

Eagle – Picher Industries
5901 West Beaver Street
Jacksonville, Florida
County: Duval
District: Northeast
Site Lead: Waste Cleanup Program
Approved for Cleanup: April 12, 2012
ERIC ID # 3951

Site Description and History

The Eagle – Picher Industries site is located at 5901 West Beaver Street (US Highway 90) in Jacksonville, Duval County in Township 02S, Range 25E, Section 13 at 30° 19' 30.73" N, 81° 45' 0.65" W and occupies an area of approximately 1 acre. Eagle Picher manufactured industrial grade latex, solvent-based paint and surface primers at the site until 1980. In 1980, Plas-Chem Coatings, Inc. began manufacturing paint and surface primers at the site until 1989. From 1989 to 1993, the property is believed to have been vacant. The principal onsite structure is a 17,570-square foot one story building that currently houses T&T Manufacturing, Inc. T&T Manufacturing purchased the building in 1997, but has been located onsite since 1993 when they began manufacturing polyethylene bags.

In 1989, soil samples collected onsite exceeded the soil cleanup target levels (SCTLs) for leachability in groundwater for toluene, ethyl benzene, and total xylenes. In 1991, Plas-Chem entered into a Consent Order with the Florida Department of Environmental Regulation (FDER, now DEP) addressing the assessment and remediation of soil contamination. A Contamination Assessment was performed in 1992 by ATEC Associates, Inc. (ATEC) and a Remedial Action Plan (RAP) was generated and implemented for the soil and groundwater contamination. The remedy consisted of a groundwater pump and treat system. Additional assessment activities performed in 2001 and 2002 identified significant benzene, ethyl benzene, toluene, and xylenes (BTEX) contamination beneath the onsite building. The pump and treat remediation system was modified to include air-spargers and soil vapor extraction, and began operation in 2002. The groundwater remediation system remained operational until 2005, when Eagle – Picher filed for Chapter 11 bankruptcy. In late 2005, ATC Associates, Inc. (ATC) performed additional soil and groundwater assessment activities for Eagle – Picher. The additional assessment identified two main areas of groundwater and soil contamination; both in the area of the onsite building.

In 2006, Eagle – Picher Industries withdrew its status as a corporation and authority to transact business in Florida, and all contamination assessment activities ceased.

Threat

Previous groundwater and soil investigations revealed contamination of onsite soils as well as the surficial aquifer both onsite and offsite. Onsite soils were contaminated with xylenes and ethyl benzene in excess of the applicable Soil Cleanup Target Levels (SCTLs). After remedial activities were completed, soil contaminant concentrations dropped below the leaching SCTLs for BTEX, but BTEX constituents persist in the vadose zone. Onsite and offsite groundwater was initially contaminated with BTEX in excess of the applicable Groundwater Cleanup Target Levels (GCTLs). The July 2012 groundwater data indicated only benzene and total xylene concentrations remained in excess of GCTLs. The contaminated groundwater is a potential threat to two

Jacksonville Electric Authority Major Grid potable supply wells that are located between 1 and 2 miles from the site.

Response Strategy and Status (July 2021)

In 2010, the DEP completed a preliminary assessment of the site and recommended a CERCLA site investigation of the site. The CERCLA site investigation was completed in 2011 and, based upon the results, the site was recommended for state action.

The Eagle – Picher Industries site was placed on the State Action List in April 2012. In July 2012, The DEP contractor (E&E) performed a site visit and walkover. During the site visit E&E located all previously installed monitor wells, performed depth-to water measurements, and collected groundwater samples from all the identified monitor wells. E&E also conducted an engineering evaluation on the operational ability of the existing groundwater soil vapor extraction and air-sparge remediation system for possible reuse. E&E discovered the system had not been operated since 2005, and the electrical power was shut off. E&E concluded, upon careful examination and evaluation of the system, that the cost to repair and/or retrofit the existing treatment system for possible future operation would likely exceed the cost of installing a new, replacement remediation system.

In July 2012, E&E also conducted groundwater sampling to establish a baseline contaminant concentration map. Groundwater data indicated benzene and total xylene concentrations greater than the Groundwater Cleanup Target Levels (GCTLs) in two and five wells, respectively. Low concentrations of toluene and ethyl benzene were also detected; however, these concentrations were below the respective GCTLs. The groundwater plume is located onsite. Based upon the contaminant concentrations detected during the baseline-sampling event, the DEP determined active groundwater remediation was not needed at this time. The DEP also determined that, based upon the soil analytical results in the 2001 CERCLA site investigation report, additional soil contamination assessment activities are required. In April 2014, the first semi-annual groundwater monitoring event was performed. Data indicated groundwater contaminant concentrations and trends similar to those established by the July 2012 sampling event.

In July 2014, the limited scope soil assessment was completed. Data indicate soil concentrations of VOCs greater than the applicable SCTLs for leachability to groundwater. The samples were subsequently prepared using the SPLP and leachate samples exhibited VOC concentrations of VOCs greater than the applicable GCTL.

In January 2015, the site was switched from E&E to Geosyntec Consultants (Geo). Geo proposed the additional installation of a shallow monitor well along West Beaver Street to delineate contaminants in the shallow surficial aquifer and installation of a deep monitor well to complete vertical delineation of contaminants in the groundwater. Additional soil and groundwater samples were taken to adequately characterize and define potential sources for groundwater impacts.

Additional soil assessment activities were completed to characterize the lateral and horizontal extent of the remaining soil contamination. Based on the results of the additional assessment, the

Department requested costs for an interim source removal work plan to address soil exceeding applicable cleanup target levels.

In November 2016 Geosyntec Consultants submitted a Remedial Action Plan to the DEP for an excavation of the site to be completed and air sparge used to reduce contaminant levels. After approval, the remediation began in March 2017. The loading zone and east side of the property were excavated in a trenching manner down to 5ft below land surface and fitted with air sparging equipment to facilitate volatilization of the contaminants. After sparging activities were completed the site was backfilled and set to be monitored quarterly to assess remediation efficacy. Following quarterly monitoring, the May 2018 Groundwater Monitoring Report showed rebound of contaminants into the groundwater and indicated that vertical delineation has not been accomplished.

Groundwater impacts have migrated off-Site to the east and northeast. Assessment activities conducted in 2020 indicate horizontal and vertical delineation of off-Site groundwater impacts has been completed. BTEX and naphthalene concentrations in the surficial aquifer (approximately 10 to 32 ft bls) exceed GCTLs and NADCs. Current groundwater data indicates the highest groundwater contamination is located near the concrete loading dock (DPT006 and MW-29) in the surficial aquifer. The 2020 groundwater contaminant concentrations indicate generally stable concentrations.

Schedule

The DEP contractor will recommends preparation of a remedial alternatives evaluation to address the onsite NADC exceedances observed in the surficial aquifer between 10 and 32 ft bls near the concrete loading dock (DPT006 and MW-29) that appear to be acting as a source to the downgradient groundwater plume due to the northeastward hydraulic gradient present within the surficial aquifer.

Annual groundwater monitoring will continue.