Supplemental Environmental Assessment

Appendix G: Hazardous, Toxic, and Radioactive Waste Considerations

Arkansas River Navigation Study
Arkansas and Oklahoma

September 2024

Prepared By:

Regional Planning and Environmental Center
Environmental Branch
U.S. Army Corps of Engineers
Little Rock and Tulsa Districts

McClellan-Kerr Arkansas River Navigation System (MKARNS) Channel Deepening HTRW Appendix – UPLAND DISPOSAL SITES

1.0 Introduction

In order to complete a feasibility level HTRW evaluation for the MKARNS Supplemental Environmental Assessment (SEA), a records search was conducted following the rules and guidance of ER 1165-2-132: *HTRW Guidance for Civil Works Projects*, and in general accordance with portions of American Society for Testing and Materials (ASTM) E1527-13: *Standard Practice for Environmental Site Assessment: Phase 1 Environmental Site Assessment Process*. The proposed project involves deepening the existing Arkansas River channel to 12 ft with upland disposal sites being designed to receive the dredged material. The project area consists of 39 upland disposal sites located in Oklahoma, where some sites are federally owned and others are privately-owned, and 137 inland disposal sites located along the MKARNS.

2.0 Records Review

For the records review, files, maps and other documents that provide environmental information about the project area are obtained and reviewed. To complete the records review, United States Army Corp of Engineers (USACE) reviewed publicly available databases and sources, using the proposed footprint of each of the 39 upland disposal sites.

Often, a private vendor of environmental database searches (*e.g.*, Environmental Data Resources of Shelton, CT; Environmental Risk Information Services) would be used for a more in-depth review. Due to the extensive number of sites to be searched and corresponding volume of information that would be provided, as well as meeting scheduling constraints, contracting with a private vendor was not practical. A 'desktop' records review was conducted by the US Army Corps of Engineers (USACE) using various sources to determine the presence of HTRW sites on or near the subject properties. The records reviews were focused on active clean-up sites and sites with a reasonable risk of HTRW release. Three search engines were used to search databases, helping to narrow down the number of searches. The search engines are the Environmental Protection Agency (EPA) Cleanups in my Community (CIMC) database, and either of two state search engines: Oklahoma Department of Environmental Quality (DEQ) DataViewer or Arkansas DEQ EnviroView. These search engines query several federal or state databases for user-selected information with an approximate 1-mile search distance for each of the sources. A closer search distance of 0.5-mile *from a property boundary* is recommended to identify specific types of environmental risks. However, a wider radius was used to ensure that sites having large acreage could be searched using one location within the property boundary that would still capture risks beyond the boundary for this Feasibility Level records review.

The information collected from this desktop records review was analyzed for recognized environmental conditions (RECs) that could affect the proposed project or need further investigation, given the proposed project measures. *This is a high-level records review and may need to be expanded or repeated as the project progresses.* The project is currently planned to be completed in several phases and a re-review for specific phases may be warranted during future pre-construction, engineering and design (PED). For this records review, all areas immediately adjacent to project features were searched. The results of this analysis, specifics of any REC (where applicable), and justification for dismissal from further evaluation (where applicable) are discussed below.

Limited information was available to review for the inland disposal sites. The "Final Environmental Impact Statement (FEIS), Appendix E Sediment Sampling" dated August 2005 contained data for 24 surface sediment, and 12 subsurface sediment samples collected in September 2004 by USACE personnel and analyzed General Engineering Laboratory, with QA duplicate samples analyzed by Analytical Management Laboratories (AML).

3.0 Databases Queried

3.1 **The EPA's CIMC Search Engine** – This search engine was used to query several federal databases that are described on the US EPA CIMC website and summarized below.

Brownfields Properties: Grantees may report information on Brownfield properties receiving federal grants. Data, which dates back as far as 1998, are collected from grantees via ACRES. This data is pulled into CIMC twice a month.

Brownfields Grants Jurisdictions: Geographic areas covered by specific Brownfields grants. This data is collected through ACRES. These data are pulled into CIMC twice a month.

RCRA Corrective Action: Facilities cleaned up under the corrective action program of the Resource Conservation and Recovery Act (RCRA). These data, dating back to 1980, are collected from the states using *RCRAInfo*. Only facilities data which states designate as being on the 2020 Baseline for Corrective Action and for public access are included in CIMC. These data are pulled from the RCRAInfo webservice twice a month.

A review of this database found several disposal sites in Oklahoma and Arkansas that are within one mile of a Federal RCRA Corrective Action Site. The inland disposal locations are at 123.1R, 175.2R, 300.0R, OK 309.0R-D, OK 393.2R-D, and OK392.8L-D. These corrective action sites will not be considered a REC at this time due to the distance of the corrective action sites from the current disposal sites. However, the corrective action sites are noted here because they could pose an HTRW concern if the specified disposal locations are shifted by the PDT.

