



## **CURRENT CONDITIONS REPORT**

**EXIDE TECHNOLOGIES**  
**555 North Hoke Avenue**  
**Frankfort, Indiana**  
**EPA ID No. IND001647460**

*Prepared For:*  
**EXIDE TECHNOLOGIES**  
**Milton, Georgia**

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**ADVANCED GEOSERVICES CORP.  
West Chester, Pennsylvania**

**Project No. 2011-2678-00  
July 6, 2017**



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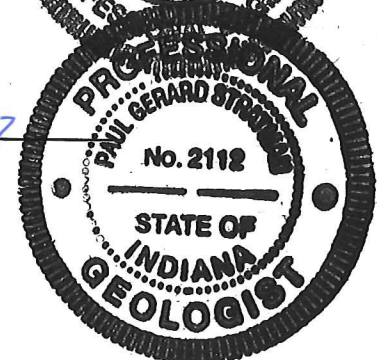
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7/6/17

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### APPENDIX

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## 1.0 INTRODUCTION

This Current Conditions Report (CCR) has been prepared by Advanced GeoServices Corp (Advanced GeoServices), on behalf of Exide Technologies (Exide) for the former battery manufacturing facility (the Facility) located at 555 North Hoke Avenue in Frankfort, Indiana (the Site). The Facility is located as shown on the attached Site Location Map (Figure 1).

Exide is the Respondent for a United States Environmental Protection Agency (USEPA) Administrative Order on Consent (Consent Order) under Section 3008(h) of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984, 42 USC 6928(h). The lead enforcement agency for the Site is the USEPA Region 5.

### 1.1 PURPOSE

As required by Section 11.a of the Consent Order, this CCR is being developed to compile and assess the information collected to date for the Site, describe the physical conditions and extent of contamination, and summarize the historic operations at the Site. The information presented in the CCR will be used to develop a RCRA Facility Investigation Work Plan (RFI Work Plan) as required by Section 11.b of the Consent Order.

### 1.2 REPORT ORGANIZATION

The CCR has been organized to present information on historic operations, current conditions, and concepts for future investigation and potential remediation. The Site contains several Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) which may have impacts from historic operations. These are further consolidated into larger Areas of Interest (AOIs) based on the historic Site operations and potential Contaminants of Concern (COCs) that have been identified or are potentially present.



The remainder of the CCR is organized as follows:

- Section 1.0 – Introduction
- Section 2.0 – Site Description
- Section 3.0 – Site History
- Section 4.0 – Environmental Setting
- Section 5.0 – Regulatory History
- Section 6.0 – Historic Investigations and Data
- Section 7.0 – Contaminants of Concern
- Section 8.0 – Conceptual Site Model
- Section 9.0 – Interim Corrective Measures Assessment
- Section 10.0 – Data Gaps
- Section 11.0 - References

Tables are provided to present information on the AOCs/AOIs as well as to summarize historic data. Figures are provided which depict the former Site layout, current conditions, and historic sample locations. Several appendices are also attached to provide the reader with detailed information that has been compiled for the Site such as laboratory reports, well search records, historic photographs, and other relevant records and documents.



## 2.0 SITE DESCRIPTION

The Site is located at 555 North Hoke Avenue in Frankfort, Indiana as shown on Figure 1 (based on USGS Topographic maps for *Michigantown Quadrangle and Frankfort Quadrangle, Indiana-Clinton County 7.5 minute series*). The Site is bounded by North Hoke Avenue to the west, Kelley Avenue to the east, Washington Street to the north, and Norfolk Southern railroad tracks to the south. The Site is located within Clinton County.

The majority of the Site corresponds to the tax parcel with the address 555 North Hoke Avenue. However, several other contiguous/adjacent parcels located along Washington Street and Kelley Avenue are also owned by Exide. Most of these lie within the existing perimeter fence.

