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

**Date:** Friday, January 25, 2008
**From:** Tom Cook

**Subject:** Peoples Gas 22nd Street Station Site
2200 South Racine Avenue, Chicago, IL
Latitude: 41.8514000
Longitude: -87.6561000

| | | | |
|---|---|---|---|
| **POLREP No.:** | 11 | **Site #:** | B5FW |
| **Reporting Period:** | 11/18/07 to 12/14/07 | **D.O. #:** | Not Applicable |
| **Start Date:** | 6/18/2007 | **Response Authority:** | CERCLA |
| **Mob Date:** | 6/18/2007 | **Response Type:** | Time-Critical |
| **Demob Date:** | | **NPL Status:** | Non NPL |
| **Completion Date:** | | **Incident Category:** | Removal Action |
| **CERCLIS ID #:** | ILD982074767 | **Contract #** | EP-S5-06-04 |
| **RCRIS ID #:** | | | |

**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 the end of 2007 or early 2008, 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-chloroanaline [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 Q, Area R1 and Area M. The PRP conducted soil sampling of Areas Q, S and R1 (see BMcD map of excavation areas under "documents" on OSC website). ComEd contractors worked in Areas A1 and C and north adjacent Cermak Road for an unrelated electrical utility project. On November 19-20, 2007, BMcD continued investigative drilling in the vicinity of Area D. On November 22-23, 2007, the site was closed for a holiday.

On November 19, 2007, three IEPA representatives visited the site to inquire about a trucking incident in Indiana that occurred the previous week. According to the incident report provided by the PRP, one load of soil left the site on November 14, 2007, to be disposed at Liberty Landfill, Liberty, Indiana. The truck was involved in an accident with a passenger vehicle while en route to the landfill. In the course of the accident, the load of soil was spilled onto the side of the road. The soil was subsequently cleaned up and delivered to the landfill on November 15, 2007.

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

- Transported 761 loads of soil to CID Landfill in Calumet City, IL or Liberty Landfill in Indiana; all trucks decontaminated prior to leaving site
- Performed perimeter air sampling and air monitoring on a continuous basis (24-hour air samples and air monitoring is conducted around the perimeter). On November 19-20, 2007, elevated levels of dust and/or benzene were detected. On November 27-30, 2007, elevated levels of benzene and/or dust were detected. On December 3, 5 and 10, 2007, an elevated level of dust was detected. Dust and benzene control measures were taken. On December 7, 10 and 13, 2007, an elevated level of dust was detected: the PRP contractor determined that the source was a smoke stack at an offsite building.
- Performed health and safety air monitoring during site activities
- Performed street sweeping activities on Racine Street

- Performed de-watering activities in excavation areas
- Performed water treatment
- Discharged 32,000 gallons of treated water to the MWRD sanitary sewer
- Transported 43,500 gallons of untreated water to the Ortek facility for disposal
- Excavated in Areas Q, R1 and M, and backfilled completed areas.
- Collected confirmation soil samples from the floor and walls of Area Q, the floor of Area S, and the floor and walls of Area R1
- Collected a monthly discharge water sample

On November 20, 2007, START personnel collected 1 confirmation soil sample of the floor Area Q cell 2, along with BMcD. START also observed as BMcD collected 1 confirmation sample of the floor of Area Q cell 1. The samples were analyzed for VOCs, SVOCs, and total and SPLP metals. The results for the START sample of Area Q floor cell 2 were below the PRP cleanup levels as stated in the RAP. BMcD reported that results for Area Q floor cells 1 and 2 were below the PRP cleanup levels as stated in the RAP.

On November 27, 2007, START collected the monthly sample of the treated discharge water, along with BMcD. The sample was analyzed according to the MWRD permit requirements. BMcD reported that results for the water sample were below the MWRD discharge levels as stated in the permit.

On November 27, START personnel observed as BMcD collected 1 confirmation sample of the floor of Area S cell 10. The sample was analyzed for VOCs, SVOCs, and total and SPLP metals. BMcD reported that results were below the PRP cleanup levels as stated in the RAP.
On November 29, 2007, START personnel collected 1 confirmation soil sample of the south wall of Area Q, along with BMcD. START also observed as BMcD collected 1 confirmation sample of each from the north, west, and east walls of Q. The samples were analyzed for VOCs, SVOCs, and total and SPLP metals. BMcD reported that PAH results for the Area Q west wall were above the PRP cleanup levels as stated in the RAP; the other walls were below PRP cleanup levels. START results indicated that the Area Q south wall were above the PRP cleanup levels (PAH levels in the grab sample exceeded the construction worker objective). To address the remaining contamination, BMcD completely removed the walls of Area Q. Area Q has now been designated part of the surrounding Area R1.

On November 30, START personnel observed as BMcD collected 1 confirmation sample each of the floor of Area R1, east and center cells. The samples were analyzed for VOCs, SVOCs, and total and SPLP metals. BMcD reported that results were below the PRP cleanup levels as stated in the RAP. However, BMcD later determined that soil impacts were present at a deeper elevation in these cells, and decided to resample the area. BMcD re-excavated the area to two depths, 26' bgs and 31' bgs. The area was divided into sample cells 1 and 2.
On December 11, START personnel observed as BMcD collected four confirmation samples from Area R1. BMcD re-sampled the floor of Area R1 cells 1 and 2 (depth 31' bgs) , and collected 1 confirmation sample each from the south walls of cells 1 and 2 (depth 26' to 31' bgs). START personnel collected 1 confirmation soil sample from the south wall of Area R1 cell 1, along with BMcD. The samples were analyzed for VOCs, SVOCs, and total and SPLP metals. BMcD reported that results were below the PRP cleanup levels as stated in the RAP. The START results for Area R1 floor cell 1 also were below the PRP cleanup levels as stated in the RAP.

On December 12, START personnel observed as BMcD collected five confirmation samples from Area R1. BMcD re-sampled the floor of Area R1 cells 1 and 2 (depth 26' bgs) , and collected 1 confirmation sample each from the south walls of cells 1 and 2 (depth 19' to 26' bgs) and the east wall of cell 1 (depth 26' to 31' bgs). START personnel collected 1 confirmation soil sample from the floor of Area R1 cell 2, along with BMcD. The samples were analyzed for VOCs, SVOCs, and total and SPLP metals. The START results for Area R1 floor cell 2 were below the PRP cleanup levels as stated in the RAP. BMcD reported that results were below the PRP cleanup levels as stated in the RAP.

Analytical results from previous sampling events have been received and evaluated by START.

On October 23, 2007, BMcD collected the monthly sample of the treated discharge water. The sample was analyzed according to the MWRD permit requirements. BMcD reported that results for the water sample were below the MWRD discharge levels as stated in the permit.

**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 or Liberty 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 Area M
- 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 M cells, when excavation complete
- Complete backfilling of Areas R, Q and S with clean fill

**Key Issues**

None.

**Disposition of Wastes**

| Waste Stream | Quantity | Manifest # | Disposal Facility |
|---|---|---|---|
| Non-hazardous Soil - September 2007 Rev. 1 | 7,365 yd3 | | CID RDF, Calumet City, IL |
| Non-hazardous Soil - September 2007 | 4,830 yd3 | | Liberty Landfill, Monticello, IN |
| Non-hazardous Soil - October 2007 | 11,250 yd3 | | CID RDF, Calumet City, IL |
| Non-hazardous Soil - October 2007 | 3,675 yd3 | | Liberty Landfill, Monticello IN |
| Non-hazardous Soil - November 2007 | 2,220 yd3 | | Liberty Landfill, Monticello IN |

response.epa.gov/22ndStreet