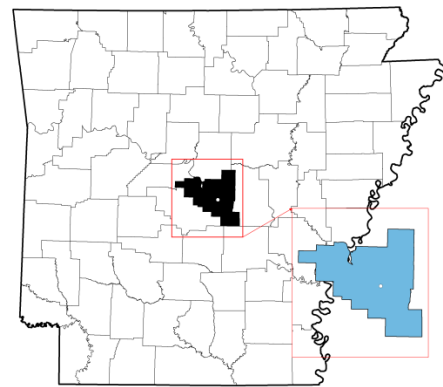




STATE PRIORITY LIST SITE SUMMARY

Arkansas Department of Energy & Environment, Division of Environmental Quality
5301 Northshore Drive, North Little Rock, AR 72118

Facility Name: Fashion Park Cleaners
Facility Location: Little Rock, Arkansas
EPA RCRA ID No: ARD035560507
EPA CERCLA ID No: NA
AFIN: 60-01942
County: Pulaski
Arkansas Senate District: 34
Arkansas House District: 37
US Congressional District: 2



CURRENT STATUS

Recommendations in the CSA, the Addendum, and those of the Arkansas Department of Health, regarding indoor air sampling, and a process of notification of the off-site groundwater plume to affect property owners, are addressed in the Property Development Decision Document. Additional work includes provisions for restricting use of groundwater, removing liquids and sludge from trenches and sumps, and rendering the site's underground storage tank (UST) useless for liquid storage. In addition, renovations or demolition that would disturb areas containing lead-based paint or asbestos containing material (ACM) must follow Occupational Safety and Health Administration (OSHA) workplace safety and health standards.

The Groundwater Monitoring Report for the first groundwater monitoring operation and maintenance (O&M) monitoring event was finalized in July 2014.

Caradine and Company was withdrawn from the Arkansas Brownfield Program on August 28, 2014.

A second groundwater monitoring sampling event was conducted May 15, 2018. A third groundwater monitoring sampling event will be conducted in May 2023.

STATE PRIORITY LIST HISTORY

The site was included on the Arkansas Pollution Control and Ecology Commission (APC&EC) Regulation No. 30 Remedial Action Trust Fund Act (RATFA) Hazardous Substance Site Priority List (SPL) on October 28, 2005 for investigations.

ADEQ sent a letter dated May 22, 2008 to Caradine and Company with a copy of the signed Brownfields Implementing Agreement (IA) dated May 21, 2008. The property owner submitted the Draft Property Development Plan (PDP) on December 11, 2008. The Revised PDP was submitted on March 4, 2009. ADEQ conditionally approved PDP on April 2, 2009. A property development decision document (PDDD) was public noticed and became final on June 25, 2009.

Caradine and Company was withdrawn from the Arkansas Brownfield Program on August 28, 2014; however, the site remains on the SPL.

SITE DESCRIPTION

Location: The site is located at 1101 Cumberland Street in Little Rock, Pulaski County, Arkansas (34° 44' 16" N latitude; and 92° 16' 11" W longitude). The site occupies part of the NW ¼ of Section 10, Township 1 North, Range 12 West. The legal description of the property is Lot 1, Block 46, Original City of Little Rock, Pulaski County, Arkansas. Interstate 630 is located immediately adjacent to the property and to the south. The site was a residence in 1897 and a water bottling company in 1939. The laundry and dry cleaning was in operation from 1950 to 2003

Population: Little Rock is the capital of Arkansas and is a metropolitan area with a population of 628,293 and more than a million people living within an hour drive of downtown.