For purposes of this report “the Site” will refer to all of the Exide owned parcels that are contiguous/adjacent to the 555 North Hoke Avenue parcel. The Site parcels are summarized on Table 1 and Figure 2.

These Site parcels encompass approximately 13.7 Acres. Approximately 4.5 acres of the Site, were formerly under roof for battery manufacturing and related operations. Approximately 12.1 acres of the Exide owned parcels are located within the perimeter of an existing security fence. No above grade structures remain onsite. Only floor slabs remain. The area within the fence is almost entirely paved. The remaining 1.6 acres of the Site lies outside of the fence and has an open grass covered surface.

An unnamed creek is adjacent to the Site on the north side of the Exide parcels. The coordinates for the facility are 40° 17' 08" N, 86° 29' 45" W. Residential properties are located on Hoke Avenue, Kelly Avenue, and south of the railroad tracks. Several light industrial and commercial properties are located near the Site on Washington Street.



The Site was formerly used for the manufacture of lead-acid batteries from 1963 – 1997 (and possibly as early as the 1940s), with manufacturing present at the Site dating back to the early 1900's. As a result of these operations a total of nine (9) SWMUs and three (3) AOCs are present onsite. The Site is categorized with four Areas of Interest (AOIs) based on historic use, current conditions, and recent investigations.

- Former Manufacturing Areas – This includes all of the former buildings/structures and ancillary equipment such as baghouses and water treatment equipment. This includes all nine (9) SWMUs and AOCs 1 and 2.
- Underground Storage Tanks – Records indicate that three Underground Storage Tanks (USTs) were present onsite at one time. These were generally located adjacent to the Former Manufacturing Areas on the northeast portion of the Site.
- Overall Site – this includes the remaining portions of the Site that were not utilized for manufacturing or USTs such as the majority of paved areas of the Site that were used for vehicle and truck parking and/or short term material storage.
- Groundwater – this includes the groundwater below the Exide-owned parcels.



### 3.0 SITE HISTORY

#### 3.1 OWNERSHIP HISTORY

Limited information is available regarding the exact nature of historic manufacturing operations at the Site. Based on information contained in the Consent Order and a November 28, 2011 Letter Report prepared by USEPA, Prest-O-lite Manufacturing owned the Site during the World War II era. Prest-O-Lite was a car equipment manufacturer (including lead acid batteries), although this ownership history and specific Prest-O-Lite manufacturing operations conducted on-site could not be confirmed during preparation of this Current Conditions Report. Based on Polk's City Directory in 1959 a telephone exchange registered to P.R. Mallory & Co. Inc. was listed for the address. P.R. Mallory & Co. manufactured electronics including dry cell batteries and eventually became Duracell. General Battery Corporation purchased the Site in 1963, which is consistent with additional information from Polk's City Directory which shows the telephone exchange for the address belonging to General Battery & Ceramic Co. Exide assumed ownership of the Site during the acquisition of General Battery Corporation in 1988. Exide currently owns the parcels that make up the Site.

#### 3.2 OPERATIONAL HISTORY

##### 3.2.1 Early History

Carriage manufacturing operations reportedly began on the Site in the early 1900s. Historic aerial photographs dating back to 1969 show many structures that were still present at the time of demolition in 2012. Prior to 1963, the Site was also reportedly used for cabinet manufacturing. It is possible that Prest-O-Lite, P.R. Mallory and cabinet manufacturing operations all occurred on the property between World War II and 1963.



### 3.2.2 Battery Manufacturing

In 1963, General Battery Corporation began the manufacture of lead-acid batteries for use in automotive, golf cart, marine and industrial applications. At its peak the facility produced over 12,000 automotive batteries per day. The Standard Industry Classification (SIC) code for the facility was 3691, Battery manufacturing. The aerial photograph taken in 1969 shows a Facility layout that looks very similar in development to conditions observed in subsequent photographs. Notable exceptions are the pink coloration in the center of the northern portion of the facility (later developed as “New Formation”) and in the parcels located along Kelley Avenue. The pink coloration on the aerial photograph is typically indicative of vegetation photographed by color-infrared (CIR) aerial photography.

