

Former Barbera Residence Site (a.k.a Port Refinery) Remedial Investigation RYE BROOK, NEW YORK

The New York State Department of Environmental Conservation (DEC), in coordination with the State Department of Health (DOH), is committed to ongoing investigation of the Former Barbera Residence site and surrounding properties and keeping the Village of Rye Brook community informed about recent work underway related to this State Superfund site.

Site Description

The Former Barbera Residence (a.k.a. Port Refinery) site is located at 55 Hillandale Road, in Westchester County in the Village of Rye Brook. This site is a one-acre residential property bordered by private residences on both sides and the Arbors Townhouse Complex is behind the property.

Investigation History

The previous site owner operated an illicit mercury refinery business (Port Refinery Co., Inc.) inside of the two-story garage on site for 20 years until EPA's first contact in the early 1990s. The Rye Brook Police Department received complaints about a resident on Hillandale Road mishandling mercury in 1991. In response to the complaints, EPA investigated this residence and discovered extensive mercury contamination in a garage, cabana, and in many additional areas on the property where the mercury had been illegally dumped.

In 1994, as a part of an EPA emergency removal ([EPA Port Refinery Link](#)), the garage and cabana were removed, and the pool was demolished. EPA excavated and removed more than 6,300 tons of contaminated soil from this and bordering properties. EPA's removal action included sampling to determine the extent of the contamination; removing the contaminated soil and debris; and confirmatory sampling. Clean soil was brought in to

replace contaminated soil and to return the site to the original grade.



55 Hillandale Pre Demolition (source: https://response.epa.gov/site/site_profile.aspx?site_id=1600)



55 Hillandale Post Demolition (source: https://response.epa.gov/site/site_profile.aspx?site_id=1600)

In 2004, EPA conducted an emergency response at the site to remove visible mercury observed near a rock pile, adjacent to the asphalt walking path on the Arbors condominium property. EPA also collected surface soil samples from around the walking path to delineate the extent of mercury contamination. EPA expanded their investigation after mercury was found in the soil of neighboring properties, beyond

the area of the spill. EPA also collected and analyzed air, surface and subsurface soil, stream and pond sediment, and groundwater samples.

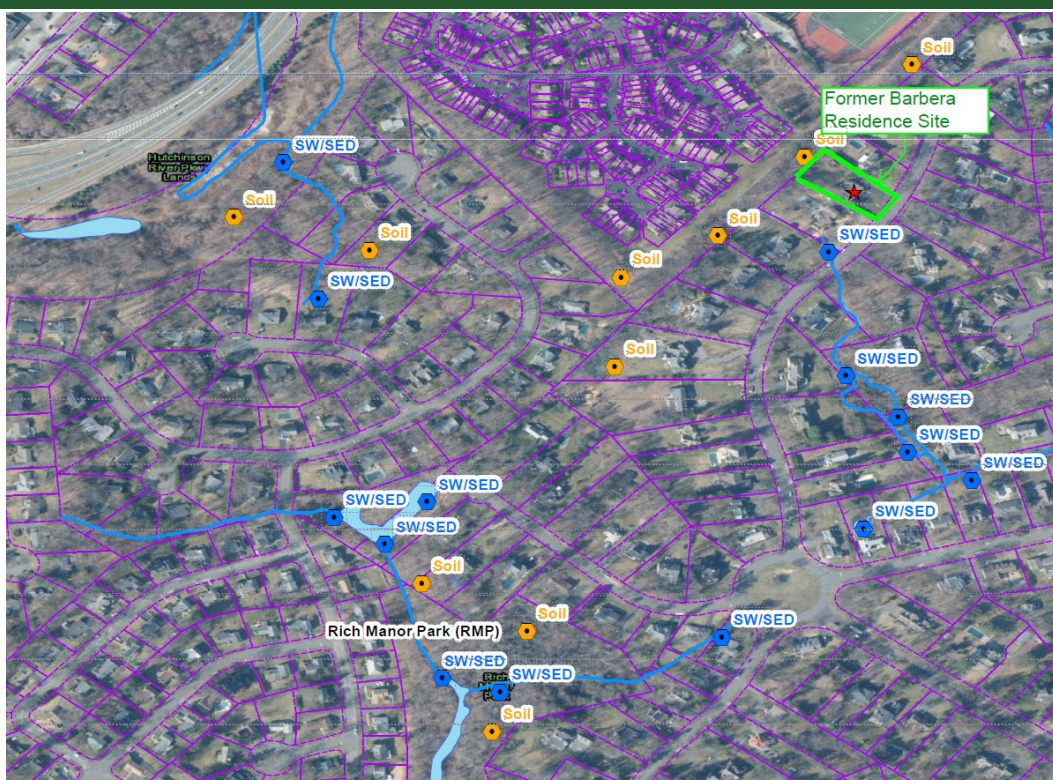
In 2005, during clean up and removal operations at the Arbors Townhouse Complex, a significantly larger quantity of mercury-contaminated soil was encountered than originally estimated. The on-site residence was also demolished to access a contaminated drywell and septic tank. EPA's remedial and restoration activities, on and off-site, were completed in 2006.

