

**United States Environmental Protection Agency**  
**Region V**  
**POLLUTION REPORT**

**Date:** Tuesday, August 19, 2008

**From:** Tom Cook

**Subject:** Peoples Gas 22nd Street Station Site

2200 South Racine Avenue, Chicago, IL

Latitude: 41.8514000

Longitude: -87.6561000

<b>POLREP No.:</b>	22	<b>Site #:</b>	B5FW
<b>Reporting Period:</b>	7/29/08 to 8/14/08	<b>D.O. #:</b>	Not Applicable
<b>Start Date:</b>	6/18/2007	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	6/18/2007	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>		<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>	ILD982074767	<b>Contract #</b>	EP-S5-06-04
<b>RCRIS ID #:</b>			

**Site Description**

The 22nd Street Station Site (Site) is located at 2200 South Racine, Chicago, Cook County, Illinois, in a mixed residential, commercial, and industrial area. The site is bordered to the north by Cermak Road, to the east by an electrical substation owned by Commonwealth Edison (ComEd), and to the south by the South Branch of the Chicago River. The Site is approximately 7.2 acres in size and is occupied by ComEd.

The Site is a former manufactured gas plant (MGP) that operated as an MGP facility from approximately 1862 to 1958. The Site was initially developed by Peoples Gas to produce coal gas. In 1934 it was modified to produce carbureted water gas and oil gas. In 1944, two production sets were modified to produce reformed natural gas. Peoples Gas began leasing portions of the site to ComEd in 1931 and sold the last portion to ComEd in 1959. The MGP facility at the Site stopped operating in 1958 and the plant was entirely dismantled by 1960.

A preliminary assessment of the Site was conducted by Illinois Environmental Protection Agency (IEPA) in 1988. Peoples Gas performed site investigations between 2000 and 2002. A Remedial Objectives Report (ROR) was developed that recommended the removal of impacted material from several on-site locations.

Remediation activities, consisting of excavation and disposal of contaminated soils, were begun by Peoples Gas in April 2006 under the IEPA Site Remediation Program. Peoples Gas is the potentially responsible party (PRP) for this site. The PRP contractor remediating the Site is Burns & McDonnell Engineering Company, Inc. (BMcD) along with their subcontractors.

Site activities by the PRP include excavation to depths ranging from 3 feet to 30 feet below ground surface (bgs). Other site activities by the PRP include daily air monitoring, continuous 24-hour perimeter air monitoring and sampling, confirmation soil sampling, and water treatment and discharge to Metropolitan Water Reclamation District (MWRD) sanitary sewer.

Site features at the 22nd Street Station include active utility lines that must be supported during excavation work. One area of the site is considered a High Risk Evolution (HRE) area by ComEd. ComEd has placed restrictions on excavation in this area.

Prior to the U.S. EPA oversight at the Site, BMcD excavated impacted material in the east gas holder (to a depth of approximately 20 feet bgs) and portions of the former Throop's Canal (to a depth of approximately 30 feet bgs). Please see the BMcD map of excavation areas under "documents" on OSC website. An Administrative Order on Consent was signed by Peoples Gas in early June 2007, prompting the U.S. Environmental Protection Agency (U.S. EPA) to begin PRP oversight activities at the Site.

On June 12, 2007, a kick-off meeting was held at the 22nd Street Site between U.S. EPA, START, Peoples Gas, and BMcD, to discuss future oversight activities, documents required, and logistics for

transmitting data and documents. The meeting addressed three MGP sites that U.S. EPA would be overseeing that are located within one mile of each other: 22nd Street Station, Hough Place, and Pitney Court. Note that one START member covers oversight of these three sites, splitting time between each of the three sites. Both Hough Place and Pitney Court remediations are expected to be completed by the middle of 2008, while the 22nd Street Station Site remediation is expected to be completed by March 2009.

On June 18, 2007, U.S. EPA began PRP oversight activities at the three Peoples Gas MGP sites: Hough Place Station, Pitney Court, and 22nd Street Station. The U.S. EPA Superfund Technical and Response Team (START) contractor is performing PRP oversight during the removal activities at the sites. As part of the removal activities, START collects or observes the collection of confirmation samples of soil to confirm that the PRP cleanup objectives are being met. Samples are being collected to identify the potential presence of the following site contaminants of concern:

- Benzene, toluene, ethylbenzene, and xylenes (BTEX);
- Polynuclear aromatic hydrocarbons (PAH);
- Synthetic precipitation leaching procedure (SPLP) lead, manganese, and selenium;
- Carbon disulfide [a volatile organic compound (VOC)];
- 2-Methylnaphthalene and 4-chloroaniline [semivolatile organic compounds (SVOC)]; and
- Total lead, manganese, and selenium.

Soil cleanup objectives for the 22nd Street Station Site are IEPA TACO Tier 1 industrial/commercial and construction worker standards for soil ingestion and inhalation, Tier 1 or Tier 2 soil migration to groundwater, and a non-TACO Tier 1 remediation objective for 2-methylnaphthalene.