Federal National Priority List (NPL): EPA maintains a National Priority List (NPL), which identifies for the States and the public those sites or other releases that appear to warrant remedial (long term) actions. These NPL sites are categorized as *Proposed* (undergoing the Superfund NPL Site Listing Process), *Final* (clean-up remedy is selected and implemented), and *Deleted* (clean-up process is complete). Superfund NPL data come to CIMC (updated twice a month) through two mechanisms: 1) the Superfund Enterprise Management System (SEMS); 2) links to the Superfund Site Home Pages created by combining data from SEMS with site-specific data from the regions.

A review of this database did not show any NPL sites within one mile of the proposed disposal sites in Arkansas or Oklahoma. This database was accessed and reviewed on November and December 2022.

Superfund: Superfund is a United States federal environmental remediation program established by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and administered by the EPA to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. EPA administers the Superfund program in cooperation with individual states and tribal government. Data included in CIMC dates back to 1982. These sites include abandoned warehouses, manufacturing facilities, processing plants, and landfills. Superfund sites that are on the National Priority List (NPL), are proposed for the NPL and have been deleted from the NPL are in CIMC. Data is collected from EPA Regions via the Superfund Public Use Database (SPUD) and are pulled into CIMC twice a month. These are not official boundaries and have no legal standing, but are provided as a public service.

Federal Facilities and Federal Agency Hazardous Waste Compliance Docket: Sites that are owned by federal government agencies and have hazardous waste cleanups are included in CIMC. Data are collected using the Superfund Enterprise Management System (SEMS) public database, the Federal Registry System (FRS), and RCRA Info and are pulled into CIMC twice a month. Base Realignment and Closure (BRAC) sites are also included in CIMC. This database was last updated on 2 December 2022 and was reviewed on 26 December 2022 for both inland and upland sites.

Removals/Responses: Data is provided by On Scene Coordinators (OSCs) through **epaosc.org** and pulled into CIMC twice a month for additional access to the public. However, data about Incidents of National Significance (INS) is located on their own EPA web pages, and CIMC links to those pages.

Recovery Act Funded Cleanups: CIMC provides information on Superfund and Brownfields site cleanups that received ARRA Recovery Act funding, but not on the Leaking Underground Storage Tanks sites.

Toxic Release Inventory (TRI) sites: The TRI is a dataset compiled by the U.S. EPA and contains information on the release and waste management for over 800 toxic chemicals, and toxic chemical categories as reported annually by facilities in certain industries as well as federal facilities. TRI data is provided in the CIMC mapping interface.

3.2 T**he Oklahoma Department of Environmental Quality (DEQ) Database** – This search engine was used to query several Oklahoma databases that are described on the Oklahoma DEQ Data Viewer website and summarized below (some are described above and are abbreviated here):

Oklahoma DEQ RCRA Sites: Location of DEQ Resource Conservation and Recovery Act (RCRA) treatment, storage and disposal facilities (TSDFs) sites in Oklahoma. Superfund Sites: This data provides location information for Oklahoma Superfund sites evaluated and documented by Land Protection Division (LPD).

Remediation Institution Controls: (also called Engineering Institutional Controls) Remediation sites in Oklahoma with Institutional Control tracked by the Remediation Unit of the LPD of the Oklahoma Department of Environmental Quality. Oklahoma state statute 27A O.S. § 2-7-123(C) requires the Department of Environmental Quality to place notices of remediation on properties where risk-based clean-up has occurred.

Class I Injection Wells: Wells that inject hazardous and non-hazardous waste beneath the lowermost formation containing an underground source of drinking water (USDW) within ¼ mile of the well bore.

Voluntary Cleanup Program Sites: The Voluntary Cleanup Program (VCP) provides a means for private parties and government entities to voluntarily investigate and, if warranted, clean up properties that may be contaminated. VCP utilizes a negotiated process for site activities. Sites in the VCP generally have the option to enter the Brownfields Program if the participant requests. VCP includes sites ranging from old oil refineries with multiples sources of contamination that affect hundreds of acres to sites less than an acre with a single source of contamination.

OWRB Appendix H Sites: Sites listed in OAC Title 785, Chapter 45, Appendix H, Beneficial Use Designations for Certain Limited Areas of Groundwater. Within Oklahoma there are some bodies or areas of groundwater the quality of which is not suitable for the beneficial uses that are designated on a default basis in OAC 785:45-7-3(b). In most cases, this unsuitability is caused by natural conditions or irreversible human-induced impacts such as pollution. Consequently, it is necessary to provide for beneficial use designations for these limited areas of groundwater which are more accurate and appropriate than the default designations in 785:45-7-3(b). The absence of an area of a groundwater formation from this Appendix does not necessarily indicate that area is free from contamination or has quality suitable for any particular beneficial use.

Hazardous Waste Permit Sites: A list of facilities in Oklahoma with hazardous waste permits. These sites

include hazardous waste landfill disposal sites, facilities that store hazardous wastes, hazardous waste transfer facilities, and certain types of recycling or treatment facilities.

Solid Waste Facilities: These are the active, permitted solid waste sites for the state of Oklahoma and are monitored by the DEQ. These include current transfer stations, non-hazardous industrial waste landfills, sanitary landfills, construction/demolition landfills, municipal solid waste landfills, municipal solid waste incinerators, regulated medical waste processing facilities, compost facilities, and waste tire processing facilities.

