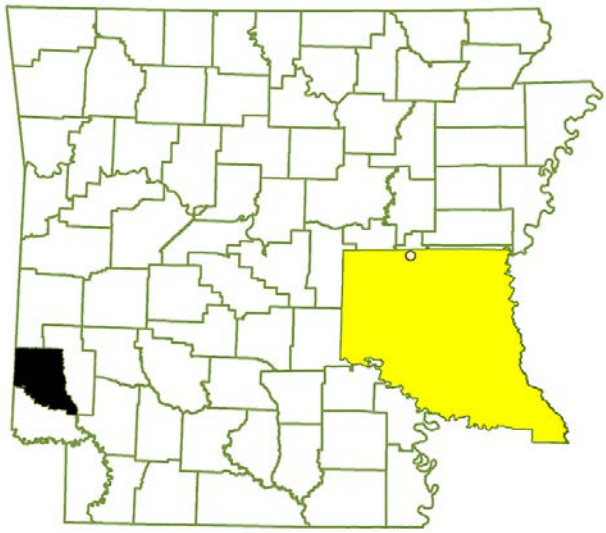
# HADCO BROWNFIELDS

## STATE PRIORITY LIST SITE
## GILLHAM, ARKANSAS

ADEQ
5301 Northshore Drive
North Little Rock, Arkansas 72118



EPA RCRA ID No: ARD021354493
EPA CERCLA ID No: Not Applicable
AFIN: 67-00078
County: Sevier County
Arkansas Senate District: 21
Arkansas House District: 21
US Congressional District: 4

## Current Status

The Hadco property was assessed under the Arkansas Voluntary Clean-Up Act (Brownfields Program) (Act 1042 of 1997, as amended, Arkansas Code Annotated (A.C.A.) 8-7-1101 et seq.). Under this program and amendments, underutilized or abandoned industrial, commercial, or agricultural sites are evaluated through the Comprehensive Site Assessment (CSA) process to determine the nature and extent of hazardous substances released to the environment, potential for additional releases, and the risk to human health and the environment.

The CSA Report for this site was approved in November 2006. A Public Notice of the Implementing Agreement entered by and between the Brownfields Program Participant and the ADEQ for the purpose of compliance with appropriate Arkansas Statutes governing the voluntary clean-up of the Hadco property was published in September 2007.

The CSA determined that a surface soil location near a former sump contained levels of metals exceeding residential standards.

Additional sampling was conducted by the ADEQ on February 9, 2011 at the contaminated areas on the Hadco site. The sampling data showed contamination of chromium was still present on site. After conducting a risk analysis on the sampling data, it was determined that the chromium on site needed to be delineated between hexavalent or trivalent.

FTN Associates, Inc. obtained additional samples on April 20, 2012 and concluded that all the chromium on the site is trivalent rather than hexavalent. Based on this data, the site now shows no unacceptable risk to human health, and has been deleted from the State Priority List (SPL).

Currently the site is being held by the State Land Office. The State Land Office has determined that any deed issued from the sale of the property will include language restricting the site to industrial use only.

## State Priority List History

Hadco operated at the site from 1980 to 1992 as a machining and electroplating facility; much of their work involved the production of conventional ammunition components. The electroplating process involved using solutions of chromium, cadmium, and cyanide. Additionally, waste acids and plating solutions were stored throughout the site. A series of waste removal actions, environmental assessments, and sampling investigations were conducted by ADEQ, EPA Region 6, and the Arkansas Department of Health between 1992 and 2000. Based on these previous studies, ADEQ identified remaining concerns and added the site to the SPL in 2005. The CSA investigation targeted elevated metal concentrations in soil and pond sediment, and on building and equipment surfaces. The site deleted from the State Priority List on June 8, 2013.

