Current Status

The Griffing Railway Repair Company (Griffing Railway Repair) conducted railcar repair operations at the site from 1965 to 1991. The business declared bankruptcy and was abandoned after 1991 following enforcement actions taken for previous environmental violations. An Emergency Removal Action completed in 1994 appeared to have mitigated site conditions posing an imminent and substantial endangerment to both public health and the environment. The EPA Region 6 prepared a Superfund Site Strategy Recommendation Form to provide public notification of the decision of No Further Action Planned for this site. A number of investigations conducted at the site in the 1990s indicated that chemicals had been released into the environment, however.

The ADEQ contracted FTN Associates, Ltd. (FTN) to evaluate the site through the Comprehensive Site Assessment (CSA) process to determine the nature and extent of hazardous substances released to the environment, the potential for additional releases, and the risk to human health and the environment. The CSA was completed in November 2010.

On August 7, 2013, ADEQ sent a letter to the land commissioner to request that upon the sale of the property a deed restriction be put in place. The deed restriction will limit the use of the property to industrial purposes only, as well as, require that no groundwater wells be drilled on-site (excluding groundwater monitoring wells) and any wells currently operational on the property be closed.
State Priority List History

The Arkansas Remedial Action Trust Fund Act (A.C.A. 778-7-501 et seq.), or RATFA, provides authority and funding for identifying, investigating, and remediating hazardous substance sites throughout the State. The RATFA Hazardous Substances State Priority List (SPL) identifies those hazardous substance sites eligible for State-funded investigation and remedial actions, if necessary, on a case-by-case basis; it is not an inclusive site inventory or historical list. The Griffing Railway Repair site was placed on the SPL due to its indeterminate status in 2005. The site’s long history of hazardous material use, waste generation, and improper waste handling warranted additional investigation.

Site Description

Location: Griffing Railway Repair is located at the end of School Street in El Dorado, Arkansas (Griffing Railway Repair, School Street Box 1735, El Dorado, AR 71730).
Latitude:  33° 11’ 55” N
Longitude:  92° 40’ 15” W

Population: The City of El Dorado has approximately 20,500 residents.

Setting: The site, which encompasses more than 20 acres, is bordered to the north by a wooded lot and to the east by the Rock Island Railroad right-of-way. The site is bordered to the south by a wetland area. Two large above ground storage tanks border the site to the southwest. The site is bordered to the west by the El Dorado and Wesson Railroad right-of-way, Koch Industries, and Lion Oil Company. Two metal buildings, several waste piles, concrete slabs, former rail beds, and a containment structure are located on the site.

Hydrology: Surficial stratigraphy in the area of the site consists of the Cockfield Formation of the Eocene Claiborne Group and Quaternary alluvium. The site is located in the outcrop area of the Cockfield Formation. The Cockfield is composed of interbedded and lenticular fine to medium-grained sand, silt, clay and lignite. The formation has a maximum thickness of 400 feet in the outcrop area.

El Dorado Water Works has 10 municipal drinking water supply wells located up gradient of the site. The wells are completed in the Sparta Sand aquifer at depths ranging from 350 to 460 feet. El Dorado Water Works supplies drinking water to approximately 34,100 residents. An estimated 514 individuals have been reported to rely on private drinking water wells within a 4-mile radius. Numerous groundwater monitoring wells are located west of the site at Koch and Lion Oil Company.
Aerial Photo: From the 2010 CSA conducted for Griffing Railway Repair, El Dorado, Arkansas.
Site Map: From the 2010 CSA conducted for Griffing Railway Repair, El Dorado, Arkansas.
Waste and Volumes

The types of wastes generated by Griffing Railway operations included paint, wastewater treatment sludge, and hazardous cleaning materials. Spent sandblasting material was stockpiled on site. The facility also received more than 10 railcar tanks per week containing lube oil, diesel fuel, and k-blend (a mixture of paint thinners and solvents). Solids and semi-solid sludge was removed from tank cars and placed in a concrete holding channel where it was then shoveled into 55-gallon drums and shipped off-site for disposal. Liquids flowed from the railcar tank cleaning area by means of a concrete channel to a sump. Liquids were reportedly pumped from the sump into railcar tanks for storage prior to treatment.

Each railcar tank contained up to 400 gallons of liquid wastes. The liquid in these railcar tanks was supposed to have been processed through the on-site water treatment plant and then analyzed prior to being discharged into the city sewer system. However, liquids were reportedly discharged directly to the ground because the on-site treatment plant could process only 2,000 gallons per day and the facility was receiving more liquid than the plant could process. The on-site discharge resulted in approximately 6 acres of upland and some wetland contamination that created a semi-solid tar mat, according to one EPA report. However, historic Sanborn fire insurance maps show that there was an asphalt plant present on the site in the 1920s and refining operations northwest of the site may have contributed to the tar mat as evidenced by adjacent Lion Oil’s “asphalt flats”, and Koch Industries also handled asphalt and may have contributed to the site contamination.

Three potential onsite contamination sources and their volumes included: the containment structure area of approximately 2,424 square feet; a waste pile area of approximately 8,050 square feet; and the semi-solid tar mat of approximately 188,000 square feet.

Health Considerations

The CSA determined that the calculated noncancer hazards and theoretical cancer risks are below or within the range of target hazards and risks considered acceptable by the EPA for all receptors except potential fishermen and indoor workers. The groundwater is not suitable for drinking water purposes. The site has remained inactive and is currently unoccupied. As of May 2012, the process of implementing deed restrictions to prohibit the use of groundwater and prevent the use of the property for anything other than industrial purposes was initiated.

ADEQ and EPA Response Actions

- Site Discovery – May 1992 (EPA)
- Preliminary Assessment – December 1992 (ADEQ)
- Removal – September 1994 (EPA)
- Site Investigation – November 1995 (EPA)
- Expanded Site Investigation – November 1999 (ADEQ)
- NFRAP – January 2001 (EPA)
- Drum removal – May 2006 (EPA)
- CSA process– initiated May 2010 and completed November 2010 (ADEQ)
- May 2012 – property owner contacted to start deed restriction process to prohibit use of drinking water and any land uses other than industrial (ADEQ)
- August 2013 – ADEQ sent a letter to the land commissioner to request that upon the sale of the property a deed restriction be put in place.

**ADEQ Anticipated Future Activities**

The ADEQ will continue to contact the adjacent property owner, El Dorado & Wesson Railroad Company, to discuss the potential need for environmental investigation.

**Site Contacts**

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