Site Cleanup Assistance Program: The SCAP program has 4 sub-programs: This program remediates abandoned hazardous waste sites and closed armories around the state. The School Chemical Disposal Program is a one-time service to Oklahoma public schools to remove unused, outdated, and potentially dangerous chemicals from school laboratories. SCAP also resolves environmental issues that are preventing property revitalization, allowing local communities to access the DEQ's expertise in site cleanup, paving the way for reuse of a site or building. Data layer updated 1/24/2022.

Tier II Facilities: Tier2 reports, also know has Hazardous Chemical Inventory reports, are required by federal law to be submitted annually by companies storing hazardous chemicals. These reports contain information on the type, amount, and storage of hazardous chemicals in quantities large enough to impact the surrounding community if there was an accident or spill. These reports help local emergency planners and responders prepare for and respond to accidents involving hazardous chemicals. These reports also allow citizens to know what facilities in their neighborhood store hazardous chemicals so that citizens can make informed decisions about what to do if an accident occurs. For more information on a specific facility, please contact DEQ.

Brownfields: *Completed* sites are in the Brownfields certificate program or that have completed the Brownfields program and have received a certificate of completion. Those designated as *RLF* sites received funding from DEQ through the Brownfield Revolving Loan Fund. This database was reviewed on 28 October 2022 for the inland disposal sites.

3.3 **The Arkansas Department of Environmental Quality (DEQ) databases** – The Arkansas EnviroView includes map layers from 37 different datasets. This search engine was used to query four Arkansas databases that are described on the Arkansas DEQ Data EniroView website and summarized below. A separate GIS-based viewer for Brownfields was used to identify active and completed Brownfield sites within Arkansas.

Permitted Sites: Arkansas DEQ Permits are required for various classes of landfills, composting, transfer stations, material recovery, and waste tire processing facilities to protect from the potentially harmful effects of mismanaged solid waste.

Regulated Facilities: a wide array of facilities regulated by the Arkansas DEQ such as underground storage tanks (USTs), Chemical Inventory sites, and Hazardous Waste Generators. Data is current as of date of search.

RATFA Sites (Remedial Action Trust Fund Act): These include NPL and State Priority List (SPL) sites.

Engineering Institutional Controls: (see *Remediation Institutional Controls* above) These are areas pertaining to the engineering and institutional controls of properties regulated by the Arkansas Department of Environmental Quality. Institutional controls in Arkansas are primarily used in implementing remediation plans to settle an enforcement action, in solid waste management, in the management of mining facilities, and

as part of their Brownfields program.

Arkansas Brownfields - A review of this database showed several Brownfield sites within 2 miles of proposed disposal sites in Arkansas. Disposal site 67.7 R and 71.0R are within 2 miles of this active Brownfields site. 204.4R is within one mile of a completed Brownfields location. These brownfields sites do not currently pose a HTRW hazard to the project, but could in the future if the identified disposal sites were to shift location. This database was accessed and reviewed on 25 October 2022.

Oil and Gas Wells, Fields, and Pipeline Maps – A search of the oil and gas wells in the area via the AR Oil and Gas Wells, Fields, and Pipeline Maps website identified hundreds of sites including oil wells, plugged oil wells, injection/disposal sites and cross river pipelines in the vicinity of identified disposal sites. Wells within 1 mile distance of selected disposal sites begin at site 215 and continues to 308. Pipelines begin at site 14 and are found crossing various locations throughout the Arkansas River system. Although pipelines themselves are not classified as HTRW, pipelines and oil wells play an important role in the HTRW existing conditions near the potential project area due to the potential for uncontrolled leaks into the surrounding environment. A site assessment (visit) may be required to better determine evidence of prior leaks and the need for a site investigation. The presence of these pipelines also presents obstacles with respect to construction. With construction best practices the potential of impacting an existing pipeline can be addressed avoiding any releases. This database was reviewed on 22 November 2022.

4.0 Interviews and Site Visit

The objective of the interviews and site visit is to discover environmental conditions that could not be obtained in the records search, as well as to determine past uses of the subject property. Due to the large number of sites (39 upland, 137 inland) being investigated for the project, interviews and a site visit were not conducted for this report, but may be conducted at a later date once the records review is completed and if the results indicate a need for specific sites.

5.0 Results and Conclusions

To complete a feasibility level HTRW evaluation for the MKARNS project, a records search was conducted following the rules and guidance of ER 1165-2-132: *HTRW Guidance for Civil Works Projects*, and in general accordance with portions of ASTM E1527-13: *Standard Practice for Environmental Site Assessment: Phase 1 Environmental Site Assessment Process*.

UPLAND DISPOSAL SITES

There are seven sites having RECs that raise concerns discovered during this desk top review for each subject property. Each site and the reason for concern is detailed below. None of these sites will be used in Phase 1 of the construction project, so it will not be affected by the results of any further investigations planned for these sites. A figure of each site can also be found below.