The extent of paved areas is unclear in the 1977 aerial photo. The 1981 aerial photo (Appendix A) clearly shows that the remaining portions of the Site, along Kelley Avenue have been paved. The New Formation portion of the facility was constructed in the late 1980s or early 1990s and is visible in the 1992 aerial photograph (Appendix A). Some portions of the New Formation area may have been enclosed earlier in the 1980s.

During the battery manufacturing process, metallic lead was received at the facility, melted, and cast into grids and posts. Lead oxide paste was also manufactured at the facility and subsequently applied to the grids. Lead oxide was created by feeding molten lead into a reactor and mixing it with air to oxidize the lead. Pasted grids were placed in stacks that formed the core of the battery. The cores were placed in battery cases that were produced offsite. Then the remaining components were added. Electrolyte (dilute sulfuric acid) was then added to the battery and a charge was applied (formation). After formation, the battery was cleaned, finished, labelled, and packaged for shipment to retailers and distributors.

Water was used to cool batteries after charging and also to wash batteries prior to shipment. Cooling water was collected in floor drains and emptied to a sump in the wastewater treatment plant (WWTP) located on the northwest corner of the Site. The sump collected wastewater from the entire plant, including sulfuric acid from the cooling and washing process, and lead from



washing and dry charge operations. The corrosive wastewater (containing primarily sulfuric acid and lead) was pumped into two above ground holding tanks outside the building and then into reactor tanks located inside the WWTP building (SWMU-5).

Wastewater was treated with lime to neutralize the pH and precipitate dissolved metals. Following neutralization with lime, the wastewater flowed into a large clarifier outside. Precipitated solids settled to the bottom and was pumped to a sludge holding tank. From June 1986 until operations ceased the sludge was dewatered using a filter press. Sludge cake generated by the filter press was collected in a roll-off container for offsite disposal. Extracted water was recycled back to the clarifier. Prior to the use of the filter press, sludge was dewatered using vacuum pan filters and the filter cake was temporarily stored in an enclosure building prior to offsite disposal. Clarified water was then discharged to the City of Frankfort sanitary sewer system in accordance with a discharge permit. A schematic drawing of the WWTP dated from 1984 is provided in Appendix B.

Lead vapors were generated from molten lead handled in melting pots and casting machines. Plastic fumes were also generated from the battery case heat sealing process. Air handling equipment was used to vent these emissions to baghouses on the southeast side of the building. Lead oxide dust also was vented through ducting to a baghouse (SWMU-2). In general, air from the Facility was cycled through a filtering system called the OSI in the filter building (SWMU-6).

Battery manufacturing operations ceased in 1997. The Site was used by Exide for equipment storage until the demolition project in October 2012. The Site is currently vacant.

### 3.2.3 Facility Decontamination and Demolition

In October 2012, Exide voluntary performed a decontamination of the facility followed by demolition of the above grade structures. The decontamination and demolition project was completed in January 2013. The scope of work included:

- interior pressure washing and vacuuming to remove dust;



- removal of universal wastes (mercury bulbs and switches, PCB ballasts, miscellaneous chemicals, paints, and petroleum products, etc.);
- dust suppression and air monitoring program;
- demolition of above grade structures;
- cleaning of pits, sumps, and pipes to remove sediment;
- abandonment of piping/drains;
- sampling and sorting of debris for disposal, recycling, or reuse;
- crushing and onsite placement of approximately 3,300 CY of concrete rubble;
- final washing of remaining impervious surfaces;
- collection and onsite treatment of impacted wash water and other contact water;
- demolition of select areas of corroded concrete floor and placement of impermeable cover; and,
- Installation of chain link fence as needed to secure the perimeter.

As part of the demolition work all utility supplies to the Site have been previously cut-off abandoned.

