# United States Environmental Protection Agency Region IV POLLUTION REPORT

Date: Thursday, March 10, 2011

From: Gary Andrew

Subject: Huntsville Gas Company

426 Dallas Avenue NW, Huntsville, AL

Latitude: 34.7313370 Longitude: -86.5935230

**POLREP No.:** 3 Site #: A4TG

Reporting Period: D.O. #:

Start Date:2/25/2011Response Authority:CERCLAMob Date:2/14/2011Response Type:PRP OversightDemob Date:NPL Status:Non NPLCompletion Date:Incident Category:Removal Action

CERCLIS ID #: ALN00040707462 Contract #

RCRIS ID #:

## **Site Description**

A manufactured gas plant operated at the Huntsville Gas Company (HGC) site from 1856 to about 1948. The facility originally operated in 1856 as the Huntsville Gas Light Company, using rosin from coal to manufacture gas. In 1932, after several name changes, the facility became the Huntsville Gas company. It is not known whether a carbonization or gasification (or both) process was used at the plant. In 1946, HGC became part of the Alabama Gas Corporation (Alagasco) and the plant was abandoned as the city's distribution system switched from coal gas to propane air gas. Between 1940 and 1950, the City of Huntsville began redeveloping projects in the surrounding downtown area, removing several shanties and old antebellum homes from Dallas Avenue near the plant. The plant was disassembled between 1950 and 1970, though specific date(s) of disassembly and abandonment procedures are presently unknown; two tanks and the purifying house are still visible in a 1954 aerial photograph. In the 1970s, the Huntsville Housing Authority (HHA) constructed the Searcy Homes Development, a portion of which resides on property previously occupied by HGC.

The site is bordered on the west by an unnamed drainage ditch, which flows 200' to the southwest into Pinhook Creek. Directly across the drainage ditch is a Norfolk Southern railroad line, from which coal and other raw materials were allegedly supplied to the HGC facility. Infrastructure in the area surrounding the HGC site changed significantly between 1950 and 1970. The HGC plant was located at the intersection of Rison/Pollard Street and Spragins Street, but portions of both streets were removed prior to the construction of Searcy Homes and were replaced with Dallas Avenue and Monroe Street, which travel parallel to one-another and do not intersect. Property lines in the neighborhood were also redrawn so that the original parcel boundaries of the HGC facility no longer exist. A pre-1950 sanborn map superimposed over a post-1990 aerial image has shown that several current structures reside on the former HGC footprint: a 0.1 acre vegetable garden, a concrete basketball court, the Searcy Homes Office (426 Dallas Avenue NW), and 5 duplex buildings (424 A/B, 422 A/B, 420 A/B, 418 A/B, and 416 A/B on Dallas Avenue NW).

The Alabama Department of Environmental Management (ADEM) conducted a CERCLA Preliminary Assessment (PA) of the HGC site in February, 2003 and issued its findings to EPA in May, 2003. ADEM collected groundwater, surface water, sediment, and soil samples in September, 2004 and submitted its findings in a CERCLA Site Inspection (SI) in September, 2006 to EPA that received a low priority for further assessment. ADEM collected additional soil samples in February, 2007 and submitted a second SI in September, 2007 to EPA that received a higher priority for further assessment based on findings that high levels of Polynuclear Aromatic Hydrocarbons (PAHs) were found in a widespread area. The site was referred to EPA Emergency Response and Removal Branch (ERRB) in January, 2008. The site has been listed in the CERCLA Information System (CERCLIS) under identification number ALN00040707462.

Historical knowledge has shown that the following potential chemicals are often found at manufactured gas plant sites: arsenic, cadmium, cyanide, lead, mercury, benzene, toluene, ethylbenzene, xylene, naphthalene, phenolic compounds, and PAHs. Analytical results for soil sample collected during the second SI

indicated the presence of arsenic, chromium, mercury, cyanide, and 14 organic compounds above Alabama Risk Based Corrective Action (ARBCA) Preliminary Screening Value (PSV) for Direct Contact Exposure in Residential soils. The sample was a composite of 132 individual borings, collected at 0"-18" below ground surface (bgs), over 3 acres of the estimated HGC footprint. Concern was raised about the findings due to high levels of several constituents, particularly PAHs, being found in this particular composite sample which had a high probability for dilution.

#### **Current Activities**

Excavation of the "599" area is now complete. Activities there resulted in expanding the original 40 x 40 foot area in all directions. The main hole was approximately 12 foot deep with the extended excavations being 7 feet or less. Remnants of a retort or brick tar pot were unearthed in the extended excavation. Work has begun on the deep excavation adjacent to buildings 422 and 424. The wall of the large gas holder was found just below the surface. The size and proximity of this wall to the duplex has caused a review of the excavation plan. Contamination has also been found on the courtyard side of these buildings at 3 feet below ground surface at building 422 and slightly less at building 424. The contamination in the deep excavation for the gas holders may be linked to that in the courtyard. The implications of this is now being reviewed. Shallow surface excavations are now complete except in areas that are part of the traffic pattern.

The air monitoring system is functioning well. No exceedances have been recorded. Foam has been applied to reduce odors. So far 3200 gallons of the foam have been used. Dewatering of the site continues as needed with 46,450 gallons of waste water processed as of March 8. 192 truckloads (4,372 tons) of waste have been transported to the Republic Services landfill in Hillsboro, AL.

### **Planned Removal Actions**

The Southern most portion of the "599" extended excavation will be run out to the extent practicable. It will soon interfere with a vital traffic route on Site. Backfill of the original "599" location will begin. Excavation of the gas holders will continue in the area of cell 3B.

## **Next Steps**

Sample results from some of the deep excavations and several of the shallow wall excavations are expected this week. The results will determine if and where further excavation may be needed.

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