

Standard Auto Bumper Corporation
2500 West 3rd Court
Hialeah, Florida
County: Miami – Dade
District: Southeast
Site Lead: EPA
Placed on National Priorities List: October 4, 1989
Delisted: October 27, 2007
HWC # 084
ERIC ID # 3856

Site Description and History

The Standard Auto Bumper site is located in an industrialized area of northeast Miami – Dade County, approximately six miles northwest of downtown Miami in Section 07, Township 53S, Range 41E at 25° 50' 41.4288" N, 80° 17' 21.2576"W. The property area is approximately 42,000 square feet. The property is bordered on the north by Quality Manufacturing Products, Inc. and World Metals; to the east of West 3rd Court by Nela Junk Yard; to the south by J. Mori Painting, Inc.; and, to the west of the railroad track by Gilda Bakery, Inc. The Red Road Canal is located approximately 300 feet west of the site, running parallel to West 3rd Court and the railroad.

Prior to 1959, the property was occupied by two facilities: located on the southern half of the site was a slaughterhouse and on the northern half of the property, a furnace/smelting company. A chromium and nickel plating facility owned by Standard Auto Bumper Corporation began operations in 1959. Operations continued through 1992. Wastewater from the electroplating and stripping process was discharged to a drainage ditch/swale area west of the facility until 1972, when a wastewater treatment system was constructed to convert hexavalent chromium to trivalent chromium. Between 1972 and 1979, approximately 5,760 gallons of wastewater per day were processed and discharged to the underground, slab-covered drainage trench located adjacent to the treatment tanks. In 1979, use of this trench was discontinued and effluent discharge to the Hialeah sewer system was initiated. With the implementation of the wastewater treatment system and permitted discharge to the sewer system, releases of hazardous substances to the environment diminished, although Dade County authorities documented unauthorized discharges of treated and untreated wastes to the ground. In early 1993, Standard Auto Bumper ceased operations and abandoned the facility leaving tanks with processing water and drums onsite.

Threat

Elevated levels of heavy metals including nickel and chromium existed in soils at levels above concentrations acceptable for direct exposure under an industrial use scenario and at concentrations that posed a threat of contamination to the underlying groundwater. Excavation and off-site disposal of metals contaminated soils has removed the majority of the threat with the exception of those areas adjacent to or under buildings next to the site where excavation was not

feasible. Adjacent property owners have been notified of the elevated soil contaminant levels, and instructed to follow appropriate handling and disposal measures for any soils requiring excavation in the future.

The isolated areas of nickel and chromium groundwater contamination in the Biscayne Aquifer on and immediately adjacent to the site have diminished in response to the prior soil removal activities. The February 2001 groundwater monitoring event has confirmed that the groundwater contaminant levels have declined such that groundwater quality meets State and federal drinking water standards. The Superfund well survey indicated that there are no private wells, to allow direct contact or ingestion of site groundwater contaminants.

Response Strategy and Status

An expanded Site Investigation (ESI) was conducted at the site in March 1987 by NUS Corporation, the U.S. EPA Region IV Field Investigation Team (FIT). Numerous soil and groundwater samples were collected at the site as part of the ESI. Elevated concentrations of heavy metals were found in the former disposal areas and other areas on-site. Similar contaminants were identified in the soils, groundwater, and waste effluent samples, indicating that the source of groundwater contamination was soil leachate from the discharge areas. Polynuclear aromatic hydrocarbons (PAHs) and pesticides were detected in soils but were determined to be related to creosote products in the adjacent railroad ties and asphalt paving and not related to site operations. No groundwater samples contained concentrations of any organic compounds above federal or State drinking water standards. The ESI recommended excavation of the contaminated soil from particular areas on-site to decrease the source of metal contamination.

Standard Auto Bumper entered into a consent agreement with DERM in 1988 to implement a Remedial Action Plan (RAP). The objectives were to address the extent of contamination through design plans for soil removal, groundwater monitoring and facility improvements; and to establish time schedules and estimate costs for remediation. Before work outlined in the RAP began, an Administrative Order (AO) for Removal between EPA and Standard Auto Bumper was executed, requiring removal of contaminated soils.