- Potable water – October 22, 2012;
- Electrical Service – September 25, 2012;
- Natural Gas – October 16, 2012; and,
- Sanitary Sewer – January 16, 2013.

### 3.3 EMPLOYEE HISTORY

As part of the Current Conditions Report development, Dale Reynolds was interviewed. Mr. Reynolds has been an Exide employee since July 7, 1980. Mr. Reynolds currently lives in Frankfort and was the Facility Manager from 1998 through 2017. Additional positions held by Mr. Reynolds include: Material Control Manager, Quality Control Manager, Quality Control Engineer, Lab Technician, Leadman Quality Control Floor Auditor. Following closure of the





facility, Mr. Reynolds has continued to function as the Site caretaker. Mr. Reynolds was involved with the demolition and investigation work that occurred following the closure of the Facility.

Prior to the interview a map (Figure 2 and 4) of the facility showing the SWMUs and AOCs superimposed over the former and current facility layout was provided to Mr. Reynolds along with the following questions:

- *Please confirm your dates of employment with Exide and at the Frankfort Facility;*
- *Please describe your level of knowledge of the Site and former Facility operations;*
- *Do you have any knowledge of use at the three grassy areas/parcels located outside of the current perimeter fence?*
- *In addition to the nine SWMUs and three AOCs identified on the facility plan, are you aware of any other locations where potential contamination pathways are present? This could include leaking sumps, pits, severely damaged flooring, past spills, tanks, waste storage areas, etc.;*
- *Are you aware of any locations where lead, acid, battery casings, or other waste materials were spilled, dumped, buried onsite?;*
- *For areas of the facility “yard” that are currently paved, are you aware of any sites of spills or materials handling that may have occurred on the ground prior to paving?;*
- *Is there currently any problem with trespassers or other members of the general public entering the Site property (albeit without authorization);*
- *Are you aware of any current or former gasoline filling stations in the immediate vicinity of the Site and/or across the street from the property at 1403 Washington Avenue? If so, please describe the approximate location;*
- *During the removal of UST-2 do you recall observing any remnants of an additional UST on the north side of the removal area;*
- *Are you aware of any usage of chlorinated solvents onsite? This includes compounds such as tetrachloroethylene, commonly referred to as PCE; and trichloroethylene, commonly referred to as TCE. Both are also described as “dry*



*cleaning fluid” and both are most often used industrially as degreasing compounds. If you are aware of the use of chlorinated solvents onsite. How were they managed as a waste?;*

- *Please confirm the date/year when the new formation building was constructed. Was the underlying area paved prior to construction of the building?;*
- *Can you describe the capacity and materials of construction of the former sludge holding tank (SWMU-2); and,*
- *To your knowledge were there ever any wells operated onsite for water production?*

Mr. Reynolds responded in writing and a brief phone call was performed to ensure an accurate understanding of the responses. A complete written summary of the interview is provided as Appendix C.



## 4.0 ENVIRONMENTAL SETTING

### 4.1 LOCATION AND LAND USE

The Site is located as shown on Figure 1 (based on USGS Topographic maps for *Michigantown Quadrangle and Frankfort Quadrangle, Indiana-Clinton County 7.5 minute series*). The Site is bounded by North Hoke Avenue to the west, Kelley Avenue to the east, Washington Street to the north, and Norfolk Southern railroad tracks to the south. The Site is located in central Indiana within Clinton County, approximately 50 miles northwest of Indianapolis.

The Site consists of eighteen (18) contiguous/adjacent parcels owned by Exide which encompass approximately 13.7 acres. All but three of the parcels are located within a perimeter security fence. The majority of the area within the fence perimeter is paved (12.1 acres). The three parcels outside the fence are open grassy lots.

During operations approximately 4.5 acres of the Site were under roof and dedicated to battery manufacturing and other directly related operations (wastewater, emission control, offices, etc.). The remaining 7.6 acres of paved area inside the fence was utilized for parking of automobiles, trucks, and trailers. The Site is currently vacant.

