku z tym, w czasie, gdy trwają zaawansowane prace nad stworzeniem Konceptualnego Modelu Obiektu dla OU1, wciąż pracuje się nad rozpoznaniem całego systemu. Ukończenie raportu FS dla OU1 zaplanowano obecnie na 2022 r.

#### Charakterystyka fizyczna Badanego obszaru OU1

Na terenie Badanego obszaru stwierdzono podwyższone stężenia zanieczyszczeń. Znaczna ilość tych zanieczyszczeń spowodowana jest historycznym zanieczyszczeniem rzeki, a zanieczyszczone osady stwierdzono w szczególności w warstwie osadów powierzchniowych i podpowierzchniowych oraz osadów natywnych podłoża.

Aktywne obecnie zewnętrzne źródła zanieczyszczeń Badanego obszaru obejmują m.in. wyloty oddzielnych, komunalnych systemów kanalizacji deszczowej (MS4), wyloty oczyszczonych ścieków z oczyszczalni ścieków Newtown Creek (WWTP), dozwolone zrzuty przemysłowe, inne zrzuty dozwolone/niedozwolone, przepływ naziemny/odwadnianie bezpośrednie, wody gruntowe, pozostałe źródła inne niż punktowe, skutki pływów rzeki East River, opady atmosferyczne, przesączenia na linii brzegowej/zrzuty wód gruntowych z obiektów znajdujących się powyżej rzeki oraz erozję linii brzegowej, jak również zrzuty CSO.

Reprezentacyjne próbki tych zrzutów zostały pobrane w ramach procesu RI/FS OU1, co zapewniło wystarczające

dane do opracowania szacunków ilościowych w zakresie stężeń substancji niebezpiecznych wpadających do rzeki z tych źródeł oraz, tam gdzie ma to zastosowanie, ich masy/ilości.

Sama rzeka zawiera również podwyższone stężenia wielu zanieczyszczeń i mają w niej miejsce procesy wewnętrzne, które mogą prowadzić do rozprzestrzenienia się tych zanieczyszczeń na terenie Badanego obszaru. Procesy te obejmują wzburzenie (bąbelkowanie), wzruszenie osadów oraz migrację NAPL.

Zrzuty ze źródeł punktowych do Badanego obszaru obejmują ponad 300 wylotów prywatnych i komunalnych położonych wzdłuż rzeki i jej dopływów. W/w zrzuty ze źródeł punktowych zasilają głównie przepływy wody słodkiej do Newtown Creek w warunkach deszczowych i obejmują dozwolone na zasadzie indywidualnej zrzuty wody opadowej i ściekowej, zrzuty CSO, zrzuty niedozwolone oraz zrzuty ścieków oczyszczonych z WWTP. Odpływy wód opadowych z dróg oraz spływy powierzchniowe również trafiają do rzeki.

#### FFS na obszarze OU2

#### Informacje ogólne na temat Jednostki Operacyjnej 2

W warunkach pogody deszczowej rzeka zbiera zrzuty ze źródeł punktowych, obejmujących CSO i wody opadowe (zrzuty komunalne oraz dozwolone i niedozwolone zrzuty z prywatnych źródeł punktowych) oraz ze źródeł innych niż punktowe, takich jak spływy powierzchniowe (lokalizacje niektórych zrzutów ze źródeł punktowych - patrz Ryc. 2). Oprócz zrzutów w warunkach pogody deszczowej do rzeki trafiają również zrzuty wody słodkiej z wód gruntowych. Woda gruntowa trafia do rzeki poprzez osady oraz z obiektów położonych nad rzeką, przylegających do Newtown Creek. Rzekę East River i źródła punktowe uznaje się obecnie za główne źródła substancji stałych w rzece.

Przez kilka dziesięcioleci kontrola CSO w celu poprawienia poziomów bakterii i stężeń rozpuszczonego tlenu w zbiornikach wodnych była prowadzona w ramach programów regulacyjnych CWA, włącznie z Polityką kontroli CSO EPA (Część 402 (q) CWA) oraz ogłoszeniem przez NYSDEC numerycznych norm jakości wody w zakresie ilości bakterii i rozpuszczonego tlenu. Kontrola CSO skupiona była na objętościowych ograniczeniach zrzutów CSO w celu spełnienia w/w norm.

Planowanie CSO dla Newtown Creek zostało zapoczątkowane w 1990 r., w ramach Projektu planowania obiektu jakości wody Newtown Creek. Plan obiektu zbiornika wodnego/zlewiska (WWFP) dla Newtown Creek został opublikowany przez NYCDEP i zatwierdzony przez NYSDEC w 2012 r. WWFP obejmował analizę modyfikacji operacyjnych i strukturalnych, ukierunkowanych na ograniczenie CSO oraz poprawę ogólnych wyników w zakresie systemu pobierania i oczyszczania wody w zlewisku. W 2017 r. NYCDEP opracował LTCP w celu ustalenia, posiłkując się informacjami publicznymi, odpowiednich mechanizmów kontroli CSO, które należałoby wprowadzić,

aby osiągnąć właściwe dla zbiornika wodnego normy jakości wody, zgodne z Federalną polityką kontroli CSO oraz związanymi z tym wytycznymi. NYSDEC zatwierdził w/w LTCP w 2018 r.

Mimo że prace na rzecz ograniczenia ilości zrzutów CSO skoncentrowane są na celach CWA, ograniczenie ich ilości spowoduje również spadek masy zrzucanych do rzeki COPC związanych z obiektem. Ogólnym celem FFS dla OU2 jest ustalenie czy mechanizmy kontroli ilości zrzutów zalecane przez LTCP, stworzone, by spełniać wymogi programu CWA, są wystarczające, by spełniać również wymogi CERCLA dla tego obiektu.

W ramach prac RI/FS dla OU1 sfinalizowano program rzetelnego poboru próbek ze źródła punktowego. Pobrano próbki trzydziestu jeden zrzutów ze źródeł punktowych podczas 15 poborów próbek w czasie deszczowej pogody, w okresie od czerwca 2014 do grudnia 2015. Próbki pobrano z CSO, MS4, odpływów z autostrad, wody opadowej zrzucanej z posesji prywatnych oraz dozwolonych wylotów. Danych tych użyto do oceny linii dowodów opisanych poniżej. Zrzuty z próbkowanych CSO odpowiadają za ok. 96 procent całkowitych zrzutów CSO do rzeki

#### Wielorakie linie oceny dowodów

Jak wspomniano powyżej, trwają prace nad RI/FS dla OU1, a wstępne cele naprawcze dla Badanego obszaru nie zostały opracowane. W związku z tym zastosowano podejście polegające na wielorakich liniach oceny dowodów w zakresie oceny względnej efektywności każdej z alternatyw ocenianych w ramach FFS dla OU2.

Ocenie poddano trzy linie dowodów (LOE), zgodnie z opisem zawartym poniżej.

- LOE 1: porównanie stężeń fazy cząstek stałych COPC w zrzutach CSO ze stężeniami fazy cząstek stałych w innych potencjalnych źródłach zanieczyszczeń rzeki.
- LOE 2: porównanie obciążenia masowego COPC ze zrzutów CSO z obciążeniem masowym COPC z

innych potencjalnych źródeł zanieczyszczeń rzeki; oraz

 LOE 3: ocena wpływu COPC ze zrzutów CSO na podłoże osadowe rzeki, przy założeniu, że środki naprawcze CERCLA dla całego Badanego obszaru zostały wdrożone. Opracowano stosunkowo prostą serię modeli w celu ustalenia wynikłego stężenia COPC w osadach powierzchniowych ze zrzutów CSO oraz innych potencjalnych źródeł zanieczyszczeń rzeki.

COPC użyte w tych ocenach są spójne z COPC uznanymi za powodujące największe ryzyko dla receptorów ludzkich i ekologicznych dla Badanego obszaru w ramach procesu RI/FS dla OU1, zgodnie z opisem zawartym w części Podsumowanie ryzyka związanego z obiektem niniejszego Proponowanego planu.

Wszystkie dane wykorzystane do oceny LOE zostały uzyskane w trakcie procesu RI/FS dla OU1. W szczególności do ocen LOE wykorzystano dane zgromadzone z następujących kategorii potencjalnych źródeł zanieczyszczeń Badanego obszaru:

- Zrzuty CSO w tym 20 próbek pobranych z siedmiu wylotów CSO, reprezentujących średnio 96 procent wszystkich zrzutów CSO do rzeki;
- Zrzuty wody opadowej w tym 47 próbek pobranych z MS4, posesji prywatnych, odpływów z autostrad i innych wylotów wody opadowej;
- Zrzuty oczyszczone w tym do 23 próbek pobranych ze ścieków oczyszczonych, dozwolonych zrzutów z systemów oczyszczania wód gruntowych oraz oczyszczonych zrzutów z obiektów przemysłowych;
- East River w tym do 87 próbek pobranych z rzeki oraz
- Opady atmosferyczne zastosowano dane regionalne z różnych publicznie dostępnych źródeł.

Wyżej wymienione potencjalne źródła określane są w FFS dla OU2 jako zrzuty CSO oraz "inne wkłady poddane ocenie". Zgodnie z opisem zawartym w części niniejszego Proponowanego planu p.t. "Fizyczna charakterystyka Badanego obszaru OU1", należy zwrócić uwagę, że wspomniane inne wpływy poddane ocenie nie odzwierciedlają wszystkich potencjalnych źródeł COPC w Badanym obszarze.

Wyniki oceny LOE zostały omówione w części niniejszego Proponowanego planu p.t. "Ocena alternatyw".

#### PODSUMOWANIE RYZYKA ZWIĄZANEGO Z

#### CZYM SĄ GŁÓWNE ZAGROŻENIA?

Krajowy plan na wypadek zagrożenia zanieczyszczeniem olejami i substancjami niebezpiecznymi (NCP) określa oczekiwanie, zgodnie z którym tam, gdzie jest to praktycznie możliwe, EPA przeprowadzi proces oczyszczania w celu zaradzenia głównym zagrożeniom stwarzanym przez dany obiekt (NCP Część 300.430(a)(1)(iii)(A)). Koncepcję "głównego zagrożenia" stosuje się do charakterystyki "materiałów źródłowych" obiekcie Superfund. W Materiałem źródłowym jest materiał obejmujący lub zawierający substancje niebezpieczne, skażające lub zanieczyszczające, pełniące rolę zbiornika dla migracji gruntowych, zanieczyszczeń do wód powierzchniowych lub powietrza lub będące źródłem bezpośredniego narażenia. Zwykle nie uznaje zanieczyszczonych wód gruntowych za materiał źródłowy; jako materiał źródłowy można natomiast postrzegać NAPL wodach gruntowych. Głównymi odpadami w niebezpiecznymi są materiały źródłowe uznawane za wysoce toksyczne lub wysoce mobilne, których zwykle nie da się wydzielić w sposób bezpieczny i niezawodny lub które mogłyby stanowić poważne ryzyko dla ludzkiego zdrowia lub środowiska, w razie narażenia na kontakt. Decyzja o oczyszczaniu tych odpadów jest podejmowana na podstawie właściwości danego obiektu, szczegółową analizę alternatyw, przy użyciu dziewięciu kryteriów wyboru środków naprawczych. Analiza ta zapewnia podstawe do podjęcia ustawowych ustaleń, według których dany środek naprawczy obejmuje oczyszczanie jako element główny.

#### **OBIEKTEM**

#### Ocena ryzyka OU1

W ramach procesu RI/FS dla OU1, przeprowadzono oceny podstawowego ryzyka dla ludzkiego zdrowia i środowiska, a raporty zostały zatwierdzone przez EPA. W ramach ocen stwierdzono nieakceptowalny poziom ryzyka, zarówno dla ludzkiego zdrowia, jak i dla środowiska. Stanowi to zatem podstawę do podjęcia działań naprawczych na terenie obiektu.

Ocena podstawowego ryzyka dla ludzkiego zdrowia (BHHRA) została zatwierdzona w czerwcu 2017 r. W ramach tej oceny stwierdzono występowanie nieakceptowalnych poziomów ryzyka związanego ze spożyciem ryb i krabów. Ustalone w ramach BHHRA zanieczyszczenia budzące potencjalne obawy to

całkowite niedioksynopodobne kongenery PCB, ekwiwalenty całkowitej toksyczności PCB (TEQ) oraz całkowite TEQ dioksyny/furanu.

Ocena podstawowego ryzyka dla środowiska (BERA) została zatwierdzona we wrześniu 2018 r. Ogólnie rzecz biorąc, wyniki BERA wskazują na to, że osady na terenie Badanego obszaru, w szczególności w rejonie obrotnicy i większości dopływów są toksyczne dla bezkręgowców naddennych i stanowią ryzyko dla małży, niebieskich krabów, ryb i ptaków. Głównymi zanieczyszczeniami powodującymi nieakceptowalne ryzyko były WWA, PCB i miedź. Dodatkowe ryzyko stanowiły dioksyny/furany oraz ołów.

Ponieważ w ramach ocen ryzyka dla OU1 stwierdzono nieakceptowalny poziom ryzyka, istnieją podstawy do oceny odpowiednich środków naprawczych, które należy podjąć na terenie obiektu, również w OU2. Trwające FS dla OU1 zapewni oceny alternatyw dla środków naprawczych w zakresie całego obiektu.

#### Ryzyko związane z OU2

W ramach procesu FFS dla OU2 nie przeprowadzono odrębnych analiz ryzyka. COPC stwierdzone w ramach BHHRA i BERA dla OU1 są COPC poddanymi ocenie w niniejszym FFS dla OU2.

W związku z tym pełna lista zanieczyszczeń poddanych szczegółowej ocenie w FFS dla OU2 obejmuje całkowite WWA (TWWA17, gdzie 17 odnosi się do liczby poszczególnych związków ujętych w ilości ogólnej), całkowite PCB (TPCB), miedź, dioksyny/furany i ołów.

#### CELE DZIAŁAŃ NAPRAWCZYCH

Celem działania naprawczego (RAO) dla OU2 obiektu jest:

 Zminimalizowanie, w praktycznie możliwym do osiągnięcia stopniu, wpływów stwierdzonych na terenie obiektu związków do Newtown Creek z wylotów CSO, które mogą zwiększać zanieczyszczenie Badanego obszaru.

Jak opisano wyżej, COPC dla OU2 do TWWA17, TPCB, miedź, dioksyny/furany i ołów.

Wstępne cele naprawcze (PRG) dla OU2 nie zostały opracowane. Nie są one konieczne dla oceny RAO. Zamiast tego oceniono względem siebie alternatywy opracowane w ramach FFS dla OU2. PRG dla

poszczególnych COPC zostaną opracowane w ramach procesu RI/FS dla OU1.

#### GŁÓWNE ODPADY NIEBEZPIECZNE

Obecne i zasadnie oczekiwane w przyszłości zrzuty COPC z CSO stanowią źródło zanieczyszczenia Badanego obszaru. Działanie to nie charakteryzuje jednak ich toksyczności i mobilności. W związku z tym określenie źródeł, które stanowią główne odpady niebezpieczne zostanie odroczone i przeprowadzone w ramach procesu wyboru środków naprawczych dla OU1. Aby uzyskać więcej informacji na temat koncepcji głównych zagrożeń, należy zapoznać się z polem tekstowym "Czym są główne zagrożenia" oraz z częścią "Podsumowanie ryzyka związanego z obiektem" w celu uzyskania informacji na temat ryzyka stwarzanego przez obiekt.

## PODSUMOWANIE ALTERNATYW ŚRODKÓW ZARADCZYCH

CERCLA, Część 121(b)(1), 42 U.S.C. § 9621(b)(1) stanowi, że działania naprawcze muszą chronić ludzkie zdrowie i środowisko, być nakładochłonne i korzystać z trwałych rozwiązań oraz alternatywnych technologii oczyszczania, a także alternatyw w zakresie odzyskiwania zasobów w maksymalnym zakresie, w jakim jest to praktycznie możliwe. Ponadto CERCLA, Część 121(d), 42 U.S.C. § 9621(d) określa, że działania naprawcze muszą wymagać pewnego poziomu lub normy kontroli substancji niebezpiecznych, skażających i zanieczyszczających, które spełniają co najmniej obowiązujące lub właściwe i odpowiednie wymogi (ARAR) w zakresie przepisów federalnych i stanowych, o ile uzasadnione nie jest odstąpienie od nich na mocy CERCLA, Część 121(d)(4), 42 U.S.C. § 9621(d)(4).

Alternatywy w zakresie środków naprawczych dla OU2 podsumowano

poniżej. Kosztami inwestycyjnymi są wydatki wymagane do skonstruowania alternatywy w zakresie środków naprawczych.

Koszty eksploatacji i utrzymania (O&M) są kosztami pokonstrukcyjnymi, niezbędnymi do zapewnienia lub zweryfikowania nieprzerwanej efektywności alternatywy w zakresie środków naprawczych i są one szacowane w trybie rocznym. Obecna wartość to

ilość pieniędzy, która - gdyby zainwestować ją w bieżącym roku - byłaby wystarczająca do pokrycia wszystkich kosztów w czasie związanych z projektem. Czas konstrukcji to czas wymagany do skonstruowania i wdrożenia alternatywy. Nie obejmuje on czasu wymaganego na zaprojektowanie środka naprawczego, wynegocjowanie rezultatów działania środka naprawczego z odpowiedzialnymi podmiotami lub zawarcia umów na udzielenie zamówienia na projekt i konstrukcję.

#### Alternatywa 1 - Brak dalszych działań

Koszt inwestycyjny:0 USDRoczny koszt eksploatacji i utrzymania:0 USDKoszt obecnej wartości:0 USD

Ramy czasowe konstrukcji: 0 lat

NCP wymaga przeprowadzenia oceny alternatywy typu "Brak dalszych działań", w celu ustalenia podstawy do porównań z innymi alternatywami w zakresie środków naprawczych. W tej alternatywie zakłada się, że zrzuty CSO do rzeki pozostaną na obecnym poziomie, bez wdrażania LTCP. W ramach tego scenariusza, zrzuty CSO do rzeki ogółem szacuje się na poziomie ok. 4,5 mld litrów rocznie, przy zastosowaniu warunków omówionych szczegółowo w LTCP zatwierdzonym przez NYSDEC.

#### Alternatywa 2 - Brak dalszych działań

Koszt inwestycyjny: 0 USD

Roczny koszt eksploatacji i utrzymania: 0 USD

Koszt obecnej wartości: 0 USD Ramy czasowe konstrukcji: 0 miesięcy

W tej alternatywie zakłada się, że NYCDEP wdroży LTCP zgodnie z poleceniem, na mocy nakazów CWA CSO wydanych przez NYSDEC, władze stanowe oddelegowane przez EPA do wdrożenia CWA. Kluczowe etapy projektu i konstrukcji są zawarte w nakazach CSO, które wskazują, że LTCP będzie wdrażane w miarę prowadzenia procesu CERCLA. Alternatywa ta nie obejmuje żadnych dodatkowych środków kontroli ilości zrzutów CSO poza wymaganymi przez LTCP.

Na poparcie tej alternatywy, w świetle wielu zmian, jakich oczekuje się dla Newtown Creek w nadchodzących latach, włącznie z wyborem przyszłych działań następczych na mocy CERCLA, EPA spodziewa się, że wymagana będzie kontynuacja następujących działań monitoringowych:

 Pobieranie próbek zrzutów z czterech głównych CSO do Newtown Creek co kwartał, aż do pełnego wdrożenia LTCP, przy regularnym składaniu raportów do EPA.

Ponadto, EPA i NYSDEC rozważą wprowadzenie programu typu "track-back" [powrotu do początku prowadzenia obserwacji] w celu odniesienia się do ewentualnych stałych wzrostów stężeń COPC ze zrzutów CSO, o ile zostaną one stwierdzone. Jeśli będzie to wymagane, program typu "trackback" pozwoli na identyfikację źródeł zwiększonych stężeń zanieczyszczeń w kanalizacji, aby można się było nimi zająć poprzez bardziej rygorystyczne mechanizmy kontroli lub

działania na wysoczyźnie. Monitoring CSO oraz potencjalny program typu "track-back", wymagane w ramach tej Alternatywy, byłyby używane w celu potwierdzenia, że założenia zastosowane przy opracowaniu tej alternatywy, w ramach CERCLA, pozostają odpowiednie do czasu pełnego wdrożenia LTCP.

Koszty prowadzenia tego monitoringu szacuje się na 5 000 000 USD w zakresie cokwartalnego poboru próbek zrzutów CSO przez ok. 22 lata (czas potrzebny do pełnego wdrożenia LTCP), plus dodatkowe 5 000 000 USD na śledzenie źródeł zanieczyszczeń, o ile okaże się to konieczne. Kosztu jakiegokolwiek monitoringu środka naprawczego typu "brak działań" lub "brak dalszych działań" nie uznaje się za środek naprawczy na mocy CERCLA, dlatego też koszty związane z tą alternatywą podaje się jako zerowe.

Z Alternatywą 2 nie wiążą się żadne kontrole pięcioletnie. Obowiązywałyby tu jednak wymogi dotyczące składania regularnych raportów do czasu wdrożenia LTCP; ich wyniki byłyby używane do zapewnienia efektywności tej decyzji. Ocena ostatecznego czasu trwania i częstotliwości monitoringu i raportowania

zostałaby przeprowadzona w związku z procesem wyboru środka naprawczego prowadzonym dla całego obiektu OU1.

#### Alternatywa 3 – 100% kontroli CSO

Koszt inwestycyjny: Roczny koszt eksploatacji i utrzymania: Koszt obecnej wartości: Co najmniej 1,65 mld USD
Ramy czasowe konstrukcji: Co najmniej 22 lata

Alternatywa ta zakłada, że wszystkie zrzuty CSO do rzeki są pod kontrolą. W porównaniu z Alternatywą 2, alternatywa ta wymagałaby zbudowania tunelu o większej średnicy w celu podłączenia go do wszystkich CSO zrzucanych do Newtown Creek oraz dodatkowych oczyszczalni ścieków.

W FFS dla OU2 koszty związane z opracowaniem tej alternatywy nie zostały w pełni określone. Z drugiej strony, ocena kosztów kontrolowania wszystkich zrzutów z czterech największych CSO zawarta jest w LTCP zatwierdzonym przez NYSDEC. Taki koszt obecnej wartości został oszacowany na 1 650 000 000 USD. Ponieważ Alternatywa 3 wykracza poza przedmiot oceny LTCP, szacuje się, że wdrożenie pełnej kontroli CSO kosztowałoby ponad 1,6 mld USD, a wdrożenie zatwierdzonego LTCP zgodnie z oczekiwaniami trwałoby ponad 22 lata.

Podobnie jak w przypadku Alternatywy 2, Alternatywa 3 również wymagałaby monitoringu połączonego z wdrożeniem programu typu "track-back" dla ograniczenia

obciążenia COPC z CSO do czasu pełnego wdrożenia mechanizmów kontroli CSO.

Z tą alternatywą nie wiążą się żadne kontrole pięcioletnie. Obowiązywałyby tu jednak wymogi dotyczące składania regularnych raportów do czasu wdrożenia Alternatywy 3; ich wyniki byłyby używane do zapewnienia efektywności tej decyzji. Ocena ostatecznego czasu trwania i częstotliwości monitoringu i raportowania zostałaby przeprowadzona w związku z procesem wyboru środka naprawczego prowadzonym dla całego obiektu OU1.

#### **OCENA ALTERNATYW**

#### Wielorakie linie oceny dowodów

Zgodnie z opisem zawartym we wcześniejszych fragmentach tego planu, do oceny każdej z alternatyw użyto trzech LOE. Podsumowanie wyników tej oceny znajduje się poniżej. Więcej szczegółów na temat oceny można znaleźć w raporcie w zakresie FFS dla OU2.

#### LOE 1: Porównanie stężeń

W przypadku LOE 1 stężenia fazy cząstek stałych COPC w zrzutach CSO do Badanego obszaru porównano ze stężeniami fazy cząstek stałych COPC w innych poddanych ocenie wpływach do Badanego obszaru. Inne poddane ocenie wpływy w ramach LOE 1 to: woda opadowa, zrzuty oczyszczone i woda powierzchniowa East River. Ponieważ alternatywy wpływają na ilość zrzutów z CSO, ale nie mają wpływu na stężenie COPC w zrzutach, ocena każdej z alternatyw z osobna w ramach tej LOE 1 nie była konieczna. Ryc. 3a do 3e pokazują wyniki porównań w ramach LOE 1 dla każdego z COPC na obszarze OU2.

Ogólnie rzecz biorąc, LOE 1 pokazuje, że zmierzone stężenia COPC na substancjach stałych w zrzutach CSO mieszczą się ogólnie w zakresie stężeń mierzonych na substancjach stałych z innych wpływów poddanych ocenie. Dla każdego z COPC średnie stężenia wykryte w substancjach stałych CSO wynosiły mniej niż średnia z substancji stałych z wód opadowych i więcej niż średnia ze zrzutów oczyszczonych oraz East River.

#### LOE 2: Porównanie obciążeń

Obciążenie zanieczyszczeniami definiuje się jako jednostkę masy na jednostkę czasu (np. kg/rok). Obciążenie dla każdego z COPC zostało obliczone przy użyciu danych dotyczących natężenia przepływu dla każdego z poddanych ocenie wpływów oraz związanych z tym stężeń COPC w danym wpływie. Obciążenie COPC ze zrzutów CSO zostało porównane z obciążeniem z innych poddanych ocenie

wpływów do Badanego obszaru. W ramach LOE 2 innymi poddanymi ocenie wpływami były: East River, opady atmosferyczne, MS4 i zrzuty oczyszczone. W przypadku tej LOE obciążenia w ramach zarówno Alternatywy 1, jak i Alternatywy 2, zostały porównane z innymi poddanymi ocenie wpływami. Alternatywa 3 nie została poddana ocenie w ramach LOE 2, ponieważ obciążenie w ramach tej alternatywy zostałoby wyeliminowane. Ryc. 4a do 4e pokazują wyniki porównań w ramach LOE 2 dla każdego z COPC na obszarze OU2.

Ogólnie rzecz biorąc, LOE2 pokazuje, że obciążenie z CSO jest w zasadzie podobne lub mniejsze niż obciążenie z innych poddanych ocenie wpływów. Alternatywa 2 zapewnia w rezultacie znacząco mniejsze obciążenie niż Alternatywa 1, co brzmi rozsądnie, biorąc pod uwagę, że ilość zrzutów do Badanego obszaru zostałaby ograniczona o ok. 61 procent poprzez wdrożenie LTCP (zgodnie z wymogami CWA). W zakresie TWWA17, największe obciążenie dla Badanego obszaru pochodzi ze zrzutów oczyszczonych, podczas gdy rzeka East River dostarcza największego obciążenia TPCB, miedzią i ołowiem w porównaniu z innymi poddanymi ocenie wpływami. Szacuje się, że największe obciążenie dioksynami/furanami pochodzi z opadów atmosferycznych.

## LOE 3: Ocena wpływu CSO na Badany obszar przez modelowanie, po zastosowaniu środka naprawczego

Trzecia LOE obejmowała zastosowanie zestawu modeli numerycznych zaprojektowanych w celu dokonania symulacji przeznaczenia i transportu zanieczyszczeń w Newtown Creek. Modele te zostały zastosowane we wszystkich trzech alternatywach środków naprawczych poddanych ocenie w FFS dla OU2, a przewidywane stężenia COPC w podłożu osadowym poddanym środkom naprawczym porównano w celu zapewnienia względnej oceny tych alternatyw.

Struktura modelowania zastosowana w FFS dla OU2 obejmowała model źródła punktowego, szacunki w zakresie przesiąkania wód gruntowych, model hydrodynamiczny, połaczony model eutrofizacji i transportu osadów oraz model chemiczny. Model źródła punktowego obliczał wpływy do rzeki pochodzące ze zrzutów CSO, spływów wód opadowych oraz spływów powierzchniowych z posesji znajdujących się nad rzeką. Spływy obliczone według modelu źródła punktowego, wraz z pionowym wskaźnikiem przesączania wód gruntowych zostały przekazane do modelu hydrodynamicznego. Model hydrodynamiczny obliczał transport słupa wodnego oraz łączył i przekazywał te informacje do modelu eutrofizacji i transportu osadów oraz modelu chemicznego. Model eutrofizacji i transportu osadów korzystał z obciażeń składnikami odżywczymi, weglem organicznym i osadami (ze źródeł punktowych oraz East

River) oraz wyników modelu hydrodynamicznego w celu obliczenia przeznaczenia i transportu alg, węgla organicznego i osadów, i przekazywał te informacje do modelu chemicznego. Wreszcie, model chemiczny korzystał z obciążeń chemicznych (ze źródeł punktowych, East River i innych wpływów) oraz wyników modelu hydrodynamicznego i modelu eutrofizacji i transportu osadów w celu obliczenia przeznaczenia i transportu COPC. Łącznie, w zależności od założeń i wyników różnych modeli, struktura modelowania obliczyła transport COPC pochodzących z różnych źródeł oraz osadzanie się COPC na podłożu osadowym rzeki.

Ryc. 5A i 5b pokazują porównanie modelowanego średniego ważonego stężenia powierzchniowego (SWAC) każdego z trzech głównych COPC (TWWA17, TPCB i miedzi) w porównaniu z procentowym ograniczeniem zrzutów z CSO. Na grafie widać, że nawet 100-procentowa kontrola zrzutów CSO miałaby minimalny wpływ na powstałe stężenia w osadach na terenie Badanego obszaru. Modelowanie obejmuje wpływy z East River, innych źródeł punktowych i wód gruntowych. Wyniki modelowania wskazują, że nawet przy 100-procentowej kontroli CSO stężenia w podłożu osadowym po zastosowaniu środków naprawczych nie zbliżają się do zera. Co więcej, modelowanie pokazuje, że 100-procentowa kontrola CSO tak naprawdę zwiększa powstałe stężenie TPCB w pewnych częściach Badanego obszaru.

Zawarte w 2018 r. z miastem AOC regulujące FFS dla OU2 zawierało stwierdzenie, że należy poddać ocenie co najmniej trzy alternatywy - brak działań, brak dalszych działań oraz 100-procentową kontrolę. Wyniki LOE3 pokazują, że ocena kolejnej alternatywy, przy środkach kontroli ilości CSO pomiędzy ilością zalecaną przez LTCP a 100-procentową kontrolą, nie jest konieczna, ponieważ nawet 100-procentowe ograniczenie ilości zrzutów CSO ma niewielki wpływ na stężenia COPC w podłożu osadowym Badanego obszaru.

#### Ocena według dziewięciu kryteriów

W celu dokonania wyboru środka naprawczego, do indywidualnej i porównawczej oceny różnych alternatyw w zakresie środków naprawczych zastosowano dziewięć kryteriów (patrz, tabela poniżej, Kryteria oceny alternatyw Superfund w zakresie środków naprawczych). Niniejsza część Proponowanego planu opisuje względną efektywność każdej z alternatyw w oparciu o dziewięć kryteriów, przy odnotowaniu, jak każda z nich wypada w porównaniu z innymi rozważanymi opcjami. Szczegółową analizę alternatyw można znaleźć w raporcie w zakresie FFS dla OU2.

#### 1. Ogólna ochrona ludzkiego zdrowia i środowiska

Porównanie LOE 1 wykazuje, że COPC zrzucane do Badanego obszaru z CSO mieszczą się w granicach stężeń z innych poddanych ocenie wpływów do Badanego obszaru. LOE 2 wykazała, że Alternatywa 2 zmniejszyłaby obciążenie COPC Badanego obszaru w porównaniu z Alternatywą 1, a Alternatywa 3 zmniejszyłaby obciążenie Badanego obszaru w jeszcze większym stopniu, eliminując zrzuty CSO. Z drugiej strony, LOE 3 wykazuje, że zmiana w modelowanych SWAC na w założeniu czystym podłożu osadowym po zastosowaniu środka naprawczego, niezależnie od tego czy ocenie poddana jest Alternatywa 1, 2 czy 3, jest nieznaczna.

Ocena LOE wykazuje, że wszystkie trzy alternatywy zapewniają mniej więcej taki sam poziom ochrony.

## 2. Zgodność z obowiązującymi lub właściwymi i odpowiednimi wymogami

Działania podjęte na terenie jakiegokolwiek obiektu Superfund muszą spełniać wszystkie obowiązujące lub właściwe i odpowiednie wymogi w ramach przepisów federalnych i stanowych lub zapewniać podstawy do odstąpienia od tych wymogów. W przypadku alternatywy 1 i 2 brak jest ARAR, ponieważ nie są wymagane żadne działania związane z CERCLA. Alternatywa 3 spełniałaby wymogi ARAR.

#### 3. Efektywność i trwałość w perspektywie długofalowej

Alternatywa 2 po jej wdrożeniu byłaby na dłuższą metę bardziej efektywna niż Alternatywa 1, ponieważ ograniczyłaby ilość zrzutów CSO do Badanego obszaru. Alternatywa 3 zapewniłaby najwyższy poziom efektywności i trwałości, skutecznie eliminując zrzuty CSO do Badanego obszaru, po jej wdrożeniu.

## 4. Ograniczenie toksyczności, mobilności lub ilości odpadów poprzez ich oczyszczanie

Mimo że brak jest znaczących różnic w stężeniach COPC w modelowanych stężeniach osadów powierzchniowych w rzece przy zastosowaniu różnych alternatyw, Alternatywa 1 nie zapewniłaby żadnego dodatkowego ograniczenia zrzutów CSO; nie doszłoby więc do dodatkowego ograniczenia mobilności i ilości zanieczyszczeń. Zarówno Alternatywa 2, jak i Alternatywa 3 ograniczyłyby mobilność i ilość zanieczyszczeń dzięki przechwytywaniu i ograniczaniu toksyczności poprzez oczyszczanie/odprowadzanie większości lub wszystkich zrzutów CSO. Z drugiej strony, Alternatywa 3 zapewniłaby wyższy poziom ograniczenia mobilności i ilości zanieczyszczeń, ponieważ zapewnia ona wyższy poziom przechwytywania ilości CSO i ich oczyszczania w porównaniu z Alternatywa 2.

#### 5. Efektywność w perspektywie krótkoterminowej

W przypadku Alternatywy 1 i 2 nie wystąpiłyby żadne konsekwencje krótkoterminowe dla społeczności lub pracowników obiektu, ponieważ w nie byłyby wymagane żadne działania naprawcze w ramach CERCLA.

Alternatywa 3 miałaby znaczący wpływ na społeczność w perspektywie krótkoterminowej. Rozszerzenie rozmiaru LTCP poza to, co NYCDEP ma już wdrożyć w ramach nakazu, prawdopodobnie skutkowałoby dłuższym okresem na wdrożenie i wymagałoby większego zasięgu dla budowy.

#### 6. Możliwość wdrożenia

Ani Alternatywa 1, ani Alternatywa 2 nie wymagają żadnych działań naprawczych, dlatego też ocena kryterium możliwości wdrożenia w ramach NCP dla tych dwóch alternatyw nie jest konieczna. Należy zauważyć, że chociaż Alternatywa 2 nie obejmuje żadnych działań, zakłada ona, że zajdzie niezależny obowiązek wdrożenia LTCP na mocy wydanego dla miast stanowego nakazu CWA oraz że działanie to, mimo że nie wybrane w ramach CERCLA, zostało określone przez NYSDEC jako możliwe do wdrożenia.

Alternatywa 3 byłaby bardzo trudna do wdrożenia, zarówno pod względem inżynieryjnym, jak i administracyjnym.

#### 7. Koszt

Brak jest związanych z CERCLA kosztów dotyczących Alternatywy 1 lub Alternatywy 2.

Szacowany koszt Alternatywy 3 wynosi ponad 1 650 000 000 USD. Kwota ta została oszacowana na podstawie obliczeń przedstawionych w LTCP.

#### 8. Akceptacja przez stan

Stan Nowy Jork dokonuje przeglądu preferowanej przez EPA alternatywy, przedstawionej w niniejszym Proponowanym planie.

#### 9. Akceptacja przez społeczność

Akceptacja preferowanych alternatyw przez społeczność zostanie poddana ocenie po zakończeniu okresu publicznego zgłaszania uwag i znajdzie się w zapisie decyzji (ROD) dla OU2. Na podstawie zgłaszanych publicznie uwag preferowane alternatywy będzie można zmodyfikować w odniesieniu do wersji przedstawionej w niniejszym proponowanym planie. ROD jest dokumentem formalizującym wybór środka naprawczego dla obiektu.

#### PREFEROWANA ALTERNATYWA

Preferowaną przez EPA alternatywą dla OU2 jest Alternatywa 2, Brak dalszych działań. W tym przypadku "Brak dalszych działań" zakłada, że LCP, który NYCDEP ma nakaz wdrożyć będzie faktycznie wdrożony w terminie. EPA stwierdziła, że ograniczenie ilości odpadów osiągnięte w ramach LTCP będzie wystarczające do celów działań następczych CERCLA.

Na poparcie tej decyzji, w świetle wielu zmian, jakich oczekuje się dla Newtown Creek w nadchodzących latach, włącznie z wyborem przyszłych działań następczych na mocy CERCLA, EPA spodziewa się, że wymagana będzie kontynuacja następujących działań monitoringowych:

 Pobieranie próbek zrzutów z czterech głównych CSO do Newtown Creek, aż do pełnego wdrożenia LTCP.

Ponadto, EPA i NYSDEC rozważą wprowadzenie programu typu "track-back" [powrotu do początku prowadzenia obserwacji] w celu odniesienia się do ewentualnych stałych wzrostów stężeń COPC ze zrzutów CSO, o ile zostaną one stwierdzone. Jeśli będzie to wymagane, program typu "trackback" pozwoli na identyfikację źródeł zwiększonych stężeń zanieczyszczeń w kanalizacji, aby można się było nimi zająć poprzez bardziej rygorystyczne mechanizmy kontroli lub działania na wysoczyźnie.

Monitoring CSO oraz potencjalny program typu "track-back" byłyby używane w celu potwierdzenia, że założenia zastosowane przy opracowaniu tej alternatywy, w ramach CERCLA, pozostają odpowiednie do czasu pełnego wdrożenia i funkcjonowania LTCP, co przewiduje się na rok 2042.

Alternatywa 2 dotyczy ilości zrzutów z samych CSO. EPA określi w przyszłych decyzjach dotyczących wyboru środków naprawczych dla innych OU czy konieczne są dodatkowe działania kontrolne na poziomie rzeki lub punktów zrzutu CSO. Te dodatkowe działania kontrolne mogą obejmować m.in. rozmieszczenie osadników i/lub podkłady absorbujące oleje w zakończeniach rur zrzutowych CSO oraz pogłębianie konserwacyjne rzeki w celu rozwiązania problemu nagromadzenia zanieczyszczonych substancji stałych w pobliżu zrzutów CSO.

Przeprowadzona wieloraka ocena LOE potwierdza wniosek, że nie są wymagane żadne dalsze działania (poza zatwierdzonymi działaniami w ramach LTCP po ich wdrożeniu) w zakresie ograniczenia ilości zrzutów CSO do rzeki. Modelowanie przeprowadzone w ramach LOE 3 pokazuje, że przyrostowe ograniczanie stężeń COPC w Badanym obszarze, gdyby wybrano opcję 100-procentowej kontroli lub rozwiązanie pomiędzy LTCP zatwierdzonym

przez NYSDEC oraz opcją 100-procentowej kontroli, byłoby nieznaczne.

Dzięki przeprowadzeniu analizy LOE stwierdzono, że każda z poddanych ocenie alternatyw zapewnia mniej więcej ten sam poziom ochrony, dlatego też kontrola ilości odpadów zalecana w LTCP zatwierdzonym przez NYSDEC, którą wdroży NYCDEP, jest wystarczająca do celów związanych z działaniami CERCLA i nie są potrzebne dalsze środki ograniczające ilości odpadów. Ponadto, Alternatywa 3 miałaby dużo większe konsekwencje w perspektywie krótkoterminowej, byłaby bardzo trudna do wdrożenia, kosztowałaby znacznie więcej niż Alternatywa 2 i nie poskutkowałaby znaczącym obniżeniem COPC obciążających rzekę.

Z preferowaną alternatywą nie wiążą się żadne kontrole pięcioletnie. Będą tu jednak obowiązywać wymogi dotyczące składania regularnych raportów do czasu wdrożenia LTCP; ich wyniki będą używane do zapewnienia efektywności tej decyzji. Ocena ostatecznego czasu trwania i częstotliwości monitoringu i raportowania zostanie przeprowadzona w związku z procesem wyboru środka naprawczego prowadzonym dla całego obiektu OU1.

W oparciu o obecnie dostępne informacje EPA uznaje, że preferowana alternatywa spełnia kryteria progowe i zapewnia najlepszy bilans kompromisów wśród wszystkich alternatyw, jeśli chodzi o kryteria zbilansowania i modyfikacji. EPA spodziewa się, że preferowana alternatywa spełni następujące wymogi ustawowe CERCLA Części 121(b), ponieważ (1) będzie chronić ludzkie zdrowie i środowisko, poprzez wybrane działanie lub dodatkowe działania, które zostaną ustalone w ramach ROD dla OU1; (2) spełnia poziom lub norme kontroli substancji niebezpiecznych, skażających i zanieczyszczających, która co najmniej utrzymuje prawnie obowiązujące lub właściwe i odpowiednie wymogi w ramach przepisów federalnych i stanowych, ponieważ żadne ARAR nie są wymagane dla środków naprawczych w sytuacji braku dalszych działań, (3) jest nakładochłonna i (4) wykorzystuje trwałe rozwiązania i alternatywne technologie oczyszczania (lub odzyskiwania zasobów) w maksymalnym zakresie, w iakim jest to praktycznie możliwe. Ponadto CERCLA Cześć 121 obejmuje preferencję dla środków naprawczych, które w sposób trwały i znaczący ograniczają ilość, toksyczność lub mobilność substancji niebezpiecznych jako głównego elementu (lub wymaga uzasadnienia w przypadku niespełnienia tej preferencji). Mimo że w ramach wybranego środka naprawczego nie są wymagane żadne dalsze działania, wdrożenie LTCP znacząco obniży ilość zrzutów CSO, źródła obciążeń zanieczyszczeniami, do Newtown Creek.

Zgodnie z polityką Regionu 2 EPA "Clean and Green", EPA dokona oceny wykorzystania zrównoważonych technologii i

praktyk w odniesieniu do wdrożenia wybranego środka naprawczego.

#### UDZIAŁ SPOŁECZNOŚCI

EPA zachęca opinię publiczną do szerszego zapoznania się z obiektem oraz działaniami prowadzonymi w ramach Superfund.

Terminy dotyczące okresu publicznego zgłaszania uwag, data, miejsce i godzina spotkania otwartego oraz lokalizacje plików rejestru administracyjnego znajdują się w polu tekstowym "Ważne daty", umieszczonym na pierwszej stronie niniejszego Proponowanego planu. Instrukcje dotyczące przesyłania pisemnych uwag do Proponowanego planu znajdują się w podkreślonym polu poniżej.

Region 2 EPA wyznaczył specjalistę ds. kontaktów społecznych jako jednostkę kontaktową w zakresie zastrzeżeń społecznych i pytań dotyczących federalnego programu Superfund w Nowym Jorku, New Jersey, Portoryko i na Amerykańskich Wyspach Dziewiczych. Aby wspomóc te prace, Agencja uruchomiła czynną 24h na dobę bezpłatną infolinię (1-888-283-7626), na którą obywatele mogą dzwonić w celu uzyskania informacji, wyrażenia swoich zastrzeżeń lub zarejestrowania skarg dotyczących Superfund.

#### Aby uzyskać więcej informacji na temat obiektu Superfund

Newtown Creek, należy skontaktować się z następującymi osobami:

Mark Schmidt Natalie Loney menedzer ds. projektów naprawczych koordynator ds.

zaangażowania społecznego

(212) 637-3886 (212) 637-3639 schmidt.mark@epa.gov loney.natalie@epa.gov

Pisemne uwagi dotyczące niniejszego Proponowanego planu należy przesyłać do pana Schmidta na podany poniżej adres lub adres mailowy.

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18<sup>th</sup> Floor New York, NY 10007

E-mail: schmidt.mark@epa.gov

## Osobą odpowiedzialną za kontakty społeczne w sprawie Regionu 2 EPA jest:

George H. Zachos Regional Public Liaison Bezpłatna infolinia (888) 283-7626 (732) 321-6621

U.S. EPA Region 2 2890 Woodbridge Avenue, MS-211 Edison, New Jersey 08837-3679

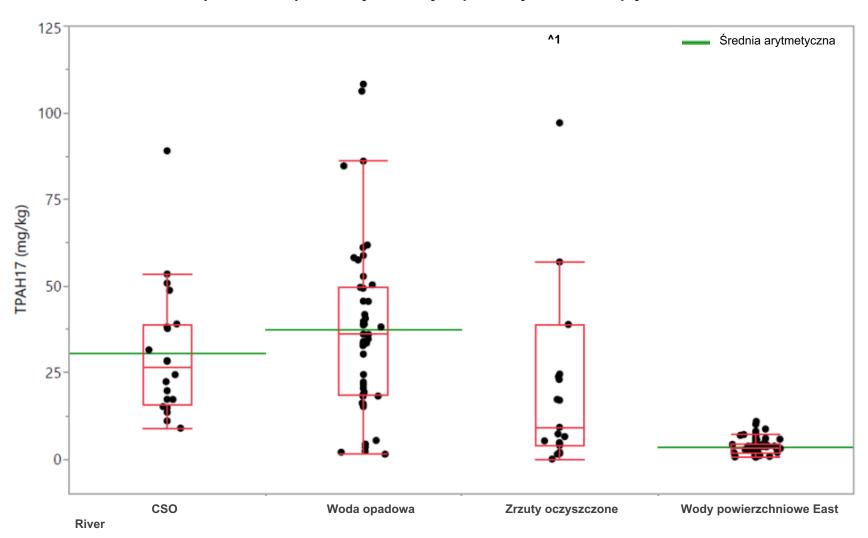
Ryc. 1 - Lokalizacja obiektu Newtown Creek



Ryc. 2 - Umiejscowienie CSO i wylotów Newtown Creek

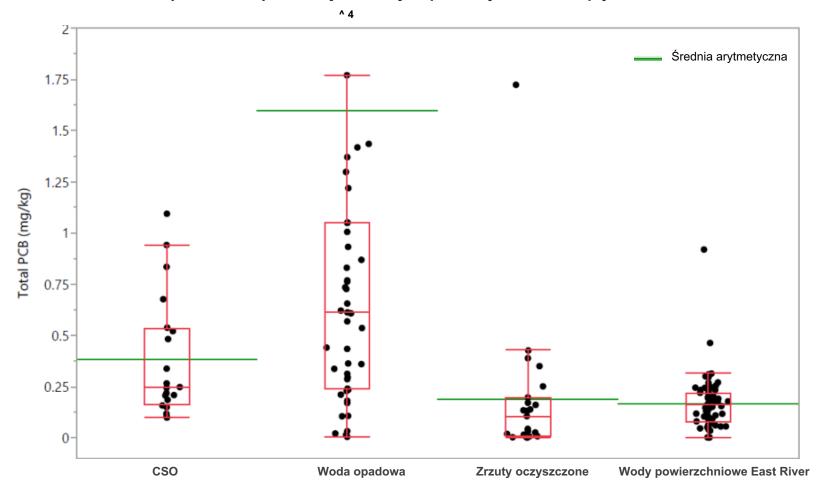


Ryc. 3a - Porównanie stężeń cząstek stałych w CSO ze stężeniami cząstek stałych z innych poddanych ocenie wpływów TWWA17

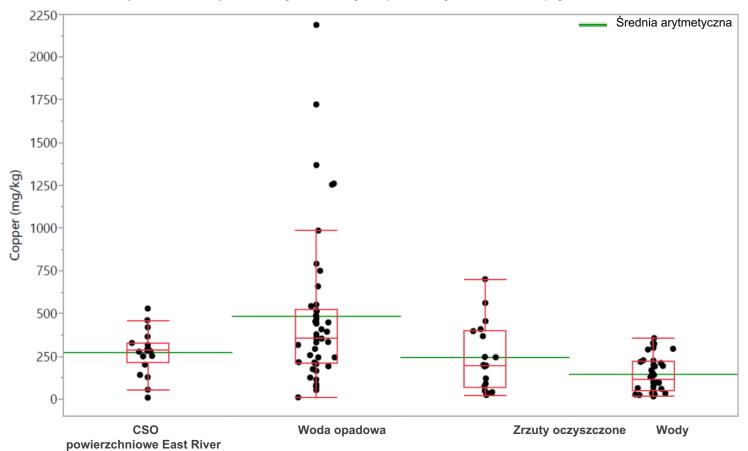


Uwaga: Średnie stężenie TWWA17 w zrzutach oczyszczonych wynosi 2 056 mg/kg, co wykracza poza skalę wykresu.

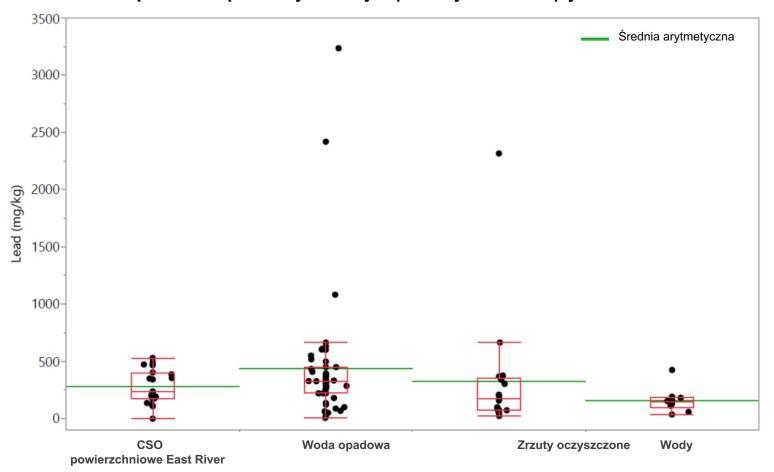
Ryc. 3b - Porównanie stężeń cząstek stałych w CSO ze stężeniami cząstek stałych z innych poddanych ocenie wpływów TCB



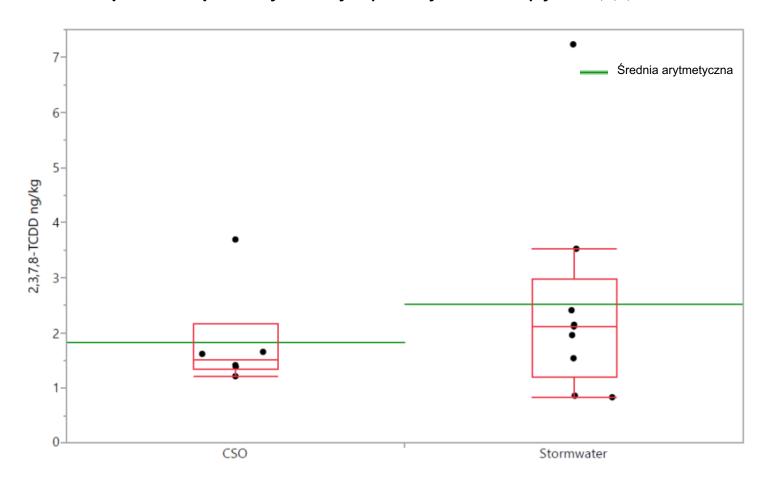
Ryc. 3c - Porównanie stężeń cząstek stałych w CSO ze stężeniami cząstek stałych z innych poddanych ocenie wpływów miedzi



Ryc. 3d - Porównanie stężeń cząstek stałych w CSO ze stężeniami cząstek stałych z innych poddanych ocenie wpływów ołowiu



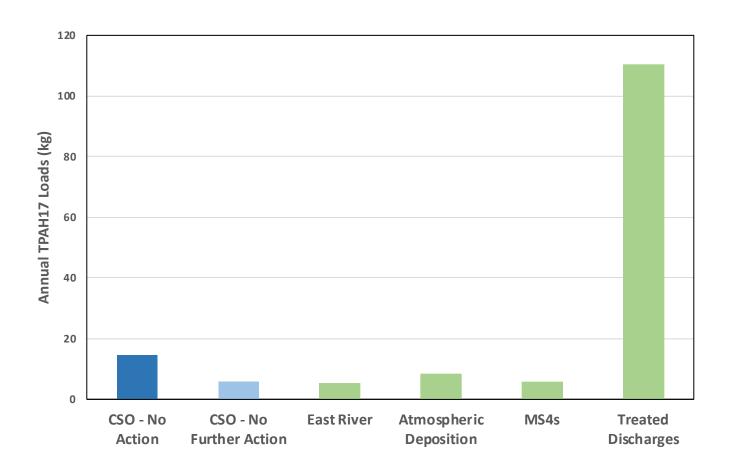
Ryc. 3e - Porównanie stężeń cząstek stałych w CSO ze stężeniami cząstek stałych z innych poddanych ocenie wpływów 2,3,7,8-TCDD



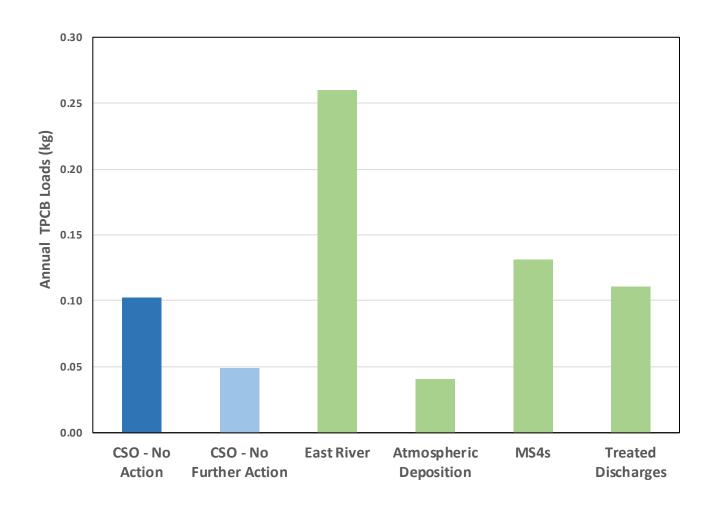
#### Uwagi:

- 1) Z powodu dużej liczby niewykrytych próbek w CSO i innych wpływach o podwyższonym stopniu, wykres ten pokazuje wyłącznie porównanie dla próbek wykrytych.
- 2) W przypadku East River i zrzutów oczyszczonych wykryto tylko jedną próbkę, dlatego też dla tych źródeł nie pokazano wykresów pudełkowych.
- 3) Porównanie statystyczne jest prowadzone wyłącznie dla próbek wykrytych.

