Newtown Creek Community Advisory Group (CAG)

TECHNICAL MEETING SUMMARY

July 22, 2021 | Virtual Meeting No. 13

Summary of Presentations and Discussion[1]

To view the full presentations, visit the Newtown Creek CAG website. The questions asked by CAG members after the presentation follow **bolded** with presenter answers in *italics* and additional CAG commentary on that question in regular text.

ANNUAL UPDATE ON THE UPLAND SITES

Michael Haggerty, NYS DEC project manager, gave an update on the upland sites. The upland sites are as follows[2]:

- 27-10 49th Street (C241219) – The site had PCE/TCE (chlorinated solvent) contamination. NYS DEC oversaw an Interim Remedial Measure (IRM) in 2020, which included hotspot excavation, a soil vapor extraction (SVE) system, and a vapor mitigation system. NYS DEC intends to issue a future No Further Action Decision document, which would comprise site management and institutional/engineering controls.
- Buckeye Pipeline (9813881) – The site has a petroleum spill. Previous remedial action included hydraulic containment (2005-2012), groundwater/NAPL recovery extraction wells ("pump and treat") which was damaged during Hurricane Sandy, and excavation (2014). Currently the site has in operation PetroFix injections along the Creek (2021), groundwater monitoring, and hard and soft booms.
- 28-90 Review Avenue (C241236) – The former oil terminal has NAPL present on-site. The on-site RI is complete. NYS DEC is evaluating remedial technologies, which include in-situ solidification (ISS), hydraulic containment, NAPL recovery, groundwater treatment, and/or bulkhead replacement/repair.
- SIMS Metal / Hugo Neu (1200318) – The recycling facility is a petroleum spill project which had petroleum bulk storage (PBS) violations. Prior remedial action included excavation and a NAPL recovery system (skimmer). The facility was reopened in 2017, since when the site has designed and implemented a groundwater/NAPL recovery system.
- Arch Street (241222) – The state Superfund project is a Long Island Rail Road (LIRR) railyard with chlorinated solvent contamination. The IRM is planned but has not yet been implemented. The IRM includes excavation and in-situ chemical oxidation and requires pre-design soil sampling.

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[1] For additional detail of the presentations, refer to the slides found at https://newtowncreekcag.wordpress.com/presentation-slides/

[2] Properties with a "C" identifier are under the state's brownfield cleanup program; properties with a 7-digit identifier are petroleum spills; properties with large-scale long term petroleum remediation have an "S" identifier; and state Superfund properties have 6-digits that begin with a 2 in the case of NYC.

- 36-08 Review Avenue (C241218) – The property has chlorinated solvent and petroleum contamination. No NAPL has been observed. The property entered the state's brownfield program in 2019, and a remedial investigation report is currently under review.
- Review Avenue Development I and II or "Quanta Resources" (C241005 / C241089) – The former petroleum refining/storage and chemical manufacturing site's sub-units received certificates of completion in 2020. 450,000 gallons of NAPL were recovered, and site management is in effect.
- Pratt Oil Works (S241115) – The former petroleum refining/storage and chemical manufacturing site has undergone an IRM for NAPL recovery (125,000 gallons recovered) and SVE. NYS DEC issued a decision document in April 2020, which covers remedial system operation, installation of an additional bulkhead (July 2020), a cover system, environmental easement, and site management.
- 37-88 Review Avenue (C241203) – NYS DEC issued a decision document in September 2020, which includes NAPL recovery, vapor mitigation, a cover system, environmental easement, and site management. The remedy is currently in design phase.
- Phelps Dodge (241002) – The former copper refinery received a record of decision in 2002. The remedy included excavation (of PCBs), a barrier wall, hydraulic containment, a cover system, site management, and environmental easement. A construction completion report was done in 2021, which includes recent shoreline stabilization.
- National Grid (GPEC 224052 & Equity Works 224050) – Greenpoint Energy Center has dense non-aqueous phase liquid / manufactured gas plant (DNAPL-MGP) waste on-site. A revised RI report is under review, which includes supplemental surface and soil vapor sampling. Future pump house construction will include sediment sampling around the dock structure. Equity Works also has DNAPL-MGP waste present on-site. IRMs include excavation and ongoing NAPL recovery (more than 20,000 gallons to date). The proposed IRM from 2020 includes excavation and in-situ solidification to address source areas, the review of which is mostly complete.
- Manhattan Polybag (1609627) – The former oil terminal involves NAPL discharge to surface water. Sorbent booms are in place, along with on-going passive NAPL recovery (less than 100 gallons recovered). There are structural issues with the building and the bulkhead. NYS DEC is negotiating a consent order with the property owner and is conducting supplemental investigation.
- 200 Morgan Avenue (9209135) – The former oil terminal has seen remedial actions which include UST and soil excavation, along with a NAPL recovery system in operation. There have been periodic sheens on the surface water. Sorbent booms are in-place, and the property owner has applied for a bulkhead replacement.
- Frito Lay (C224133) – The former scrap metal yard is in site management. There have been sheens on the adjacent surface water, and the property will be featured in the upland site assessment.
- Kinder Morgan Terminal (S224082) – The active major oil storage facility (MOSF) has an IRM for hydraulic containment, which includes groundwater dewatering, NAPL recovery,

