

A Successful HSCA Funded Cleanup:

Former Erie Rail Yard

Susquehanna Depot Borough,
Susquehanna County, PA

The Former Erie Rail Yard Site (Site) in Susquehanna Depot Borough, Susquehanna County was the location of an historic rail yard, which has been converted in part to a community park. Due to rail activities and other events at the Site, the soil was contaminated predominantly with heavy metals, specifically antimony, arsenic, and lead. The Site was selected as a pilot project for the Brownfields to Playfields initiative, and involved coordination among the Department of Environmental Protection (DEP), Department of Conservation and Natural Resources (DCNR), Department of Community and Economic Development (DCED), and the Borough of Susquehanna Depot (Borough). Remediation activities began in 2017 and final activities were completed at the Site in 2020. Approximately fourteen (14) acres of the Site were turned into a community park through select clearing of trees and brush, regrading, and placement of a surface barrier (cap). Environmental covenants were also placed on fourteen (14) parcels within the Site to limit groundwater use, earthmoving activities, and interactions with capped areas.

Former Erie Rail Yard

The Site was opened as an active rail yard in 1848 by the Erie Railroad Company and included roundhouses and various shops for repairing railcars. These shops were lit by a manufactured gas plant (MGP) which existed at the rail yard from 1865 to 1890. The yard operated until about 1960, when shops were relocated to New York State, and by the 1960s and 1970s most of the buildings were razed or destroyed by fire.

Activities at the Site after the 70s are not fully known, but as part of the construction of the State Route 92 Bridge, Pennsylvania Department of Transportation (PennDOT) contactors collected soil samples in May 1989, April 1993, and May 1994. During these investigations, it was found that the area south of the railroad tracks was impacted by fuel hydrocarbons, which included polycyclic aromatic hydrocarbons (PAHs), other semi-volatile organic compounds (SVOCs), as well as lead.

After the Route 92 Bridge construction, investigative activities ceased until Spring 2007 when, as part of a regional initiative to investigate former MGP sites, DEP had URS Corporation conduct a Phase 1 Environmental Assessment. An additional historical investigation to shed light on the origin of soil contaminants was conducted in 2008, and extensive soil sampling was conducted between November 2008 and January 2009. From these sampling rounds it was found that numerous samples exceeded the DEP Statewide health standard (SHS) for Target Analyte List metals, but no detections above the SHS were observed for SVOCs and polychlorinated biphenyls (PCBs). Final soil sampling was conducted in July 2011 and April 2012 by DEP's contractor, Groundwater and Environmental Services, Inc., to further delineate contamination. The primary contaminants of concern were found to be arsenic, antimony and lead, with potential exposure pathways to be through dermal contact and direct ingestion of soils.

Project at a Glance

Location:

Susquehanna Depot Borough
Susquehanna County, PA

Project Size:

Approximately 40 acres

Principal Use:

114-acre community park
(Ira Reynolds Riverfront Park)

Total Project Cost:

\$2.27 M

Consultant:

URS Corporation
Groundwater and Environmental
Services, Inc.
AECOM Technical Services, Inc.

Project Period:

2007-2021 (14 years)

Partners:

Susquehanna Depot Borough,
DEP, DCNR, and DCED



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PROTECTION

In February and March of 2016, DEP and DCNR discussed obtaining grant monies to assist the Borough in developing the Site as a community park once remediation was completed. The grant application was submitted in April 2016, and the Community Conservation Partnerships Program (C2P2) Grant was awarded to the Borough for the Ira Reynolds Riverfront Park in the amount of \$250,000 in mid-December 2016. The park is named after Ira Reynolds, the most devoted Boy Scout to Troop & Pack 81. Ira was an incredibly dedicated leader and mentor. His dedication to the Scouting program for so many years changed the lives of hundreds of young men who looked to him as a positive example of leadership and integrity.

A groundbreaking ceremony with officials from DCNR, DCED, DEP, Susquehanna County, the Borough, and Senator Lisa Baker was held on July 13, 2017. Approximately 75 local residents and business people attended the ceremony, as well as a local Boy Scout troop. During the summer of 2017, DEP's contractor, AECOM Technical Services, Inc., completed clearing and grubbing, placed river stone along the riverbank, and created stone tree wells around approximately 40 trees that were retained. An eight-inch layer of general fill was placed across part of the Site to create the first layer of capping, and the utility and infiltration trenches, as well as

rough grading, were completed in the fall. By June 2018, six inches of topsoil had been placed on the general fill, and hydroseeding was completed on the capped areas.

Work to be conducted by the Borough was delayed due to a limited response to bid requests for the walking trails, lighting, and fence work. Additionally, a portion of the future park was owned by the Susquehanna Depot Fire Department. Negotiations took place between the Borough and the Fire Department and eventually approximately 4 acres of land belonging to the Fire Department were obtained for the park, along with a strip of land adjacent to the Fire Department. Lights, walking trails, and fencing were installed between December 2019 and June 2020. Some additional seeding was conducted throughout 2020, and final DEP activities were completed in October 2020. As part of the institutional controls for the Site, eight (8) property owners were sent environmental covenants (ECs) for fourteen (14) parcels, limiting the use of groundwater and earthmoving activities, as well as interactions with the installed cap. Six of the ECs have been recorded and two are awaiting final signatures. The Borough finalized installation of a pavilion and volleyball court at the park, and an official park opening event took place September 21, 2021.

Highlights:

- Approximately fourteen (14) acres were used to create the Ira Reynolds Riverfront Park.
- The Park area was capped with a total of 14 inches of clean fill and topsoil.
- Environmental Covenants were placed on 14 parcels in the Site, to limit exposure to high levels of arsenic and lead and maintain the integrity of the capped area.

The Hazardous Sites Cleanup Fund (HSCF), a special fund established under the Hazardous Sites Cleanup Act (HSCA) (35 P.S. §6020.101 et seq.), provides the funding for the Department of Environmental Protection (DEP) to carry out a number of activities to address releases and threatened releases of hazardous substances to the environment.



Project Photos



Erie Rail Yard in mid-1900's



Project Photos



May 2017 Prior to any Site Clearing Activities



July 13, 2017 Groundbreaking Ceremony for Ira Reynolds River Front Park

Project Photos



September 2017 After Clearing and Grubbing



Former Pump House Prior to Demolition

Project Photos



June 2018 Hydroseeding of Capped Areas



Ira Reynolds Memorial Monument



The official park opening event took place September 21, 2021.