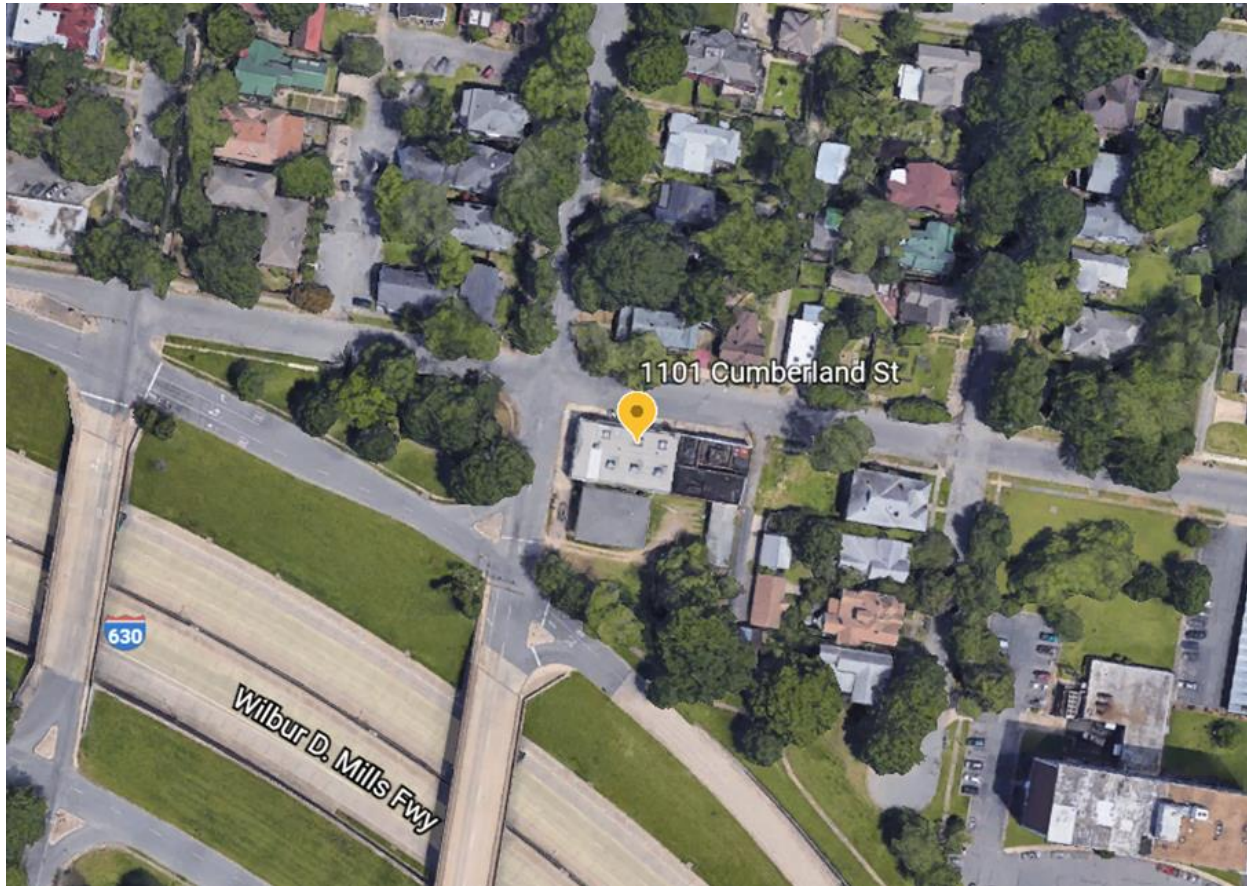
Setting: The site is located at the southeast corner of Eleventh and Cumberland Streets in downtown Little Rock, Pulaski County, Arkansas. The site consists of a single structure that occupies the entirety of the property. The structure is approximately 150 feet by 50 feet and was formerly utilized as a commercial laundry and dry-cleaning facility. The property is located in an area of downtown Little Rock which is primarily residential with some office/commercial property. Immediately south of the subject property is a multi-family dwelling with a detached garage, an open field, and the Interstate 630 (I-630) right-of-way. Just east and north of the subject property are residential dwellings, some with detached garage or parking structures. A large city park and multi-story apartment complex are located two blocks east of the property. Located west and across Cumberland is an open area and the I-630 right-of-way (CSA).