Based on a review of historic aerial photos (Appendix A), the three (3) grassy parcels outside of the perimeter fence do not appear to have been used for any operational purpose by Exide. Historic facility plans dated 1984 (Appendix B) indicate that an alley was present to the immediate north of the facility perimeter fence.

### 4.2 SURROUNDING LAND USE

Residential properties lie across the street from the Site on Hoke and Kelly Avenue; as well as on the opposite side of the railroad tracks to the south. Washington Avenue is immediately north of the Site and has several light industrial commercial properties located in proximity to the Site. No Sanborn maps were available for the Site (see certification in Appendix A).



A review of surrounding properties generated by EDR (Appendix A) has identified various commercial/industrial properties and underground storage tanks located near the Site. This includes the following:

- Wampler Services Inc, 1270 Washington Avenue – this property is located immediately across Washington Avenue from the Site includes an active scrap yard that appears to have been in operation since the late 1960s based on aerial photos. Michael Construction shares the same address and at one time had a storage tank onsite.
- Indiana Gas Company, 500 Hoke Avenue – this property located on the opposite side of Hoke Avenue previously housed storage tanks. This location was also identified as the site of a voluntary cleanup (VRP Number 6980709).
- Norfolk Southern Railroad, 1601 West Ohio Street – this property is located approximately 700 feet south of the Site and a review of available records indicated that there was a leaking UST present at this location. Based on a review of aerial photographs it is unclear whether this is the correct physical address for a UST facility. This location was also identified as the site of a voluntary cleanup (VRP Number 6020104).
- Jay’s Car Care, 358 Hoke Avenue – this property is located approximately 700 feet south of the Site.
- An October 6, 1997 letter from Exide’s Legal Council (Mr. Lawrence Vanore) to IDEM indicated that in April 1987 a gasoline filling station was present “right across the street from the complainant’s house” located at 1403 Washington Avenue. This would place the potential location within 400 feet of the Site.

#### 4.3 TOPOGRAPHY AND SURFACE DRAINAGE

A survey of the Site does not exist. The Site appears relatively flat with a typical ground surface elevation of approximately 850 feet MSL. However, a review of topographic maps for the area around the Site indicates that elevations are generally higher south of the Site and lower north of the Site. It has been observed that stormwater from the eastern half of the Site drains east and



north to Kelley Avenue. Stormwater from the western half of the Site drains west and north to Hoke Avenue. Northern portions of the Site drain north to Washington Avenue.

Stormwater inlets are shown on Figure 3. Water which enters these inlets drains to stormwater pipes on Kelley Avenue or Michigantown Road.

#### 4.4 CLIMATE

Central Indiana has a humid continental climate with cold winters and hot, wet summers. Measureable snowfall usually begins in late November and ends in late March. Daytime temperatures in January, the coldest month of the year, average in the low-mid 30s; with overnight lows in the upper teens. In the summer, daytime highs average in the low to mid 80s; with overnight lows in the mid-60s. Extended periods of higher temperatures are rare due to disruption from cooler and drier Canadian air. The clashing of hot and cold air masses can lead to severe weather, particularly in the spring. Spring is typically the wettest time of the year and is the peak time for tornados. May is typically the wettest month with average rainfall between four and five inches across the State. Average annual precipitation in Clinton County is approximately 39 inches.

#### 4.5 SURFACE WATER HYDROLOGY

Precipitation in the vicinity of the Site can fall as rain in the warmer months or snow during the winter. Most precipitation around the site is managed by a system of paved roads and curbing which direct stormwater into inlets and drainage structures.

An unnamed tributary of the Prairie Creek lies approximately 300 feet north of the Site; on the opposite side of Kelley Avenue. The unnamed tributary eventually drains to the Prairie Creek approximately 1.5 miles downstream of the Site. The Prairie Creek eventually drains into the South Fork of the Wildcat Creek and ultimately to the Wabash River. Most of Indiana (approximately 24,000 square miles) is drained by the Wabash River system. The Site is located in the Upper Wabash River Basin.