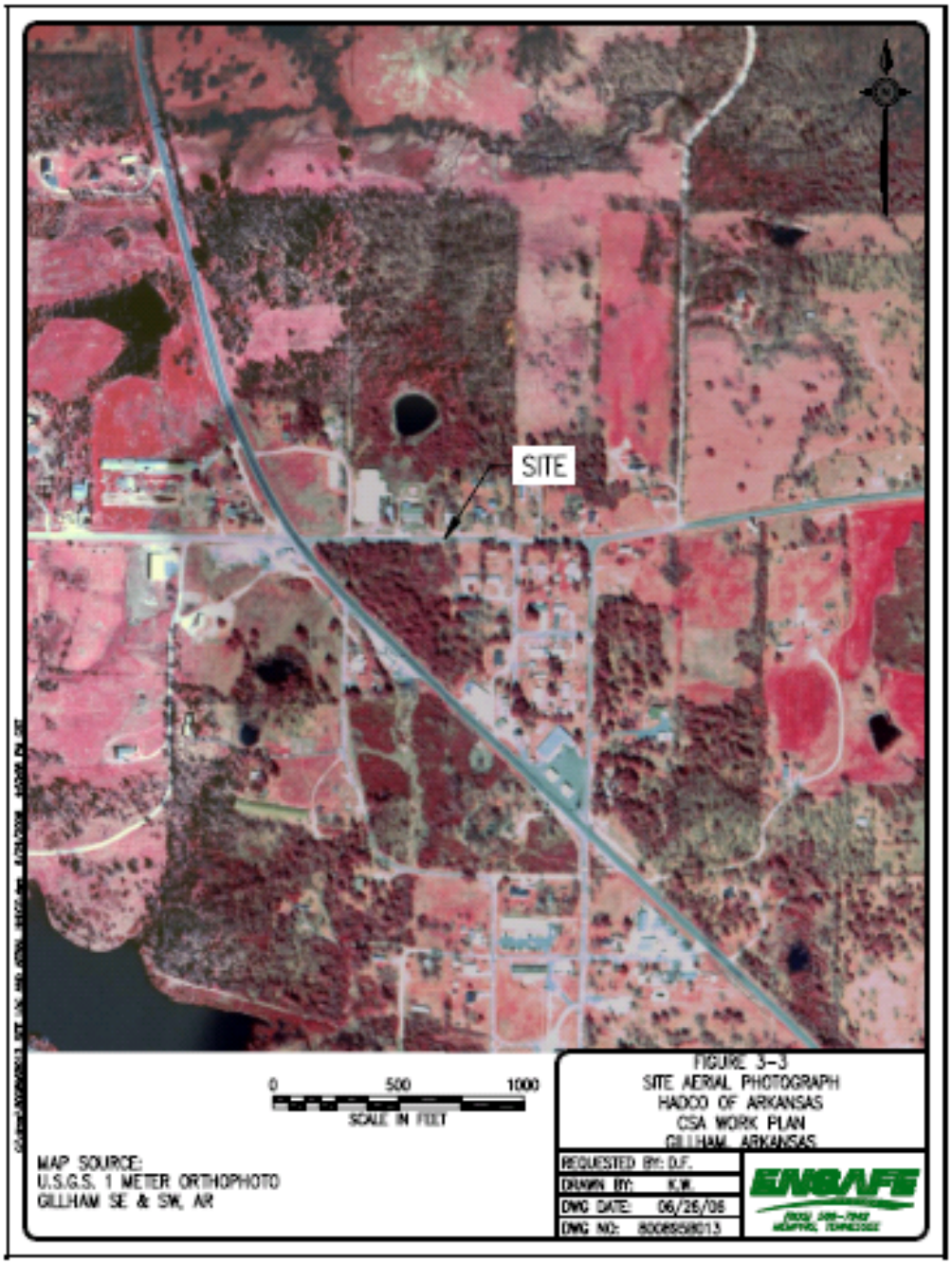
## Site Description

Location: The 17-acre site is located at the corner of Tower Road and State Highway 71 on the north side of the small town of Gillham, Arkansas. The geographic coordinates are $34^{o}$ 10’ 16” north latitude and $94^{o}$ 19’ 02” west longitude.

