



State of Louisiana
Louisiana Department of Health
Office of Public Health

August 14, 2018

U.S. EPA, Region 6
ATTN: Mike Hebert, Remedial Project Manager
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Dear Mr. Hebert,

Under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR), the Louisiana Department of Health (LDH) had initiated the review of data for the American Creosote site in DeRidder to begin to evaluate the potential public health impacts. To date, it is not clear who is affected by this site and its contaminants. While it is known that the site soil is heavily contaminated with creosote and creosote-related compounds, more soil, groundwater, and surface water sample data must be collected to understand the full extent of the migration of contaminants into nearby waterways, residential areas, or groundwater to make public health recommendations. In addition, fish tissue data must be collected from the associated water ways and creeks where surface water drainage from the site has been identified.

Background

The American Creosote DeRidder site was listed by the U.S. Environmental Protection Agency (EPA) on the National Priority List (NPL, a.k.a. Superfund) in January 2018.¹ Historical timber treatment operations at the site, which has been inactive since 1957, have resulted in contamination by creosote related compounds. The site, located on Washington Street/Post Plant Road in DeRidder, LA, has been owned by Central Manufacturing Company, Inc. since 1992. No industrial, commercial, or residential activity has taken place on the site since 1957.²

¹United States Environmental Protection Agency (2018). EPA Adds American Creosote Site in DeRidder, LA, to the National Priorities List to Clean Up Contamination and Protect Communities. Dallas: EPA Region 6 Office. Available at: <https://www.epa.gov/newsreleases/epa-adds-american-creosote-site-deridder-la-national-priorities-list-clean>.

²HRS Documentation Record for American Creosote DeRidder. Dallas: U.S. Environmental Protection Agency. EPA ID Number: LAN000604293. Available at: <https://semspub.epa.gov/work/HQ/196894.pdf>.

The Preliminary Assessment/Site Investigation at this site identified and listed five primary areas of concern (AOC) within this general area that are the most identifiable remediation spots: AOC #1 - Concrete Structure; AOC #2 - Oil/Water Separator; AOC #3 - Waste Pit; AOC #4 - Aggregated Areas of Surface Soils; and AOC #5 - Creosote Solids. Due to historical timber treatment activities, the soil, sediment, and surface water are contaminated at the site with liquid pitch oil, tar oil, and coal tar solutions. Chemicals of concern (COCs) associated with these activities include polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPHs), and metals.

Demographics

DeRidder, Louisiana, located in Beauregard Parish, had an approximate population of 10,918 as of 2016 (American Community Survey ACS 5-Year Population Estimate).³ Seventy-five percent of the persons were age 18 and older. Of the 10,569 people self-reporting one race in DeRidder, 59.5% were white, 36.9% were Black or African American, and 1.2% were Asian. It was estimated in 2016 that 26.2% persons in DeRidder were living below the poverty level.⁴ The 2008-2012 ACS results estimate there were 1,491 persons within a 1.0-mile radius of the American Creosote DeRidder site.

The American Creosote DeRidder site is a 55-acre tract of land immediately surrounded by a wooded area west and north of the site and open fields east and south of the site. There are residential structures within a one-mile radius of the site in all directions. The Ingevity DeRidder plant, a special chemicals manufacturer & supplier, is located one-fourth of a mile from the southernmost point of the American Creosote DeRidder site.

Potential for Exposure

The heavily wooded NPL site is not currently a residential or commercial use site. As of May 2018, the site is considered private property. There are signs of trespassing and recreational use (i.e. beer cans, shotgun shells, etc.), but the extent to which this occurs is not known since the site is currently not fenced.

The Palmetto Creek and Bundick Creek are used for recreational fishing; it is also possible that adolescents and/or adults use these creeks for other recreational activities (swimming, rafting, etc.). Additionally, if contaminants that have migrated offsite have reached parts of the Palmetto and Bundick Creeks that are accessed by local residents/citizens, there may be others exposed to this surface water.