Current Conditions

In June 2022, EPA performed an indoor air, surface water, sump pump water, and sediment sampling investigation as part of a Removal Assessment at the site to determine the extent of mercury contamination. Indoor air samples were collected from one residential property located at the site due to elevated air monitoring readings of mercury vapors within the residence basement sump. The results of this sampling event showed that contamination is still present on site and in immediate surrounding areas. The investigation results prompted DEC to reclassify the site as a Potential Inactive Hazardous Waste Site, and DEC is proceeding with further site investigation to ensure public health and the environment are protected.

UPCOMING INVESTIGATION ACTIVITIES

The New York State Department of Environmental Conservation (DEC) and the New York State Department of Health (DOH) will be overseeing site characterization activities at the site and surrounding areas to determine the presence and potential impact of mercury in soil, groundwater, air, sediment and surface water associated with past disposal of waste materials from historic mercury refinery operations. Following initiation, in-field investigation activities are anticipated to take at least 45 days. The timeline is dependent on weather, site conditions, contractor availability, and other factors. The crew performing the work will consist of four to five people. Work will be completed using hand tools and drill rigs. Work areas will be demarcated with traffic cones. Individuals are asked to remain outside of the cones and to not approach the work areas.



Main site location and proposed surface water (SW) and sediment (SED) samples

Soil Boring and Monitoring Well Installation

DEC consultants will collect soil and groundwater samples from the surface and subsurface to further investigate mercury contamination on and off-site. Groundwater monitoring wells will be installed in public rights-of-way to reduce impacts on the community.

The DOH CAMP will be implemented for monitoring of mercury, volatile organic compounds (VOCs), and particulates at the upwind and downwind perimeter of each designated work area during activities on site. If sampling occurs within 20 feet of occupied structures or potentially exposed populations, additional monitoring will occur between the work area and nearest occupied structure and at the location of ventilation system intakes, if necessary.

Soil samples will be collected and logged continuously from surface to terminal depth below ground surface. Each soil sample will also be screened for the presence of VOCs with a photoionization detector and readings will be recorded on the boring log and field book.

Soil and groundwater samples will be collected from the soil borings and monitoring wells and sent to an environmental laboratory for analysis and data evaluation.

Air Sampling

After review of soil and groundwater data, DEC may, if necessary, request access from property owners to collect indoor and outdoor air samples on their property. Air samples will be collected and sent to an environmental laboratory for analysis and data evaluation.



Example of hand auguring equipment



Example of drill rig



Example of air sampling canister

Sediment and Surface Water Sampling

Sediment samples will be collected via a hand trowel to a depth of 6 inches and a width of 3 to 4 inches. Surface water will be collected from visible water bodies.

A crew of approximately four people will be working in the investigation areas. Ingress and egress to buildings will remain clear and work areas will be demarcated with traffic cones. Individuals are asked to remain outside of the cones and to not approach the work areas.

Sediment and surface water samples will be collected and sent to an environmental laboratory for analysis and data evaluation.

Site Restoration

Upon completion of the soil sampling, each soil boring will be backfilled with native soil or topsoil if needed. The boring will be backfilled from the total depth to the surface and restored to pre-intrusive activities conditions. If mercury contaminated soil is encountered, the material will be containerized, and the boring will be backfilled with topsoil. Care will be taken during sample collection to preserve the grass or sod overlying the target interval. The surface will be regraded by hand, as needed, and the surficial layer of grass or sod following sampling will be replaced.

Site Characterization Report

All data collected during these site characterization activities will be evaluated and presented in a report for DEC and DOH review. Based on the results of the site characterization, additional investigation actions or cleanup actions may be necessary, and DEC will inform the community of those developments as the remedial program progresses.

Contact and Document Access Information

GENERAL INQUIRIES/COMMENTS FOR DEC TEAM

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FOR MORE INFORMATION

Key project documents and more information are available on the following sites:

DEC Docs:

<https://extapps.dec.ny.gov/data/DecDocs/360033/>

Sign up to Receive Updates by Email:

<http://www.dec.ny.gov/chemical/61092.html>