

United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Tuesday, April 22, 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.:	16	Site #:	B5FW
Reporting Period:	03/01/08 to 04/18/08	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 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 and conducted confirmation sampling in Areas M, H, and A1 (see BMCD map of excavation areas under "documents" on OSC website). ComEd contractors worked in Area A1 for an unrelated electrical utility project.

In addition to soil excavation, the PRP poured concrete against a portion of the former gasholder in Area C, as a containment barrier. The PRP also removed two underground storage tanks on April 15, 2008. Two 10,000-gallon and one 15,000-gallon UST were removed from the former purifying house in Area H, under a UST removal permit and oversight from the City of Chicago Department of Environment and State Fire Marshal. The USTs were sheared and scrapped for offsite disposal.

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

- Transported 1,794 loads of soil to CID Landfill in Calumet City, IL; all trucks decontaminated prior to leaving
- Transported 23 loads of soil to Countryside Landfill in Grayslake, IL
- Performed perimeter air sampling and air monitoring on a continuous basis (24-hour air samples and air monitoring is conducted around the perimeter). On March 5, 7, 10, 14, 18-20, 25 - 27, 2008 and April 2, 4, 7, 9, 14-18, 2008, elevated levels of dust were detected; dust control measures were used or the re-sample was below action levels. On April 4 and 15, 2008, elevated levels of benzene were detected; benzene control measures were used or the re-sample was below action levels.
- Performed health and safety air monitoring during site activities
- Performed street sweeping and dust suppression activities on Racine Street
- Performed de-watering activities in excavation areas
- Transported 183,400 gallons of untreated water to the Ortek facility for disposal
- Treated 5,700 gallons of water and discharged to an onsite MWRD sanitary sewer
- Excavated in Areas M, H, C, B and T and backfilled completed areas.

- Collected confirmation soil samples in Areas A1, M and H
- Collected treated water sample

Confirmation sampling activities are described below.

On March 3, 2008, BMcD re-excavated and re-sampled one soil sample from the floor of Area A1 cell 9. The sample was analyzed for VOCs, SVOCs, Total and SPLP Metals. The sample results met the PRP objectives as stated in the Remedial Action Plan (RAP).

On March 10, 2008, BMcD collected one soil sample each from the floor and north wall of Area M cells 5 and 6. The samples were analyzed for VOCs, SVOCs, Total and SPLP Metals. The sample results met the PRP objectives as stated in the RAP.

On March 12, 2008, BMcD collected one soil sample each from the floor and north wall of Area M cells 7 and 8. The samples were analyzed for VOCs, SVOCs, Total and SPLP Metals. The sample results met the PRP objectives as stated in the RAP.

On March 13, 2008, BMcD collected one soil sample each from the floor of Area M cells 9 and 10. The samples were analyzed for VOCs, SVOCs, Total and SPLP Metals. The sample results met the PRP objectives as stated in the RAP.

On March 14, 2008, BMcD collected one soil sample each from the floor of Area M cells 11 and 12 and the north wall of cell 11. The samples were analyzed for VOCs, SVOCs, Total and SPLP Metals. The sample results met the PRP objectives as stated in the RAP.

On March 17, 2008, BMcD collected one soil sample each from the floor of Area M cells 13 and 14, the north wall of cells 12, 13 and 14, and the east wall of cells 10, 12 and 14. START collected one soil sample each from the floor of cell 13 and the north wall of cell 12, along with BMcD. The samples were analyzed for VOCs, SVOCs, Total and SPLP Metals. The sample results met the PRP objectives as stated in the RAP.

On March 26, 2008, BMcD collected one soil sample each from the floor and north wall of Area M cells 15 and 16. The samples were analyzed for VOCs, SVOCs, Total and SPLP Metals. The sample results met the PRP objectives as stated in the RAP.

On March 26, 2008, BMcD also collected the monthly sample of the treated discharge water. The sample was analyzed according to the MWRD permit requirements. START has not yet received the sample results.

On March 27, 2008, BMcD collected one soil sample each from the floor and of Area H cells 1 and 2. The samples were analyzed for VOCs, SVOCs, Total and SPLP Metals. The sample results met the PRP objectives as stated in the RAP.

On April 2, BMcD collected one soil sample each from the floor and of Area H cells 3 and 4. The samples were analyzed for VOCs, SVOCs, Total and SPLP Metals. The sample results have not yet been reported to START.

Analytical results for previous sampling events were received and evaluated by START.

On February 25, 2008, BMcD collected the monthly sample of the treated discharge water. The sample was analyzed according to the MWRD permit requirements. The sample results met the PRP objectives as stated in the MWRD permit.

On February 29, 2008, BMcD collected one soil sample from the floor of Area M cell 4. The sample was analyzed for VOCs, SVOCs, Total and SPLP Metals. 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 H and C
- 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 H, when excavation complete
- Complete backfilling of Areas M with clean fill

Key Issues

None.

response.epa.gov/22ndStreet