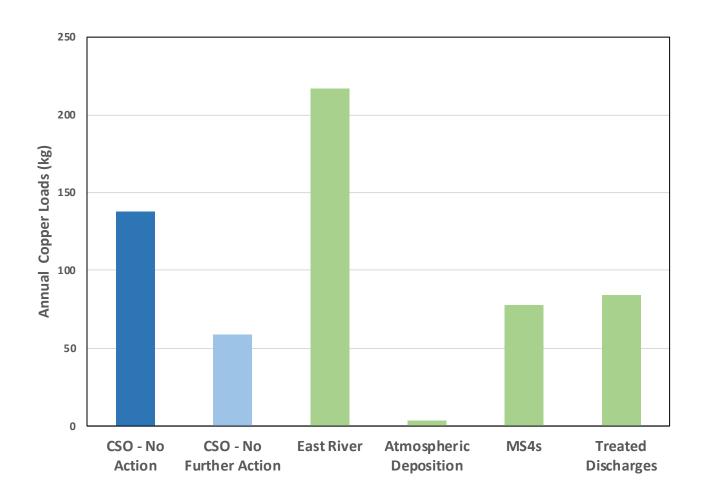
Ryc. 4A - Porównanie obciążeń TWWA17 z CSO i innych poddanych ocenie wpływów do Badanego obszaru



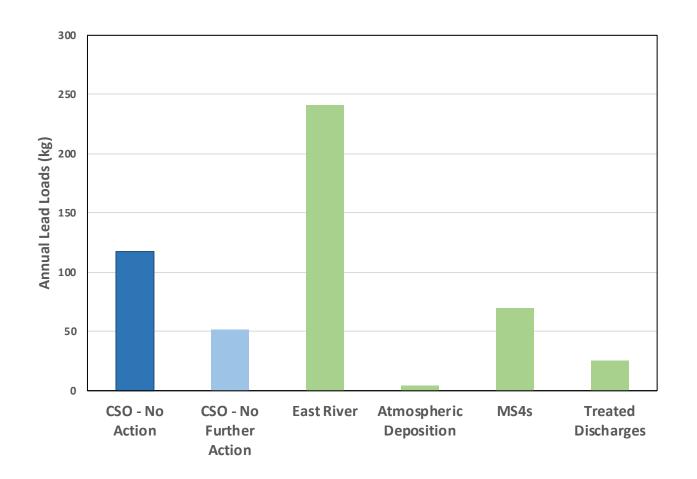
Ryc. 4b - Porównanie obciążeń TPCB z CSO i innych poddanych ocenie wpływów do Badanego obszaru



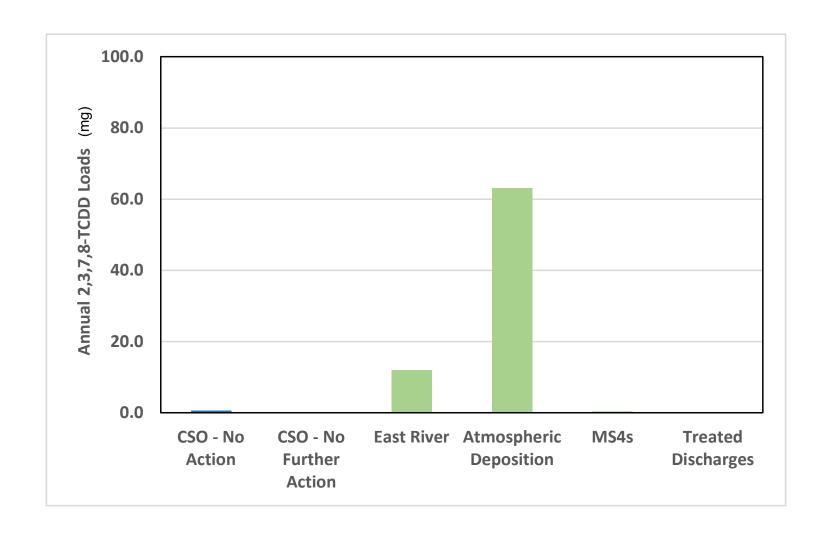
Ryc. 4c - Porównanie obciążeń miedzią z CSO i innych poddanych ocenie wpływów do Badanego obszaru



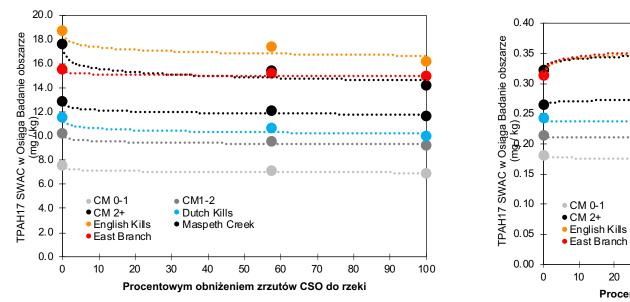
Ryc. 4d - Porównanie obciążeń ołowiem z CSO i innych poddanych ocenie wpływów do Badanego obszaru

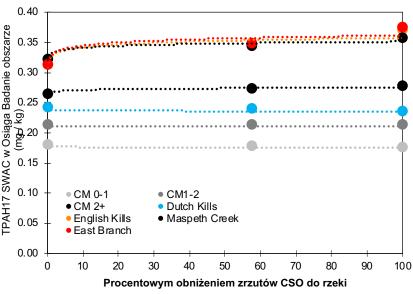


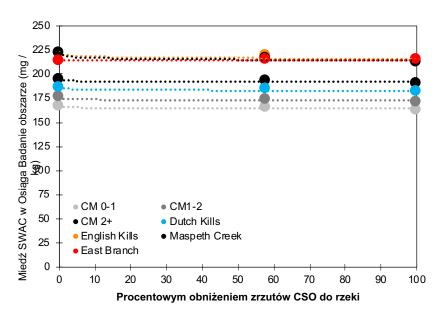
Ryc. 4e - Porównanie obciążeń 2,3,7,8-TCDD z CSO i innych poddanych ocenie wpływów do Badanego obszaru



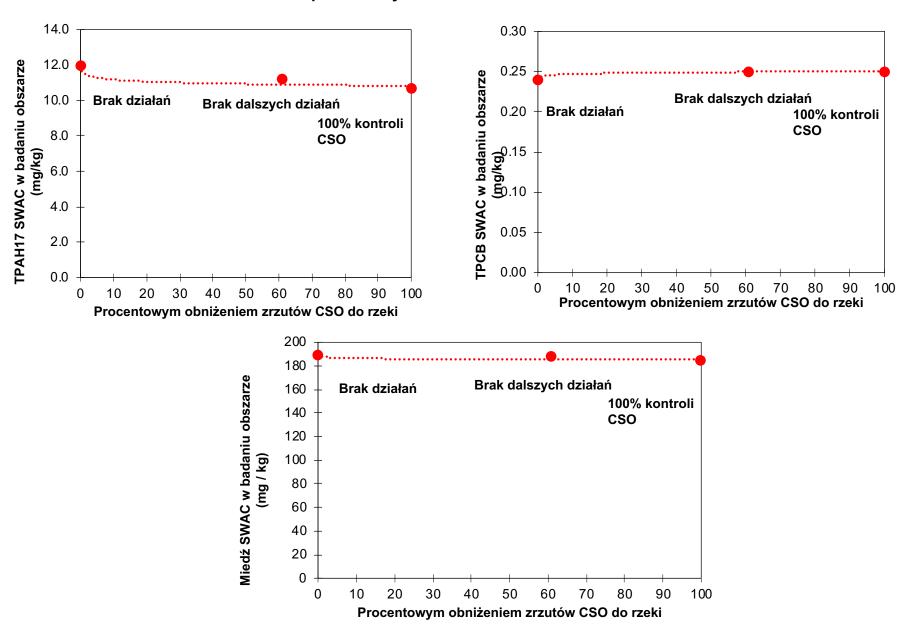
Ryc. 5A 0 Porównanie modelowanych SWAC w Newtown Creek z procentowym obniżeniem zrzutów CSO







SWC - Na terenie całego Badanego obszaru z procentowym obniżeniem zrzutów CSO



## ATTACHMENT B

## **PUBLIC NOTICES**



# **EPA Invites Public Comment on a Proposed Cleanup Plan For the Newtown Creek Superfund Site in New York, New York**

On November 21, 2019, the U.S. Environmental Protection Agency (EPA) is issuing a Proposed Plan for addressing Operable Unit 2 of the Newtown Creek Superfund site (site). A **30-day public comment period** on the Proposed Plan, which identifies the EPA's preferred cleanup plan and other cleanup options that were considered by the EPA, **begins on November 21, 2019 and ends on December 23, 2019.** 

Overall, the Newtown Creek site is addressed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as the Superfund Law). In addition, as per the requirements of the Clean Water Act, the New York City Department of Environmental Protection is under order of the New York State Department of Environmental Conservation (NYSDEC) to implement a Combined Sewer Overflow (CSO) Long Term Control Plan for Newtown Creek (LTCP). The LTCP was approved by NYSDEC and includes construction of a storage tunnel that would reduce the volume of CSO discharges to Newtown Creek to achieve waterbody-specific water quality standards consistent with the Federal CSO Control Policy and related guidance. Operable Unit 2 of the site evaluates whether the volume control measures prescribed by the LTCP, pursuant to the Clean Water Act order referenced above, are sufficient to meet the needs of an eventual Superfund cleanup of the site.

The EPA's preferred cleanup plan for this discrete aspect of the site consists of No Further Action, where, in this case, no further action means no action beyond the anticipated implementation of the LTCP, pursuant to the above-referenced Clean Water Act order.

During the public comment period, EPA will hold two public meetings in New York City to inform the public of EPA's preferred cleanup plan and to receive public comments on the preferred plan and other options that were considered. The public meetings will be held on **December 9** at **6:30** p.m. at Sunnyside Community Services, 43-31 39<sup>th</sup> Street in Queens, New York and on December 11 at **6:30** p.m. at P.S. 110, 124 Monitor Street in Brooklyn, New York.

The Proposed Plan is available electronically at <a href="https://www.epa.gov/superfund/newtown-creek">https://www.epa.gov/superfund/newtown-creek</a> or by calling Natalie Loney, EPA's community Involvement Coordinator, at (212) 637-3639 and requesting a copy by mail.

Written comments on the Proposed Plan, postmarked no later than close of business December 23, 2019, may be emailed to <a href="mailto:schmidt.mark@epa.gov">schmidt.mark@epa.gov</a> or mailed to Mark Schmidt, US EPA, 290 Broadway, 18<sup>th</sup> Floor, New York, NY 10007-1866. The Administrative Record file containing the documents used or relied on in developing the alternatives and preferred cleanup plan is available for public review at <a href="www.epa.gov/superfund/newtown-creek">www.epa.gov/superfund/newtown-creek</a> or at the following information repository: EPA - Region 2, Superfund Records Center, 290 Broadway, 18<sup>th</sup> Floor, New York, NY 10007-1866.

For more information, please contact Natalie Loney at (212) 637-3639 or <a href="loney.natalie@epa.gov">loney.natalie@epa.gov</a>.



## EPA Extends the Public Comment period on Proposed Cleanup Plan for the Newtown Creek Superfund Site

On November 21, 2019, the U.S. Environmental Protection Agency (EPA) issued a Proposed Plan for addressing Operable Unit 2 of the Newtown Creek Superfund site (site). A 30-day public comment period on the Proposed Plan, which identifies the EPA's preferred cleanup plan and other cleanup options that were considered by the EPA, which began on November 21, 2019 has been extended an additional 30-days and will now end on January 27, 2020.

Overall, the Newtown Creek site is addressed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as the Superfund Law). In addition, as per the requirements of the Clean Water Act, the New York City Department of Environmental Protection is under order of the New York State Department of Environmental Conservation (NYSDEC) to implement a Combined Sewer Overflow (CSO) Long Term Control Plan for Newtown Creek (LTCP). The LTCP was approved by NYSDEC and includes construction of a storage tunnel that would reduce the volume of CSO discharges to Newtown Creek to achieve waterbody-specific water quality standards consistent with the Federal CSO Control Policy and related guidance. Operable Unit 2 of the site evaluates whether the volume control measures prescribed by the LTCP, pursuant to the Clean Water Act order referenced above, are sufficient to meet the needs of an eventual Superfund cleanup of the site.

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Written comments on the Proposed Plan, postmarked no later than close of business January 27, 2020, may be emailed to <a href="mailto:schmidt.mark@epa.gov">schmidt.mark@epa.gov</a> or mailed to <a href="mailto:Mark Schmidt">Mark Schmidt</a>, US EPA, 290 Broadway, 18<sup>th</sup> Floor, New York, NY 10007-1866. The Administrative Record file containing the documents used or relied on in developing the alternatives and preferred cleanup plan is available for public review at <a href="www.epa.gov/superfund/newtown-creek">www.epa.gov/superfund/newtown-creek</a> or at the following information repository: EPA - Region 2, Superfund Records Center, 290 Broadway, 18<sup>th</sup> Floor, New York, NY 10007-1866.

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# EPA Extends the Public Comment period on Proposed Cleanup Plan for the Newtown Creek Superfund Site

On November 21, 2019, the U.S. Environmental Protection Agency (EPA) is issuing a Proposed Plan for addressing Operable Unit 2 of the Newtown Creek Superfund site (site). A 30-day public comment period on the Proposed Plan, which identifies the EPA's preferred cleanup plan and other cleanup options that were considered by the EPA, which began on November 21, 2019 and was previously extended by 30 days has now been extended by an additional 30 days and will end on February 28, 2020.

Overall, the Newtown Creek site is addressed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as the Superfund Law). In addition, as per the requirements of the Clean Water Act, the New York City Department of Environmental Protection is under order of the New York State Department of Environmental Conservation (NYSDEC) to implement a Combined Sewer Overflow (CSO) Long Term Control Plan for Newtown Creek (LTCP). The LTCP was approved by NYSDEC and includes construction of a storage tunnel that would reduce the volume of CSO discharges to Newtown Creek to achieve waterbody-specific water quality standards consistent with the Federal CSO Control Policy and related guidance. Operable Unit 2 of the site evaluates whether the volume control measures prescribed by the LTCP, pursuant to the Clean Water Act order referenced above, are sufficient to meet the needs of an eventual Superfund cleanup of the site.

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Written comments on the Proposed Plan, postmarked no later than close of business February 28, 2020, may be emailed to <a href="mailto:schmidt.mark@epa.gov">schmidt.mark@epa.gov</a> or mailed to Mark Schmidt, US EPA, 290

Broadway, 18<sup>th</sup> Floor, New York, NY 10007-1866. The Administrative Record file containing the documents used or relied on in developing the alternatives and preferred cleanup plan is available for public review at <a href="www.epa.gov/superfund/newtown-creek">www.epa.gov/superfund/newtown-creek</a> or at the following information repository: EPA - Region 2, Superfund Records Center, 290 Broadway, 18<sup>th</sup> Floor, New York, NY 10007-1866.

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EPA zaprasza do publicznego zgłaszania uwag na temat proponowanego planu oczyszczania dotyczącego obszaru **Newtown Creek Superfund** w Nowym Jorku, Nowy Jork

W dniu 21 listopada 2019 r. Amerykańska Agencja Ochrony Środowiska (Environmental Protection Agency, EPA) wydaję proponowany plan dotyczący jednostki operacyjnej 2 w obszarze (obszar) Newtown Creek Superfund. 30-dniowy okres publicznego zgłaszania uwag dotyczących proponowanego planu, który określa preferowany przez EPA plan oczyszczenia i inne opcje oczysznia rozważone przez EPA, rozpoczyna się 21 listopada 2019 r. i kończy się 23 grudnia 2019 r.

Ogólnie rzecz biorąc, działania w sprawie obszaru Newtown Creek są podejmowane w oparciu o ustawę o ochronie środowiska naturalnego i odpowiedzialności za szkody wyrządzone w środowisku (Comprehensive Environmental Response, Compensation, and Liability Act - CERCLA, znanej również jako ustawa o Superfund). Ponadto, zgodnie z wymogami ustawy o czystości wód (Clean Water Act), Departament Ochrony Środowiska w Nowym Jorku (New York City Department of Environmental Protection) jest zobowiązany przez Departament Ochrony Środowiska w stanie Nowy Jork (New York State Department of Environmental Conservation, NYSDEC) do wdrożenia długoterminowego planu kontroli przelewów z kanalizacji ogólnospławnej (Combined Sewer Overflow, CSO) dla Newtown Creek (Long Term Control Plan, LTCP). LTCP został zatwierdzony przez NYSDEC i obejmuje budowę tunelu retencyjnego, który zmniejszyłby objętość zrzutów CSO do Newtown Creek, aby osiągnąć normy jakości wody właściwe dla zbiornika wodnego i zgodne z Federalną Polityką Kontroli CSO i powiązanymi wytycznymi. Jednostka operacyjna 2 obszaru ocenia, czy środki kontroli objętości zalecane przez LTCP, zgodnie z wyżej wymienioną ustawą o czystości wód, są wystarczające, aby zaspokoić potrzeby ostatecznego oczyszczenia obszaru w ramach Superfund.

Preferowany przez EPA plan oczyszczania dotyczący tego odrębnego aspektu obszaru, obejmuje brak dalszych działań, przy czym w tym przypadku brak dalszych działań oznacza niepodejmowanie działań poza przewidywanym wdrożeniem LTCP, zgodnie z zarządzeniem w świetle wymienionej wyżej ustawy o czystości wód.

W okresie publicznego zgłaszania uwag, EPA zorganizuje dwa publiczne spotkania w Nowym Jorku, aby poinformować opinię publiczną o preferowanym przez EPA planie oczyszczania oraz aby zgromadzić publiczne uwagi na temat preferowanego planu i innych rozważanych opcji. Spotkania publiczne odbędą się w dniu 9 grudnia o godz. 18:30 w Sunnyside Community Services, 43-31 39th Street in Queens, Nowy Jork i w dniu 11 grudnia o godz. 18:30 w P.S. 110, 124 Monitor Street w dzielnicy Brooklyn, Nowy Jork.

Proponowany plan jest dostępny w formie elektronicznej na stronie https://www.epa.gov/superfund/newtown-creek lub można go uzyskać dzwoniąc do Natalie Loney, koordynatora EPA ds. zaangażowania społeczności, pod numer (212) 637-3639 i prosząc o przesłanie egzemplarza pocztą.

Pisemne uwagi dotyczące proponowanego planu, z datą stempla pocztowego nie później niż do końca dnia roboczego 23 grudnia 2019 r., można wysyłać pocztą elektroniczną do schmidt.mark@epa.gov lub pocztą do Mark Schmidt, US EPA, 290 Broadway, 18th Floor, Nowy Jork, NY 10007-1866. Cała dokumentacja administracyjna zawierająca dokumenty wykorzystane lub na których oparto się przy opracowywaniu alternatywnych rozwiązań i preferowanego planu oczyszczania jest ogólnodostępna do wglądu na stronie www.epa.gov/superfund/newtown-creek lub w następujących repozytoriach: EPA - Region 2, Superfund Records Center, 290 Broadway, 18th Floor, New York, NY 10007-1866.

W celu zyskania dalszych informacji należy skontaktować się

# Z teki prawnika nowy dziennik Saturday, OCTOBER 26 - FRIDAY, NOVEMBER

Od zwycięstwa do zwycięstwa

Klient naszej kancelarii, zatrudniony jako robotnik budowlany, pracował 6 czerwc w budynku przy Szódki Aleii (2011) w budynku przy Szóstej Alei i 47 Ulicy na Manhattanie, wykańczając prace malar wał się na piętrze, które miało wewnętrzne dwa poziomy. W dniu wypadku m na niższym poziomie. Aby dostać się na ów niższy poziom, był zmuszony zejść po ra była na stałe zamontowana na ścianie pomieszczenia. Gdy zaczął schodzić, na szczeblu drabiny i spadł na betonową podłogę.

W Nowym Jorku właściciele budynków i generalni wykonawcy mają obowiązek zapewnienia bezpieczeństwa w miejscu pracy i upewnienia się, że pracownicy dysponują niezbędnym wyposażeniem i sprzętem ochronnym, potrzebnymi do bezpiecznego wykonywania pracy. Ważne jest również, by pracownicy mieli świadomość, gdzie ten sprzęt się znajduje, i umieli go używać. Brat takiego wyposażenia lub jego nieużywanie może bowiem doprowadzić do tragicznych wypadków. W Nowym Jorku właściciele budyndo tragicznych wypadków. Kancelaria The Platta Law specjali-

zuje się w sprawach wypadków budow-lanych, które wydarzyły się z powodu zaniedbania wymogów bezpieczeństwa tam, gdzie właściciele i generalni wykonawcy zawiedli pracowników, za których byli odpowiedzialni.

W przypadku poszkodowanego pracownika budowlanego kancelaria The Platta Law Firm odkryła, że zaledwie kilka dni przed wypadkiem oskarżony generalny wykonawca usunął niezbędny sprzęt zabezpiecza-

datkowo wyjątkowo śliskimi. Było tylko kwestią czasu, aby ktoś pośli-zgnął się na tej drabinie i został cięż-

ko ranny.

W wyniku upadku pracownik buw wyniku upadku pracownik ou-dowlany złamał kość w nodze w po-bliżu kolana. Oprócz złamania nogi doznał również uszkodzenia kolana. W związku z tym potrzebował dwóch operacji artroskopowych, aby je na-prawić. Upadek doprowadził również do przepukliny wielu dysków szyjnych, cow konsekwencji spowodowało na-cisk na nerwy kręgosłupa szyjnego. W rezultacie nasz klient musiał przejść poważną i skomplikowaną operację szyi, podczas której lekarz wszczepił specjalny materiał zespalający kręgi szyjne. To w poważnym stopniu ograniczyło u poszkodowanego zakres ruchu szyi i ciągły ból. Na sam koniec poszkodowany pracownik przeszedł także operację lewego ramienia, również uszkodzonego podczas upadku. Zoperowany został uszkodzony stożek rotatora ramienia.

Oskarżeni, jak to zwykle bywa, nie

przez cały c wego. Zam ków", którz niom poszk bezpieczni mo dostęr bowała ró mocowa pracown była bez było pra rych os nia sie sami je powan

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W efekcie procesu oskarżeni zaakceptowali fakt, że nasz klient doznał na zdrowiu i nie będzie mógł wykonywać swojego zawodu. Kancelaria w stanie doprowadzić do wypłaty dla poszkodowanego pracownika b

jący przed wypadkiem. Na początku remontu ustawiono bowiem rusztowania i drabiny przedłużające, aby pracownicy, tacy jak nasz klient, mogli bezpiecznie po nich zejść na niższy poziom. Te właśnie rusztowania i drabiny przedłużające zostały usunięte pod koniec projektu. Wyłącznym powodem była wygoda generalnego wykonawcy, który miał wiele innych prac budowlanych wykonywanych w tym samym czasie, w którym doszło do wypadku. Usunięcie tego istotnego wyposażenia zabezpieczającego zmusiło poszkodowanego do używania przymocowanej na stałe stalowej drabiny. Niestety, drabina ta nie miała materiału antypoślizgowego na szczeblach. W rzeczywistości stalowe szczeble były pomalowane, co czyniło je do-

przyznawali się do odpowiedzialności. Chociaż nie mieli uzasadnionego powodu usunięcia rusztowania i rozsuwanych drabin, twierdzili, że pracownicy budowlani mieli do dyspozycji inne drabiny rozkładane. Ten argument stał w bezpośrednim konflikcie z zeznaniami poszkodowanego, który bardzo wyraźnie twierdził, że jedynym sposobem na dostanie się na niższy poziom było użycie przymocowanej na stałe niebezpiecznej stalowej drabiny. Nasz klient zeznał również, że rozglądał się po całym terenie budowy, szukaiac drabiny, którą mógłby właściwie ustawić, ale nie mógł żadnej znależć.

Pomimo niezachwianej postawy poszkodowanego i niebudzących wątpliwości jego zeznań, oskarżeni kontynuowali swoją linię obrony

Jeśli Państwo sami stali się ofiarą wypadku, lub znają kogoś kto potrzebuje pomocy prav płatnej konsultacji pod numerem telefonu 212-514-5100, emaliowo pod adresem – s stego spotkania w naszej kancelarii na dolnym Manhattanie. Możecie Państwo rów



## EPA Invites Public Comment on a Proposed Cleanup Plan For the Newtown Creek Superfund Site in New York, New York

On November 21, 2019, the U.S. Environmental Protection Agency (EPA) is issuing a Proposed Plan for addressing Operable Unit 2 of the Newtown Creek Superfund site (site). A 30-day public comment period on the Proposed Plan, which identifies the EPA's preferred cleanup plan and other cleanup options that were considered by the EPA, begins on November 21, 2019 and ends on December 23, 2019.

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# New acts rule Grammys as Lizzo, Lil Nas, Eilish lead in noms

By Mesfin Fekadu

The Grammys are screaming "Cuz I Love You" to Lizzo: The breakthrough singer-rapper scored a whopping eight nominations, including bids for the top four awards, making her the show's top-nominated act.

Lizzo picked up nominations for album of the year with her major-label debut, "Cuz I Love You;" song and record of the year with her anthemic No. 1 hit, "Truth Hurts;" and best new artist.

Like Lizzo, other new artists dominated with Grammy nominations on Wednesday: Billie Eilish and Lil Nas X earned six nominations apiece.

Eilish also scored nominations in the top four categories, making the 17-year-old the youngest artist in the history of the Grammys to achieve the feat. Lil Nas X, 20, is up for three of the top four awards, including album and record of the year for "Old Town Road," featuring Billy Ray Cyrus.

Lizzo's "Cuz I Love You," Eilish's "When We All Fall Asleep, Where Do We Go?" and Lil Nas X's "7" - an 8-song EP — will compete for album of the year along with Ariana Grande's "Thank U, Next," Bon Iver's "I,I," Vampire Weekend's "Father of the Bride," H.E.R.'s "I Used to Know Her" and Lana Del Rey's "Norman (Expletive) Rockwell!"

Nominees for record of the year include songs that hit No. 1 on the Billboard Hot 100 chart this year, including "Old Town Road," "Truth Hurts," Eilish's "Bad Guy," Grande's "7 Rings" and Post Malone and Swae Lee's "Sunflower." H.E.R.'s "Hard Place," Bon Iver's "Hey, Ma" and Khalid's "Talk," which peaked at No. 3 on the Hot 100, round out the eight nominees.

While Taylor Swift was shut out of album of the year with "Lover," the album's title track earned a nomination for song of the year, a songwriter's award. It will compete with "Truth Hurts," "Bad Guy," "Hard Place," Lady Gaga's "Always Remember Us This Way" from "A Star Is Born," Lewis Capaldi's "Someone You Loved," Lana Del Rey's "Norman (Expletive) Rockwell" and Tanya Tucker's "Bring My Flowers Now," co-written by Brandi Carlile.

egories - scored four. While her groundbreaking "Homecoming" documentary earned a nomination for best music film, its album version didn't pick up any nominations. Instead her "The Lion King: The Gift" project — which features songs inspired by "The Lion King," for which she voiced the character Nala - is up for best pop vocal album, competing with projects from Ed Sheeran, Swift, Eilish and Grande. Beyoncé's "Spirit," from "The Lion King" which is being pushed for Oscar consideration, is up for best pop solo performance along with Swift's "You Need to Calm Down," "Truth Hurts," "Bad Guy" and "7 Rings."

Overall, female acts out-performed their male counterparts in the top four categories: Five of the eight album-of-the-year contenders are women, while seven of the eight song-of-the-year nominees are by women. Female musicians also rule in the best new artist category, though record of the year is evenly split.

Grande, who won her first Grammy earlier this year, scored five nominations, as did H.E.R. and Finneas, Eilish's older brother who co-wrote, co-produced and engineered her debut album. Finneas' nominations include producer of the year (non-classical) and best engineered album (non-classical).

Several acts picked up four nominations, including J. Cole, Gary Clark Jr., Lucky Daye, Thom Yorke, Bob Ludwig and Tanya Tucker, who in August released her first album of new songs in 17 years.

British country-soul performer Yola also scored four bids, including best new artist, pitting her against Lizzo, Lil Nas X, Eilish, pop singer Maggie Rogers, New Orleans group Tank and the Bangas, the Austin-based duo Black Pumas and Spanish singer Rosalía, who won album of the year at last week's Latin Grammys.

Lizzo's road to the Grammys has been a long one: The 31-year-old, who performed with Prince on his "Plectrumelectrum" album, grinded as an independent and touring artist for years before signing a major-label deal, releasing her first album in 2013. But this year marked her major breakthrough: Her song "Truth Hurts" topped the charts for seven weeks; she's

wowed audiences with her live Swift earned three nominations, while Beyoncé - who performances — including her twerking while playing the flute.

Lil Nas X earned six Grammy Award nominations, including one for best new artist, album and record of the year for "Old Town Road," featuring Billy Ray Cyrus.

Photo by Chris Pizzello/Invision/AP, File



She's also graced several magazine covers, earning praise for promoting body positivity and denouncing fat shaming.

But Lizzo has also had her fair share of critics: Some felt she shouldn't qualify for best new artist at the Grammys since she's been on the music scene for years. Others thought since "Truth Hurts" was originally released in 2017, it shouldn't qualify for the 2020 Grammys. The Recording Academy said "Truth Hurts" qualified because the song was never submitted for contention in the Grammys process and it appears on an album released during the eligibility period for the upcoming show.

"Truth Hurts" was co-written by Tele, Jesse Saint John and Ricky Reed, who is nominated for producer of the year (non-classical). Mina Lioness, the British singer who Lizzo gave writing credit to after using some of her viral tweet in the hit song, didn't appear on the list of writers nominated for song of the year for "Truth Hurts." Lizzo's label, Atlantic Records, told the Associated Press last week it was in the process of adding Lioness to the song's credits.

Lizzo's other nominations include best urban contemporary album, best pop solo performance for "Truth Hurts," best traditional R&B performance for "Jerome" and best R&B performance for "Exactly How I Am," which features Gucci Mane and marks the rapper's first Grammy nomination.

Another first-time nominee: former First Lady Michelle Obama, who is nominated for best spoken word album for "Becoming" (Barack Obama has won two Grammys in the same category).

Nipsey Hussle, who died in March and was nominated for best rap album earlier this year. scored three nominations: His song "Racks In the Middle" is up for best rap performance and best rap song, while "Higher" -a collaboration with DJ Khaled and John Legend that was one of the last songs Hussle recorded — is nominated for best rap/ sung performance.

The Cranberries picked up a nomination for best rock album for their eighth and final album, "In the End," which the surviving members of the Irish band created using unfinished vocals from singer Dolores O'Riordan, who died last year.

The 2020 Grammys will hand out awards in its 84 categories live from the Staples Center in Los Angeles on Jan. 26. Nominees were selected from more than 20,000 submissions, and the final round of voting runs from Dec. 9 until Jan. 3.

Brooklyn Amity School, a nonprofit organization in Brooklyn, NY is seeking sealed bids for sales and installation of security-related enhancements. The project includes installation of the electric gate (parking lot sliding gate with buzz-in access and carnera) and Exterior CCTV System and Related Equipment (capacity for 24/7 surveillance recording). Selection criteria will be based on knowledge of surveillance and security, adherence to work schedule, prior experience, references, and cost. Specifications and bid requirements can be obtained by contacting us at finance@amityschool.org.

All interested firms will be required to sign for the proposal docuents and provide primary contact, telephone, fax, and email address. Bids will be accepted until 5 p.m on November 22, 2019, and work is to commence by December 2, 2019, and completed by December 20, 2019.



## **EPA Invites Public Comment on a Proposed Cleanup Plan** For the Newtown Creek Superfund Site in New York, New York

On November 21, 2019, the U.S. Environmental Protection Agency (EPA) is issuing a Proposed Plan for addressing Operable Unit 2 of the Newtown Creek Superfund site (site). A 30-day public comment period on the Proposed Plan, which identifies the EPA's preferred cleanup plan and other cleanup options that were considered by the EPA, begins on November 21, 2019 and ends on December 23, 2019.

Overall, the Newtown Creek site is addressed under the Comprehensive Environmental Response. Compensation, and Liability Act (CERCLA, also known as the Superfund Law). In addition, as per the requirements of the Clean Water Act, the New York City Department of Environmental Protection is under order of the New York State Department of Environmental Conservation (NYSDEC) to implement a Combined Sewer Overflow (CSO) Long Term Control Plan for Newtown Creek (LTCP). The LTCP was approved by NYSDEC and includes construction of a storage tunnel that would reduce the volume of CSO discharges to Newtown Creek to achieve waterbody-specific water quality standards consistent with the Federal CSO Control Policy and related guidance. Operable Unit 2 of the site evaluates whether the volume control measures prescribed by the LTCP, pursuant to the Clean Water Act order referenced above, are sufficient to meet the needs of an eventual Superfund cleanup of the site.

The EPA's preferred cleanup plan for this discrete aspect of the site consists of No Further Action, where, in this case, no further action means no action beyond the anticipated implementation of the LTCP, pursuant to the above-referenced Clean Water Act order.

During the public comment period, EPA will hold two public meetings in New York City to inform the public of EPA's preferred cleanup plan and to receive public comments on the preferred plan and other options that were considered. The public meetings will be held on **December 9** at **6:30** p.m. at Sunnyside Community Services, 43-31 39th Street in Queens, New York and on December 11 at 6:30 p.m. at P.S. 110, 124 Monitor Street in Brooklyn, New York.

The Proposed Plan is available electronically at https://www.epa.gov/superfund/newtown-creek or by calling Natalie Loney, EPA's community Involvement Coordinator, at (212) 637-3639 and requesting a copy by mail.

Written comments on the Proposed Plan, postmarked no later than close of business December 23, 2019, may be emailed to schmidt.mark@epa.gov or mailed to Mark Schmidt, US EPA, 290 Broadway, 18th Floor, New York, NY 10007-1866. The Administrative Record file containing the documents used or relied on in developing the alternatives and preferred cleanup plan is available for public review at www.epa.gov/superfund/newtown-creek or at the following information repository: EPA - Region 2, Superfund Records Center, 290 Broadway, 18th Floor, New York, NY

For more information, please contact Natalie Loney at (212) 637-3639 or ioney.natalie@epa.gov.

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# Legales

1320 Avisos Legales



1320

La EPA invita comentarios del público sobre un plan propuesto de limpieza Para el sitio Superfund de Newtown Creek en la Ciudad de Nueva York, Estado de Nueva York

El 21 de noviembre de 2019, la Agencia de Protección Ambiental de los EE, UU (EPA, por sus siglas en inglés) emite un Plan propuesto para abordar la Unidad operable 2 del sitio Superfund de Newtown Creek (sitio). Comienza un periodo de 30 días para comentarios del público sobre el Plan propuesto, el cual identifica el plan preferido de limpieza de la EPA y otras opciones de limpieza que fueron consideradas por la EPA, desde el 21 de noviembre de 2019 hasta el 23 de diciembre de 2019. En general, el sitio de Newtown Creek está cubierto por la Ley de Responsabilidad Compensación y Recuperación Ambiental (CERCLA conocida también como Ley Superfund). Además, según los requisitos de la Ley de Agua Limpia, el Departamento de Protección Ambiental de la Ciudad de Nueva York está bajo la orden del Departamento de Conservación Ambiental del Esva for esta bajo la oficier de bepartamento de Conservación Amineira de la trado de Nueva York (NYSDEC) para implementar un Plan de Control a Largo Plazo (LTCP) de Desborde de Alcantarillado Combinado (CSO) para Newtown Creek. El LTCP fue aprobado por el NYSDEC e incluye la construcción de un túnel de alma-cenamiento que reduciría el volumen de descargas de CSO a Newtown Creek a fin de adecuarse a las normas de calidad del aqua específicas para los cuerpos de agua que son congruentes con la Política Federal de Control de CSO y los lin-eamientos afines. La Unidad operable 2 del sitio evalúa si las medidas de control de volumen indicadas por el LTCP, conforme a la orden de la Ley de Agua Limpia señalada anteriormente, son suficientes para satisfacer las necesidades de una limpieza eventual de Superfund del sitio. El plan de limpieza preferido por la EPA para este aspecto discreto del sitio consiste en No Más Medidas, donde, en este caso, no tomar más medidas significa no actuar más allá de la implementación prevista del LTCP, conforme a la orden de la Lev de Agua Limpia mencionada anteriormente. Durante el periodo de comentarios del público, la EPA sostendrá dos reuniones públicas en la Ciudad de Nueva York a fin de informar al público del plan de limpieza preferido por la EPA y para recibir comentarios del público sobre el plan preferido y otras opciones que fueron consideradas. Las reuniones públicas se llevarán a cabo el 9 de diciembre a las 6:30 p.m. en Sunnyside Community Services, 43-31 39th Street en Queens, Nueva York y el 11 de diciembre a las 6:30 p.m. en P.S. 110, 124 Monitor Street en Brooklyn, Nueva York. El Plan propuesto está disponible electrónicamente en https://www.epa.gov/superfund/ newtowncreek o llamando a Natalie Loney, coordinadora de participación comu-nitaria de la EPA, llamando al (212) 637-3639 y pidiendo un ejemplar por correo Pueden enviarse comentarios por escrito sobre el Plan propuesto, con franqueo postal que no sea posterior al término de la jornada laboral del 23 de diciembre de 2019, o por correo electrónico a schmidt.mark@epa.gov o por correo postal a Mark Schmidt, US EPA, 290 Broadway, 18th Floor, New York, NY 10007-1866. El archivo del registro administrativo que contiene los documentos utilizados o que sirvieron de base para desarrollar las alternativas y el plan de limpieza preferido está disponible para el público en www.epa.gov/superfund/newtown-creek o en el siguiente depósito de información: EPA - Region 2, Superfund Records Center, 290 Broadway, 18th Floor, New York, NY 10007-1866. Para obtener más

información, comuníquese con Natalie Loney llamando al (212) 637-3639 o por 971-78153-1

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# 烏大使館

# 鳥國7月已知軍援被扣 印為交換說不攻自破

本報訊

國防部與國務院官員 在20日晚的彈劾調查聽

證會上證實,烏克蘭在7月25日,也就 是總統特朗普與烏克蘭總統通電話當 天,已知軍事援助被扣。這項供詞也 推翻了白宮至今堅稱不存在利益交換 的説法。

合美聯社、CNN及NBC報道,助理副國防 部長庫珀(Laura Cooper)及國務院國務次 卿黑爾(David Hale)20日傍晚出席第二場公開聽 證會時,談到了烏方與華府之間的通訊往來。 負責俄羅斯、烏克蘭和歐亞大陸事務的庫珀表 示,烏克蘭大使館早在7月25日便一直追問軍事 援助被扣的事宜,當日並三次聯繫國防部人員

根據證供,首先是下午2時31分,五角大 夏收到國務院發出的電郵,當中提到烏克蘭大 使館和眾議院外交事務委員會正查詢軍援的問 題;到了下午4時25分,部門再收到國務院電 郵,內容表明「黑爾知道援助凍結。烏克蘭也知 道」; 庫珀並表示, 她的一名幕僚之後收到烏克 蘭大使館聯絡,也是詢問安全援助的最新情況。

在盤問期間,眾院情報委員會主席謝安 達追問,鳥克蘭會否只是例行了解援助進展, 庫珀回應説,按她的經驗,鳥國政府當時問到 了具體事項,已經不僅僅是一般查詢。她又表 示,自己從未和總統特朗普談過烏克蘭軍援被 扣的事,但聽説因為特朗普擔心烏克蘭貪腐而



■助理副國防部長庫珀(右)及國務次卿黑爾(左)出席20日第二場彈劾調查公開聽證會。

美聯社

擱置援助。

庫珀同時強調,這筆軍援對烏克蘭非常重 要,印象中根據法律,款項必須在9月30日前到 位。分析指,庫珀的供詞暗示,特朗普政府未 有遵循法律機制扣起對鳥援助,而且也改寫了 烏克蘭政府知情的時間表,大大削弱白宮及共 和黨一直以來的主要論點,也就是7月25日通電 話時,鳥克蘭政府不知道援助被扣,因此總統 特朗普不可能以此敲詐對方。

至於國務院次卿黑爾作證時沒有開場 發言。盤問期間共和黨議員特克利夫(John Ratcliffe)嘗試將凍結軍事援助正常化,指美國近 期也扣起了對巴基斯坦和黎巴嫩等其他國家的 援助,詢問黑爾此舉是否正常。黑爾則表示, 扣起外國援助的事雖然偶會發生,但性質並不 能視為「正常」,巴基斯坦之所以援助被拒,是 因為其政策招致華府不滿,當地政府也協助部

分與美國為敵的勢力。

特朗普後來又在推特上説,桑蘭德的證

容,同樣是説自己什麼也不要,沒有交換條件。 特朗普還與桑蘭德拉開距離,稱桑蘭德開 始時支持其他總統候選人,「我對他不是很了 解,我也沒有和他談多少話,他看上去是個好 人,但我對他不太了解。」尚在作證的桑蘭德得

知特朗普説與自己不熟後,當場表示「無所謂」。

詞已證明自己清白,「彈劾政治獵巫現在結束

了」。他又復述了自己7月與桑蘭德通電話的內

白宮發言人格里沙姆(Stephanie Grisham) 也發表聲明稱,「桑蘭德的聲明清楚表明,在 他與總統特朗普打的幾個簡短電話中,總統明 確表示他對烏克蘭『什麼也不要』, 並重複説 『沒有交換條件』。對烏克蘭的援助發出了,沒 有開展調查,特朗普總統和澤連斯基總統也舉 行了會談。民主黨人在繼續捕風捉影。」

陸祝明編譯

# 特朗普復述與桑蘭德通話 連説兩次| 什麼也不要.

總統特朗普20日回應駐歐盟大使桑蘭德作 證時稱,自己在電話中對桑蘭德説的最後的話 是自己「什麼也不要」。



■總統特朗普離開白宮時回應駐歐盟大使 桑德蘭的作供,強調自己沒有向烏克蘭提 出任何要求。 美聯社

綜合英國《每日郵報》和NBC報道,特朗普 當天對記者表示,桑蘭德曾在9月的一次電話中 問他「你要什麼?你要什麼?我們聽到各種説 法」。「現在就是我對他問的話的回應,準備好 了嗎?攝像機啟動了嗎?『我什麼都不要』, 這 就是我對烏克蘭的要求。這就是我説的,『我什 麼也不要』,我説了兩遍」。

特朗普當時正準備前往德州參觀蘋果公司 在當地的一家工廠,他照著用黑色粗字筆手寫 的要點,對記者讀出他和桑蘭德當時通電話的 內容。特朗普是從白宮的住處而不是橢圓辦公 室離開。一位官員透露,他收看了上午9時開始 的桑蘭德聽證會的大部分。

特朗普將同樣的敘述前後向記者講述了三 遍,語調變得越來越憤怒,「我對桑蘭德大使 説,『我什麼也不要,我什麼也不要,我不要交 換條件,告訴澤連斯基統,做正確的事』。|

曾負責克林頓彈劾案的前檢察官斯塔爾 (Ken Starr)表示,駐歐盟大使桑蘭德的證詞如 同「震撼彈」,將是壓垮總統特朗普的最後一根稻 草,肯定眾院會以此起草彈劾文件,並預料參院

會像尼克遜彈劾案般,施壓要求特朗普辭職。 英國《每日郵報》報道,斯塔爾20日接受霍士 新聞訪問時,談到公開聽證會的最新進展,考慮 到眾院情報委員會主席謝安達向記者表示,桑蘭 德的證詞已證明特朗普涉及「賄賂罪」, 構成了彈 劾條件,由此可見「大局已定」,眾院如果尚未擬 定彈劾文件,那麼接下來就會展開相關工作,但 需觀察共和黨會否參與起草。

斯塔爾指,特朗普為了自保,也許在與桑 蘭德通電話時表示「沒有利益交換」,但電話的錄 音模糊不清,聽證會只能採納桑蘭德對通話內容 的解讀,不過情況對特朗普來說並不樂觀,畢竟 除了凍結烏克蘭援助,行為如同索賄外,特朗普 還可能因為蔑視國會而面對另一項彈劾理據。

桑蘭德在聽證會上表示,國務院拒絕向他 提供文件,對此斯塔爾認為這點是關鍵指控,而 且桑蘭德在提及特朗普團隊阻撓他作證時表現得 「相當不滿,接近激動」,等如揭露特朗普妨礙司 法。

國會1998年彈劾克林頓時,正是由斯塔爾擔

任獨立檢察官,他提出的調查報告也是導政克林 頓遭彈劾的關鍵。對於這次局面,他猜測參院也 許借鑑尼克遜時代的作法,在彈劾表決前要求總

統請辭。 按照彈劾程序,起草彈劾文件的職責在於 眾院,表決是否罷免的職責在於參院。尼克遜當 年面對彈劾時,同屬共和黨的參議員陷入兩難, 贊成的話等於背叛黨友,但否決的話又違背民 意,無論哪項決定都會影響下屆國會選舉的連任 勝算,不如尼克遜請辭。但與尼克遜時代不同的 是,現在黨爭得程度比當年激烈得多,特朗普也 未必像尼克遜般願意考慮他人。

# 駐歐盟大使稱知情

所稱的,他曾與副總統彭斯就對烏克蘭軍事援 助與要烏克蘭發起調查之間關係進行對話的説 法,彭斯方面作出強力否認,稱這樣的對話「從

綜合美聯社及英國《每日郵報》報道,桑蘭 德20日在眾議院情報委員會的公開聽證會上作 出宣誓作證,稱他在9月1日會晤烏克蘭官員前 與副總統彭斯交談時,曾表達他對扣起軍事援 助與調查問題掛鉤做法的關注。

對於桑蘭德這一説法,彭斯方面立即作出 回應。彭斯的幕僚長肖特(Marc Short)發表措 辭謹慎的聲明,否認彭斯曾與桑蘭德談及「調查 拜登父子、(拜登兒子亨特擔任董事的)烏克蘭 私營天然氣公司Burisma、及根據潛在的調查有 條件發放對烏軍事援助」的有關事宜。

肖特續説,桑蘭德9月1日去波蘭的途中從 未單獨與彭斯在一起。肖特指出:「桑蘭德大使 憶述的這個討論從未發生過。」

在彭斯的否認聲明發表後,民主黨人追 問桑蘭德。桑蘭德表示,他從未暗示他與彭斯 是一對一單獨會面。桑蘭德在較早時作證時表 示,當他告訴彭斯他的擔心時,彭斯並沒有表 示驚訝。桑蘭德表示,他想不起彭斯的「任何具 體回應一。

彭斯的助手之前堅稱,彭斯並不知道據稱 力推烏克蘭總統澤連斯基發表聲明宣布進行那 些調查的做法。彭斯也曾表示,他9月在華沙 與澤連斯基會晤時,儘管曾討論美國的軍事援 助,但也沒有類似推動行動。

彭斯的新聞秘書沃爾德曼表示,彭斯也不 知道桑蘭德報告的、在彭斯-澤連斯基會晤後他 與澤連斯基一名高級助手「有關扣起軍事援助 的簡短對話」。桑蘭德表示,他曾告訴澤連斯 基的高級助理雅馬克(Andriy Yermak),「在烏 克蘭作出我們多周來一直討論的有關反貪腐的 公開聲明前,恢復美國的援助可能不會發生」。

# 擬向舉報人問話

據報道,聯邦調查局(FBI)現在想向通鳥門 的匿名舉報人問話。正是這名舉報人爆出總統 特朗普7月25日與烏克蘭總統澤連斯基的通話, 導致眾議院民主黨人發起對特朗普的彈劾調查。

綜合《華爾街日報》及英國《每日郵報》報 道,知情人士説,FBI似乎謀求這名舉報人在一 個現正處於初步階段的調查合作,FBI華盛頓辦 事處於10月接觸舉報人的律師,計劃正式與他 交談,但並沒有解釋這樣做的理由及問話的內 容,並稱是次問話是「禮貌性要求」,而非強制

據報FBI暗示,舉報人本人並非是他們調查 的對象。據悉目前還未訂出問話的計劃。而FBI 也拒絕置評。代表這名舉報人的律師曾提出書 面回答國會調查員的問題,但就以身分洩露恐 怕會危及個人安全的擔心為由,拒絕共和黨人 要他親自出庭作證的要求。民主黨人也指共和 黨人要獲得舉報人詳情的要求有潛在的危險性。

之前有報道稱,代表舉報人的律師團隊已 收到多個死亡威脅,並導致執法部門的至少-次調查。雖然各大傳媒機構還未報道舉報人的 身分,但部分保守網站及共和黨議員已經在流 傳他們懷疑是舉報人的名字。知情人士透露, 舉報人是中情局(CIA)的一名男性分析員。他 所舉報的特朗普與烏克蘭總統的通話,其實他 當時並不在場,只是從旁人處聽説的二手資料。

司法部證實,他們在9月份仔細檢查了該名 舉報人的投訴後鑑定,總統特朗普要求烏克蘭 總統澤連斯基調查天然氣公司Burisma的做法並 沒有違反競選財務法,從而認為不需要採取進 一步行動。但司法部並沒有核查是否有其他違 法的更廣泛問題。

現在FBI對這名舉報人的興趣暗示,FBI可 能要從其他方面看待這個投訴,以及投訴是否 會引發除了競選財務問題外的其他法律關注。

知情人士説,FBI中有人認為,司法部此舉 是一個黨派決定,以避免連帶引發對總統特朗 普的調查,因而有人想追查下去,但有鑑於通 俄門調查的前車之鑑,FBI現在這個問題上也是 小心翼翼。 鄧燕文編譯



手了遞員 WAN 先生膝關節疼痛劇烈,長期派送工作導致軟骨退化嚴重,影響工作。在服用中科骨痛靈進行輔助治 療後,膝關節疼痛問題得到顯著改善,重新回到工作。

中科骨痛靈紐約用家分享:各位僑胞,如果你在唐人街補過輪胎, ·定認識我,因為腰患,而結業,現在郵局工作,五年前右膝劇痛,醫生 説要換人工關節,但要65歲後才做,我那時才55歲,要等十年,這五年 嘗盡痛苦,每天跛著行,每晚痛醒,食過很多藥物,打骨膠,針灸,全部 無效,直到服用中科骨痛靈,一星期痛楚明顯減輕,服完一樽,已可安睡, 服完三樽,只兩個半月,行動自如,久違了的踢腿、屈膝深蹲、爬樓梯輕 鬆做到,我的同事全部見證,各位同胞,如有相同遭遇,不要遲疑,立即 服用中科骨痛靈,早服用早解除痛楚,多謝分享我的經歷。



◆ 本分 中科健康國際(紐約)有限公司 www.uszhongke.com Renaissance Tower, 136-33 37th Ave, Suite 2B1 Flushing, NY11354



## 環保署邀請公眾對清理紐約州紐約市Newtown Creek 超級基金址計劃建議置評

在2019年11月21日,美國環保署(EPA)發出一個處理Newtown Creek超級基金址可操作單位2之計劃建議。計劃 建議包括一個30天的公眾評論期,用以識別環保署清理計劃之選擇和環保署考慮的其他清理選項。該評論期由2019 年11月21日起,至2019年12月31日止。

整體來說,Newtown Creek址是根據全面的環境回應、補償和責任法(CERCLA,亦稱為超級基金法)予以處理。 此外,根據清潔水法的規定,受到紐約州環境保護部(NYSDEC)指令紐約市環境保護部為Newtown Creek實施一 個聯合污水溢流(CSO)長期控制計劃(LTCP)。長期控制計劃已經NYSDEC批准,並包括建造一條儲存隧道, 以減少CSO排到Newtown Creek的量,俾達到符合聯邦CSO控制政策和相關指導的特定水體水質標準。地點之可操 作單位2根據上述清潔水法案之命令所訂之量控制措施,是否足夠符合一個最後超級基金清理地點之需要作出評估。

環保署對此地點之清理計劃選擇,並未包括進一步行動,因而在此情況下,無進一步行動意指除根據上述之清潔水 命令預期實施LTCP外,將別無行動。

在公眾評論期內,環保署將在紐約市舉行兩個公眾會議,向公眾説明環保署選擇之清理計劃,並接受公眾對選擇計 劃和其他考慮選項之評論。公眾會議將於12月9 日下午6:30在Sunnyside Community Services, 43-31 39th Street, Queens, New York和在12月11日下午6:30在P.S. 110, 124 Monitor Street, Brooklyn, New York舉行。

計劃建議,可上網https://www.epa.gov/superfund/newtown-creek查看,或致電環保署的社區參與統籌Natalie Loney, 電話(212) 637-3639要求郵寄一份副本。

對計劃建議如有書面評論,可於2019年12月23日工作天結束之前寄到,以郵戳為準,可以用電郵發到 schmidt.mark@epa.gov或郵寄到下址:Mark Schmidt, US EPA, 290 Broadway, 18th Floor, New York, NY 10007-1866。管理紀錄檔案包括制定方案和選擇清理計劃所用或所依賴之文件,公眾可上網 www.epa.gov/superfund/newtown-creek查看,或於以下的資料庫查看:EPA - Region 2, Superfund Records Center, 290 Broadway, 18th Floor, New York, NY 10007-1866 o

查詢詳情,請致電 Natalie Loney,電話 (212) 637-3639 或電郵 loney.natalie@epa.gov.

N19K20CK

## ATTACHMENT C

## WRITTEN PUBLIC COMMENTS

From: Willis Elkins < welkins@newtowncreekalliance.org>

Sent: Thursday, February 27, 2020 1:11 PM

**To:** Schmidt, Mark

Cc: Stephen Levin; Antonio Reynoso; Jimmy Van Bramer; Robert Holden; Joe Lentol;

davilam@assembly.state.ny.us; Cathy Nolan; salazar@nysenate.gov; gianaris@nysenate.gov; Brooklyn

Borough President Eric Adams; slee@queensbp.org; Daniel Wiley; Mary Odomirok

**Subject:** Comments on OU-2 Proposed Plan for Newtown Creek

**Attachments:** EPA OU-2 CAG Comments Final.pdf

Dear Mr. Schmidt and EPA team;

Please find attached the formal comments on behalf of the Newtown Creek Community Advisory Group (CAG).