and SPDES discharge. A protective hard boom is also in place. Sheens were observed in 2021, and NYS DEC has received reports of 2 spills.

- Former Paragon Oil / Apollo Street (S224983 / S224122) – The former refineries received a combined decision document in 2014. The remedy includes SVE and vapor mitigation, hydraulic containment (total fluid recovery and discharge in compliance with an SPDES permit), bulkhead improvements, a cover system, and site management.
- Greenpoint Petroleum Remediation (S224150) – The former refinery is divided into multiple operable units with their own decision documents. Remedial activities include excavations (IRM), SVE, hydraulic containment (groundwater dewatering, NAPL recovery, SPDES discharge, and bulkhead improvements), and site management).

Mr. Haggerty also gave an overview of the Newtown Creek Upland Assessment. Upland sites are under the jurisdiction of the state, and the goal for the assessment is to address sources of contamination to the Creek prior to implementation of US EPA's remedy. The assessment involves:

- Consolidating existing information
- In-Creek field work
- Establishing which properties require investigation and/or remediation
- Consultation with EPA

The questions asked by CAG members after the presentation follow **bolded** with presenter answers in *italics* and additional CAG commentary on that question in regular text.

- **I recall that the Phelps Dodge cap was compromised. Has that affected how the site is being considered?**
    - *NYS DEC: I believe that was repaired and documented in the construction completion report. Regardless of where the site is in the process, if action needs to be taken it will be taken.*
- **Can you say more about the Kinder Morgan extraction system?**
    - *NYS DEC: I would call this a dual-phase system. The system involves dewatering and lowering the water table, which both controls the groundwater gradient and pools the NAPL floating on the water table so that it can be extracted more effectively via extraction wells. The remedy only works if the hydraulic containment system is operational. If some of the extraction wells go down, then the likelihood of success decreases.*
- **For 36-08 Review Avenue, you referred to petroleum contamination being present and no NAPL being observed on the site. How is that the case?**
    - *NYS DEC: If you have a pool of NAPL in sufficient quantity, it will filter down through the soil column and collect on the water table. That is what is referred to as "NAPL" here. There may be NAPL-saturated soil where there are droplets in the core. There may also be staining related to the petroleum release. However, in this case there was no floating NAPL.*
- **Is the upland assessment a new initiative? How long is the timeframe?**

- *NYS DEC: Yes, it is new. We are limited because we intend to do the field work during spring tides. The timeframe is at least a year.*
- **Would it add to data previously collected by NYC DEP?**
- *NYS DEC: It would likely reproduce some of study, though we have incorporated it. The boundary of the NPL site ends at the high-water mark. The assessment goes beyond just assessing the shoreline and intends to identify contamination into the Creek from any source. We hope to narrow down the long list of properties potentially contributing to contamination to those which we need to address.*