ALT 20 at River Mile (RM) 337.2 (35.31910556N, 95.7936W): An REC exists within 1 mile of this site identified as a Tier II facility on the OK DEQ database, Roberson Oil - South River Bend Ranch 2-25 (coordinates 35.313850N, 95.783250W) and permitted as recently as 2020. This facility is an oil and gas

extraction site with stock tank, separator, and associated equipment. No spills are reported for this site, however, it is common for investigations of such sites to reveal historic hydrocarbon contamination.

15 at RM 393.8 (35.786225N, 95.29099444W): The OK DEQ databases list 8-10 Tier II facilities within 1-mile of Site 15, depending on the exact location of the site boundary. These Tier II facilities are located across the river in an industrial area near the Port Place. In this area, the US EPA databases indicate three locations listed on the EPA's Toxics Release Inventory (TRI), also located within the same industrial area and within 1 mile of Site 15, with a fourth TRI depending upon the exact location of the Site 15 boundary.

14 at RM 389.7 (35.74565833N, 95.27910556W): A REC identified as a Landfill (GP) within 1-mile of the subject property on the OK DEQ databases. In addition, several Tier II facilities are located within 1-mile of the site. The US EPA databases list 1 TRI within a 1-mile radius of the site; while not qualified as a REC, it should also be noted that an additional four TRIs are within 2-miles of the subject property.

32 at RM 416.4 (35.99783889N, 95.54171944W): OK DEQ's databases list a REC identified as a Tier II facility (BCE MACH LLC; an oil and gas company) approximately 1-mile from the subject property; several other Tier II facilities are also located in the vicinity of the property but outside the 1-mile radius.

16 at RM 394.4 (35.79490556N, 95.29466667W): The OK DEQ databases indicate several TRIs within a 1-mile radius of the subject property. In addition, a possible VCP site is noted nearby to the subject property at a water plant. Several Tier II facilities are also located within 1-mile of the property, as well as a Superfund site (non-NPL). It is also noted that a Brownfield, and several additional TRIs are located within a 2-mile radius of the property and while not considered a REC at this time, could be a concern if the disposal site location is changed by the PDT.

0 at RM 309.1 (35.37991111N, 94.43728333W): The AR DEQ databases indicate at least one REC consisting of a Tier II facility (Stephens Production co.; an oil and gas company), a RCRA Corrective Action site, a Brownfield, and several TRIs are located within a 1-mile radius of the subject property. In addition, it should be noted that numerous additional TRIs, a Superfund site (non-NPL), several Brownfield sites are located within 2-miles of the current location planned for the disposal site, but could be considered a REC if the location is shifted by the PDT.

1 at PRL (35.36605N, 94.43525833W): The OK DEQ database lists a Tier II facility, numerous TRIs, and a Superfund site (non-NPL) located within a 1-mile radius of the subject property and constituting RECs. It is also noted that numerous TRIs, a Superfund site (non-NPL), and Brownfield sites are located within 2-miles of the subject property that are not considered a REC at this time but could if the PDT shifts the location of the disposal site.

INLAND DISPOSAL SITES:

Seven proposed inland disposal sites are located within one mile of a REC. Each of these seven sites requires more investigation to acquire data that can be used by RPEC and the PDT for the project. Investigation typically consists of a sampling and analysis of sediments. While these inland disposal sites are not subject to the same considerations as the upland sites with regard to real estate acquisition, the quality of the sediments is required to determine whether it is appropriate to place dredged sediments at these locations. Two proposed disposal sites (175.2R, 123.1R) are within one mile of a RCRA Corrective Action site, with a third proposed disposal site (300.0R) within one mile of multiple RCRA Corrective Action sites. Two sites (67.7R and 71.0R) are within one mile of an active Brownfield site, with a third (204.4R) within one mile of a closed Brownfield site. Finally, we also have a report from USACE

personnel that past mining operations were conducted at RM 157 to 175 (pool 8) that also should be investigated.

Currently, these seven RECs are identified for further study to assess the sediment quality. Because the project will be executed in several phases spanning several years, and the inland disposal sites are tentative at this stage of the project development, the sediment assessment of each inland disposal site for the first project phase will be conducted once the project development team evaluates the bathymetry (depth profile) of the channel and determine quantities of sediment and confirms locations. Sediment assessment for future project phases should be conducted during the PED stage for each phase so that the data is considered recent and relevant. A figure of each site can also be found below.

The first phase of the project will not include the use of these seven inland placement areas, and will not be affected by the results of the sediment sampling and analysis that is currently being planned.

The following locations will not be considered as a REC at this time due to the distance of the locations from the current disposal sites, however, these locations are noted here because they could pose an HRTW concern if the specified disposal locations are shifted by the PDT:

FEDERALLY-OWNED LAND

29 at RM 401.6 (35.86035N, 95.37475833W): 2 sites noted for situational awareness that are beyond the 2-mile radius (extended beyond required 1-mile radius). One appears to be related to the Chouteau lock and dam no. 17, LUST ID OK064-0460 with an No Further Action (NFA) noted.

30 at RM 407.6 (35.90309444N, 95.46195W): Tier II facility just beyond 1-mile radius: Endeavor Energy Resources, LP - Ramsey "34" located at 35.915367N, 95.475711W

31A at RM 414.9 (35.97661667N, 95.53517778W): Several tier II facilities near 31A but outside the 1-mile radius.