As always, we look forward to continued engagement and incorporation of the community concerns with the Superfund investigation and cleanup of Newtown Creek.

////
Willis Elkins
Executive Director
Newtown Creek Alliance
347-504-6701

## **Newtown Creek Community Advisory Group (CAG)**

February 27th, 2020

## Via email to schmidt.mark@epa.gov

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY 10007

## Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

The Newtown Creek Community Advisory Group (CAG) respectfully submits the following comments on the Environmental Protection Agency's (EPA) proposed remedy to address Operable Unit 2 (OU-2) of the Newtown Creek Superfund site (Proposed Plan), related to future discharges of chemicals of potential concern (COPCs) from Combined Sewer Overflows (CSOs) from potentially responsible party New York City Department of Environmental Protection (DEP). We are deeply concerned that the Proposed Plan would take off the table any potential reduction of CSO pollution sources, given their ongoing destruction of our ecosystems and the ongoing dangers CSOs pose to those that live or work near the Creek or seek to utilize the waterway for recreational and/or educational purposes. Furthermore, we are disappointed with EPA that the first major decision in the Superfund remediation of Newtown Creek is to essentially let a polluter off the hook.

We believe finalizing this Proposed Plan would call into question EPA's commitment to cleaning up Newtown Creek and set a poor precedent for future Superfund decisions. Our waterway has been continuously poisoned for over 150 years and the communities surrounding it have been cut off from this once natural resource. Despite that, hundreds of human-powered boaters now take to the water each year and dozens of businesses utilize their shoreline access. Besides the human population, wildlife is showing its desire to return to the once decimated waters of the Creek. You can find blue crabs and ribbed mussels along the shores, numerous fish species swimming in its waters, and waterfowl prevalent year round. Community organizations and city agencies are working to bring back wetland plants to abandoned bulkheads and eroding shorelines. Allowing ongoing pollution to continue is unjust for us and unacceptable for EPA. Our detailed comments are below.

# 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.

The CAG takes great issue with how the Proposed Plan attempts to downplay the severity of CSO pollution through the use of data, charts and narrative comparing CSO to other significant pollution sources such as Stormwater, Treated Discharges and East River Surface Water inputs. We believe that EPA's responsibility, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), is to protect human and ecological health by eliminating/mitigating known pollution sources, period. It is irresponsible for EPA to avoid CSO reduction simply because it may not be the most significant ongoing pollution source. The data within the Proposed Plan supports a very basic understanding of urban waterbodies: reducing CSO volume means reducing the amount of COPCs entering the waterway. The modeling used in OU-2 clearly shows that reductions of CSO volume directly correlate with reductions in CERCLA chemical loading. This is highlighted in Figures 4-a through 4-d with a declining trend between the 0% capture ('No Action'), 61% capture ('Nor Further Action'), and 100% capture (implied at zero kg, but not shown) scenarios. Because additional reduction beyond the arbitrarily set 61% figure will result in absolute reduction of COPCs entering Newtown Creek via CSO, we believe the EPA has the responsibility to pursue further action and prevent this ongoing pollution source.

# 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.

The other significant pollution sources referenced in OU-2 (which serve to downplay the severity of CSO input) have yet to be properly evaluated with cleanup goals in mind to reduce risks to human and ecological health. Therefore it is illogical to compare CSOs to other pollution sources with no criteria yet established to assess their impact or how each source may be reduced, as the OU1 Record of Decision has not yet been finalized. Additionally, while data referenced in OU-2 utilizes present day and anticipated CSO levels via skewed modeling (see Comment 7 below) and anticipated LTCP projects, the same favorable consideration is not given in evaluating the other pollution sources.

For instance, Figure 4-a shows Comparison of total polycyclic aromatic hydrocarbons (TPAH17) loads from CSOs and other evaluated inputs to the study area, with the concentrations from 'Treated Discharges' at approximately six times higher than the second most significant source, 'CSO - No Action.' Not only does this chart fail to consider the possibility of future reductions to TPAH17 levels across all sources, but we believe the 'Treated Discharges' data used is largely skewed by a single Con Edison outfall that has since been reduced under direction from EPA and New York State Department of Environmental Conservation (DEC). Because we believe these comparisons to be misleading, inaccurate, and not based on actual evaluations of impact or target cleanup goals, they should be omitted from the OU-2 proposed plan.

<sup>&</sup>lt;sup>1</sup> See EPA, Newtown Creek Superfund Site Proposed Plan for Operable Unit 2, at Figures 4-a, 4-b, 4-c, & 4-d (Nov. 2019), available at <a href="https://semspub.epa.gov/work/02/562695.pdf">https://semspub.epa.gov/work/02/562695.pdf</a>.

## 3. It is Premature to Take CSO Reduction Off The Table.

We believe the EPA should not act on OU-2 until it sets a clean-up goal and finalizes a remedy for OU-1, or it becomes clear in the interim that additional CSO capture will be required beyond that required in the LTCP. As it stands, the City is currently under a Consent Order to complete the requirements of the LTCP. Although that Consent Order is subject to future renegotiation and decades of other intervening changing circumstances, the City must, for now, move forward with the planning, designing, procurement, and construction of sewage capture infrastructure. As the City's actions will not change based on the Proposed Plan, there is no compelling reason for EPA to finalize it at this time. The Proposed Plan will merely take further CSO reduction "off the table." That should not be done without setting a remedial goal for COPCs. Remedial goals set for OU-1 should be based on risk factors for both humans and other sensitive receptors, such as benthic organisms. Once those goals are set, the OU-2 Proposed Plan can be assessed against them. To the extent that the Proposed Plan may allay the City's concerns about additional future actions being required, that is not a sufficient reason to make a determination before the OU-1 remedy. Until those other ongoing pollution sources are compared to CSO discharges, EPA should not take potential further CSO reduction "off the table."

The failure of the EPA, DEC and DEP to effectively coordinate the timing of Superfund and LTCP processes has left the community in an unfair predicament wherein a full consideration and mitigation of CSO impacts is being sacrificed in favor of convenience. Therefore, we believe that design and advancement of the LTCP solutions can and should continue up to the point where a future and final determination of Superfund related CSO impacts under OU-1 would not significantly disrupt existing progress towards CSO reduction.

## 4. A 61% Reduction of COPCs from CSOs Is Insufficient.

Modeling conducted under the LTCP, and evaluated as part of the OU-2 Focused Feasibility Study, estimates that over 1.2 billion gallons of combined sewer overflow are discharged to Newtown Creek annually. The 'No Further Action' remedy proposed will result in a 61% reduction from today's levels, still leaving over 460 million gallons of CSO entering Newtown Creek per year. As Figures 4a, 4b, 4c and 4d of the Proposed Plan clearly show, this 61% is not sufficient for significantly reducing the annual loads of various chemicals to Newtown Creek via CSO. Whereas the New York City performed a "knee-of-the-curve" analysis to attempt to make the case for diminishing returns in regards to pathogen and dissolved oxygen levels to appease state DEC needs for the LTCP, there appears to be a direct linear correlation between volume and chemical loading. In other words, the curve of reduction of COPCs is linear, so any further reduction beyond 61% would be equally impactful. This raises the question as to why the EPA would accept a failing grade (61%) reduction as part of the OU-2 Proposed Plan. Adopting the 61% reduction from another regulatory scheme is arbitrary and meaningless for the purposes of

Superfund. While 100% may not be cost effective, no other feasible option between 61% and 100% was even evaluated. As there is a direct linear benefit of COPC loading reduction resulting from any additional decrease in CSO discharge,, EPA must assess reasonable alternatives between 61% and 100% capture, including alternate means of controlling CSOs, such as additional green infrastructure, capture, treatment, and diversion.

# 5. Superfund<sup>2</sup> Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.

CERCLA provides clear federal authority to "respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment." Additionally, the law authorizes "[I]ong-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening."

The Human Health Risk Assessment acknowledges the existing recreational uses along Newtown Creek, such as boating, fishing and swimming. There is also a threat to benthic macroinvertebrates from toxic sediments, as identified in the Baseline Ecological Risk Assessment. The failure to assess OU-2 in the context of these risk assessment would undermine the Superfund process. The growing interest among community members to further utilize the waterway and enjoy the benefits of a healthy ecosystem (as evidenced by increasing public access and boating opportunities) would be directly negated by ongoing contamination. The EPA should exercise its authority under Superfund to protect these uses and benthic habitat they depend on. At the very least, EPA must wait to assess the CSO remedy in the context of the sitewide Operable Unit 1 (OU-1) remedy to determine whether the threats from COPCs present in the CSO discharges are adequately addressed.

## 6. "No Further Action" Is an Action Requiring National Consistency Review.

It is inaccurate to label the proposed plan as "No Further Action." Instead it must be categorized as a proposed remedy and subject to National Consistency Review by the National Remedy Review Board (NRRB). In reality, the Proposed Plan, which is set to be a "final" remedy, is contingent upon and effectively requires an action by DEP that is expected to cost roughly \$1.65 billion. While the City's forthcoming action was initially devised in the context of Clean Water Act statutory requirements, it also serves to control a significant amount of COPCs by capturing and treating sewage and polluted stormwater runoff.

The DEP's forthcoming construction of new sewage capture infrastructure underlies the determinations that EPA makes regarding the sufficiency of the Proposed Plan to mitigate human health and environmental risks, the asserted lack of need for further sewage capture,

<sup>&</sup>lt;sup>2</sup> U.S. Envtl. Protection Agency, Superfund CERCLA Overview, https://www.epa.gov/superfund/superfund-cercla-overview (last accessed Jan 20, 2020). <sup>3</sup> *Id.* 

and the plans for ongoing monitoring and a potential track-back initiative. If the City were to subsequently renegotiate the requirements in its "Long-Term Control Plan" (LTCP) with the state Department of Environmental Conservation (DEC) to modify its proposed CSO capture infrastructure plans, EPA would have to reopen and reevaluate the OU-2 Proposed Plan. Therefore, the \$1.65 billion expenditure by the City is an essential part of the proposed remedy.

The false categorization of the OU-2 Proposed Plan as "no further action" would allow it to improperly avoid the normal procedural elements of remedy selection. Specifically, it would allow OU-2 to avoid National Consistency Review by the NRRB, which determines whether such plans are consistent with Superfund law, regulations and guidance.

The NRRB reviews all Superfund response decisions for which the proposed remedial action is in excess of \$50 million.<sup>4</sup> Despite EPA's insistence that the \$1.65 billion action being taken by the City pursuant to the LTCP has nothing to do with Superfund, in fact, the agency reviewed a real "No Action" plan, and determined that such a plan would not offer the same pollution reduction benefit as the \$1.65 billion remedy it selected. Because the EPA finds this significant amount of investment will optimize sewage pollution reduction, the NRRB should evaluate "the nature of the site, the risks posed by the site, regional and state/tribal opinions on proposed actions, the quality and reasonableness of the cost estimates, and any other relevant factors or program guidances" to ensure the Proposed Plan is consistent with applicable laws, regulations and guidance.

The EPA cannot opt out of this procedure, and it must be completed and made available *before* republication of the Proposed Plan for review and comment.<sup>6</sup> Therefore, the OU-2 Proposed Plan must be withdrawn and subjected to NRRB review before being reissued for public comment.

# 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.

The Newtown Creek LTCP, upon which the Proposed Plan is based, has a number of shortcomings, including self-serving modeling, failure to adequately account for increasing precipitation caused by climate change, inflated green infrastructure implementation figures, and likely underestimation of redevelopment once the OU-1 remedy is implemented.

<sup>&</sup>lt;sup>4</sup> Memorandum from Robin H. Richardson, Acting Director, Office of Superfund Remediation and Technology InnovationU.S. Envtl. Protection Agency, regarding National Remedy Review Board Criteria Revision and Operational Changes, OSWER Directive 9285.6-21, Sept. 4, 2014, *available at* https://semspub.epa.gov/work/HQ/176423.pdf.

<sup>&</sup>lt;sup>5</sup> Memorandum from Elliot P. Laws, Assistant Admin'r, Off. of Solid Waste & Emergency Response, U.S. Envtl. Protection Agency, Formation of National Superfund Remedy Review Board, at 2, Nov. 28, 1995, *available at* https://semspub.epa.gov/work/HQ/176405.pdf. <sup>6</sup> *Id.* 

New York City has a track record of skewing modeling results in its favor. For instance, DEP seems to have mixed year-long and seasonal sampling datasets to devise its LTCP to control pathogens and low dissolved-oxygen conditions in receiving waters resulting from CSO discharges. Without explanation, the City has also relied on separate one-year and ten-year models for the LTCP, depending on the pollutants it assessed; it is yet unclear why DEP used one year of rainfall data (2008) for its InfoWorks modeling assessment and ten years of rainfall data for the East River Tributaries Model assessment. While 2008 was selected as representing a typical year, the ten year record includes 2008, and the longer record would better capture long-term averages and trends. Given the previous attempts to create favorable data, questions arise about sampling and modeling for COPCs:

- What modeling dataset did the EPA use to inform the Proposed Plan?
- For what time period is the modeling applicable?
- Were models based solely on 23 samples?
- Were those samples representative of different times of day, different seasons, and different outfall locations (which drain separate sewersheds)?
- Are 23 samples from CSO outfalls sufficiently representative of CSO outfalls in all seasons?
- Did EPA oversee CSO Outfall sampling? How so?
- Did EPA perform its own CSO sampling or rely on a different CSO sampling protocol to devise the Gowanus Canal remedy? If so, why?
- Are the samples covering 96% of CSO discharges representative enough of all discharges to model local sediment deposition?

In addition to modeling anomalies, one of the most vital shortcomings of the LTCP and Proposed Plan lies in the fact that the baseline modeling in determining CSO volume ignores climate change. As it is based on 2008 rainfall data, the LTCP fails to incorporate the recommendations of the New York City Panel on Climate Change to account for the effects of increased precipitation, which have been repeatedly acknowledged by DEP, DEC, and EPA. Construction of the proposed sewage infrastructure pursuant to the LTCP is not expected to be complete until 2042, and its useful life will potentially extend over 100 years.

According to the New York City Panel on Climate Change ("NYPCC"), storms could grow significantly in frequency and intensity by 2050. "Mean annual precipitation increases projected by the [global climate models] are 4 to 11 percent by the 2050s and 5 to 13 percent by the 2080s." Therefore, the project will likely fail to achieve the 61% reduction goal as of its first day of operation (estimated 2042). Yet DEP continues to rely on backward-looking projections, using 2008 as a model year. DEP states in its October 10, 2019 response to comments on the Citywide LTCP:

<sup>&</sup>lt;sup>7</sup> N.Y. City Panel on Climate Change, 2015 Report Executive Summary (2015), http://onlinelibrary.wiley.com/doi/10.1111/nyas.2015.1336.issue-1/issuetoc.

[t]he typical rainfall year used for modeling is the 2008 JFK rainfall, which remains a good representation of current average rainfall conditions through 2019

(Response 1). But even if such a model continues to account for average rainfall through the past ten years, conditions are expected to grow significantly wetter. For example, 2008 saw only 46.3 inches, but 57.4 inches of precipitation fell at JFK airport in 2018.8 The City and EPA can rely on NYPCC data and expect these higher precipitation rates to become the norm, with both frequency and intensity of rainfall increasing.

Even using 2011 as the base year for the Proposed Plan model fails to account for future increases both when the LTCP is initially implemented and throughout the useful life of the sewage-capture infrastructure. EPA must reevaluate the effectiveness of the Proposed Plan to protect human and ecological health, given the increased precipitation and corresponding increase in CSO discharges over the next century.

Additionally, sea level could rise 8 to 30 inches by 2050, high enough as to inundate the low-lying wastewater infrastructure. For New York City,

[National Panel on Climate Change] (2015) projects a mid-range (25th–75th percentile) sea level rise of 11–21 in. (0.28–0.53 m) at the Battery by the 2050s. . . . High-end estimates (90th percentile) reach 30 in. (0.76 m).<sup>9</sup>

When relying on existing and future stormwater and sewage infrastructure, EPA must assess and model how sea level rise will affect the ability of wastewater treatment plants, CSO outfalls, and new proposed sewage capture tunnels to function properly.

While climate change is a certainty, predicting population change in New York City is difficult. The LTCP does include a predicted model of population growth, but it does not necessarily account for proposed rezonings, such as the ongoing proposal to rezone northern Brooklyn areas adjacent to the creek, in the neighborhoods of Greenpoint, East Williamsburg, and Bushwick.<sup>10</sup> As representatives of developers are currently attending CAG meetings, it is reasonably foreseeable that there will be pressure to construct residential houses once the remedy is underway, bringing greater populations and combined sewer volume to the Newtown Creek sewershed.

<sup>&</sup>lt;sup>8</sup> Nat'l Weather Serv., John F. Kennedy Airport, NY Historical Data, https://www.weather.gov/okx/KennedyHistorical (last accessed Nov. 27, 2019).

<sup>&</sup>lt;sup>9</sup> N.Y. City Panel on Climate Change, 2015 Report Executive Summary (2015), http://onlinelibrary.wiley.com/doi/10.1111/nyas.2015.1336.issue-1/issuetoc.

<sup>&</sup>lt;sup>10</sup> Paul Stremple, Newtown Creek's Brooklyn Waterfront Faces First Rezoning Changes in Nearly 60 Years, Brooklyn Eagle (Apr. 10, 2019),

https://brooklyneagle.com/articles/2019/04/10/newtown-creeks-brooklyn-waterfront-faces-first-zoning-changes-in-nearly-60-years/.

The models also depend on incorrect assumptions about implementation of green infrastructure. On page 10 of the OU-2 Focused Feasibility Study, EPA explains that conditions for determining the baseline CSO discharge of 1.16 billion gallons per year, which is less than the current 1.62 billion gallons per year, are calculated using increased future treatment capacity and reduced stormwater flow because of green infrastructure plans. The EPA should share with the CAG exactly how these figures were determined. As it stands, the City is very unlikely to meet its 2030 green infrastructure implementation goals. DEP is already far behind its green infrastructure targets and does not expect to achieve its 2030 milestones. City-wide, DEP has missed a previous milestone to manage the equivalent of 1,181 impervious acres (a 1.5% green infrastructure application rate) in 2015, and, as of 2019, it still has managed only 591 acres (a 0.75% green infrastructure application rate) in 2019. DEP is most likely going to miss its 2030 milestone, which is the equivalent of 7,873 managed acres (a 10% green infrastructure application rate). Given the slow start to the green infrastructure program in New York City, DEP should not incorporate these projects into its baseline projections for its analysis of CSO.

We believe that all proposed solutions for the clean-up of Newtown Creek must account for the various changes that climate change will bring to New York City, including sea level rise and precipitation increases. Therefore, we ask that the EPA provide the community with a new analysis that both accurately reflects both predicted local CSO volumes and COPC loadings (based on increases in annual rainfall and populations within the watershed) for the years 2050 and 2100, and what the new levels mean in regards to the clean-up and potential recontamination of Newtown Creek.

## 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.

We are very concerned that the only additional potential actions considered in the OU-2 Proposed Plan are monitoring, the implementation of a track-back program to "identify sources of elevated contaminant concentrations within the sewershed," and control actions such as "the placement of sediment traps and/or oil sorbent pads at the end of CSO discharge pipes and in-creek maintenance dredging to address potential accumulation of contaminated solids near the CSO discharges." We find both approaches to be ineffective, and unproven, band-aids that will achieve very little in the clean-up and elimination of chemical loading to Newtown Creek.

In regards to the track-back program, the Newtown Creek sewershed is approximately 4,642 acres in total. In some cases, there are single CSO pipes that drain entire neighborhoods where hundreds of thousands of people live, work, flush toilets, and potentially dump COPCs into catch basins. The concept of locating the sources of elevated chemical levels within a combined

<sup>&</sup>lt;sup>11</sup> N.Y. City Dep't of Envtl. Protection, 2018 Green Infrastructure Annual Report 2 (2019).

<sup>&</sup>lt;sup>12</sup> *Id*.

sewer system area so massive and complex is optimistic at best. Additionally, we do not understand the basic logic as to why and how this track-back plan is being considered.

Secondly, the FFS gives very limited information on how sediment traps, sorbent pads, or maintenance dredging would effectively reduce chemical loads to the Creek, or potentially work in conjunction with, or possibly disrupt, chosen remedies that are yet to be selected under OU-1. EPA needs to provide greater information on these programs to the CAG and ensure that they are consistent with what the community will be seeking in an ultimate Record of Decision.

# 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

On July 9th, 2015 the Contaminated Sediments Technical Advisory Group (CSTAG) presented formal recommendations to EPA Region 2 regarding Newtown Creek. Principle 1 in the letter argues to "Control Sources Early" and specifically mentions the impacts of CSOs in relation to CERCLA: "CSTAG recommends that the Region work with the appropriate regulatory authorities to develop a plan to eliminate any unpermitted, piped discharges, minimize impacts from CSOs, and address groundwater discharges that may recontaminate the Creek." EPA should heed the advice of CSTAG and fully consider options to 'minimize impacts' from CSO and not attempt to write-off the documented chemical loading and recontamination that CSO will continually bring to Newtown Creek.

In its Record of Decision for the Gowanus Canal, a nearby waterway similarly affected by heavy industrial use and ongoing CSOs, EPA required the DEP to construct two sewage capture tanks totalling 12 million gallons in volume in order to prevent future risks to benthic habitat. While Newtown Creek is a larger waterbody with different conditions from Gowanus Canal, the methodology for assessing the potential future risk of recontamination from ongoing CSO discharges should be the same or nearly the same for the two waterbodies. If not, EPA must provide an articulable reason for the differing methodologies. The different superfund remedies for waterbodies only 3.5 miles apart from each other are another reason the proposal must be subject to National Consistency Review by the NRRB. The fact that DEC and the City have previously agreed to a sewage capture plan in Newtown Creek is irrelevant to the methodologies to analyze risk in the context of Superfund.

\_\_\_\_\_

The decisions set forward by EPA under OU-2 will have significant impact on the health of the ecosystems and communities that live in and near Newtown Creek. We look forward to working with EPA to implement meaningful solutions that properly address the ongoing and future impacts of CSO, as well as all other contamination sources.

<sup>&</sup>lt;sup>13</sup> Contaminated Sediments Technical Advisory Group, "CSTAG Recommendations on the Newtown Creek Contaminated Sediment Superfund Site " July 9th, 2015.

## Sincerely,

## Newtown Creek Community Advisory Group:

Leah Archibald\* Tony Argento Erik Baard

Patterson Beckwith

Tanya Bley
Lisa Bloodgood\*
Michael Devigne
Mike Dulong\*
Willis Elkins\*\*
Katie Ellman
Quincy Ely-Cate\*
Stephen Fabian
Tom Grech

Michael Haskell Michael Heimbinder

Ted Gruber

Brett Herman Laura Hofmann Michael Hofmann

Christine Holowacz\*

Ed Kelly\*

\*Steering Committee Member

CC:

NYC Council Member Stephen T. Levin

NYC Council Member Antonio Reynoso

NYC Council Member Jimmy Van Bramer

NYC Council Member Robert Holden

NY State Assembly Member Joseph Lentol

NY State Assembly Member Mariza Davila

NY State Assembly Member Cathy Nolan

NY State Senator Julia Salazar

NY State Senator Michael Gianaris

Brooklyn Borough President Eric Adams

Acting Queens Borough President Sharon Lee

US Congress Member Carolyn Maloney

US Congress Member Nydia Velazquez

Bradley Kerr Louis Kleinman Ryan Kuonen\*\* Steve Lang Michael Leete Rich Mazur\*

**Dorothy Morehead** 

Jan Mun

Johanna Phelps
Paul Pullo\*
Lori Raphael
Chrissy Remein
Mike Schade\*
Jason Sinapoli
Dewey Thompson
Teresa Toro
Mitch Waxman\*

Kate Zidar Marina Zurkow

Charles Yu

<sup>\*\*</sup>Co-Chair

From: Casey Chamberlain <casey@hunterspointparks.org>

Sent: Tuesday, February 18, 2020 2:13 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on EPA OU-2 Proposed Plan for Newtown Creek

Attachments: EPA OU-2 Comments HPPC.pdf

## Good afternoon,

Attached please find comments on the Newtown Creek Superfund Site OU-2 proposed plan. Thank you for your consideration.

Best,

Casey Chamberlain Hunters Point Parks Conservancy

--

Casey Chamberlain
Manager of Programming and Development
Hunters Point Parks Conservancy
www.hunterspointparks.org
E: casey@hunterspointparks.org

M: 585-727-4670

Support us by <u>donating</u> or shopping on <u>Amazon Smile</u> Stay connected & <u>sign-up</u> for our newsletter Follow us on <u>Facebook</u> / <u>Twitter</u> / <u>Instagram</u> Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

## Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Casey Chamberlain and I am submitting comments on behalf of the Hunters Point Parks Conservancy. Our organization opposes the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek.

We are deeply concerned that the Proposed Plan would take off the table any potential reduction of CSO pollution sources, given their ongoing destruction of our ecosystems and the ongoing dangers CSOs pose to those that live or work near the Creek or seek to utilize the waterway for recreational and/or educational purposes. Our organization works in Hunter's Point South Park which has a boat launch onto Newtown Creek - the first public access point to the Creek in Queens. This park and boat launch, plus new developments planned on the Queens side of the creek are meant to bring more people to the Creek to recreate and learn about this incredible waterway.

Newtown Creek has been continuously poisoned for over 150 years and the communities surrounding it have been cut off from this once natural resource. However, they are now rediscovering this vital waterway - hundreds of human-powered boaters now take to the water each year and dozens of businesses utilize their shoreline access. Besides the human population, wildlife is showing its desire to return to the once decimated waters of the Creek. You can find blue crabs and ribbed mussels along the shores, numerous fish species swimming in its waters, and waterfowl prevalent year round. Community organizations and city agencies are working to bring back wetland plants to abandoned bulkheads and eroding shorelines.

The proposed plan seems remarkably short-sighted, dangerous, and counter to the mission of the EPA. We believe finalizing this Proposed Plan would call into question EPA's commitment to cleaning up Newtown Creek and set a poor precedent for future Superfund decisions, especially as the waterway is only gaining in popularity for recreational and educational uses.

In regards to the details of the Proposed Plan, we echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. We believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Casey Chamberlain
Hunters Point Parks Conservancy
Long Island City, Queens

From: Luke Grochowski < lukegrochowski325ci@gmail.com>

Sent: Tuesday, February 18, 2020 3:01 PM

**To:** info@newtowncreekalliance.org; Schmidt, Mark

**Subject:** Stop sewage overflow!

## 2/18/2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

## Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Luke Gorchowski and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I am a resident of greenpoint and NYC, I think its about time this problem finally addressed with a smart solution. I work and live here and the fact that there has never been any progress made to avoid raw sewage overflow is a shame. This creek has been environmentally ravaged for decades and its important to clean it up.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
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- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Luke Grochowski

From: Jane Lea <jane.laros.lea@gmail.com>
Sent: Tuesday, February 18, 2020 8:32 PM

**To:** Schmidt, Mark

**Cc:** info@newtoncreekalliance.org

**Subject:** EPA OU-2

## Feb 18

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

## Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Jane Lea* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I live, work, and am raising kids in Greenpoint. In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
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- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments. Sincerely.

Jane Lea

Sent from my iPhone

From: Morgan Ratner <mratner3193@gmail.com>
Sent: Wednesday, February 19, 2020 3:26 PM

**To:** Schmidt, Mark

**Subject:** Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

## Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Morgan Ratner and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I am an advocate for clean waterways, which are valuable natural resources and deeply important.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
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- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Morgan Ratner From: Tam Sackman <tamsackman@gmail.com>
Sent: Wednesday, February 19, 2020 5:19 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

## February 19, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

## Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Tam Sackman and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. As a resident of East Williamsburg, I am deeply concerned about the impact the pollution of Newtown Creek already has on the environment and health of my community. My primary mode of transportation is walking, and I spend a lot of time crossing the creek. I am concerned about my own wellbeing and those who take a similar path.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
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- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Tam Sackman East Williamsburg From: lan Moritz <moritz.ian@gmail.com>
Sent: Wednesday, February 19, 2020 6:07 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Newton Creek

**Attachments:** Public Template EPA OU-2 Comments.pdf

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Ian Moritz* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
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- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,	
lan Moritz	
lan Moritz	
(908) 227-4582	

## February 19, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

## Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Ian Moritz* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Ian Moritz

From: stu sherman <stu.sherman@gmail.com>
Sent: Wednesday, February 19, 2020 6:28 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

February 19, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailtoschmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

## Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Stuart Sherman and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I am a Greenpoint resident and I provide free legal services at hospitals and health clinics in the community to low income clients. Through my work I have seen the harm environmental toxins have on my neighbors, and how this disproportionally impacts those who don't have the money or resources to protect themselves or move. I live near the east river, several blocks south of Newton creek in a rent stabilized apartment. I worry about the regular pollutants that are discharged into the water through CSO and their impact on my family.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,
Stuart Sherman

From: William Vega <william.vega206@gmail.com>
Sent: Wednesday, February 19, 2020 7:42 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

### February 19, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is William Vega, President of North Brooklyn Progressive Democrats. I am opposed the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. *Having lived in the neighborhood for the past 13 years I have come to appreciate all that Newton Creek has to offer for recreation and education to neighborhood constituents, as well as it's need to be cleaned up and preserved as a major part of our overall eco-system in North Brooklyn.* 

Regarding the details of the Proposed Plan, I support many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA needs to take responsibility and use its authority to address all pollution sources, including CSO discharges, especially the 3 current oil spills going into Newton Creek as identified in The Brooklyn Daily Eagle on May 20, 2019.
- 2. It is illogical to compare CSO discharges to "other pollution sources" yet to be evaluated.
- 3. Knowing the history of how Newton Creek has essentially been used for dumping by various manufacturing sites it is premature to take CSO reduction off the table.
- 4. Also, 61% reduction of COPCs from CSOs is insufficient given high rate of cancer that has been diagnosed in Greenpoint.
- 5. Superfund grants EPA the authority to impose CSO reduction beyond the Clean Water Act requirements.
- 6. "No Further Action" requires a national consistency review.
- 7. The City's Pollution Models include unrealistic assumptions that underestimate future CSO discharges.
- 8. The solution to pollution Is preventing overflow, not track-back, dredging or absorbent pads.
- 9. EPA should be consistent with Gowanus Methodology and CSTAG recommendations.

Thank you for your time and consideration of these comments. I hope that as government employees and as a project manager for the EPA you will act with integrity to protect the community from harm.

Sincerely, William Vega, President

North Brooklyn Progressive Democrats

**From:** Andrew Kapochunas <kapochunas@gmail.com>

**Sent:** Wednesday, February 19, 2020 10:36 PM

**To:** Schmidt, Mark

**Subject:** Comments on EPA's Proposed Plan for Newtown Creek

**Attachments:** 021920 Letter to EPA.jpg

Dear Mark:

Please consider my comments in the attached letter.

Thank you.

Andrew Kapochunas Hunters Point, Long Island City February 19, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Andrew Kapochunas and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. My family's first home in the U.S. was in Blissville, in 1949, where our sponsoring cousins lived, and I still remember the smell I unfortunately associate with America. We later moved to Maspeth, not far from Maspeth Creek, because it was a Polish-Lithuanian neighborhood, not because my parents thought it was an improvement in atmosphere. I couldn't wait to leave the area, and applied, and was accepted by, Stuyvesant High School in Manhattan. I later graduated from CCNY, and soon moved to the Bronx – a real improvement. Soon after marrying, my wife and I bought a house in Sunnyside Gardens – finally, a place where I thought we could raise a family. Jobs took me out of state, but in 2018 my wife and I came back, to Long Island City, in the Hunters Point area, where the view of Manhattan is superb, and the park amazing. I soon joined the Newtown Creek Alliance, because I thought the people living and working further up the creek deserved to live and work in a decent area, not in an area where the EPA thinks it's OK for people to be subjected to the stench of raw sewage outflows every time it more than drizzles.

I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of your Proposed Plan. I believe that:

- 1. EPA has a responsibility to address all pollution Sources, including CSO discharges.
- 2. It makes no sense to compare CSO discharges to pollution sources not yet evaluated.
- 3. It's premature to take CSO reduction off the table.
- 4. A 61% reduction of COPCs from CSOs is unacceptable to me, my wife, and to anyone living or working near Newtown Creek.
- 5. Superfund status grants EPA the authority to impose CSO reduction beyond Clean Water Act requirements.
- 6. "No Further Action" requires National Consistency Review.
- 7. The city's pollution models underestimate future CSO discharges hasn't EPA noticed the building boom along the creek?
- 8. The solution to pollution is preventing overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA should be consistent with Gowanus methodology and CSTAG recommendations.

Thank you for considering these comments.

Andrew Kapochunas

214 50<sup>th</sup> Ave.

Sincerely,

Long Island City, 11101

Member, Newtown Creek Alliance

From: Sandy Nurse <sandramnurse@gmail.com>
Sent: Wednesday, February 19, 2020 10:58 PM

**To:** Schmidt, Mark

**Subject:** Fwd: Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

**Attachments:** Sandy Nurse Comments on EPA OU-2 (1).pdf

Good evening,

Please find attached my comment on the proposed plan for Newtown Creek Superfund Site Operable Unit 2.

Thank you,

Sandy Nurse

# February 19th, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Sandy Nurse and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I am the Founder and former Executive Director of BK ROT, a youth green jobs program in Bushwick, Brooklyn. I am also a candidate for City Council in District 37. The Newtown Creek requires consistent support in being fully remediated. The waterway plays an important role in NYC's ecosystem and the constant Combined Sewage Overflow is an ongoing health hazard that is past time to be addressed.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Sandy Nurse

Founder of BK ROT

Candidate for City Council District 37

From: Andres Pascual <apascual5227@gmail.com>
Sent: Thursday, February 20, 2020 10:34 AM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** OU-2 Proposed Plan for Newtown Creek

#### 02/20/2020

## Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Andres Pascual* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. *As a member of the Williamsburg / Greenpoint community for over 30 yeears, promises have been made over the years to cleanup Newtown Creek after many years of polluting it. The time is now to keep up those promises in order to improve the ecosystem surrounding the Newtown Creek as well as the health of the residents like myself who grew up, live and work in the area today.* 

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Andres Pascual Lifelong resident of Williamsburg, Brooklyn From: Jason Cox <iamjasoncox@gmail.com>
Sent: Thursday, February 20, 2020 7:08 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Feb 20, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailtoschmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Jason Cox and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I've been a resident of north Brooklyn for 6 years now with many more planned. Unspoiled nature is scarce as it is in this part of the city, and revitalizing Newtown Creek will benefit all residents of the area. The proposed plan to limit CSO discharges is woefully insufficient.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Jason Cox Bedford-Stuyvesant From: Barbara Hertel <babshertel@gmail.com>
Sent: Friday, February 21, 2020 1:40 PM

**To:** Schmidt, Mark **Subject:** EPA CSO comment

Attachments: EPA Comment CSO no action ltr 2020.pdf

Dear Mr Schmidt and EPA,

Attached please find my comments about the EPA's stand on CSO's.

Thank you in advance for your consideration, Barb

February 21, 2020

Mr. Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

#### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Barbara Hertel and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I am an active member of the North Brooklyn Boat Club and have paddled on the Creek. I have experienced dead fish by the CSO, nasty smells, and garbage. I know not to go out on after a rain. I live near the East River and that at least has a hefty cleaning system. Some areas of the creek don't have such a robust "cleaning" system. Also the pollution in the creek goes out to the East River where one can see trash in the water. A cleaner creek would allow people to eat the fish and crustaceans plus enjoy the clean beauty.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.
- 10. If National Grid gets their way to liquefy natural gas on the creek, there will certainly be more toxic discharge into the creek.

Thank you for your time and consideration of these comments.

Sincerely.

Barbara Hertel Southside Williamsburg From: Kevin Towler <kevin.a.towler@gmail.com>

Sent: Friday, February 21, 2020 2:29 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Newton Creek

## To whom it may concern:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations

-Kevin Towler

From: Jason Siegel <jbsiegel5@gmail.com>
Sent: Friday, February 21, 2020 3:12 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Action on CSO Reduction

#### 02/21/20

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY 10007

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Jason Siegel and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. The Newtown Creek is an essential part of the community. The hazardous CSO discharges are both a local and large-scale threat to the surrounding environment and ecosystem.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Jason Siegel Brooklyn, New York



From: Adam Offitzer <aoffitzer@gmail.com>
Sent: Saturday, February 22, 2020 3:28 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org **Subject:** We Need Action On CSO Reduction

#### 2/22/20

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Adam Offitzer and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. This matters deeply to me and my community in NYC. The plan proposed is totally insufficient, and would be a disaster for the neighborhood.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Adam Offitzer New York, NY From: Storm Water Infrastructure Matters <swimmablenyc@gmail.com>

**Sent:** Monday, February 24, 2020 1:36 PM **To:** Schmidt, Mark; Lisa Bloodgood; SWIM SC

**Subject:** Public Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

**Attachments:** SWIM Coalition Comment Letter EPA Proposed Plan for Newtown CreekSuperfund Site Operable

Unit 2 .pdf

**TO:** Mark Schmidt U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY 10007

From: Stormwater Infrastructure Matters (SWIM) Coalition

RE: EPA's Proposed Operable Unit 2 (OU2) plan for the Newtown Creek Superfund site

Dear Mr. Schmidt,

On behalf of the Stormwater Infrastructure Matters Coalition, please accept the attached comment letter in response to EPA's proposed plan for the Newtown Creek Superfund site, referred to as Operable Unit 2 (OU2).

Julie A. Welch

# Julie A. Welch | Program Manager

Stormwater Infrastructure Matters (SWIM) Coalition

swimmablenyc@gmail.com

(917) 647-1780

swimmablenyc.org

https://www.facebook.com/swimmablenyc/

https://twitter.com/SWIMCoalition

https://www.instagram.com/swimcoalition/

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February 20, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

#### RE: Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

The members of the Steering Committee for Stormwater Infrastructure Matters (SWIM) Coalition write to convey our opposition to the EPA Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek.

SWIM Coalition is a diverse group of more than 70 community-based, citywide, regional and national organizations, water recreation user groups, institutions of higher education, scientists, citizens and businesses who advocate for the health of New York City's vital waterways.

Combined sewer overflows are a major contributor of toxic contaminates to Newtown Creek, and they must be considered as one potential piece of the successful remediation and protection of the creek. In regard to the details of the Proposed Plan, we echo many of the comments being submitted by the Community Advisory Group (CAG) about its shortcomings. We believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of Contaminants of Potential Concern from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Julie a. Welch

Julie A. Welch | Program Manager | SWIM Coalition
On behalf of the SWIM Coalition Steering Committee

Mike Dulong - Riverkeeper

Michelle Luebke – Bronx River Alliance

Larry Levine – Natural Resources Defense Council

Leonel Lima Ponce – Pratt Institute

Paul Mankiewicz - The Gaia Institute

Dr. Holly Porter Morgan - LaGuardia College

Shino Tanikawa - NYC Soil & Water Conservation District

From: Thomas Worden <tjworden510@gmail.com>

Sent: Monday, February 24, 2020 5:03 PM

**To:** Schmidt, Mark

Cc: info@newtowncreekalliance.org
Subject: Newtown Creek Superfund Site

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Thomas Worden and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. There are many responses to what can be done with Newtown Creek, but 'effectively nothing' shouldn't be it. Your proposed plan wouldn't change the fact that our water is polluted, and that the space could be used as a public good.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Best, Thomas Worden He/Him

518-488-8527

From: Steven Fox <smfox@udel.edu>
Sent: Monday, February 24, 2020 7:04 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007

Submitted via email to <a href="mailto:schmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is **SteveFox** and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Steve Fox Brooklyn, ny From: Julia Weaver < juliaweaver1219@gmail.com>

Sent: Monday, February 24, 2020 7:28 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Newtown Creek 'No Further Action' Plan

Monday February 24, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Julia Weaver and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. Growing up in Maryland, I had access to creeks and bays for recreational use. I can't begin to describe how instrumental this was to my personal development. Nature provided me with a space to meditate and reflect, and reminded me that I am just a small part of a much larger ecosystem. Our local waterway (Jug Bay) was a point of pride, and a space for the community to gather. A major factor for me as I weigh whether I want to remain in the city and raise a family here, is whether my future children will have opportunities to experience nature. Since they are few and far in between in a major city, I feel I need to fight for them whenever I can.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Julia Weaver From: Neil Padover <neilpadover@gmail.com>
Sent: Monday, February 24, 2020 9:44 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

2/24/2020
Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Neil Padover and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. Our community and our children deserve that is NOT polluted.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Neil Padover Greenpoint, Brooklyn 11222 From: Michele Kaufman <michelegkaufman@gmail.com>

**Sent:** Monday, February 24, 2020 10:58 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Newtown Creek

February 24th, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailtoschmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Michele Kaufman and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I'm a native New Yorker and have been living in North Brooklyn for several years and Brooklyn is where I plan to stay. My neighbors and I deserve to live in a neighborhood with clean and safe water. People are getting sick, children and elderly people are at risk. Why do we have to continue to fight for the environment when it's your job to make sure it is protected and safe! What's been done is not enough, please finish the job!

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Michele Kaufman County Committee Member AD50 From: Philip Leff <philip@philipleff.com>
Sent: Tuesday, February 25, 2020 10:51 AM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

February 25, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Philip Leff and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I am an environmental activist and lifelong New Yorker who feels that this plan is a major step backwards in the environmental health of our community. New Yorkers have worked hard for many years to turn our waterways from fetid dumping grounds into major assets for recreation as well as commerce. I simply cannot understand why an agency allegedly in charge of protecting our environment feels it is acceptable to discharge any amount of raw sewage into our waterways. Also, a cleaner, accessible Newtown Creek would be a valuable asset to our park-starved community, boosting quality of life for tens of thousands of residents. Dumping raw sewage would certainly not help these goals.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. 'No Further Action' Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,
Philip Leff
East Williamsburg, Brooklyn

From: Chris T <ctowler.518@gmail.com>
Sent: Tuesday, February 25, 2020 2:32 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

February 25th, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailto:schmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Chris Towler and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. It's too long that we've allowed corporations to profit at the cost of our environment without accountability. The plan to take 'No Further Action' feels like one of political expediency rather than any objective assessment of the situation and risks to our community's health and well-being.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

**Chris Towler** 

From: Kristen LaCherra <kristenlacherra@gmail.com>

**Sent:** Tuesday, February 25, 2020 2:50 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site

February 24, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailtoschmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Kristen LaCherra and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. As a proud former resident of Greenpoint, I believe that the ongoing pollution this proposal allows for would pose a devastating impact to those who live and work near the Creek, and this neighborhood deserves better. I want a cleaner Creek for my loved ones and the future of this community.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
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- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Kristen LaCherra Silver Spring, MD From: Kevin Costa < kevcosta@udel.edu>
Sent: Tuesday, February 25, 2020 7:09 PM

**To:** info@newtowncreekalliance.org; Schmidt, Mark

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

2/25/2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Kevin Costa and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. This waterway is of utmost importance to the people of the Long Island City, Greenpoint, and Williamsburg communities, and the city and states at large.

The Newtown Creek is what happens when companies behave recklessly and irresponsibly in the name of capitalism. The complete negligence and disregard for the environmental and physical health of the community is now evident in the increased incidence of health issues in the neighborhoods surrounding the superfund site. As a community resident, I want to live in a community where I do not have to fear the repercussions of drinking the water from the sink, where I have to wonder about the air I breathe near my own home. For those reasons and a million others, I implore you to take action, not "no further action"!

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that (grossly) Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Kevin Costa Brooklyn Community Board 1 resident From: Morgan Meadows <mameadows91@gmail.com>

Sent: Tuesday, February 25, 2020 10:06 PM

**To:** Schmidt, Mark

Subject: Comments on Proposed Plan for newton Creek Superfund Site Operable Unit 2 | Morgan Meadows

#### Mark Schmidt

Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY 10007 Submitted via email to <a href="schmidt.mark@epa.gov">schmidt.mark@epa.gov</a> Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2 Dear Mr. Schmidt and Environmental Protection Agency Staff: My name is Morgan Meadows and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. Simply as a human being, a cleaner creek contributes to a cleaner city, state, planet, so I feel compelled to voice my thoughts here. In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that: 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges. 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated. 3. It Is Premature to Take CSO Reduction Off The Table. 4. A 61% Reduction of COPCs from CSOs Is Insufficient. 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements. 6. "No Further Action" Is an Action Requiring National Consistency Review. 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges. 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads. 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations. Thank you for your time and consideration of these comments. Sincerely,

Morgan Meadows

Williamsburg, Brooklyn

From: Tessa Engel <tengel@fordham.edu>
Sent: Wednesday, February 26, 2020 1:18 PM

**To:** Schmidt, Mark; info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

**Attachments:** Proposed Plan for Newtown Creek.docx

# To Whom it May Concern:

I am a Greenpoint resident and attached is my letter to Mark Schmidt / the EPA regarding the Newtown Creek.

Thank you, Tessa

--

Tessa Arianna Engel MSW/MPH Candidate 203-506-0317 she/her/hers/ella

# 26 February 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

#### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Tessa Engel and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I have long been a Greenpoint, Brooklyn resident, and have seen my community fall ill to various environmental issues. I do not wish to continue to live in a neighborhood that continues to be polluted, and I know that many of my neighbors feel the same way. We do not deserve to live next to a polluted creek.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Tessa Engel Greenpoint Resident From: Laura Treciokas < laura.treciokas@gmail.com>
Sent: Wednesday, February 26, 2020 2:36 PM

**To:** Schmidt, Mark

**Cc:** Newtown Creek Alliance

**Subject:** Newtown Creek OU-2 Proposed Plan Comments

February 26, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Laura Treciokas and I oppose the proposed plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. As a longtime Greenpoint resident who cares deeply about the environmental health of my community and the wellbeing of Newtown Creek. I participate in a number of environmental initiatives directed at improving both the Creek's health as well as the safety of our citizens.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of my comments.

Sincerely,

Laura Treciokas Greenpoint resident From: Liz Braswell liz@lizbraswell.com>
Sent: Wednesday, February 26, 2020 2:44 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

### February 26, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailtoschmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Liz Braswell and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I live in Greenpoint.

There are obvious, cataclysmic results of continuing to allow CSOs—toxic floods during hurricanes, for instance, which the neighborhood has had to deal with and will unfortunately have to deal with more often from here on out.

Then there are the birds and fish and wildlife which have been slowly returning to NYC over the past 25 years who are still threatened by the garbage we spew out into our waterways. I've seen brants and red-breasted mergansers and other vulnerable species trying to live on the creek. Wouldn't it be nice if they could thrive there?

But mostly: It's 2020, not 1020, and our cities still dump raw sewage into the environment? Do we leave human corpses in the streets as well, or throw our trash into middens on the sidewalks?

Our Oceans are on the verge of collapse with climate change. The absolute least we could do is stop polluting them further.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. The EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It's Ridiculous to Compare CSO Discharges to Other Pollution Sources Yet to Be Even Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.

- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

From: Robert Colgan <robcolgan@gmail.com>
Sent: Wednesday, February 26, 2020 3:14 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

February 26th, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Robert Colgan and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I have lived in north Greenpoint on Clay Street for four years and I recently purchased a condo on Box Street. The condition of the creek is the single most important factor in the future of my entire neighborhood. Currently, we live in fear of the toxic condition of the creek, a problem only exacerbated by rising sea levels and more frequent flooding in the future. A clean creek will be a tremendous economic boon to the Greenpoint and LIC as it becomes a destination for recreation.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
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- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,
Robert Colgan
62 Box Street, 6A
Brooklyn, NY 11222

From: Toby Bryce <tbryce@gmail.com>
Sent: Wednesday, February 26, 2020 3:15 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

February 26, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailtoschmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Toby Bryce and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I have two children, and we live within a very short distance of the creek - so the creek's water quality and general cleanliness has a very direct effect on our family's day-to-day lives.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Toby Bryce Brooklyn, NY 11222 From: richard rubin <kebon97@yahoo.com>
Sent: Wednesday, February 26, 2020 3:16 PM

**To:** Schmidt, Mark

**Cc:** Newtowncreekalliance Info

**Subject:** Comment on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Richard Rubin, I am a native New Yorker and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. This is truly a step backwards in cleaning up the waterway and making New York a healthier place to live.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
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- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Richard Rubin 6 Pomander Walk New York, NY 10025 From: Christopher Jackson <cjackzen@yahoo.com>
Sent: Wednesday, February 26, 2020 5:27 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Newtown Creek

#### February 26, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

#### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Christopher Jackson* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek.

I deeply care about the health of all life that is connected with the waterways including fish, birds, insects, animals and even humans. I think of our waterways as an organ in a human body, and if one is contaminated, the whole body suffers and is at risk of disease.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Christopher Jackson

Astoria, NY

<sup>&</sup>quot;Every day is a blessing, make the most of it"

From: Meg Kettell <megkettell@gmail.com>
Sent: Wednesday, February 26, 2020 10:22 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Meg Kettell and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I am a resident of Greenpoint, BK and I live and work in the area.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration.

Sincerely, Meg Kettell From: Timon Malloy <tmalloy@fredffrench.com>
Sent: Wednesday, February 26, 2020 11:07 PM

**To:** Schmidt, Mark **Subject:** Newtown Creek

February 26, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Timon Malloy and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I think cleaning up the waters of New York city is a critical project to fulfill New York's destiny as a city and restore it environmentally.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Timon Malloy Native New Yorker From: Mary Gallagher <gllghrmry@yahoo.com>
Sent: Thursday, February 27, 2020 12:00 AM

**To:** Schmidt, Mark

Subject: Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

February 26th, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Mary Gallagher and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. << Insert info about yourself and why you care about cleaning up Newtown Creek. I am a Registered Nurse licensed by NYS to care for its population. I am an Astoria resident my entire life. The pollution is unhealthy for the human, plant and fauna.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that allowing continued pollution is in total disregard for the health and well being of the entire community of humans, fauna and plants. Green NYC is being lauded yet you are allowing chemical pollution. I recycle. I compost. I take very few bags from stores and if I do I recycle to dispose of the little trash I create. NYC is bragging of being green of the new law going into effect prohibiting plastic bags and promoting bringing your own. This now impacts me financially. Cost that businesses incurred is now being passed onto consumers. WORSE is that I will now be buying bags for trash. The Proposed Plan for Newton Creek is incongruent with Green NYC. WORSE is that it is in disregard for the health of the community which impacts healthcare costs. Money is better spent supporting the health and wellbeing of the community. To promote contributing citizens.

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Mary Gallagher RN Astoria, NY Queens **From:** Dewey Thompson <a href="mailto:dthompson@pickerelpie.com">dthompson@pickerelpie.com</a>

Sent: Thursday, February 27, 2020 11:09 AM

To: Schmidt, Mark
Cc: Newtown Alliance

**Subject:** EPA's role is to reduce pollution.

# February 27, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Dewey Thompson and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I've lived in Greenpoint, Brooklyn for almost 25 years and raised three children here. In 2010, I founded the North Brooklyn Community Boathouse, a non-profit organization dedicated to opening up and enabling public access to the waterways, including the Newtown Creek, around North Brooklyn. For years, I've paddled through the Creek, into areas that, because of the legacy of industrial development around it and very limited public access, people rarely see. What I see is the enormous potential of this significant waterway and the impossible barrier that any reduction in our efforts to address pollution will create for the overall environmental sustainability of the area. In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

#### Sincerely,

#### Dewey Thompson

President, North Brooklyn Community Boathouse Board Member, Newtown Creek Alliance Board Member, North Brooklyn Parks Alliance Advisory, North Brooklyn Neighbors From: Kristin Elizabeth Berry <puppybrite@gmail.com>

Sent: Thursday, February 27, 2020 11:55 AM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

2/27/2020
Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailtoschmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Kristin Berry and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. As a resident of Greenpoint for almost a decade, I do not see the situation improving without serious EPA involvement. As an informed citizen, the CSO situation in Newtown Creek affects my life weekly. In addition to the odor that sometimes wafts across the area, and the contamination risks should the Creek flood, I find it absolutely disgusting that in the year 2020, I still have have to think twice before flushing my toilet when it rains in my neighborhood.

In regards to the details of the Proposed Plan, I stand by the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Kristin Berry Resident Greenpoint, NY From: Mitch <mitchparadise@gmail.com>
Sent: Thursday, February 27, 2020 11:56 AM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

# Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Mitch Jones and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I live in Greenpoint, Brooklyn just two short blocks away from the edge of Newtown Creek. North Brooklyn is a neighborhood that has a legacy literally getting dumped on that has left it with some of the highest childhood asthma rates in New York and you can literally smell the impact of CSOs dumping untreated waste in the days following rain events.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Mitch Jones Greenpoint, Brooklyn From: Lauren Geisler <geisler.lauren@gmail.com>
Sent: Thursday, February 27, 2020 2:21 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Lauren Geisler and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I live in Greenpoint Brooklyn and care about the clean up of our neighborhood and that includes the surrounding bodies of water. Greenpoint is no longer an industrial neighborhood, but it still needs work to clean up the industry left behind and the industry still opperating at Newtown Creek. Helping clean our poluted waterway makes our nighborhood and our city healthier.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations. Thank you for your time and consideration of these comments. Sincerely

Lauren Geisler Concerned Greenpoint Citizen geisler.lauren@gmail.com 561.504.9498 From: Molly McMullin <molly.mcmullin@gmail.com>

Sent: Thursday, February 27, 2020 2:59 PM

**To:** Schmidt, Mark

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Molly McMullin and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I've lived and worked in the neighborhood for 8 years and it's important to me to have unpolluted water.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Molly McMullin Resident of Greenpoint, Brooklyn From: Andrew Nesheim <aonesheim@gmail.com>
Sent: Thursday, February 27, 2020 3:03 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Regarding the Newtown Creek Proposed Plan

February 27, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailtoschmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Andrew Nesheim and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I lived and worked as an Environmental Science teacher in northern Brooklyn, and I am dismayed that EPA appears to be sidelining the evident environmental and health hazards posed by continued release of CSOs to Newton Creek and the East River.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Andrew Nesheim From: ray balconis <raybalconis@msn.com>
Sent: Thursday, February 27, 2020 3:28 PM

**To:** Schmidt, Mark

**Cc:** Newtown Creek Alliance

**Subject:** Newtown Creek

February 27, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Ray Balconis* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. *I have lived and worked in Maspeth for 50 years and am tired of Newtown Creek being polluted and allowed to deteriorate further. It is time to turn around the generations of abuse this waterway has weathered.* 

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

A decision of 'No Further Action' to reduce hazardous CSO discharges into the creek is just irresponsible and detrimental to Maspeth, Queens, and NYC as a whole.