A printed FEMA FIRM map for the Site and surrounding vicinity was not available. Panel 18023C0165C was viewed using the FEMA ArcGIS viewer and indicated that the panel containing the Site is an “Area of Minimal Flood Hazard”.

#### 4.6 GEOLOGY

As the Laurentide ice sheet began to retreat from present day Northern Indiana and Northwest Ohio between 14,000 and 15,000 years ago, it receded into three distinct lobes. The eastern or Erie Lobe sat atop and behind the Fort Wayne Moraine. Meltwater from the glacier fed into two ice-marginal streams, which became the St. Joseph and St. Marys Rivers. Their combined discharge was probably the primary source of water for the proglacial Wabash River system. Rich prairie soils extend over central Indiana. Some clays in east-central Indiana are compact with poor drainage and frequent ponding of water. Till (material deposited directly by glaciers) forms flat to hummocky plains that dominate the central portion of the state. The thickness of the glacial deposits ranges from 100 to 400 feet throughout Clinton County.

The Site and surrounding region is immediately underlain by Fincastle-Crosby soils (see *EDR* soil report provided in Appendix A). This is a silty loam with slow infiltration rates (Class C) and is somewhat poorly drained. The area is characterized by swell and swale topography. Fincastle soils are typically observed on rises and have a brown silt loam surface layer, and yellowish brown, mottled silty clay loam to clay loam subsoil. Crosby soils are found on high rises and have a brown silt loam surface layer, and yellowish brown, mottled silty clay loam, clay loam, and loam subsoil.

Fill materials are generally present in the upper 18 – 24 inches of the onsite soil strata. Borings performed as part of the Hazardous Waste Pile Closure (1998 – 2000) identified fill materials in depths of up to 5 feet below ground surface in the northern portion of the Site. During the 2014 soil investigation, shallow geoprobe borings (4 feet to 8 feet in depth see Appendix D) identified silty clay soils in a majority of borings. Sandy fill materials were identified in borings performed near the rail road embankment on the south portion of the Site, beneath Old Formation, and beneath the former WWTP. All of these locations were described as likely to have had grading or fill placement performed.



Debris (brick/masonry fragments, piping, wire) was observed in the UST-2 removal excavation performed in 2014, but was not observed in geoprobe borings elsewhere onsite. The deepest boring performed onsite during the Initial Site Characterization (ISC) investigation reached a depth of sixteen (16) feet below ground surface. Bedrock was not encountered.

The Site appears to fall near the divide between Devonian and Silurian bedrock units. Devonian formations typically have a carbonaceous shale on the upper portion and are underlain by limestone, dolostone and shale. Silurian bedrock contains the latter rock types. Indiana bedrock geology features a broad anticline with a slight plunge to the northwest. Due to the broadness of the anticline it is often referred to as an arch. Bedrock beneath the Site is located at approximately 550 feet MSL (approximately 300 feet bgs).

#### 4.7 HYDROGEOLOGY

The Tipton Complex Aquifer System is characterized by unconsolidated deposits that are quite variable in materials and thickness. Aquifers within the system range from thin to thick and include single or multiple intratill sands and gravels. The aquifers are highly variable in depth and lateral extent and are typically confined by thick clay layers. The total unconsolidated thickness of the Tipton Complex Aquifer System generally ranges from about 200 feet to over 400 feet in Clinton County. The potentiometric surface of the regional unconsolidated aquifer is approximately 800 feet MSL (approximately 50 feet bgs).