- **We heard numerous times about sites needing repairs and having recurring issues (e.g., Kinder Morgan that has been the Greenpoint Oil Spill). The cleanups need to be thorough to prevent further contamination into the Creek.**
  - *NYS DEC: We'd note that the remedies have not failed, but that they require maintenance from time to time.*
- **The Borden Avenue site (28-90 Review Avenue) is new. You mentioned bulkhead replacement/repair. There is no bulkhead at the site currently – it is a completely eroded shoreline. The location is prime for a naturally restored edge. The likelihood of a future facility is near 0. The thought of putting in a bulkhead here would be a loss, and NYS DEC should consider a natural shoreline as a NRDA trustee for the site.**
  - *NYS DEC: We can follow up with our other division and get back to you.*
- **Can you explain how NYS DEC will determine whether a site affects the Creek?**
  - *NYS DEC: The answer would vary site-by-site, but it would be evidence-based and often would involve collecting samples from the property itself.*
  - **What happens to sites with smaller amounts of contamination into the Creek?**
  - *NYS DEC: The evaluation would be related to the individual property. We have a list of properties around the Creek, but not all contribute contamination to the Creek. Those that do would go to the proper programs on our side.*
  - **We see anything coming into the Creek as part of the Superfund site. We count on NYS DEC to properly account for all contamination into the Creek. (You may refer to our comments on the OU1 RI.)**
  - **Will this include visual identification of sheens/NAPL, chemical analyses, etc.? Will you document and share a report?**
  - *NYS DEC: The field work will involve a screen to identify seeps (sheens, discolorations, etc.). We will also study information in our own databases and shared by other agencies. We hope to identify additional properties that require work. We have a list of properties but intend to screen the whole Creek and collect samples for chemical analysis where warranted. All information will be publicly available.*
- **Are there other examples of NYS DEC providing analyses of another NPL site?**
  - *NYS DEC: We have similar upland sites (in Gowanus, for example). I am not sure if we have done an assessment at other sites.*
- **Who is the consultant for the upland site assessment?**
  - *NYS DEC: HRP.*

- *<u>EPA:</u> EPA acknowledges and supports NYS DEC's efforts. They rely on our work in the Creek with the PRP group, and our ability to develop a proper remedy relies on their assessment of upland sites. There are 2 components – 1) sites that may contribute to such a level that they might re-contaminate the whole waterway; 2) sites that may cause local recontamination. Both are critical for our decision-making process. The 2019 ROD for the Gowanus NPL site has a similar outline. There are a number of sites that may potentially be contributors but were not mentioned in the ROD, while some were of such a large scale that EPA called them out for implementation of a remedy.*

UPDATE ON THE STATUS OF OU3

Stephanie Vaughn, US EPA Region 2 remedial project manager, provided an update on operable unit 3.

The remedial investigation and feasibility study (RI/FS) for the Newtown Creek study area have been ongoing since 2011. The study area is a highly complex system, and a ROD for OU1 is not expected until at least 2024, possibly later. The Newtown Creek Group (NCG) came to EPA with the idea to conduct an early action (EA) on the lower 2 miles of Newtown Creek. EPA Region 2 agreed to consider this possibility as an interim action. EPA signed an administrative order with NCG in 2019, which specified a structured evaluation approach. Any action taken as part of OU3 would ultimately need to be consistent with the remedy for OU1 once selected.

The objectives of OU3 work were –

1. To determine whether an EA remedy for Creek Mile 0-2 is appropriate as an interim action, or whether selection of a remedy for this portion of the Creek should be deferred pending completion of the OU1 RI/FS and ROD.
2. To develop and evaluate potential remedial alternatives for OU3 via a focused feasibility study (FFS).
3. To develop action-specific performance metrics for use after the implementation of any OU3 remedy via a performance monitoring plan to evaluate the impact/performance of any such EA remedy.

The FFS is currently in draft, and both EPA and NCG have provided comments. NCG has also proposed significant modifications to the draft FFS to address concerns raised during the review process by EPA, NYS DEC, the CAG, and other entities.

EPA's responses to NCG's technical positions under objective 1 are as follows –

- NCG Position 1: "Tidal flow from the East River is currently the dominant source of solids to the surface water and sediment bed in OU3."
    - EPA response: EPA agrees based on current system understanding (modeling and data from the RI is consistent with this position, though EPA still awaits the revised modeling portion of the RI report).

- NCG Position 2: OU3 is net depositional and natural recovery toward long-term equilibrium conditions is expected to continue over time via deposition of solids primarily from the East River.
    - EPA response: Several lines of evidence suggest that natural recovery is occurring, but EPA does not currently have the temporal data (rate of recovery) to confirm this assumption. While EPA agrees that the system is generally net depositional, local erosion areas do exist and episodic erosion/deposition may occur.
- NCG Position 3: The creek bed in OU3 is physically stable.
    - EPA response: There is support for this, but local erosional areas need to be clarified.
- NCG Position 4: Ongoing sources of contaminants of concern (COCs) are not expected to negatively impact EA success.
    - EPA response: To date, no significant ongoing sources have been specifically identified in the lower 2 miles. However, localized exceedances in sediment remain despite this assumption and the assumption that natural recovery is occurring. Both internal and external ongoing sources of contamination could potentially impact effectiveness of any action. The upland property evaluation is still ongoing, though many of the properties are being addressed through state programs. Ongoing sources may impact the rate/effectiveness of natural recovery in the Creek.