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, **Ray Balconis** Maspeth, NY From: Joanne <reneiatba@icloud.com>
Sent: Thursday, February 27, 2020 4:02 PM

**To:** Schmidt, Mark

**Subject:** Newtown Creek Comments on Proposed Plan for Superfund Site Operable Unit 2

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY

Dear Mr. Schmidt and Environmental Protection Agency Staff:

I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek.

My husband and I live only 4 blocks from Newtown Creek and own additional rental property nearby. We have been active in getting Newtown Creek listed as a superfund site and are dissatisfied to learn that one of the first actions is to remove sewage overflow as a source of pollution. I can tell you that the stench after a storm attests to the need to control the overflow.

I echo many of the comments being submitted by the Community Advisory Group about the shortcomings of the plan which include:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

I hope you will consider these comments and amend the decision to remove CSO from the cleanup. Combined Sewage Overflow is urgently needed to be tackled by preventing the discharge into our waterways.

Joanne Moncada 130 Dupont Street Brooklyn Y 11222

Sent from my iPad

From: royirizarry1 < royirizarry1@aol.com>
Sent: Thursday, February 27, 2020 4:18 PM

**To:** Schmidt, Mark

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

### February 27, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Roy Irizarry* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I am a 33 year brooklyn native and recreational enthusiast who actively works along the creek. I actually Used to participate in recreational fishing on the creek as well as the east river. Unfortunately, I had to stop this joyous activity do to the destruction of this estuary and displacement of its marine life from CSO contamination. I've recently been blessed to be a first time father to a beautiful baby girl. It is our right as human beings to be able to enjoy our natural resources without fear of becoming sick and possibly die do to sickness and infection from those resources. I'm sure you will do the right thing and retract your current plan and implement one that is 100% reduction as anything less is unacceptable. That way my child as well as everyone else children can enjoy what we couldn't for so many years do to neglect from our regulatory agencies.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments. Sincerely.

Roy Irizarry

33 year Williamsburg/greenpoint native...

From: Silvia Cohn <silviacohn@gmail.com>
Sent: Thursday, February 27, 2020 4:24 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Newtown Creek

#### 2.27.20

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailtoschmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

#### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Silvia Cohn* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I am concerned that the pollution of this waterway is not being taken seriously in terms of targeting it at the source and preventing future problems that would be that much more complicated to solve. Please address this now rather than later.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,
Silvia Cohn
Resident of Northern Manhattan

From: Joe Paski <joe@paski.nyc>

Sent: Thursday, February 27, 2020 6:51 PM

**To:** Schmidt, Mark **Subject:** Newtown Creek

# 27 February 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailto:schmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Joe Paski and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I live in Brooklyn and understand that Newtown Creek is a vital resource that needs to be immediately preserved for transportation, shipping, and recreation. New York is decarbonizing, and cleaning up the remnants of a polluting society is a crucial part of that transition.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Joe Paski Greenpoint From: Dave Kerr <hi@davekerr.com>
Sent: Friday, February 28, 2020 8:20 AM

**To:** Schmidt, Mark

**Subject:** I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into

Newtown Creek.

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Dave Kerr and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I have lived in Greenpoint area for 12 years and I am aware of the impact this overflow has on our surrounding community. My health and the health of our neighborhood is of the utmost importance and the EPA has the responsibility to pay attention and address all pollution in our area. In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations. Thank you for your time and consideration of these comments.

Sincerely,

Dave Kerr

Greenpoint, Brooklyn

From: Marie Lorenz <lorenzmarie@gmail.com>
Sent: Friday, February 28, 2020 8:22 AM

**To:** Schmidt, Mark

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

**Attachments:** newtown no further action.pdf

January 26, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailtoschmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Marie Lorenz and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I have live near the Newtown Creek since moving to Brooklyn in 2002, first in Greenpoint and now Bushwick. I am a frequent boater and love to use the new Plank Road park as a launch site, very close to one of the main CSO's on the creek.

I attended a public comment meeting on December 9, 2019, where I heard representatives from the EPA talk about the Proposed Plan. It seemed crazy to me that the only possibilities being compared were 'No Further Action' and '100% CSO Control'. I feel like any time a group of people work through a problem, some compromise can be reached. Is there not a more realistic alternative between options 2 and 3 where the EPA worked *with* NYCDEP? Wouldn't the resources of both the city and the DEP go further if combined? Comparing the two most extreme options seemed like a way to excuse the EPA from doing anything at all.

I am going to copy here the points that the Newtown Creek Alliance has formed about the Proposed Plan. I know that you have heard them before, but please mark me down as another community member who agrees.

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,
Marie Lorenz
Assistant Professor Fashion Institute of Technology
1013 Willoughby Avenue

From: Kate Richard <ka.c.richard@gmail.com>
Sent: Friday, February 28, 2020 12:17 PM

**To:** Schmidt, Mark

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Kate Richard, and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. Though I live in Bedford-Stuyvesant and not immediately near Newtown Creek, I think that this is an important issue across NYC, and support any efforts to reduce CSO overflows in the city. I echo many of the comments being submitted by the Community Advisory Group. I believe that the EPA has a responsibility to address all pollution sources, including CSO discharge. Taking CSO reduction off the table is premature, and the EPA can impose CSO reduction beyond the Clean Water Act requirements. This action should be consistent with other CSO reduction efforts in Brooklyn and NYC, such as the efforts in Gowanus.

Thank you for your time and consideration of these comments.

Sincerely, Kate Richard Bedford-Stuyvesant, Brooklyn From: Sara Solomon <sara4solomon@gmail.com>

**Sent:** Friday, February 28, 2020 12:26 PM

**To:** Schmidt, Mark

**Subject:** Please address the pollution in Newtown Creek

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Dave Kerr and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I have lived in Greenpoint area for 12 years and I am aware of the impact this overflow has on our surrounding community. My health and the health of our neighborhood is of the utmost importance and the EPA has the responsibility to pay attention and address all pollution in our area.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations. Thank you for your time and consideration of these comments. Sincerely, Sara Solomon Greenpoint, Brooklyn

\_\_

Sara Solomon, LMFT www.solomontherapy.com 818.632.1421 **From:** Acacia Thompson <acacia.thompson@gmail.com>

**Sent:** Friday, February 28, 2020 12:28 PM

**To:** Schmidt, Mark

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site

February 28, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Acacia Thompson and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I live on Newtown Creek with my family and advocate for Box Street Park on the waterway. Our future park will be at the mouth of the Creek. Many Greenpointers will finally have long needed access to the waterfront once this park opens and yet, after a rainy day, they'll need to avoid the waterway as it is right on a CSO. How is it fair that our City gets to be one of the biggest polluters of our waterways and the EPA stands by and supports it. Please rethink the "No Further Action" stance and advocate properly for this waterway.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Sincerely,
Acacia Thompson
Greenpoint Tree Corps
D14 Green Alliance
Friends of Box Street Park

From: Elana Ehrenberg <er.ehrenberg@gmail.com>

**Sent:** Friday, February 28, 2020 12:37 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown CreekSuperfund Site Operable Unit 2

#### February 28, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Elana Ehrenberg and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I live right off of Newtown Creek in Greenpoint and walk over the Pulaski Bridge every day to get to work. I know the toxic history and the decades of neglect this waterway and surrounding neighborhoods have faced. I want a cleaner creek for actual waterfront access, both recreational and with resiliency in mind. I want my future children to be able to enjoy this waterway and not be faced with the potential harms from CSO and other pollution. A clean creek would provide so much to the neighborhood and is vital for the future of this community.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
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- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Elana Ehrenberg Chair of the 50<sup>th</sup> Assembly District Committee Greenpoint, Brooklyn ---

Elana Ehrenberg

From: Katarina Pittis <katarinapittis@gmail.com>

**Sent:** Friday, February 28, 2020 12:39 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** I oppose the "No Further Action" plan for Newtown Creek

February 28, 2019

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailtoschmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Katarina Pittis and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek.

I am a documentary filmmaker based in Brooklyn, NY. I became aware of the severity of the pollution in Newtown Creek back in 2017 when I started working on a short documentary about the historical and present pollution of this waterway. I have spoken to dozens of community members such as locals and businesses living and working near Newtown Creek, attended a Community Advisory Group (CAG) meeting, and have observed the behind-the-scenes fight to improve this waterway. I have explored many different parts of the Creek by canoe and by foot. I have stood in the rain on several occasions to watch the Combined Sewage Overflow flood into the Creek and stain the water and surrounding area. It is beyond disappointing to see an agency like the EPA, which is supposed to protect our resources and the animals and people around it, which is supposed to listen to the science, do **nothing**. How is a plan for "No Further Action" a plan at all?

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
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- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Katarina Pittis

Documentary Filmmaker Kensington, Brooklyn From: Brent O'Leary <br/>
Sent: Brent O'Leary <br/>
Friday, February 28, 2020 12:46 PM

**To:** Schmidt, Mark

**Subject:** Hunters Point Civic Association **Attachments:** EPA OU-2 CAG Comments 2.7.20.pdf

Dear Mr. Schmidt and Environmental Protection Agency Staff:

I write in support of the comments made by the Newtown Creek Community Advisory Group (attached) on the Environmental Protection Agency's proposed remedy to address Operable Unit 2 (OU-2) of the Newtown Creek Superfund site, related to future discharges of chemicals of potential concern from Combined Sewer Overflows from potentially responsible party New York City Department of Environmental Protection.

We think the reduction of CSO pollution sources is vital to the health of those who live or work near the waterways and for opening up this very important community asset to utilize the waterway for recreational, educational and other purposes and agree with the reasoning set forth in the Newtown Creek Community Advisory Group comments. We would appreciate you taking these comments into consideration.

sincerely,

Brent O'Leary
President, Hunters Point Civic Association

From: Kevin LaCherra < kevinlacherra@gmail.com>

**Sent:** Friday, February 28, 2020 1:33 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** OU-2 Proposed Plan for Newtown Creek Letter

### February 28, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Kevin LaCherra and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. My family has been in Greenpoint since the 1800s and we have seen the impact of the environmental disasters here. We know that the consequences are generational. Which is why we need real substantive action from the EPA. To fight for a real cleanup and immediate action on CSOs. This community after suffering so much deserves a clean Creek.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
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- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Kevin LaCherra Greenpoint, Brooklyn From: Rachel Sturm < racheInsturm@gmail.com>

Sent: Friday, February 28, 2020 3:18 PM

**To:** Schmidt, Mark

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Friday, February 28th

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY 10007 Submitted via email to schmidt.mark@epa.gov

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Rachel Sturm and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I'm a relatively new Greenpoint resident, but I'm eager to make this community my long-term home. I'm invested in insuring the community is safe, clean, and accessible to all of those who reside and visit.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
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- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Rachel Sturm Greenpoint, BK From: Natalie Bahmanyar <n\_bahmanyar@yahoo.com>

**Sent:** Friday, February 28, 2020 4:02 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

#### February 28, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Natalie* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
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- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,
Natalie Bahmanyar
Clinton Hill, Brooklyn

From: Lynn Del Sol <lynn@nbkparks.org>
Sent: Friday, February 28, 2020 4:41 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

**Attachments:** EPA OU-2 Comments-delSol.pdf

#### *Friday Feb. 28th 2020*

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to <a href="mailto:schmidt.mark@epa.gov">schmidt.mark@epa.gov</a>

#### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Lynn del Sol and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I have lived and worked in North Brooklyn for most of my life. I moved here over twenty years ago at the age of nineteen to join many of my friends who had families entrenched in the area for three, four, and even five generations. I live just a stone's throw away from the creek on Humboldt between Nassua and Driggs Ave in the same building for seventeen years.

What I didn't know at that time was just how polluted and sick the environment was, nor how many of my friends and their family we would bury over the years from bizarre cancers, or heart wrenching stomach and esophagus diseases. A clean Newtown Creek is the foundation to a healthy neighborhood. While it is too late for so many of my neighbors and friends - there is always a chance to create a better - cleaner - safer - more sustainable world for all those that come next.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
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- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Lynn del Sol North Brooklyn Parks Alliance Greenpoint, Brooklyn. From: Derek Kirch <derekjkirch@gmail.com>
Sent: Friday, February 28, 2020 5:02 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekaliance.org

**Subject:** OU-2 Proposed Plan for Newtown Creek Letter

### February 28, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Derek Kirch and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. I've been a neighbor to the creek for nearly a decade now living in Astoria, and after all the damage that's been done to the creek and the communities surrounding it we need real action from the EPA to fight for real cleanup efforts.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
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- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Derek Kirch Astoria, Queens From: Daeha Ko <daehako@gmail.com>
Sent: Friday, February 28, 2020 5:23 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org

**Subject:** WE NEED ACTION ON CSO REDUCTION

February 28, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Daeha Ko and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. As a resident of Greenpoint, Brooklyn, Newtown Creek has long been a source of pollution that harms our waterways and the ground. Cleaning up the Creek will result in not having to worry about toxic water seeping into the ground and reduce the chances of chemical-related illnesses that can have an effect on the development of children living here.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
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- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.
--

Sincerely,

Daeha Ko

Sane Energy Project

Greenpoint, Brooklyn

--

Daeha Ko

646-886-7955 daehako@gmail.com From: Mai Armstrong <maiarmstrong7@gmail.com>

**Sent:** Friday, February 28, 2020 7:22 PM

**To:** Schmidt, Mark; NCA

**Subject:** Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

February 28, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Mai Armstrong and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. As an advocate for clean water and clean air, I cannot in good conscience support any plan that works in opposition to our basic human right to pollution-free waterways.

The DEP LTCP proposal expects the community accept 'No Further Action' as a viable 'plan'. That we should accept continued CSO runoff pollution into our waterways, accept untreated sewage being released into the water, accept increased water pollution, that we should sacrifice health and home for ... DEP?

Our community deserves a clean Newtown Creek. We should be able to swim and fish and recreate without fear of illness or injury. We deserve a waterway that is an asset to students, workers and residents alike - to accept less would be shortsighted.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.

- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Mai Armstrong Brooklyn, NY

#### 2/27/20

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Luis Galan* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. Pollution is pollution and we only live on one planet. I live in Queens and to hear that there is no action to reduce pollution in our waterways is an absolute travesty. All the future families living in this area will be affected by your decision. There is no PLANET B that humans can live on. I am a Principle in Bayside with two children and your decision will directly affect the health of my children and their future children. Please reconsider your decision.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,
Caroline Galan
Flushing Queens

#### 2/27/20

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

# Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Luis Galan* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. Pollution is pollution and we only live on one planet. I live in Queens and to hear that there is no action to reduce pollution in our waterways is an absolute travesty. All the future families living in this area will be affected by your decision. There is no PLANET B that humans can live on. I am a Director of IT with two children and your decision will directly affect the health of my children and their future children. Please reconsider your decision.

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- 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely, Luis Galan Flushing Queens

Jewel Street Brooklyn, New York 11222

February 27, 2020

FOR THE RECORD

Submitted via UPS to Mark Schmidt

overely, Matechah)

Mr. Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY 10007

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Evelyn Matechak, a lifelong resident and a senior. I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) about the shortcomings of the plan.

I believe that:

### Superfund Community Advisory Group Comments

- 1. The EPA has a responsibility to address all pollution sources, including CSO discharges.
- 2. It is Illogical to compare CSO discharges to other pollution sources yet to be evaluated.
- 3. It is premature to take CSO reduction off the table.
- 4. A 61% reduction of COPCs from CSOs is insufficient.
- 5. Superfund grants EPA Authority to impose CSO reduction beyond the Clean Water Act Requirements.
- 6. "No Further Action" is an action requiring National Consistency Review.
- 7. The City's pollution models include unrealistic assumptions that underestimate future CSO discharges.
- 8. The solution to pollution is preventing overflow, not track-back, dredging or sorbent pads.
- 9. The EPA should be consistent with Gowanus Methodology and CSTAG recommendations.

I "fully" support the Newtown Creek Alliance (NCA) and the Newtown Creek Community (CAG) for all their dedicated work for the "3Rs" to "Reveal", "Reveal",

cc: info@newtowncreekalliance.org

Mr. Willis Elkins, Co-Chair of CAG

Attachment: Newtown Creek Advisory Group (CAG) dated February 10, 2020 (41 members)

From: Sarah Durand <sdurand2008@gmail.com>

**Sent:** Friday, February 28, 2020 5:58 PM

**To:** Schmidt, Mark

**Cc:** Newtown Creek Alliance

**Subject:** Comment: Newtown Creek Site, Proposed OU2

Dear Mr Schmidt,

My name was originally included as a signatory to the letter developed by Willis Elkins (CAG Co-Chair) and Mike DuLong (CAG Steering Committee) that summarized discussions during CAG meetings (Dec 2019 & Jan 2020) held to review the proposed OU2 for CSO discharge reduction. Unfortunately I was unable to attend these meetings, which would have afforded me the opportunity to offer the comments here for inclusion into the above-mentioned letter. Once I had the opportunity to review the letter I then requested that my name be removed, given that I identified points of disagreement (I had been included as a signatory because of my CAG membership)

- 1) I support the proposed construction design of the LTCP that includes a 39Mgal storage tunnel, given the observation of NYCDEP Kevin Clarke (Bureau of Engineering Design) that it affords the flexibility of adding storage capacity, whereas fixed holding tanks do not.
- 2) Comparative data regarding COPC sources illustrate that a 100% reduction of CSO discharge would not offer significant advantage: Figs 4a-d show that the LTCP reduces PAH, PCB, Cu, and Pb by ≥ 50% beyond current discharge and below or comparable to the level of the East River
- 3) Time and resources of the EPA should not *currently* be further directed to CSO remediation beyond ensuring
- the OU2 proposal is submitted for review by the NRRB
- a rigorous Track-Back program (below) is developed
- the OU2 then procedes in strict compliance with the revised proposal (should the NRRB require revisions)
  It is now critical that the EPA team turn attention to <u>issues that continue to be deflected and delayed by the contractor and legal team of the Newtown Creek Group that are critical to successful elimination of CERCLA toxins from the estuary ecosystem. Specifically:</u>
- ➤ Upland sources have yet to be identified and characterized absence of thorough data collection will leave the community with a remediation model that benefits the bottom line of commercial enterprises that profitted from polluting Newtown Creek, but that leaves the Creek and its community underserved
- ➤ NAPL inputs have been ignored in the RI/FS and associated chemical fate and transport models ditto

  ➤ Current RI/FS suggests that point sources are responsible for the elevated concentrations measured in the surface sediments of the Creek
- but not ebullition, but not coal tar migration, but not petroleum seepage These sources can be ignored simply because no data has been collected.

The absence of data collection re the above issues is shameful, given the amount of time that the EPA contractor of record apparently devolted to CSO-related contamination, a source that is not the major contributor of CERCLA-identified poisons to our ecosystem.

The EPA should not accept the proposed OU2 in the absence of a clearly defined, clearly organized and clearly funded Track-Back monitoring program.

- A detailed "Track-Back" monitoring program should developed as a collaborative effort between City (NYCDEP) and State (NYSDEC) representatives and the CAG.
- Data collection for the Track-Back can also be collaborative. Note the excellent and powerful record of the Citizen-

Science effort currently monitoring *Enterococcus* contamination throughout the greater estuary: the Citizens Water Quality Testing program: <a href="http://www.nycwatertrail.org/CWQT">http://www.nycwatertrail.org/CWQT</a> 2018.html

- The Track-Back program should
  - A) be collaboratively imlemented and sustained by City and community actors
  - B) operate within a clearly defined framework of funding, protocols and materials
- C) entail a yearly data review with community representatives, with actionable findings idenitifed in advance as part of developing the Track-Back program

A rigorous monitoring program is critical for the reasons outlined in Sections 7 and 8 of the letter signed by other CAG members; we're facing a rapidly changing world and the rate of this change is accelerating

Thank you for your attention

--

Sarah E. Durand, PhD
Community Advisory Group
Associate Professor - Biology
LaGuardia C. College - CUNY
sdurand@lagcc.cuny.edu | 718-482-5743

From: Barb Kostanick <barbkostanick@gmail.com>

Sent: Monday, December 9, 2019 1:52 PM

**To:** Schmidt, Mark

Subject: Newtown Creek Superfund Site - Public Comment on OU 2 Proposed Remedy

Dear Mr. Schmidt,

I have reviewed the EPA's proposal endorsing Alternative 2 (No Further Action) on the Combined Sewer Outflow issue. While cheaper, this alternative still allows millions of gallons of effluent to flow into Newtown Creek. This effluent poses a risk to wildlife, those who fish or seek shellfish in the area, and those exposed to the water. It is not acceptable to continue to pollute this waterway.

The proposal also fails to recognize the increasing impact and frequency of high volume storms.

Solving the challenge of CSO has costs but also great benefits. Public health will be improved with cleaner water and remediation of pollutants. Land abutting the creek will become more usable and valuable with a cleaner creek. Habitat restoration and cleaner water will return thriving plant, fish and shellfish communities to this area. In turn, better habitat will diminish the risks associated with storm damage.

EPA's Alternative 2 sacrifices all of these benefits. It is basically saying that EPA doesn't care about the health of those living near the creek or the impacts on wildlife. The responsible parties should be responsible for the cleanup of the mess they made rather than a half-assed partial remediation.

My grandmother and her family grew up on the Queen's side of Newtown Creek. The shellfish and fish provided important sustenance for her family, and the Creek provided recreational opportunities including swimming and rowing. Returning the Creek to a healthy state will provide these same opportunities for others.

Barb Kostanick Boulder, Colorado From: Lael Goodman <lael@northbrooklynneighbors.org>

Sent: Wednesday, February 26, 2020 3:08 PM

To: Schmidt, Mark
Cc: Anthony Buissereth

**Subject:** Newtown Creek Proposed Plan Comments

Attachments: NBN Comments Newtown Creek Superfund Site OU2 Proposed Plan.pdf

Dear Mr. Schmidt,

Please find attached North Brooklyn Neighbors' comments on the Proposed Plan for Newtown Creek OU2.

Thank you for this opportunity to provide input.

Best, Lael

--

### Lael K. Goodman

Environmental Justice Program Manager
North Brooklyn Neighbors
240 Kent Avenue
Brooklyn, NY 11249
718.384.2248 ext. 111



February 24, 2020

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY 10007

### RE: Comments on the Newtown Creek Superfund Site Proposed Plan for CSO Discharges

Dear Mr. Schmidt:

We appreciate the opportunity to share our feedback, comments and concerns about the Newtown Creek Superfund Site Proposed Plan for CSO Discharges from Operable Unit 1.

Newtown Creek is an important part of the North Brooklyn community. Many of our residents interact with Newtown Creek through boating, birdwatching, nature walks as well as the many workers whose jobsites are located alongside the Creek. Yet many other residents ignore it entirely, scared off by stories of sludge and smells and its history of spills. Too many North Brooklynites interact with the Creek mainly by passing over it in buses and cars. For too long, this resource has been a dangerous drain on our community. It is past time for the Creek to be made a safe place for people, wildlife, and for the many commercial purposes that it already serves.

We believe that the US Environmental Protection Agency's (EPA) proposed plan does not meet the standards of safety this community deserves. Our specific concerns and question are outlined below.

- The EPA should strive to ensure that maximum reduction of contaminants of primary concern (COPCs) occurs. Reducing COPCs from CSOs by 61% leaves a significant percentage of contaminants entering Newtown Creek. This is unacceptable.
- Any reduction of contaminants in Newtown Creek is beneficial. In the proposed plan it is argued that because of other contaminants entering Newtown Creek, even 100% control of COPCs "would not be significant." However, this reasoning is flawed for two reasons.
  - 1. This determination is made before even assessing the change in contamination from other inputs. Once other sources of contamination are addressed, the share of contamination coming from CSOs may be drastically different. Significance could only be assessed at this point.
  - 2. What is the EPA's definition of significance? It is stated that, "the LOE evaluation shows that all three alternatives provide roughly the same level of protectiveness." However, while graphs, such as figures 5a and 5b are helpful for visualizing change between alternatives, it is not immediately evident what the total difference would be. The EPA must be more transparent about the true difference between the various proposed remedies so that the public can best understand the Alternatives.

- Modeling for CSO volume must include projected changes in precipitation and CSO output due to climate change. The Long Term Control Plan (LTCP) is not expected to be operable until 2042. By then, models predict that precipitation in New York will increase, especially heavy precipitation events. So while the current recommended plan is to capture 61% of CSO, when climate change projections are taken into account for the years that it will be opened (2042) as well as the life of the project (hopefully far beyond that), it is unrealistic to assume that this solution would in fact capture 61% of CSO.
- NBN is concerned about the feasibility of the "track-back program" that is "considered" as part of Alternative 2. Given the size and complexity of the sewershed in North Brooklyn, how effective is a track-back program likely to be in determining the source of contamination? If there is a successful track record of this type of intervention, NBN would strongly urge that it be adopted. However, if this measure is unlikely to have much success, NBN would argue that other proven methods to reduce COPCs in overflow should be considered. For example, the plan could include inspections of facilities that are known to use COPCs in their operations to ensure their disposal practices are sound or introduce a program that reduces disposal at such facilities during precipitation events. Additionally, the trackback program was only suggested to be in place until the LTCP is in place. However, with at least 39% of overflow still reaching the Creek, it would stand to reason that any measures that were necessary before the LTCP was put in place would still be necessary afterwards.
- Alternative 2 requires "sampling of discharge from the four major CSOs to Newtown Creek on a quarterly basis until the LTCP is fully implemented, with regular reporting to the EPA." Sampling of CSO discharges should be done more frequently than quarterly, as Alternative 2 proposes. It is not clear in the alternatives document why quarterly sampling is recommended. Infrequent sampling of a site allows more contaminants to enter Newtown Creek undetected. With the LTCP not likely to be in place before 2042, more frequent monitoring would allow for increased detection of COPCs and thus the ability and reason to implement more comprehensive preventative measures. Additionally, what does regular reporting mean? NBN urges the definition of regular to mean that reporting should occur after each sample is taken such that any concerning numbers can be dealt with as soon as is possible to prevent further contamination.

In sum, we urge the EPA to pursue much stronger clean-up thresholds and more clearly define those thresholds. The rigor with which the Superfund Program is carried out will have an immediate and direct impact on the lives of our community members.

Thank you again for considering our comments and appreciate the opportunity to share our perspective. We look forward to your responses to continuing to ensure that Newtown Creek be cleaned to a standard that is protective of human health and the environment.

Sincerely,

Anthony Buissereth Executive Director

Gael K. Goodman

Environmental Justice Program Manager

From: Alice Ruth <alicecruth@gmail.com>
Sent: Wednesday, February 26, 2020 5:21 PM

**To:** Schmidt, Mark

**Subject:** time-sensitive matter

Dear Mr. Schmidt,

EPA's preferred alternative for OU2 is wholly unacceptable. The history of Newtown Creek—which was allowed by the government to languish for decades as toxic contamination leached into the waterway—is a disgrace. Most of the work lies ahead, and so it is not the right answer for the federal agency EPA to essentially close the book on a Superfund site that has been toxic for decades but has been been identified only in the last decade as worthy of EPA attention.

Brooklyn is the most populous of New York City boroughs and is the fastest growing, and it not right that humans and other forms of life should avoid contact with the water. It will likely never be clean, although it is true that are are signs of improvement.

I am thinking of moving from the Upper East Side of Manhattan to Greenpoint. I will have the DEP test the water, and I'll cross my fingers that it is safe to drink. Bad enough that the polluters barely even get a slap on the wrist, but to drop this now is diabolical.

Sincerely,

Mary Culpepper

From: Chelsea Fisher <cfisher428@gmail.com>
Sent: Friday, February 28, 2020 8:36 AM

**To:** Schmidt, Mark

**Subject:** NO FURTHER ACTION???

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is *Chelsea Fisher* and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek. *I'm outraged and confused why you would stop work. Have you been in Greenpoint after a heavy rain? Have you been terrified of overflow from any water source in your neighborhood fearful for your health, your dog's health? Stopping work here will set a precedent for local cleanup which is vital and necessary for all New Yorkers and for the environment. Do you know how many people who grew up in greenpoint have had specific types of cancer potentially related to the toxic chemicals present? And all that aside this waterway is certainly not fully cleaned why would you stop? Please explain? I both live in greenpoint and am a local business owner and would like to know. In other words... what the fuck?!* 

Chelsea

From: James Mullaney <ambivalenteagle@gmail.com>

**Sent:** Friday, February 28, 2020 1:58 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org; Joan Mullaney

**Subject:** Newtown Creek, OU-2 Proposed Plan, Combined Sewer Overflows

### Mr. Schmidt:

I attended a meeting in Sunnyside on February 19th at which an EPA representative laid out some of the details concerning the plan for beginning a clean-up of one-third of Newtown Creek. The meeting was hosted by the Community Advisory Group of the Newtown Creek Alliance. After listening to presentations by both parties I have come to the conclusion that it is premature and ill-advised to finalize the EPA's Proposed Plan for Combined Sewer Overflows from Operable Unit 2 on the Newtown Creek. Action should be deferred until a fully comprehensive plan for the entirety of the waterway is created.

I also believe that the totality of resources available under the federal Superfund law should be deployed toward the clean-up of this toxic waterway, as it provides a higher standard than the Clean Water Act does. Particularly at this time of rising environmental awareness and social mobilization for the protection of the natural environment our goal should be to restore Newtown Creek to as pristine a condition as possible - even if this means waiting longer and investing more.

My family and I have always lived in the vicinity of the Newtown Creek. My great-grandfather and great-grandmother on my mother's side, Alexander Perzanowski and Louise Koncewicz, emigrated from rural Poland to Greenpoint in the 1910s. Alexander worked as a night watchman at the Sucony refinery on the banks of the Newtown Creek. With the money he earned from his job he purchased abandoned buildings in Greenpoint, repaired them by hand with the carpentry and plumbing skills he acquired as a peasant in Poland, and rented them out to newly arriving immigrants from Europe. His son, my great-uncle Anton Perzanowski, worked full time at the refinery for almost 40 years - as Sucony morphed into Mobil and then Exxon-Mobil. He was absent from work during World War II when he served as a medic in the U.S. Army all across Europe and Africa.

On my father's side of the family, my late uncle Patrick Mullaney worked as a bridgekeeper on the bridges that span the Newtown Creek from the 1960s until the 1980s. My late uncle Peter Mullaney also worked on the bridges.

As a lifelong resident of Greenpoint, Brooklyn and Woodside, Queen my earliest memories of life on earth are intimately bound up with the Newtown Creek. Not just the strange, sour, fetid smells from the glue factory that regularly drifted all the way across to Woodside as late as 1966; or the vomitous, unbearable stench of feces that hung in the Blissville and Greenpoint air like thick drapes on hot summer nights. Deeper in my preverbal awareness I can recall priceless, halcyon images: hazy, early morning scenes of yellow sunlight joyously dancing on the water's fractured surface; the reassuring cacophony of truck traffic and tugboat horns; haunted midnights when the moon glowered like a lost soul high above the stark and lonely structure of Kosciuszko Bridge.

It is with these thoughts full of fondness and love for the Newtown Creek that I urge you to postpone the implementation of the proposed plan and continue working closely with members the concerned community, scientists, and politicians. Thank your consideration and for your diligent efforts to clean up the Newtown Creek.

Sincerely,

James P. Mullaney

From: Kevin Barbee <kevin@kevinbarbee.com>

Sent: Friday, February 28, 2020 8:22 PM

**To:** Schmidt, Mark

**Cc:** info@newtowncreekalliance.org **Subject:** Newtown Creek, New York City

Mr. Schmidt,

I am writing to let you know that I am opposed to your recent decision not to continue cleaning up the Newtown Creek, deciding after 10 years of study to issue the decision of 'No Further Action'.

Have you personally visited the site to see the floating oil on the water surfaces? Obviously not.

Please take my suggestion to change the name of your agency from EPA to EDA, "Environmental Destruction Agency."

Wishing you and your children a clean waterfront (unlike what you have decided is OK for Brooklyn and Queens),

Kevin Barbee

Kevin Barbee | +1.917.808.6136 New York

From: Jon Schulman <schulmania@gmail.com>
Sent: Monday, December 30, 2019 10:03 PM
To: schmidt.mark@epa.org; Schmidt, Mark
Subject: P.S. 110 Students' Public Comments

Attachments: P.S. 110 STUDENT COMMENTS ON NEWTOWN CREEK.docx

### Hi Mark,

As a school in extreme proximity to Newtown Creek, our 4th grade students have been following the situation regarding the CSO very carefully. In all of their subjects, they are learning about the history of the creek and how it has become a Superfund Site today. In light of the recent town meeting held at their school, P.S. 110 - The Monitor School -- they would like to add in their comments. According to the Brooklyn Eagle, comments are being accepted up until January 27, 2020. My students are a thoughtful and motivated bunch, and want nothing more than to help their community, and thereby help their world, become a greener, healthier place for everyone. They have researched the subject thoroughly and continue to search for solutions just as they know that you, as Remedial Project Manager of the U.S. Environmental Protection Agency, and your team are. Please see the attached document, which has four of our Green Team students' comments about Newtown Creek for the upcoming town meeting. Thank you so much for reading them. They need to know that as informed and concerned citizens, their voices are being heard.

Respectfully, Jonathan Schulman 4th Grade Teacher P.S. 110 - The Monitor School 124 Monitor Street Brooklyn, NY 11224

Change your thoughts and you can change the world.

-Norman Vincent Peale

From: Jon Schulman <schulmania@gmail.com>
Sent: Monday, January 6, 2020 11:27 PM

**To:** Schmidt, Mark

**Subject:** Fwd: P.S. 110 Students' Public Comments

Attachments: P.S. 110 STUDENT COMMENTS ON NEWTOWN CREEK.docx

Follow Up Flag: Follow up Flag Status: Flagged

Hi Mark,

This is a followup to my Dec. 30th email to you about students brainstorming ideas to help Newtown Creek's CSO problem.

We'd really appreciate it if you could speak with us about it. Maybe a video chat, if not a visit in person to our school?

We don't mean to be a bother. The students are just really passionate about taking care of their community and would love

to talk with an expert to gain more insight into the issues. Thanks so much!

Jonathan Schulman 4th Grade Teacher - P.S. 110 The Monitor School

----- Forwarded message ------

From: Jon Schulman <schulmania@gmail.com>

Date: Mon, Dec 30, 2019 at 10:02 PM

Subject: P.S. 110 Students' Public Comments

To: <schmidt.mark@epa.org>, <schmidt.mark@epa.gov>

### Hi Mark,

As a school in extreme proximity to Newtown Creek, our 4th grade students have been following the situation regarding the CSO very carefully. In all of their subjects, they are learning about the history of the creek and how it has become a Superfund Site today. In light of the recent town meeting held at their school, P.S. 110 - The Monitor School -- they would like to add in their comments. According to the Brooklyn Eagle, comments are being accepted up until January 27, 2020. My students are a thoughtful and motivated bunch, and want nothing more than to help their community, and thereby help their world, become a greener, healthier place for everyone. They have researched the subject thoroughly and continue to search for solutions just as they know that you, as Remedial Project Manager of the U.S. Environmental Protection Agency, and your team are. Please see the attached document, which has four of our Green Team students' comments about Newtown Creek for the upcoming town meeting. Thank you so much for reading them. They need to know that as informed and concerned citizens, their voices are being heard.

Respectfully, Jonathan Schulman 4th Grade Teacher P.S. 110 - The Monitor School 124 Monitor Street Brooklyn, NY 11224

Change your thoughts and you can change the world.

### -Norman Vincent Peale

--

Jonathan Schulman 4th Grade Teacher P.S. 110 - The Monitor School 124 Monitor Street Brooklyn, NY 11224

Change your thoughts and you can change the world.
-Norman Vincent Peale

### P.S. 110 STUDENTS' COMMENTS ON THE PROPOSED PLAN REGARDING THE CSO

December 18, 2019

Hello, I'm Balti and I'm a student at P.S. 110 - The Monitor School. We help make our environment greener by putting our Green Team to the test. Our team consists of students, parents, teachers and community leaders who were dissatisfied with the recent oil spills and pollution it has been causing for our creek.

We can help this problem by using filters to clean the water. If we work together, we can make 100 percent of Newtown Creek clean, rather than the proposed plan that clean only 61% of it.

### Balthazar

December 19, 2019

Hello, my name is Maya and I am a student who works well with my 4<sup>th</sup> grade classmates at The Monitor School. We help our school community "go eco" by focusing on a zero-waste plan of recycling and sorting trash. As a school, we are worried about Newtown Creek's combined sewage overflow, and therefore want to test the water to see for ourselves what the effects are. Our school community includes stakeholders such as students, teachers, parents and community leaders who are dissatisfied with the creek becoming polluted over the years. In fact, animal habitats have been destroyed and the water is undrinkable.

We are offering our school Green Team of interested students to brainstorm this issue and come up with viable solutions. One of them is to fundraise for new equipment such as filtration nets or "trash traps," as have been successfully used to catch garbage in rivers in Australia. This would lead to much less pollution and be very easy to put into place. The trash that is collected could be sorted for recycling. It is so important to bring awareness to this problem. Putting signs up along the creek is a start. But we need to really teach others in the school and community about our mission. Then, it will start to come true.

### Maya

December 19, 2019

Hello, I'm Olive and I am in the 4<sup>th</sup> grade at P.S. 110. We help make our school as clean as possible by throwing out our trash properly and recycling the rest. We mostly try to reduce our school's waste, just like we want to for Newtown Creek. Our school's students, teachers, parents and community leaders are dissatisfied with the steps being taken so far to clean up the oil and sewage in Newtown Creek. Thus, our Green Team is ready to help clean the waters! Please give us a chance to think of new ways we can clean the water, such as using a Brita filter like we do in our own homes, but on a larger scale. We all know that toxic chemicals are hurting the water, plants and wildlife. We will not only save our creek, but our neighborhood!

### Olive

December 20, 2019

Hello, I'm Lennox, a 4<sup>th</sup> grade student at P.S. 110 – The Monitor School. I would like to help Newtown Creek by getting kids to take an interest in their environment. Our goal is to make a garden guide for our own school garden, based on what we learn about how to preserve Newtown Creek. We can start a trend on social media and get the government to understand how important this issue is to us. Our stakeholders are the students and community members who live, work and play in Greenpoint. We are dissatisfied with all the animals dying along the creek's shoreline. Our Green Team can provide testing to find out where the oil is still coming from. If the EPA is dedicated to solving the CSO problem, our team is dedicated to finding the option that helps us most now AND in the future.

### Lennox

From: Jon <schulmania@gmail.com>
Sent: Monday, January 27, 2020 4:57 PM

To: Schmidt, Mark; Loney, Natalie; Kandil, Shereen; Vaughn, Stephanie; Kwan, Caroline

**Cc:** Raciunas Dana; Levier Nancy

**Subject:** Fwd: Elevator pitch work from Class 403/405

### Good afternoon Mark,

These are the additional proposals and comments that our 4th grade students are submitting to be included as part of the public record.

Thank you, Ms. Levier, for sending them. I know they prepared hard with their research and debate regarding the Newtown Creek issues. I apologize that some of the handwritten comments are difficult to read. But hopefully, you can include some of their work into the public record.

As far as picking an alternative date for your team's visit to our school, please keep us updated. Our students look forward to hearing about your experience and expertise on the various phases of the operation, as well as sharing their own views in a student town meeting.

Respectfully,

Mr. Schulman
PS 110 - The Monitor School

### Begin forwarded message:

From: Schulman Jonathan < JSchulman 5@schools.nyc.gov>

Date: January 27, 2020 at 4:47:53 PM EST

To: "schulmania@gmail.com" <schulmania@gmail.com> Subject: Fwd: Elevator pitch work from Class 403/405

### Get Outlook for iOS

From: Levier Nancy <NLevier@schools.nyc.gov> Sent: Monday, January 27, 2020 1:28:05 PM

**To:** schmidt.mark@epa.gov < schmidt.mark@epa.gov>; Schulman Jonathan < JSchulman5@schools.nyc.gov>; Levier Nancy < NLevier@schools.nyc.gov>

Subject: Elevator pitch work from Class 403/405

Get Outlook for iOS

# FASK/PROJECT DESCRIPTION:

Students worked in groups and collaborated to research current issues with the pollution in New Town Creek, located in Greenpoint, Brooklyn. They looked up different ways to clean-up the oil or garbage in the water and came up with original ideas in order to "take action". Some students focused on the creek itself, while others chose to clean up and beautify its borders.

This activity culminated in an "elevator pitch" which the students practiced orally, and in a petition letter to be sent to community leaders.

STANDARD 6. Gather relevant information from multiple sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

The study of civics and citizenship requires the ability to probe ideas and assumptions, ask and answer analytical questions, take a skeptical attitude toward questionable arguments, evaluate evidence, formulate rational conclusions, and develop and refine participatory skills.

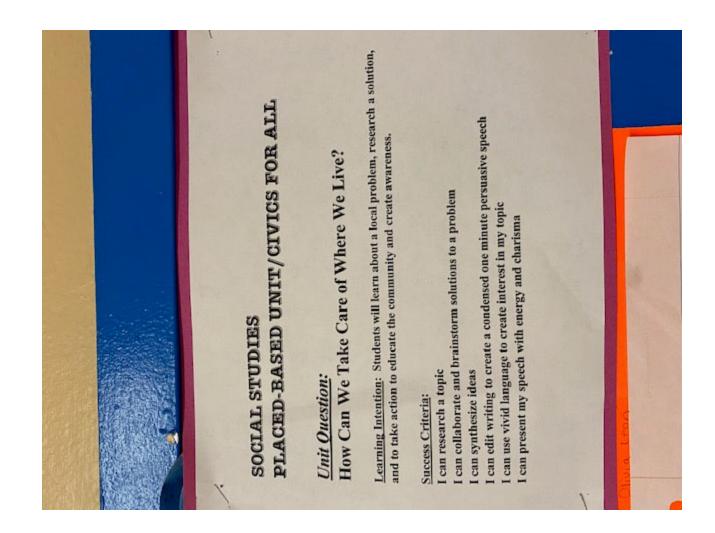
# Students

 suggest alternative solutions or courses of action to hypothetical or historic problems  prioritize the solutions based on established criteria \* propose an action plan to address the issue of how to solve the problem.

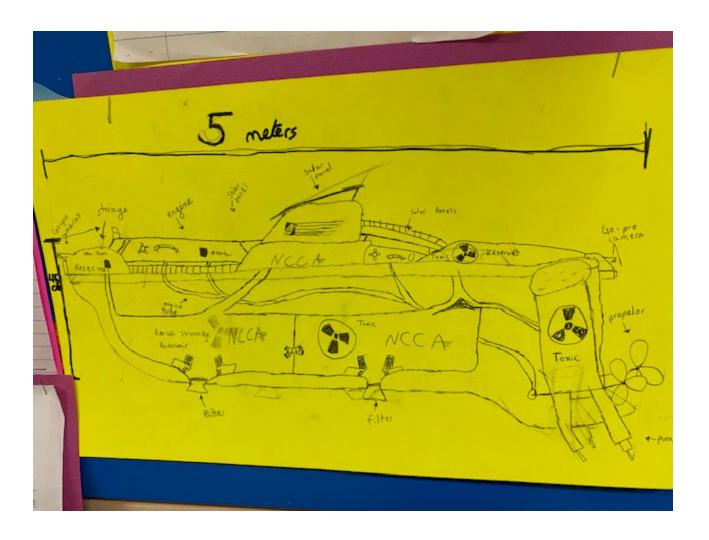
This is evident, for example, when students:

Brainstorm a list of alternative solutions for a real classroom or school problem

Write letters to the [community leaders] or the local paper suggesting preferred afternatives in a local issue



Wide 1070	help andargered	reek's wildlife?  near it Gaess what?  qing because there is  or Milk weed to lay  reive with no Monarch  or plan to save  can also help plants  Our salution is to  resuade people to plant  a. After there's yeare  butter fles, after  es there are more  will have nothing at all!
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anara My	Hello my marie is Zahar Vinarsky, I E.S.P. the Endangered Species Presorv spiecies survive.	here are hardly any plants no hardly any plants no dy handly any plants over also dy handly any plants no bardly any plants of political dy Cages on-loss plants will they can more Newboun creek grow. Or give of his more fact one more fact of per plants has not dealther fires plants are fact fires plants has dan't act fast we not the host we have
Zorhan Umanaly	Hallo my E.S.P. Hr. spicalies	Do you of There of Menach hardly a cages of Milk Milk hardly a mear of the car of the ca



Fleur Letouzé 1/23/20	Hello, my name is Fleur and my company is called "cleaner river."	Did you know that if we don't do anything to clean our waters, by 2050 there will be more plastic than fish in our	Just in our community, the East river has plastic bottles, soda cans, plastic bags ect. Are Floating on the surface of the river.	our solution is to invent a boat that is powered by winds and currents, the boat collects plastic waste, then it gets pushed up by a conveyer belt and gets recy cled after that:	the future of our waters are in danger, we need to help out!	
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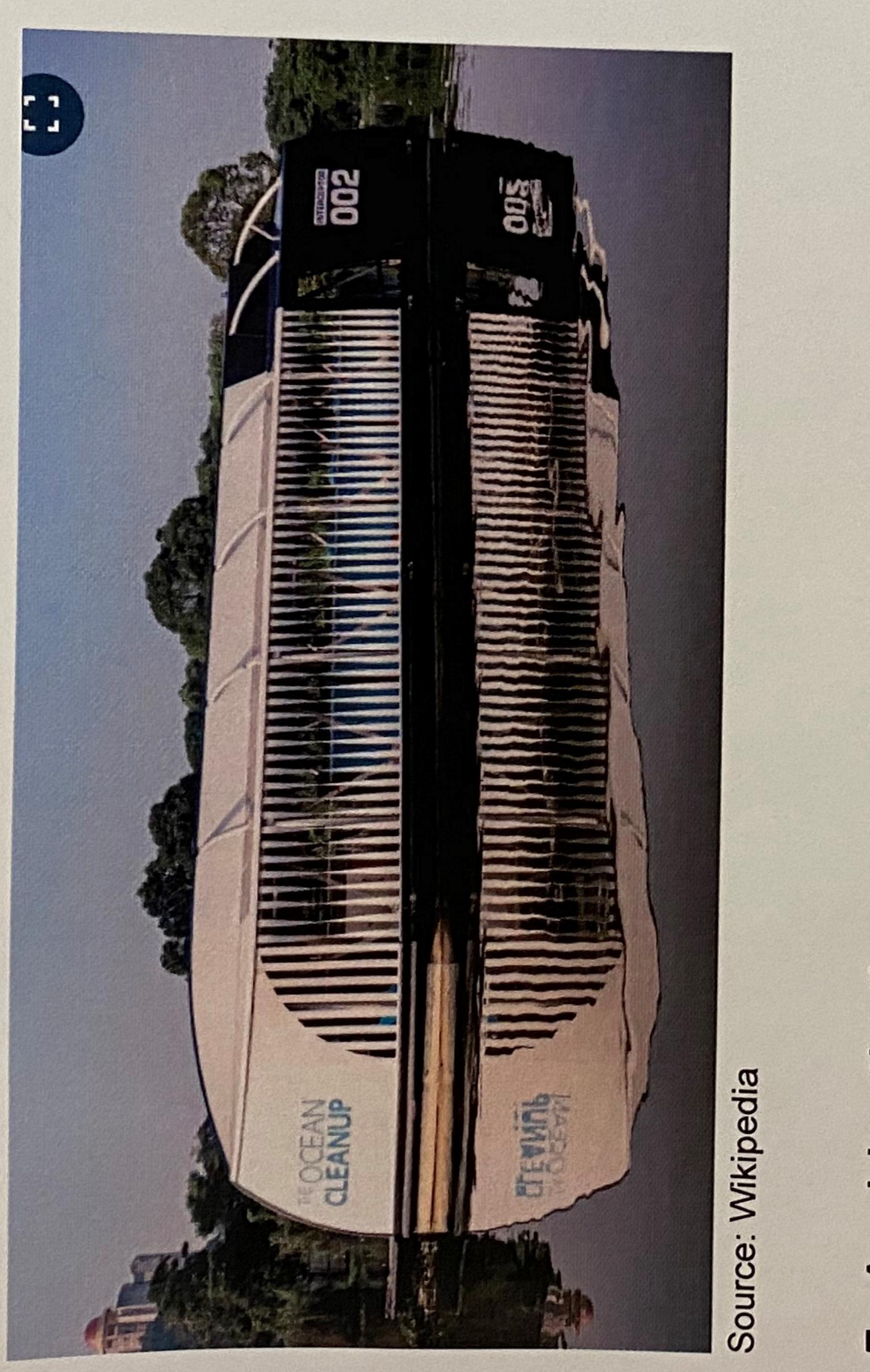
(describ (name yourself would benefit the undersigned, call a difference by this want to Signed L Kinnen Cooper-

# NCCA ELEVATOR PITCH English

Helb, as the Newtown Creek Children Aliance, we help cleaning Newtown Creek's bottom by using a mini cleaning bout. Our custumers include the Environmental Protectio Agency, Apple and the William Vale Hotel. They are dissatisfied with all the pollution that's in the creek. But now, with our new cleaning boat, we can clean up three acre of raw sewage, garbage and oil per day!

Please join us for a meeting on Thursday 23 of February.

4. There is also something called the Interceptor which is The Ocean Cleanup's answer for river plastic waste and maybe it could be used (or something like it) on Newtown Creek. It is 100% solar-powered, extracts plastic autonomously, and is capable of operating in the majority of the world's most polluting rivers. Maybe the extraction process can be modified to suck up the oil also on a version of the boat.



it will take days for vacuum pump pump. Work. It 5. And lastly there is a method that I am sure that will wo combo that I am sure that will work because they tried it London. It is a **combo of water beetles and vacuum pt** water beetles will evaporate the trash. It will take 2 to 3 d the trash to evaporate but if we put about 500 of them it v 1-2 months. While the water beetles do that, the vacuum will suck up the oil. **=** 



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2. Aquatic skimmers are simple devices that can clean polluted water. This method can remove fuel, PCBs, dioxins and radioactive wastes. The **polluted water** is sent through columns of activated carbon; the chemicals stick, or sorb, to the surface and within the pores of the granules, and the **clean water** flows through.



cource: Wikipedia

Ikea created an ocean tool that can pick up trash! It can even suck up oil if modified.



Source: Wikipedia

From: Mike Dulong <mdulong@riverkeeper.org>
Sent: Thursday, February 27, 2020 5:02 PM

**To:** Schmidt, Mark

**Subject:** Riverkeeper Comments on Proposed OU2 Remedy for Newtown Creek Superfund Site

Attachments: image001.png; 2020.02.27 - Riverkeeper Comments on OU2 Proposed Plan.pdf

### Dear Mr. Schmidt:

I have attached Riverkeeper's comments on the EPA's proposed Operable Unit 2 plan for the Newtown Creek Superfund site. Thank you for your consideration of our comments.

Best,

Mike

--

Michael Dulong, Esq. Senior Attorney Riverkeeper, Inc. E-House, 78 North Broadway White Plains, NY 10603 P: 914.422.4133



Riverkeeper---Defending the Hudson. Protecting Our Communities.

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February 27, 2020

### Via U.S. Mail and Email

Mark Schmidt U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY 10007

Re: Comments on EPA's Proposed Operable Unit 2 Plan for the Newtown Creek Superfund Site

Dear Mr. Schmidt:

I write on behalf of Riverkeeper, Inc., in support of the Newtown Creek Superfund Community Advisory Group (CAG) comment letter, dated February 10, 2020, on the United States Environmental Protection Agency's (EPA) proposed Operable Unit 2 (OU2) plan for "no further" reduction of combined sewer overflow (CSO) pollution at the Newtown Creek Superfund site.¹ Riverkeeper opposes EPA's plan to take further CSO reduction "off the table" for the Superfund remedy. Such an action would be premature, unnecessary, and in violation of EPA procedure for Superfund remedy review.

The proposed OU2 plan would undermine EPA's forthcoming sitewide remedy selection for creek cleanup, known as the Operable Unit 1 (OU1) remedy. Once the sitewide OU1 remedy is implemented, ongoing CSOs have the potential to cause recontamination. A decision on the OU2 remedy should wait until EPA has set forth risk-based goals in the Remedial Investigation and Feasibility Study and has holistically identified the actions necessary to achieve such goals and prevent recontamination as part of the OU1 Record of Decision (ROD). Those determinations, which would drive any potential need for additional CSO reduction, have yet to be made. Our understanding is that the methodology and procedure by which EPA made such determinations in the context of the Gowanus Canal Superfund cleanup were to first set remedial goals and then assess whether the remedy for CSO inputs met those goals. No good reason has been provided for the EPA to diverge from that procedure.



<sup>&</sup>lt;sup>1</sup> I have appended the CAG comment letter and incorporate it by reference herein.

Moreover, the information upon which an OU2 determination would be made is inaccurate and incomplete. The fact that the OU2 plan relies on a flawed Long-Term Control Plan (LTCP) renders it inherently defective. In addition to the shortcomings of the LTCP discussed in the CAG comment letter (pages 5-8), it should be noted that the LTCP failed to evaluate alternatives that would reduce or mitigate impacts from total suspended solids (TSS) or other pollutants relevant to Superfund, because TSS is not listed as a cause of Newtown Creek's nonattainment of water quality standards.<sup>2</sup> Therefore, the benefits of potential remedies for toxic solids pollution, such as high rate clarification, were never considered alongside or in lieu of further CSO reduction. Nor was the feasibility of pursuing such remedies in parallel ever assessed. The information in the LTCP relied upon by EPA must be independently scrutinized and confirmed before the OU2 plan is finalized.

In addition, as detailed in the CAG comment letter (page 3), taking action on OU2 at this time would serve no purpose for Newtown Creek, its habitat or the people who work and recreate on it. Finalizing the proposed OU2 plan would not modify New York City Department of Environmental Protection's (DEP) forthcoming requirements to reduce CSO discharges into Newtown Creek in accordance with the milestones set forth in the LTCP.<sup>3</sup> That work will proceed under the legally binding LTCP, at least for now, with or without EPA action. However, it is likely that in the coming years DEP will renegotiate the LTCP with New York State. In that case, EPA would have to reopen and reassess its decisions on OU2. Therefore, EPA should wait until it has completed its OU1 analysis for the creek to set CSO reduction requirements and incorporate mandatory provisions in the ROD to guarantee that the CSO remedy will be completed.

