UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
290 BROADWAY
NEW YORK, NEW YORK 10007-1866

May 27, 2014

Daniel Greene
Senior Counsel
City of New York Law Department
100 Church Street
New York, NY 10007

Re: Gowanus Canal Superfund Site, Brooklyn, NY
Remedial Design Consent Order Negotiations

Dear Mr. Greene:

As you know, for a number of months EPA and New York City ("City") have been negotiating a consent agreement for the performance of certain Remedial Design ("RD") work for EPA's September 27, 2013 Record of Decision ("ROD") for the Gowanus Canal Superfund Site ("Site"). The City's description of the negotiations and its positions were set forth in its letter to EPA dated April 4, 2014 ("City Letter"). This letter responds to the City Letter, as well as adjustments to the City's positions since then. As described further below, EPA believes that these negotiations have reached an impasse.

Negotiation Process

The major components of the Gowanus ROD include dredging the accumulated contaminated sediments, capping the contaminated native sediments, excavation and restoration of the filled-in former 1st Street turning basin and Combined Sewer Overflow ("CSO") retention tanks to control contaminated solid discharges.

Nearly eight months ago on September 30, 2013, EPA issued a Notice for the Commencement of RD Negotiations and Demand for Past Costs ("Notice and Demand") to the various Potentially Responsible Parties ("PRPs") named therein, including the City, which had been notified of its potential liability in November 2009.

EPA believes that the City and National Grid are the two largest contributors, both by volume and duration, to the pollution in the Canal. National Grid is the successor to the owner/operator of three former manufactured gas plants ("MGPs") which actively disposed of coal tar into the Canal for over a century. In addition to its responsibility for cleanup in the Canal, National Grid

is the primary party responsible for approximately $500-600 million of state-lead cleanup work at these former MGP facilities, which remain major sources of pollution to the Canal.

The City is the owner and operator of the Canal and its appurtenant sewage infrastructure, including the Flushing Tunnel. Since the Canal's construction, the City has discharged hazardous substance-contaminated untreated sewage into the Canal. Although various infrastructure improvements have reduced these discharges, hundreds of millions of gallons of CSO discharges continue annually. By design, the City operates the Canal as a sewage solids retention basin, and utilizes the Flushing Tunnel to, among other things, re-distribute the buildup of sewage solids from the head of the Canal towards New York Harbor. The City also owns and operates, or formerly owned and operated, a range of facilities which contribute(d) releases, including an asphalt plant, incinerator, waste transfer facilities, vehicle storage and service garages, electric power stations and coal yards. The City is also the owner of two major former MGP source area parcels: Public Place, for which the City is a party with National Grid in a state cleanup order; and Thomas Greene Park.

The Notice and Demand sought $5 million in partial reimbursement of EPA's outstanding $11 million past costs for the Site and execution of a RD consent order, a draft of which was included therein, by December 13, 2013, which deadline was determined by EPA to be necessary in order to ensure that RD fieldwork could begin in spring 2014, followed by remedial action ("RA") negotiations so that dredging can start in 2017.

To facilitate settlement discussions between EPA and the PRPs, EPA convened a meeting of the PRPs on November 7, 2013. To prepare the parties for the negotiations that would occur after the ROD, EPA had convened a similar meeting of the PRPs over a year and half before, in March 2012.

Following the November 7, 2013 meeting, based on indications by the City to EPA, National Grid and the other PRPs that the City was unwilling to negotiate or work with those other parties regarding participation in the dredging, capping and disposal elements of the Canal remedy (the "Dredging RD"), EPA determined that it would be preferable to attempt separate negotiations for different portions of the RD. EPA continued negotiations with the non-federal PRPs other than the City (the "non-NYC PRPs") for the Dredging RD. The Dredging RD includes design of remedial components accounting for about $403 million of the EPA-estimated $506 million remedy cost.

EPA separately continued RD consent order negotiations with the City for the siting and design of the CSO retention tanks and the design for the cleanup and restoration of the former 1st Street turning basin (the "Tank and Turning Basin RD"). EPA believes that the City is the most appropriate party to perform these tasks, since the City owns and operates the sewage system which discharges contaminated CSO solids into the Canal and, based on available information, owns and/or owned and operated the 1st Street turning basin.

To advance the separate negotiations, on November 26, 2013, EPA advised all of the PRPs that it was modifying the objectives and timeframes for negotiation. EPA advised the parties that it would seek from the City by December 13, 2013, a partial RD order, without cost recovery,

either on consent or unilaterally if necessary, for CSO facility siting, and would extend the time for negotiating the balance of the Tank and Turning Basin RD to March 15, 2014. EPA also advised all of the parties that it was still seeking to have National Grid, by December 13, 2013, sign an RD consent order for the Dredging RD and to agree to pay EPA $5 million, and that EPA would extend the time for all other non-NYC PRPs to join National Grid in such an order until January 31, 2014.