EPA sees the advantages of moving forward with OU3 as follows:

- It would provide an opportunity to begin cleanup of the Creek years before a remedy is implemented for the rest of OU1. If EPA were to issue a ROD for OU1, cleanup would realistically not take place until 2028 and likely later.
- It would provide an opportunity to confirm and further refine the conceptual site model (CSM) for the whole study area. Robust post-implementation sampling would take place, the data from which would inform whether assumptions are true. Potential opportunities include:
    - Creating a robust temporal dataset to better evaluate natural recovery for Creek Mile 0-2
    - Helping determine whether there are significant ongoing sources within Creek Mile 0-2
    - Helping determine whether additional localized erosional areas are present within Creek Mile 0-2
- It would provide an opportunity to gain direct experience conducting cleanup work in the Creek. This would help inform future efforts, particularly around managing logistics.

Challenges raised by stakeholders are as follows:

- *From CSTAG* – EPA's Contaminated Sediments Technical Advisory Group (CSTAG) raised that OU3 would not address the most contaminated portion of the Creek, and therefore does not fit the usual definitions of an EA. There are also concerns with the relevant footprint of contamination (due to erosional forces, prop wash, etc.) and whether the potential for recontamination is fully understood. CSTAG is also concerned about timing and navigational concerns.
- *From NYS DEC* – NYS DEC raised concerns about NAPL and agreed with the concerns of CSTAG and the CAG.
- *From the CAG* – The CAG raised that there is no clear benefit to the community and that OU3 would be focused on the cleanest areas of the Creek while there are areas with more immediate needs. They shared concerns about the potential for recontamination, navigation, and the diversion of Superfund resources. The CAG also suggested that OU3 would be too early, given that cleanup goals have not yet been set.

EPA concluded that based on the preponderance of evidence and consistent with the terms of the administrative order between EPA and NCG, it would defer selection of a remedy for this portion of the Creek until completion of the RI/FS for the entire OU1. EPA also raised that significant effort has gone into getting to this point, and that the information learned through the process will benefit the project overall.

David Haury, Anchor QEA, shared NCG's disappointment with the decision given that they were in the process of refining their FFS based on comments from stakeholders. NCG saw OU3 as an opportunity to monitor the overall effectiveness of a remedy in a way that would accelerate the recovery of the lower part of the system. Mr. Haury shared that NCG continues to work collaboratively with EPA and its partners on the OU1 FS. He commented that work on OU3 did not slow down the work on OU1. NCG has been working with EPA to develop interim risk-based preliminary remediation goals (PRGs) and has looked at long-term conditions in the study area from ongoing sources (e.g., the East River, CSOs, and MS4s). NCG has submitted draft reports looking at NAPL mobility, ebullition, and the treatability study, and has been working with US ACE on their commercial navigation study.

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- **Thanks to EPA for your careful consideration of this. We disagree with NCG's position on OU3 but believe that none of the work has been wasted. We want the best work done and look forward to working collaboratively.**
    - *<u>NYS DEC:</u> I believe that was repaired and documented in the construction completion report. Regardless of where the site is in the process, if action needs to be taken it will be taken.*

General Updates

Anne Rosenblatt, US EPA Region 2 remedial project manager, shared further updates. EPA has been working on finalizing the RI and is developing responses to CAG comments. EPA intends to meet with the CAG's steering committee in August to discuss the responses, then present to the CAG thereafter. Stakeholders are currently reviewing modeling as part of the RI, with comments expected in the fall. EPA is also developing interim and background PRGs for the FS and intends to present those to the CAG in the fall. Finally, EPA is furthering development of the shallow groundwater study and locations of wells.

Brief Items & Next Steps

Upcoming CAG Meeting Dates (proposed)	August - BREAK
	September 15, 2021
	October 20, 2021
CAG Items to cover at future meetings	EPA responses to CAG comments on the RI Interim and background PRGs for the FS Updates from US Army Corps of Engineers on the Commercial Navigation Study Updates from Trustees (Natural Resources Damages Assessment)