Finally, as discussed in the CAG comment letter (pages 4-5), to comply with EPA policies for determining Superfund remedies costing more than \$50 million, the proposed OU2 remedy must be subject to review by the National Remedy Review Board (NRRB).<sup>4</sup> In addition, although Riverkeeper has faith that dedicated and experienced regional EPA staff members are the most knowledgeable about the local issues and intricacies of the complex Newtown Creek site, the decision must also be subject to review by the EPA Administrator.<sup>5</sup> While the proposed OU2 plan is labeled as "no further action," in reality it is dependent upon the LTCP, which requires DEP to implement CSO reduction measures expected to cost roughly \$1.65 billion. The CSO reduction measures in the LTCP serve to reduce the contaminants of potential concern relevant to the Newtown Creek cleanup and they underly EPA's analysis of the risks of ongoing CSOs to human health and benthic

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<sup>&</sup>lt;sup>2</sup> New York City Dep't of Envtl. Prot., Combined Sewer Overflow Long Term Control Plan for Newtiwn Creek at 8-14 (2017), available at https://www1.nyc.gov/assets/dep/downloads/pdf/water/nyc-waterways/newtown-creek/ltcp-newtown-creek-cso.pdf.
<sup>3</sup> Id.

<sup>&</sup>lt;sup>4</sup> Memorandum from Robin H. Richardson, Acting Dir., Off. of Superfund Remediation and Tech. Innovation, U.S. Envtl. Prot. Agency, to Superfund Nat'l Pol'y Managers, Regions 1-10, U.S. Envtl. Prot. Agency, Sept. 4, 2014, available at https://semspub.epa.gov/work/HQ/176423.pdf.

<sup>&</sup>lt;sup>5</sup> Memorandum from E. Scott Pruitt, Adm'r, U.S. Envtl. Prot. Agency, to Assistant. Adm'r, Off. Land and Emergency Mgmt., and Reg'l Adm'rs, U.S. Envtl. Prot. Agency (May 9, 2017), *available at* https://www.epa.gov/sites/production/files/2018-05/documents/cercla\_delegation\_memo\_and\_delegations-2.pdf

organisms. As discussed above, if the LTCP is later modified, EPA would have to reevaluate its OU2 plan. As a result, the LTCP is an essential part of the proposed OU2 remedy and must subject to review and approval by the NRRB and Administrator.

Thank you for your consideration of these comments.

Respectfully yours,
Michael Duling

Michael Dulong Senior Attorney

Cc (via U.S. mail):

Christine Poore, NRRB Chair, EPA Chloe Metz, NRRB Region 2, EPA

### **Newtown Creek Community Advisory Group (CAG)**

February 10th, 2020

### Via email to schmidt.mark@epa.gov

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY 10007

### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

The Newtown Creek Community Advisory Group (CAG) respectfully submits the following comments on the Environmental Protection Agency's (EPA) proposed remedy to address Operable Unit 2 (OU-2) of the Newtown Creek Superfund site (Proposed Plan), related to future discharges of chemicals of potential concern (COPCs) from Combined Sewer Overflows (CSOs) from potentially responsible party New York City Department of Environmental Protection (DEP). We are deeply concerned that the Proposed Plan would take off the table any potential reduction of CSO pollution sources, given their ongoing destruction of our ecosystems and the ongoing dangers CSOs pose to those that live or work near the Creek or seek to utilize the waterway for recreational and/or educational purposes. Furthermore, we are disappointed with EPA that the first major decision in the Superfund remediation of Newtown Creek is to essentially let a polluter off the hook.

We believe finalizing this Proposed Plan would call into question EPA's commitment to cleaning up Newtown Creek and set a poor precedent for future Superfund decisions. Our waterway has been continuously poisoned for over 150 years and the communities surrounding it have been cut off from this once natural resource. Despite that, hundreds of human-powered boaters now take to the water each year and dozens of businesses utilize their shoreline access. Besides the human population, wildlife is showing its desire to return to the once decimated waters of the Creek. You can find blue crabs and ribbed mussels along the shores, numerous fish species swimming in its waters, and waterfowl prevalent year round. Community organizations and city agencies are working to bring back wetland plants to abandoned bulkheads and eroding shorelines. Allowing ongoing pollution to continue is unjust for us and unacceptable for EPA. Our detailed comments are below.

### 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.

The CAG takes great issue with how the Proposed Plan attempts to downplay the severity of CSO pollution through the use of data, charts and narrative comparing CSO to other significant pollution sources such as Stormwater, Treated Discharges and East River Surface Water inputs. We believe that EPA's responsibility, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), is to protect human and ecological health by eliminating/mitigating known pollution sources, period. It is irresponsible for EPA to avoid CSO reduction simply because it may not be the most significant ongoing pollution source. The data within the Proposed Plan supports a very basic understanding of urban waterbodies: reducing CSO volume means reducing the amount of COPCs entering the waterway. The modeling used in OU-2 clearly shows that reductions of CSO volume directly correlate with reductions in CERCLA chemical loading. This is highlighted in Figures 4-a through 4-d with a declining trend between the 0% capture ('No Action'), 61% capture ('Nor Further Action'), and 100% capture (implied at zero kg, but not shown) scenarios. Because additional reduction beyond the arbitrarily set 61% figure will result in absolute reduction of COPCs entering Newtown Creek via CSO, we believe the EPA has the responsibility to pursue further action and prevent this ongoing pollution source.

## 2. It is illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.

The other significant pollution sources referenced in OU-2 (which serve to downplay the severity of CSO input) have yet to be properly evaluated with cleanup goals in mind to reduce risks to human and ecological health. Therefore it is illogical to compare CSOs to other pollution sources with no criteria yet established to assess their impact or how each source may be reduced, as the OU1 Record of Decision has not yet been finalized. Additionally, while data referenced in OU-2 utilizes present day and anticipated CSO levels via skewed modeling (see Comment 7 below) and anticipated LTCP projects, the same favorable consideration is not given in evaluating the other pollution sources.

For instance, Figure 4-a shows Comparison of total polycyclic aromatic hydrocarbons (TPAH17) loads from CSOs and other evaluated inputs to the study area, with the concentrations from 'Treated Discharges' at approximately six times higher than the second most significant source, 'CSO - No Action.' Not only does this chart fail to consider the possibility of future reductions to TPAH17 levels across all sources, but we believe the 'Treated Discharges' data used is largely skewed by a single Con Edison outfall that has since been reduced under direction from EPA and New York State Department of Environmental Conservation (DEC). Because we believe these comparisons to be misleading, inaccurate, and not based on actual evaluations of impact or target cleanup goals, they should be omitted from the OU-2 proposed plan.

2

<sup>&</sup>lt;sup>1</sup> See EPA, Newtown Creek Superfund Site Proposed Plan for Operable Unit 2, at Figures 4-a, 4-b, 4-c, & 4-d (Nov. 2019), available at <a href="https://semspub.epa.gov/work/02/562695.pdf">https://semspub.epa.gov/work/02/562695.pdf</a>.

### 3. It is Premature to Take CSO Reduction Off The Table.

We believe the EPA should not act on OU-2 until it sets a clean-up goal and finalizes a remedy for OU-1, or it becomes clear in the interim that additional CSO capture will be required beyond that required in the LTCP. As it stands, the City is currently under a Consent Order to complete the requirements of the LTCP. Although that Consent Order is subject to future renegotiation and decades of other intervening changing circumstances, the City must, for now, move forward with the planning, designing, procurement, and construction of sewage capture infrastructure. As the City's actions will not change based on the Proposed Plan, there is no compelling reason for EPA to finalize it at this time. The Proposed Plan will merely take further CSO reduction "off the table." That should not be done without setting a remedial goal for COPCs. Remedial goals set for OU-1 should be based on risk factors for both humans and other sensitive receptors, such as benthic organisms. Once those goals are set, the OU-2 Proposed Plan can be assessed against them. To the extent that the Proposed Plan may allay the City's concerns about additional future actions being required, that is not a sufficient reason to make a determination before the OU-1 remedy. Until those other ongoing pollution sources are compared to CSO discharges, EPA should not take potential further CSO reduction "off the table."

The failure of the EPA, DEC and DEP to effectively coordinate the timing of Superfund and LTCP processes has left the community in an unfair predicament wherein a full consideration and mitigation of CSO impacts is being sacrificed in favor of convenience. Therefore, we believe that design and advancement of the LTCP solutions can and should continue up to the point where a future and final determination of Superfund related CSO impacts under OU-1 would not significantly disrupt existing progress towards CSO reduction.

### 4. A 61% Reduction of COPCs from CSOs Is Insufficient.

Modeling conducted under the LTCP, and evaluated as part of the OU-2 Focused Feasibility Study, estimates that over 1.2 billion gallons of combined sewer overflow are discharged to Newtown Creek annually. The 'No Further Action' remedy proposed will result in a 61% reduction from today's levels, still leaving over 460 million gallons of CSO entering Newtown Creek per year. As Figures 4a, 4b, 4c and 4d of the Proposed Plan clearly show, this 61% is not sufficient for significantly reducing the annual loads of various chemicals to Newtown Creek via CSO. Whereas the New York City performed a "knee-of-the-curve" analysis to attempt to make the case for diminishing returns in regards to pathogen and dissolved oxygen levels to appease state DEC needs for the LTCP, there appears to be a direct linear correlation between volume and chemical loading. In other words, the curve of reduction of COPCs is linear, so any further reduction beyond 61% would be equally impactful. This raises the question as to why the EPA would accept a failing grade (61%) reduction as part of the OU-2 Proposed Plan. Adopting the 61% reduction from another regulatory scheme is arbitrary and meaningless for the purposes of

Superfund. While 100% may not be cost effective, no other feasible option between 61% and 100% was even evaluated. As there is a direct linear benefit of COPC loading reduction resulting from any additional decrease in CSO discharge,, EPA must assess reasonable alternatives between 61% and 100% capture, including alternate means of controlling CSOs, such as additional green infrastructure, capture, treatment, and diversion.

# 5. Superfund<sup>2</sup> Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.

CERCLA provides clear federal authority to "respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment." Additionally, the law authorizes "[l]ong-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening."

The Human Health Risk Assessment acknowledges the existing recreational uses along Newtown Creek, such as boating, fishing and swimming. There is also a threat to benthic macroinvertebrates from toxic sediments, as identified in the Baseline Ecological Risk Assessment. The failure to assess OU-2 in the context of these risk assessment would undermine the Superfund process. The growing interest among community members to further utilize the waterway and enjoy the benefits of a healthy ecosystem (as evidenced by increasing public access and boating opportunities) would be directly negated by ongoing contamination. The EPA should exercise its authority under Superfund to protect these uses and benthic habitat they depend on. At the very least, EPA must wait to assess the CSO remedy in the context of the sitewide Operable Unit 1 (OU-1) remedy to determine whether the threats from COPCs present in the CSO discharges are adequately addressed.

### 6. "No Further Action" Is an Action Requiring National Consistency Review.

It is inaccurate to label the proposed plan as "No Further Action." Instead it must be categorized as a proposed remedy and subject to National Consistency Review by the National Remedy Review Board (NRRB). In reality, the Proposed Plan, which is set to be a "final" remedy, is contingent upon and effectively requires an action by DEP that is expected to cost roughly \$1.65 billion. While the City's forthcoming action was initially devised in the context of Clean Water Act statutory requirements, it also serves to control a significant amount of COPCs by capturing and treating sewage and polluted stormwater runoff.

The DEP's forthcoming construction of new sewage capture infrastructure underlies the determinations that EPA makes regarding the sufficiency of the Proposed Plan to mitigate human health and environmental risks, the asserted lack of need for further sewage capture,

4

<sup>&</sup>lt;sup>2</sup> U.S. Envtl. Protection Agency, Superfund CERCLA Overview, https://www.epa.gov/superfund/superfund-cercla-overview (last accessed Jan 20, 2020). <sup>3</sup> *Id.* 

and the plans for ongoing monitoring and a potential track-back initiative. If the City were to subsequently renegotiate the requirements in its "Long-Term Control Plan" (LTCP) with the state Department of Environmental Conservation (DEC) to modify its proposed CSO capture infrastructure plans, EPA would have to reopen and reevaluate the OU-2 Proposed Plan. Therefore, the \$1.65 billion expenditure by the City is an essential part of the proposed remedy.

The false categorization of the OU-2 Proposed Plan as "no further action" would allow it to improperly avoid the normal procedural elements of remedy selection. Specifically, it would allow OU-2 to avoid National Consistency Review by the NRRB, which determines whether such plans are consistent with Superfund law, regulations and guidance.

The NRRB reviews all Superfund response decisions for which the proposed remedial action is in excess of \$50 million.<sup>4</sup> Despite EPA's insistence that the \$1.65 billion action being taken by the City pursuant to the LTCP has nothing to do with Superfund, in fact, the agency reviewed a real "No Action" plan, and determined that such a plan would not offer the same pollution reduction benefit as the \$1.65 billion remedy it selected. Because the EPA finds this significant amount of investment will optimize sewage pollution reduction, the NRRB should evaluate "the nature of the site, the risks posed by the site, regional and state/tribal opinions on proposed actions, the quality and reasonableness of the cost estimates, and any other relevant factors or program guidances" to ensure the Proposed Plan is consistent with applicable laws, regulations and guidance.

The EPA cannot opt out of this procedure, and it must be completed and made available *before* republication of the Proposed Plan for review and comment.<sup>6</sup> Therefore, the OU-2 Proposed Plan must be withdrawn and subjected to NRRB review before being reissued for public comment.

## 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.

The Newtown Creek LTCP, upon which the Proposed Plan is based, has a number of shortcomings, including self-serving modeling, failure to adequately account for increasing precipitation caused by climate change, inflated green infrastructure implementation figures, and likely underestimation of redevelopment once the OU-1 remedy is implemented.

5

<sup>&</sup>lt;sup>4</sup> Memorandum from Robin H. Richardson, Acting Director, Office of Superfund Remediation and Technology InnovationU.S. Envtl. Protection Agency, regarding National Remedy Review Board Criteria Revision and Operational Changes, OSWER Directive 9285.6-21, Sept. 4, 2014, *available at* https://semspub.epa.gov/work/HQ/176423.pdf.

<sup>&</sup>lt;sup>5</sup> Memorandum from Elliot P. Laws, Assistant Admin'r, Off. of Solid Waste & Emergency Response, U.S. Envtl. Protection Agency, Formation of National Superfund Remedy Review Board, at 2, Nov. 28, 1995, *available at* https://semspub.epa.gov/work/HQ/176405.pdf.

New York City has a track record of skewing modeling results in its favor. For instance, DEP seems to have mixed year-long and seasonal sampling datasets to devise its LTCP to control pathogens and low dissolved-oxygen conditions in receiving waters resulting from CSO discharges. Without explanation, the City has also relied on separate one-year and ten-year models for the LTCP, depending on the pollutants it assessed; it is yet unclear why DEP used one year of rainfall data (2008) for its InfoWorks modeling assessment and ten years of rainfall data for the East River Tributaries Model assessment. While 2008 was selected as representing a typical year, the ten year record includes 2008, and the longer record would better capture long-term averages and trends. Given the previous attempts to create favorable data, questions arise about sampling and modeling for COPCs:

- What modeling dataset did the EPA use to inform the Proposed Plan?
- For what time period is the modeling applicable?
- Were models based solely on 23 samples?
- Were those samples representative of different times of day, different seasons, and different outfall locations (which drain separate sewersheds)?
- Are 23 samples from CSO outfalls sufficiently representative of CSO outfalls in all seasons?
- Did EPA oversee CSO Outfall sampling? How so?
- Did EPA perform its own CSO sampling or rely on a different CSO sampling protocol to devise the Gowanus Canal remedy? If so, why?
- Are the samples covering 96% of CSO discharges representative enough of all discharges to model local sediment deposition?

In addition to modeling anomalies, one of the most vital shortcomings of the LTCP and Proposed Plan lies in the fact that the baseline modeling in determining CSO volume ignores climate change. As it is based on 2008 rainfall data, the LTCP fails to incorporate the recommendations of the New York City Panel on Climate Change to account for the effects of increased precipitation, which have been repeatedly acknowledged by DEP, DEC, and EPA. Construction of the proposed sewage infrastructure pursuant to the LTCP is not expected to be complete until 2042, and its useful life will potentially extend over 100 years.

According to the New York City Panel on Climate Change ("NYPCC"), storms could grow significantly in frequency and intensity by 2050. "Mean annual precipitation increases projected by the [global climate models] are 4 to 11 percent by the 2050s and 5 to 13 percent by the 2080s." Therefore, the project will likely fail to achieve the 61% reduction goal as of its first day of operation (estimated 2042). Yet DEP continues to rely on backward-looking projections, using 2008 as a model year. DEP states in its October 10, 2019 response to comments on the Citywide LTCP:

6

<sup>&</sup>lt;sup>7</sup> N.Y. City Panel on Climate Change, 2015 Report Executive Summary (2015), http://onlinelibrary.wiley.com/doi/10.1111/nyas.2015.1336.issue-1/issuetoc.

[t]he typical rainfall year used for modeling is the 2008 JFK rainfall, which remains a good representation of current average rainfall conditions through 2019

(Response 1). But even if such a model continues to account for average rainfall through the past ten years, conditions are expected to grow significantly wetter. For example, 2008 saw only 46.3 inches, but 57.4 inches of precipitation fell at JFK airport in 2018.8 The City and EPA can rely on NYPCC data and expect these higher precipitation rates to become the norm, with both frequency and intensity of rainfall increasing.

Even using 2011 as the base year for the Proposed Plan model fails to account for future increases both when the LTCP is initially implemented and throughout the useful life of the sewage-capture infrastructure. EPA must reevaluate the effectiveness of the Proposed Plan to protect human and ecological health, given the increased precipitation and corresponding increase in CSO discharges over the next century.

Additionally, sea level could rise 8 to 30 inches by 2050, high enough as to inundate the low-lying wastewater infrastructure. For New York City,

[National Panel on Climate Change] (2015) projects a mid-range (25th–75th percentile) sea level rise of 11–21 in. (0.28–0.53 m) at the Battery by the 2050s. . . . High-end estimates (90th percentile) reach 30 in. (0.76 m).<sup>9</sup>

When relying on existing and future stormwater and sewage infrastructure, EPA must assess and model how sea level rise will affect the ability of wastewater treatment plants, CSO outfalls, and new proposed sewage capture tunnels to function properly.

While climate change is a certainty, predicting population change in New York City is difficult. The LTCP does include a predicted model of population growth, but it does not necessarily account for proposed rezonings, such as the ongoing proposal to rezone northern Brooklyn areas adjacent to the creek, in the neighborhoods of Greenpoint, East Williamsburg, and Bushwick.<sup>10</sup> As representatives of developers are currently attending CAG meetings, it is reasonably foreseeable that there will be pressure to construct residential houses once the remedy is underway, bringing greater populations and combined sewer volume to the Newtown Creek sewershed.

<sup>&</sup>lt;sup>8</sup> Nat'l Weather Serv., John F. Kennedy Airport, NY Historical Data, https://www.weather.gov/okx/KennedyHistorical (last accessed Nov. 27, 2019).

<sup>&</sup>lt;sup>9</sup> N.Y. City Panel on Climate Change, 2015 Report Executive Summary (2015), http://onlinelibrary.wiley.com/doi/10.1111/nyas.2015.1336.issue-1/issuetoc.

<sup>&</sup>lt;sup>10</sup> Paul Stremple, Newtown Creek's Brooklyn Waterfront Faces First Rezoning Changes in Nearly 60 Years, Brooklyn Eagle (Apr. 10, 2019),

https://brooklyneagle.com/articles/2019/04/10/newtown-creeks-brooklyn-waterfront-faces-first-zoning-changes-in-nearly-60-years/.

The models also depend on incorrect assumptions about implementation of green infrastructure. On page 10 of the OU-2 Focused Feasibility Study, EPA explains that conditions for determining the baseline CSO discharge of 1.16 billion gallons per year, which is less than the current 1.62 billion gallons per year, are calculated using increased future treatment capacity and reduced stormwater flow because of green infrastructure plans. The EPA should share with the CAG exactly how these figures were determined. As it stands, the City is very unlikely to meet its 2030 green infrastructure implementation goals. DEP is already far behind its green infrastructure targets and does not expect to achieve its 2030 milestones. City-wide, DEP has missed a previous milestone to manage the equivalent of 1,181 impervious acres (a 1.5% green infrastructure application rate) in 2015, and, as of 2019, it still has managed only 591 acres (a 0.75% green infrastructure application rate) in 2019. DEP is most likely going to miss its 2030 milestone, which is the equivalent of 7,873 managed acres (a 10% green infrastructure application rate). Given the slow start to the green infrastructure program in New York City, DEP should not incorporate these projects into its baseline projections for its analysis of CSO.

We believe that all proposed solutions for the clean-up of Newtown Creek must account for the various changes that climate change will bring to New York City, including sea level rise and precipitation increases. Therefore, we ask that the EPA provide the community with a new analysis that both accurately reflects both predicted local CSO volumes and COPC loadings (based on increases in annual rainfall and populations within the watershed) for the years 2050 and 2100, and what the new levels mean in regards to the clean-up and potential recontamination of Newtown Creek.

## 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.

We are very concerned that the only additional potential actions considered in the OU-2 Proposed Plan are monitoring, the implementation of a track-back program to "identify sources of elevated contaminant concentrations within the sewershed," and control actions such as "the placement of sediment traps and/or oil sorbent pads at the end of CSO discharge pipes and in-creek maintenance dredging to address potential accumulation of contaminated solids near the CSO discharges." We find both approaches to be ineffective, and unproven, band-aids that will achieve very little in the clean-up and elimination of chemical loading to Newtown Creek.

In regards to the track-back program, the Newtown Creek sewershed is approximately 4,642 acres in total. In some cases, there are single CSO pipes that drain entire neighborhoods where hundreds of thousands of people live, work, flush toilets, and potentially dump COPCs into catch basins. The concept of locating the sources of elevated chemical levels within a combined

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<sup>&</sup>lt;sup>11</sup> N.Y. City Dep't of Envtl. Protection, 2018 Green Infrastructure Annual Report 2 (2019).

<sup>&</sup>lt;sup>12</sup> *Id*.

sewer system area so massive and complex is optimistic at best. Additionally, we do not understand the basic logic as to why and how this track-back plan is being considered.

Secondly, the FFS gives very limited information on how sediment traps, sorbent pads, or maintenance dredging would effectively reduce chemical loads to the Creek, or potentially work in conjunction with, or possibly disrupt, chosen remedies that are yet to be selected under OU-1. EPA needs to provide greater information on these programs to the CAG and ensure that they are consistent with what the community will be seeking in an ultimate Record of Decision.

### 9. EPA Should Be Consistent With Gowanus Methodology and CSTAG Recommendations.

On July 9th, 2015 the Contaminated Sediments Technical Advisory Group (CSTAG) presented formal recommendations to EPA Region 2 regarding Newtown Creek.<sup>13</sup> Principle 1 in the letter argues to "Control Sources Early" and specifically mentions the impacts of CSOs in relation to CERCLA: "CSTAG recommends that the Region work with the appropriate regulatory authorities to develop a plan to eliminate any unpermitted, piped discharges, minimize impacts from CSOs, and address groundwater discharges that may recontaminate the Creek." EPA should heed the advice of CSTAG and fully consider options to 'minimize impacts' from CSO and not attempt to write-off the documented chemical loading and recontamination that CSO will continually bring to Newtown Creek.

In its Record of Decision for the Gowanus Canal, a nearby waterway similarly affected by heavy industrial use and ongoing CSOs, EPA required the DEP to construct two sewage capture tanks totalling 12 million gallons in volume in order to prevent future risks to benthic habitat. While Newtown Creek is a larger waterbody with different conditions from Gowanus Canal, the methodology for assessing the potential future risk of recontamination from ongoing CSO discharges should be the same or nearly the same for the two waterbodies. If not, EPA must provide an articulable reason for the differing methodologies. The different superfund remedies for waterbodies only 3.5 miles apart from each other are another reason the proposal must be subject to National Consistency Review by the NRRB. The fact that DEC and the City have previously agreed to a sewage capture plan in Newtown Creek is irrelevant to the methodologies to analyze risk in the context of Superfund.

\_\_\_\_\_

The decisions set forward by EPA under OU-2 will have significant impact on the health of the ecosystems and communities that live in and near Newtown Creek. We look forward to working with EPA to implement meaningful solutions that properly address the ongoing and future impacts of CSO, as well as all other contamination sources.

<sup>&</sup>lt;sup>13</sup> Contaminated Sediments Technical Advisory Group, "CSTAG Recommendations on the Newtown Creek Contaminated Sediment Superfund Site " July 9th, 2015.

#### Sincerely,

#### Newtown Creek Community Advisory Group:

Leah Archibald\* Tony Argento Erik Baard

Patterson Beckwith

Tanya Bley

Lisa Bloodgood\*
Michael Devigne
Mike Dulong\*
Willis Elkins\*\*
Katie Ellman
Quincy Ely-Cate\*
Stephen Fabian
Tom Grech
Ted Gruber
Michael Haskell
Michael Heimbinder

Brett Herman
Laura Hofmann
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Ed Kelly\*

Bradley Kerr Louis Kleinman Ryan Kuonen\*\* Steve Lang Michael Leete Rich Mazur\*

Dorothy Morehead

Jan Mun

Johanna Phelps
Paul Pullo\*
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Mike Schade\*
Jason Sinapoli
Dewey Thompson
Teresa Toro

Mitch Waxman\*
Charles Yu
Kate Zidar
Marina Zurkow

<sup>\*</sup>Steering Committee Member

<sup>\*\*</sup>Co-Chair

From: Chyao, Amy (Law) <achyao@law.nyc.gov>

Sent: Friday, February 28, 2020 3:54 PM

To: Schmidt, Mark
Cc: Plache, William (Law)

**Subject:** Newtown Creek PRAP OU2 Comments from New York City

Attachments: Comments of the City of New York on the Proposed Remedial Action Plan for Newtown Creek,

Operable Unit 2.pdf

#### Hello Mr. Schmidt,

Please see attached for comments from the City of New York on the Proposed Remedial Action Plan for Newtown Creek, Operable Unit 2.

#### Thanks,

#### **Amy Chyao**

Assistant Corporation Counsel Environmental Division New York City Law Department 100 Church Street, Room 6-126 New York, New York 10007 (212) 356-3594 (o) | (646) 951-2605 (c) achyao@law.nyc.gov



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February 28, 2020

#### Via Email

JAMES E. JOHNSON

Corporation Counsel

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency ("EPA") 290 Broadway, 18<sup>th</sup> Floor New York, New York 10007

Re: Comments on the Proposed Remedial Action Plan for the Newtown Creek Superfund Site, Operable Unit 2

Mr. Schmidt:

The City of New York ("City") respectfully submits its comments on the Proposed Remedial Action Plan ("PRAP") for Operable Unit 2 ("OU2") of the Newtown Creek Superfund Site. The City agrees that the Selected Remedial Alternative in the PRAP meets the NCP Criteria, is protective of human health and the environment, is cost-effective, and will provide for a substantial reduction of combined sewer overflows ("CSOs"). Additionally, the City agrees that it is proper for EPA to select a remedy for OU2 at this time because the selected remedial alternative will not be affected by the outcome of the Remedial Investigation and Feasibility Study for OU1. Furthermore, selection of a remedy at this time allows the City to proceed in a timely manner with design and construction, including land acquisition, for the CSO control infrastructure required under the City's Long Term Control Plan ("LTCP") as approved by New York State and consistent with the Superfund process.

The City respectfully submits the following comments on the OU2 PRAP:

1) <u>Additional Control Actions</u>: As the PRAP states, "the overall goal of the OU-2 FFS is to determine if the volume controls prescribed by the LTCP designed to meet the requirements of the CWA program are sufficient to also meet the CERCLA requirements for the Site." EPA has concluded in the PRAP that, in fact, "the volume reduction achieved by the LTCP will be

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<sup>&</sup>lt;sup>1</sup> PRAP at 5

sufficient for the purposes of a CERCLA response action."<sup>2</sup> As such, the ROD for OU2 will select a final remedy for CSO volume controls, subject only to standard EPA reopeners.

The PRAP acknowledges that OU1 remedy selection is ongoing and, separate and apart from the OU2 CSO volume controls selected in the OU-2 ROD, further in-Creek response actions will be evaluated as part of OU1.<sup>3</sup> The PRAP also acknowledges that there may be a time gap between implementation of these selected OU1 in-Creek remedies and completion of the OU2 CSO volume controls. Accordingly, the PRAP proposes a monitoring plan for CSOs until the CSO volume controls are fully implemented.<sup>4</sup> The purpose of the monitoring plan is to confirm that the contaminant of potential concern ("COPC") concentrations in CSO discharges are consistent with the lines of evidence relied upon in the OU2 FFS and PRAP. This monitoring plan is independent of any in-Creek remedy selection for OU1, which instead addresses the risk posed due to current COPC concentrations in sediment.

Finally, the PRAP identifies potential future additional CSO point of discharge controls. These potential additional controls are unwarranted and inconsistent with EPA's determination that the preferred alternative is NCP compliant and provides overall protectiveness of health and the environment.

Comments regarding specific proposed in-Creek control actions attributable to CSOs are as follows:

- a) Maintenance Dredging Adjacent to CSO Outfalls: As discussed in the PRAP, other sources to the Creek include, but are not limited to, NAPL migration from upland properties and subsurface sediments, groundwater, stormwater, atmospheric deposition, and the East River. Given the tidal nature of the Creek, the contaminants from these sources get transported throughout the Creek. Consequently, it is inappropriate to attribute sources of contamination in sediments to a source based on proximity alone. EPA has acknowledged this in its comments in the OU1 RI/FS. Therefore, in-creek maintenance dredging adjacent to CSO outfalls as part of additional control action cannot be solely attributed to CSOs.
- b) Sediment Traps Are a Measurement Tool, Not a Remedial Tool: Sediment traps capture the solids and COPCs in the water column and, depending on the duration of deployment, provide a long-term estimate of the nature of the COPCs arriving to the surface sediments. As discussed in comment 1(a), given the tidal nature of the Creek, the COPCs captured in the traps can be from multiple sources, not just CSOs. Therefore, the sediment traps do not provide an accurate estimate of COPCs coming from CSOs and are not a control action for CSOs, but rather a measurement tool.

<sup>&</sup>lt;sup>2</sup> *Id.* at 11.

<sup>&</sup>lt;sup>3</sup> *Id.* at 2, 11–12.

<sup>&</sup>lt;sup>4</sup> See infra, comment 2.

- c) Deployment of Oil Sorbent Pads: Additional clarification is needed to understand the need and assess the implementability of this potential control action. Specifically, during the OU1 CSO sampling program, samples were collected in large transparent glass containers, and NAPL was not observed in any of the samples. Therefore, sorbent pads appear to be irrelevant for CSO discharges.
- 2) <u>CSO Monitoring Plan</u>: The PRAP states that the four large CSOs will be sampled on a quarterly basis until the LTCP is fully implemented (approximately 22 years). The City proposes that this frequency and duration of sampling could be considered only if the quarterly data show an increasing trend in the COPCs of concern. If the COPC trends remain at the same levels or decrease, then the City will reduce the frequency of sampling, which will be decided with EPA during the development process of the monitoring plan.
- 3) <u>Costs Discussed in the PRAP</u>: There appears to be a typographical error in the monitoring costs discussed in the PRAP on page 8 in the fourth paragraph. The estimated cost for tracking the sources of contamination is \$5 million.
- 4) Characterization of Sources to Study Area: The description of the data collected for the Site on page four of the PRAP document is incomplete. The second paragraph gives an impression that NAPL samples were collected separately from the ebullition study; however, the OU1 study has collected few samples of NAPLs migrating due to ebullition. NAPL that migrates frequently and, at times, continually from upland properties (e.g., NAPL seeping from the former Pratt Oil Works Site since 2016) has not been characterized. NAPLs are considered principal threat wastes per EPA guidance (1991), and the limited data that have been collected from OU1 for NAPLs migrating due to ebullition show that the COPC concentrations in NAPLs are very high (thousands of mg/kg for TPAHs and above the Toxic Substances Control Act ("TSCA") limit for polychlorinated biphenyls ("PCBs")). EPA should provide additional clarification in the PRAP that NAPL seeping from upland properties is potentially significant but has not yet been fully characterized for OU1 RI/FS.
- 5) <u>Section 1.6, Pages 7 and 14 of the FFS Report</u>: This section describes the potential sources to the Creek, but fails to identify important sources and inputs:
  - a) Groundwater: The report describes the sampling plan implemented to collect groundwater samples from the sediments. These samples only represent characterization of the COPCs entering the Creek from groundwater through sediments; they do not characterize the COPC concentrations entering the Creek from adjacent upland properties. This is an ongoing input to the Site. If the text is going to describe the sampling activities for groundwater, it should also describe the ongoing work in OU1 to provide a complete picture of available data for one of the largest sources of freshwater to the Creek.
  - **b) NAPL Seeping from Upland Properties**: The FFS fails to mention an important source of COPCs to the Creek: NAPL migrating from upland properties. NAPL, as per EPA guidance, is a principal threat waste. Data collected by the City and the community show that COPC concentrations in NAPLs are very high—up to 27,000 mg/kg for TPAH17 and well above the TSCA limit for PCBs, up to 675 mg/kg. These data are validated by data

collected under EPA oversight for NAPLs migrating from subsurface sediments, which show similar levels of concentrations for TPAH17 and TPCB. To date, there is no data collected under OU1 to characterize the principal threat waste entering the Creek for upland Sites.

6) Conclusions of LOE 2 and Appendix D: LOE2 evaluates the COPC concentrations on solids in CSOs with other ongoing sources to the Creek such as East River, stormwater, and treated discharges. The FFS concludes that the TPCB concentrations on solids from CSOs are comparable to the TPCB concentration in stormwater. This conclusion is incorrect because the FFS relies solely on the p-value and fails to consider the significant differences in the distribution and average TPCB concentrations in the CSO solids vs. stormwater (0.38 mg/kg in CSOs vs. 1.6 mg/kg in stormwater). The TPCB concentrations in CSOs are lower than those measured in stormwater, especially from the TPCB concentrations in solids from private properties. This is further evident in the results of LOE3, which show that when 100% CSO control is evaluated, there is a small increase in the estimated TPCB concentrations in the sediment bed. This is an important consideration for OU2 and the CSM for OU1 and needs to be discussed accurately. A detailed technical discussion to support the City's position is provided below:

The FFS concludes that the TPCB concentrations in CSOs and stormwater are the same at a 95% confidence interval based on the p-value shown in Appendix D of the FFS report. This conclusion based on the p-value shown in Appendix D is incomplete, failing to consider the practical difference in TPCB concentration, and instead relying incorrectly on a strict interpretation of p-values. The Dunn-Šidák statistical test run by EPA calculates the p-value by comparing all the data sets with each other: a total of seven comparisons. The alpha value then gets adjusted up to account for the number of comparisons tested. The purpose of the LOE2 is to test whether the COPC concentrations in CSOs are comparable to the three types of other sources—East River, stormwater, and treated discharges, *i.e.*, three comparisons in total, not seven.

The Dunn-Šidák test was run in R such that only three comparisons were conducted. The results of the comparisons are shown in the attached Table 1. Table 1 shows the unadjusted p-value for all the COPCs and the adjusted p-value to account for the number of comparisons. Evaluation of the results indicates that while the p-values presented in the Table 1 are different from those presented by EPA in Appendix D, the conclusions drawn by EPA using its test do not change for any COPCs except TPCBs.

For TPCBs, the p-value is at 0.054, marginally above the alpha value of the confidence interval over which the test is conducted. In such case, the p-value cannot be interpreted as the only metric. There is general consensus in the statistical literature that strict binary interpretation of arbitrary statistical significance levels without consideration of the actual magnitude of effects and uncertainty bounds is outdated and was never intended by the originators, Jersey Neyman and Ronald Fisher. Rather, Fisher intended the p-value to be just one part of a fluid process that blended data and background knowledge to lead to scientific conclusions.<sup>5</sup> Central to this

<sup>&</sup>lt;sup>5</sup> See Regina Nuzzo, Statistical Errors: P Values, the 'Gold Standard' of Statistical Validity, Are Not as Reliable as Many Scientists Assume, 506 NATURE 150, 150–52 (2014).

process is the size of effects and uncertainty in their estimates. Analysis of the OU2 FFS work should acknowledge and consider that a tiny difference that is "statistically significant" is of much less importance than a relatively large effect size that is "statistically significant" at the 10% level rather than the 5% level. In this case, CSO solids exhibit relatively large practical differences in concentrations relative to stormwater discharges, particularly with stormwater discharging from private properties, and these differences should be acknowledged and incorporated into the site conceptual model. Differences in concentration on the order of a factor of 2 should not be ignored simply because the p-value was 0.054 instead of 0.045. To be 94.6% confident, or even 75% confident, is more than adequate to draw conclusions without any uncertainty about data that are interpreted within the Superfund program.

To further justify the importance of the TPCB concentration difference between the CSOs and stormwater, the City also evaluated the ratio of concentrations of total PCBs in other background sources to concentrations in CSO. The ratio was constructed based on the geometric mean, arithmetic mean, and median. The 95% confidence intervals on the ratios were estimated based on 2.5<sup>th</sup> and 97.5<sup>th</sup> percentiles from 1,000 bootstrapping runs. For each bootstrap run, each dataset (CSO or other source) was randomly sampled, and the ratio of the mean of other source to the mean of CSO was calculated. Bootstrapping provides a distribution-free estimate of the confidence intervals. The results of the ratios for TPCBs and associated 95% confidence intervals are shown in Figure 1. Values greater than 1 indicate that the concentration in CSOs is less than the evaluated group, while values less than 1 indicate that the concentration in CSOs is greater than the evaluated group. Figure 1 shows that the lower confidence interval values for the ratios of stormwater to CSO are all greater than 1, indicating that the concentrations of TPCB on solids from stormwater are greater than those on CSO solids with 95% confidence. This conclusion holds true whether it is based on geometric mean, or arithmetic mean or median.

The conclusion that the TPCB concentrations in CSOs are comparable to stormwater based on strict interpretation of the p-value is incorrect. The FFS should be updated to correct this.

7) Section 5.3.1, Overall Protection of Human Health and the Environment: This NCP criteria should discuss LOE 3 as well. Modeling conducted as part of LOE3 shows that CSOs have minimal impact on the COPC concentrations in the surface sediments of the Creek. Any of the alternatives considered (No Action, No Further Action, 100% Control) would be protective of human health and the environment. The achievement of the RAO is not as relevant when evaluating the NCP criteria.

The City thanks EPA for the opportunity to provide these comments and for EPA's consideration of them.

Sincerely,

William Plache

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## Table 1 Non-parametric Dunn's test Comparing of COPC Concentrations on CSO Solids Discharging to Newtown Creek with Other Background Sources



**OU2 Focused Feasibility Study for Newtown Creek** 

Analyte	Comparison	unadjusted p- value from Dunn test	adjusted p- value by "Sidak" method
TPAH17	CSO vs. Stormwater	0.21	0.51
	CSO vs. Treated Effluent	0.06	0.18
	CSO vs. East River Surface Water	0.00	0.00
Total PCB	CSO vs. Stormwater	0.02	0.054
	CSO vs. Treated Effluent	0.00	0.00
	CSO vs. East River Surface Water	0.00	0.00
Copper	CSO vs. Stormwater	0.06	0.16
	CSO vs. Treated Effluent	0.25	0.59
	CSO vs. East River Surface Water	0.00	0.00
Lead	CSO vs. Stormwater	0.31	0.68
	CSO vs. Treated Effluent	0.14	0.35
	CSO vs. East River Surface Water	0.02	0.046
2,3,7,8-TCDD	CSO vs. Stormwater	0.41	0.65
(Detect Only)	CSO vs. Treated Effluent	0.32	0.53

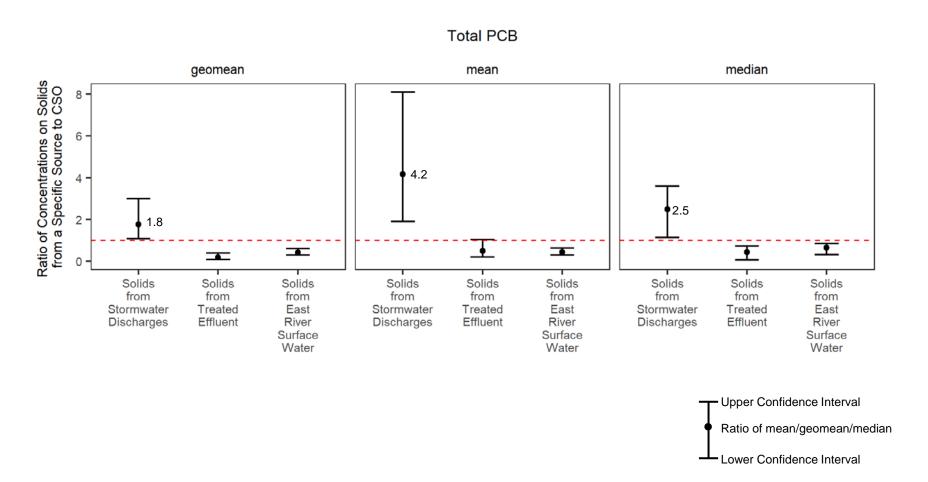
#### Notes:

- (1) Dunn test was performed by "dunnTest" function in R package "FSA". p-value from Dunn test comparing the two sources.
- (2) p-value adjusted by "Sidak" method to account for there are three (or two for TCDD) pairwise comparisons. For "Sidak" method, adjusted p-value equals  $1 (1 p)^m$ , where p is unadjusted p-value and m is number of comparisons.

## Figure 1 Ratio of TPCB Concentrations from Other Sources to the Concentrations on CSO Solids Discharging to Newtown Creek



**OU2 Focused Feasibility Study for Newtown Creek** 



#### Notes:

The plots from left to right show the ratio of geometric means, ratio of arithmetic means and ratio of medians, respectively. The 95% confidence intervals were set at 2.5<sup>th</sup> and 97.5<sup>th</sup> percentile values from bootstrapping analysis.

From: Stuart Messur <smessur@anchorqea.com>
Sent: Wednesday, February 12, 2020 3:32 PM

**To:** Schmidt, Mark

Subject: Newtown Creek Group (NCG) comments on the Newtown Creek Superfund Site Operable Unit 2

**Proposed Plan** 

**Attachments:** 20200212\_Comments\_on\_NYCDEP\_OU2\_FFS\_Report\_USEPA\_Final.pdf

#### Good afternoon Mark,

On November 21, 2019, The U. S Environmental Protection Agency (USEPA) released a Proposed Plan for public comment that identified a preferred remedy for a discrete portion of the Newtown Creek Superfund Site referred to as Operable Unit 2 (OU2). As you are aware, the Newtown Creek Group (NCG), under the direction of USEPA, is currently performing a Remedial Investigation/Feasibility Study for all of Newtown Creek and its tributaries, referred to as OU1. Recognizing that decisions made for OU2 can directly impact OU1, Anchor QEA, on behalf of the NCG, has reviewed the Proposed Plan and supporting OU2 FFS Report, and is providing comments which we request be addressed during approval of the OU2 FFS Report and OU2 Record of Decision (ROD) preparation. Comments are provided in the attached.

If you have any questions, please feel free to contact me.

Thank you.

Stu Messur Principal

#### **ANCHOR QEA, LLC**

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## NCG's Comments on the Newtown Creek Superfund Site Operable Unit 2 Proposed Plan and Focused Feasibility Study

#### Introduction

On November 21, 2019, the U.S. Environmental Protection Agency (USEPA) released a *Proposed Plan* (USEPA 2019) that identified a preferred remedy for a discrete portion of the Newtown Creek Superfund Site referred to as Operable Unit 2 (OU2). OU2 relates to the current and anticipated future discharges of contaminants of potential concern (COPCs) from combined sewer overflows (CSOs) to the Newtown Creek Superfund Site Study Area, which is referred to as Operable Unit 1 (OU1). The OU2 *Focused Feasibility Study Report* (FFS Report; NYCDEP 2019) is a document prepared by the New York City Department of Environmental Protection (NYCDEP) pursuant to an Administrative Order on Consent between USEPA and NYCDEP that formed the basis for USEPA's preferred remedy in the *Proposed Plan*. USEPA has requested that public comments on the *Proposed Plan* and supporting documents be provided by February 28, 2020. Under the direction of USEPA, a Remedial Investigation/Feasibility Study (RI/FS) is currently being performed for OU1 by the Newtown Creek Group (NCG), and because decisions made for OU2 can directly impact OU1, the NCG has reviewed the OU2 FFS Report and offers the comments contained herein.

Based on the NCG's review of the draft OU2 FFS Report and *Proposed Plan*, the NCG requests that USEPA, as part of the approval of the OU2 FFS Report and OU2 Record of Decision (ROD) preparation, explicitly state that the applicability of the models and the evaluations presented in the OU2 FFS Report will be limited to the OU2 Focused Feasibility Study (FFS) and will not be applied to or used in the OU1 RI/FS, because a separate and more comprehensive modeling study tailored to OU1 is currently under development in collaboration with USEPA and under USEPA's oversight.

The remainder of this document provides NCG's detailed comments on the FFS Report.

#### Comments on the Operable Unit 2 Focused Feasibility Study Report

The OU2 FFS Report identified and screened three alternatives to address COPCs discharging from the CSOs to Newtown Creek. In order to evaluate and compare the three CSO alternatives, NYCDEP developed a suite of numerical models designed to simulate the fate and transport of COPCs discharged from the CSOs into Newtown Creek. As noted in the *Proposed Plan*, the models were "applied to all three remedial alternatives evaluated in the OU2 FFS and the predicted COPC concentrations in a remediated sediment bed were compared to provide a relative assessment of the alternatives [emphasis added]" (NYCDEP 2019).

The NCG is not questioning the use of these models for making relative comparisons among alternatives for OU2, but it is important to acknowledge that the NCG is developing a robust, creek-wide modeling framework as part of the OU1 RI/FS and that those models will be used in the

evaluation of remedial alternatives in the OU1 Feasibility Study (FS). The NCG OU1 models are being developed under a rigorous oversight and review process led by USEPA, with substantial discussion and input from other stakeholders (including NYCDEP). In contrast, the OU2 models were used for a much more limited purpose (i.e., informing the selection of different levels of infrastructure improvements for CSO control as compared to the OU1 model's purpose of making future predictions of sediment, water, and tissue concentrations in the Newtown Creek Study Area for various sediment remedial scenarios), incorporated several underlying assumptions that differ from those used in the OU1 models (see examples that follow), and do not appear to have been subject to the same rigor of site-specific review by USEPA. To provide clarity on these distinctions, the NCG requests that the final OU2 FFS Report and the OU2 ROD clearly state that the applicability of the models, evaluations, and interpretations presented in the OU2 FFS Report are limited to only evaluating CSO control alternatives in the OU2 FFS, and that the OU2 models will not be used to inform the OU1 FS and remedy selection process.

Upon review of the OU2 FFS Report, the NCG has identified the following four limitations that should be explicitly discussed and qualified to alleviate potential confusion in the future when the OU1 RI/FS model results are presented:

- 1. In Section 1.4 of Appendix B of the OU2 FFS Report (NYCDEP 2019), NYCDEP acknowledges that the sediment transport model focuses on solids originating from CSOs and other point sources. The NYCDEP model, therefore, does not perform well when compared to USEPA's calibration target ranges of net sedimentation rates (NSRs), specifically in the downstream reaches of the Study Area where deposition is dominated by East River solids, as presented in the NCG's OU1 draft Final Modeling Results Memorandum (Appendix G of the Remedial Investigation Report; Anchor QEA 2019). The OU2 FFS Report discusses that this limitation does not affect the relative comparisons made in that document, a point with which the NCG agrees. However, the final OU2 FFS Report and OU2 ROD should specifically state that due to the NYCDEP model's limitation with respect to calibration to the target NSRs, the results of the OU2 modeling are precluded from being used in any way for the OU1 RI/FS.
- 2. The OU2 FFS chemical fate and transport model was configured to make predictions for a 1-centimeter (cm)-thick surface sediment layer. In contrast, the Newtown Creek surface sediment layer has long been defined as the top 15 cm (6 inches) for all aspects of the OU1 RI/FS (i.e., characterization, risk assessment, and modeling) because it generally represents the biologically active zone. By simulating only the upper 1 cm of surface sediment, the OU2 FFS model purposely amplified the rate of change among the CSO alternatives, because a 1-cm thickness responds much more quickly to changes in loads and deposition as compared to the 15-cm thickness being evaluated for OU1. As such, evaluations of the 1-cm surface sediment layer would overpredict the rate of change in COPC concentrations as compared to the full 15-cm thickness used in the OU1 RI/FS. Thus, any predictions based on a 1-cm-thick sediment

- layer for OU2 are not comparable to the 15-cm-thick surface sediment predictions being developed for OU1. The final OU2 FFS Report and OU2 ROD should make note of this distinction and specifically state that this difference precludes the results of the OU2 modeling from being used in any way for the OU1 RI/FS.
- 3. The OU2 FFS Report evaluation did not discuss or make any attempt to quantify the uncertainty of its model predictions of future surface sediment concentrations. This limitation is unlikely to impact the results of the relative comparisons made in the OU2 FFS Report because the predicted future equilibrium surface sediment concentrations (top 1 cm) were similar among the three CSO control alternatives evaluated. However, presenting the predicted concentrations for future top 1-cm surface sediment chemical concentrations can be misleading without the associated range of uncertainty. When similar model-predicted surface sediment concentrations are presented as part of the NCG OU1 modeling effort, which will include uncertainty bounds, results may be different than those presented and discussed by NYCDEP in the OU2 FFS Report. The final OU2 FFS Report and OU2 ROD should make note of this distinction and specifically state that the OU2 model and modeling results are limited to use in comparing alternatives in the OU2 FFS, because uncertainty bounds on model predictions will be a necessary element in evaluating remedial alternatives in the OU1 FS.
- 4. Section 4 of the OU2 FFS Report states that the "hypothetical future scenario" simulated with the OU2 model was developed with the sole purpose of "assessing CSO control alternatives specifically and separately from (i) various other ongoing contaminant loadings to the Creek" (NYCDEP 2019). To accomplish this, the OU2 model used for this simulation excluded contaminant sources other than point sources, including assuming complete groundwater control, to better isolate the impact the point sources have on predicted surface sediment concentration when comparing CSO control alternatives. In contrast, the OU1 RI/FS and the OU1 models have dedicated significant efforts to understanding the effects various sources of contaminant loads to the creek have on surface sediment concentrations, including groundwater loads. Thus, the OU2 FFS Report's acknowledgement that the assumptions made as part of the OU2 modeling and the "hypothetical future scenario" were made with the intent of only comparing among the CSO control alternatives, underscores that these assumptions preclude the use of the OU2 modeling to anything beyond the OU2 FFS (including the OU1 RI/FS). This point should be explicitly stated in the final OU2 FFS Report and OU2 ROD.

#### **Summary**

In summary, the model evaluations presented in the OU2 FFS Report were used to evaluate sediment bed COPC concentrations on a relative basis to support the comparative evaluation of the three CSO control alternatives. Although the OU2 modeling approach appears reasonable to meet the objectives of the OU2 FFS, it is important to acknowledge that the OU2 models were developed for a fundamentally different purpose than the more comprehensive suite of models being developed for

OU1 and use many different underlying assumptions that significantly influence the results. Therefore, there are important limitations to the OU2 modeling that must restrict its use to the OU2 FFS and preclude it from being used in any way for the OU1 RI/FS and remedy selection. These limitations include the following: 1) the OU2 model does not accurately predict rates of deposition across the full extent of the Study Area; 2) the OU2 model does not represent surface sediment bed dynamics over the depth most relevant to the OU1 RI/FS (i.e., the 15-cm biologically available zone); 3) the OU2 model does not quantify uncertainties in its predictions; and 4) the OU2 model excludes contaminant sources other than point sources to focus the OU2 model on comparing CSO control alternatives. Although the *Proposed Plan* acknowledges that the OU1 RI/FS modeling framework development is underway, the NCG requests that USEPA, as part of the approval of the OU2 FFS Report and OU2 ROD preparation, explicitly state that the models and evaluations presented in the OU2 FFS Report are limited to the OU2 FFS and are not to be applied to or used in the OU1 RI/FS, because a separate and more comprehensive modeling study tailored to OU1 is currently under development in collaboration with USEPA and under USEPA's oversight.

#### References

- Anchor QEA (Anchor QEA, LLC), 2019. *Remedial Investigation Report*. Draft. Remedial Investigation/Feasibility Study, Newtown Creek. April 2019.
- NYCDEP (New York City Department of Environmental Protection), 2019. Focused Feasibility Study Report. The Newtown Creek Superfund Site, Kings County and Queens County, New York City, New York, Operable Unit 2. Prepared by New York City Department of Environmental Protection as modified by the U.S. Environmental Protection Agency, Region 2. CERCLA Docket No. CERCLA-02-2018-2020. November 2019.
- USEPA (U.S. Environmental Protection Agency, Region 2), 2019. *Proposed Plan*. Newtown Creek Superfund Site, New York City, New York. November 2019.

From: Joseph Lentol <lentolj@nyassembly.gov>
Sent: Wednesday, February 26, 2020 5:58 PM

**To:** Schmidt, Mark

**Cc:** 'Emily Mijatovic'; 'Cathy Peake'

**Subject:** Comments on Newtown Creek Superfund Site from Assemblyman Joe Lentol

**Attachments:** AM Lentol response to EPA-Newtown Creek.pdf

Mr. Schmidt,

Please see attached comments.

