Al's Radiator Shop
1298 State Road 60
Lake Wales, Florida
County: Polk
District: Southwest
Site Lead: Waste Cleanup Program
Approved for Cleanup: January 18, 2011
HWC # 158

Site Description and History

The Al's Radiator Shop (ARS) site is located at 1298 State Route 60 in Lake Wales, Polk County, Florida in a predominantly commercial and residential area. Specifically, the site is located in Township 30S, Range 27E, Section 03 at 27° 54′ 14.3941″ N, 81° 36′ 37.0953″ W. The site covers approximately 0.9 acre of partially developed land located along the northern side of State Route 60. One building, approximately 45 by 70 feet, formerly existed centrally on the site. Two debris piles are located at the Site, the first consisting of building materials remaining from the demolished building and the second consisting of common refuse. The Site is bound to the north and west by a residence, to the east by vacant land, to the northeast by a flea market, and to the south by a drainage ditch that runs parallel to State Route 60. An advertising billboard located onsite is currently being utilized.

From the 1980s until 2000, the site had been used as a radiator repair facility. Activities conducted at the site included; the core replacement of radiators, radiator repair and replacements and storage of used radiators and fuel tanks. The repair process involved flushing antifreeze from radiator systems, soldering radiators with lead-based solders, flushing and cleaning the inner components of radiators with muriatic acid, and repainting radiators.

The first site investigation at ARS was conducted by the DEP Southwest District (SWD) in September 2000 prior to the issuance of a Consent Order (CO). The investigation was limited to a visual inspection of the site. In October 2000, the SWD issued the CO for site cleanup of illegally dumped antifreeze and subsequently coordinated with the Florida Department of Law Enforcement to arrest the site owner and operator. As a result of the CO, several site investigations were conducted.

Threat

During the initial assessment, onsite soils were shown to be contaminated with metals and polycyclic aromatic hydrocarbons (PAHs) above Soil Cleanup Target Levels (SCTLs) for residential direct exposure. Groundwater was also analyzed during the initial assessment. Analysis of the groundwater samples revealed the presence of PAHs and metals above the Groundwater Cleanup Target Levels (GCTLs). During the most recent monitoring event all monitoring wells were below GCTLs for the contaminants of concern.

Response Strategy and Status

During a Resource Conservation and Recovery Act (RCRA) inspection conducted by the SWD, soil and surface water sampling and analysis were conducted to confirm the presence of

contamination. Lead and ethylene glycol were present at concentrations exceeding DEP Cleanup Target Levels (CTLs). In August 2006 and June 2007, additional site investigation activities were conducted on behalf of EPA Region 4's Remedial Branch by the DEP. Samples collected from surface soils, subsurface soils, and groundwater were submitted for analysis. Results of the sampling indicated that several surface soil samples collected at the site contained high concentrations of lead in the soil. The findings of the assessment indicated: (1) a release had occurred at the site, (2) the release has contaminated the shallow on-site soils and, (3) the soil receptor pathway may be impacted. Additional Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) investigation activities were recommended for the site. After determining that the Site would not rank on the NPL, the Remedial Branch issued a “No Further Remedial Action Planned” decision memo on February 2, 2008, and requested that EPA Region 4's Emergency Response and Removal Branch (ERRB) conduct a Removal Site Evaluation to determine if the Site met the requirements for a Time Critical Removal. In April 2008, the ERRS mobilized to the site and excavated approximately 650 cubic yards of onsite soil. All areas of excavation were field-screened and laboratory analyzed to confirm that lead and arsenic were below EPA emergency cleanup levels. Restoration of the adjoining residential property was conducted using clean backfill and sod. The former Al's Radiator Shop property was graded and seeding with hay was spread over the property to minimize soil erosion. The removal action was completed and the site demobilized on July 10, 2009.

The site was accepted for State-funded cleanup and assigned to a DEP Project Manager in June 2011. The site assessment work plan was submitted by HSA Engineering and approved by DEP in November 2011.

Site assessment activities began in February 2012. Based on discussions with the Department, additional assessment was necessary to delineate the extent of soil and groundwater contamination. The site assessment was completed in May 2012. During the Site Assessment, 113 soil samples were collected from 19 soil borings with depths ranging from the surface to 11 feet. The only contaminants detected that exceed the SCTLs were benzo(a)anthracene (1.57 mg/kg) and benzo(a)pyrene (1.52 mg/kg). These samples were collected from SB011 at 0 – 0.5 feet. Arsenic was also detected (2.92 mg/kg) in SB019 at 0 – 0.5 feet. Four monitoring wells were installed and sampled and an onsite production well was sampled during the assessment. The only sample that contained contamination above the GCTL was from the onsite production well (PW001) with a lead concentration of 22 µg/L. There was no off site contamination detected and therefore, no off site notification was required for this site.

An additional Assessment Report was approved on September 6, 2012. The lead concentrations in PW001 were attributed to debris in the well. Attempts were made to retrieve the debris and over-purge to address the lead levels. The well was finally properly abandoned on May 30, 2013. Additional groundwater assessment in the vicinity of PW001 was completed in October 2013. The data collected indicate that lead is still present at 30 ft below land surface (bls) and 60 feet bls. The levels detected were 177 µg/L and 569 µg/L, respectively. A Source Removal Work Plan to address the limited soil contamination was approved on January 29, 2013. Source Removal Activities occurred in June 2013, during which 8.07 tons of contaminated soil was removed and

properly disposed of. The Interim Source Removal Report was received in July 2013 and approved in August 2013.

A Site Assessment Addendum Report was received and approved in September 2014. The focus of the report was to assess lead impacts in the vicinity PMW001. Both filtered and unfiltered groundwater samples were collected and analyzed. No lead was detected in any of the samples. Therefore, this site was determined to meet No Further Action Criteria as defined in Chapter 62-780.680(1). A site Rehabilitation Completion Report was submitted in October 2014 and approved on November 7, 2014. Site Rehabilitation Completion Order (SRCO) was completed on March 3, 2015. All monitoring wells on this site were properly abandoned as detailed in the Well Abandonment Report dated, May 27, 2015 and approved on May 28, 2015.