This system is capable of meeting the needs of domestic and most high-capacity users in the county. Aquifer layers utilized in the Tipton Complex Aquifer System are generally 5 to 10 feet thick sands and/or gravels. These sands and gravels are overlain by a till cap which is commonly 65 to 190 feet thick with thin intratill sand and gravel layers. Wells in this system are typically completed at depths ranging from 68 to 195 feet. Domestic well yields are commonly 15 to 65 gpm and static water levels are generally 15 to 35 feet below the surface. There are 8 registered significant ground-water withdrawal facilities (29 wells) in this system in Clinton County. High-capacity well yields of up to 1,200 gpm are reported.



The Tipton Complex Aquifer System is generally not susceptible to contamination because it is typically overlain by thick clay deposits. However, in places surficial clay thickness is thin or not present. These are at moderate to high risk to contamination by surface sources.

#### 4.8 GROUNDWATER MONITORING AND USE

Only limited groundwater monitoring has been performed on the site. It is unknown whether the groundwater was ever used to supply facility water needs during earlier periods. However, for at least the latter part of the operational history (1980 and later) the Facility was only supplied with potable water from multiple City of Frankfort municipal supply lines and no groundwater usage is noted by Mr. Reynolds. The municipal water supply lines were cut and capped in October 22, 2012.

During the 2014 UST removal, depth to groundwater measurements were inconclusive. The depth to water measurements observed in temporary geoprobe well borings on July 1, 2014 was approximately 11-12 feet below ground surface. However later on that same day groundwater was observed at depths as shallow as approximately 3 feet bgs. In addition, heavy rainfall occurred during the UST removal period. During excavation of the USTs groundwater was typically observed at a depth of approximately 6 feet. This may be indicative of perched water conditions above shallow clay lenses as well as stormwater infiltration/run-on. A summary of groundwater elevations observed during the UST removal is provided on Table 2.

The hydraulic gradient observed in the borings performed as part of the UST removal appears to mimic the site topography and flows in a north-northeast direction corresponding to lower surface elevations. An intermittently flowing creek is located approximately 300 feet north of the UST removal groundwater measurement locations.

In 2014, during the UST removal a review of the Indiana Department of Natural Resources – Division of Water Well Record Database was performed. The review indicated that there are eighty-five (85) high capacity (greater than 70 gallons per minute) and municipal water supply wells within a 2-mile radius of the Site. In addition, there are thirty-three (33) wells with a capacity





of less than 70 gallons per minute located within a one (1) mile radius of the Site. IDEM provided a determination on May 12, 2014 that the Site is not located within a wellhead protection area (WHPA). The closest private well appears to be approximately 1,000 feet east of the Site. Residences in the immediate vicinity of the Site are supplied with municipal water. Copies of individual well construction records and a map with the location is provided in Appendix E.



## 5.0 REGULATORY HISTORY

### 5.1 RCRA/ENVIRONMENTAL PERMITS

On August 18, 1980, General Battery submitted a Notification of Hazardous Waste Activity for hazardous waste generation; and treatment, storage, and disposal of hazardous wastewater and associated sludge. On November 19, 1980, General Battery filed a Part A Hazardous waste permit application for the on-site wastewater treatment facility and for storage of waste water treatment sludge in an enclosed building. On October 18, 1982, the facility requested that the wastewater treatment unit be withdrawn from the Part A application, because the RCRA amendments no longer required a RCRA permit for such units. On December 8, 1982, EPA approved the withdrawal of the waste water treatment unit from the Part A application.

On September 30, 1983, the Indiana State Board of Health (ISBH) conducted a RCRA Generator Compliance Inspection at the facility. Based on this inspection, the facility was issued a Notice of Violation (NOV) on October 31, 1983, for lack of personnel training records. In addition, copies of the contingency plan had not been submitted to the state and local emergency organizations.