Joe Lentol



Kings County lentoli@assembly.state.ny.us

#### THE ASSEMBLY STATE OF NEW YORK ALBANY

Chairman
Committee on Codes
COMMITTEES
Rules
Ways & Means
Election Law

February 26, 2020

Mark Schmidt
Remedial Project Manger
U.S. Environmental Protection Agency
290 Broadway, 18<sup>th</sup> Floor
New York, NY 10007
Submitted via email to Schmidt.mark@epa.gov

Dear Mr. Schmidt,

I am writing to you to oppose the EPA's recommendation to take no further action in reducing combined sewage overflows (CSOs) in Newtown Creek in Greenpoint, Brooklyn. As the long-serving Assembly Member of this district, I have seen this community suffer time and again from one form of environmental pollution or another. Whether it was a proposed power plant, a waste transfer station, or the massive Greenpoint Oil Spill, this community has been asked time after time to live with and accept environmental pollution that we did not create. That is the historic context that you need to be aware of when deciding how the EPA will proceed with Newtown Creek.

More to the point, the people of Greenpoint have raised their voices to declare that we will not accept a plan that calls for no further reduction of hazardous CSO discharges into Newtown Creek. I understand that achieving further CSO reduction beyond the currently projected number of 61% will be difficult and costly. But just because something is difficult does not mean you give up on doing it. The EPA has a responsibility to this community to continue its efforts to reduce CSOs, and I need you to uphold that responsibility.

I must also express my disappointment that the EPA's December 11, 2019 presentation on Newtown Creek to this community was overly reliant on technical analysis and modeling that is far too complex in nature. People who attended that meeting wanted to express their concerns and expectations, but many left frustrated and under the impression that the presentation was deliberately designed to prevent discussion of the basic issues through use of complex data.

The truth is that with the use of sophisticated modeling, two different researchers can use the same dataset to come to completely different conclusions. I prefer to rely on what I can see with my own eyes, and anyone here on the ground can see that Newtown Creek is not in a condition that we can walk away and declare "mission accomplished." For a more in-depth, technical analysis of the EPA proposal, I would direct you to the written comments submitted by the Newtown Creek Alliance for further suggestions on how our community would like to proceed from here.

The people of this community want Newtown Creek to be safe for recreational uses including boating, fishing and swimming. Even notable celebrities including Jimmy Kimmel and Bill Murray have realized the creek's worth as seen in this clip from *Jimmy Kimmel Live* (<a href="https://www.youtube.com/watch?v=c6T33GnzwKM">https://www.youtube.com/watch?v=c6T33GnzwKM</a>). Newtown Creek made national TV because gritty urban scenery is popular, and we must preserve it. My community wants cleaner water so that more uses that we are not even thinking of can occur.

I stand with my many constituents who have devoted their time and energy to this issue, whether by participating in the Newtown Creek Superfund Community Advisory Group, attending the EPA's December presentations, providing written comments in response to the EPA's proposed action, and all those who have worked tirelessly in support of a clean, livable and swimmable Newtown Creek.

Sincerely,

Joseph R. Lentol

**From:** Garner, Shelby <Shelby.Garner@mail.house.gov>

Sent: Thursday, February 27, 2020 4:58 PM

**To:** Schmidt, Mark

**Subject:** Testimony for Newtown Creek Superfund Site Operable Unit 2 Proposed Plan

**Attachments:** 20200227164659186.pdf

Mr. Schmidt,

Please find the comments from Rep. Carolyn B. Maloney (NY-12) relating to the proposed Newtown Creek Superfund Site Operable Unit 2 plan.

Best,

Shelby

Shelby H Garner
Deputy Chief of Staff/Director of Community and Intergovernmental Affairs
Office of Rep. Carolyn B. Maloney
1651 Third Avenue, Suite 311
New York, NY 10128

Tel: (212) 860-0606 Fax: (212) 860-0704

If you would like to receive Congresswoman Maloney's E-Newsletter, please <u>click here</u>.

#### CAROLYN B. MALONEY 12TH DISTRICT, NEW YORK

2308 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-3212 (202) 225-7944

> COMMITTEES: FINANCIAL SERVICES

GOVERNMENT REFORM

JOINT ECONOMIC COMMITTEE, [Senior House Democrat]



### Congress of the United States

#### House of Representatives

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DISTRICT OFFICES:

1651 THIRD AVENUE

WEBSITE: www.house.gov/maloney

TESTIMONY OF CONGRESSWOMAN CAROLYN B. MALONEY

U.S. Environmental Protection Agency Newtown Creek Superfund Site Operable Unit 2 290 Broadway, 18th Floor New York, NY 10007 February 27, 2020

I am pleased to thank the United States Environmental Protection Agency (EPA) for allowing me to present testimony on the proposed plans for Newtown Creek Superfund Site Operable Unit 2 (OU 02). I am privileged to represent many constituents who reside alongside or in close proximity to Newtown Creek in the neighborhoods of Long Island City, Queens and Greenpoint and East Williamsburg, Brooklyn.

OU 02 addresses the site-specific problem of Combined Sewage Overflow (CSO) into the Creek. The current EPA proposal OU 02 finds acceptable the 61% reduction of CSOs anticipated under the implementation of the New York City Long-Term Control Plan (LTCP), which was mandated by the state of New York outside of the Superfund process. I find this inadequate and inconsistent with the Congressional intent of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA). Specifically, I feel the current plan does not adequately address the present or future health and environmental risk of CSO discharge into the Creek.

Beginning in the 1990s, I was an early proponent of including the EPA in the environmental remediation plans for Newtown Creek and advocated for its designation as a Superfund Site. In 2010, the federal government did designate the Creek as such. I was so vocal about involving the EPA as I strongly felt this the most expedient way to ensure environmental remediation of the Creek to a level that would allow for the Creek to be a productive recreational and natural ecosystem.

Today, Newtown Creek has become a haven for kayakers and bird watchers; on shore and in the Creek, native species of birds, fish, mollusks, and crustaceans are returning. I think it highly premature to take full remediation off the table; however, to achieve full remediation, CSOs will need to be eliminated. Even under the likely optimistic City LTCP modelling, a 61% reduction in CSOs would still result in the annual discharge of more that 460 million gallons of CSOs into the Creek.

I strongly support the remediation efforts of the EPA for Newtown Creek; however, I feel the proposals for OU 02 fall short of what will be required to achieve the remediation of the Creek necessary to permanently remove long-term health hazards and provide for the maximum utility of Newtown Creek for human use and as a productive natural environment.

From: Alvin Pena <pena@nysenate.gov>
Sent: Friday, February 28, 2020 5:19 PM

**To:** Schmidt, Mark

**Cc:** Sihem Mellah-Sliker; Julia C Salazar

**Subject:** Public Comment Letter regarding Newtown Creek proposal

**Attachments:** EPA OU-2 Letter.pdf

Good Evening Mr. Schmidt,

Hope this email finds you well. Please see the attached letter from Senator Salazar to be submitted for public comment for the proposed plan for Newtown Creek Superfund site Operable Unit 2.

If you have any questions or concerns please don't hesitate to ask.

All the best,

Alvin

Alvin Peña
Community Affairs Liaison for Williamsburg and Greenpoint
& Director of Outreach
NY Senator Julia Salazar
18th Senate District
Pena@nysenate.gov

Office: 718.573.1726

CHAIR WOMEN'S ISSUES

COMMITTEE MEMBER

CHILDREN & FAMILIES
ELECTIONS
ENVIRONMENTAL CONSERVATION
HEALTH
HOUSING, CONSTRUCTION &
COMMUNITY DEVELOPMENT
SOCIAL SERVICES



ALBANY OFFICE: ROOM 944 LEGISLATIVE OFFICE BUILDING ALBANY, NY 12247 PHONE: 518-455-2177

DISTRICT OFFICE:

212 EVERGREEN AVENUE BROOKLYN, NY 11221 PHONE: 718-573-1726

> Website: salazar.nysenate.gov

February 28, 2020

Mark Schmidt
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, NY 10007
Submitted via email to schmidt.mark@epa.gov

#### Comments on Proposed Plan for Newtown Creek Superfund Site Operable Unit 2

Dear Mr. Schmidt and Environmental Protection Agency Staff:

My name is Julia Salazar and I oppose the Proposed Plan to take 'No Further Action' in reducing Combined Sewage Overflow into Newtown Creek.

\_\_\_\_

The Newtown Creek has been in a constant state of neglect. Failures to stem the flow of CSOs have created dangers to the ecosystem and communities that regularly use the waterway for recreational and business endeavors. It is abundantly clear that the proposed 'No Further Action' plan does not provide the necessary measures to fully mitigate the dire situation that the ongoing pollution has caused.

North Brooklyn has faced a plethora of environmental harms, especially urban air pollutants, which have led to terrifying levels of asthma and respiratory diseases. Still reeling from the long-term impacts of the Green point Oil Spill in 1950, Greenpoint has been one of the communities hit the hardest by environmental injustices. Compounding this are the many waste transfer stations in the district, which have created widespread environmental and health hazards. There is no reason this community should continue bearing the impacts of irresponsible players. "Though air quality is improving in NYC in general, it varies by community district. In Greenpoint and Williamsburg, levels of the most harmful air pollutant, fine particulate matter (PM2.5), are 9.6 micrograms per cubic meter. "Source: NYC DOHMH, Community Air Survey, 2016.

CHAIR WOMEN'S ISSUES

COMMITTEE MEMBER

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DISTRICT OFFICE: 212 EVERGREEN AVENUE BROOKLYN, NY 11221 PHONE: 718-573-1726

> Website: salazar.nysenate.gov

Therefore, the opportunity to fix the CSO discharges must be taken with the utmost care. I would respectfully urge the EPA to accept the provisions I have listed to ensure this crucial opportunity is not squandered.

In regards to the details of the Proposed Plan, I echo many of the comments being submitted by the Community Advisory Group (CAG) regarding the shortcomings of the plan. I believe that:

- 1. EPA Has a Responsibility to Address All Pollution Sources, Including CSO Discharges.
- 2. It Is Illogical to Compare CSO Discharges to Other Pollution Sources Yet to Be Evaluated.
- 3. It Is Premature to Take CSO Reduction Off The Table.
- 4. A 61% Reduction of COPCs from CSOs Is Insufficient.
- 5. Superfund Grants EPA Authority to Impose CSO Reduction Beyond the Clean Water Act Requirements.
- 6. "No Further Action" Is an Action Requiring National Consistency Review.
- 7. The City's Pollution Models Include Unrealistic Assumptions that Underestimate Future CSO Discharges.
- 8. The Solution to Pollution Is Preventing Overflow, not Track-Back, Dredging or Sorbent Pads.
- 9. EPA Should Be Consistent With Go-wanus Methodology and CSTAG Recommendations.

Thank you for your time and consideration of these comments.

Sincerely,

Senator Julia Salazar

From: QN02@cb.nyc.gov (CB) <QN02@cb.nyc.gov>

Sent: Friday, February 28, 2020 5:20 PM

To: QN02@cb.nyc.gov (CB)

**Subject:** support letter from community board 2 environment committee

**Attachments:** Newtown Creek support letter 2282020.pdf; Environment-Newtown Creek Community Advisory

Group (CAG).pdf

**Importance:** High

Dear Mr. Mark Schmidt,

Attached is a letter of support from the Community Board 2 Environment Committee.

Please see attached.

Sincerely, Debbie

Debra Markell Kleinert District Manager, CB 2Q 43-22 50th Street, 2nd Floor Woodside, NY 11377

Tel: (718) 533-8773 Fax: (718) 533-8777 Email: qn02@cb.nyc.gov

CB2 Website: <a href="www.nyc.gov/queenscb2">www.nyc.gov/queenscb2</a>
Facebook: Queens Community Board 2



### Community Board No. 2

43-22 50th Street, 2nd Floor Woodside, New York 11377 (718) 533-8773 Fax (718) 533-8777 Email qn02@cb.nyc.gov www.nyc.gov/queenscb2

Denise Keehan-Smith Chairwoman Debra Markell Kleinert District Manager

February 28, 2020

Mr. Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18<sup>th</sup> Floor New York, New York, 10007

RE: <u>Letter of Support - Newtown Creek Community Advisory Group letter of comments on the New York city's long-term control plan for Newtown creek.</u>

Dear Mr. Schmidt:

Community Board 2 is writing to support the Newtown Creek Community Advisory Group letter of comments on the New York City's Long-Term Control Plan for Newtown creek.

On February 27, 2020 the Environment Committee of Community Board 2 voted unanimously in favor with none opposed, and no abstentions to support the attached letter.

Sincerely,

Debra Markell Kleinert

District Manager

DMK

cc: Honorable Alexandria Ocasio-Cortez, US Congress

Honorable Carolyn B. Maloney, US Congress

Honorable Grace Meng, US Congress

Honorable Nydia M. Velazquez, US Congress Honorable Michael Gianaris, NY State Senate

Honorable Brian Barnwell, NYS Assembly

Honorable Michael DenDekker, NYS Assembly
Honorable Catherine T. Nolan, NYS Assembly
Honorable Robert Holden, NYC Council Member
Honorable Jimmy Van Bramer NYC Council Member
Honorable Daniel Dromm, NYC Council Member
Honorable Sharon Lee, Queens Borough President
Denise Keehan-Smith, Chairwoman, Community Board 2
Dorothy Morehead, Enviornment Chair, Community board 2

From: Catherine Nolan <nolanc@nyassembly.gov>

Sent: Friday, February 28, 2020 5:31 PM

**To:** Schmidt, Mark

**Subject:** Comment on the Proposed Plan for Newtown Creek OU-2

(Submitted via email to schmidt.mark@epa.gov)

February 28, 2020

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY 10007

Dear Mr. Schmidt,

The EPA's proposed measures concerning Newtown Creek have elicited strong objections within our community, concerns shared by, but not limited to, the memberships of the Newtown Creek Alliance and the Community Advisory Group - who have followed closely the efforts at the creek as they have evolved. I share their concerns and objections, because I believe that any assumption that the adopted Long Term Control Plan would be sufficient to remediate the creek would be a faulty one.

The creek will continue to be polluted after the implementation of the Long Term Control Plan, which the EPA has predicated the feasibility of its "No Further Action" plan upon. The LTCP provides for only a 61% reduction in Combined Sewer Overflows (CSOs,) and is slated to require two decades to implement; the LTCP alone will not remedy what is an ongoing process of pollution at Newtown Creek.

To adopt a plan which would allow a partial redress of the contamination of the creek is illogical; the demands on the current infrastructure can only be assumed to increase in future, this based on the readily observable current development, as well as the predicted development in Queens County over the next decade under current NYC Zoning Laws. Considering the rapidly increasing infrastructural demands of the surrounding area, it would be premature to disregard the possibility of needing to consider the "Alternative 3" option posed in the EPA's 2019 Proposed Plan at some point in the future.

The EPA's continued considerations for the remediation of the Creek had conveyed the agency's commitment to CERCLA projects to the wider community. To finalize a "No Further Action" plan will be a setback, a hurdle to overcome for any further improvements aimed at the capture of a larger portion of the CSOs which continue to pollute the waterway. It would be inappropriate before the City of New York's Department of Environmental Protection has demonstrated the availability of resources to even complete the Long Term Control Plan's objectives to the satisfaction of federal, state, and local guidelines and regulatory expectations.

The finalization of a "No Further Action" plan for Operable Unit 2 would be inappropriate at this time. I submit this as my formal objection as the NYS elected representative of the Queens side of Newtown Creek.

Thank you for your consideration.

Sincerely,

Catherine Nolan

From: Solotaire, Ben <BSolotaire@council.nyc.gov>

Sent: Friday, February 28, 2020 1:53 PM

**To:** Schmidt, Mark

**Subject:** Comments on the Proposed Remedy for Operable Unit 2 of Newtown Creek

**Attachments:** EPA OU 2 Letter.pdf

Dear Mr Schmidt,

Please accept these comments from NYC Council Member Stephen Levin, representing the 33<sup>rd</sup> District, regarding the EPA's proposed Operable Unit 2 plan for the Newtown Creek Superfund site.

Thank you for your consideration and attention to this matter,

Benjamin

Benjamin Solotaire Councilmanic Aide Council Member Stephen Levin 718 875 5200

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slevin@council.nvc.gov



# THE COUNCIL OF THE CITY OF NEW YORK **STEPHEN T. LEVIN**

COUNCIL MEMBER, 33rd DISTRICT, BROOKLYN

February 28, 2020

Mark Schmidt Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway, 18th Floor New York, NY 10007

Dear Mr Schmidt,

I am writing as the duly elected New York City Council Member representing a district that covers large portion of the Newtown Creek as well as a resident of Brooklyn. These comments are in response to the Environmental Protection Agency's (EPA) recently proposed remedy to address Operable Unit 2 (OU-2) of the Newtown Creek Superfund Site as it relates to future contamination of the creek by chemicals of concern from Combined Sewer Overflows (CSOs) from the potentially responsible party New York City Department of Environmental Protection. I feel we cannot pass up this opportunity to continue to reduce the threat of CSO pollution sources given their ongoing destruction of our ecosystems and the dangers they pose to the people who live and work along the Creek and those that use it for recreational purposes. We cannot be satisfied with the ways things are when we have the opportunity to make things better.

We are a city of islands whose history and culture has been shaped by the ocean, bays, harbors and waterways that surround us and with which we interact on a regular basis. For centuries we have abused those waterways by dumping raw sewage into it from our ever increasing population. When the system we use today was designed it was cutting edge but that was over a hundred years ago in a city with a much smaller population and when we didn't fully understand the damage we could do to the health of our environment and ourselves.

Over the last few decades we have begun to try and correct that failure and lack of understanding. Cleaning waterways such as the Newtown Creek and the Gowanus Canal, also in my district, are hugely expensive and take decades and to not obtain the highest levels of decontamination and keep them that way is an abuse of our responsibility as public servants. With the assistance of the Newtown Creek Alliance Community Advisory Group and Riverkeeper I have laid out some specific objections to the plan below.

#### <u>CHAIR</u> GENERAL WELFARE

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SUB-COMMITTEE

ZONING & FRANCHISES

TRANSPORTATION

- 1) It is unreasonable to take action on OU-2 until the EPA determines a clean-up goal and remedy for OU-1. For the EPA to say that the current goals of CSO reduction under the City's Long Term Control Plan are sufficient to protect the health of the creek and all its users prior to the determination of goals for the entire creek negligent and not fair to the community. The EPA should not consider what is convenient and expeditious to the City over what is best for a full clean-up of Newtown Creek.
- 2) Currently there is an estimated 1.2 billion gallons of combined sewage overflow annually into Newtown Creek. The "No Further Action" remedy proposed will result in a 61% reduction which still leaves over 460 million gallons a year being deposited in the Creek. As EPA's own figures show this does not sufficiently reduce the annual loads of various chemicals of potential concern (COPCs) into Newtown Creek via CSOs. The data represented by EPA clearly shows a linear correlation between volume of CSO and chemical loading, yet no options were looked at between 61% and 100%. While 100% may not be feasible for economic reasons I request that an evaluation of something more than 61% should be conducted and presented to the community before further action is taken.
- 3) In 2015 the Contaminated Sediments Technical Advisory Group (CSTAG) presented formal recommendations to the EPA Region 2 regarding Newtown Creek. Principle 1 in the letter argued to "Control Contamination Early" and mentions the impacts of CSOs in relation to CERCLA: "CSTAG recommends that the Region work with the appropriate regulatory authorities to develop and plan to eliminate any unpermitted, piped discharges, minimize impacts from CSOs and address groundwater discharges that may contaminate the Creek." I strongly urge the EPA to follow consider the advice of the CSTAG and work to minimize impacts that CSOs bring to the Creek. In its Record of Decision for the Gowanus Canal, the other superfund site in my district, the EPA required the construction of sewage capture tanks totaling 12 million gallons in order to protect the habitat of the Canal and reduce the future risk of contamination. While the Creek is a larger body of water the methodologies must be consistent when determining remedies and if it is not then an explanation must be provided.

Any decisions made now regarding OU-2 will have significant impact on the future of the Creek. The reasons I have laid out above are just some of the issues that exist with the current recommendation of the EPA. I urge the EPA, on behalf of my current and future constituents, to not accept the status quo and to fully explore the options to give us a truly clean and uncontaminated Newtown Creek.

Sincerely,

Stephen T. Levin

NYC Council Member

Stephen 1. Lem

33rd District

## ATTACHMENT D

## TRANSCRIPT OF PUBLIC MEETINGS

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 2
NEWTOWN CREEK SUPER FUND SITE
PROPOSED PLAN PUBLIC MEETING
OPERABLE UNIT TWO

-----X

43-31 39th Street Sunnyside, New York

DATE: December 9, 2019

TIME: 6:39 p.m.

## **APPEARANCES:**

U.S. Environmental Protection Agency 290 Broadway, 18th floor New York, New York 10007

Stephanie Vaughn, Section Chief Mark Schmidt, P.E.

Remedial Project Manager, Environmental Engineer

Chuck Nace, Environmental Toxicologist Shereen Kandil, Community Affairs Lead James Doyle, Esq.

CDM SMITH

14 Wall Street, Suite 1702 New York, New York 10005

Joseph Mayo, Principal Scientist/Project
Manager

Rooni Mathew, Environmental Scientist

## INTERPRETERS

Weng Chan Zakub Zaic Maria Teresa U. Ching Andrzej Siergie Sonia S.

Nancy Nasca, Court Reporter

- MS. VAUGHN: Hi, everybody.
- <sup>5</sup> Welcome, thank you for coming out on this rainy
- 6 but warm night. It's very strange out there.

7

- 8 My name is Stephanie Vaughn. I'm with the
- 9 Environmental Protection Agency, Region 2 which
- includes New York, New Jersey, Puerto Rico, and
- the Virgin Islands also oddly.

12

- We are here tonight for what we call a Proposed
- 14 Plan Public Meeting which is a very formal
- meeting. Everything we say tonight is recorded
- by a stenographer. You can see our
- stenographer sitting over here (indicating).
- 18 So I'll explain in a moment why it's all
- recorded. I'm going to through a couple of
- housekeeping items and then we can move into
- the part of the presentation.

- 23 So first, if you haven't signed in, please do
- $^{24}$  so. There's a sign in sheet by the door.
- 25 Also, if English is not your primary language,

- if you're not comfortable with English we do
- 3 have interpreters here to provide real time
- 4 interpretation of what is being said. I think
- 5 they are each going to come up or they're just
- 6 going to say something from over there if you
- <sup>7</sup> can't understand me saying this (indicating).
- 8 We have interpretation in Spanish, Polish, and
- <sup>9</sup> Chinese.
- 10 (Whereupon, the interpreters introduced
- themselves in their respective languages.)
- MS. VAUGHN: Can everybody hear me?
- 13 By the way before we get going, I see a few
- more folks dribbling in so please sign in, and
- if you need help with interpretation let
- 16 Shereen know.

17

- Welcome again. We are here to discuss the
- 19 Agenda basically. The video projections will
- be played over here (indicating). So I'm
- 21 briefly going to walk everyone through the
- Superfund process and then we'll go through a
- little bit of history of the Newtown Creek
- <sup>24</sup> Superfund Site.

- <sup>2</sup> I see familiar faces but there are a few folks
- 3 here who are may be not as familiar with the
- 4 site. I will spend some time getting you up to
- 5 speed and then we will focus on what we call
- 6 Operable Unit 2 of the site, and I'll also
- <sup>7</sup> explain what that means. Then we will discuss
- 8 EPA's different alternatives to address
- 9 Operable Unit 2 which is the primary focus of
- this meeting. We'll go through some next steps
- and then take your questions and comments.

12

- 13 So why are we here tonight. As I said, we are
- here to discuss EPA's Proposed Plan for
- Operable Unit 2 of the Newtown Creek Superfund
- 16 Site from a logistics standpoint. EPA has a
- very formal process. We conduct what's called
- 18 remedial investigation and feasibility studies
- 19 for a site, during which the study is in nature
- and extent of contamination and we evaluate
- 21 different ways addressing that contamination.

- Once we think we understand the system well
- enough and have a way of addressing that
- contamination we put out what we call a

- Proposed Plan or Proposed Remedial Action Plan,
- 3 so that is what we have done. When we release
- 4 that Proposed Plan that starts a mandatory
- 5 thirty day public comment period. A request
- for extension of that comment period has
- <sup>7</sup> already been made. So the Proposed Plan was
- 8 released on November 21, 2019. With the thirty
- 9 day extension we now expect that the commentary
- to end on January 27, 2020. The only reason it
- says here anticipated to be extended is because
- we haven't published formal notice in the paper
- yet, that will be published in the papers on
- 14 Thursday. But for all intensive purposes the
- commentary is extended. So any comments that
- are verbal or written that we receive during
- this public comment period will become part of
- the formal record for the site.

- $^{20}$  So that is why this evening we have a
- stenographer here, Nancy, who is recording
- everything that is said. When it comes to the
- question and answer time she will, or I will
- 24 ask that you state your name clearly so that
- $^{25}$  she can record it and then your question, and

then she'll record the answer as well.

3

- 4 Then at the end of the commentary period EPA
- 5 takes all of the questions and comments
- 6 received and we draw up what's called a
- 7 Responsiveness Summary, and that becomes part
- 8 of what we call the Record Of Decision.

9

- 10 The Record Of Decision is a formal document
- 11 selecting remedial action for a site or a
- portion of a site, like in this case just a
- portion of the site. So in the Responsiveness
- 14 Summary EPA formally responds to all of the
- questions and concerns raised.

16

- 17 So what else from housekeeping perspective, we
- 18 have a long presentation. This is sort of what
- we're presenting tonight it's not complicated
- but we want to make sure that everyone
- understands what we are proposing and what
- we're not proposing so it's going to take a
- 23 little while to get there.

24

25 So we're going to ask that everyone hold their

- question unless it's a really quick
- 3 clarification type question. Please hold your
- 4 questions until the end. We do have index
- 5 cards available up front and Shereen can hand
- 6 them out maybe if folks want them.

7

- 8 If you have a question related to a particular
- 9 slide or just a question comes to mind, please
- jot it down on your index card or wherever you
- want. We want to hear the questions but we
- 12 also want to get through the presentation. I
- think that is it on this slide (indicating).

- 15 So to very briefly to get everybody --
- UNIDENTIFIED SPEAKER: Will the
- presentation be available online?
- UNIDENTIFIED SPEAKER: It's very fuzzy,
- 19 I can't read that. Can you turn off the
- 20 lights?
- MS. VAUGHN: Should I keep going or
- 22 should I wait?
- UNIDENTIFIED SPEAKER: Let's go.
- MS. VAUGHN: Very briefly, I'll go
- $^{25}$  through the Superfund process. I know a lot of

- you are familiar with this. A site starts, we
- have a process by which sites get added to
- 4 what's called a Public National Priorities
- 5 list, a list of sites that become eligible for
- 6 Superfund review and analysis and money.

7

- Once a site is listed on this list it becomes a
- 9 Superfund site we will start what is called
- 10 Remedial Investigation And Feasibility Study
- which I've sort of already described. I'll give
- 12 you a little more detail on that. We go out
- and we'll sample whatever relevant material on
- the site, the soil, the sediment, the water,
- ground water. We investigate the site during
- the Remedial Investigation and then we develop
- what is called a Feasibility Study. We look at
- different ways to address contamination at the
- 19 site, then there's site specific determination.
- Then we go through issuing a Proposed Plan,
- which is what we have done. After we finish
- the public commentary we come out with the
- 23 Record Of Decision

24

 $^{25}$  After the Record Of Decision is signed that

- becomes a legal binding document of how the
- 3 site will be cleaned up, there is
- 4 administrative record associated with that.
- 5 Then go into a remedial design and remedial
- 6 action process, and then ultimately we finish
- <sup>7</sup> the clean up of the site.

8

- 9 So if you all can see there's this inner circle
- here, it's community involvement and reuse
- (indicating), and that is a very important
- 12 circle on this diagram. An arrow goes
- community involvement is important throughout
- the entire process. As many of you know,
- there's a very active Community Advisory Group
- 16 for the site that is very involved. They have
- regular meetings, monthly or every other month,
- and it's a way for the community to stay
- involved with the site, to have input into the
- site every step of the way. If anyone is
- interested in joining the CAG or participate
- with the CAG they have a website and we'll
- 23 assist as to the Chair or Community Advisor
- person.

- <sup>2</sup> As I said, I think most of you are very
- <sup>3</sup> familiar with the site so I will very briefly
- 4 go through the site picture with you.

5

- 6 Newtown Creek is part of the New York-New
- Jersey Harbor Estuary and it forms the north
- 8 south boarder between Queens and Brooklyn.
- 9 Here is Newtown Creek (indicating). It is
- designated by New York City as one of
- 11 Significant Maritime and Industrial Areas in
- the City and it is basically a 3.8-mile
- waterbody with five tributaries. I'll show a
- more detailed map in a moment.

15

- 16 Historically the site has been a center of
- industrial activities since at least the
- mid-1800s. It was one of the busiest
- industrial areas in New York City and heavy
- 20 industrial facilities were located along the
- site, including more than 50 oil refineries.

- The City began dumping raw sewage directly into
- the water in 1856 and the Creek was crowded
- $^{25}$  with vessels and using the waterway to

- <sup>2</sup> transport materials through Queens and
- Brooklyn. This is an old shot, I'm not sure
- 4 what the exact date of that picture was
- <sup>5</sup> (indicating).

6

- During World War II the Creek was one of the
- 8 busiest ports in the entire nation. So there
- 9 was heavy industrial usage that dates back a
- 10 long time but continued up until not that long
- 11 ago.

12

- 13 There are still industrial commercial vessels
- 14 floating, operating upward and along the Creek
- so there's no plan for that to change or go
- away completely.

- 18 So from a Superfund perspective the site was
- 19 listed on the National Priorities List in
- 20 September 2010. After which we signed an Order
- with what we call potentially responsible
- parties for this site. We signed an
- 23 Administrative Order on Consent with these
- parties, they include five private parties plus
- $^{25}$  New York City and under the Order they are

- <sup>2</sup> conducting the Remedial Investigation
- 3 Feasibility Study for the entire site for what
- 4 we call the Study Area.

5

- 6 The Study Area is very specifically defined in
- <sup>7</sup> the Order, and basically in simple terms the
- 8 water and sediment of the Creek up to the high
- 9 water line. It includes bulkheads or rip-rap
- but it doesn't generally include the upland
- 11 outside of the Creek.

12

- Now here is a more detailed map of the Study
- 14 Area (indicating). This is the main stem of
- the Creek (indicating). There are five main
- tributaries, Dutch Kills, Whale Creek, Maspeth
- 17 Creek, East Branch, and English Kills. Well,
- one more thing, and the East River, it flows in
- and out of the East River.

- 21 So often with Superfund sites we divide them
- into what we call Operable Units, that's a
- technical Superfund term but it's a way of us
- managing a site in smaller elements so that we
- $^{25}$  can make decisions as we go along and look at

- different parts or pieces of a site in a more
- 3 concentrated way. So depending on how complex
- 4 the site is it might all be addressed in only
- one Operable Unit or could be divided into
- 6 several Operable Units. It could be based on
- <sup>7</sup> the geographic areas of the site or a specific
- 8 site problem, or where a specific action is
- <sup>9</sup> taken or required.

10

- 11 So for Newtown Creek up until last year -- up
- until this year really the site is being
- addressed as one Operable Unit. The entire
- 14 study area was being investigated. That
- 15 Remedial Investigation And Feasibility Study as
- 16 I mentioned was being conducted for the water
- and sediment of the Creek. We anticipate that
- we will be at this point in that process no
- sooner than 2023, so we're still several years
- off from making a decision regarding the entire
- 21 Creek.

- 23 So recently we created two new Operable Units
- to the site. I will start with Operable Unit 3
- <sup>25</sup> first.

2

- Operable Unit 3 relates to evaluation of a
- 4 potential interim, early action for the lower 2
- 5 miles of the Creek. So if you go back here
- 6 (indicating) it would be from the East River to
- <sup>7</sup> about the turning basin (indicating). This
- 8 wide area that's previously called the turning
- 9 basin, that's where the larger boats were able
- to turn (indicating).

11

- 12 So the private PRP people have an idea, know
- enough about the Creek so that we can address
- those lower 2 miles sooner ahead of the action
- on the rest of the Creek, so that's being
- evaluated separately. If all goes as planned
- we will be here meeting again for a Proposed
- 18 Plan for that action sometime in the not too
- 19 distant future.

- 21 But today we're here to discuss Operable Unit
- 22 2, which I'm going to say repeatedly relate to
- a very discrete specific aspect of the site.
- The way it's worded on this line it evaluates
- the impact of current and reasonably

- <sup>2</sup> anticipated future discharge of Superfund site
- <sup>3</sup> related chemicals of potential concern from
- 4 combined sewer overflows to the Study Area
- <sup>5</sup> (indicating). So all we're looking at is the
- of volume of CSO discharges to the Creek. The
- Superfund related contaminants in that
- 8 discharge and how that might impact eventual
- 9 cleanup of the Creek, and I'm going to get into
- 10 a lot more detail on that.

- 12 In order to do that evaluation we signed an
- Order with the City of New York in 2018 and
- they prepared what we call a Focus Feasibility
- 15 Study. So for the entire site we did a full
- 16 Feasibility Study, it's looking at a lot of
- different alternatives, it's a large site,
- there's a lot to do. This is a Focus
- 19 Feasibility Study, it's just looking at this
- $^{20}$  one aspect. So they prepared that Focus
- Feasibility Study with EPA oversight. That has
- also been posted online with the Proposed Plan
- 23 and you all can review it but that forms the
- 24 basis of the Proposed Plan that we are
- <sup>25</sup> discussing today.

2

- 3 So before we could get into understanding
- 4 Operable Unit 2 I just want to spend a few
- 5 minutes going over what we've done for Operable
- 6 Unit 1 which is the entire site.

- 8 So field work for Operable Unit 2 began in 2012
- 9 and was substantially completed in 2019. It
- included a collection of a robust set of data.
- We sampled lots of things that I'll list on the
- next slide, and we analyzed those samples for a
- comprehensive list of contaminants including
- volatile organic compounds, semi-volatile
- organic compounds, Aroclors and congeners,
- Polychlorinated Biphenyl (PCB), metals,
- pesticides.
- We are also developing a complex set
- of inter-related models to help us evaluate the
- Operable Unit 1 Study Area and the various
- 21 alternatives that may be considered to clean up
- the contamination in a whole. And those models
- $^{23}$  and the data for Operable Unit 1 for the Study
- Area wide investigation will form the basis for
- $^{25}$  the site wide decisions.

2

- What we did for Operable Unit 2 was for this
- 4 one specific action and though it's not as
- 5 comprehensive as the full Study Area wide
- 6 Investigation and Feasibility Study, that
- <sup>7</sup> study.

8

- <sup>9</sup> Just to give you an idea of the type of data
- that was collected. Initially we looked at the
- bathymetry, that's the sediment bed,
- groundwater, as well as ecological community,
- point source discharges which is very relevant
- to what we're discussing tonight. Sediment
- such as surface water, water chemistry,
- porewater, biota tissue testing. We looked at
- all the data and we decided we needed more
- $^{18}$  data.

- $^{20}$  We did seepage measurements which is what is
- 21 coming through the sediment seeping through the
- floor of the bed of the Creek, porewater
- sampling, more sediment boring. We looked at
- NAPL which is Non-Aqueous Phase Liquid, which
- $^{25}$  we looked at both where it was and how it might

- <sup>2</sup> move. We did sampling and observation of
- <sup>3</sup> ebullition which is that bubbling you might see
- 4 on waterbody from organic matter, and active
- 5 transport mechanism in contamination, and we
- 6 did shoreline sampling of sediment as well.

7

- 8 So the current status for Operable Unit 1, a
- 9 draft Remedial Investigation Report was
- submitted in November of 2016. As many of you
- 11 know EPA had a lot of comments on that report.

12

- 13 A revised report was submitted in April of this
- year, it is much closer to something that is
- approvable that we can share. We submitted
- 16 comments on that revised report in September
- and we expect to see a new revision I think
- <sup>18</sup> early 2020.

- $^{20}$  In addition, both human health and ecological
- risk assessments have been completed and
- $^{22}$  approved by the EPA for the entire study area,
- those are available online if anyone wants a
- look. The complex modeling I mentioned is
- ongoing.  $^{25}$

2

- 3 So basically not to get into a lot of detail
- 4 it's an important component to the model,
- 5 sediment transport, the hydrodynamic model
- 6 which looks at how the water moves and there's
- <sup>7</sup> a point source model that feeds into that, and
- 8 that feeds into a sediment transport model,
- 9 which feeds into a contaminant fate and
- transport model. So once we know how the
- 11 sediment itself moves we can look at how the
- 12 contamination which tends to bind to the
- sediment might move with the sediment.

14

- 15 Then finally, the final component is the
- bioaccumulation model which looked at what
- biota are eating the sediments that contains
- the contamination and how it accumulated in
- their bodies, and ultimately the human health
- risk is driven by people consuming those fish.
- 21 So it's important to understand how
- 22 contamination accumulates in fish.

- 24 So we discussed that we just started working on
- the Draft Feasibility Study for the entire

- 2 Study Area. We expect that report, a draft of
- 3 that report in 2021. As I mentioned earlier we
- 4 don't expect to be at this point for the entire
- 5 study area until 2023 the earliest, and that's
- 6 if all goes as planned. So that timeline is
- <sup>7</sup> important to why we're here tonight to discuss
- 8 Operable Unit 2.

9

- 10 A little background on Combined Sewer Overflows
- and CSOs. I'm going to try not to use acronyms
- during most of this presentation but CSOs I
- think most of you are familiar with that term.
- 14 But during wet weather conditions the Creek
- 15 receives discharges from point and non-point
- sources including CSOs from stormwater and
- overland flow.

18

- 19 Now what are CSOs. CSOs basically when it
- rains more than the sewer system can handle
- what would normally go to a waste water
- treatment plant is directed directly into the
- <sup>23</sup> Creek, or discharged directly into the Creek.

24

So CSO discharges are governed by the Clean

- Water Act which is separate from Superfund. So
- 3 we are here evaluating the Creek from a
- 4 Superfund perspective. The EPA is looking at
- 5 the Creek from the standpoint of hazardous
- 6 substances that the Superfund regulates such as
- <sup>7</sup> the volatile, semi-volatile organic compounds,
- 8 and Polychlorinated Biphenyl (PCBs). The Clean
- 9 Water Act is looking at different things,
- they're looking at bacteria and at the levels
- of dissolved oxygen in the water.

12

- 13 So the Clean Water Act governs the control of
- 14 CSOs and there is a need to improve the water
- quality of the Creek. So a Waterbody and
- Watershed Facility Plan for Newtown Creek was
- issued by New York City and approved by New
- 18 York State in 2012. This program was generally
- overseen by the State. The City is under Order
- 20 by the State to improve the water quality of
- the Creek as per the Clean Water Act. And a
- Long-Term Control Plan focused on the reduction
- of the volume of discharges to the Creek that
- were approved by New York State in 2018.

- Just for your understanding, there are eleven
- 3 such Long-Term Control Plans for waterbodies in
- 4 New York City, Newtown Creek is one of those
- <sup>5</sup> eleven. The Plan, I'll get into a little more
- 6 detail on that Plan, not much. But that Plan
- yas approved and the City is now working
- 8 towards implementing the Plan.

9

- 10 So this is that same figure I showed before of
- the Creek but this shows in addition the
- 12 locations of the Combined Sewer Overflow
- discharges to the Creek (indicating). There
- are 21 CSOs being discharged to the Creek. The
- 4 major ones account for the 90 percent of the
- volume of input into the Creek, and those are
- 17 located the heads of the largest tributaries
- 18 (indicating). There's is one here
- 19 (indicating). There's one here at Maspeth
- (indicating), and there's another here at East
- 21 Branch (indicating), and one at English Kills.
- 22 So Whale Creek is where the Water Treatment
- 23 Plant is located.

24

In addition to Combined Sewer Overflows there's

- of course lots of other sources of discharge to
- the Creek, there's just general stormwater
- 4 overflow, there is overland flow, there is
- 5 permitted Industrial discharges, there's
- 6 discharges from the Waste Water Treatment Plant
- <sup>7</sup> itself as well so the CSOs are just one input
- 8 to the Creek.

9

- 10 So again, I know I may sound like a broken
- 11 record. But outside of the Superfund process
- 12 New York City is under Order by the State of
- New York to implement a Long-Term Control Plan
- 14 for Newtown Creek, and that Long-Terme Control
- 15 Plan went through a public process much like
- we're going though tonight. The City has their
- own process prior to it being approved by the
- 18 State. If it's designed, the Plan itself was
- designed to meet waterbody specific water
- quality standards and when fully implemented it
- will reduce the volume of CSO discharges to the
- 22 Creek by approximately 61 percent overall.

- 24 So there are two main components to the
- Long-Term Control Plan. It first consists of a

- 2 26 million gallon expansion of the Borden
- 3 Avenue pump station, so that part will be
- 4 implemented first, and then it also includes
- 5 construction of a CSO storage tunnel which the
- 6 exact length of that tunnel is still being
- designed but it would be between 1.5 and 3 and
- 8 a half miles long. It's a significant
- 9 infrastructure project for the City that would
- capture some of the CSO discharges during wet
- weather events and send it to the Waste Water
- 12 Treatment Plant. So that's a very basic
- overview of the Long-Term Control Plan itself.

14

- The City is now under Order by the State to
- implement this Plan and the expected cost of
- the Plan is 1.2 billion dollars and as per the
- terms of the Order it needs to be complete by
- 19 2042.

- Now that seems like a very long time from now
- but in order to have it complete by 2042 the
- 23 City has to start the process, particularly
- there's a lot that goes into that. Picture
- building a 1 plus mile long tunnel under the

```
<sup>2</sup> surface of New York City. It will take a long
```

- 3 time to implement that so they have to start
- 4 putting effort towards this now.

5

- 6 So we have a timing issue, the City was
- 7 concerned that if they would implement this
- 8 Long-Term Control Plan and then in 2023 or 2024
- 9 we come out with our Superfund Record Of
- Decision to the entire study area and say you
- know what, the Plan the you're implementing is
- 12 not big enough to meet our Superfund needs. So
- we decided it would make sense to look at, and
- here we are, this very discrete aspect of the
- 15 Plan. So the volume control prescribes the
- guidelines of the Control Plan, the Long-Term
- 17 Control Plan which was designed to meet the
- 18 requirements of Clean Water Act to see if it's
- 19 sufficient to also meet the requirements of the
- <sup>20</sup> Superfund for the site.

- $^{22}$  So that is all that we are evaluating here,
- that's all that's being evaluated. We're not
- going to make any statements regarding the
- adequacy of the Long-Term Control Plan in terms

- of meeting the Clean Water Act, I'm not going
- 3 to make any statements on that either way.
- We're here to focus on the Superfund.

5

- 6 So given that we are early in the entire
- 7 process for Operable Unit 1 of the site we had
- 8 to figure out how we're going to evaluate that
- 9 question, that's a good question. I think you
- all can understand why we wanted to look at the
- question but could we answer it without
- 12 complete information.

13

- 14 So we developed an approach, first we would
- conduct a Focus Feasibility Study. We would
- use existing data and reports in order to form
- the basis of that Focus Feasibility Study. So
- 18 for Operable Unit 2 for the question that we're
- 19 looking at, we did not collect any additional
- data on the Creek. We did not conduct
- 21 additional risk assessment. We used the
- approved human health ecological risk
- assessment and we used existing data.

24

 $^{25}$  We decided we would look at multiple lines of

- <sup>2</sup> evidence to evaluate the impact of the CSO
- 3 discharges on the Creek and Mark will describe
- 4 those multiple lines of evidence, and then we
- <sup>5</sup> would evaluate at least three alternatives.
- 6 The Order states we look at least three
- <sup>7</sup> alternatives, and those are no action, what if
- 8 the Long-Time Control Plan was not implemented.
- 9 We know that it will be implemented because the
- 10 City is under Order to implement it, but what
- would things look like if it weren't.

12

- 13 So we looked at what we call no further action
- which is a bit of a confusing term. But what
- 15 it means in this case is that the City
- implements their plan that they are under Order
- to implement and reduce the volume of CSOs
- discharges by 61 percent.

- 20 And then we looked at the theoretical 100
- 21 percent control, what if there were no CSO
- discharges to the Creek. And as I said we
- would look at least three elements because once
- we completed that analysis we were going to
- <sup>25</sup> make a decision whether we needed to look at

- 2 something in-between. Like if the Plan the
- 3 City is under Order to implement calls for 61
- 4 percent reduction in volume would 80 percent
- <sup>5</sup> reduction be better, would 90 percent. So
- 6 would make that determination once we have sort
- of gone through the initial evaluation process
- 8 and we would do a comparative analysis
- <sup>9</sup> evaluating the alternatives relative to each
- other.

11

- 12 I neglected to say in the beginning who I'm
- here with before I turn it over to Mark who is
- the speaker here.

- 16 So for every Superfund site we develop what's
- called a Remedial Action Objective, what is our
- 18 goal. You need a goal in order to come up with
- 19 a plan. So our goal here is to minimize the
- 20 extent practicable inputs of site-identified
- 21 compounds to Newtown Creek from CSO outfalls
- that might add contamination to the Study Area.
- But that's the goal, we want to minimize the
- <sup>24</sup> CSO discharges and if necessary that could be a
- hundred percent control but something

in-between zero and a hundred.

3

- 4 So typically in order to evaluate a remedy or a
- 5 series of alternatives for a site you need to
- 6 look at risks. You need a risk in order to
- <sup>7</sup> take an action at a Superfund site. This site,
- 8 this Study Area does pose unacceptable risk to
- 9 human health and the environment.

- We did not conduct an independent risk
- 12 assessment for Operable Unit 2 but we do have
- approved human health and ecological risk
- $^{14}$  assessment for the entire Study Area. What
- those found was that there are unacceptable
- 16 risks to humans associated with ingestion of
- 17 fish and crabs from the Creek, and there are
- unacceptable risks to benthic invertebrates,
- 19 bivalves, blue crabs, fish and birds that live
- $^{20}$  in the Creek. Therefore, we have a basis to
- take action on the Creek, to make decisions
- regarding cleanup on the Creek. So we decided
- that the contaminants of potential concern to
- human and then biota from the Creek would be
- $^{25}$  the contaminants that we looked at for Operable

<sup>2</sup> Unit 2.

- 4 So what does that mean. While there's a whole
- bost of contaminants that were detected in the
- 6 Creek from a risk perspective there was a
- 7 relatively short list that lead to unacceptable
- 8 risk in the Creek. And that short list is
- 9 Total Polycyclic Aromatic Hydrocarbon or as
- you'll see on pages later on TPAH, Total
- 11 Polychlorinated Biphenyl PCB, copper,
- dioxins/furans which will be represented on
- figures as 2,3,7,8-TCDD and lead. So it's
- 14 really just five groups or individual
- 15 contaminants that are leading to the
- unacceptable risk, and we'll continue to call
- these contaminants of potential concern because
- we are not developing what are called
- 19 preliminary remediation goals for Operable Unit
- $^{20}$  2. We don't know what our cleanup goals for
- the Creek will be yet, we won't know that until
- we complete our study of the full Study Area
- investigation, the Feasibility Study. So we
- realize we don't need cleanup goals in order to
- $^{25}$  conduct this Operable Unit 2 evaluation.

- 2 Rather we would look at the alternatives for
- Operable Unit 2 the no action, no further
- 4 action, or 100 percent control relative to each
- <sup>5</sup> other.

6

- <sup>7</sup> I think I already went through this, I
- 8 described the alternatives that we evaluated.
- <sup>9</sup> The last line I'm going to cover, I just want
- to make it clear what Operable Unit 2 does not
- do. I think I already said all these things
- 12 but I'll repeat it.

13

- 14 It does not evaluate the appropriateness of the
- 15 State Long-Term Control Plan in meeting the
- 16 Clean Water Act requirements of the Creek. It
- does not propose cleanup goals for the site,
- that would be done in the Operable Unit 1
- 19 Proposed Plan. It only evaluates a very
- discrete aspect of the site. The impact of the
- 21 current and reasonably anticipated future
- discharge of Superfund Site related chemicals
- of potential concern from Combined Sewer
- Overflows to the Study Area.

- With that I will turn it over to Mark to go
- 3 though the technical evaluations that we did.
- 4 I'm with the EPA. I'm the Section Chief of the
- <sup>5</sup> Superfund Program. Mark is one of the three
- 6 project managers we have for the site. Also in
- <sup>7</sup> the audience we have Chuck Nace who is the
- 8 human health and ecological risk assessor for
- <sup>9</sup> the site, any question on risk he is the person
- to ask. We have Jim Doyle who is our legal
- 11 representative for the Site, if anyone has any
- questions related to the Administrative Order
- or how we actually do this legally. Then we
- also have two people from CDM who provides and
- helps us with our oversight of all the work.
- Joe Mayo who knows the site backwards and
- forward, and Rooni Mathew who is our modeler.
- 18 Any modeling related questions he can answer
- 19 those. Up front we have Shareen Kandil who is
- our Community Relations Representative.
- MR. SCHMIDT: Can you hear me, are you
- 22 okay back there?

- My name is Mark Schmidt. I'm one of the
- remedial project managers for Newtown Creek.

2 Again, we have three total but I'm one of them.

3

- 4 So I'll run you through the technical aspects
- of how we arrived at alternatives for the Site.
- 6 What we did is we used a lines of evidence
- <sup>7</sup> approach. So we collected data at the Site and
- 8 said, how could we use this data to describe
- <sup>9</sup> the lines of evidence?

10

- 11 So the first one is we want to compare
- particulate-phase concentrations in these
- discharges whether CSOs, or stormwater, and the
- treated effluent. So we were able to collect
- samples from these and take them to the lab and
- analyze them and get data and we can compare
- them to each other.

18

- 19 The next is mass loading. So now based on the
- 20 concentrations you can have volume that's
- coming out of a pipe you get a mass. So you
- 22 could compare mass for different alternatives.

- The third one is we can assess the impact and
- we'll do this with a model and we'll assume

- that you can clean the bed, have a clean bed
- 3 and then we can run simulations to see what
- 4 happens with these different alternatives what
- 5 happens to the bed whether the contamination
- increases, we run these different alternatives.
- <sup>7</sup> So these are what we call lines of evidence.

8

- 9 So again, a bunch of data was collected. We
- went out and collected, we had people out there
- in a rainy event like tonight collecting
- samples of the different discharges listed here
- 13 (indicating). We also have samples from the
- 14 East River, quite extensive East River
- sampling, ground water as well as in-creek
- sources. We also evaluated the seep creek
- 17 sources as well.

- 19 So in order to run the evaluation we had to
- group our data. So we took our data, we have
- 21 CSOs, collected 20 samples from the CSOs, about
- 96 percent of the total CSO discharges to the
- 23 Creek. 47 samples from stormwater, Municipal
- Separate Storms Sewer System known as MS-4s,
- private properties, highway drains and other

- <sup>2</sup> stormwater outlets.
- We have treated discharges, we collected 23
- 4 samples, wastewater treated effluent, permitted
- 5 discharges from groundwater treatment systems
- 6 that enter the Creek. Then East River, and we
- <sup>7</sup> also have atmospheric deposition (indicating).
- 8 So there's sites around the New York/New Jersey
- 9 area where atmospheric deposition data was
- collected, and we used that data as well.

11

- 12 So the first line of evidence again is back to
- the particulate-phase comparison of
- 14 concentrations that's displayed in the data.

15

- 16 So what we'll do is I'll display some charts
- showing the data and we can look and we can
- 18 compare them to each other.

- 20 So the first one is the TPATH. So the black
- dots represent the data, that's all the data
- that's collected (indicating). Along this line
- these are our categories, CSO, stormwater,
- treated discharges, and East River surface
- water (indicating).

2

- On this axis is our concentrations of PAH's in
- 4 this case (indicating). These are box diagrams
- <sup>5</sup> (indicating). These box diagrams are a very
- 6 good way of evaluating environmental data
- <sup>7</sup> (indicating), and the way they work is this red
- 8 line is the median, that's the middle data
- 9 point (indicating). The lower is 25 percent of
- the data below, 25 percent of the data above
- 11 (indicating). These green lines are averages
- 12 (indicating).

13

- 14 So when we look at each of these categories we
- could see how they compare to each other. We
- 16 know that CSOs average maybe about 30 or so
- 17 TPATHs. Stormwater is a bit higher
- 18 (indicating), and the East River is a bit lower
- 19 (indicating).

- 21 If we go look at PCBs, that's the next one. So
- again we see that stormwater the averages are a
- bit higher than CSOs (indicating). Again the
- 24 East River is a bit lower (indicating).
- We'll just go through each one of these.

- <sup>2</sup> Copper, it's a very similar trend we have here
- <sup>3</sup> (indicating). Stormwater is a bit higher than
- 4 all the others. The CSOs kind of lie within
- <sup>5</sup> the treated discharges (indicating), a little
- 6 higher than the East River (indicating).

7

- 8 Lead is the next one. Again, a very similar
- <sup>9</sup> trend here. You see where the CSOs lie
- compared to stormwater (indicating). Treated
- discharges are a little bit higher than East
- 12 River surface water (indicating).

13

- 14 The next one is Dioxins/Furans. In this case
- we only had detections in CSOs and stormwater
- 16 (indicating). We didn't get any Dixon/Furans
- in some of these other discharges. But again,
- 18 stormwater is higher than CSOs in each case
- 19 (indicating). So the results of this line of
- 20 evidence the concentrations are generally
- within the range of other inputs. We didn't
- see anything that was really strange, we didn't
- see any extreme highs or lows, they were all in
- range.

- 2 In general the CSO were less than stormwater in
- 3 all cases and generally less than treated
- 4 discharges, and the average concentration in
- <sup>5</sup> CSOs was higher than the East River, so that
- 6 was our first line of evidence.

7

- 8 The second one now is comparison of loading.
- 9 So we have contaminant concentration and we can
- also measure the volume what's coming out of
- the pipes and we can calculate a load.

12

- 13 So we have Alternative 1 which is no action.
- 14 Alternative 2 is the no further action or 61
- percent capture. Alternative 3 is 100 percent,
- so in this case we're not going to have any
- load from CSOs so it would be zero.

- 19 So the next slide we'll do the same exercise.
- These are a little different diagrams. I
- believe someone in the back has a question?
- UNIDENTIFIED SPEAKER: Can you just
- explain what a loading is just a little more
- 24 clearly?
- MR. SCHMIDT: Yes. So imagine you have

- <sup>2</sup> a pipe, so this pipe it has particulates in it
- 3 and it has a volume. So if you collected all
- 4 of this you would know what, if you multiply
- 5 that concentration times that volume you would
- 6 get a load.