At EPA's December 10, 2013 meeting with the City, the City indicated its strong preference to perform the CSO facility siting work on a voluntary basis without an order. EPA's position was that Superfund work on the Site must be done under an appropriate federal order. As a compromise, and to expedite the process, EPA suggested that the work be performed pursuant to the 2010 site sampling consent order between EPA and the City (Administrative Order and Settlement Agreement, Index Number CERCLA-02-2010-2011)("Consent Order"). The City agreed to begin the CSO facility siting work pursuant to the Consent Order by letter dated December 18, 2013 (the "Interim Agreement"). To provide an extra buffer in case there were delays in completing the Tank and Turning Basin RD Order negotiations, the City's Interim Agreement obligations were set to expire on April 15, 2014, one month beyond the March 15, 2014 negotiation deadline. The RD task to be performed under the Interim Agreement was for the City to retain a siting selection contractor, which task the City timely completed.

In a similar manner, following a December 12, 2013 agreement in principle with National Grid, on January 24, 2014, National Grid and EPA entered into an amendment to National Grid's 2010 site sampling order(Administrative Order and Settlement Agreement, Index Number CERCLA-02-2010-2009)("National Grid Amended Settlement Agreement"). At that time, EPA also extended the deadline for National Grid to enter into a consent order for the Dredging RD to January 31, 2014, to allow it to negotiate with the other PRPs. Pursuant to the National Grid Amended Settlement Agreement, National Grid developed and submitted for EPA approval Dredging Pre-RD and RD Work Plans, in January and February 2014, respectively, and paid EPA $1 million in partial reimbursement of EPA's outstanding past response costs. National Grid also informally agreed to future negotiations for further reimbursement of EPA's past costs.

After EPA granted a further extension for all non-NYC PRPs to February 14, 2014 and they failed to reach agreement on an RD consent order, on March 21, 2014, EPA unilaterally issued Administrative Order, Index Number CERCLA-02-2014-2001 (the Dredging RD Order"), to 31 PRPs, requiring the performance of the RD for the remedy selected in EPA's ROD other than the RD related to CSO controls and the cleanup and restoration of the former 1st Street turning basin. All of the PRPs indicated their intention to comply with the Dredging RD Order (other than the Union Oil Company Co. of California, which has asserted that it is not liable). That work is proceeding.

During the past months, EPA and the City have exchanged information and views at numerous meetings, including on October 23, 2013, December 10, 2013, January 29, 2014, February 20, 2014, March 5, 2014 and April 25, 2014, as well as letter and email exchanges on February 6, 2014, March 13, 2014, March 20, 2014 and April 4, 2014.

Although some progress was made with respect to negotiating the facility siting aspects of a consent order, EPA and the City were not close to completing a consent order for the Tank and Turning Basin RD when the March 15, 2014 deadline passed. In order to complete negotiations before the April 15, 2014 expiration of the Interim Agreement, EPA's March 20, 2014 communication to the City detailed EPA's key terms for a Tank and Turning Basin RD consent order. These included EPA's willingness to accept the City's proposed schedule for tank siting activities and submittals through June 30, 2015, as developed during these exchanges, provided that the resulting consent order addressed both the Tank and Turning Basin RD, and reimbursement of $1.75 million of EPA's costs.

In the City Letter, the City's accompanying comments on EPA's draft RD consent order, and at our April 25, 2014 meeting, the City expressed a variety of reservations, concerns and conditions regarding EPA's terms for an RD order, including a purported inability to timely commit to performing the Turning Basin RD and an unwillingness to reimburse any of EPA's costs. EPA requested that the City clarify its position as to the Turning Basin RD and EPA's costs by May 2, 2014.

The City voluntarily submitted a report compiled from available database information on potential CSO facility locations on April 30, 2014.

On May 2, 2014, the City verbally indicated to EPA for the first time that it would agree to negotiate the Turning Basin RD, having determined that it held at least some real property interest in the Basin. However, the City stated that, for a number of other reasons, they would need to negotiate a separate Turning Basin RD order, which would require a series of additional meetings. The City representatives stated their willingness to reimburse only $300,000 of the $1.75 million in Site-related costs preliminarily sought by EPA.

As of this date, EPA and the City have significant differences on not only the scope, timing and substance of the work to be included in the Tank and Turning Basin RD, but also on the terms and timing of completing the RD consent order process.

Nearly eight months have passed since EPA's Notice and Demand commenced the negotiation process. RD fieldwork and other activities need to begin shortly pursuant to federal law under EPA oversight, and the City appears to need extensive further negotiation before potentially committing to consensually perform the required work. For the reasons set forth in further detail below, EPA believes that this would result in unacceptable delays to the project.

Need for Timely Remedy Implementation

As you know, the Site was placed on the Superfund National Priorities List ("NPL") pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, on March 2, 2010. Prior to placement on the NPL, the City provided formal comment opposing the listing for a number of reasons, including the need to implement a protective remedy faster than EPA's typical timeframes:

> *Based on projections by the Army Corps to complete the FS, EIS and Construction Design documents, the City projects that under the Alternative Cleanup Plan, sediment*

remediation in the Canal could begin at least three years earlier than comparable work conducted under an average Superfund listing in New York State. The entire lifecycle of the project through remedial construction completion would take just over nine years, significantly shorter than the average New York State Superfund listing. The City believes that the critical advantage of the shorter cleanup provided by the Alternative Cleanup Plan will be sooner elimination of potential human health and environmental exposures.