³U.S. Census Bureau. (2018). American Community Survey, 2012-2016 American Community Survey 5-Year Estimates. Available at: <https://www.census.gov>.

⁴United States Environmental Protection Agency. 2017. EJSCREEN. Available at: <https://www.epa.gov/ejscreen/overview-demographic-indicators-ejscreen>

The extent of contaminant migration off the site is not yet known. There is a known source of contamination in each of the AOC's (#1-5) and a possibility that contamination has migrated off site into the freshwater pond adjacent to the site. AOC #4, the aggregated area of soil contamination, is downhill from the other AOCs and has been observed as collecting drainage water from the higher areas of the site. AOC #4 is also adjacent to a small unnamed series of creeks (see Figures A-2 & A-3 in Appendix A) which allows drainage water that collects in and around AOC #4 to continue into these creeks and flow offsite. The drainage flows from all AOCs in a southwest direction toward the railroad tracks, where groundwater monitoring wells are located, and then into the wetlands and adjoining drainage ditch/stream and finally into a freshwater pond. There is no evidence, however, of recreational fishing occurring in this pond.² Surface water subsequently discharges from the freshwater pond into an adjoining unnamed perennial stream flowing into Palmetto Creek until it merges into Bundick Creek. The remainder of the surface water migration pathway is located in Bundick Creek which contains wetlands.

Trespassers could potentially be exposed to creosote dermally. Regarding all site contaminants, oral ingestion via surface water (i.e. if someone were to ingest water that has run off site into the nearby creeks) would lead to exposure. Inhalation exposure would require that a trespasser be on the site for an extended period of time. The oral ingestion of surface water that has come from the site and migrated into nearby creeks is particularly pertinent at this time as it is one of the more viable and likely pathways in which someone may be exposed to site contaminants. Groundwater migration pathway and other potential pathways and their elements will be updated as new information and data are collected.

Conclusion

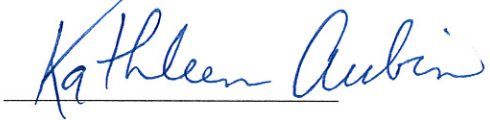
The LDH and ATSDR conclude that there are a few potential exposures to creosote contaminated water and soil at the American Creosote De Ridder Superfund site that could occur. Although this site is considered private property, current potential exposures which could exist are trespassers and the flow of contaminants that may have migrated offsite to the underlying groundwater, adjacent wetlands, stream beds, and nearby surface waters. Until the site is remediated and suggested recommendations are made (see below), both dermal and ingestion are two potential routes of. This site is in the "Remedial Investigation/Feasibility Study" stage of the Superfund process and the extent of contaminant migration is not currently known, daily dose exposure values for this site have not been calculated. It is therefore not known if accidental ingestion or dermal exposure to these contaminants of concern would harm people's health.

Recommendations

The LDH and ATSDR recommend the following for the American Creosote DeRidder Superfund site:

- Secure the site: Fencing the entire property site may not be a feasible option due to budget constraints, however, fencing areas that are known points of trespassing may be useful. In addition, good signage indicating no trespassing allowed would be helpful.
- Contain the site to prevent surface water runoff. A better characterization of the use of the waterways near the site would help in the determination of the approximate exposure to the contamination.
- Groundwater monitoring/sampling is necessary at this site.
- It is recommended that fish tissue data, following Louisiana's fish protocol, be collected from the Bundick Creek and Palmetto Creek and associated water ways where surface water drainage from the site have been identified.

Sincerely,

A handwritten signature in blue ink that reads "Kathleen Aubin". The signature is written in a cursive style and is positioned above a horizontal line.

