

**NEW YORK STATE
DEPARTMENT OF**



**ENVIRONMENTAL
CONSERVATION**

This Fact Sheet contains information about the remedial action at the Tarrytown Former MGP Site located in the Village of Tarrytown, N.Y. If you have any questions concerning this site, please contact:

**Mr. Lech Dolata
Project Manager
NYSDEC**

625 Broadway, 11th Floor
Albany, NY 12233-7014
(518) 402-9662

For site-related health questions, please contact:

**Mr. Carl Obermeyer
Junior Engineer
NYSDOH**

Monticello District Office
50 North St., Suite 2
Monticello, NY 12701
1 (800) 458-1158, Ext. 27890

For post-remedial site development questions, please contact:

**Mr. Carl Monheit
Director of Development
Ferry Investments, LLC
485 West Putnam Avenue
Greenwich, CT 06830
(914) 631-1720**

FACT SHEET

Tarrytown Former MGP Site

BROWNFIELD CLEANUP AGREEMENT

Site No. C 360064 (formerly V00167-3)

January, 2005

CLEANUP WORK HAS BEEN COMPLETED

Consolidated Edison, Ferry Landings, LLC and Ferry Investments, LLC (The Volunteers), and their contractor D.A. Collins Environmental, have completed remediation construction at the Tarrytown Former Manufactured Gas Plant (MGP). The work that began in May, 2004 was completed during the first week of January 2005. The remedial work was performed in accordance with a NYSDEC approved design and with NYSDEC construction oversight. This cleanup operation was performed under the provisions of the NYSDEC Voluntary Cleanup Program (VCP) for redevelopment into restricted residential and restricted commercial/industrial uses excluding day care, child care and medical care. Following the introduction of a Brownfield Cleanup Program (BCP) by the NYSDEC, the Tarrytown MGP site cleanup was transferred into the new program.

BACKGROUND

The 20 acre site is located on West Main Street in the Village of Tarrytown, New York (see Figure 1). The Tarrytown Former MGP Site is the location of historic manufactured gas plant activities, from which several underground structures remained. Remedial investigations were carried out at the site by the Volunteers over the past several years. Waste associated with the former MGP operations, caused significant areas of soil contamination on-site and sediment contamination in the river adjacent to the site. Additionally, several underground storage tanks (USTs) associated with a more recent use of the site as a transportation maintenance facility were the source of petroleum contamination to soils and groundwater. The primary contaminants of concern were benzene, toluene, ethylbenzene, xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs). The Non Aqueous Phase Liquids at this site are reddish brown coal tars with an oily liquid/ appearance. They do not readily dissolve in water and most of these tars are more dense than water. These are called DNAPLs. Oily, tarry liquids less dense than water are known as Light Non Aqueous Phase Liquids (LNAPLs).

REMEDIAL ACTION

The remedial construction was aimed at the removal of petroleum and MGP related contamination from the bottom of the Hudson River and the land portion of the site to create conditions for future residential and commercial use.

The Remedial Action: The remedial construction took place in the following areas discussed below (see Figure 2).

- **Western DNAPL Area**

A 160 foot long in-ground barrier made of watertight sheeting was constructed along the Hudson River to limit movement of NAPLs into the riverbed. The top of this barrier wall was finished at the same depth as the bottom of the river. In addition, a 60 foot long recovery trench, 24 to 28 foot deep and filled with crushed stone, was constructed parallel to the sheetpile wall to help in the NAPLs recovery.

- **Northern DNAPL Area**

A 360 foot long in-ground barrier made of watertight steel sheeting was constructed and driven into the lower permeability silty clay. A DNAPL recovery trench was constructed parallel to the barrier, on the upgradient side of the barrier wall. During installation of the in-ground barrier, an additional, previously unknown area containing contaminated soil was found, delineated and cleaned up. An abandoned underground storage tank, that may have been the source of contamination, was excavated and removed.

- **River Sediment**

The DNAPL contaminated sediments were removed to a predetermined depth from the riverbed and disposed of off-site. This work was performed within impermeable silt barriers to control movement of any re-suspended particles. Additionally, turbidity monitors were deployed around the silt barriers to verify effectiveness of the barrier protection system. Also, an existing waterfront platform was dismantled to obtain better access to the contaminated sediments under the deck. The dredged area was lined with a filter fabric and backfilled with imported clean stone and benthic soil placed to the final grade. After sediment removal was completed, a new platform was constructed to its original specifications.

- **Light Non Aqueous Phase Liquids (LNAPLs) Area**

A newly constructed recovery trench parallel to West Main Street, equipped with a pump station, was built to collect any LNAPL floating free on the water table. The collected LNAPL will be sent through an oil/ water separator, recycled and disposed of off- site.

- **Holder and Tar Well Area**

Holders B and C were excavated. Contaminated soil was removed and disposed of off-site. Contaminated liquids were pumped out and shipped to an off-site, permitted disposal facility. Holders A and D were investigated for presence of MGP related contamination.

Contamination found in Holder A was removed and the holder was backfilled with a clean soil. No contamination was found in Holder D.

Remaining Work:

In addition to the site cleanup work, the approved Remedial Action Work Plan dated July, 2004 also includes the following measures that will be implemented in the year 2005:

- development of a long term Operation, Maintenance and Monitoring Plan to assure that the barrier walls and the recovery trenches are effective.
- development of a site management plan to protect future site workers and residents from any possible future exposures to untreated subsurface soil and groundwater remaining on site.
- institutional controls in the form of deed restrictions and/or environmental easements will be implemented to require compliance with the approved site management plan and to prevent the use of groundwater beneath the site as a source of potable or process water without necessary water quality treatment; and
- annual certification by the property owner that the institutional controls and engineering controls are still in place, have not been altered, and are still effective.

The remedial work was performed in accordance with a site specific Community Health and Safety Plan (CH&SP) that included air monitoring to protect the community during construction. The documentation generated during construction indicates that air emissions were successfully controlled.

FOR MORE INFORMATION

If you would like more information about this project, you are urged to contact the project personnel listed on the cover of this Fact Sheet. You are also invited to visit the document repositories listed below. Included in the repositories are the Voluntary Agreement and the Remedial Action Work Plan discussed above. The repositories are located at:

| | |
|--|--|
| The Warner Library | NYSDEC Region 3 Office |
| 121 North Broadway | 21 South Putt Corners Road |
| Tarrytown, New York 10591 | New Paltz, New York 12561 |
| (914) 631-7734 | (845) 256-3154 |
| Kris Weltzheimer, Director | Mr. Michael Knipfing, Citizen Participation Specialist |
| Monday and Thursday 1 - 9 pm | Monday - Friday 8:30 am - 4:45 pm |
| Tuesday and Wednesday 10 am - 6 pm | |
| Friday 10 am - 5 pm | |
| Saturday 9 am - 1 pm (July and August) | |

ABOUT THE BROWNFIELD CLEANUP PROGRAM

The Brownfield Voluntary Cleanup Program was developed to enhance private sector cleanup of properties by enabling volunteers to remediate sites using private rather than public funds, and to reduce the development pressures on “greenfield” sites. Under the Program, a volunteer agreed to investigate and remediate a site to a level that is protective of human health and the environment for the present or intended use of the property. Investigation and remediation is carried out under the oversight of the NYSDEC and the NYSDOH. When the volunteer satisfactorily completes the work, the State provides a release from State liability for the work done, returning the site to productive use. For more information regarding New York State’s BCP, please visit the NYSDEC’s web site at: <http://www.dec.state.ny.us/website/der/bcp/>