For reasons set forth in the administrative record for the NPL promulgation, EPA listed the Site on the NPL. In response to the City's timing concerns, EPA committed to avoiding unnecessary cleanup delays, including by using methods suggested by the City such as building on existing data and reports. EPA has issued the ROD and commenced the RD within timeframes consistent with those envisioned by the City.

Since the Site was listed in 2010, the need to implement a protective remedy has only increased as land use along and near the Canal has transitioned from heavy industrial to light industrial, commercial, and residential uses, and recreational use of the Canal in particular has greatly expanded. The City's 2009 comments regarding the listing of the Canal estimated that the:

Gowanus rezoning would facilitate the reuse of numerous vacant and underutilized sites for a mix of uses including up to 3,211 housing units, approximately 572 of which would be permanently affordable to low-income households. Another planned project, Public Place, is a model of the City's efforts—articulated in PlaNYC—to reclaim brownfields that would generate an estimated 300 new jobs, and would include more than 500 affordable housing units.

Consistent with the City's projections, numerous properties along the Canal have been acquired for potential re-development, and some projects have been completed or are underway. In December 2013, the Whole Foods market opened at 3rd Street directly on the Canal. Property cleanup and site preparation work began in 2013 by The Lightstone Group, LLC for the construction of 700 units of residential housing. In 2013, City, state and federal elected representatives of the Gowanus area commenced a community-based re-zoning process called "Bridging Gowanus" to address area-wide development concerns. Notably, the development boom in the Gowanus area has the potential to contribute additional CSO sewage loads to the Canal.

Duration of the RD

As noted, EPA and the City have significant differences regarding the time required to perform the Tank RD, including the tank site selection process.

Through mid-March 2014, the City's discussions with EPA focused on the first step in the Tank RD process, namely selecting the tank locations, which the City estimated would take two years. Our March 5, 2014 meeting was the first time in which the City advised EPA that the Tank RD itself would take roughly 6 years, with actual construction then requiring an additional unknown number of years. The City has since indicated that entire Tank RD would take "approximately 5 years." See City Letter at 12.

The City argues that National Grid's draft schedule for the Dredging RD is longer than 3 years, also justifying the longer City timeframe. See City Letter at 6. Although the City correctly notes that EPA has not approved National Grid's Dredging RD schedule – we intend to make major changes so that dredging at the head of the Canal can commence in roughly 3 years, with pilot work even sooner – EPA's goal is to have the tanks, like other source control measures, in place in a given Canal area prior to dredging, or as close as possible, to limit recontamination to the maximum extent possible. The City's proposed lead times for siting, designing and then implementing the tanks are so extended that dredging will likely be well underway before the City would even start construction, thus increasing the likelihood of recontamination.

The City Letter indicates that the City has numerous requirements it must meet to site and design the tanks. EPA believes that the City's typical implementation timeframes for such a project can be greatly compressed under Superfund. The Site is the first NPL site within the City for which the City is a PRP. Because the federal Superfund law supercedes the City's normal legal and technical mandates, EPA's December 10, 2013 meeting with the City included a lengthy briefing of the key distinctions, including the inapplicability of various state, federal and local permit, environmental impact statement, and land use procedures. Implementation of a CERCLA cleanup is a federal action and not subject to zoning or approval or veto by various local boards and committees. Despite this legal reality, and the City's two year period of representation by experienced outside Superfund counsel, the City continues to maintain the position that various City laws such as the City Environmental Quality Review Act ("CEQR") and the Uniform Land Use Review Procedure ("ULURP") apply in whole or in part, and that these costly, time-consuming procedures are necessary to safeguard the public and fulfill the public's procedural expectations. See City Letter at 8.

Based on EPA's public outreach, there is strong public support for the timely implementation of the Superfund remedy at the Site, as well as further efforts under the Clean Water Act ("CWA"). Moreover, such Superfund public outreach efforts, which will continue, together with appropriate City coordination, will ensure that the public's input will be appropriately incorporated throughout the design and implementation phase. For similar reasons, EPA believes, in contrast to the City, that such outreach should occur throughout the siting and design process, not after the City has nearly concluded its selection process, as stated in the City Letter.

As discussed above, the Superfund law has removed these procedural impediments in favor of more expeditious cleanups. From a practical standpoint, EPA and its consultants, who, as you know, have previously participated in the siting and design of CSO tanks for the City and for other municipalities, believe that the tank siting process can be accomplished in about 3 months. Given the limited number of available vacant parcels, application of engineering judgment would screen out all but a few parcels for detailed review. In order to save money, EPA believes that the search should be further focused on City-owned property. The Tank RD can then commence, and, according to EPA's consultants, be completed in approximately 3 years.

