

Jackson Atomics – Former
2284 Edison Avenue
Jacksonville, Florida
County: Duval
District: Northeast
Site Lead: Waste Cleanup Program
Approved for Cleanup: May 3, 2007
ERIC ID # 3925

Site Description and History

The former Jackson Atomics site is located at 2284 Edison Avenue, Jacksonville, Duval County, Florida in Township 02S, Range 16E, Section 15 at 30° 19' 21.2024" N, 81° 41' 20.6369" W. The site is situated on two narrow parcels of property oriented in a north-south direction. The business was used for the storage of dry cleaning equipment and chemicals. Florida Division of Corporations records indicate that Jackson Atomics filed as a corporation in November 1975. However, the building was reportedly constructed in 1965. An administrative dissolution was filed in August 1994. The building was razed in late 1999 and only a deteriorated concrete pad from the foundation remains, which covers most of the northern property parcel.

The Jackson Atomics site is located in an area utilized by light industrial and commercial businesses. The site is bounded by Jacksonville Electric Motor Exchange to the west, the Towers Contracting equipment storage lot on the east, Greens Heating and Air Conditioning to the southeast, the Harris Mortuary to the northeast and the Tru-Way Church of the Risen to the northwest. A vacant lot is located to the north. The Bert Morsch Lumber State-funded hazardous waste cleanup site is located one block northwest of the site.

Threat

Soil and groundwater sampling was conducted in 2002 for the Preliminary Contamination Assessment Report. The report showed tetrachloroethene (PCE) was found in shallow groundwater samples. Several of the PCE detections exceeded the federal and state Maximum Contaminant Level (MCL) for that contaminant. Soil samples collected around the foundation of the building indicated PCE at levels that exceeded the State Soil Cleanup Target Level (SCTL) for groundwater leachability (30 µg/kg). Elevated levels of iron were detected, exceeding the State's secondary MCL.

The majority of the site area is served by the Jacksonville municipal water system. The nearest wellfield is the McDuff Avenue wellfield, located between 1.2 and 1.4 miles southwest from the site. The Hendricks Avenue wellfield is located approximately 1.9 to 2.7 miles east-southeast of the site. Groundwater flow direction at the site was determined to be towards the east with a slight north and south component.

Response Strategy and Status (December 2020)

In November 1998, a contractor preparing to demolish the Jackson Atomics building discovered large amounts of chemicals. On November 13, 1998, the City of Jacksonville and Florida Department of Environmental Protection (DEP) Bureau of Emergency Response (BER) conducted

a site visit. A number of containers were identified in poor condition both inside and outside the building. The business owner's wife was subsequently contacted by DEP BER regarding the site. She indicated that she did not have the financial resources to assess and cleanup the site. On November 16, 1998, DEP notified the former Jackson Atomics corporate officers regarding the site disposition and to discuss cleanup options.

On February 9, 1999, a DEP contractor removed sixteen drums of chemicals and contaminated debris. The materials included waste oil, chromate compounds, sulfuric acid, adipic acid (powder mixed with naphthalene), malic acid (powder), xylene/benzene mixture, terpenes, ethylene monobutyl ether, methylene chloride, and PCE. On November 7, 2000, due to the lack of a financially viable of the potential responsible party (PRP), the DEP Northeast District requested technical assistance from the DEP Site Investigation Section (SIS) in Tallahassee. On June 11, 2001, DEP's Office of General Counsel sent a letter to the PRPs regarding their potential liability and a draft Order for Site Access. The Order for Site Access was issued October 22, 2001 and forwarded to the PRPs. The PRPs did not request a formal hearing regarding the site access order, and the Final Order was executed November 30, 2001.

On June 24, 2003, based on the magnitude and extent of soil and groundwater contamination, the DEP Northeast District requested that Jackson Atomics site be accepted for State-funded cleanup. On August 20, 2003, the DEP Waste Site Cleanup Section forwarded the Jackson Atomics site to the DEP CERCLA Site Screening Section for Hazard Ranking System evaluation. The Jackson Atomics site was accepted for State-funded cleanup on May 3, 2007. Site assessment activities began in June 2011 by Golder Associates Inc. (Golder) and were completed in June 2012. The final Site Assessment Report was submitted to DEP on November 14, 2012.

Assessment activities found chromium and polycyclic aromatic hydrocarbons (PAHs) to be the contaminants of concern in soil found above SCTLs for direct exposure and leachability. The exceedances for PAHs in soil were found in a cluster located in the southern parcel and in two isolated spots on the northern parcel. The exceedances found above leachability for chromium were in one boring location in three samples on the northern parcel.

The only contaminant above the Groundwater Cleanup Target Level (GCTL) was PCE detected in MW-3 at 6.6 µg/L, which exceeds the GCTL of 3 µg/L.

Offsite notification was provided in December 2012 to two property owners regarding contaminated groundwater and one property owner regarding contaminated soil.

The final Site Assessment Report was approved by the Department in December 2012. An interim source removal was conducted on April 24 and 25, 2014 addressing contaminated soils above the SCTL for commercial/industrial use.

Four events of groundwater monitoring were conducted in June 2014, November 2014, February 2015, and May 2015. Groundwater samples were below GCTLs for VOCs the last two sampling events.

An additional source removal was conducted on January 6, 2017 to address the benzo(a)pyrene and PAHs above leachability that remained in the 0 to 0.5 foot Bgs zone. Approximately 7.7 tons of contaminated soil were removed from the two areas. Following this, FDEP requested that another event of groundwater monitoring be conducted. During this event in May 2017, one intermediate well was found to have PCE concentrations above GCTL and three intermediate wells with concentrations above MDL.

DEP has approved the Limited Source Removal Report summarizing the source removal activities that occurred in January 2017. Groundwater monitoring was completed in May 2017.

There are areas of soil remaining onsite and offsite with concentrations above the residential and commercial/industrial SCTL; therefore, institutional controls will be necessary to obtain a site rehabilitation order (SRCO).

Quarterly groundwater monitoring was completed in September 2017 and December 2017 with two clean sampling events. Golder submitted a Groundwater Monitoring Report in June 2018 that recommended conditional closure.

In a memorandum dated June 7, 2019, the Department recommended that Golder install a replacement well and conduct another round of soil and groundwater sampling before moving forward with a possible conditional closure.

On January 9, 2020, Golder submitted a Groundwater and Soil Sampling Report. PCE was detected in the newly installed monitoring well JA-4DR above the GCTL. Soil samples were below industrial/commercial STCLs. Golder recommended two quarterly groundwater monitoring events in 2020. FDEP approved the Groundwater and Soil Sampling Report on February 28, 2020.

On September 28, 2020, Golder submitted the Second Quarterly Groundwater Report. GCTLs were exceeded in five of six intermediate monitoring wells. Golder recommended a third quarterly monitoring event and Offsite Notification. After Offsite Notification was completed, FDEP approved the Second Quarterly Groundwater Report and Offsite Notification package on January 7, 2021.

On November 4, 2020, Golder submitted a PFAS Groundwater Sampling Report. PFAS (perfluoroalkyl and polyfluoroalkyl substances) was not detected above the GCTL of 70 ng/L at any of the monitoring wells. Golder recommended that no further PFAS assessment be conducted at the site. FDEP approved the PFAS Groundwater Sampling Report on January 4, 2021.

Schedule

Golder is currently scheduled to conduct groundwater monitoring for VOCs in March 2021.