- 8 So in the first line evidence we just have the
- 9 concentration, we just looked at an example of
- that. Now we're looking at the concentration
- times the volume. So the volume is going to
- have a potentially drastic influence on that
- load. Does that make sense?
- UNIDENTIFIED SPEAKER: So is that your
- units are mass divided by time?
- MR. SCHMIDT: Exactly. Yes, thank you.
- Mass divided by time. So what we have here
- there are annual loads, so it's kilograms per
- $^{19}$  year.
- UNIDENTIFIED SPEAKER: So how many.
- 21 Kilograms are coming out into the Creek over a
- year?
- MR. SCHMIDT: Yes. Exactly, that's it.
- 24 So what we have here are loads in kilograms per
- year (indicating). And here's our categories

- down here (indicating). The first is no
- action, the second one is no further action,
- 4 our third alternative is zero of course because
- <sup>5</sup> for Alternative 3 there would be no load. Then
- 6 here's our different categories (indicating).
- <sup>7</sup> So East River, atmospheric deposition we move
- 8 down and did atmospheric deposition in that
- 9 category (indicating). Here are stormwaters
- 10 (indicating), and here are treated discharges
- 11 (indicating).

12

- So for TPAHs treated discharges gave the
- 14 highest load per year. You got PCBs
- 15 (indicating). As you see the note, the East
- River is providing the highest load to the
- 17 Creek. That may surprise you but not really,
- think about the volume of the East River coming
- into the Creek is fairly significant so that's
- why it's giving you a fairly high load.

21

- 22 Again comparing to these others, MS4s treated
- discharges are a bit higher than the CSOs for
- PCBS (indicating).

- 2 The next is the copper, very similar trend to
- PCBs. The East River is the dominant source
- 4 loading. MS4s and treated discharges are about
- <sup>5</sup> the same, just a bit higher (indicating).

6

- Lead is the next one, the same. The East
- 8 River, contributes the highest in lead, and
- 9 MS4s discharges are a little less from the
- 10 CSOs.

11

- 12 Then finally the Dioxins/Furans interestingly
- enough atmospheric deposition is the highest,
- and one of the reasons is because there's very
- 15 little in these discharges of any
- 16 Dioxins/Furans. So now we're not talking about
- a huge amount, milligrams over a year so it's
- 18 not a huge but it is the highest contributor of
- 19 that load to the Creek.

- 21 So what we found in our line of evidence, so
- what we found here in this case the CSOs are
- 23 generally similar or less than the other
- inputs. Alternative 2 of course is smaller
- $^{25}$  than Alternative 1. TPAHs is the largest load

<sup>2</sup> in treated discharges.

3

- 4 PCBs, copper and lead came from the East River,
- 5 and Dixon/Furans is the largest loading from
- 6 atmospheric deposition, so that's line of
- <sup>7</sup> evidence 2.

8

- <sup>9</sup> Let's go to line of evidence 3. So this is our
- third line of evidence. This is
- post-remediation assessment through modeling.
- 12 So I mentioned we're going to do some modeling.
- 13 So as part of the long-term control Plan a
- 14 number of models were created. These models
- help in our system determining the alternatives
- 16 for the Long-Term Control Plan. Point source
- model in how much water is coming into the
- 18 Creek. There's ground water seepage,
- 19 hydrodynamic water moving around in the Creek,
- 20 sediment moving.

- Then for OU2 we did a separate chemical model.
- 23 So this is not part of the Long-Term Control
- Plan, this was done separately for OU2. So this
- chemical model, it's not the same that was done

- for OU1 as well but this is specific for this
- <sup>3</sup> OU (indicating).

4

- 5 So what we can do, let's say we go in and we
- 6 remediate all of the stuff so that there's a
- 7 perfectly clean bed and so we have
- 8 concentrations of zero. So we can run the
- 9 simulation, we can say okay, let's look at the
- 10 alternatives. We know what the concentrations
- are, we know what the loads are, we can
- simulate these over a 20 year timeframe and
- then we can make predictions, what is that
- sediment bed going to look like? Is it going
- to look better? Is it going to look worse? Is
- there going to be any contamination in the
- 17 sediment bed.

18

- 19 So again use the same CSOs, the East River,
- these other discharges that we just showed you
- 21 (indicating). We included groundwater as well
- for a conservative method, and we looked at
- TPAHs, PCBs and Copper (indicating).

24

Before we go on to the next step let me try to

- 2 explain what we're going to show to evaluate
- this, we're going to look at the average
- 4 concentration site-wide, so over the entire
- 5 Creek, what would the average concentration of
- 6 these different alternatives be over the entire
- 7 Creek, and then we can look at each of the
- 8 tributaries separately.

9

- 10 Again, the graphs are going to show an average
- 11 concentration and we're not totally focused on
- that number, we're more focused onto trend.
- 13 So if you show the trend, I'll explain this
- chart to you here (indicating).

15

- 16 So these are model simulations, 20 years. We
- have no action so percent reduction in CSO
- discharge is zero (indicating). No further
- action percentage of discharge reduction is 61
- percent. 100 percent, control is a 100
- 21 percent. And these would be your
- concentrations (indicating).

- 24 So if you took a sample of concentration in the
- $^{25}$  sediment bed for no action it would be about 12

- <sup>2</sup> milligrams/kilograms. No further action may be
- 3 about 11, and 100 percent CSO control may be
- 4 just over 10. For PCBs it's almost a flat line
- 5 and for Copper it's a decrease but not much of
- 6 a decrease (indicating).

7

- 8 So what this is really showing us is it has to
- 9 do with volume. If we control the volume to
- 10 control the CSOs it's not really helping us
- 11 from a Superfund perspective from capture of
- 12 contaminants. Just by reducing the volume
- we're not going to see less of our contaminants
- of potential concern in the Creek.

15

- 16 So for example, let's say if we look at a 75
- percent or 80 percent reduction what is that
- going to look like, it's pretty minimal in each
- of the cases. So by capturing more CSOs it's
- not really going to improve the sediment bed.

- Here's looking at some of the tributaries, the
- 23 Creek mile and you can see very similar trends
- $^{24}$  in all of them (indicating). Now I want to
- point out something that's very interesting

- here, for example, at East Branch you actually
- 3 see an increase of PCBs. That doesn't sound
- quite right but what happens in East Branch
- 5 again remember that the CSOs they contribute
- <sup>6</sup> quite a bit of volume to the Creek. So if that
- 7 volume is reduced by 100 percent control we
- 8 have other inputs that have PCBs, so what are
- 9 they going to do, they're going to kind of
- dominate the deposition solids in those
- segments and that's why you might get an
- increase in concentrations in certain
- 13 tributaries.

14

- 15 Again, they're all pretty consistent. Again,
- these numbers, these are just numbers that we
- simulate using a model so not necessarily
- something that you know, that we're going to
- use, it's more of a comparative analysis
- (indicating). So that's the third line of
- evidence.

- 23 Again, the model shows that there will be
- inputs into the Creek. There will be
- contaminants of potential concern on the

- 2 sediment bed over 20 years, they will build up.
- 3 But what we saw even at 100 percent control
- 4 it's very minimal, it's not going to change
- significantly between 61 percent Long-Term
- 6 Control Plan and 100 percent. So any percent
- 7 reduction between the two is really not
- 8 necessarily evaluated, it's not really
- <sup>9</sup> significant.

10

- 11 So here's our lines of evidence, how do we
- evaluate this now. So in our EPA Superfund
- process we have our nine evaluation criteria.
- 14 Two of them are the threshold criteria, five of
- them are a balancing criteria, and then two of
- them are the modifying criteria. These two,
- community acceptance and State acceptance will
- 18 be evaluated after the public comment period
- 19 closes (indicating). So we'll take these
- criteria's and put then in a matrix and then
- we'll compare the alternatives.

- The next slide, so let's start off with overall
- 24 protection to human health and environment. So
- of all alternatives we find the evidence shows

- that all three provide roughly the same level
- <sup>3</sup> of protectiveness.

4

- 5 What about for appropriate requirements.
- 6 Alternative 1 and 2 it's not applicable because
- <sup>7</sup> Superfund in this case is not taking an action
- 8 on these two alternatives. Alternative 3
- 9 doesn't apply to all requirements.

- 11 The next one, in terms of long-term
- 12 effectiveness I'll just point out some of
- these. Of course the most effective would be
- 14 Alternative 3, it captures the most. Both 2
- and 3 would reduce significant volume. But
- what about impacts, short-term impact. If we
- try to develop 100 percent CSO control plan
- that may be very disruptive, it would certainly
- 19 put the Long-Term Control Plan in terms of
- timing and would cause some disruption in the
- short-term, and in the long-term it's very
- difficult to be implemented. If you try to
- control every single CSO and there's 21 CSOs
- out there it would be very difficult to be
- $^{25}$  implemented, it would take a long time, and the

- cost, it would be very costly. For these two
- 3 there's no Superfund related cost or timeframe
- 4 (indicating). We have zero cost and zero time
- 5 so that's how we evaluate these criteria's.

б

- 7 So based on that we need to select an
- 8 alternative, and for that we selected
- 9 Alternative 2. Alternative 2 assumes that the
- 10 Long-Term Control Plan that New York City is
- under Order to implement is completed in a
- timely manner, we're assuming that.

13

- 14 Let me restate this as Stephanie mentioned it
- earlier. This relates to the control of CSOs.
- 16 Additional control options either in the Creek
- or at other discharges may be required.

- 19 So as part of the OU1 process we may determine
- that hey, maybe we need to put some sediment
- traps or some absorbant pads to slow the CSO
- discharge process, so these may be required as
- part of the OU1 process but we're not at that
- point to determine that at this time but it is
- $^{25}$  a possibility.

2

- Formal 5 year reviews are not be required but
- 4 there will be monitoring as part of this
- 5 program. The monitoring, we'll sample the CSO
- 6 discharges on a quarterly basis. We'll take a
- <sup>7</sup> look at that data and see is it increasing, is
- 8 it decreasing, is it staying the same. If we
- 9 see some changes or we think that it's
- increasing we can conduct a Track-Back Program
- and determine if there's a reason why we're
- 12 seeing increases.

13

- We want to make sure that this alternative
- that's chosen is valid for the Long-Term
- 16 Control Plan before it's fully implemented.
- 17 The cost for the sampling is going to be 10
- 18 million dollars but the cost is not included as
- 19 part of our no further action remedy.

- The next slide, just again reiterating some of
- the things that we discussed why Alternative 2
- was selected, protectiveness, more
- effectiveness short-term, more easily
- implementable. Again, we're not seeing by

- 2 controlling more volume we're not seeing a
- 3 significant reduction in the COPCs in the
- 4 Creek's sediment.
- UNIDENTIFIED SPEAKER: It's not a
- 6 pathogen?
- 7 MR. SCHMIDT: It's not a pathogen
- 8 because in a Superfund world we're looking at
- <sup>9</sup> just the ones that are presented tonight.

- 11 And finally again, Operable Unit 1 which we're
- in the process of working on right now. This
- decision process may determine that additional
- 14 non-volume related control actions for CSOs are
- needed. So if at some point as we evaluate OU1
- other controls are needed those could be
- implemented and that would potentially improve
- the remediation of the sediment quality in the
- 19 Creek.
- That's it, so if you have any comments.
- <sup>21</sup> Yes?
- MS. MOREHEAD: I have a.
- Question for you. If you're taking the sample
- from the Creek itself, is there a way to test
- the effluent in the pipes to possibly determine

- where the contamination is coming from to
- 3 isolate the source?
- 4 I know it's an expense but if you can isolate
- 5 the source and get rid of it on the land or
- 6 whatever, wouldn't that be ultimately cheaper?
- 7 MR. SCHMIDT: Yes. That's part of the
- 8 OU1 process. I'll let Stephanie jump in.
- 9 MS. VAUGHN: As part of the OU1 process
- we did sample the discharge from the pipes
- themselves from the CSOs.

- 13 But the monitoring plan we talked about that
- would be required between when we sign this
- decision and the Long-Term Control Plan is
- implemented which is upwards of 20 years the
- 17 City would be sampling the discharge from the
- pipes on a quarterly basis and if we saw any
- increase in concentration that's what the
- 20 Track-Back System is. They would try to find
- the source of the contamination in that way and
- so they can address it at the source before it
- <sup>23</sup> reached the Creek.
- MR. SCHMIDT: Just in terms of next
- steps if there are any comments we'll accept

- $^2$  them, yes.
- MS. VAUGHN: Can you state your name?
- 4 MS. MOREHEAD: I'm Dorothy Morehead.
- 5 I'm Chair of The Environmental Committee of
- 6 Community Board 2, and for a long time I was on
- 7 the Newtown Creek Alliance Board Of Directors
- and a couple of ground field programs for
- 9 Newtown Creek.

10

- 11 The Borden Avenue pumping station, is that
- 12 going to still have an aeration facility in it
- because they doubled back, they were going to
- have the aeration into Dutch Kills and into the
- main body of Newtown Creek?
- MR. SCHMIDT: Let me see, I believe
- that has been removed from the Long-Term
- 18 Control Plan.
- 19 Is there anyone from the City that can comment
- $^{20}$  on that?
- We can check on that. But I know there
- was a bit of discussion about that and some of
- the aeration that was proposed has been removed
- from the Long-Term Control Plan.

- 2 Stephanie, can you go to the previous slide?
- <sup>3</sup> I just want to mention one more point. We will
- 4 be issuing a Record of Decision so that's
- 5 another point to make here.

6

- 7 Then finally, the comment period is January
- 8 27th. Verbal and written comments can be sent
- 9 to me via e-mail or you could call, there's a
- 10 link to the website, and that's it.
- MS. VAUGHN: Does anyone have a
- 12 question?
- MR. ELKINS: My name is Willis Elkins,
- $^{14}$  Newtown CAG, Newtown Creek Alliance. Can we go
- back, I'll start two slides back or one more, I
- don't know. There's language about a timely
- fashion, that the City is under Order to
- implement in a timely manner. The completion
- date is 2042 with 61 percent reduction.

- In theory I can go conceive a child and that
- 22 child can live their entire non-adult life in a
- world where there's still 1.2 billion gallons
- of sewage coming into the Creek, that to me is
- $^{25}$  not a timely manner.

- 2 So what power does the EPA have to comment on
- 3 the approved Long-Term Control Plan in that
- 4 regard?
- MS. VAUGHN: We're here to discuss the
- 6 Long-Term Control Plan in relation to the
- <sup>7</sup> Superfund Site. So from a Superfund
- 9 perspective our program at least does not have
- 9 any say in the timelines for implementing the
- 10 Long-Term Control Plan. As I mentioned, the
- 11 City goes through a whole public review
- 12 process. I know there's concerns but that has
- been approved by the State. So I don't think
- in this process we can have impact on that
- 15 timeline.
- MR. ELKINS: Even if a full remedy of
- the Creek is achieved before the Long-Tern
- 18 Control Plan is achieved?
- MS. VAUGHN: So let's say that
- Operable Unit 1, the full Study Area goes along
- 21 as planned. Let's say in around 2024 we sign a
- Record Of Decision for the entire Creek and we
- determine at that point what our cleanup goals
- for the Creek are. This analysis shows, Mark
- showed the slide of what the potential sediment

- 2 concentrations would look like over time from
- 3 the inputs that were evaluated during Operable
- 4 Unit 2, so from the CSOs as well from the other
- point-source and non-point source discharges.
- 6 That was not a comprehensive evaluation of what
- <sup>7</sup> the sediment bed would look like because there
- 8 are also the in-creek sources of contamination,
- 9 there are many other sources.

10

- We also still need to perform a modeling for
- 12 Operable Unit 1. So once we complete the whole
- process and we determine that the
- 14 recontamination or the contamination potential
- 15 from any of these point-sources including CSOs
- is greater than what our cleanup goals would be
- then we could required additional action.

- 19 What we're saying here in relation to CSOs
- through this analysis it seems that additional
- 21 actions might need to be performed, if
- necessary of additional solid controls or oil
- 23 controls from the CSOs or additional in Creek
- maintenance. But the volume control would not
- have a significant difference on the result of

- 2 concentration in the Creek post remedial
- $^{3}$  action.

4

- 5 So I don't know if I'm answering your question.
- 6 I don't see right now a path where our decision
- 7 making process from a Superfund perspective
- 8 would affect the implementation timeline for
- 9 the Long-Term Control Plan.
- MR. ELKINS: Okay. I just have a
- couple of more questions. About the sampling,
- can you explain more who collected the data
- used to inform the decision, and also you
- mentioned that the risk assessment survey are
- based on OU1 which is about contamination,
- about the contaminant in the sediment.

- 18 So my question is, in this Plan did you
- evaluate how surface waters are impacted by CSO
- <sup>20</sup> discharge?
- 21 Because I understand that long-term having high
- PCBs levels or PCBs and lead in sediments can
- be detrimental for humans and ecological health
- as well. But it seems like when the sewerage
- $^{25}$  is being discharged like it is now and there's

- oils and everything else from the street
- 3 running into the Creek that stuff is going to
- 4 stay in the surface waters for some amount of
- 5 time. So by just studying the impacts of
- 6 what's in the sediment already you're not
- <sup>7</sup> actually evaluating the impacts to human
- 8 health. If I want to go out and fish tomorrow
- 9 or go wading in the water I would have higher
- 10 exposure to that surface water.

- 12 So the question is, how did you evaluate the
- surface waters in the sampling?
- MS. VAUGHN: So there was two questions
- 15 there.
- 16 Regarding the surface water risks that maybe
- 17 Chuck can answer. But very similar the risk
- 18 assessment, human health risk assessment did
- 19 include various exposure scenarios, and one of
- those was impact. So we looked at the impact
- of surface water exposure during boating and we
- used a conservative assumption as to how much
- time people might spend on the water and how
- much of their body would be exposed. And what
- $^{25}$  that evaluation showed is that the impact from

- the Superfund contaminants of potential concern
- 3 did not lead to unacceptable risk.

- 5 What we did not evaluate was impact to the
- 6 Clean Water Act contingent of concerns such as
- <sup>7</sup> bacteria.
- MR. ELKINS: Just to clarify, that was
- 9 not evaluated in relationship to CSO discharge.
- 10 The water sampling was done regardless. When
- 11 EPA evaluated are there more PCBs or PAHs or
- whatever in the surface water 24 hours after a
- major rain event, or did you just look at it
- $^{14}$  overall and not consider the timing in it
- because the containments will stay in and sink
- to the bottom.
- MS. VAUGHN: That's the type of
- question that would come out in the feasibility
- 19 study. So from the risk assessment we can turn
- back, calculate. I'm going to get myself in
- trouble here. We can calculate the
- concentration that might be of concern and so
- then we would need to address any
- 24 concentrations above that exceed that
- 25 concentration of concern.

2

- 3 So from a surface water perspective we did not,
- 4 I don't know Joe if you want to talk?
- MR. MAYO: There was sampling done
- 6 during wet weather, surface water sampling, and
- <sup>7</sup> there was also a years worth of sampling done
- 9 periodically on a monthly basis and that's the
- 9 data that went into the risk assessment.

- 11 Off the top of my head, and I'll be careful
- 12 about this. I don't think there were a lot
- higher concentrations of the surface water
- 14 following storms. I know a large part of that
- was because they also bring a lot more water
- and there's a dilution effect. But that's from
- my recollection what we seen in the RI Report.
- We can check that for you further.
- MS. VAUGHN: Thank you, Joe. Also,
- from a samples standpoint the data was all
- 21 collected as per the terms of that Order for
- Operable Unit 1. So that was collected by the
- group of potentially private parties for the
- site with EPA oversight. So we'd also have
- $^{25}$  someone from CDM or EPA on the boat with them

- overseeing what they're doing.
- MR. ELKINS: Just one more thing.
- <sup>4</sup> Everything here is based on current standards.
- 5 So the Long-Term Control Plan is based on
- 6 rainfall on a average year in 2008. We know
- <sup>7</sup> that's already changing rapidly, we're getting
- 8 more rainfall.

9

- 10 It's also that, and I appreciate your
- orientation today. The EPA is operating under
- 12 set standards of what is considered a chemical
- of concern. There are chemicals that are
- 14 coming down our sewer pipes that are not
- evaluated that do cause, you can argue with the
- lawyers and the scientists here that have risk
- for human ecological health that are not
- 18 currently evaluated in the Superfund.

- So the question is, what happens to us on the
- community side when in 25 years we have a
- reduction of sewage and it follows these models
- 23 61 percent. But in reality we have
- 24 significantly more rainfalls and 61 percent
- $^{25}$  reduction, and the EPA is actually finally

- 2 looking at other chemicals that have impact to
- human and ecological health yet we're stuck
- 4 with this approved plan from 25 years prior.
- 5 So what's the recourse for us to adjust this as
- 6 both things change in terms of regulations and
- 7 actual conditions with rainfall?
- MS. VAUGHN: So from a Superfund
- 9 perspective we do have the 5 year review
- 10 process. One of the comforting things that we
- built into the Plan here is that the City is
- 12 going to be conducting a much more robust
- sampling effort then they would otherwise if we
- didn't come in with this decision. Sampling
- the CSOs quarterly for 25 plus years is a
- significant effort and it will give us a
- significant amount of data to see if the
- 18 composition of what's coming into the CSO
- 19 changes over time, what's changing, development
- $^{20}$  and usage pattern along the Creek.

- 22 If things change, they change, and if changes
- need to be made from a Superfund perspective or
- from a Clean Water Act perspective then there
- are, at least speaking from a Superfund

- <sup>2</sup> perspective that can happen.
- MR. WAXMAN: It's Mitch, Mitch Waxman
- for the stenographer, hi. I'm on the CAG
- 5 Committee Board, Newtown Creek Alliance Board,
- 6 blah, blah, blah all this.

7

- <sup>8</sup> Just one of the things that I want to introduce
- 9 into the record that we discussed tonight, and
- just to amplify what Will was just saying.
- Now, the 61 percent number is predicated on
- 12 2008 rainfall. I saw in your handout that you
- calculated in 2011 rainfall, thank you for
- qoing to a wet year. But it's a disingenuous
- 15 number because the City is projected to grow a
- 16 little bit in the next 22 years and
- presumptively this is going to add into the
- volume that the DEP which as a PRP has had to
- be forced into the court time, and time, and
- $^{20}$  time again over the last 40 years in order to
- get them to reduce the volume of raw sewage
- that they're putting into the Creek and the
- 23 contaminants concerned that carry along with
- <sup>24</sup> it.

- Now the question is, if the 61 percent
- 3 according to right now the volume, in 2042 what
- 4 is the anticipated removal of the flow coming
- out of the pipes, is it going to be 50 percent?
- 6 Is it going to be 40 percent? I'm sure you
- <sup>7</sup> guys have done the math.

- 9 And the question I ask, just as when President
- 10 Kennedy said, America supports sending a man to
- the stratosphere and back again safely, is
- 12 rather we're talking about halfway measures on
- 13 Newtown Creek.
- MS. VAUGHN: Is there a question?
- MR. WAXMAN: The question is how
- effective is the LTCP is going to be in 25
- years given the population of New York City in
- 18 2042, presuming that the City of New York
- 19 actually obliges the court Order signed with
- the DEC or whoever?
- MS. VAUGHN: I don't really have an
- $^{22}$  answer to that, that's outside our prevue. I
- don't know if anyone here has that.
- MR. WAXMAN: Well, let's say in 10
- percent, doesn't that change the loading of the

- 2 contaminants of concern that is carried to the
- flow if the flow has gone up 10 percent?
- 4 So doesn't it logically follow that so to will
- <sup>5</sup> Mark's really bizarre dot charts change with
- 6 it?
- MS. VAUGHN: Not necessarily. It's not
- 8 necessarily coming in. From a Superfund
- 9 perspective what is coming into the Creek so
- that we could show the concentration of each of
- the loading. So just because there's a higher
- volume, if there were a higher volume in the
- future, I'm not arguing that point. It doesn't
- mean that there's also going to be a consistent
- similar percentage increase in concentration of
- whatever the contaminants are.
- MR. WAXMAN: Because the nature of the
- urban environment is going to change.
- MS. VAUGHN: It could.
- MR. WAXMAN: I'm sure.
- MS. VAUGHN: It could change for the
- better or the worse in terms of contamination
- levels. So one of the things that the samples
- 24 are going to require over the next 20 years or
- $^{25}$  so it will show whether that changes, and how

- <sup>2</sup> rapidly it changes and how significantly it
- 3 changes.
- 4 MR. WAXMAN: But luckily the Superfund
- site is going to be extended. So I would be
- 6 interested in hearing how the change in
- 7 population volume around Newtown Creek and
- 8 finding out how that would change the actual
- 9 volume of contaminants flowing into the water
- in DEP pipes. And then we can compare that to
- the part of the City planning forecast for the
- 12 growth of New York City and the sewershed
- composition therein over the next 22 years
- $^{14}$  because presume the DEP somehow manages to do
- $^{15}$  this in 22 years.
- MS. VAUGHN: We can certainly use the
- data to implement a plan.
- MR. BROOKS: Ernie Brooks, and I'm the
- 19 Queens rep for Congresswoman Carolyn Maloney
- and I've lived in Long Island City for a long
- time on Vernon and 45th Drive, and after every
- rain there's backup. The stench is pretty bad
- everywhere around the storm drains and that
- population, there's no question it's increasing
- and the sewers have not been built out to

- 2 accommodate that, and I don't see any change in
- 3 that occurring and the City really doesn't have
- 4 a plan in place to deal with the population.
- 5 There is no plan on towers on large housing
- 6 developments until the infrastructure is built.

- 8 But I would say that fact alone would mean now
- <sup>9</sup> you should go with the 100 percent reduction
- because a few years that would probably be even
- less than 61 percent. I'd also say it's
- strange of you to say it's good to have CSOs
- because they dilute other toxic chemicals. It
- seems that in one of the charts there are
- saying there would be a reduction in
- 16 concentration of something doing bad because
- you have this nice sewage basin carrying it
- 18 into the Creek and into the river and that
- 19 seems like an insanely detailed way to consider
- $^{20}$  that.
- MS. VAUGHN: On that last point, I
- $^{22}$  absolutely understand what you're saying. We
- weren't in any way saying that it's good that
- 24 CSOs were coming in. We were just explaining
- $^{25}$  the odd results in the graph

- MR. BROOKS: I'm Daniel Loud (phonetic)
- and I'm sitting next to Carolyn Maloney's rep.
- 4 I'm with Congresswoman Nydia Velazquez.
- <sup>5</sup> Our district has changed a bit. We have the
- 6 English Kills end of the Creek. We have just a
- <sup>7</sup> little part of it now. We used to have all of
- 8 it but the district has changed. But we also
- 9 have three Superfund sites in our district one
- to the north, the other one to the south, the
- Gowanus Canal which is about the Jersey side,
- 12 and I know you have members here like Louis who
- sits on both sites, the Gowanus and Newtown
- 14 Creek.

- 16 I wanted to ask because the Gowanus Canal has
- moved in, it's smaller waterbodies move in a
- 18 faster rate, they have arrived. The Record Of
- Decision actually with a lot of pressure from
- the Gowanus CAG came up with requirements that
- $^{21}$  the City do more on CSO controls to the tune of
- 22 an 8 million gallon or 4 million gallon
- overflow tank to reduce the CSOs up to 74
- percent, where as before if you do nothing it
- $^{25}$  would only have been like 34 percent. So the

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<sup>2</sup> EPA through the Superfund circular actually
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- <sup>3</sup> required the City do more controls then it was
- 4 planning under it's Long-Term Control Plan.

5

- 6 So I'm wondering what you're looking at, what
- <sup>7</sup> they're looking at, I know it's apple and
- 8 oranges. But do you have a sense of comparison
- 9 on how that ROD came to a different conclusion
- or required more because of the constituents
- are concerned being in the CSO potentially
- 12 recontaminating the Canal where as here maybe
- it's not seen as much. I'm just trying to get
- a handle on what's different in the Gowanus
- 15 case that you had a different kind of
- 16 conclusion in terms of requiring more of the
- 17 City in its CSO control?
- MS. VAUGHN: I think there are two
- 19 primary differences. One, the Gowanus decision
- $^{20}$  one is a timing issue. The Long-Term Control
- 21 Plan for the Gowanus was not out yet, it was
- not approved yet when the Record Of Decision
- for Gowanus was signed. So the EPA felt
- compelled to step in and do something.

- The second is what you mentioned, the size of
- 3 the Creek. The Gowanus Canal is a much smaller
- 4 channel, 25 percent of the volume of Newtown
- <sup>5</sup> Creek. So the impact from these CSO discharges
- 6 have a much higher impact on the Gowanus then
- 7 they would on Newtown Creek because it's
- 8 smaller than some other waterbodies and so
- 9 where maybe CSOs are not shown to have any real
- impact. So here we to evaluate the issue.
- UNIDENTIFIED SPEAKER: Are you talking
- just not seeing eye-to-eye on methodology?
- MS. VAUGHN: We didn't, they're two
- 14 different sites.
- UNIDENTIFIED SPEAKER: The only thing
- that I'm concerned is that it's not a question
- of the owner and the project manager being
- different from one to the another.

- It's kind of good that I think the two CAGs
- there has been some cross-control basis, no pun
- intended. It would be interesting to see how
- the comparison as to a lay person to understand
- how that is and not just the question of maybe
- one project manager being more aggressive and

- 2 having one approach verses a different project
- manager having a different approach at a
- 4 different place, that's what I'm asking?
- MS. VAUGHN: As Chuck pointed out we
- 6 use the same science to make a decision in the
- <sup>7</sup> process, the Superfund process. The sites are
- 8 different and therefore led to different
- 9 conclusions. I can't speak to the Gowanus, I
- can speak to Newtown Creek. We don't work in a
- vacuum to coordinate, they're just different
- 12 sites.
- MR. KAPOCHUNAS: Hi, my name is Andy
- 14 Kapochunas. I'm a member of NCA but I live in
- Hunters Point south so I'm a kind of equal
- distance from the East River and Newtown Creek.

- 18 I was surprised of the impact of the East River
- bringing in copper, lead and PCBs, and it seems
- as though that's kind of taken to be, it's
- 21 assumed that's going to continue at the same
- level. Where are those containments coming
- from, are they coming from the estuary within
- New York City? They coming from Up State? And
- is there anything happening to work on reducing

- the PCBs, lead and copper that are coming into
- 3 Newtown Creek?
- 4 MS. VAUGHN: I can't get into a lot of
- <sup>5</sup> detail about that. But are over time we became
- 6 smarter, we was people and there are better
- best management practices, better control and
- 8 there is a Waterbody Watershed Improvement Plan
- <sup>9</sup> for the entire City of New York.

10

- 11 So over time there should be improvement in all
- waterbodies which would improve the East River,
- would improve Newtown Creek and those kind of
- improvements over time is something that we're
- very interested in evaluating and looking at in
- 16 the long term.

17

- 18 I know specific actions have been taken and
- will be taken to improve the water quality
- $^{20}$  throughout the whole New York City watershed,
- but I'm not prepared to speak about those
- tonight what they are exactly because those are
- outside of the Superfund again.

24

But what I can say is that those improvements

- <sup>2</sup> are something that we absolutely looked at
- 3 something, not Operable Unit 2 that we're
- 4 talking about tonight but for the full Study
- 5 Area that is something that we were absolutely
- 6 looking at.

7

- 8 We don't want to sort of sell Newtown Creek
- 9 short. If there were overall improvements then
- we want the Creek to also show similar
- improvements over time.
- MS. FLANAGAN: Hi. My name is Maggy
- 13 Flanagan. I don't represent an organization
- 14 but I'm a fan of Newtown Creek.

15

- 16 My comment and question is to kind of step back
- a bit from the numbers and graphs and what you
- think about the mission and what it sounds like
- 19 tonight.

- 21 I understand and appreciate that you all have a
- job to do, that there are very specific
- prescriptions on the Superfund. But to stand
- $^{24}$  there and tell us that changing CSOs is not
- going to have any effect of the contaminants

- your looking at just sound pretty ridiculous.
- 3 Everybody knows CSOs impact human health and
- 4 protecting human health is the primary mission
- of the EPA. So please just step back from
- 6 things a little and to help our community
- <sup>7</sup> advocate along those ways through this process,
- 8 and if it is actually the City's Long-Term
- 9 Control Plan that is the answer to this then
- 10 please make sure you bring in the Department Of
- 11 Environmental Protection every time we want to
- talk about these kind of things. When you're
- saying the Long-Term Control will take care of
- it, well let's have the City here too.

- 16 I don't understand the political confrontations
- of that relationship but any federal pressure
- that will help us get DEP to get better CSOs
- would be great, so please continue to think
- <sup>20</sup> along those lines.
- MS. MOREHEAD: Is this posted somewhere
- (indicating)?
- MS. VAUGHN: To this website on the
- bottom here (indicating). If you search online
- Newtown Creek Superfund site it will bring you

- to the EPA site and it contains an e-mail, it's
- 3 also on the fact sheet.
- 4 MR. DULONG: Hi, I'm Mike Dulong from
- <sup>5</sup> Riverkeeper. So I want to address the point.
- 6 The difference between what's going on in the
- Gowanus Canal where there is an additional
- 8 cleanup ordered by EPA and here where there's
- 9 not going to be is striking, and I think we're
- going to spend most of the next hopefully two
- months trying to out figure why that is.

- 13 So if you could provide more information about
- what the differences are, why that happens, and
- if there were any different methodologies or
- you used the same exact methodologies and you
- show us why there was a difference there that
- would be really helpful. I think it would be
- 19 helpful just to explain to the community,
- explain to CAG why this happens and we're
- really counting on that extension to come
- through.
- MS. VAUGHN: And it will, it's just not
- publically published but don't worry, it will
- go through.

- MR. DULONG: We can really appreciate
- 3 that. So in the Long-Term Control Plan there's
- 4 a number of 62.5 percent reduction and there's
- 5 61 percent reduction from the EPA's documents,
- 6 is that because you used two different rainfall
- <sup>7</sup> years?
- MS. VAUGHN: No. Correct me if I'm
- 9 wrong but I think that's just because we looked
- at the 62.5 reduction is from the tunnel that
- will be built underground so three of the four
- larger CSOs, and then the remaining reduction
- would be the Borden Avenue pump station. So
- when you factor those two together you get 61
- percent, is that correct?
- MR. SCHMIDT: Yes.
- MS. VAUGHN: So we just sort of
- 18 condensed it into one number for ease of
- 19 explanation.
- MR. DULONG: And the Long-Term Control
- 21 Plan depends on this presumption that they'll
- be a lot green infracture put into the Newtown
- 23 Creek sewershed to curtail CSO consumption.

24

Does your analysis rely on the same assumption?

- MS. VAUGHN: Our analysis is still that
- 3 the Long-Term Control Plan is implemented as
- 4 designed, it didn't analyze the details of the
- <sup>5</sup> design impact.
- MR. SCHMIDT: We took, there was a
- <sup>7</sup> base. There was initial volume of CSOs and
- 8 then there's the green infrastructure, and
- 9 there's some pathways, there's a number of
- other items and what we looked at is that
- baseline that infrastructure was created, all
- that infrastructure is in place.
- MR. DULONG: Well, if you look at the
- 14 City's numbers for a green infrastructure and
- their projections, they're probably not going
- to hit their numbers, at least not by 2030, who
- knows if they're going to hit them 2042. So
- that actually brings up the concern I have
- 19 about enforcement. How will this be enforced
- 20 by EPA? It's just a likelihood that this will
- get rewritten over the next two decades, three
- decades as the new plans come in to support the
- 23 purpose of what the City and the State are
- doing to curtail CSO pollutants or bacteria and
- $^{25}$  those type of pollutants. How will the EPA

- <sup>2</sup> enforce their remedy, your remedy?
- MS. VAUGHN: If I understand what
- 4 you're saying, if the Long-Term Control Plan
- 5 gets modified between now and when it's
- 6 implemented?
- 7 MR. DULONG: I think it will.
- MS. VAUGHN: So if that were to happen
- 9 we would have to reassess our assumption and
- see if it still makes sense. I mean, just
- thinking out loud, if the Long-Term Control
- 12 Plan were modified to call for greater volume
- control based on the analysis conducted that
- would not hurt the Superfund process, that
- would improve it.

- 17 They're going to be sampling the CSOs very
- 18 regularly so we will continue to monitor the
- 19 situation and the elements of this process.
- MR. LOUIS: Louis, and I'm with the
- 21 Gowanus CAG. Have you looked into the
- 22 stability of the City's LTCP Program for this
- area as in consideration of the fact that both
- the volume of people and order will essentially
- be built up northward to consider the larger

- amount. One of which course is the tunnel that
- kind of surprises me because EPA turned down
- 4 the tunnel proposal of the City for the Gowanus
- 5 and here I see a tunnel. In my mind that does
- 6 not quite reconcile that, but what about the
- 7 scalability?
- MS. VAUGHN: That's not something I can
- 9 speak to.
- MR. LOUIS: You have more volume if you
- have more people will produce more problems?
- MS. VAUGHN: Yes. The design of that
- plan though, we didn't through this process
- question the design in that plan. We simply
- 15 looked at the impact of the CSO discharges on
- eventual cleanup of this site from a volume
- 17 perspective.
- 18 I understand that's a very unsatisfying answer
- but all we are really able to do at this point
- in the Superfund process is look at that one
- <sup>21</sup> aspect.
- MR. CHESLER: I'm Steve Chesler I'm on
- the Brooklyn Community Board Environmental
- 24 Protection Committee.

- 2 Is there any situation or circumstances where
- 3 these extreme existence of pathogens are
- 4 present in a body of water or on land where the
- 5 EPA would intervene and you know, demand some
- 6 sort of action or essentially another federal
- <sup>7</sup> agency that might do that?
- MS. VAUGHN: The Clean Water Act is
- 9 delegated from Federal to State. But the
- 10 Federal Program does oversee it. So if any
- 11 situation were to arise I think the EPA could
- 12 step in. That would be that the perspective
- pathogens the Clean Water Division of EPA would
- have not the Superfund.

15

- 16 So if we thought that we're going to be
- conducting the Track-Back it's the sampling of
- 18 the CSOs. If we see a significant increase in
- the Superfund contaminants of concern then we
- would require some sort of study to figure out
- where that increase in concentration is coming
- 22 from.

- 24 If during that Track-Back Time Program if
- something similar is required by the Clean

- Water Program then they would need to evaluate
- 3 that.
- 4 MR. CHESLER: So the EPA essentially
- <sup>5</sup> enforcing the Clean Water Act in the City's
- 6 compliance. What I want to understand, if the
- <sup>7</sup> bacteria pathogens are you know, whether the
- 8 City is being compliant or not why isn't that a
- 9 part of this whole conversation in
- 10 equalization?
- MS. VAUGHN: So the City prepared a
- 12 Long-Term Control Plan, the State reviewed it,
- 13 EPA reviewed. But because authority is
- delegated to the State the State approved the
- plan. So they have presumably approved the
- plan to address impact from pathogens and
- bacteria in the long term.
- MR. CHESLER: But is it possible that
- the Federal could be questioned like if the
- 20 State has made a decision that maybe severely
- in error are detrimental to human health and
- ecological aspect could EPA intervene in that
- 23 situation?

24

MS. VAUGHN: Yes, I think they could.

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 2
     Anything else?
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     Thank you all for coming out on this rainy
     night.
 4
                   (Whereupon at 8:28 p.m. the
 5
 6
         hearing concluded.)
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                  CERTIFICATE
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    STATE OF NEW YORK
                             SS.:
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    COUNTY OF QUEENS
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8
             I, NANCY NASCA, a Notary Public for and
9
    within the State of New York, do hereby
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    certify:
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             That I reported the proceedings in the
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    within entitled matter, and that the within
13
    transcript is a true record of said
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    proceedings.
15
             I further certify that I am not related
16
    to any of the parties to this action by blood
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    or by marriage and that I am in no way
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    interested in the outcome of this matter.
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             IN WITNESS WHEREOF, I have hereunto set
    my hand this 2nd day of January 2020.
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	PUBIC HEARING
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	In the Matter of
	NEWTOWN CREEK SUPERFUND SITE
	PROPOSED PLAN PUBLIC MEETING
	OPERABLE UNIT
	DATE: December 11, 2019
	TIME: 6:47 p.m.
	PROPOSED PLAN PUBLIC MEETING, Operable Unit 2,
	in the above-referenced matter, held at P.S. 110,
	134 Monitor Street, Brooklyn, New York, before
	Cassandra Phifer, Court Reporter and Notary Public of
	the State of New York.
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6	MARK SCHMIDT, Remedial Project Manager
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10	ROONI MATHEW, CDM SMITH MICHAEL MINTZER, EPA
11	MICHAEL MINIZER, EFA
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(Whereupon, the welcoming introduction was given

3 by Natalie Loney.)

> STEPHANIE VAUGHN: One other thing that I wanted to mention in addition to Mark Schmidt, who is one of the project managers for this site, also here tonight from EPA is Ann Rosenblatt, another project manager from the site and Chuck Nace, who is the human health and ecological health assessor. And we have Michael Mintzer, the attorney for the site and Rooni Mathew, who is our modeling expert for this site.

So, we ask, as Natalie said, hold questions until the end, but when we get to the end we may direct one of the questions towards one of those other folks.

So, we went through welcomes, we are going to give a brief overview of EPA and the Superfund program and then an overview of the overall site status and history. And then we'll move into discussing Operable Unit 2, which I will explain what that means; but that's the whole reason that we are here tonight, and run through what EPA preferred alternatives for that portion of site is and next steps, and then we'll take questions and answers.

Looking around, I think that many of you know a lot about the site already, but it's important to set

the stage and provide the background for the larger site so that you can understand the context of what we're talking about and what we're here to focus on tonight.

I know that Natalie already covered them,
but we're here to hear your comments and record them and
they will all become part of our administrative record
when we do select a remedy for this portion of the site.
So it's an important opportunity for you to be heard and
your comment period does extend until January 27, 2020.
So this isn't your only opportunity to provide comments,
if you think of something after the meeting.

Very briefly we are with the Superfund program of EPA and Superfund, if everyone is familiar is a very long process. And it could be frustrating at times, we're aware, but it's an important process, because we want to make decisions that are based on good science and can be supported. So, once the site goes through assessment then it's determined whether it should be added to the Superfund list or the national priorities list. The Newtown Creek site was added to that list in 2010. And then we start what's called the "remedial investigation and feasibility study. And during that time, we basically determine the nature, the type of contamination that is present at the site and extent of the contamination. We try to figure out what's there

and where it is and where it might go and the risk that it poses both to human health and the environment and then we move into what's called the "feasibility study" which is when we evaluate how to clean that up, how to, if there is a risk posed by the site, what we should do to address that risk. I'm talking in general and will get into more details of where we are in Newtown Creek in a moment. Once we finished that remedial investigation and feasibility process, and then we come out where we are tonight, EPA issues what we call a proposed plan or proposed remedial action plan. We share with the public with all interested parties a summary of the results of our findings, we put all the reports that helped us form those findings and then we share what EPA thinks is the preferred path forward.

At the conclusion of the comment period,
we evaluate all comments received and then we put
together what is called a responsiveness summary, which
includes all the questions and comments and our
responses to them, and then that goes into what we call
a "record of decision." And the record of decision is a
formal legally binding document which outlines our
cleanup plan for the site.

Once that's assigned, that's a big milestone, then we move into designing the remedy and actual clean

up of the site and eventually the site would go into either long-term operations and maintenance, if necessary. And hopefully would someday be removed from the list of Superfund sites.

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And again, very briefly, just to point people with the Newtown Creek site itself. Newtown Creek is a part of New York-New Jersey Harbor Estuary and forms the border between Brooklyn and Queens. It is designated as one of six maritime and industrial areas in the City. So this is, this black line is the creek, here is the East River and you can all see Brooklyn, Queens, New Jersey, this is the Hudson, New York Harbor, New York-New Jersey Harbor (indicating). It's a lot of connected water bodies in this area. So I was saying it's designated a maritime area. And that's important in terms of future use. It will retain some of that character moving forward. And basically, it's a 3.8 mile tidal water body with five tributaries. I'll have a close-up of the creek itself in a moment.

Historically, the creek has been one of the centers of the industry of New York City since the mid 1800s. At one point, more than 50 refineries operated along the shores and there were also many other chemical plants, petrochemical plants, fertilizer factories, glue factories, saw milling and raw sewage was dumped

directly into the creek from the City starting in the 1850s. And during World War II the creek was one of the busiest ports in the entire nation. So, it has a long history of use and contamination and it retains -- as I said, it retains some of those industrial characteristics today.

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So, as I mentioned, the site was listed and became a Superfund site in 2010. In 2011, we signed what is called an "administrative order on consent" with six, what we call "potentially responsible parties." And there were six parties who we can say contributed contamination to the creek. Five of those were private parties and one of those was the City of New York. And in that order, it was to conduct a remedial investigation and feasibility study, which is described already with EPA oversight. So, the responsible parties conduct the work, but EPA reviews all the work plans, and we provide oversight while they're conducting the sampling. And the study was to investigate what we call a "study area." And that study area was defined in the order as the water and sediment of the creek itself basically up to the mean-high water mark. So, it's not necessarily the upland properties that might be contributing, but it does include point and non-point sources that are contributing contamination to the

creek; such as combined sewer overflows, which are the focus subject of today.

Here is the creek itself. I mentioned there are five areas, Dutch Kills -- here is the East River,

Dutch Kills, Maspeth Creek, East Branch, English Kills and over here is Whale Creek where the wastewater treatment plant is located. Greenpoint, Long Island City, Williamsburg. And one other thing to point out, this is called the Turning Basin, you can see it's one of the widest points in the creek, that's where traditionally the ships, larger boats would turn.

So, what we have a large site like

Newtown Creek, and it is a large site. It has taken and will continue to take a long time to figure out how best to address the contamination at the site. We often divide large sites into what we call operable units. It's just a term of art that EPA has. And the site could be divided into operable units. However makes sense. It can be by media, one for soil, one for ground water, one for surface water, it can be by geographic areas and could be by where a specific action is required. So, the Newtown Creek site, up until recently, up until this year actually, was being addressed or being studied all as one operable unit, which was that study area that I mentioned. Since the

beginning of 2019, we have created two new operable units, operable Unit 3, I'll talk about that before Operable Unit 2. Operable Unit 3 is what we call a focused feasibility study that we are conducting related to a potential interim early action for the lower two miles of the creek. So that would be the lower two miles ending at about that Turning Basin that I showed you. That is something that we signed an order for in June of 2019 with the private responsibile parties. And depending on how the results turn out, we might be, at this point, doing a similar type meeting in the near future.

Tonight we're here to discuss Operable Unit 2, which I'm going to say this repeatedly, looks at a very distinct single aspect of the site. And that aspect is the impacts of current and reasonably anticipated future discharge of the Superfund site related chemicals of potential concern from combined sewer overflows to the study area and we're focused on the value of those discharges on subsequent slides. I'll get into more detail on what we are doing and what we are not evaluating.

So, in order to evaluate that distinct aspect of the site, we signed an order with the City, since the CSOs are under the City purview, to conduct another

focused feasibility study. The only difference between a focused feasibility study and full feasibility study is that it's focused -- one is more focused on a single issue.

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So, we signed that order in late 2018 and they completed the feasibility study earlier this year and we released the proposed plan on November 21st.

And so in order to understand why we are looking at this Operable Unit 2, the impact of the volume of discharges from combined sewer overflows, we need to understand a little about the larger study. So since the fieldwork towards the larger study of the site began in 2012 and was substantially completed in 2019. collected a whole lot of data during that investigation, which I'll show you on the next slide, and the samples were analyzed for our comprehensive list of contaminants, including volatile organic compounds, semi-volatile organic compounds, aroclors, congeners, polychlorinated biphenyls, metals, dioxins/furans. And we are also developing, as part of that larger study, a complex set of modeling to help us understand not just what -- we have data to show us what is there today, we have the historic record to help us understand how maybe it got there and then we need models to help us understand where it might go and what might happen in

the future, especially after we conduct a cleanup of the larger site.

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So everything that is being done for Operable Unit 1 for the larger study area is very comprehensive and is taking a long time because we want to make the right decision. There is no point in going out there and taking an action that needs to be retaken or tweaked in the future. So, ultimately, this would form the basis of our cleanup of the actual creek. So, I mentioned that we collected a lot of data. Initially went out and we collected, we did bathymetry surveys, which is looking at the depth of the sediment floor that's under the water, groundwater, ecological communities, we sampled directly point source discharges to the creek, we went out during wet whether, like we had Monday night and sampled what was coming out of those combined sewer overflows and other wastewater overflow facilities and water, overland. We sampled the sediment and surface water itself, both the surface and at depth. We sampled the pore water, the area between the sediment. We sampled actual tissues of various biota that live in the creek, including crabs and little benthic invertebrates that live in the sediments. And we did toxicity tests on those organisms. We reviewed all of that data and decided that we needed more

information. We went out and collected seepage samples that are coming out of creek and more biota sampling and more sediment sampling. We went out and did a quantitative study of ebullition, which is if you've ever noticed little bubbles coming up out of water bodies, that's called the ebullition and it could carry things like non-aqueous phase liquid oil contamination and we did additional shoreline sample.

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And so currently, the Operative Unit 1 the full study area, we have a draft remedial investigation report that's been revised. We expect another revised draft in early 2020. We have final human health and ecological risk assessment, which tells us that there are risks posed by the site, and I'll explain that in a moment. The complex modeling that I mentioned is ongoing, and ultimately that will become that model that we are developing, would become a model of record for the site whereby we make our decision site wide. And we are starting to work on the feasibility study looking at how we are going to clean up the entire site. And we hope to have -- to be at this point describing to you how we propose to clean up the site by 2023, that would be the earliest, it maybe later than that.

So, that is the background on the entire site and, you know, I think that was probably a little

tedious, but it's important to help us understand what is going on for Operable Unit 2. And so very basics, what are combined sewer overflows? During wet weather, the sewer system cannot and this is not in New York City but in many cities sewer systems, are not designed to handle the amount of waste that is produced. And so there are pipes that capture the excess sewage and waste and direct it into water bodies. So there are, I think, 21 combined sewer overflow pipes into Newtown Creek. The discharge from those pipes are governed by the Clean Water Act not by Superfund, so generally, that's not something that we would regulate. However, in this case, what might be coming in through those combined sewer overflows may also contain hazardous contaminants that the Superfund program is concerned with.

So, outside of Superfund, New York City is under order by New York State to look at ways of reducing the volume of discharge from the CSOs to the creek.

And there is a water body watershed facility plan for Newtown Creek that was issued in 2012, and there are 11 long-term control plans in the City that the State is overseeing. And the long-term control plan, which is basically a plan to reduce that volume of discharge from Newtown Creek was approved by the State in 2018.

So, here is just a map showing some of the

combined sewer overflow locations. And I'll try not to use acronyms, but in this case I'll use CSO, if that's okay with every one as easier to understand.

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There are 21 CSOs, but more than 90 percent discharge in the creek discharge from four of them. they're located in the four large tributaries; there one here, here, here and one here. So, the focus of the long-term controlled plan that was approved by the State is capturing the flows from those four CSOs. The plan includes building of an underground pipe, which looks like it would be between one and a half to three and a half miles long, which would connect to the existing waste water treatment plant and also expansion of the Bowery Bay substation that is on the Dutch Kills to capture more of the discharge. So, that plan, the City is under order by the State to implement that plan. The order has very strict time limits in it, and says that that plan must be implemented and in place by 2042. That is a long time from now. It's a huge infrastructure project and that's the amount of time that folks who reviewed that infrastructure project thought was needed, that's in order. So, the plan would reduce the volume of discharge to the creek, when completed, by approximately 61 percent from the baseline conditions considered in the plan.

So, what we have here is a timing issue. EPA is not supposed to -- we're not going to have a remedy for the entire site until 2023 the earliest and New York City is under order to start building, designing this long-term control plan that is going to cost over a billion dollars and take a significant amount of effort. So, we thought about it and asked if we evaluate that one aspect of the site and very specifically that is to determine if the volume control described by the long-term control plan that is approved by the New York State is sufficient to meet our Superfund needs for the site. We haven't completed our investigation of the whole site and we thought how can we do this. And we came up with an approach. As I mentioned, the City is under order with us, with EPA to develop a focused feasibility study. That focused feasibility study is based upon existing data only. All of the data that was mentioned collected from the entire site, data collected for the OU1 evaluation under EPA oversight. They would then use multiple lines of evidence, which Mark will go through, to evaluate the impacts of that discharge on the creek from the Superfund perspective. The order that we signed with the City specified that they would evaluate at a minimum, three alternatives. And one would be no

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action, meaning what if they don't do anything.

Under Superfund law, we always look at no action,
what if things stay the way that they are. The second
would be implementation of the State approved long-term
control plan, and that's basically what if discharge is
reduced by 61 percent. And then the third would be 100
percent control. What if there is no CSO discharges to
the creek anymore. And then we evaluate those
alternatives and see if we need to look at something in
between and conduct a comparative analysis.

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So, I'm almost done and then would turn it over to Mark. In order to conduct and answer these questions, we need to come up with an objective, what is the goal, what are we trying to determine. So the remedial action objective for Unit 2 of the site would simply be to minimize to the extent practical, input to the site identified compounds to Newtown Creek from CSO outfalls that may add contamination to the estuary.

As I mentioned, we used existing data to conduct this analysis. So we did not conduct new risk assessment either. The approved human health and ecological risk assessment found that there are unacceptable risks found at the site from the creek to both human health and the environment. The human health risks are driven by ingestion of fish that people may

catch from the creek and eat. The ecological risks are posed for fish and bivalves, blue crabs and birds that use the creek for their food. And so, because we are basing our evaluation on existing data and existing risk assessments our contaminants of potential concern for Operable Unit 2, are those leading to the unacceptable risk for the larger site.

So, even though the site has a whole slew of different contaminants present, the risks, the unacceptable risks are driven by a relatively short list of contaminants, and those are total polycyclic aromatic hydrocarbons, which might be abbreviated in some of the figures as TPAH or total PAHs, total polychlorinated biphenyls, TPCBs, copper and then also dioxins/furans and lead.

And typically, when you propose an alternative to clean up the site, you develop cleanup goals. We say, okay we want to clean up the sediment in the site to "X" concentration of this contaminant of potential concern. In this case, we didn't really need those, because all we are looking at is what the impact of the volume of these contaminants is on the creek. So, we do not have cleanup goals for this action.