LTCP Coordination

A key element of EPA's ROD is the recognition that the City is operating under a NYSDEC CWA order ("CWA CSO Order") regarding water quality improvements for the Canal. That order requires the submission to NYSDEC in June 2015 of a Long-Term Control Plan ("LTCP")[1] which will analyze the next stage of CSO-related improvements for the canal. As a result, the ROD indicates, among other things, that:

> The final selection of CSO control retention tank locations, as well as any further evaluations of measures to prevent recontamination of canal sediments, will be completed during the remedial design and in coordination with the contemporaneous LTCP development process. ROD at 55.
>
> The EPA's CERCLA remedial design will be informed and refined by the results of additional sampling and modeling, as well as by coordination with NYSDEC and NYCDEP as they gather Post Construction Monitoring (PCM) data developed in accordance with EPA CSO guidance in advance of the LTCP submittal to address CWA compliance. ROD at 29.
>
> The EPA and NYSDEC are committed to work together throughout the development of the remedial design and the contemporaneous LTCP development process to ensure that both the Superfund and CWA goals are met in a timely, cost-effective manner. The EPA seeks to coordinate the CERCLA and CWA processes to the extent practicable, to ensure that the selected CERCLA remedy is implemented in an effective and timely manner. Since the EPA is incorporating contaminated CSO solids control in the remedy selection, siting, remedial design and remedial action pursuant to the authority of CERCLA, certain CERCLA statutory authorities, including, but not limited to, permit exemption and environmental impact statement functional equivalency apply. ROD at 56. [Emphasis added].

The ROD makes clear that CERCLA is the controlling law for the CSO-control aspects of the ROD, and that this work is to be informed by the LTCP's development, not contingent on the LTCP's final outcome, which has already been determined to require the CERCLA remedial standards as a baseline, namely the construction of CSO retention tanks.

The City's December 18, 2013 letter outlining its Interim Agreement commitments also set forth the City's request that consent order negotiations include a concurrent approach for the following three items:

> 1) Refinement of CERCLA performance standards for CSO control measures for the upper reach of the Canal based on sampling and analyses, including post-Waterbody/Watershed Facility Plan construction monitoring studies;

[1] As you know, an LTCP is a phased approach for control of CSOs that requires a permittee to develop and submit an approvable plan that will ultimately result in compliance with CWA requirements and New York State water quality standards.

2) Assessment of engineering alternatives in conjunction with the LTCP to attain CERCLA performance standards; and

3) Site selection activities for conceptual CSO source control measures described in the ROD.

Consistent with the ROD language cited above and EPA's close coordination with NYSDEC, EPA has been amenable to a properly planned concurrent approach. However, as described below, the City's time estimates and technical approach for these items have been substantially inconsistent with EPA's RD timing and technical approach and, until more recently, have clearly conflicted with the state-mandated LTCP schedule. EPA disagrees with the City regarding the timing and substance of these efforts.

Refinement of CERCLA Performance Standards

At EPA's January 29, 2014 meeting with the City, the City presented an outline of its proposed RD sampling and sediment transport modelling investigation. The City's sampling approach focuses on characterizing sediment transport and chemical contaminants of Gowanus Bay, Buttermilk Channel and stormwater. Notably, the City's presentation states that CSO contaminants would be assessed "(if needed)." This suggests that the City believes that CSO solids contaminant levels are already adequately characterized.

EPA's CSO solids reduction range in the ROD is based on the assumption that, all other conditions being the same after the dredging and capping of the Canal and other source control measures are implemented, 58-74% CSO solids reductions in the upper Canal will be needed for the new clean surface to remain protective under the Remedial Goals. As we have expressed in meetings, any potential RD-related refinement of that reduction range would involve more precise characterization of factors upstream of the CSO outfalls, e.g., sewer line hydraulics, actual (as opposed to estimated) CSO loads and first flush solids capture efficiency rates. The City has proposed no such work to date. While the City recently proposed to meet with EPA to seek our views regarding this topic, in light of the City's presentations regarding its prior CSO tank building experience, we believe the City to have the requisite expertise to have developed the appropriate study proposals for EPA's review without EPA's preliminary input.

Consequently, EPA is concerned that the RD sampling and modelling which the City has proposed is primarily aimed at producing information to support arguments to reduce the level of CSO controls based on dilution or to raise the selected cleanup levels.

EPA's ROD is consistent in its requirements for effective source control measures for accumulated sediment, sediment NAPL, the former MGPs, contaminated CSO solids, upland hotspots from other former industrial facilities, and the nominal contribution of various unpermitted pipes. Dilution of contaminant discharges in lieu of source control would be inconsistent with the ROD. Dilution is also incongruous with the City's comments on the proposed plan, which suggested that the necessary level of source control should be even stricter than that proposed by EPA, for all sources other than CSOs.

