

Royal Bumper Plating
5607 East Broadway Avenue
Tampa, FL
County: Hillsborough
District: Southwest
Site Lead: Bureau of Waste Cleanup
Approved for Cleanup: March 21, 2000
Delisted: March 4, 2014
ERIC ID # 3909
HWC # 138

Site Description and History

The Royal Bumper Plating Co. (a/k/a – Royal Chrome Bumper Plating Co.) site is located at 5607 East Broadway Avenue, in east Tampa, near the large CSX Ucita rail yard in a mixed commercial/industrial/residential community in Section 15, Township 29S, Range 19E at 27° 57' 47.6439" N, 82° 23' 34.7909" W. Surrounding businesses include numerous auto salvage and repair facilities, a tank truck shipping firm, and a bulk cement plant across East Broadway Avenue. Residences are located a few hundred yards from the site on 56th Street. The surficial water table in this area is shallow and the site is subject to frequent flooding during rainfall events.

The facility operated as a bumper and chrome plating facility from approximately 1955 to 1992. Nickel and chrome plating was reportedly performed at the site. During the period of facility operations, State, and Federal hazardous waste violations were noted. In November 1984, Royal Bumper Plating and the Florida Department of Environmental Regulation (FDER, now DEP) entered into a Consent Order requiring the facility to submit a closure plan for an unlined surface impoundment used for waste discharge. A Closure inspection by FDER in June 1988 revealed that materials excavated from the impoundment were not being properly handled as hazardous waste. Water from the impoundment was not contained or tested before being discharged onsite. During a site inspection in December 1992, FDER discovered that the site was abandoned. Several electroplating vats still containing liquid were noted. The secondary containment under the vats also contained a liquid. The US EPA completed a removal action at the site in March 1995.

Threat

Onsite soils were contaminated with metals at concentrations above acceptable levels for both industrial and residential land use and were acting as a source of groundwater contamination at the site. Groundwater in the surficial aquifer at the site was contaminated by metals and chlorinated solvents at concentrations exceeding drinking water standards. While the surficial aquifer is not used as a potable drinking water source in this area, this contamination poses a threat to the underlying Floridan aquifer, the primary drinking water source in the area. The Floridan aquifer is located approximately 28 feet below ground surface at the site and is connected to the surficial aquifer in some areas of the County through discontinuous clay layers.

Response Strategy and Status

The site was referred to the Bureau of Waste Cleanup for State-funded cleanup in November 1999. The initial Site Assessment Report (SAR) was completed for the DEP in June 2001. Soil and groundwater sampling conducted during the site assessment indicated that concentrations of arsenic, chromium, copper, nickel and vanadium exceeded State soil cleanup target levels (SCTLs) onsite. Surficial aquifer groundwater in 7 of 15 monitoring wells exceeded Florida's groundwater cleanup target levels (GCTLs) and primary drinking water standards for chromium, nickel, and vanadium. Chlorinated hydrocarbons, including tetrachloroethene (PCE), trichloroethene (TCE) and vinyl chloride, were also detected above GCTLs in three of the monitoring wells.

A review of the SAR results suggested that site related soil contamination might extend to offsite properties. Additional offsite assessment to determine the horizontal and vertical extent of contamination was performed during the summer of 2002. Results indicated that the site-related soil contamination was located on the Royal Bumper Plating Site property and the adjacent McKenzie Tank Lines and A&A Auto Repair properties, south and east of the site, respectively. An estimated 5,500 cubic yards exceeded State soil cleanup target levels for unrestricted use.

A decision memorandum (DM) was signed on May 9, 2006. The DM included the following: excavation and offsite disposal of contaminated onsite soils exceeding commercial/industrial SCTLs; interim institutional controls (a restrictive covenant - RC) for remaining soils exceeding residential SCTLs and a restriction on the consumptive use of groundwater; excavation, and offsite disposal of contaminated offsite soils exceeding residential SCTLs; and Natural Attenuation with Monitoring (NAM) for contaminated groundwater.

An expedited schedule for the remedial action resulted in approval of the remedial design and tasking of the major offsite cleanup activities in June 2006. Excavation of all three affected properties has been completed. Monitoring wells were reinstalled and groundwater sampling was performed periodically between 2006 and 2011.

By 2011, monitoring indicated that the concentration of all contaminants was below their respective MCLs, with the exception of arsenic, which continued to fluctuate over a narrow range around the 10 mg/L MCL in one well. Based on this information, DEP approached the real property owner in 2012 with a plan to revise the temporary RC to become permanent and issue a Site Rehabilitation Completion Order (SRCO) with conditions in accordance with Chapter 62-780(680)(2) Florida Administrative Code. The restrictions included limiting the property use to commercial/industrial use and a restriction on installing any new wells on the property. The property owner agreed and DEP's consultant completed a Site Rehabilitation Completion Report in November 2012, which was reviewed and approved by DEP staff. The RC was signed by the real property owner and the Director, Division of Waste Management (for DEP) in December 2013 and was recorded by the Hillsborough County Clerk of the Court on December 13, 2013. An SRCO with conditions was issued on March 4, 2014, the monitoring wells were properly plugged and abandoned in April 2014 and the plug and abandon report was approved by DEP on May 6, 2014.