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October 3, 2019

Hon. Peter Lopez  
Regional Administrator  
United States Environmental Protection Agency  
Region 2  
290 Broadway  
New York, New York 10007

Re: Gowanus Canal Superfund Site, Brooklyn, New York

Dear Regional Administrator Lopez:

DEP has reviewed your letter of September 20, 2019, in which EPA rejected the City's proposal to modify the remedy set forth in the September 2013 Record of Decision for the Gowanus Canal Superfund Site, and to allow the City to build a 16 million gallon CSO storage tunnel in lieu of two CSO storage tanks totaling 12 million gallons. I appreciate the time that you and your team took to evaluate the tunnel alternative, and for your detailed explanation of EPA's rationale for the denial. I am, however, gravely concerned that we are squandering a fleeting opportunity to adopt an integrated solution that cohesively addresses three major environmental objectives – Superfund, the Clean Water Act, and climate resiliency – for what largely appears to be administrative reasons. And so I ask that you consider the additional information and clarifications included herein, which I believe provides a substantial basis to reassess EPA's position.

**Statutory Authority:** DEP believes that the benefits conferred by the tunnel are not outside of EPA's jurisdiction under CERCLA or the Clean Water Act. The National Contingency Plan (NCP) specifically allows EPA to modify a remedy when new information is generated that supports an alteration to the remedy. Here, the City is merely asking EPA to modify what is essentially the *design* of the selected remedy because it achieves more CSO storage *and* has other benefits to the community. The City is not requesting that EPA approve other projects that would supplement the Superfund remedy.

The NCP provides further authority for the tunnel because it requires EPA to evaluate remedial alternatives against nine criteria. As outlined in our September 2018 response to EPA's questions, the tunnel outperforms the tanks against all nine of these criteria, particularly:

- effectiveness (the tunnel would capture 33% more CSOs, provides the same solids / residuals reduction and has a longer lifespan);
- implementability (tunnels are a proven technology; less construction impacts on the community; more compatible with National Grid's barrier wall); and
- cost (tunnel costs are comparable to tank costs, and thus the project, which provides more capture, is more cost-effective).

As DEP previously explained, tunnel storage volume was increased to 16 million gallons to match or exceed the solids reduction performance that the 12 million gallon tanks provide. The additional volume of the tunnel also reduces the loading of other Superfund and Clean Water Act constituents in CSO. Further, the tunnel outperforms the RH-034 tank by reducing CSOs by more than 9 million gallons in a typical year. At the OH-007 outfall, *all* CSOs would be captured by the tunnel; hydraulic modeling shows *zero events* in a typical year from that outfall.

Regarding EPA's concern about floatables capture, DEP can easily install screens within the tunnel system to manage street debris (similar to the screens already in operation at the RH-034 outfall).

Thus, the Superfund benefits of the tunnel are clear, and justify the modification of the remedy. In light of our analysis of the NCP's nine criteria, we respectfully disagree with EPA's conclusion that the tunnel alternative "would likely be screened out of any focused feasibility study."

It also worth noting that recent EPA guidance has promoted the use of adaptive management at Superfund sites, which entails the "sound use of science and technology" and "encourages continuous re-evaluation and management prioritization of site activities to account for new information and changing site conditions."<sup>1</sup> Under EPA's own guidance, EPA has the authority to "re-evaluate" the means and methods of achieving the remedial goal of reducing CSOs to the canal. Further, a recent EPA internal memorandum urged the regions to identify and implement "cross-program collaboration efforts" at contaminated sediment sites that would promote Superfund cleanups and water quality and/or other water-related initiatives.<sup>2</sup>

The interaction of the CSO tanks and National Grid's "barrier wall" is another "Superfund reason" that supports EPA's ability to consider new information and re-evaluate site activities. Neither the ROD nor the supporting RI/FS documents contemplated the site constraints and challenges associated with multiple PRPs working in the same area. Throughout the course of the parallel tank design and bulkhead barrier wall design, it became evident that the bulkhead barrier wall would precede the tank construction, which would expose the wall to movement risk during the excavation for the tank. Despite the City's insistence that the wall should be designed to meet both temporary and permanent site conditions, EPA allowed a barrier wall design that is

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<sup>1</sup> James E. Woolford, *Superfund Task Force Recommendation #3: Broaden Use of Adaptive Management*, OLEM 9200.3-120, July 3, 2018, at 2.

<sup>2</sup> Cynthia Giles, et al., *Promoting Water, Superfund and Enforcement Collaboration on Contaminated Sites*, February 12, 2015, available at <https://www.epa.gov/sites/production/files/2015-02/documents/promoting-water-sediments-memo.pdf>.

less robust and more susceptible to damage from movement. It should be noted that if the wall does begin to move during tank construction, mitigation measures may need to be implemented; that could lead to major delays in completing the remedy. Pivoting from a large-scale tank excavation to a dual-shaft arrangement for a tunnel, which would be set some distance back from the barrier wall, largely eliminates these concerns. This structural uncertainty about the wall warrants a change in the overall remedial strategy.

Finally, EPA's rejection of the tunnel alternative seems to be inconsistent with the ROD, which states: "EPA is committed to achieving cost savings by working closely with NYCDEP to accomplish an effective Superfund cleanup while also realizing CSO benefits necessary to effectively implement the remedy through synergies and economies of scale" (pg. 88-89). DEP has demonstrated that a tunnel alternative provides equivalent CSO volume and solids capture through storage (as envisioned by the ROD) while also cost-effectively enabling the City to comply with future Clean Water Act regulatory changes and climate resiliency considerations that would necessitate capturing additional CSO and stormwater runoff.