Kathleen Aubin, MSPH
APPLETREE PI and Env. Health Scientist Supervisor
LDH/Office of Public Health

APPENDIX A

Maps of the American Creosote DeRidder Site

Figure A-1: Facility Location Map

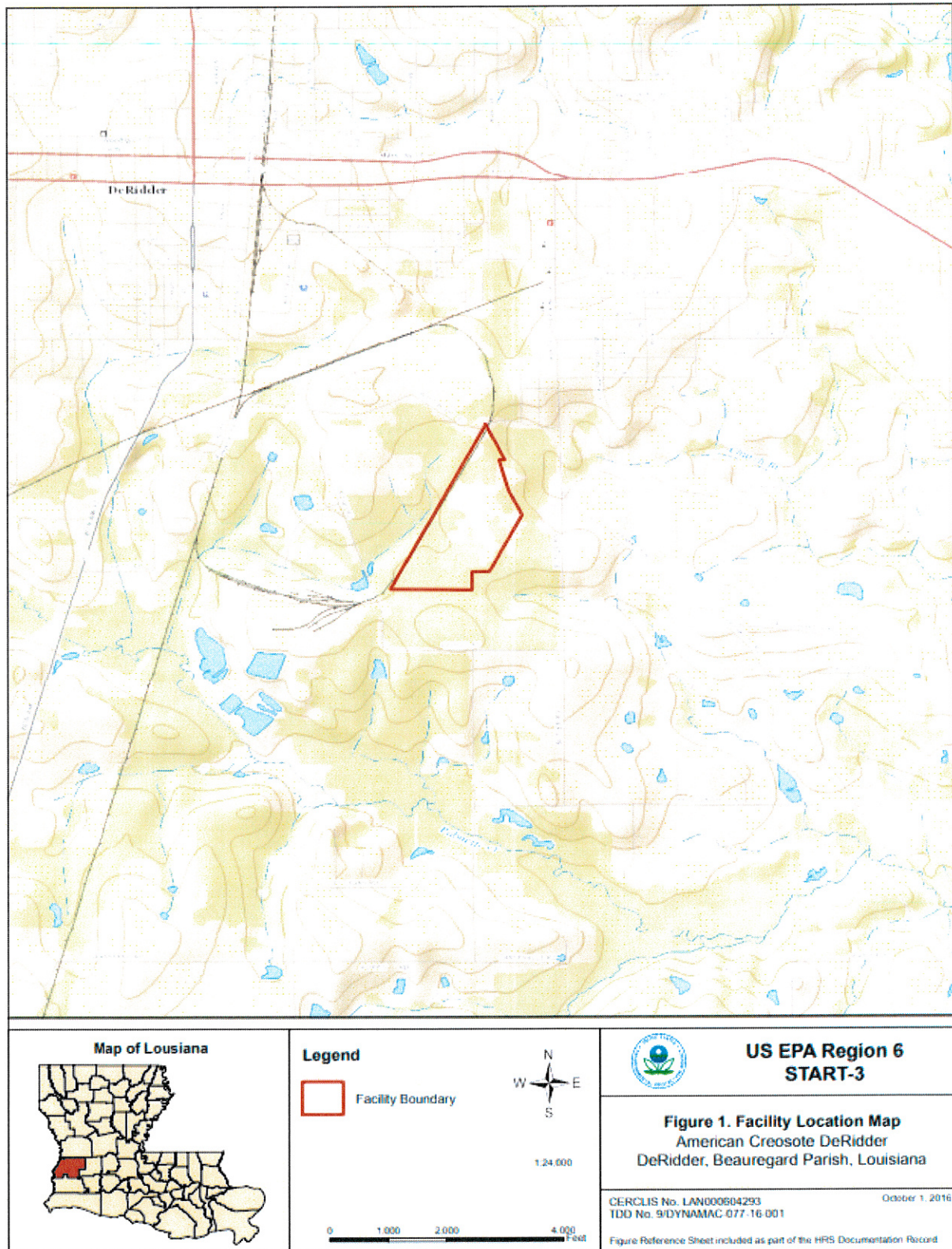


Figure A-2: Sources with Site Inspection and Expanded Site Inspection Sampling Locations

