

Ley Creek Sediment and Soil Remediation: The Impact of Past Creek Widening on the Development of a Remedial Strategy

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Background/Objectives. Operations associated with a former automotive parts manufacturing facility from the 1950s to the 1990s in upstate New York resulted in polychlorinated biphenyls (PCBs) impacts on site, off site, and in sediments in the adjacent Ley Creek. The facility owner performed several on-site and off-site remedial measures in the early 2000s. RACER Trust (RACER) is an environmental response trust which assumed the facility owner's responsibility for remediating off-site properties, including a section of Ley Creek. Since 2016, RACER has remediated PCB-impacted soil from 19 Creek-side residential properties and remediated a nearby 2.5-acre wetland, all subject to a New York State-led CERCLA remedial action and consent order. Through collaborative engagement between RACER, the engineer, the contractor, and New York State Department of Environmental Conservation professionals which began during investigation and design, RACER performed each project in an expedited manner and achieved important schedule milestones.

The next project phase is remediation of an approximately 2-mile length of Ley Creek that includes remediation of approximately 5,000 CY of sediment and a currently unknown quantity of upland soil. Several soil and sediment sampling efforts have been undertaken within this reach of Ley Creek since the late 1980s. In 2017, a 50%-complete design was reviewed by regulatory professionals and their review comments included a request for additional soil and sediment sampling. The sampling is being performed in 2018 prior to development of the final design. Preliminary results indicate a significant increase in remedial scope. The project objective is to successfully remediate facility-related impacted soil adjacent to Ley Creek and impacted sediment within the Creek within the next several years.

Approach/Activities. The project team anticipates commencement of remediation in 2019. Past Creek flood plain activities were reviewed during development of the recent sampling strategy. To improve the flood conveyance capacity of Ley Creek, a major portion of the Creek, including the 2-mile length within the project boundaries, was significantly widened and realigned in the 1970s by others. During the 40 years since the Creek was modified, the channel has reverted to a more natural, narrow form- similar to that which existed prior to the widening effort. The sampling strategy was focused on areas of channel modification. Unexpectedly, PCB impacted soil has been detected at locations a significant distance upland of the Creek within heavily wooded areas. The presentation will describe how the team adapted to a changing project scope through presentation of the following information:

- Original project scope included in the record of decision
- 1970s Ley Creek modifications performed by others
- Comparison of pre-1970s, 1970s, and current channel alignments and dimensions
- Limits of impacted sediment and soil and comparison to 1970s channel modifications
- Site access constraints associated with over 50 individual property owners
- Expedited investigation, design, and work plan development process to maintain the 2019 remediation schedule

Results/Lessons Learned. This presentation will communicate how unanticipated challenges were managed to maintain the remediation schedule and how establishment of a robust and experienced project team resulted in expedited project delivery.