PARTIALLY FEDERALLY-OWNED LAND

41 at RM 443.7 (36.21145556N, 95.71084167W): RCRA Corrective Action site at Terra N2 plant about 3 miles north

6 at RM 342.3 (35.385675N, 95.85671944W): Enerfin Resources I LP - Eastok Siebert #2 Disposal Well (N 4020 Rd & E 1110 Rd. (approx. 0.4 miles east on lease road))

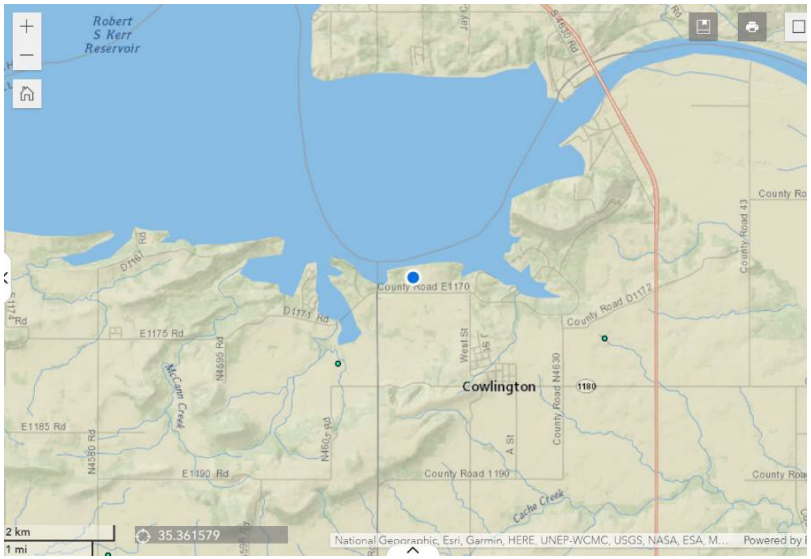
PRIVATELY-OWNED LAND

20 at RM 337.2 (35.32066667N, 94.80741389W): Tier II facilities outside 1-mile radius, but within 2-mile radius (O&G facilities).

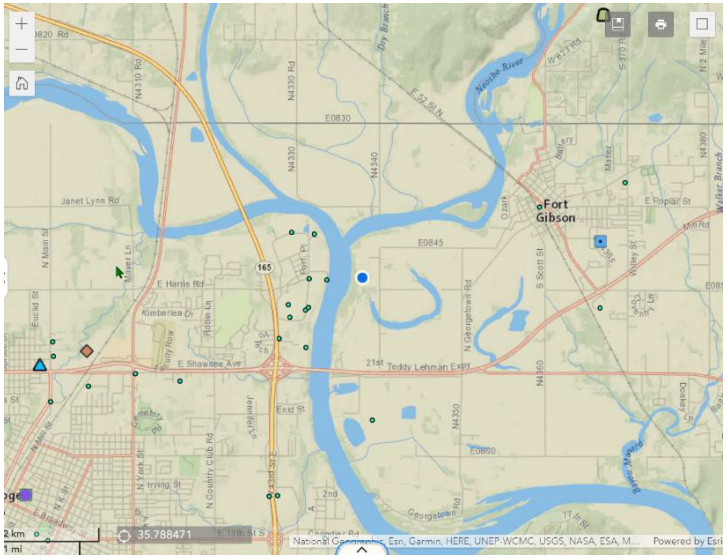
18A at RM 361.9 (35.49803333N, 94.11755W): While no REC appear within 1-mile, several do within 2-mile radius) on EPA databases; none within 1-mile, but several Tier II facilities including fuel facility within 2-miles on state database.

12 at RM 382 (35.68711111N, 94.23648056W): UST releases outside of 2-mile radius (TRI NAME: US Army National Guard Camp Gruber).

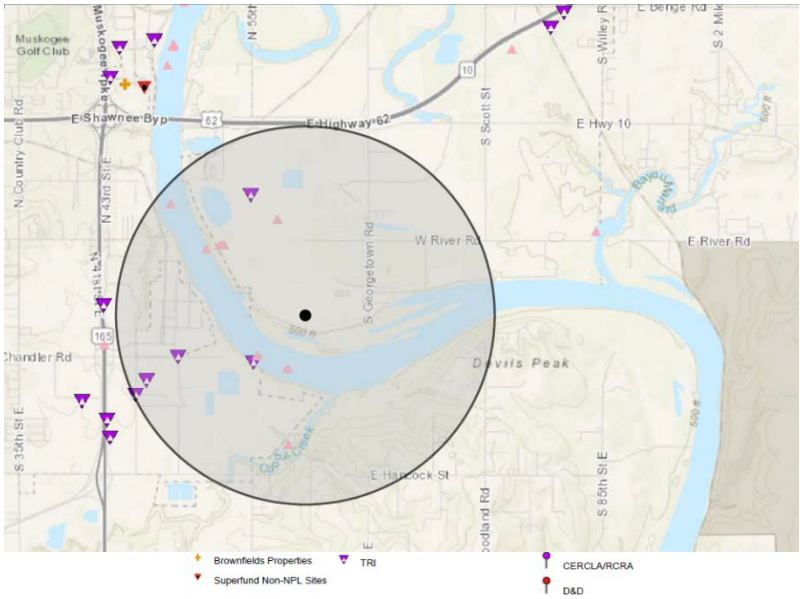
Upland Disposal Sites with REC Identified in the Vicinity



