



Brownfield Cleanup Program

Washington Street Former MGP Site Site Number 7-04-046 Binghamton, NY October 2008

Remedial Investigation Report Available; Report Recommends Remediation of Brownfield Site Contamination

The investigation has been completed for the Washington Street Former Manufactured Gas Plant (MGP) Site located at 24 Water Street in Binghamton, Broome County, under New York's Brownfield Cleanup Program (BCP). See attached map for the location of the site. The New York-State Department of Environmental Conservation (NYSDEC) has approved the "Remedial Investigation Report" submitted by New York State Electric & Gas Corporation (NYSEG). The Remedial Investigation (RI) Report describes the results of the environmental investigation of the site and recommends actions to address contamination. The RI Report is available at the locations identified in this fact sheet.

NYSDEC previously accepted an application submitted by NYSEG to participate in the BCP. The application proposes that the site will be used for residential purposes with some restrictions applied to things such as intrusive activities on-site.

Highlights of the Remedial Investigation Report

The RI evaluated the nature and extent of contamination in the following media: soil, groundwater, soil vapor, surface water, and river sediments. Soils were evaluated through the installation of soil borings and test pits and samples were collected for chemical analysis. Groundwater was evaluated through the installation of monitoring wells and samples were collected for chemical analysis. Soil vapor was evaluated through the completion of a soil vapor intrusion investigation in two commercial structures adjacent to former MGP structures. River sediments were evaluated through probing and sample collection for chemical analysis. Surface water was evaluated through sampling for chemical analysis.

In soils, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and metals

Brownfield Cleanup Program: New York's Brownfield Cleanup Program (BCP) encourages the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and redeveloped. These uses include recreation, housing and business.

A **brownfield** is any real property that is difficult to reuse or redevelop because of the presence or potential presence of contamination.

For more information about the BCP, visit: www.dec.ny.gov/chemical/brownfields.html were detected at concentrations exceeding the restricted residential soil cleanup objectives (SCOs). PAHs, typical components of asphalts, fuels, oils, and greases, are chemicals which are made whenever substances are burned. VOCs are substances, widely used in household and commercial products, which become gases at room temperature.

In the shallow groundwater, no MGP related VOCs were detected above ambient water quality criteria (criteria for water quality that accurately reflects the latest scientific knowledge). Several non-MGP related VOCs (i.e. chlorinated compounds) were detected above criteria south of the site. No MGP related PAHs were detected above criteria. Coal tar dense non-aqueous phase liquid (DNAPL) is present in two on-site groundwater monitoring wells, MW-3 and MW-9. Coal tar DNAPL, which is denser than water at this site, is among the by-products when coal is carbonized to make coke, or gasified to make coal gas.

Several potentially MGP related VOCs and PAHs exceeded criteria in deep groundwater. VOCs were present in monitoring wells cross-gradient from the site suggesting that some of the VOCs are coming from a source other than the former MGP.

Only two compounds, toluene and barium, were detected in surface water. Toluene is potentially MGP related and was detected at one surface water sample location, but its detected concentration was below the criteria for surface water. Barium is not MGP related and there is no surface water criteria for that compound.

Several VOCs and PAHs were detected in Chenango River sediments. However, the concentrations detected do not vary significantly from the concentrations detected upstream of the site and appear to be within the expected background range for Chenango River sediments. In the Susquehanna River, physical observations were made while probing sediments, and no indication of site-related impacts were observed.

A soil vapor intrusion investigation was completed at two commercial buildings adjacent to former MGP structures. Soil vapor intrusion refers to the process by which volatile chemicals move from a subsurface source into the indoor air of overlying buildings. The potential for exposures associated with soil vapor intrusion was investigated and it was determined that no further action is necessary to address exposures.

In general, MGP related impacts to soils and shallow groundwater do not extend beyond the boundary of the former MGP site. In deep groundwater, potentially MGP related impacts are present at the most downgradient monitoring well (MW-5D) which is located at the western site boundary. Impacts to surface water are not present and there is no known or documented use of groundwater in this area. However, as stated above, there is an area of coal tar DNAPL in the subsurface which will require remediation.

Significant Threat Determination

NYSDEC in consultation with the New York State Department of Health (NYSDOH) has determined that the Washington Street Former MGP Site does not pose a significant threat to human health or the environment.

NYSDEC made the determination that the site does not pose a significant threat because:

- no complete exposure pathways exist at the site as contaminated soil is not found at the surface and buildings and pavement cover the site;
- the area is served by public water, therefore, exposure to contaminated groundwater is not expected;
- it was determined that no actions were necessary to address soil vapor;

• institutional controls will be implemented at the site to restrict the use of groundwater and to address the potential for soil vapor intrusion in any future buildings on-site.

Next Steps

The Final RI Report is currently available at the locations listed below. NYSEG will now conduct an Alternatives Analysis and develop a Remedial Work Plan. These documents will describe how the Applicant will address the contamination related to the brownfield site. When NYSEG submits a Remedial Work Plan for approval, NYSDEC will announce the availability of the draft plan for public review, and a 45-day comment period will commence. A public meeting will also be held to discuss the proposed remedial action..

NYSDEC will keep the public informed throughout the investigation and remediation of the Washington Street Former MGP Site.

Background

The site occupies approximately 1.4 acres of land within a city block in Binghamton, Broome County, NY. The site and the surrounding land use is commercial. From circa 1853 until 1888 the site was used to manufacture gas from coal. Subsequent to that the site was used for various commercial purposes including automobile and truck sales and service, a gasoline station, and plumbing & electrical supply warehouses.

In 1991 an underground storage tank (UST) and 65 cubic yards of contaminated soil were removed from the site. A groundwater investigation was completed subsequent to the UST removal.

In February 2005 NYSEG submitted an application to enroll this site in the State's Brownfield Cleanup Program. The Brownfield Cleanup Agreement was issued in October 2005. An RI Work Plan was approved by the NYSDEC in November 2005 and RI field work was initiated in May 2006.

FOR MORE INFORMATION

Location of Documents Related to the Site Cleanup

In order to make site information available to the public, the following locations currently have the documents related to the site cleanup. These documents include the RI Report and the application to participate in the BCP accepted by NYSDEC:

Broome County Public Library 185 Court Street Binghamton, NY (607) 778-6407 (reference desk) Monday – Thursday: 9:00 AM - 8:00 PM Friday & Saturday: 9:00 AM - 5:00 PM NYSDEC Region 7 Sub-Office 1679 NY Rte. 11 Kirkwood NY, 13795 (607) 775-2545 Monday – Friday: 8:00 AM – 4:00 PM

Who to Contact

Comments and questions are always welcome and should be directed as follows:

Project Related Questions Kiera Becker New York State Department of Environmental Conservation 625 Broadway Albany, NY 12233-7014 518-402-9662 kabecker@gw.dec.state.ny.us <u>Health Related Questions</u> Julia Kenney New York State Department of Health 547 River Street Troy, NY 12180-2216 1-800-458-1158 ext 27860

If you know someone who would like to be added to the project mailing list, have them contact the NYSDEC project manager above. We encourage you to share this fact sheet with neighbors and tenants, and/or post this fact sheet in a prominent area of your building for others to see.



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