Raleigh Street Dump
Western End of Raleigh Street
Tampa, Florida
County: Hillsborough
District: Southwest
Site Lead: EPA
Placed on National Priorities List: June 30, 2009
ERIC ID # 3935

Site Description and History

The Raleigh Street Dump Site (RSDS) is a 5.2-acre site located in an industrial and heavy commercial area at the western end of Raleigh Street, near Delaney Creek, in Tampa in Township 29S, Range 19E, Section 33 at 27° 54′ 54.9387″ N, 82° 25′ 38.5597″ W. The site is bisected by the Raleigh Street extension, with the area to the north consisting of undeveloped densely vegetated land bounded to the west by a salt marsh. The area of the site south of Raleigh Street is occupied by Tampa Fiberglass, a manufacturer of septic fiberglass tanks and shells, also bounded by a salt marsh to the south that is part of Delaney Creek. The central and northern portions of the site are owned by Atlantic Land and Improvement Company (ALI), a subsidiary of CSX Transportation.

The site was used to landfill battery casings, slag, trash and construction debris from approximately 1977 into the mid 1980's, with the majority of the dumping occurring on the northern half of the site. A battery recycling facility (Chloride Metals, Inc.) located at the eastern end of Raleigh Street is believed to have contributed to the dumping on the site. A composite soil sample collected by the US Environmental Protection Agency (EPA) from the southern portion of the battery dump area during its 1980 investigation confirmed lead (41,000 mg/kg), arsenic (70 mg/kg) and antimony (410 mg/kg) contamination at the site. From 1988 to 1990, Hillsborough County Environmental Protection Commission (HCEPC) conducted enforcement actions against Tampa Fiberglass following complaints of improper disposal of wastes at the site. The HCEPC investigations confirmed dumping of waste oil, sludge, resins and other trash as well as poor housekeeping practices in the main plant area. Tampa Fiberglass removed much of the contaminated debris from the northern portion of their property in October 1991 and provided sample results to HCEPC that showed the remaining onsite material to be non-hazardous.

A Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site inspection by the Florida Department of Environmental Regulation (FDER, now DEP) in 1994 confirmed elevated levels of metals, organics, pesticides and polychlorinated biphenyls (PCBs) in onsite soils and sediments as well as metals in unfiltered groundwater samples from a temporary well. The EPA conducted an Expanded Site Inspection in 1998 that included the installation of seven temporary monitoring wells along with soil and sediments sampling, and confirmed elevated concentrations of previously detected contamination.

Threat

Surficial aquifer groundwater at the site contains contaminants that exceed the State of Florida groundwater standards. The principle use of the aquifer is for lawn irrigation and livestock watering. While no contamination has been confirmed in the underlying Floridan Aquifer,

potential contamination of that drinking water source remains a concern. The three to four-foot thick clay separating the surficial aquifer from the Floridan is discontinuous in the area, with evidence of sinkholes that could create conduits between the two aquifers.

Onsite soils and wetland sediments have been remediated to commercial/industrial land use criteria and site-specific sediment cleanup levels respectively, along with site specific leachability criteria identified in the EPA Record of Decision. Restrictive covenants have been put in place by the onsite property owners to ensure that future land remains commercial/industrial and compatible with the site remedy. Groundwater use is restricted until groundwater meets cleanup goals at the site.

Response Strategy and Status (December 2020)

The site was placed on National Priorities List by the EPA for Superfund cleanup, as authorized by CERCLA, in June 2009, with concurrence from DEP.

A Remedial Investigation (RI) was conducted in two phases at the RSDS, with Phase II completed in August 2002. An ecologic risk assessment was completed in 2005. Supplemental RI sampling was conducted in March and October 2006. A Feasibility Study (FS) was completed in May 2007, which incorporated the additional data collected during the Supplemental RI and identified and evaluated remedial action alternatives that could be used for site cleanup.