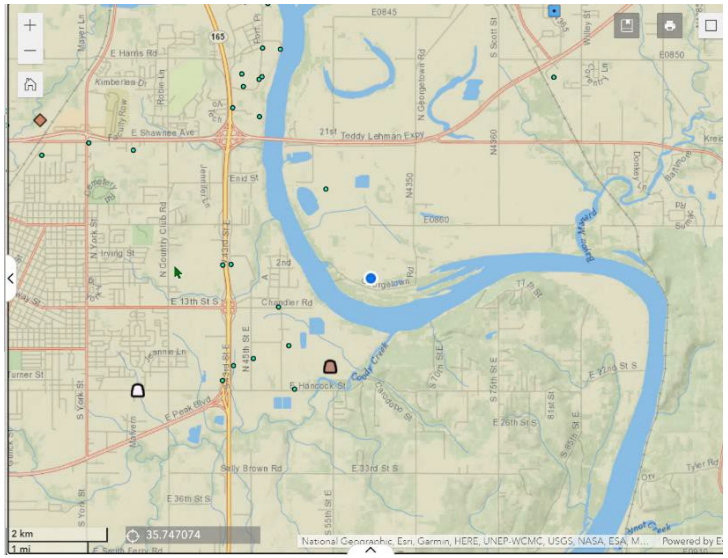
ALT 20 at River Mile (RM) 337.2: EPA databases



