

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

**Date:** Monday, August 20, 2007

**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>       | 5                    | <b>Site #:</b>             | B5FW           |
| <b>Reporting Period:</b> | 07/28/07 to 08/19/07 | <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 is to cover oversight of these three sites and will rotate to a different site each day. Both Hough Place and Pitney Court remediations are expected to be completed by end of 2007 while the 22nd Street Station Site remediation is expected to be completed by the end of 2008.

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 Area R2, Area S and Area U in the vicinity of the former storage tanks, and conducted confirmation sampling at portions of Area S and Area R2 (see BMcD map of excavation areas under "documents" on OSC website). BMcD also conducted waste characterization sampling of DNAPL (Dense Non-Aqueous Phase Liquid) in Area B.

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

- Transported 830 loads to CID Landfill in Calumet City, Illinois; all trucks decontaminated prior to leaving site
- Transported 9 loads of concrete to Countryside
- Performed perimeter air sampling and air monitoring on a continuous basis (24-hour air samples and air monitoring is conducted around the perimeter)
- Performed health and safety air monitoring during site activities
- Performed street sweeping activities on Racine Street
- Performed daily de-watering activities in excavation area
- Performed water treatment
- Discharged 226,000 gallons of treated water to the MWRD sanitary sewer
- Collected confirmation soil samples from the floor of Area S cell 2, cell 3, cell 4, cell 5, cell 6 and cell 7
- Collected confirmation soil samples from the south and west side walls of Area S cell 2, the south wall of Area S cell 4, and the east wall of Area S cell 6
- Re-excavated Area 2 cell 2 south wall, along the property boundary and re-sampled the soil from the south side wall
- Collected confirmation soil samples from the floor of Area R2 cell 3
- Continued excavation in Area R2 and Area S around the former oil tanks and backfilled completed portions of Area R2 and Area S

- Applied Impermix grout to the sheeting wall interlocks at Area O and Area A2.

BMcD also sampled removed pipe for PCBs.

On August 2, 2007, START personnel collected 1 confirmation sample of the floor of Area S cell 3, along with BMcD. START also observed as BMcD collected confirmation samples of Area S cell 2 (floor, south wall) and Area S cell 1 (east wall). The samples were analyzed for VOCs, SVOCs, PAHs, and total and SPLP metals. Results for Area S cell 2 and cell 3 floors and cell 1 wall were below the PRP cleanup levels as stated in the Remedial Action Plan (RAP). Results for Area S cell 2 south wall did not meet the PRP cleanup levels for PAHs.

To address the contamination present at the south sidewall of Area S cell 2, BMcD excavated additional soil from the face of the south wall. On August 8, 2007, START personnel observed as BMcD collected 1 confirmation sample of the south sidewall of Area S cell 2. The sample was analyzed for VOCs, SVOCs, PAHs, and total and SPLP metals. Results for Area S cell 2 south wall re-sample were below the PRP cleanup levels as stated in the RAP.

On August 3, 2007, START personnel observed as BMcD collected a DNAPL waste characterization sample from the south sump of the Area B gasholder. The sample was analyzed for extractable organic halogens (EOX). Results for the sample have been reported by BMcD. The material in the Area B sumps will be transported and disposed offsite as non-hazardous special waste.

On August 3, 2007, START personnel also observed the collection of confirmation soil samples of Area S cell 4 (floor and south side wall) and Area S cell 5 (floor). The samples were analyzed for VOCs, SVOCs, PAHs, and total and SPLP metals. Results for Area S cell 4 and cell 5 were below the PRP cleanup levels as stated in the RAP.

On August 9, 2007, EPA On-Scene Coordinator (OSC) Thomas Cook came to the 22nd Street Station site to view site progress. On August 9, 2007, BMcD collected confirmation samples from Area R2 cell 3 (floor) and Area S cell 6 (floor). Results for the sample have not yet been reported by BMcD.

On August 10, 2007, START personnel collected 1 confirmation sample of the east wall of Area S cell 6, along with BMcD. The sample was analyzed for VOCs, SVOCs, PAHs, and total and SPLP metals. Results for Area S floor cell 3 floor were below the PRP cleanup levels as stated in the Remedial Action Plan (RAP).

On August 15, 2007, START personnel observed as BMcD collected 1 confirmation sample of the floor of Area S cell 7. The sample was analyzed for VOCs, SVOCs, PAHs, and total and SPLP metals. Results have not yet been reported by BMcD.

### **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

### **Next Steps**

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

- Continue excavation of Area R2, Area S and Area U
- Install bracing in Area U
- 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 Area R2 and Area S cells, when excavation complete
- Backfill Areas R2 and S with clean fill when confirmation results are received

### **Key Issues**

None.