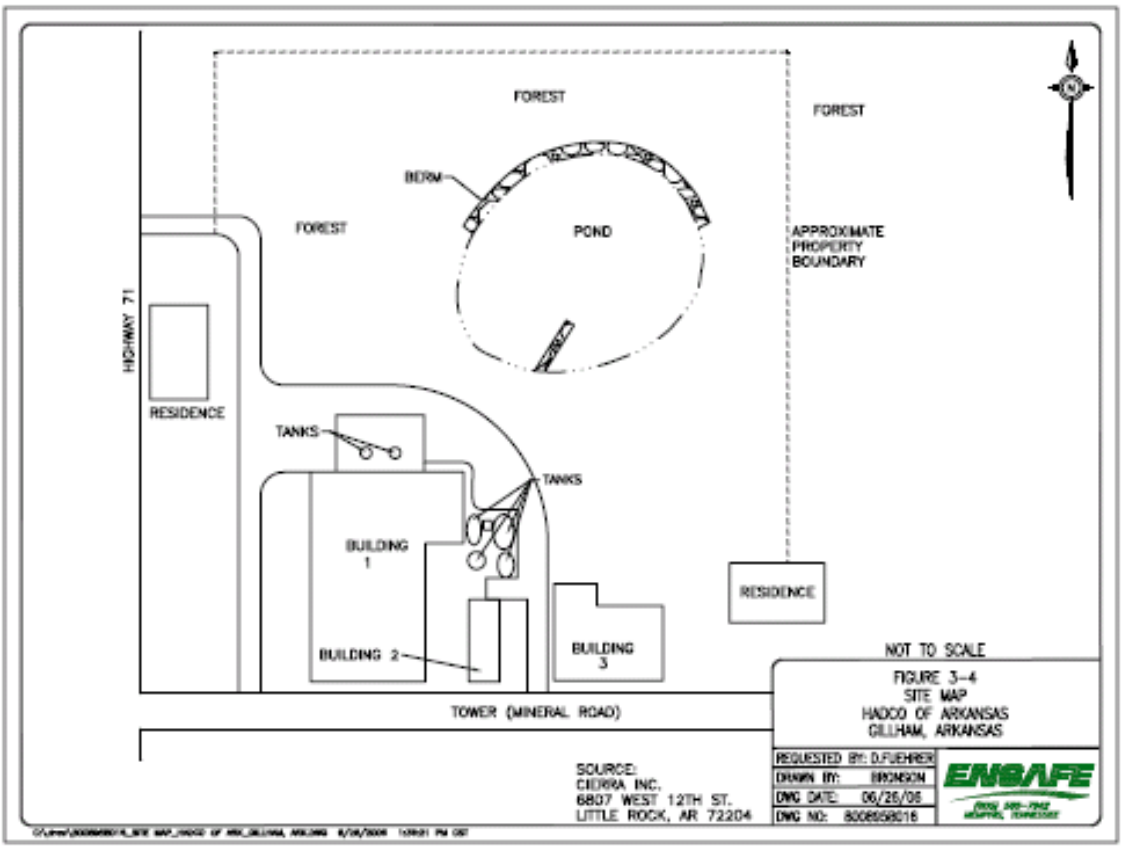
Population: Gillham has approximately 188 residents.

Setting: The site contains three steel frame buildings and ancillary tanks and equipment situated on both open and wooded land. The State of Arkansas Land Commissioner has owned the property since 1993, when the previous owner filed for bankruptcy and abandoned the operation. Light industrial, retail, and residential developments are located in Gillham, principally along Highway 71. The undeveloped land surrounding the site and the town is similar to the heavily wooded land found in the Ouachita National Forest to the north. The land is hilly with forested areas interspersed with agricultural fields, bedrock outcrops, and private residences, farms, and commercial developments. In particular, the forested land is home to an abundant wildlife population, including numerous species of birds.

Hydrology: The land surface is relatively flat across the southern portion of the property, and then slopes down to the north-northeast into a former cooling pond that is bermed around the sides. Surface water flows across the property to the north and into the pond, which feeds a spring and a creek that flows north into the Lower Little River watershed. A groundwater-bearing zone is developed at the top of and in weathered bedrock at depths of 3 to 17 feet below ground surface. Groundwater in this zone produces only small quantities of water to wells, and is not considered to be a useable aquifer.