**Risks of tunnel:** DEP believes that EPA's statement that shifting to a tunnel would "result in much longer continued human health and environmental exposures" is an overstatement. Last year, DEP projected that there would be less than a year gap between the projected completion of the OH-007 tank and the tunnel. Given the improvements to water quality controls already implemented by the City, and the amount of time that has and will be required to investigate and remediate the Canal, the projected lag is negligible.

Finally, EPA's concern that there are risks associated with tunnel construction omits the fact that there also unique risks associated with construction of two tanks. Large-scale tank excavation, adjacent to the Gowanus canal and nearby older structures, introduce a number of risks. Threats to the support of excavation, achieving adequate groundwater cut-off, potential for compromised foundations of adjacent structures, and tight site conditions for contractor access adjacent to the large open excavation represent a few of the significant risks with the RH-034 tank that will have to be monitored and managed throughout construction. The tunnel shafts have much smaller surface footprints that mitigate several of these risks. Also notable is the fact that DEP has significant tunnel expertise, including the recent boring of two deep shafts and a 2.5-mile tunnel beneath the Hudson River that was completed early and on budget.

**Cost comparisons:** EPA's statement that cost comparisons should focus on the ROD's cost estimates and not the *actual* costs of the CSO tank remedy is unfounded. The City has been pointing out the flaws in EPA's original cost estimates for many years, beginning before the ROD was issued.<sup>3</sup> The City's "voluntary" costs – which were incurred to preserve the only city park servicing this urban community – is less than \$100 million. The actual *involuntary* costs far surpass that amount, and include various measures to provide a fully-functioning CSO facility that minimizes land- and air-pollution impacts on the local community, such as odor control, automated grit and screenings removal, and a dewatering pumping station, all of which were wholly absent in EPA's consultant's cost estimate.

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<sup>3</sup> See, for instance, NYC's comments on EPA's December 2012 Proposed Remedial Action Plan.

**Administrative delays:** As noted in DEP General Counsel Elissa Stein Cushman's January 2019 letter to EPA Regional Counsel Eric Schaaf, a ROD amendment should typically take one year, not two, if determined to be necessary. Also, the City volunteered to commence the detailed facility planning and design work on a parallel track during this process so that the administrative work would not delay the implementation schedule. There is also no evidence that a change to a tunnel approach would cause any delay to the in-canal dredging work. Further, even with no change of approach, a ROD amendment is necessary to account for the significant change from the original cost estimate. Thus, there is no basis to deny the City's request based on this purported delay.

**Impacts to the in-canal remedy:** EPA's concerns about post-remedy dredging in the canal are inconsistent with the ROD, which requires that the in-canal cap be armored to withstand perpetual maintenance dredging. Similarly, the Settlement Agreement between EPA and the City for the RH-034 tank directs the need for maintenance dredging, requiring the City to perform post-remedy sampling to determine if such dredging is needed. Thus, EPA's suggestion that the tunnel will create such problems is inaccurate.

**Rezoning/expansion of tanks:** DEP is extremely confused that EPA is willing to consider expansion of the tanks in connection with potential rezoning efforts. This seems entirely inconsistent with EPA's rejection of the tunnel due to speculative delays and costs. Obviously, expanding the tanks – even if feasible from an engineering perspective – would clearly cause significant delays, as the \$30M design for the RH-034 tank is nearly complete and changes to the geometry to accommodate more storage volume would result in significant changes to the design for Construction Packages 2 and 3, including potentially the need to re-work the support of excavation design, structural design, access locations, and layout of open space above the tank that has already been presented to the public and approved by the New York City Public Design Commission. These changes would clearly result in years' long delays in the project schedule. EPA's statement that the tanks could be expanded in spite of resulting delays and increased costs is perplexing, particularly in comparison to EPA's rejection of the tunnel, despite its overwhelming merits.

**Non-Superfund solutions:** While DEP appreciates EPA's support and assistance on other efforts to address flooding and resiliency efforts in the neighborhood, such approaches would require the City to almost double its costs in addressing all of the stormwater-related issues in the area. The City's ratepayers should not be burdened by funding a \$1.2 billion tank project *and* a separate flooding and resiliency project of similar cost due to EPA's unwillingness to integrate these efforts via the tunnel.

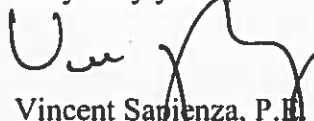
**Impact on ROD components:** Despite EPA's comment, the City has *not* shifted its focus from the RH-034 or OH-007 tanks. DEP just submitted the 90% Design for the last construction package (CP3) for the RH-034 facility. DEP has also made significant progress on the OH-007 facility and property acquisition, including completion of facility planning, preparation of the draft Basis of Design report, completion of the Environmental Impact Statement, collection of preliminary geotechnical and environmental borings, performance of test pits, preparation of the Uniform Land Use Review Procedure (ULURP) application necessary for selection and use of

the existing City-owned property, and acquisition of the adjacent properties required to construct the tank. Finally, DEP has started the planning and design for the construction of a new bulkhead for the City-owned property.

In sum, DEP remains convinced that the tunnel alternative is the right choice under a Superfund analysis. More importantly and urgently, the tunnel is the right choice from a collective public-benefits viewpoint, as it provides the community with significant quality-of-life advantages, including urban flood control, construction mitigation, and long-term operational impacts. Storage tanks will not protect the vulnerable Gowanus neighborhood from continuing sea level rise and increasing storm intensities.

You have my firm commitment that DEP will continue to work steadfastly with EPA on the CSO control remedy, as well as the in-canal remedy and the restoration of the First Street Turning Basin. Without a reconsideration of EPA's position, however, I regret that we are missing a crucial opportunity to better serve the public.

Very truly yours,



Vincent Sapienza, P.E.  
Commissioner

cc: Basil Seggos, Commissioner, NYSDEC