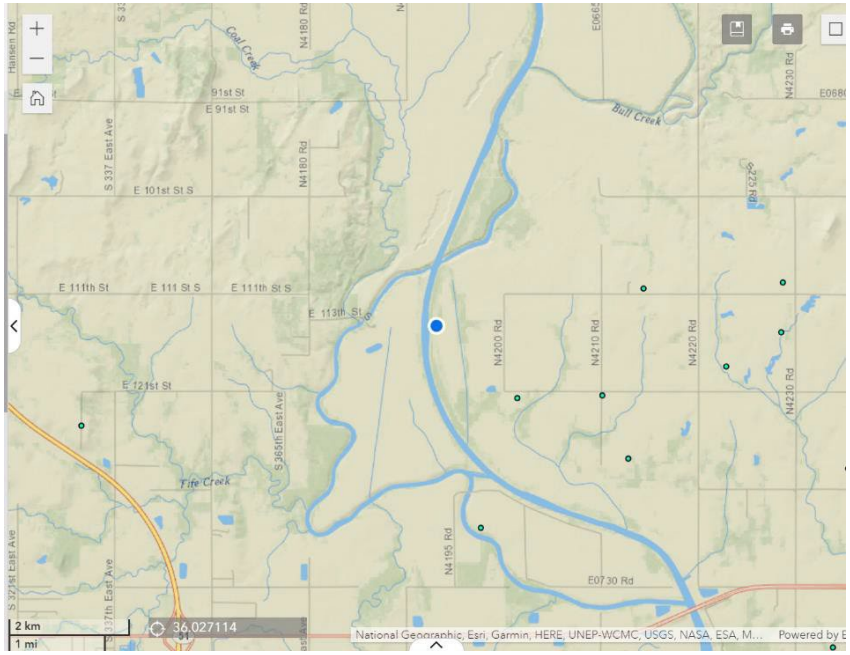
15 at RM 393.8: EPA databases

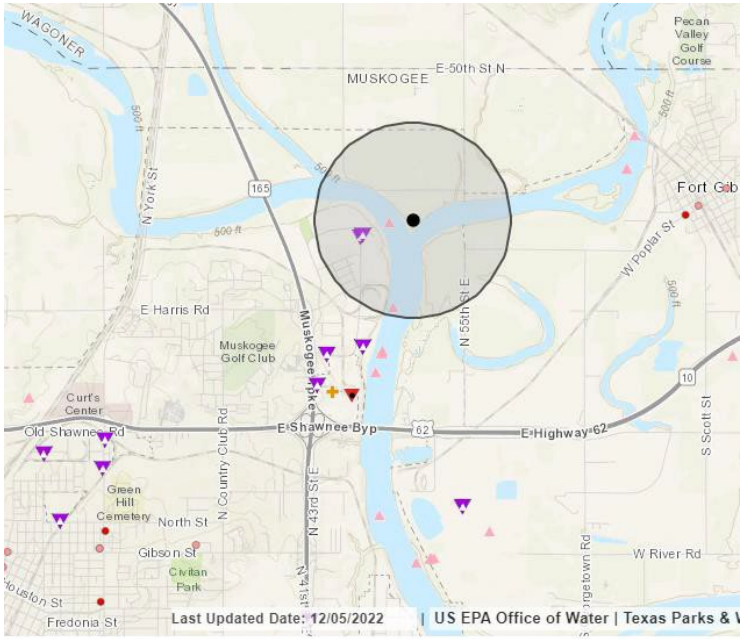


14 at RM 389.7 EPA databases with 2-mile radius shown



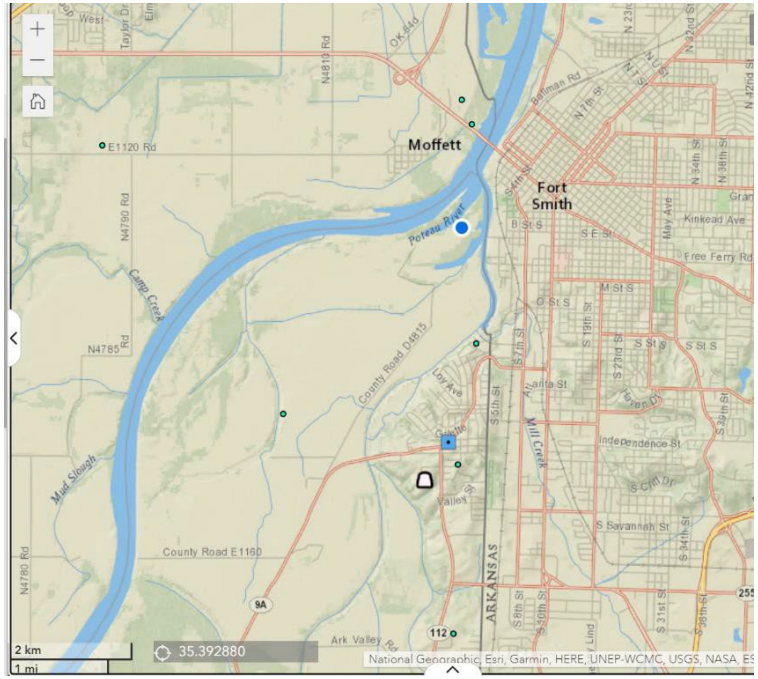
14 at RM 389.7 OK DEQ

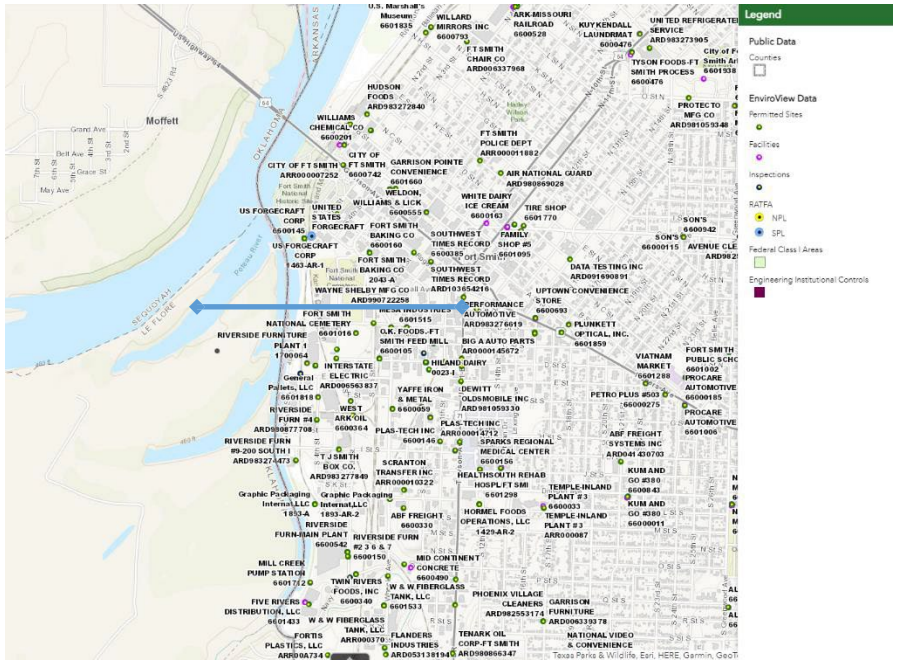




32 at RM 416.4: OK DEQ Tier II facility to southeast of site at about 1-mile, several more (O&G company) to west of site. (left figure)