In discussing its RD sampling and modelling proposals, the City also continues to suggest that harbor sediments, rather than CSOs, contribute the vast majority of contaminated solids to the upper Canal. EPA previously determined in the ROD that the upper Canal contaminated sediment loadings are dominated by CSO solids based on a range of studies, including prior City water quality studies which plainly contradict the City's proposed plan comments. See Responsiveness Summary at Responses to Comments 132-143. If this were not the case, neither the original construction of the Flushing Tunnel nor its current $83 million refurbishment would be necessary as a substitute for tidal exchange at the head of the stagnant Canal.

EPA recognizes that the re-activated Flushing Tunnel may potentially deliver some additional harbor sediment as a result of its greater operating efficiency, and that such harbor sediments would represent a greater percentage of upper Canal sediments than under prior conditions, assuming that CSO solids are reduced as the ROD requires. These harbor sediments, however, have negligible contaminant loadings, well below EPA's selected Remedial Goals for preventing recontamination of the Canal after cleanup. Therefore, such harbor sediments will play little role in the post-cleanup effectiveness analysis, and further study of this input is irrelevant to refining the 58-74% range of CSO solids reduction called for in the ROD. The Flushing Tunnel is an appropriate method to introduce dissolved oxygen into the stagnant Canal, but its potential to bring cleaner harbor sediment into the Canal and dilute CSO solids-related contaminant levels is not a substitute for source control of CERCLA hazardous substances.

Despite EPA's reservations about the utility of the City's proposed sampling, EPA is willing to review whatever data the City chooses to voluntarily collect and submit. EPA will not, however, require the City to perform work as part of ordered actions which appears to be technically unnecessary and therefore not fiscally justifiable. The City appears to have acknowledged EPA's position on this matter, and stated its willingness to perform any work beyond that which EPA approves at its own risk.[2]

Regardless of EPA concerns related to the City's proposed RD sampling, EPA has reviewed the schedule for the City's LTCP-related data collection and modeling. That schedule should allow the City to submit a fully informed LTCP and for the results of that work to inform the RD, as EPA described in the ROD.

Assessment of Engineering Alternatives to CSO Tanks

The ROD included language which was intended to provide some flexibility in the implementation of CSO solids controls:

> In order to achieve this minimum level of contaminated CSO solids control, based on the preliminary screening, in-line sewage retention tanks would be constructed near outfalls

[2] In previous voluntary supplemental sampling work performed by the City for CSOs and sediment under the Consent Order, the City declined to incorporate technical comments from either EPA or NYSDEC regarding the City's sampling approach and methodology. Because this could impair integrating this data with the existing data, future data submissions would need to address EPA's technical requirements.

> RH-034 and OH-007 unless other technically viable alternatives are identified. Tank volumes of 6- to 8-million gallons and 3- to 4-million gallons were preliminarily selected for outfalls RH-034 and OH-007, respectively, on the basis of their capacity to reduce CSO volume and solids in an amount that will prevent recontamination of the canal after the implementation of the sediment cleanup components of the remedy.
>
> For costing purposes, an 8-million-gallon in-line retention tank (estimated by the EPA to cost $46,429,000 to construct) would be installed for outfall RH-034 and a 4-million-gallon in-line retention tank (estimated by the EPA to cost $31,272,000) would be installed for outfall OH-007. For the purpose of developing construction costs associated with CSO control, it was assumed that these tanks could be located on available NYC-owned land in the vicinity of the outfalls. The final selection of CSO control retention tank locations, as well as any further evaluations of measures to prevent recontamination of canal sediments, will be completed during the remedial design and in coordination with the contemporaneous LTCP development process.

ROD at 55.

The City has, of course, been aware since at least late 2011 of EPA's position that tanks were the most appropriate control technology. At that time, EPA relied in part on the City's 2008 Waterbody/Watershed Facility Plan ("WWFP"), which did not identify any viable alternatives to tanks for large volume CSO controls, although tanks were screened as not being cost effective, a standard which differs under the CWA from CERCLA.

The City's October 2012 "Evaluation of Possible Measures for CSO Solids Control," which was required by NYSDEC under the CWA CSO Order, was a focused Feasibility Study which evaluated a range of technologies that could attain significant CSO solids reductions in the upper Canal. That report concluded that the only option that would achieve the goals was tanks, which the City deemed too expensive. EPA's December 2012 FS Addendum, which the City commented on as part of the proposed plan, also identified no other viable alternative to tanks. At EPA's October 2013 meeting with the City wherein the City's desire to perform this alternative technology assessment was first stated, the City noted that it was aware of no other technology that could be used of in lieu of CSO tanks. The City has simultaneously been developing LTCPs for other waterbodies, such as Alley Creek, where a 5 million gallon retention tank is located. The City is presumably continually assessing alternate technologies. However, once CSO volumes reach the levels found at outfalls RH-034 and OH-007, short of separating the combined sewer system, there is no currently available engineering solution other than retention tanks.

For these reasons, EPA does not believe that there is an effective technology other than tanks. This ROD language on "further evaluations" contemplates a potential reduction in tank size by their use in combination with other solids capture methodology for increased cost efficiency.