Hydrology: The site is located within the Mississippi Embayment of the Gulf Coast Plain Province, near the boundary with the more hilly Interior Highlands. The uppermost geologic unit beneath the site is the Tertiary-age Wilcox Group (Haley 1993). The Wilcox Group generally consists of relatively thin interbeds of lignitic sand and clay (Petersen et.al. 1985). Basal gravel and coarse sand are present in the lower part of the Tertiary deposits along the fringes of the Interior Highlands. Upper sands may yield water to shallow wells, however well yields are unpredictable and the unit is not of major importance as a source of water. The stratigraphy of the units below the site is described on the Arkansas Geological Commission (AGC) website (<http://www.state.ar.us/agc/agc.htm>) (CSA).

Based on data collected along the perimeter of the site, the building is underlain by approximately 5 to 8 feet of variegated, soft to very stiff, silty clay and silt, which is underlain by 5 to 9 feet of gravelly sand that coarsens with depth. There are areal variations in the matrix material in this stratum, and silt and clay may replace sand. Yellowish, loose to medium dense, medium-grained sand is encountered approximately 13 to 15 feet below ground surface and becomes looser and coarser with depth. The base of the second sand stratum was not encountered after penetrating as much as 18 feet of the unit. Discontinuous thin lenses of reddish brown silt (<2 feet thick) may occur throughout the interval. Rounded gravel is encountered 2 feet below the top of this sand stratum and becomes larger and more densely packed with depth (CSA).

Groundwater occurs in the sand stratum under unconfined conditions and represents the uppermost water-bearing unit beneath the site. Static water levels ranged from 26.02 to 27.68 ft. below ground surface during September 2005. The direction of ground-water flow is generally east-southeast and likely affected by topographic features (e.g., embankments near I-630 to the south) because regional flow is expected to be northeast towards the Arkansas River (CSA).

FTN surveyed available databases to document use of groundwater within a 1-mile radius of the site. Sources of information included well construction records maintained by the AGC and the USGS "Groundwater Site Inventory for the Nation" database (<http://nwis.waterdata.usgs.gov/nwis/gwsi>). No groundwater users were identified within the search radius (CSA). A door-to-door survey was conducted of properties surrounding the former Fashion Park Cleaners site to determine if structures in the area contained below grade living areas (basements) or if water wells were present. Based on information that was gathered during the course of the survey, none of the nearby properties have basement structures or water wells (Addendum).

Aerial Photo:**WASTE AND VOLUMES**

The principal chemicals of concern at the site are volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), most notably tetrachloroethylene (PCE) and its degradation daughter products.

A number of materials were used and stored by Fashion Park Cleaners, including detergents and solvent cleaning fluids (i.e., petroleum-based and PCE). Dry cleaning solvents were apparently stored in tanks at the bottom of the dry cleaning machines. Clean petroleum solvent was stored in an above ground storage tank (AST) that was located on a concrete slab in the rear (east) of the building on the edge of the alleyway. A second AST, located on the roof of the building, was used to contain spent solvent. Both ASTs were part of a closed loop system, which pumped solvent to and from the solvent washing machine. Spent solvent was pumped from the rooftop AST to the still inside the building, and distilled solvent was then pumped back to the clean solvent AST (PMI 2002) (CSA).

PMI (2002) reported observing numerous different one-gallon plastic containers of various spot agents (i.e., oil and grease removers, silk spotters, and protein spot removers, paint remover, etc.)

have been observed onsite. Most of these chemicals were stored on the floor adjacent to or in the drains connected to the sanitary sewer system. There were also containers of lubricating oil on the concrete floor adjacent to the boiler. Also observed were significant amounts of oil dry on the floor, indicating that there had been spills from the oil containers or during their use (CSA).