Aerial Photo: Gillham, Arkansas




Site Diagram: Hadco Property

## Waste and Volumes

The site has not been used since 1992. When abandoned, the production line vats were essentially in place at the site. During the three-phase removal action conducted by ADEQ and EPA between December 1992 and July 1993, wastes were segregated, sampled and disposed at permitted facilities. The removal and disposal of these materials mitigated immediate threats posed by these materials to human health and the environment.

Removed media included:

- 32,500 gallons of poisonous and corrosive waste
- 660 yards of Class I nonhazardous soil and debris
- 123 drums containing 24,805 pounds of solid and 3,570 gallons of liquid corrosive, oxidizing, and flammable wastes
- Various drums, totes, and tanks

## Health Considerations

The CSA sampling results indicated a highly localized area, or "hot spot," of cadmium and chromium contamination near a former sump. A focused human-health risk evaluation of all chemicals of potential concern (COPCs) at the site was completed to determine the need for further action and/or any land use restrictions at the site.

The models used in the risk evaluation predict the lifetime cancer risks and noncarcinogenic Hazard Indices (HIs) for potential receptors exposed to site contamination. These models determined potential risks for exposure (via ingestion, dermal contact, or inhalation) using the maximum concentrations of all COPCs in soil including the elevated metals concentrations in the "hot spot." No unacceptable cancer risks were predicted for adult or child resident soil exposures; however, HIs indicating potential cumulative adverse health effects were predicted. No unacceptable cancer or noncancer risks were predicted for industrial/commercial worker soil exposure.

## ADEQ Response Actions

The following provides a chronology and brief description of actions taken at the Hadco site:

- ADPC&E Sampling Event, November 1992 – Drum, tank, soil, and surface water samples showed high concentrations of plating metals in various media.
- ADPC&E Emergency Order and Request for Response, December 1992 – Required response actions by owner and requested the EPA provide assistance in mitigating health threats and removing wastes from site.
- EPA Emergency Removal Action, December 1992 to July 1993 – Removal and disposal of chemicals, containers, and impacted media.
- EPA Site Assessment, February 1994 – Soil, sediment, and water sample results for priority pollutant metals and cyanide below state and Federal action levels.

- EPA Focused Site Inspection, May 1995 – Site survey and analytical data generation to support a score under the Hazard Ranking System to determine if the site should be included on the National Priorities List.
- Superfund Site Strategy Recommendation, November 1995 – Designated the disposition of the site as No Further Remedial Action Planned and further investigation under Superfund not warranted.
- Sampling and Analysis Field Investigation, November 1997 – Property lender-initiated Phase II investigation conducted with ADPC&E review and comment; elevated chromium, cadmium, zinc, nickel, and cyanide detections.
- Additional sampling was conducted by the ADEQ on February 9, 2011 at the contaminated areas on the Hadco site.
- Contractor obtained additional samples to allow for complete characterization of chromium as hexavalent or trivalent form.

Funding awards granted by the EPA allow ADEQ the opportunity to offer technical assistance for site assessments to qualified Brownfields Program participants belonging to either the non-profit or public sector. As a public sector entity, the State Land Office was eligible for such assistance and ADEQ initiated a Targeted Brownfields Assessment (TBA) for the Hadco site in 2005. TBAs are designed to help minimize the uncertainties of contamination often associated with brownfields. ADEQ arranged for a contractor to conduct a site visit and evaluate and present background information, data searches, and site worker interviews to satisfy the requirements of a Phase I Environmental Site Assessment. These activities began in June were concluded in December 2005. ADEQ subsequently secured a contractor to conduct the CSA activities of 2006. ADEQ has provided contractor oversight, reviewed plans and reports, and continues to assist the State Land Office in expediting the Hadco property redevelopment process.

## ADEQ Anticipated Future Activities

The State Land Office intends to sell the site for industrial reuse. Any prospective purchaser will have the option of completing the Brownfields process by submitting a Property Development Plan. The ADEQ would then prepare a Property Development Decision Document. Upon completion of actions required by the Property Development Decision Document, the ADEQ would issue a Certificate of Completion for the Hadco site. This site has been removed from the SPL.

## Site Contacts

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