EPA believes that there is no serious doubt about what measures will be needed, and that the most timely, cost-effective approach is to commence siting and design of the 8 and 4 million gallon tanks contemplated in the ROD, potentially modify these presumptive volumes based on

data developed during the RD, and to overlay any additional water quality control technologies which may be identified through the LTCP, such as primary treatment for CSO discharges which cannot be captured by the tanks.[3]

Both EPA and NYSDEC are concerned about the City's timing of the CSO controls alternatives evaluation effort. The City's approach, proposed in January 2014, for combining this alternatives evaluation with both the LTCP and the tank siting selection would extend all of those activities, including the June 2015 LTCP submission, until June 30, 2016. This was unacceptable to EPA and NYSDEC.

In its March 13, 2014 draft schedule, the City proposed completing the evaluation of alternative CSO control technologies by the June 30, 2015 LTCP submission time, but not completing tank siting until October 31, 2015.

On March 20, 2014, EPA proposed a schedule which would result in completion of a detailed siting report at the same time as the June 2015 LTCP submission. EPA and the City subsequently agreed that the June 2015 detailed siting report would contain the following work elements:

- Conceptual layouts of the tank(s) (including square footage)
- Conceptual layouts of the superstructures and other above ground features, including support buildings for pumping, control, mechanical, electrical, and odor control as well as tank access hatches (including square footages);
- Conceptual sizing and layouts of electronic and mechanical facility support rooms;
- Conceptual layouts of influent and discharge sewers;
- Conceptual force main routing;
- Conceptual layouts for pump station connections;
- Artist renderings of the facilities in relationship to existing buildings;
- Anticipated methods of construction and qualitative statements regarding high level community impacts (truck trips, construction traffic routing, dust and noise); and
- Identification of construction support areas required for construction including staging areas.

In EPA's view, contrary to the City's, this information is substantially similar to the results of a preliminary RD report. For this reason, among others, we think the RD can be completed within EPA's schedule utilizing the CERCLA process and appropriate engineering judgment. EPA and the City did not reach agreement on the timing of the submission of an alternatives analysis itself. EPA believes that, if this analysis is done, it needs to occur within a time frame which

[3] Despite having CSO retention tanks as the selected remedial technology in the ROD, the City has suggested that the ROD has only "conceptual CSO source controls" and that it is unable to advance the remedial design contracting process because the City is unable to adequately determine what it will be designing. See, e.g, City Letter at 3 and 11. I refer you to the Feasibility Study and the cost estimate for the alternative selected in the ROD, which closely follows Superfund guidance. Superfund feasibility studies are universally used to design CERCLA remedies.

would allow it to be evaluated, and, if warranted, acted upon by EPA so as to avoid any delays caused by changes in siting selection or remedy requirements. Time is accordingly limited. Because of the public outreach requirements under the LTCP process, the City will necessarily have to perform its LTCP-related evaluations in time to present it to the public in December 2014. As with the City's proposed sampling, EPA is willing to review such alternative technology information as the City may develop and submit, but EPA does not intend to include such work as mandatory under any administrative order.

1st Street Turning Basin

EPA recognizes that the Turning Basin RD is not on the same critical path as the retention tanks because the RD is less complex and some flexibility may exist in coordinating the Basin restoration with the primary dredging work. However, EPA has, since the September 30, 2013 Notice and Demand, sought to secure commitments for the entire RD. Since late November 2013, EPA has specifically sought the City's commitment to perform the Turning Basin RD. The City's November 21, 2012 response to EPA's information request indicated that the City owns the Basin. The deeds for the adjoining properties, which are readily available, indicate that they are bounded by and do not include the Basin. EPA has also provided such information as has been available to EPA regarding the City's ownership of the basin. However, during the past months, the City has indicated that it has been unable to commit because it has been reviewing its ownership of the Basin.

In the City Letter, which also questioned the need for cleanup of the Turning Basin,[4] and at our April 25, 2014 meeting, the City indicated that it was not prepared to negotiate the Turning Basin RD. As noted, it was not until our May 2, 2014 discussion that the City acknowledged a property interest in the Basin and indicated a willingness to negotiate performance of the Turning Basin RD. However, the City conditioned this willingness on having a separate order, due to the involvement of a different City agency, the need for separate contractors, the need to review technical issues and in order to seek the participation of two adjacent property owners whom the City suggests should share in the cost, as they will benefit from the remediation of the Basin. The timeframe for concluding these negotiations was not specified.

As EPA has observed to the City, every property owner along the Canal will likely benefit from the remediation of the long-standing pollution problems, which problems have suppressed property values. In addition, both parties who border the Basin may well be Bona Fide Prospective Purchasers, or "BFPPs," and thus not PRPs. One is planned as a non-profit arts center. While close coordination with such parties will be necessary, EPA has not notified these parties of their potential liability and has no basis to believe that they should be required to perform or pay for the Turning Basin RD.