According to PMI (2002), the dry-cleaning machines were self-contained systems. Dry cleaning solution and certain detergents were added to the machine periodically. The machine had an internal still, which distilled the dry cleaning solvents being used. Distilled solvent was returned to the tanks at the bottom of the machines. Still bottoms (sludge) generated during the distilling operation were captured in a small metal pan on the rear of the machine, and then transferred from the metal catchment basin by means of a funnel into 55-gallon drums. All waste dry-cleaning solvents/still bottoms were containerized and disposed of offsite. Detergents associated with other washing machines were discharged to the sanitary sewer system (CSA)]

HEALTH CONSIDERATIONS

The onsite building covers nearly all affected soils on the property. The presence of some VOCs and SVOCs in soil beneath the building slab at concentrations exceeding the U.S. Environmental Protection Agency (“USEPA” or “EPA”) Region 6 Dilution Attenuation Factor (DAF) screening levels indicates a potential for these contaminants to leach into groundwater. These soils are not likely to be exposed to direct infiltration from precipitation, but indicate the potential for areas of deep subsurface contamination within the footprint of the building that could result in leaching of contaminants. Significant levels of contamination characterize site groundwater, and offsite migration of a contaminant plume has been identified (CSA).

The investigation data were evaluated to identify human health risks potentially associated with current or future use of the site. Although the site is currently inactive, it was assumed that residents and workers located over affected groundwater near the site might be exposed to chemical vapors migrating from shallow groundwater into indoor air. Based on the findings of the health risk assessment, current off-site exposure to vapor intrusion from groundwater does not pose unacceptable risks to residents or workers. Because the Fashion Park building is intended to be used as an adult daycare center in the future, risks associated with this land use were assessed using residential exposure assumptions for groundwater, soil, and indoor air. It is also possible that the site could be used for commercial/ industrial purposes in the future, thus commercial/industrial workers and construction workers were also considered possible future receptors at the site. Under future land use scenarios unacceptable health risks were identified for the worker, resident, and adult daycare user inhaling VOCs migrating from soil to indoor air and for domestic uses of groundwater. The noncancer risks associated with vapor intrusion, however, are based on exposure to 1,2,4- and 1,3,5-trimethylbenzene and are likely to overestimate health risks. In addition, groundwater is not locally used as a source of water supply and its use is unlikely given the available public water supply (CSA).

DEQ RESPONSE ACTIONS

- Pollution Management, Inc. conducted a Phase I Environmental Site Assessment at the Property in October 2002, and a Phase II Environmental Site Assessment in March 2003.
- A Comprehensive Site Assessment report was completed February 13, 2007 by FTN and CTEH.
- ADEQ observed FTN collect additional groundwater samples with direct push well technology (DPT) in September 2007. A door-to-door survey was conducted in October 2007 by FTN.
- A Comprehensive Site Assessment Addendum was submitted in October 2007 and approved by ADEQ on December 10, 2007.
- On May 22, 2008, ADEQ sent Caradine and Company a signed copy of the Implementing Agreement dated May 21, 2008.
- ADEQ began the first groundwater operation and maintenance (O&M) monitoring event for the site in April 2013. FTN drilled and installed a permanent groundwater monitoring well April 3, 2013. The well was sampled on April 30, 2013. The site visit for the groundwater O&M monitoring was completed on October 21, 2013 by ADEQ personnel and the property owner. Interviews were conducted with the property owner and available neighbors between October 2013 and January 2014.
- ADEQ drafted a Groundwater Monitoring Report that was finalized in July 2014.

DEQ ANTICIPATED FUTURE ACTIVITIES

Continued groundwater monitoring of MW-01 will occur once every five (5) years to ensure natural attenuation is occurring at the site. Institutional controls should be put into place as soon as possible to prevent any contact with the groundwater.

DEQ will continue to monitor the usage of the site.

SITE CONTACTS

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