Data collected during the RI and FS confirmed that surface and subsurface soils are contaminated with metals (primarily lead, zinc, antimony, and arsenic) and carcinogenic PAHs at depths up to three to four feet below land surface over much of the site. Metals contamination was also confirmed in sediments in the "bird's foot" wetland area in the north/central portion of the site. The principal contaminants detected in three of the five monitoring wells in the surficial aquifer during the Supplemental RI include antimony, arsenic, lead; all of which exceeded primary drinking water standards. Cadmium and thallium were also detected in groundwater above standards but not in soils. Iron and manganese exceed the State secondary drinking water standards in all five of the surficial aquifer monitoring wells. Groundwater samples collected from the five onsite monitoring wells installed into the upper portion of the Floridan aquifer (approximately 47 feet below land surface) and the two onsite private wells did not detect any contaminants above primary drinking water standards. Iron was observed above the secondary standard in all Floridan wells including the background well. Manganese exceeded the secondary standard in one monitoring well and the Tampa Fiberglass private well.

A proposed plan was released to the public in June 2007 which outlined the proposed remedy for the site. The EPA Record of Decision was signed in June 2009, documenting the selected Superfund site remedy, which will consist of soil and sediment removal, with soil cleanup goals based on commercial/industrial land use and the protection of groundwater and site specific sediment cleanup goals, based on the protection of the ecological environment. An estimated 12,000 cubic yards of contaminated soils and sediments will be excavated and disposed offsite at a permitted disposal facility. Groundwater remediation will be accomplished using monitored

natural attenuation. It is anticipated that contaminant concentrations in groundwater will naturally decline following removal of the soil contaminant sources.

Clearing of areas of the site, perimeter fence construction and additional onsite soil and groundwater sampling was conducted in 2010, to limit site access and collect data to support remedial design of the remedy. Results are documented in the August 2010 Supplemental RI report.

EPA has signed a consent decree with Atlantic Land & Improvement Company (ALI) that requires the potentially responsible party (PRP) to complete design and cleanup of the site. The consent decree was lodged with the US District Court in June 2011.

A remedial design work plan was submitted in November 2011. The 30 percent design report was submitted in May 2012 and included the results of additional soil sampling to support designation of excavation limits, along with a wetland remediation plan. Following submittal of the 90% design and incorporation of review comments provided by EPA, DEP and other stakeholders, the final design was submitted and approved by EPA in September 2012.

A remedial action work plan was provided in November 2012. Site preparation for implementation of the soil removal was initiated in early 2013. Dewatering and water treatment were necessary during the soil excavation efforts to facilitate removal of contaminated soils due to heavy rains. Removal of contaminated soils and wetland sediments and site restoration with clean backfill and revegetation was completed in October 2013. A total of 33,268 tons of contaminated soils and sediments were excavated and disposed of offsite at a permitted disposal facility. Of that total volume, approximately 10,000 tons of contaminated soils were treated onsite to render the soils non-hazardous prior to offsite disposal. As part of site remediation and restoration, the “bird’s foot” wetland area was expanded, invasive species were removed, and wildlife habitat enhancements were implemented.

A Construction Completion Report was provided to EPA and DEP in April 2014, summarizing activities conducted as part of the site remedy. A Remedial Action Report was submitted in June 2014 with supporting soil and groundwater laboratory reports, disposal manifests, surveyed as-builts and post-removal groundwater data, to demonstrate that the remedy met the requirements of the ROD and remedial action work plan. A revised RA report was submitted in September 2014 in response to EPA and DEP review comments. Additional soil sampling was conducted in several onsite cells and two adjacent debris areas to verify that that all soils with contaminant concentrations above remedial goals had been removed. Based on the sampling results, an additional 66 tons of soil were removed from one cell in May 2015. The revised May 2015 RA report was provided in June, documenting the additional activities. EPA approved the remedial action report and completion of the soil remedy on June 16, 2015.

EPA issued an “Excellence in Reuse” Award for this Superfund site at an onsite awards ceremony in April 2017.

Schedule

Maintenance and monitoring of wetland restoration is ongoing to ensure successful re-establishment of wetland vegetation and improved tidal connection into the wetlands.

Quarterly groundwater monitoring is underway to confirm the effectiveness of the source remedy and document the progress of natural attenuation of contaminants in groundwater. Groundwater monitoring will continue until it is confirmed that remedial goals have been met.