START also collects or observes the collection of confirmation samples of treated water to be discharged to a MWRD sanitary sewer. Water samples confirm that the MWRD treatment objectives are being met. Samples are being collected to identify the potential presence of the following site contaminants of concern:

- Target Compound List (TCL) VOC;
- PAH; and
- Target Analyte List (TAL) Metals.

Treated water objectives for the 22nd Street Station Site are established by MWRD in the discharge permit issued for the site.

#### **Current Activities**

During the reporting period, the PRP excavated in Areas T, N, and C (see BMcD map of excavation areas under "documents" on OSC website). The PRP collected soil samples in Areas T and C.

From July 30, 2008 through August 4, 2008, no soil excavation or offsite disposal activities were conducted, due to the Fiesta de Sol neighborhood festival occurring on north adjacent Cermak Avenue. During this time period, the water treatment system and frac tanks were moved to accommodate future remediation activities. Most site activities were suspended on Tuesday, August 5, because there was limited site electricity due to a severe storm.

The PRP subcontractor Thatcher installed supports for active gas lines near Area D. The PRP subcontractor, Nash, worked on the utility duct pack adjacent to vacated Racine.

The MGP pipe that was uncovered along the east site boundary, in Area T, was removed in sections and staged for PCB sampling.

A summary of the activities performed during the reporting period by the PRP are as follows:

- Transported 256 loads of soil to CID Landfill in Calumet City, IL; all trucks decontaminated prior to leaving
- Broke concrete in Areas T and N and stockpiled for future disposal
- Performed perimeter air sampling and air monitoring on a continuous basis (24-hour air samples and air monitoring is conducted around the perimeter). On August 1, 7, 11 through 14, elevated levels of dust were detected from onsite activities: dust control measures were used. On July 30, elevated levels of benzene were detected: benzene control measures were used.
- Performed health and safety air monitoring during site activities
- Performed street sweeping and dust suppression activities

- Performed de-watering activities in excavation areas
- Transported 293,600 gallons of untreated water offsite for disposal
- Treated 261,600 gallons of water and discharged to an onsite MWRD sanitary sewer
- Excavated in Areas T, N, and C and backfilled completed areas

Confirmation sampling activities are described below. All confirmation soil samples were analyzed for VOCs, SVOCs, Total and SPLP metals.

On July 15, 2008, BMcD collected one soil sample from the east wall of Area C cell 5. This cell was previously sampled on April 30, 2008, and did not meet the remediation objectives. The PRP excavated further east and resampled. The sample results failed to meet the remediation objectives for SVOCs. BMcD is currently planning to install a grout curtain as an engineered barrier for this area.

On August 12, 2008, BMcD collected one soil sample each from the floors and east walls of Area T cells 19 and 20. The sample results have not yet been received by START.

On August 13, 2008, BMcD collected one soil sample each from the floor and east wall of Area T cell 21. The sample results have not yet been received by START.

On August 14, 2008, BMcD collected one soil sample each from the floor and east wall of Area cell 6. The sample results have not yet been received by START.

Analytical results for previous sampling events were received and evaluated by START. Soil samples were analyzed for VOCs, SVOCs, Total and SPLP Metals. Water samples were analyzed for the parameters specified in the MWRD discharge permit.

On May 29, 2008, BMcD collected the monthly sample of the treated discharge water. The sample results met the remediation objectives as stated in the MWRD permit.

On June 24, 2008, BMcD collected the monthly sample of the treated discharge water. The sample results met the remediation objectives as stated in the MWRD permit.

On July 22, 2008, START and BMcD each collected the monthly sample of the treated discharge water. The sample results met the remediation objectives as stated in the MWRD permit.

Analytical results for the following BMcD sampling events have not yet been received by START:

On July 16, 2008, BMcD conducted a limited soil boring investigation in Area K. One soil boring was advanced to 30 ft bgs. No further documentation has been received by START yet.

On July 24, 2008, BMcD collected one soil sample each from the floors and south walls of Area T cells 13 and 14. The sample results have not yet been received by START.

### **Planned Removal Actions**

Planned removal actions at the 22nd Street Station Site are as follows:

- Excavate soil per the Remedial Action Plan (RAP)
- Transport excavated soil to CID Landfill for disposal
- De-water excavation areas
- Treat water from de-watering activities and discharge to MWRD sanitary sewer, or transport untreated water offsite for disposal

### **Next Steps**

The next steps to be carried out by the PRP are as follows:

- Continue excavation of Areas D and T.
- Continue to de-water excavation areas as required
- Treat water from excavation areas and discharge treated water to MWRD sanitary sewer
- Continue 24-hour perimeter air monitoring and sampling
- Continue air monitoring in work zones
- Continue street sweeping activities on Racine Street
- Continue to decontaminate trucks prior to trucks leaving site
- Collect confirmation samples of Areas T and D when excavation complete.
- Complete backfilling of Area T with clean fill

**Key Issues**

None.

[response.epa.gov/22ndStreet](http://response.epa.gov/22ndStreet)