I already mentioned the evaluated remedial alternatives. I'm just going to say this again,

Alternative 2 "no further action." And that just means that the long-term control plan that the City is under order by the State to implement is indeed implemented in the timely fashion. So there is no additional EPA Superfund required action. That's what is meant by that.

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Mark. We want to make it clear what Operable Unit 2 does not do. So, we are not here to evaluate the appropriateness of the long-term control plan that was approved by the State for meeting the requirements under the Clean Water Act. We're simply looking at the Superfund needs. And as I said, we're not proposing cleanup goals for this site. We are really just evaluating this one discrete aspect of the site, the volume of discharges and their potential impact on the remedy for the site.

So, I'm going to sit down here and hand this over to Mark.

MARK SCHMIDT: Hi, everyone. Thank you for coming out tonight. I would like to move around a bit, so I'll stand up here. Again, my name is Mark Schmidt. I'm one of remedial project managers of the Newtown Creek with EPA. There are three of us. It's a complex

site Ann Rosenblatt is one of us here tonight and Caroline Kwan is on leave right now. She's very active in the site.

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So, based on the information that Stephanie has presented, we need to look at a way that we are going to evaluate this focused feasibility study. We have a bunch of data, so we need to evaluate that data. what we've done is come up with lines of evidence approach. So basically we have three lines of evidence that we are going to use. The first one is the particulate phase concentrations of the different outfalls that run into the creek. So you can actually go out and collect samples from these outfalls and take it to the laboratory and get a result. That's the first line of evidence. And using that, as well as we look at a mass, the mass loading how much mass is coming into the creek. And then the third one is actually doing some modeling. So we do a bit of modeling exercise and we are going to assume that we can go out and clean up the creek, no contamination would be in the creek and then we can run some scenarios and see as what outfalls contribute volumes of water to the creek, how much mass would accumulate on the sediment. So those are the three lines of evidence. So, again, we've collected a lot of data. These are all the data that Stephanie

talked about, some of these data that has been collected out there. And what we've done is, we grouped these, we want to put these data into a group so that we can look at them in a better way. So these are basically the data that we are going to use here. So, let's talk about each one.

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The first one is CSO discharges. So, we went out and collected 20 samples from the CSOs, seven CSO, about 96 percent of total discharges. So we come out when it's raining, right. We want to get CSO when it's raining. So that took an effort to get that done. samples from the storm water use is included in municipal separate storm sewer systems, private properties, highway drains and other outlets. And 23 samples treated effluents discharged. We have groundwater treatment out there as well other industrial facilities. 87 samples for the East River. So East River, again we're able to collect 87 samples of water from the East River. And another one is atmospheric deposition. And there are stations throughout New York and New Jersey that have atmospheric data that we can use. So, the first line of evidence again, is this particular phase concentration that are coming out of these outfalls. So we are going to look at these and here are categories. We have CSOs, storm

water, treated discharges and the East River surface water. And what we'll do is compare them and look at all of them together and we'll look at them for each individual contaminant of potential concern. So, let's start with the first chart. I'm going to show you a series of charts here. Looking at the data down here across this axis, we have CSO, storm water, treated discharges, East River surface water. And on this axis we have the concentration. So this is the concentrations that are coming out. The black dots, these are the actual data points here, you see the data points. And these boxes, these are box blocks, these are common. When you have environmental data, the red line that's the middle, that's your median. There is 25 percent below is that box and 25 percent above is that box. The green lines are the averages. What's important here is we want to look at this data and compare it to each other and see how it looks. Looking at this data, CSO, is about -- that's about 30 milligrams per kilograms. And how does that look compared to the other. Storm water is a bit higher, East River is a bit lower. The data is grouped pretty well together for the East River and those total PAHs. And the next one is PCBs. Let's look at that one. Fairly similar trends you're going to see. Storm water

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again is higher than the others. CSOs is a bit higher than these two, than surface water. Copper, we'll look at copper. Very similar trends. Again, storm water is higher than CSO, East River is a bit lower. Lead is the next one. Lead is again, very similar trends that we are seeing. Storm water is a bit higher than the other. And finally, dioxins and furans. For dioxins and furans, the next text that we got was coming out the CSOs storm water. So, again only the storm water seems to be higher than the CSOs in all of those categories.

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So some of our finding for this line of evidence is basically that, you know, if you look across, all the concentrations are fairly in range, you don't see any of these categories that are extremely higher than the others. The average concentration on CSOs are generally less than storm water and treated discharges and a bit higher for that of the East River. So those are concluded from the line of evidence.

The next one is line of evidence two. So we want to look at mass. Okay. So think of you have a concentration and then you have this volume of water coming through the pipes. So what we can do is calculate a mass and this would be done on a weight over a year. How much mass is coming in over a year. So what we are going to point out here is Alternative 1 and

2, we compare those two; but Alternative 3, if you have zero flows coming out of the CSO, you would have zero mass. So, it's not shown on the charts because it's zero, but that's basically what we're saying for Alternative 3.

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Going to the next one I'll do the same exercise that we just did. These charts are a little bit different here, the categories down here. CSO, no action. This means no action will be taken. Here is our no further action. And, again, our Alternative 3 here would be zero. Here is your category, East River, atmospheric deposition and here is our storm water and treated discharges and here is our load. This is in kilograms over a year. If we look at the data, generally, of course no action would be lower. We expect to have lower loads, but this action is fairly similar to these others, East River, atmospheric deposition, MS4s and treated discharges are a little bit higher than the others. If you look at PCBs, kind of interesting here, East River is the highest for PCBs. And if you think about that, it's not really a surprise, you think about the volume of that East River coming into Newtown Creek, it's quite a bit. So you are going to get a bit of mass from the East River.

And as far as treated discharges, again it's

higher than the CSO, no further action. And again, even a bit higher than no action. Next one is copper, very similar trend for copper. The East River has the highest concentrations of copper. And, again, MS4s and treated discharges are higher than the CSO, no further action. Next one is lead. You're going to see the same trend for lead, East River is the highest and MS4s, again, is a bit higher than the CSOs, no further action, treated discharges is a little lower. And finally dioxins and furans, and this is very interesting, the highest is atmospheric deposition. And because there is really none that were measured in these others, very low dioxins and furans coming out of here. And again, we're not talking about a large mass. This is in milligrams over a year, so it's not a lot, but it is also higher than the others.

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TERESA TORO: Mark, Teresa Toro, Greenpoint resident. And how many people here already feel up-to-date on Newtown Creek contaminants 101, show of hands. Thank you.

We're pretty up-to-date. There are members of Newtown Creek Alliance here, members of the community advisory group here, people here are very, very familiar with the environmental contaminants with Newtown Creek. We are here to make public comments on Newtown Creek and

1 EPA's plan for it and would like to get to that part. 2 When are you exactly going to get to that Mark. MARK SCHMIDT: That's coming up. 3 TERESA TORO: When? 4 MARK SCHMIDT: A few more slides. 5 6 TERESA TORO: How many more slides exactly? 7 MARK SCHMIDT: Ten more slides. TERESA TORO: Ten more slides? 8 9 What do they cover? 10 MARK SCHMIDT: We have one more line of 11 evidence. 12 TERESA TORO: Does everyone want to get to what 13 you came here to do or do you want to see ten more 14 slides? 15 Does anybody want to speak out? 16 NATALIE LONEY: Before you continue. Part of 17 the process is to make sure that those people who are not members of the CAG, those people who are not 18 familiar with the --19 20 TERESA TORO: I'm not a member of the CAG or 21 Alliance, I'm a resident. 22 NATALIE LONEY: One second. We have a document 23 that we are required to make sure that everyone is on 24 the same page as us. We hear what you are saying and 25 there will be an opportunity, just let him finish this

presentation and we'll open up the floor for questions and answers and then we'll give ample opportunity for everyone to weigh in.

TERESA TORO: When? Why?

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NATALIE LONEY: As soon as he is finished with his presentation, we have a document that we are required to present on. As soon as we're finished with it everyone would have an opportunity to comment; but we do need to make sure that all of the information that is in this document is shared with this community, not only verbally, but we need to have it on the record so that no one can say that information was not disseminated.

I understand that you are well versed on this project and you know a lot about it, however, there maybe people who are not as familiar with it and we do need to make sure that everyone is on the same page, not only those who are familiar with it. So, as soon as is he finished, it's not going to take but a couple of minutes longer and then we'll open up the floor for Q and A.

SARAH LILLEY: Would this be online.

NATALIE LONEY: It will be available online if not tomorrow by Friday. So, if you can bear with us for a couple of minutes more --

TERESA TORO: We're beared with you for many

years.

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NATALIE LONEY: I understand all of that, but I want to make sure that everyone gets the same information. I know that you're more familiar with it, but not everyone maybe in the same level of understanding that you are.

SARAH LILLEY: You also representing box graphs (inaudible) --

NATALIE LONEY: We have a stenographer here, so the back and forth has to go a little bit slower. If you just allow us to complete the presentation. I recognize that everyone may not be very familiar with the box graphs and all of that. It is kind of dense technical information and so that is what the Q and A will allow us to do. So if you can just bear with us a couple moments more so we can finish the presentation, everyone would have the same information and we'll open up the floor for Q and A.

TERESA TORO: The record should reflect that many people in the community feel extremely frustrated. There is a pattern that the EPA has with drowning us with very extensive long presentations. We get information that we've had at meeting after meeting after meeting. I have to note, there is a difference between a public meeting and update and a public

hearing. This is not information that needs to be read into a record. This is information that can be, you know, disseminated online, people can read it as they feel comfortable as their interest allows.

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NATALIE LONEY: I'm sorry. I need to interrupt. We really need to go forward with it.

TERESA TORO: Can we get this done so we can get to the comment period.

NATALIE LONEY: Most definitely. The comment period is continuing, but I have to just clarify something. We have to and we are required to share this information in this public way. We cannot just disseminate the information online. It has to go on the public record and it has to be an open presentation of this material. It's not something that we can post online and accept comments this way. This is the process that EPA adheres to at all of our Superfund sites. And every time there is a proposed plan, there is a meeting and there is a clear thorough representation of all of the information, then there is an open discussion. And the comment period for this site has been extended. It is no longer a 30-day comment period, it's a 60-day comment period. So you have an opportunity to weigh in tonight --

SARAH LILLEY: You should update your handout to

say that.

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NATALIE LONEY: That information was shared at the beginning of the meeting. In addition, we posted the extension of the comment period in all of the local papers, including the Spanish, Polish and Mandarin newspapers, as well as the local newspapers.

SARAH LILLEY: We don't have that at the meeting --

NATALIE LONEY: I understand that. We also announced it at the beginning of this session and will continue to announce it at the end as well.

WILLIS ELKINS: The presentation is almost over, we were here Monday. They're almost done. And I agree it's very important that they have some baseline understanding of the issue, because it's complicated. And our opinions should be informed by this so that we can questions and then they have to go and give a whole presentation. So, whatever problems that we have, there was plenty of time on Monday to go through everything and voice lots of concern. So I just want to get through this.

NATALIE LONEY: Thank you.

MARK SCHMIDT: So from our lines of evidence two, the loading from CSOs are similar to those that were compared to across the charts. Again,

Alternative 2 is smaller loading than one. Loading for TPAH treated discharges and East River was the largest for copper, lead and PCBs and dioxins/furans. And the next loading from atmospheric deposition. So the next line of evidence three, and in this line of evidence we are going to do some modeling. So modeling have been developed for the site, as well as for the long-term control plan. And these modeling include a point source model of water coming into the creek, ground water seepage, hydrodynamic, to inform how the water moves around the creek, and sediment model and then chemical model. And then the chemical model specifically for OU2s. The chemical model is not part of the long-term control plan and is a different model than what is used in OU1, but a tool that we are going to use to help us look at some of these assessments.

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So, using these models, again we can assume that we are going to clean the sediment bed, it's going to be completely clean. And then we can run these simulations over a 20-year timeframe to see what happens as mass is coming into the system.

I just want to make a few more points. Here is our inputs, we're looking at PAH, PCBs and copper, and what we're going to do is look at an average concentration both on a site wide basis as if you're

going to collect sediment samples, samples of the 1 2 sediment in the creek bed as well as each of the tributaries. 3 4 So, the next slide shows what these results look 5 like. So, the no action assumes zero percent reduction 6 of CSOs. And no further action is 61 percent. 7 100 percent control is 100 percent. And on this axis 8 are all concentrations. So no action for pH is about 9 12, no further action maybe 11 or so, and this is just 10 about a ten. And so what we can see is that even with 11 greater CSO controls, the concentrations in the bed are 12 fairly minimal, the amount that is reduced fairly 1.3 minimal. If you look at PCBs, very similar, it's kind 14 of a flat, kind of a flat line as we look across here. 15 And for copper, it decreases some, but not significant. 16 So, if you think --17 SARAH LILLEY: Can you read what's on the Y 18 axis? We can't read it from here on the Y axis. 19 20 MARK SCHMIDT: You want us to read those out? 21 SARAH LILLEY: Yeah, I can't tell what --22 MARK SCHMIDT: This is zero and 14. 23 SARAH LILLEY: I can see the number, but not on the side. 24 25 MARK SCHMIDT: Total PAH 17, total of TPAH in

milligrams per kilograms. So, if you look at total CSO control between 70 and 90, you're not seeing a lot of difference in this area. So, again, in each of those contaminants, it's just a minimal change as you do more CSO control. Here is copper and this is PCBs.

Next slide, we can look at each of the tributaries and creek separately, very similar trends. As trends we see here is TPAH, PCBs and copper, very similar trends as we see in each of those tributaries. So next line what we see, as you turn on these inputs, you're going to get contamination in the creek, you're going to get something in the creek bed. However, even, as you know, if you control 100 percent of the CSO, you have other inputs that are coming in. So they're going to contribute contamination to the creek bed. And even by looking at different alternatives between 61 and 100, it's just not going to be significant. The difference is going to be pretty minimal.

So, here is our data, how do we evaluate.

EPA we have a criteria, we have nine evaluation

criteria. We have threshold criteria, there is two of

those. Balancing criteria, we have five of those and

modifying criteria, including community acceptance and

State acceptance. These are evaluated after the public

comment period. So what we can do is take all of these

alternatives and we can take these criteria and put it in a matrix and then evaluate it. So the overall picture of human health in the environment, all three of these evaluations are roughly the same level of protectiveness. Alternative 1 and 2 they don't have relative requirements because there is no action. Alternative 3 comply with all requirements. I'll just pick out a few of these. In the long-term, Alternative 3 is most effective in terms of long-term effectiveness. And however you're going to have short-term impacts. The long-term control plan would need to be quite a few changes in terms of land acquisition and design at that project. And to implement long-term it's very difficult, because it would require quite a bit of infrastructure, relocation, land acquisition as well. Cost estimate, let me explain this to make sure this is clear. We have no Superfund related cost. The long-term control plan is going to be over 1.2 billion dollars, but for Superfund that's not a cost that we will incur. For the 100 percent control plan would be at least 1.65 billion over 22 years. looking at all of these, we can come up with an alternative that is preferred. And Alternative 2 is

preferred. And this assumes that the long-term control

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plan would be implemented by the City. And what we're talking about here is volume control. And we see that the volume has not really changed much, but maybe other ways through the OU1 process we can look at it there are other ways to do that, maybe sediment traps and in-creek maintenance. There are other ways that we can capture the contaminants and treat that. So the monitoring is going to be sampling of this CSO discharges. And that would happen as soon as we start the monitoring right away. And we want to assure that this monitoring making sure that the assumptions that we made are correct. So, the monitoring itself will be about 10 million dollars, but we don't include that as part of our remedy that would be paid for outside of EPA.

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The next slide, and this is the last slide.

So, again, just summary, Alternative 2, is more effective in short term. Easily implemented. And again any greater CSO control is really not going to improve the concentrations of potential contaminants concern in the sediment bed.

And finally, I just want to say again, I just want to repeat this, as part of the Operable Unit 1 decision process, we may determine that additional non-volume related control items need to be done and I mention those in previous slides. Those are items that

we, as part of the OU1 process that we are going through, we can evaluate it at that time. That's it of the last slide.

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The next steps, we are going to review any public comments and we will issue a record of decision. The comment period is extended until January 27th.

Again, you can send comments to me or give me a call. Here is our website and with that we will answer any questions.

NATALIE LONEY: We are going to open up the floor for question and answer. We will ask that prior to asking your questions you just State your name for the record and ask your question relatively slowly.

Ouestions.

MARIE LAURENT: My name is Marie Laurent (phonetic). I have a really quick question. I think that the slide is in the 30s and there is a graph that was comparing the CSOs, the things coming out of PCBs and then things coming out, one was storm water, is that storm water measures coming out the PCBs or running off the street, the CSOs?

MARK SCHMIDT: For the CSOs, those are the concentrations charts coming out of the CSOs.

MARIE LAURENT: The graph is storm water, not so much the storm water coming out the CSO?

1 MARK SCHMIDT: The CSOs are flows. The flows 2 that's coming out of the CSO is, we sample that CSO. The storm water is a different pipe. 3 MARIE LAURENT: Where is that measured from? 4 5 MARK SCHMIDT: For example, throughout the creek 6 there a number of storm water pipes that come into the 7 creek, distinctly from the CSO. 8 MARIE LAURENT: That's coming off the street? 9 MARK SCHMIDT: Yes, you can do the same thing, 10 grab a sample of that. 11 MARIE LAURENT: That's what I was wondering 12 about. 13 MARK SCHMIDT: I think that's on the previous 14 slides. 15 For example, like these. These are samples that 16 are collected from CSOs, those are different points. 17 MARIE LAURENT: I see. Thank you. 18 NATALIE LONEY: Another question? 19 WILLIS ELKINS: I just want to followup on 20 Marie's question. 21 That storm water here, it sounds like storm 22 water CSO for storm water, also referring to runoff 23 directly, direct runoff from private property sites? 24 MARK SCHMIDT: So we previewed a little 25 definition. MS4, private properties, highway drains

other storm water outlets. So, yes, wherever that you see like water would be coming into the creek from a pipe or some flow kind of a channel flow, we would collect a sample from that.

NATALIE LONEY: Additional questions?

ANDRE TULET: On Page 42 I don't understand why there is no improvement between the 100 percent and the 61.

MARK SCHMIDT: And what happens is, so we have a volume of CSOs that are coming in. So, again, as those previous slides show, CSO is not the only thing coming into the Newtown Creek, there is other storm water and other outlets that come into the creek. If you cutoff the CSOs, that will reduce that, you know, mass coming into the creek; but there are still these other inputs.

ANDRE TULET: So my next question is:

In addition to CSO measured, would that increase the -- decrease the difference between the 100 percent remedial and the 61 remedial?

Can you get to them and clean them up?

STEPHANIE VAUGHN: That's a great question.

I mentioned earlier that we did not set cleanup goals for this action. We're making a very discrete determination. So, as part of the overall site

Operative Unit 1 decision process, we will set cleanup

goals and we will determine if additional measures are needed, not just for CSOs, but for any of these other potential inputs of contamination to the creek; including the ones evaluated in this Operable Unit 2 effort, as well as other sources, such as in creek source of sediment of contamination, removal of sediment, for example. So all of those determinations will be made as part of the larger site decision document.

ED KESICKI: The bottom line is even if the CSO is reduced to nothing you would still get some contamination water on the East River. So the EPA might as well not do anything with the CSO, because there is are contaminants coming in. My question is:

As part of the sample from the CSO or storm water during the rain storm, how is it can be effected by the beginning of storm you would get much more stuff from the sewers less than the storm water and the storm water itself would be more contaminated, and if you wait ten minutes, 15 minutes that would be all the way out?

That's one thing is:

How do you account for timing between rainfall?

So, yesterday the storm water, it rains for 15,

20 days, then you're going to get it that way and it

would flush a lot of the stuff in. So a wide variety,

how do you address that in your sampling?

STEPHANIE VAUGHN: You asked a few things. Can
I just make a comment on your first point.

Again, we're not saying that nothing needs to be done for CSO, we're saying that the volume control prescribed, the long term control plan appears to be sufficient to meet our Superfund needs.

Additional, it maybe determined that additional action is needed, such as solids and/or oil capture.

Your question regarding timing is an excellent one.

Do you want to talk about this?

MARK SCHMIDT: Sure.

These are real good questions, because we have to think about that. I mean when is it going to rain; you don't know. So we had that whole crew of people ready, you know, a lot of people were out there 2:00 in the morning, because they had to come out when we were expecting the rain to occur. So then it's not absolutely perfect, we don't sample every single rain storm, but those are some of the thing that we did. We had to say that we are going to look at those variables and see how we can get the worse case scenario. So, yeah, those are the things that we're considering in our analysis.

STEPHANIE VAUGHN: And in addition, you don't

necessarily want to look at the first flush of water that comes through the CSO, because that might not be the highest concentrations. So, we had to wait for the storm, wait for the first flows to come through the CSOs, sort of like if you run your water for the first time in the house or something you wait for things are building up and you don't want to wait too long, you have to wait for the right moment.

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One of the good things about this action is, the City is going to be required to sample the CSOs quarterly starting from when a record of decision is signed, at least until the long-term control plan is implemented. So we will gather a lot of data through that effort.

And in addition, if we find that, let's say concentrations in the CSOs start, concentrations of the Superfund contamination, like the PAHs and PCBs start increasing unexpectedly during those sampling efforts, then the City would be required to do some kind of track back system program to try to find the source of that increasing contamination. So, it will be very useful data to have and will give us at the information.

And finally on that, once we sign -- we're not trying to say that once the long-term control plan is implemented, then we'll never sample again. Once we

sign the record of decision for the entire Operative
Unit 1, that would include monitoring the maintenance
activities that supercede anything we have to do through
this Operable Unit 2 actions.

NATALIE LONEY: Was there another question over here?

KEVIN LACHERRA: Something that you said that stuck, you're looking at variables and trying to find the worse case scenarios, but it doesn't seem that this is actually planning for the worse case scenario.

This is third time that, I guess, I would ask this question at one of these meetings; but the modeling to the rainfall is a 2008 model, right?

MARK SCHMIDT: Correct.

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KEVIN LACHERRA: And this project would be done it 2042. So, I mean, it's not the worse case scenario. According to the University State data, it's 15 percent higher by the 2040s. All of this seems to hinge on the 61 percent number saying that you evaluated this gap from 61 percent and 100 percent and you determined that that gap was not sufficient to lock us in to this infrastructure. You're locking us into this infrastructure for the next 20, 30 years. And after that, because the problem is not fixed, it's not good enough in 2042. Well, the water is here, you know, and

it's in our community. I have a lot of concerns about this. And I really feel like I haven't gotten the answer to the question; which is what's the real number?

Not the 2008 number, not the 2019 number, what is the number in 2042 of what this plan actually captures in terms of CSOs; because I don't think that's 61 percent?

It doesn't seem like it's actually 61 percent and you know, I want to know if that's been modeled and I think that this community deserves an answer on that.

STEPHANIE VAUGHN: We understand the concern.

I'll say the answer to that is not going to make anybody happy. We are looking at this from Superfund's perspective. The long-term control plan was reviewed and approved by the State, so there will be, I imagine, an ongoing review process for the long-term control plan, which was approved as per the Clean Water Act. We were looking, us up here tonight, are looking at it through the Superfund lens, and from that perspective our analysis shows that increasing the volume control from the CSOs would not have a significant difference on the Superfund remedy. So, we're not speaking about the bacterial and oxygen and all of those impacts from the control plan. And that's really all that I think that we can say on that.

KEVIN LACHERRA: I really don't think that's a sufficient answer for us. That's what I'm frustrated with. To say that we evaluated one thing, one slice, one part of this problem and then it's on the other people to find out what comes after. You all would be long gone by the time that this is done, most of you would have retired and moved on and the rest of the community would be here and we'll deal with the outcomes of that, just like we have been dealing with outcomes of that for 150 years. So to say that the cost involved is two million dollars or 1.65 million dollars, and you know, I say to myself that that value is extracted from this community for 150 years, that that value has been extracted from the City. They conduct their sewage waterways and it's been extracted by the companies who have made their money here and left. And we're looking into infrastructure for the duration of that. And I don't think that's sufficient. And I would like to see if there is modeling that shows what the actual number I think that we deserve to see it.

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STEPHANIE VAUGHN: So, the long-term control plan is available online and that includes the modeling that was conducted. Not what we did, but the modeling that supports the actual sizing and design of the long-term control.

1 KEVIN LACHERRA: Based upon the 2008 rainfall?
2 STEPHANIE VAUGHN: It's more complicated than

that.

KEVIN LACHERRA: Is it based on rainfall totals of what this actually would be handling at the time that this is done?

STEPHANIE VAUGHN: Any questions regarding that should be directed to the State or the City.

SARAH LILLEY: That's not good enough.

KEVIN LACHERRA: That's unbelievable.

LAURA HOFFMAN: For a long time I've lived in Greenpoint all of my life. And today I and my husband brought my 29-year old daughter to the hospital for chest pains and had to rush you know, again to get here. Thankfully it wasn't heart attack, but it was just from her typical lupus symptoms that she suffers. I've had a diagnosis of lupus as well. And in October I had major surgery to remove part of my kidney for kidney cancer. And two of my grandchildren were lost to birth defects and two of my siblings had -- I can go down the list of numbers of my family. But what I'm trying to say is that, we've been dealing with a lot of crap over a long period. Listening to all of this, when you hear that you guys are considering no action on anything, it makes my blood boil; because for me I really don't give a

rat's ass about what the cost is, because the cost of my family has been frequently a bit. And we've had so much heartache, right. And it cost, it costs the Government money every time that one of us gets sick in one way or another. Eventually people can't work or afford hospital care. And is it just circling back to the Government anyway. I just want to put it out there that each and every person that comes and presents to us, that means you individually have a responsibility to the agency and the work that you do, just like when I go to work and I see something that is wrong. something that is within you that is supposed to speak out about what is wrong with the work, and this is one of those cases. The New York State Department Of Health, New York State Department of Environment Conservation, EPA have been sort of disappointments for many, many years.

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And finally, talking about all the stuff that people are talking about today and governing personal responsibility, it's about time that you take some.

You're looking into faces of a lot of people that have been sick. I see Doreen here, her family members have suffered. Kevin's, the family members have suffered.

There is a bunch of people in this room who have experienced cancers, Lupus and all kinds of stuff.

And part of the picture is from the creek. Enough is enough. You really have to do, you know, provide us with a plan and information that is going to address the issue. People are getting sick.

The question I'm going to pose is, why are you guys leaving us high and dry?

STEPHANIE VAUGHN: We hear your concerns, we've heard your concerns. This is just one small piece. We are continuing to do work and we will get there, get there to the larger decision. It's just taking time.

LAURA HOFFMAN: I hope it's before I lose another grandchild or one of my kids or myself that you actually step up to the plate.

KEVIN LACHERRA: And don't pass the buck to the City.

TERESA TORO: It's a Superfund site, it's not a City issue anymore.

DOREEN SUDANO: Hi, my name is Doreen Sudano.

I was born and raised in Greenpoint all my life.

My question is, why is this taking so long?

As a child of the 70s, I remember lining up to get blood tested at Terra Sheet Park (phonetic).

And this has been known in this neighborhood all of my

life. And I don't understand why it takes so long,

especially with a lot of condos being built, which brings in more and more people more and more waste.

Has your studies taken in the fact that all of these condos that are being built with more people, with more waste?

Has any of these surveys or anything, have you taken that into consideration?

STEPHANIE VAUGHN: That's all part of the larger study of the full site. Yes, what we call the reasonable anticipated land use is part of our consideration. So, yes. The short answer is yes.

DOREEN SUDANO: I don't understand why it's taking so long. My mother was diagnosed with a disease and she was asked whether she smoked or worked in any chemical factory. And my she was very conscious and didn't smoke all of her life. And my father got sick as well. This has been in the neighborhood a long time, and I don't hear how long it's going take. If you really care about the neighborhood, you have to move faster on fixing the waterways.

STEPHANIE VAUGHN: We do too.

DOREEN SUDANO: Apparently, you don't. And it won't take forever to get it cleaned.

EMILY GALLAGHER: Hi, Emily Gallagher.

Can you explain a little more of when Heather

was complaining no further action of 60 percent.

And you said that was already decided by the State.

Can you explain what that process was and if we're not satisfied with that what we can do to change that, since you feel it's the opportunity for the public to weigh in?

Is there still an opportunity to weigh in at a State level?

STEPHANIE VAUGHN: That's a good question.

I know that the whole long-term control plan go through a public review process like this one. And I think that there was a two-year period, there were multiple hearings. And I know that a lot of concerns were voiced then. And the plan has since been approved. So, that's why I said reach out to the State, because it was not something that we EPA approved. So we can't, through our office, disapprove that plan. So we can give you contact information for the appropriate people at the City and State to speak with. It's just something that is out of our jurisdiction.

NATALIE LONEY: Any additional questions.

MICHAEL HOFFMAN: My name is Mike Hoffman.

I'm trying to figure this out. I thought it was a comment period, and I notice a question-and-answer session you already have up there; but you're going to

take comments, but you're not doing it, but the State is going to decide anyhow, how to do it. So in any mind, no matter what we say, if it's not a question how can you make a comment. The State already decided what they're going to do.

STEPHANIE VAUGHN: So we're taking questions and comments tonight, mainly questions and comments.

You can continue to submit comments during the comment period, so, until January 27th of 2020.

LAURA HOFFMAN: That's actually not true;
because you said multiple times at the beginning of this
meeting that you asked specifically for any questions.

I mean, I'm part of the -- I've been out of the loop
because of the surgery and everything, but, I was even
confused about the intent of this meeting.

So, who is taking -- is somebody taking notes?

NATALIE LONEY: This is part of the process for the proposed plan. This is a formal public meeting, so there is a Court Reporter here. So she's recording everything that is being said, any questions that are raised or comments that are made tonight and they would be part of the official record. And what EPA does with those questions and comments, we respond to them in a written document called Responsiveness Summary. So you can ask your questions or make your comments on the

record tonight or you can, in addition, submit as many written questions or comments to our agency up to the 27th of January 2020. So there is a formal record of everything that is going on this evening.

MICHAEL HOFFMAN: When you say "formal," if someone makes a comment -- how if someone makes a comment, if there is no formal question?

NATALIE LONEY: I asked, in addition to the comments that she made, if she also had a question for the moderator.

DEBORAH SPIROFF: Deborah Spiroff present of Greenpoint. Since there is a comment and question period, if someone makes a formal comment and question, is there the ability, once it's been reviewed, to actually change the plan that is being presented and what is that process?

We come in here and we made a statement, for example, 61 percent, is there a review process or is this just an opportunity for us to vent and it to be a good public vent.

STEPHANIE VAUGHN: Absolutely, there is an opportunity for change to occur. That's why we go through this. So, if information comes to light during this process that causes us to reconsider our preferred alternative for this portion of the site, then we would

do so, we would document that. If it was a minor change, we might still go forward with the record of decision and document the change. If it was a significant change, we might start the whole process all over again.

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DEBORAH SPIROFF: I think that a lot of frustration has been that it appears as though a conclusion has been presented. And yes, we're being given the opportunity to comment, but it's feeling like, well, they already made this decision. And we're here and yeah, we are going to listen to you; but it's already set in stone and there is, as it's been mentioned, decades long history where family members have gotten sick and died. And this has historically always been a residential community. It wasn't so the Superfund didn't know that people were living here. My building was built in 1998 and so, that's where the long-term frustration comes in. Residents here have been hearing pass the buck for decades and they're tired.

STEPHANIE VAUGHN: Again, we really do understand that. And let me just State this one other way. We were looking at whether the sixty or so percent control that the long-term control plan would lead to or whether 80 percent control or 90 percent control of volume would make a difference in the Superfund

perspective. So that is what we are relaying to all of you today. We're not making statements regarding anything else. We're not at a moment in our Superfund process yet where we can make a statement regarding the risk proposed by the site and what action is need to be taken to address those risks.

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DEBORAH SPIROFF: Do you know when that would be. I think that a lot of us are very anxious to hear when that would be.

STEPHANIE VAUGHN: That was said at the beginning of the presentation. Just so you know, it's out there public ready in sometime after 2023. There is still a number of years.

DEBORAH SPIROFF: Thank you.

SARAH LILLEY: This is just a comment.

My name is Sarah Lilley. I lived in this community for almost a quarter of a century and I think the frustration that I feel is that, in a sense, it's sort of set by a thousand cuts, everything is decided up. And I'll try to make this brief, because I know that this is more an expression of frustration and I don't know what you're going to say to this; but it's just a matter of, we have these different agencies, we have graphs, we have charts, we have Superfund, we have CSOs and a huge document dump that we all just sat

through. Who understood exactly what in this room. We can take a test and figure it out; but honestly, I understand that you guys have to do that, that's your process that someone else decided. What we need is for people to talk it us and explain really what all of this actually means; because actually, right now we're sitting here basically having like all of this information dumped on us. And I agree with Deborah, it feels as if decision has been made on our behalf. And I also would like to reiterate again that this has been decades. It's just absurd that we have to keep coming out to these meeting and seeing a PowerPoint presentation of things that we can't read from this distance and that most people aren't qualified to understand. Give us a presentation that we can wrap our brains around, most people here, so that people actually have the tools to understand what decisions are being made about the environment which is around all of our homes and workplace and that's affected so many people whose families been here for so long. It feels like more of accommodation. And I understand that you don't mean it that way, but from your perspective we cannot see that from here. So I know that that is more of a comment and I don't know whether it's helpful or not, but these are really people lives that ultimately hang

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in the balance here. For all of these individual little meetings and all these separations between departments and agencies and everything, all of us are getting lost in the cracks between these things. It's really heartbreaking.

STEPHANIE VAUGHN: I don't know what to say to that.

SARAH LILLEY: They have nothing to say to that. What can you say to that, but the fact that you can't say anything to that. You leave us all with the same meeting year after year and decade after decade.

ANDRE TULET: I just want to go back to the EPA, Environmental Protection Agency. You're using a document that dates back to 2008, and it's seven years later. And your showing tests that you've been used.

Is there a reason that you're giving documents that are outdated?

You already used this document. I wouldn't use a tax guide from 1999 to an address 2019 issue.

So, I think as experts, maybe you would want to say, look we have to do this, but would that be affecting what we would be working with.

STEPHANIE VAUGHN: The data that we use for our analysis was collected between 2012 and 2019. It is recent data.

ANDRE TULET: I mean, the tests could have it occurred to us in retrospect --

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STEPHANIE VAUGHN: I'm sorry, I would say that that we could have gone with this evaluation, this presentation without even mentioning the long-term control plan. So if that helps, what we did is we looked at the volume of discharges from the CSOs and said, would they, just the volume, would they negatively -- is there something that we should do to reduce that volume that would, on its own, improve the quality of the creek from a Superfund perspective. So, we decided to use the volume controls prescribed by the long-term control plan as sort of a baseline. You know what, if we do 61 percent and what if we increase that to 100. And we could have just as easy said, what if we look at 25 percent volume production, then 50 percent and 75 percent and 100 percent. And then 2008 data wouldn't even be part of this conversation, it would just purely be sort of a academic exercise of what -- based on the measured concentration that we collected during our Superfund process. What impact do those volume controls have on the creek. So, maybe that's a more satisfying way to look at it. But our conclusion, if we would have done it that way, would have been the same. That going from 50 to 75 to

100 percent control of the volume of CSOs given their relative input to the creek would not make much difference in the result in concentrations that we found from in the creek. That was a mouth full. But maybe we should have done it that way.

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WILLIS ELKINS: I just want to rebut that point.

Can you go back to Line 2, one of graphs PCBs. So what

you just said is that, basically it makes no difference

how much CSOs you remove --

STEPHANIE VAUGHN: No that's not true.

WILLIS ELKINS: But these graphs clearly show that from zero to 61 to 100 percent, which isn't even shown on here, because it's not zero line, is a difference. And you can argue about whether it's considerable or not, but, I feel like we mentioned this in many meetings. And to echo a lot of the points people, like Laura and Kevin made about the goal on the community side is to eliminate pollution sources to the creek. And primarily, a lot of these pollution sources have been there for 150 years. CSO is the most active pollution. As you see here, why are we not aiming, why do we not have a vision of getting that blue line completely reduced. In other sources, by comparing other sources is not a valid constraint by saying this

person only killed one person, so you know, is he in prison with people who killed 20, so he is actually not that bad of a person. You want to address all of the pollution sources in all of these. We do want to address. MS4s are going to reduced pollution, that's what we want the State to have leadership on. And the reason that it is higher, because you guys have failed us in the past.

So, the conclusion is to take those blue bars all the way to zero. And I'm frustrated that you're using a complicated analysis to show that the difference is minimal. And in the other presentations here, it does show up and we know it.

The question that I have specifically is about the only real option that you presented during this plan is to say that you're going to consider doing, I would just say in conclusion, the track back program and maintenance. And part of other frustration, that we dealt with a DEP and DEC is that is primary what we have for many years an aeration system, which are complete bandages to treat CSO. It's not about oxygen, it's not about bacteria, it's about nitrogen and phosphates, so on and so forth.

So, the question is, I guess simply, why are you pursuing these same conclusions and how exactly would a

track back solution work and why is it not being pursued now?

And further on that, the CSOs for Newtown Creek is how many acres?

STEPHANIE VAUGHN: It's large it's huge.

WILLIS ELKINS: Over 4,000?

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STEPHANIE VAUGHN: It's like 6,000.

WILLIS ELKINS: So let's say 4,000, 6,000 acres draining to the pipes here. How is it feasible to say you can go and say there is a large level of PCB, only the one pipe can drain thousands of acres. And that is someone flushing something down the toilet, down the street, someone's backyard. And it seems so difficult, and I say it from my own experience of working with DEP, DEC. DEC has it' own term that they refer to as sewer sheen. And it's a given that there is a sheen of chemical contamination that is coming out of the sewer piping. So I think that you are going to be able to track back sources of oil that we see and it goes down to anywhere on Newtown Creek after a rainstorm, you're going to see a grey sheen of contaminants and it's going to have those chemicals in there, and I'm not talking about bacteria.

How can we even expect -- and that's a minimal conclusion, the real problem is the sewage coming in the

first place and even reduce it?

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How even that substandard approach be expected to work is my question?

STEPHANIE VAUGHN: So that I would say a couple of things on. First, that would be a solution at least until the Operative Unit 1 is assigned. So that would determine whether additional actions are needed.

Second, at least by collecting this data and having that in a decision document, it would give EPA the authority, I think to -- it would give us greater ability to compel action and to maybe conduct a more thorough track back.

WILLIS ELKINS: How does the track back work when you have one pipe that is draining 800 acres?

STEPHANIE VAUGHN: It's complicated.

It's outside of my area of expertise. This is something, though, that we can try to figure out. There could be tighter permit restrictions, tighter regulations. And there are all kinds of other -- there are a lot of mechanisms that are possible once we have the data to show that it's necessary. Right now, we don't even have this kind of data. So, the good thing is more data gives us more ability to say something needs to be done.

WILLIS ELKINS: So you mentioned, OU1 have the

potential to override the solution from OU2?

A. STEPHANIE VAUGHN: It will. We're only making a decision here regarding the volume. The OU1 will override OU2. That is it going to be the all-encompassing decision for the site.

WILLIS ELKINS: But not with regards to the volume.

STEPHANIE VAUGHN: If the OU1 study determines that additional volume control is needed, then it could. But this analysis gives us a high level of comfort that that is not the solution. There might be other pieces of the solution that are needed. But if it's wrong, it's wrong. And if that's what we find, that's what we find.

MIKE DULONG: I'm Mike Dulong, staff attorney from NY. EPA lead the action on sewage cleanup for the Gowanus Canal Superfund site, and that's not happening here. And I don't think that its been explained clearly why. Yes, it's a different site, but it's the same Superfund laws that allows contaminants. Why doesn't the EPA make it harder on the City? What is the difference between the City and all the other PRPs? It seems like you're going soft on the City here. The only reason to take this action, to go through with OU2s is to basically take something off the table. And I think

that you just said, and I would like to confirm that, this isn't really going to take anything off the table, because OU1 should be able to override this. And what is the point of going through with OU2. You are relying on methodologies, because you were relying on 61 percent that you claim there is going to be reduced by 61 percent. The community is right, that doesn't incorporate climate change. It's relying on some things that are never going to happen, the City is never going to accomplish. So why is it okay to just rely on that 61 percent number and say that's alright. I mean, what you're really saying that we don't care much, this is going to go in, we're not going to do anything. Then, I guess that you should be saying that. Sampling the first flush, I heard said today, the sampling at first flush a not the first best way to get the best number. I don't know anything about sampling and I've been doing this for eight years and I never heard that doing the sampling at any other time that the first flush is the way to see the contaminants. First flush takes everything off the river. And all the pollutants off the river. Isn't this the best time to sample and test. STEPHANIE VAUGHN: Can I start answering and then you can continue?

First I meant to actually say this during the

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presentation Gowanus versus Newtown Creek. They are two different sites. There are a couple key differences between the two sites. One is the timing. The long-term control plan for Newtown Creek has been approved already before we're at the point of making a decision regarding the overall site remedy. So that is a big difference. Where the Gowanus, the long-term control plan had not yet been approved. So, EPA, since we were ready in the Superfund program to make a decision regarding the clean up of the site. And given the inputs, the evaluations that they did there, the CSO needed to be addressed as part of that remedy. So that is why EPA was involved in that long-term control. I'm sorry, I should say EPA Superfund.

The other big difference between the two sites is just physically Gowanus canal is about a quarter the size of Newtown Creek, and so, the impact from CSOs on the Gowanus is much more significant than they are on the creek.

The next question was regarding the OU1 versus this decision. So when we sign records of decision, we call them final or we might call them interim.

And in any case, we constantly review those decisions over the years. We continue to collect data and review them and make sure they're still appropriate. So, if

our Operable Unit 1 remedial investigation feasibility process determines that we are actually misreading regarding anything related to the CSOs, then we can include that in our decision process. Nothing is ever absolutely final.

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MIKE DULONG: Is this a final determination or is there going to be interim determination.

STEPHANIE VAUGHN: We're calling it final.

MIKE DULONG: Which is nuts. You're not calling OU3 final and you're calling the OU3 interim.

And why is this taken off of the table?

I live there here and been here for a decade and I am a rate payer. And I'm the one who would be stuck with the bill with just a little security from DEP.

So you all have wiggling room to implement a harder CSO. We go a long way, we go with this community, so I don't understand why you're taking this action now. If we could just put this off until later.

STEPHANIE VAUGHN: We'll address that in the comments.

MIKE DULONG: The one other question that I had is, the impact the CSO discharges, looking at making less mass to the creek or tributaries, how are you addressing what affect? Are there going to be on the

sediment made by the CSOs where there might be more contamination.

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STEPHANIE VAUGHN: That's something that I think was part of the modeling effort. And I don't know if Rooni wants to, but he can maybe talk to you also about the first flush. Maybe Rooni or Mark could talk about that in more detail than I can, if you like.

MARK SCHMIDT: I think that with the first flush concept, one of the things that Willis just brought up, you're talking about large watershed. When it rains, when you get that first flush, it's not necessarily from the whole watershed. It takes time to get that water down through those pipes. Often the first flush you might get something localized, but you may not see something from the entire watershed. So, I think that is the thinking. The first flush, like I said, you would get the most of it, but if there is other, you know, the way the water shows up in the piping it, comes from further in the watershed.

Does that make sense Rooni?

ROONI MATHEW: Yes.

Rooni Mathew with CDM Smith for EPA.

Another thing that I would like to point out is that many of these CSOs are sampled multiple times at different events. It's not just one sampled taken at

1 one point. They're sampled multiple times, multiple 2 events, multiple times within the rainfall event. So what you're seeing in some of the charts that Mark 3 presented, it addresses an average value. 5 MIKE DULONG: That makes sense. Thank you. 6 SARAH LILLEY: Sarah Lilley again. 7 I'm just following up. Did you say it's only 20 samples from the creek? 8 9 MARK SCHMIDT: From the CSOs. 10 SARAH LILLEY: That does not seem like a lot. 11 Do you have the most recent ones within over 12 what are period of time? 13 MARK SCHMIDT: We don't have the data here, but, 14 yeah, we can provide when they were collected. Just as 15 Rooni was discussing, they were sampled at different 16 times. We don't have the data here, but we can provide 17 that. 18 STEPHANIE VAUGHN: It was over a couple of 19 years. 20 SARAH LILLEY: It just doesn't seem like a lot 21 of samples. I don't know what other people think, but 22 20 is like really not very much. 23 STEPHANIE VAUGHN: So, it gives us information 24 to do our evaluations on and again we're going to 25 continue to sample those CSOs quarterly for at least the

1 next -- well at least --2 SARAH LILLEY: But you're making decisions based on that, that's what I'm saying. 3 STEPHANIE VAUGHN: That is true. And that is 4 5 what often happens. Data changes over time, and that's why we're conducting additional samples, that way if 6 7 changes are needed, they can be made. 8 SARAH LILLEY: After you already made the 9 decision. 10 STEPHANIE VAUGHN: If changes to the decision, 11 if needed, they can be made. 12 LAURA HOFFMAN: I have a question. 13 Is the comment and question period as important as the presentation? 14 15 STEPHANIE VAUGHN: So let me. 16 LAURA HOFFMAN: I'm sorry. 17 I'm asking because, from my point of view, 18 once the presentation ended, I see that all the 19 information is being taken down, there is noise and 20 these are among the things that would lead folks to 21 believe that the comment period haven't been taken 22 seriously. 23 STEPHANIE VAUGHN: Let me explain this. 24 As Natalie mentioned this earlier, some folks 25 came in a little later. These were interpreters for

Polish, Spanish and Chinese, because we wanted to make sure that everybody could understand the meeting.

We need to be out of this room by 9:00 and it can take them quite a while to break down.

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SARAH LILLEY: Why is it going on during the comments?

STEPHANIE VAUGHN: It turns out that nobody here needed translation services. They started breaking down early. We apologize for the noise. It's just, if someone were using the services, we would have dealt with and tried to stay in the building longer, but they told us that we need to be out by 9:00. That is one thing that we may not have said that along with this public comment period. So all of the information related to what we proposed today is available online. It could also be viewed in person if someone wants to see a hardcopy. So that includes not just the proposed plan and presentation, it includes not just the presentation that we gave tonight, but also the focus and feasibility report that we prepared and the proposed plan that we put out and lots of other records related to the site.

So, those can be reviewed during your leisure, those that deem, the comment period, and you can make comments at any point during that period. And we

absolutely take this process very seriously and that's why we have the Stenographer here and that's why we have the interpreters here, in case they're needed. And we would take any and all comments received.

SARAH LILLEY: I suggest next time, rather than do a huge data dump and expect people to try to understand every single page and it stays in their minds, it's actually massive information. So, next time make people understand while you're going, rather doing your big story data dump and help people catch up and understand.

NATALIE LONEY: One thing I would say,
you're absolutely right. It's quite a bit of
information and it is challenging to try to digest
everything in this relatively short period of time --

SARAH LILLEY: It's impossible. It's almost a waste of time.

NATALIE LONEY: One of things that we really try to balance is not only sharing, obviously we have to share this information, but it's also important to us for people to understand this information. And so, what we have been doing is, what we're committed to doing is continuing to engage with the community advisory group, which meets monthly. And the EPA is present at practically every one of those meetings.

And all of the information, the technical information, we share it. And so that when we get to these decision points, people have had an opportunity to weigh in on that information. So it's almost very challenging to try to do both things. And we have to share the information, we try to give it as much time as we can, and we cannot throw out this information, this is your proposed remedy or proposed plan. It can only be present. We made that analysis and this is the result of that analysis. The technical information that led to this decision, we have tried to share on a regular basis with the community through the community advisory group. And so, if there is another way that we can engage, if there is another opportunity for us to share information, we are more than willing to participate in any way, shape or form that makes it easier for the community to digest all of this.

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KEVIN LACHERRA: So, I guess maybe a couple simple questions and I'll try to break it up this way:

Does EPA believe that a climate emergency is coming to New York City, to the country, to the world, does EPA as a Federal agency believe that?

STEPHANIE VAUGHN: I am not able to speak on behalf of the entire agency. I can tell you my personal feelings; but, I can't say EPA.

KEVIN LACHERRA: So we don't know. I guess based on the established science, because, again your all scientists and engineers, and that you're representing, and I am not, will a climate emergency really (inaudible) increased rainfall, higher sea levels or stresses on our environment, is that the question from the scientists.

STEPHANIE VAUGHN: Resiliency planning is part of the process.

KEVIN LACHERRA: So if resiliency planning is part of the process, is there modeling for rainfall for New York City?

It's the largest Metropolitan City besides LA, is there remodeling for the City in the 2040s and 2050s?

STEPHANIE VAUGHN: Again, you're asking questions that are outside of the subject matter.

KEVIN LACHERRA: This is confronting that exact subject matter. This is to account for rainfall and infrastructure and things that are going to be confronting like the streets that we walk and the place that we live, and we can't even get answers on whether EPA is concerned about climate change. That's the simple question that I wrote down.

And another question is, why wouldn't infrastructure be planned for?

What could reasonably be anticipated that can handle everyone else in the City. We do that, I hope, and I don't know whether we're doing it here.

STEPHANIE VAUGHN: Can I make one other point. From the Superfund perspective, just because the rainfall quantities increase and the usage patterns of the watershed of the creek change does not necessary mean the contaminant loads of the Superfund substances can change. It could increase, it could decrease and stay the same, that's why we will evaluate this over time. We're not trying to ignore anything, we're together taking a science base --

WILLIS ELKINS: I just want to say something for community members that are here. Everyone needs CAG and the steering committee members and we are doing our best, and I really appreciate Sarah and Teresa sharing their frustrations. We're being presented with information in what seems like an approved plan. And we had a meeting last week and we had a technical consultant that came to the meeting on Monday to observe it, and we had a phone call with her yesterday, and so our plan going forward is we're going to be submitting her drafts on behalf of the CAG and we are going to ask CAG to vote on this in January. And that takes us back to everything. You've been to both these hearings and

we heard from all of you in the room. EPA and the technical consultant and partner that we're asking will be submitting those, and we want to in the meeting in January to submit that. And also want people to give feedback in the meantime. And we really do believe that just having one letter from the CAG outlining the stuff and getting into the nitty-gritty technical stuff is not as powerful as every single person in this room that care about it submitting comments on. So, we're also going to be making a draft of the comments in a way that is more clear and concise and summarizing these main issues in a way that they're going to understand. So, we do really want everyone here, all our neighbors that care about this and elected officials to really get behind this so that we can get just more further action.

BEN SOLOTAIRE: Ben Solotaire.

Just a quick note. That was just yesterday with DEP talking about Gowanus CSO overflows and they actually used that 2008 rainfall number also. And I didn't have anyone to followup with it. And it doesn't come across as anything appropriate. And I'll follow up with them to find out. So, I'll get back to that too. My other question is, can you just clarify what you're looking at for comments on. Are we trying to comment if we think your science is right or it seems like more I

agree with Willis, what's the actual question and decision that is in the paperwork so we can get into that?

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I guess all of the above. You can question our science. As Willis mentioned, they do have a technical consultant helping to review this from a technical perspective. You can comment from more of a personal layman's perspective that you would like to see something more. You can comment on our detailed evaluation of the science criteria and say that you don't think that we evaluated those appropriately. You can put whatever effort that you want in reviewing the documents. And whatever that you see is wrong or you disagree with, let us know about it.

ROY IRIZARRY: I don't understand why you're wasting so much time and money researching when you should have been 100 percent reduction. From the beginning everything started acceptable amount and 100 years later people have cancers and people have this and that. I think you're wasting a lot the resources doing this investigation trying to just -- spending 1.65 million dollars because the amount reduced so minimal. Any reduction is the best reduction. I mean, I just don't get that. 61 percent should not be the number, it

should be 100 percent.

STEPHANIE VAUGHN: Understood.

MIKE DULONG: That 1.65 billion number is from zero, it's not from what DEP is doing. And 22 number is from zero, it's to now. And what it's going to take DEP to do, we're thinking is going to do anyway, it depends on how much money getting down to it. I have one more question. How do you assess the impacts, the very local impacts the CSO discharges in Dutch Kills and where it comes into?

How would do you address the local impacts of the CSO and where they are actually discharging?

STEPHANIE VAUGHN: So, that's something that it's with the modeling. We looked at that and Rooni can talk about that; but again, as part of this, as part of the operable unit items.

ROONI MATHEW: So the chemical model that Mark talked about is not a single model of the entire creek, it's broken up into smaller regions. And I think I can give you exact spatial extent of each creek, but in the order of ten to 20 meters, it's calculated in concentrations in that spatial resolution and when we look at the results in the presentation you'll realize today we are presenting averages. So, let's say the creek average calculations itself does take into

consideration what's happening at a greater scale.

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MIKE DULONG: Is that available? Is that calculation localized calculations for those online?

ROONI MATHEW: They are available in the FS report. You could see mapping contamination evaluated chemical models.

MIKE DULONG: Is that what is in the creek though or is that what is coming out?

ROONI MATHEW: That is what is predicted coming out the CSO in the future.

SARAH LILLEY: Lastly, I'm curious to know if the future developments of the neighborhoods are being taken into consideration.

STEPHANIE VAUGHN: So that's something that we considered during the full site-wide study. We're not at that point yet. Generally we would look at the weather, the zoning, how much would remain residential versus nonresidential and we would look at the population growth. We would look at the various other factors.

SARAH LILLEY: Of course right now it's exploding. It's just continuing to explode, the amount of CSO. There is going to be at the reach of sort of human behavior of population over the backside essentially of the creek. It's clearly going to grow

1 higher and higher. I don't know if you're taking all of 2 that into consideration on a regular basis. 3 STEPHANIE VAUGHN: Like I said, we're taking it into consideration. Thank you everyone. 4 5 Before you leave, we have a last slide up. 6 The comment period has been extended from December 23rd 7 to January 27, 2020. You can submit written comments to 8 the address on the screen or you can send them via 9 e-mail to Mark Schmidt. All of the comments that were 10 made today are going to be part of the record. So if 11 you have any additional questions make them there. 12 Thank you. 13 (Whereupon, at 8:55 p.m., the above matter was 14 concluded.) 15 16 I, CASSANDRA PHIFER, a Notary Public for and within the State of 17 18 New York, do hereby certify that the 19 above is a correct transcription of 20 my stenographic notes. 21 22 23 CASSANDRA PHIFER 24 25