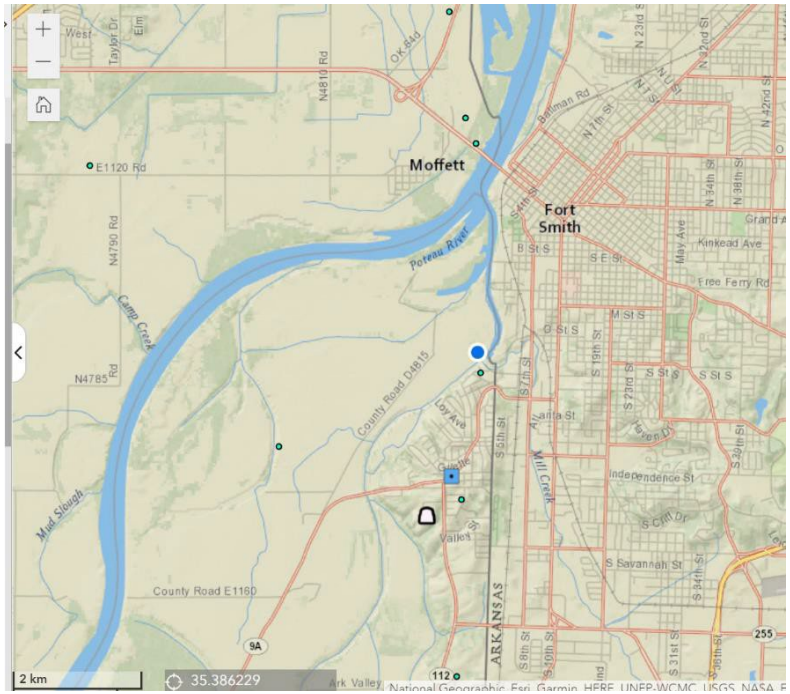
16 at RM 394.4 EPA databases 1-mile radius shown (right figure)

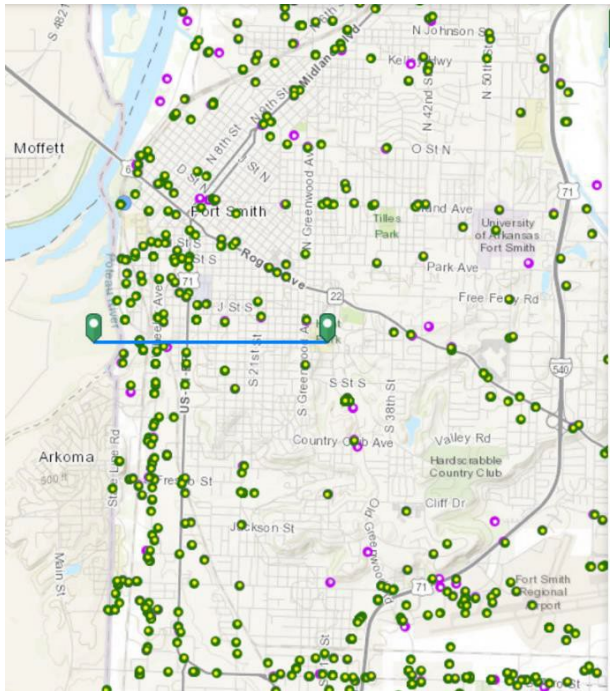




0 at RM 309.1 OK DEQ database (note – site is on border between OK and AR) (left figure)

0 at RM 309.1 AR DATA BASE (note – site is on border between OK and AR). 1-mile distance shown in blue. (right figure)





1 at PRL OK DEQ database (note – site is on border between OK and AR) (left figure)

1 at PRL AR DATA BASE (note – site is on border between OK and AR). 1-mile distance shown in blue. (right figure)

Inland Disposal Sites with REC Identified in the Vicinity

Figure 1: Disposal site 175.2R is within one mile of this RCRA corrective action site.

Figure 2: Disposal site 123.1.R is within one mile of this RCRA corrective action site.

Figure 3: Disposal Site 300.0R is within one mile of multiple RCRA corrective action sites.

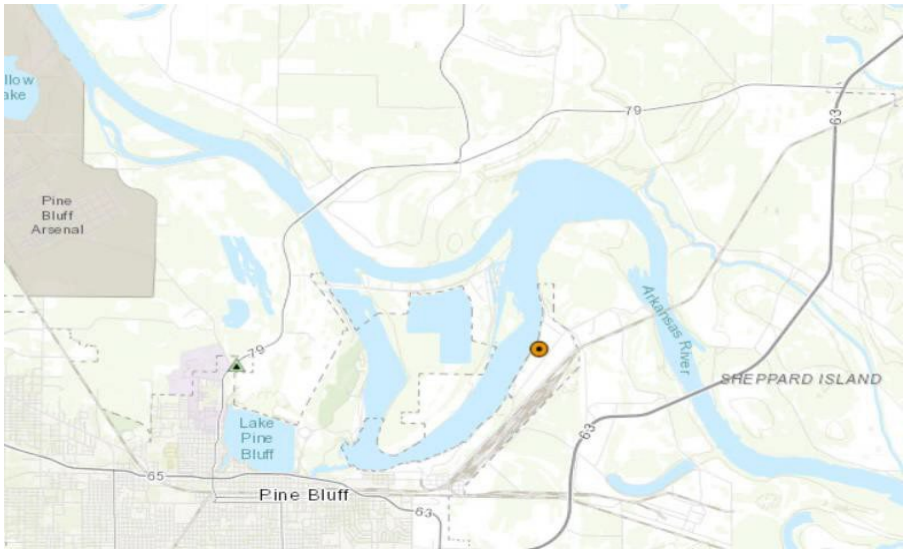


Figure 4: Disposal Sites 67.7R and 71.0R are within one mile of these Active Brownfields sites.

Figure 5: Disposal site 204.4R is within one mile of this Closed Brownfield site.