

Crosby Motors, Inc.
3506 Clifford Lane
Jacksonville, Florida
County: Duval
District: Northeast
Site Lead: Waste Cleanup Program
Approved for Cleanup: February 24, 2000
HWC # 115

Site Description and History

The approximately 2-acre site is located in Duval County, Florida in Township 01S, Range 26E, Section 32 at 30° 21' 58.9748" N, 81° 43' 28.0339" W. The site has operated as various automotive salvage-related businesses since 1968. Mr. and Mrs. Hicks were the prior owners and original operators of the salvage yard, and ceased to operate the business in the 1980's. Mr. James Crosby purchased the business and operated the yard from 1988 to 1994. Mr. Randy Taylor reportedly purchased the property in 1994. However, the current property appraiser's records indicate that Mr. and Mrs. Hicks are the current owners. The Florida Department of Environmental Regulation (FDER, now DEP) Site Investigation Section (SIS) conducted a site assessment in 1994 in response to a citizen complaint. It was reported that there was improper disposal of automotive fluids throughout the site.

Threat

The SIS report indicated polynuclear aromatic hydrocarbons (PAHs) and phthalate esters in the soil. The soil contaminants reported were consistent with 30 weight motor oil and fuel oil. Volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and inorganic metals were detected in groundwater samples. Specifically, benzene was detected at a maximum concentration of 2,200 µg/L. Naphthalene and phenol were also detected in excess of the Groundwater Cleanup Target Levels (GCTLs). Additionally, cadmium, chromium, iron, and lead were detected in the groundwater samples. Sediment samples collected from the drainage ditch, along the property boundary, contained PAHs, pesticides, polychlorinated biphenyls (PCBs), and inorganic metals. Possible sources of contamination may have been from automobile crushing resulting in the spillage of various fluids (antifreeze, waste oil, motor oil, gasoline, and brake fluid). It is also suspected that lead-acid batteries were buried at the site. Residences in the site vicinity rely on private wells for their drinking water supply.

Response Strategy and Status (June 2016)

The Crosby site was added to the DEP State-action site list in 1998. The IT Corporation, acting as the DEP State Cleanup Contractor, submitted a Site Assessment Work Plan in August 2000. The DEP requested a water well survey to be completed at this site after the initial project visit. This survey indicated two potable wells located within ¼ mile of the site. Sampling and analysis has indicated no water well contamination.

The DEP initiated an investigation into the legal status of the property and concluded that the recorded property owner, as noted in the Duval County Property Appraiser records is the legal owner.

Prior to initiation of the contamination assessment, salvage-related waste was removed from the site. In March and April 2001, IT Corporation completed the following initial fieldwork activities: removal of 490 tons of tires, 750 tons of scrap metal, and 680 tons of debris; drum sampling, characterization, and removal; building demolition and removal; fencing repairs; and final site grading.

Ground penetrating radar and electromagnetic studies were completed in September 2002 and indicated several onsite areas where material was buried. Preliminary excavation in one area indicated the presence of tires, scrap metal, and other salvage related material. In November 2002, soil samples were collected to characterize soil associated with the removal of buried debris. Laboratory analysis indicated that soil contamination was limited to petroleum products and some metals. Additional contamination was noted in the adjacent small ditch located northwest of the site.

Shaw Environmental, formerly IT Corporation, initiated excavation of contaminated soil and buried debris at the Crosby site in December 2003 and completed the excavation in February 2004. The preliminary groundwater assessment was conducted in May 2004, and indicated that groundwater exceeded the GCTLs for methyl tert-butyl ether (MTBE) and benzene.

Eight monitoring wells were installed during additional groundwater assessment activities conducted in November 2005. The groundwater analytical results indicated concentrations of total recoverable petroleum hydrocarbons (TRPH), MTBE, and benzene exceeded GCTLs. The soil assessment and delineation activities were completed, and an assessment report submitted to the DEP. The report indicated an area of soil near the east side entry that should be removed and that additional delineation is required before a Remedial Action Plan (RAP) could be developed.

In March 2008, Shaw completed soil delineation for lead and PCB contamination areas. A RAP to address soil contamination was submitted to the DEP in May 2008, and approved in February 2009. The RAP includes two phases of soil remediation: excavation and disposal of PCB and lead-contaminated soil; and in situ land farming to address petroleum-contaminated soil.

The excavation phase of the remedy was completed in February 2010. Approximately 1,464 tons of impacted soil were disposed of and replaced with clean fill.

In October 2010, Shaw completed groundwater assessment using Direct Push Technology in order to delineate the MTBE plume. Based on the results of the results of the assessment, Shaw proposes to install additional monitoring wells in order to monitor the offsite MTBE plume. The DEP concurred with the recommendation.

Based on the November 2010 Annual Groundwater Sampling Report, benzene and MTBE were the only contaminants that exceeded their respective GCTLs. Shaw recommended removing PCB and lead from the list of groundwater contaminants of concern, since they have not been detected in groundwater samples above the GCTL.

Shaw installed 11 monitoring wells in April 2011 in order to complete delineation of the offsite MTBE plume and update offsite notice to reflect the current areal extent of the plume.

Based on the results of the October 2014 annual groundwater sampling event completed by CB&I (formerly Shaw), the MTBE plume extends offsite in all directions and several samples exceeded the Natural Attenuation Default Source Concentration for MTBE.

At the request of the DEP, Geosyntec Consultants (Geosyntec) completed a Project Understanding and Proposed Path Forward report in April 2015. The report recommended additional soil and groundwater assessment to determine if the land farming component of the 2008 RAP was still necessary and if there was an upgradient source of MTBE contamination in the groundwater.

The DEP approved a Supplemental Site Assessment Report prepared by Geosyntec. The report included recommendations to reduce the size of the contaminant plume that is likely offsite. The DEP has been unable to secure access to the Amtrak property located immediately downgradient to confirm offsite contamination.

In August 2015, the Department sent correspondence to the current property owner suggesting a site closure based on current zoning be pursued.

Schedule

The DEP is waiting for a response from the property owner. The next groundwater monitoring event will be completed in May 2017.