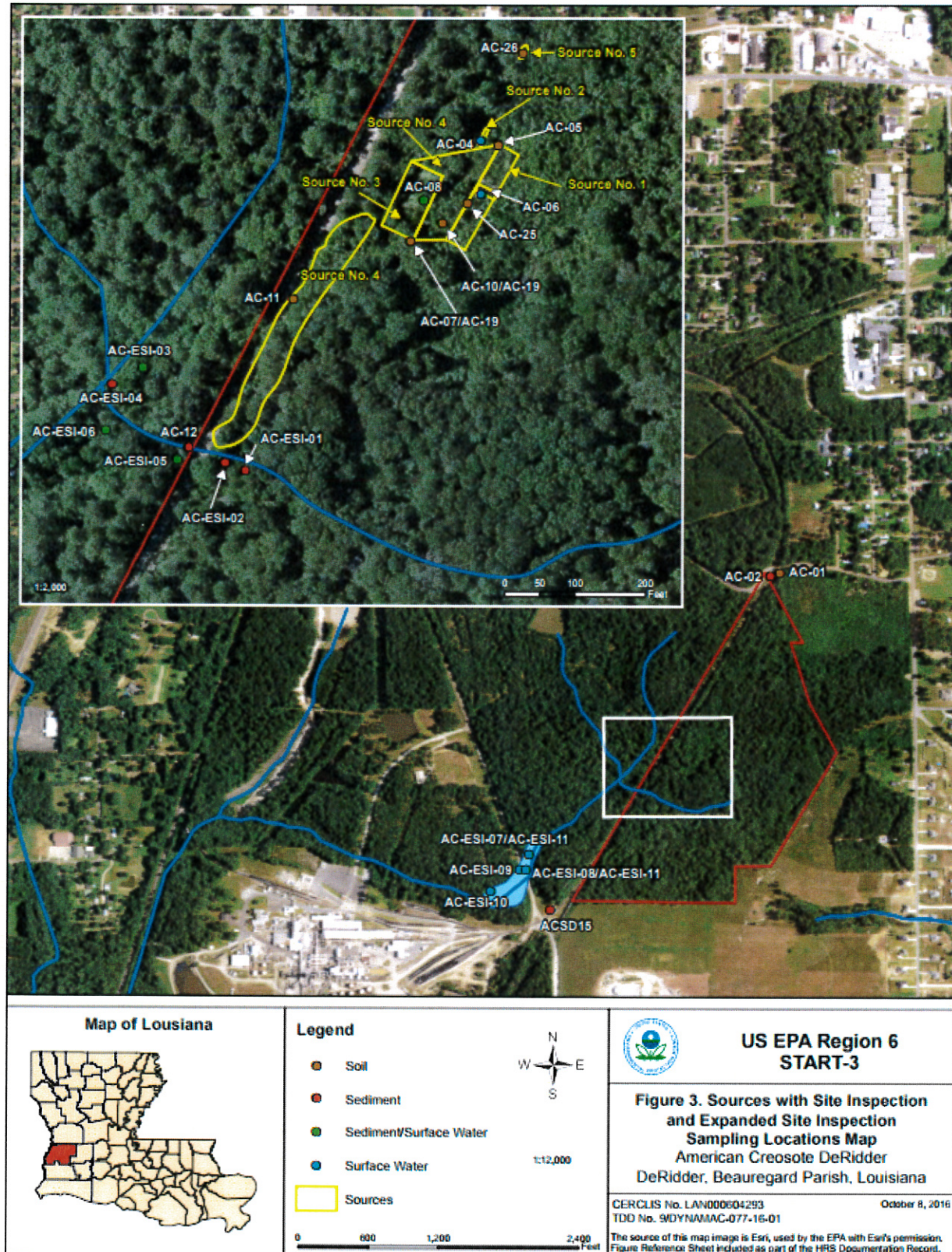


Figure A-3: PPE Location and Overland Flow Pathways