Cost Recovery

As noted above, EPA had sought an initial reimbursement from the PRPs of $5 million of EPA's roughly $11 million in past costs spent at the Site. In March 2014, after National Grid had paid

[4] The City commented on, and EPA responded to, questions concerning the restoration of the Basin. See Responsiveness Summary at Response to Comment 190.

$1 million toward EPA's past costs and stated its willingness to pay more than that, EPA advised the City that an initial payment by the City of $1.75 million would be acceptable.

In the April 4, 2014 City Letter and again at our April 25th meeting, the City declined to offer any reimbursement, arguing that National Grid was getting preferential treatment. EPA suggested to the City that it agree to pay the same amount(s) as National Grid, and requested $1 million initially to match National Grid's payment. The City declined to match National Grid's payments on April 25th and again on May 2nd, at which time the City offered $300,000.

EPA's continued Superfund activities, particularly on a site of such magnitude, rely in part on EPA's recovery from PRPs of its expenditures from public appropriations. EPA believes that it is necessary and appropriate for the City to pay substantially more than $300,000 at this time.

It should also be noted that, despite the capital costs that are associated with the cleanup of the Canal, information submitted by the City suggests that it is apt to realize an overall net gain from this project, which will have the incidental beneficial effect of fostering substantial economic redevelopment in a large area surrounding the Canal. Five years ago, even before the current boom in Brooklyn real estate, the City estimated that "planned projects in the Gowanus Canal Corridor alone (Gowanus rezoning, Public Place, and the Toll Brothers) will generate over $500 million in tax revenue." NYCDEP (2009), NPL Listing Comments at 16-17. Those projects, as noted, have been completed (Whole Foods), are underway (Lightstone, in lieu of Toll Brothers), or are anticipated (rezoning). The infrastructure investment reflected by the remediation is not inconsistent with other City development efforts of this scope.

Additional Concerns

During the course of the negotiations, the City has made a number of other assertions and taken steps which EPA believes have hampered progress on reaching agreement.

The City made several presentations and submissions to EPA regarding complexities which the City asserts require a lengthy tank siting selection process. While EPA is cognizant of the technical issues which will need to be addressed during the Tank RD, and after careful review of the City's submissions, in our view, most of the issues raised by the City are design, not siting-related, which must be addressed at any location, and should not delay site selection progress. Although we have a range of concerns about how the City's efforts could be streamlined through the application of, among other things, engineering judgment, several of the most salient examples warrant note.

The City has emphasized, on one hand, that "EPA must understand that environmental and land use review is of critical importance, especially when locating a municipal facility such as a CSO tank in a dense urban neighborhood." See City Letter at 7. Conversely, the City's February 20, 2014 presentation on CSO Tank Siting includes a design-related page regarding the need to weigh "Covered or Open Tanks." This states that "Open tanks eliminate need for air handling/ odor control equipment." EPA does not believe that open CSO tanks in a dense urban neighborhood are a feasible engineering consideration, and that the extending the RD timeframe for such considerations is inappropriate. Open CSO tanks would present the same public

nuisance impacts as are now caused by the Canal's use as an open retention basin; impacts which both the City's required CWA CSO sediment dredging and EPA's selected remedy seek to eliminate.

As noted above, on April 30, 2014, the City submitted a Preliminary List of Potential CSO tank Sites. Parcels over 20,000 square feet ("sf") were included, and only churches, schools, and parcels with a Floor Area Ratio ("FAR") above 50% were screened out. Since Gowanus-area buildings typically have few stories, most of the 20,000 sf parcels are below the 50% FAR screening level. As a result, the list includes 86 parcels, including the newly opened Whole Foods market, the Lightstone parcels where 700 residential units are under construction, the former Power Station, which was recently purchased and is being remediated for a future non-profit arts center, Con Edison's 3rd Avenue service yard, and the American Can Factory, a 5-story multi-use arts and manufacturing complex employing hundreds of people.[5]

These parcels would be extraordinarily expensive for the City to acquire for the retention tanks and thus warrant no consideration as potential locations for CSO storage tanks. For this and other reasons, EPA believes that the vast majority of the 86 parcels can be screened out immediately, advancing the process.

EPA is concerned that the City's initial tank siting efforts, including consideration of parcels such as Whole Foods, will result in cost inflation and delay. This concern is also reflected in the City's April 4, 2014 comments on EPA's draft RD consent order and in our April 30, 2014 meeting, wherein the City sought what it terms an "Off Ramp" provision, a series of terms, providing that it can stop design work if cost estimates exceed those set forth in the ROD by more than the +50% planning range. As we advised the City, although we cannot be bound by the City's estimates, EPA is already required by law to review any substantial changes in the cost of a selected remedy.

