United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Tuesday, November 13, 2007
From: Tom Cook

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

POLREP No.:	9	**Site #:**	B5FW
Reporting Period:	09/25/07 to 10/13/07	**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 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-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 U, Area B and Area C. The PRP conducted soil sampling of Area B and Area C (see BMcD map of excavation areas under "documents" on OSC website). To contain odors from Area B soil, the PRP applied bed ash, woodchips, Visqueen and odor-suppressing foam to the material. The PRP also conducted test pits in Area B to delineate the extent of contamination under the footing.

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

- Transported 779 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)
- 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 83,700 gallons of treated water to the MWRD sanitary sewer
- Performed cofferdam installation and concrete breaking in Area U
- Excavated in Area U, Area B and Area C, and backfilled completed portions of Area R2 and Area S. Capped completed portions of Area B and Area C with concrete, grout and clean backfill.
- Removed the tank walls and pipes in the Area B gasholder
- Collected the confirmation soil samples from the floor of Area B and the floor and walls of Area C
- Collected the monthly discharge water sample and split random water samples with START
- Installed a new flow meter for the water treatment system, which was inspected and sealed by MWRD on October 11, 2007

On September 25, 2007, START personnel observed as BMcD collected the monthly sample of the treated discharge water. The sample was analyzed according to the MWRD permit requirements. No pollutant detections in exceedence of the MWRD permit were reported by BMcD.

On September 28, 2007, BMcD collected 1 confirmation sample each from soil under the north, south, west and east footings of the of Area B floor, from 29 to 30 ft bgs. The samples were analyzed for VOCs, SVOCs, and total and SPLP metals. For structural stability reasons, the footing of the gasholder in Area B cannot be excavated. Therefore, a grab sample was collected from the wall of a trench adjacent to the bottom of the footing. BMcD reported that some BTEX and SVOC results were in exceedence of the PRP cleanup levels as stated in the RAP. Soils under the footing will remain in place, under an engineered barrier. Area B has been capped with a concrete barrier and grouted inside and outside the wall of the gasholder.

On October 2, 2007, START personnel observed as BMcD collected 1 confirmation sample of the floor of Area B cell 1. 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 October 2, START personnel collected a sample of the treated discharge water along with BMcD. This was a random sample event directed by U.S. EPA for QA/QC purposes. The sample is being analyzed for VOCs, PAHs, and metals. Results are being evaluated by START.

On October 3, 2007, BMcD collected 1 confirmation sample of the floor of Area B cell 2. 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 October 4, 2007, BMcD collected 1 confirmation sample of the floor of Area B cell 3. 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 October 11, START personnel collected 1 confirmation sample of the floor of Area C cell 1 along with BMcD. BMcD also collected 1 confirmation sample each of the west and south walls of Area C, cell 1. The samples were analyzed for VOCs, SVOCs, and total and SPLP metals. The results for Area C cell 3 floor soil sample, collected by START, met the PRP cleanup levels as stated in the RAP. BMcD reported that results for all three samples were below the PRP cleanup levels as stated in the RAP.

On October 11, START personnel collected a sample of the treated discharge water along with BMcD. This was a random sample event directed by U.S. EPA for QA/QC purposes. The sample is being analyzed for VOCs, PAHs, and metals. Results are being evaluated by START.

START is awaiting analytical results from these previous sampling events:

On September 18, 2007, BMcD collected a waste characterization sample from material within Area B. On September 19 and 20, BMcD collected a TCLP benzene sample from Area B. Results for the samples 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 or Liberty 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 R, Area S, Area U and Area B
- Complete Area U cofferdam installation
- 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 R1, Area S and Area U cells, when excavation is complete
- Complete backfilling of Areas R2 and S with clean fill

Key Issues

None.

Disposition of Wastes

Waste Stream	Quantity	Manifest #	Disposal Facility
July 2007 Non-Hazardous Soil - Revision 1	6930 yd3		CID RDF, Calumet City, IL
August 2007 Non-Hazardous Soil	13,605 yd3		CID RDF, Calumet City, IL