The site was listed on the National Priorities List in October 1989. In 1989, under a Removal Order, the Potential Responsible Parties (PRP) excavated the soil and sludge in the bottom of the slab-covered trench and sent it to the Chemical Waste Management facility in Emelle, Alabama for disposal. Soils excavated from the drainage ditch and south areas of the site were not deemed hazardous waste and were sent to the local landfill. Confirmatory samples indicated that remaining site soils after excavation contained nickel above the cleanup concentration. Due to the financial inability of the PRP to continue cleanup activities, EPA took over site activities using Superfund money in 1991. The EPA separated soil and groundwater actions into two operable units (OU).

The Remedial Investigation/Feasibility Study (RI/FS) for soils was completed in September 1992. The results indicated that much of the soil contamination was located in the former drainfield area north of the facility building and the surface drainage areas west and south of the building. Soil contamination was observed at depths up to six feet below land surface at the top of the groundwater table.

The EPA Soil (OU 1) Record of Decision (ROD) was issued in September 1992, documenting the selected soil remedy. The ROD specified that soil with concentrations of total chromium, hexavalent chromium or nickel above 519 ppm, 52 ppm or 370 ppm, respectively, would be excavated and disposed at a Florida Class I lined landfill. Groundwater monitoring for a period of up to 5 years was also specified to determine the effectiveness of the source remedy.

In September 1993, EPA and its contractor mobilized to the site for the soil removal action. Initial actions included the removal of excess debris found on-site and excavation of a fuel oil underground storage tank. Soil removal activities began in January 1994 and were completed in September 1994. The removal action included all hazardous material in and around the facility including vat contents of low pH metal plating solutions, sump/berm contents containing waste sludge associated with the plating process, a small volume of chemicals and associated wastewater. Approximately 10,000 tons of contaminated soil was removed. All soils on and surrounding the site that exceeded the cleanup criteria were removed, except where excavation would compromise the integrity of a building foundation or roadway. Contaminated soil left in place and undisturbed includes that immediately adjacent to or under the Gilda Bakery building, the Quality Manufacturing building and West 3rd Court.

The groundwater (OU 2) RI/FS was conducted between 1991 and 1993 and included periodic sampling of groundwater to determine the extent of groundwater contamination. The results of the four (4) sampling events confirmed nickel and chromium groundwater contamination above drinking water standards, but showed that concentrations were also progressively and significantly declining over time. By the end of 1992, chromium complied with the 100 ug/L drinking water standard and nickel exceeded the 100 ug/L standard in only two on-site and one off-site monitoring wells, with a maximum concentration of 270 ug/L. There was no discernable groundwater contaminant plume.

The EPA signed the OU 2 ROD in December 1993. The major components of the selected groundwater remedy included natural attenuation and monitoring of groundwater contaminants for a minimum of 18 months and until federal and State drinking water standards are met, and groundwater-use controls on properties with contaminated groundwater. The groundwater remedy required that the OU 1 soil removal be implemented.

The EPA began the prescribed groundwater monitoring in May 1994. Quarterly groundwater sampling was conducted at the fourteen existing monitoring well locations. All of the samples were analyzed for parameters found on the OU 2 ROD Target Analyte List (TAL), except cyanide. EPA completed its Superfund State Contract obligation to monitor the fourteen wells in May 1995. At that time, DEP took over the monitoring duties.

In April 1999, the monitoring schedule was altered from quarterly sampling of fourteen (14) groundwater monitoring wells to semi-annual sampling of three (3) groundwater monitoring wells as a result of sustained contaminant levels below MCLs in most of the monitoring wells. DEP completed the first semi-annual sampling in April 1999, which indicated that no monitoring wells exceeded the Florida Drinking Water Standards. The February 2001 groundwater monitoring data confirmed that groundwater at the site continues to meet the federal and State Drinking Water Standards.

The EPA completed the Superfund Five Year Review for the site in November 2004 to support the Agency's evaluation of possible site delisting from the National Priorities List. The EPA in cooperation with the DEP and Dade County identified the necessary institutional controls to assure that industrial land use restrictions are maintained on-site and to assure appropriate future management of currently inaccessible contaminated soils that remain due to their location under existing buildings. DERM established a "tickler system" as the institutional control to track all permit requests for construction activities on-site and on the adjacent properties to assure that any remaining contaminated soils exposed during property development activities are managed according to federal and State regulations. The on-site property owner filed the restrictive covenant in October 2007.

The EPA issued a notice of intent to delist the site in July 2007 in the Federal Register, following establishment of the necessary institutional controls. The site was delisted on October 27, 2007. Five Year Reviews, as required by Superfund, will continue to be conducted by EPA to confirm that the remedy and institutional controls remain protective and effective following delisting.