The City has recently stated that its estimate of the cost for two CSO retention tanks will be $500 million. This is only $6 million less than EPA's cost estimate for the entire cleanup. The City's 2008 WWFP included an option for 8 and 4 million gallon tanks. Based on a cost estimate therein of $488 million, the City eliminated such CSO tanks from further consideration under the CWA cost effectiveness screening process.[6] Beginning in 2011, EPA informally requested on several occasions that the City provide the basis for its 2008 tank cost estimates. When the City did not provide the information after over a year, in September 2012 EPA requested this information using CERCLA formal information gathering authority. In its response to the formal request, the City could not produce any responsive documentation. See Responsiveness Summary, Response to Comment 165. Based on EPA's best estimate of the

[5] Despite being based on publicly available information and offering no costing, siting or engineering analysis, the City has labelled this report as "Confidential Business Information" ("CBI"). In order to claim information as CBI, the submitting person needs to provide the legally required supporting information pursuant to 40 CFR Part 2, Subpart B. Because the City is not a business, it is unclear how this information could qualify as CBI. The City has similarly asserted that its April 30, 2014 draft schedule for RD is CBI. Technical submissions to EPA by a PRP are typically releasable documents.

[6] We note that cost effectiveness plays a different role in CERCLA cleanups. The cost effectiveness of the remedy, including the CSO source controls, was determined in the ROD.

direct tank-related construction costs for the Alley Creek facility, among others, the City's as-built construction cost of storage tanks is approximately $5.60 to $6.60 million per million gallons. Id. These numbers are consistent with EPA's estimated costs of $78 million for two tanks, assuming the use of City-owned land to eliminate land acquisition costs in an area where contaminated vacant parcels cost in excess of $10 million.[7]

EPA's ability to evaluate the City's positions on the tank siting process, potential costs and other issues has also been hampered by the City's decision not to have its tank siting consultants, retained in early February 2014, attend our recent meetings.

In addition to the "Off Ramp" provision noted above, the City's comments to the draft RD consent order propose other substantial changes which are unacceptable to EPA. Instead of a commitment to perform the design of the tanks selected in the ROD, the terms would provide for the City's pre-design work to result in the selection of a CSO source control technology to be designed, the design of which is subject to conditions. Significant changes to dispute resolution, EPA's covenant not to sue and EPA's reservations of rights are also sought. Among EPA's approaches for minimizing cleanup delays at the Site is avoiding protracted exchanges over standard Agency order provisions.

LTCP Submission and CSO Dredging

As the City knows, NYSDEC has indicated that it does not support the City's request for an extension of the June 2015 deadline for submission of the LTCP, and that the June 2015 submission must be an "approvable" LTCP which includes all nine elements of LTCPs as EPA policy mandates. NYSDEC has indicated that the LTCP will need to include an implementation schedule for any CSO projects, including the tanks being designed under the RD and any additional recommended measures. Since the waters will likely not achieve the Clean Water Act Section 101(a)(2) water quality Fishable/Swimmable goals, NYSDEC has indicated that it expects that the City will need to complete a Use Attainability Analysis ("UAA") for the water body through an assessment of the physical, chemical, biological and economic factors affecting the attainment waters use. The NYSDEC has also indicated that it believes that the UAA will need to recommend to DEC the Canal's designated uses and propose any revisions, most likely upgraded ones, from the current water quality standards. This could potentially result in the need for measures beyond those in the ROD.

Another EPA concern is that the City has recently sued NYSDEC with respect to NYSDEC's disapproval of the Alley Creek LTCP, the first such LTCP submission by the City. EPA is concerned that any conflicts regarding the requirements of the LTCP process will have impacts on the quality and timing of the City's June 2015 LTCP and, consequently, RD progress. EPA believes that the City should take the appropriate steps to resolve this issue.

In a similar manner, the City needs to reconcile its position concerning the CSO dredging with the dredging required by the ROD. The City is required by the CWA CSO Order to partially

[7] There are many other cost factors to be considered in assessing the actual net cost of a CSO retention facility, including the avoided costs for periodic CSO maintenance dredging which the City's October 2012 "Evaluation of Possible Measures for CSO Solids Control" indicates could cost $4 million every 5 years.

dredge and cap CSO sediment accumulated at the head of the Canal by 2018, work which may cost up to $20 million and which would need to be removed during the deeper ROD-related dredging and capping. Because performance of the ROD dredging in lieu of the CWA CSO sediment dredging would result in significant cost efficiencies, the City has requested deferral of the CSO dredging. Pending a commitment to implement the ROD dredging, the City has not obtained NYSDEC approval for a deferral. Despite the lack of a deferral, EPA is advised that the City has placed a hold on the U.S. Army Corps of Engineers permit application for CSO dredging. Irrespective of a deferral, EPA needs a commitment from the City to move forward with the CERCLA process.

Conclusion

For the reasons described above, EPA believes that, despite some degree of progress, RD negotiations have reached an impasse. We are concerned that continued negotiations will result in substantial delays in securing commitments for the RD, starting the actual RD work, and advancing to RA negotiations with all PRPs. At this time, we believe we have no choice but to consider our other enforcement options, which as you know, may include issuance of an order unilaterally for the City to perform the RD.

Sincerely,

Brian E. Carr
Assistant Regional Counsel