On August 2, 1984, ISBH conducted another RCRA Generator Compliance Inspection at the facility. On October 22, 1984, the facility was issued NOV V-008 for not providing documentation to confirm compliance with 40 CFR 265, Subpart L for storage of D008 hazardous waste sludge in a waste pile, and insufficient documentation to show full compliance with personnel training requirements. In January 1985, the facility submitted the missing information to ISHB, as well as a closure plan for the waste pile. On September 9, 1985, ISBH issued NOV V-197 to General Battery for incomplete financial assurance documentation related to closure of the waste pile. On September 17, 1985, the facility submitted a revised closure plan to address ISBH's comments on the draft dated April 1, 1985. On September 23, 1985, the facility submitted additional financial assurance documentation in response to the September 1985 NOV. On October 8, 1985, ISBH issued a notice of compliance for the two NOVs (V-008 and V-197). ISHB approved the waste pile closure plan on October 22, 1985, and approved the certification of completion of total closure of the waste pile on November 10, 1986.



On January 7, 1985, General Battery submitted a closure plan for an indoor waste pile that was being used for management of wastewater treatment sludge. This action was taken in order to comply with EPA and Indiana hazardous waste regulations for owners/operators of hazardous waste TSD facilities. The closure plan was revised and resubmitted on September 17, 1985. On October 22, 1985, the ISBH approved the closure plan. General Battery implemented the closure in June 1986. Clean closure certification of the waste pile was approved by IDEM in November 1986. Following closure of the indoor waste pile, wastewater treatment sludge was accumulated in roll-off containers for less than 90 days prior to offsite disposal.

On February 19, 1987, General Battery requested that IDEM withdraw the RCRA Part A permit application in its entirety because the waste pile at the facility had been clean closed with IDEM approval. On April 29, 1987, IDEM determined that the facility qualified as a generator only and approved withdrawal of the permit application. On August 24, 1988, the facility revised their Notification of Hazardous Waste Activity to reflect generation of waste naphtha. Based on waste generation rates at that time, the facility was classified as a large quantity generator of RCRA hazardous waste.

On January 27, 1987, IDEM conducted another RCRA compliance inspection at the facility. On April 29, 1987, IDEM issued NOV V-492 which cited the following violations: personnel training records were inadequate, personnel had not completed an annual review of initial training, the contingency plan was incomplete, the start of the 90-day generator accumulation period was not labeled on the drums in the drummed waste accumulation area, and the hazardous waste containers were not inspected weekly for leaks and deterioration. In response to facility information submitted on June 5, 1987, IDEM issued a Notice of Inadequacy on August 19, 1987. General Battery provided additional information to IDEM on September 10, 1987, and IDEM issued a Notice of Compliance for NOV V-492 on October 9, 1987.

Following completion of the Hazardous Waste Pile remediation in November 2000, Exide submitted the Hazardous Waste Pile Closure Report to IDEM on January 9, 2001. IDEM approved the closure report on February 14, 2001. With closure of this unit, the facility was reclassified as a RCRA generator.



In March 1988, IDEM conducted a Preliminary Review Visual Site Assessment (PR/VSI) at the site. The PR/VSI identified five solid waste management units (SWMUs) which are discussed in Section 3.6. The PR/VSI recommended that soil samples be collected from several depths beneath all baghouses as well as the vicinity of the filter house and analyzed for lead.

On January 31, 1997, IDEM conducted a complaint investigation at the facility. The complaint was made by an anonymous person who identified himself as a former employee of Exide. The complaint alleged that two tractor trailers full of scrap batteries with acid were dumped in a 30-foot deep pit in 1991. The pit was allegedly located in a paved parking area on the north side of the plant between the weigh scales and the truck monitor office. Based on the results of the investigation, there was no evidence found to support the allegations that scrap batteries had been dumped and buried. The IDEM inspector recommended that no further action was necessary.

On June 17, 1997, IDEM conducted a RCRA Compliance Evaluation Inspection (CEI) at the facility. As a result of the inspection, the facility was issued a NOV on August 18, 1997. In the NOV, the facility was cited for five violations: creation of an unpermitted 30-foot by 30-foot waste pile in the northeast corner of the facility; failure to meet the general requirements for a waste pile, such as run-on/run-off management, wind dispersal controls, and a leachate collection system; the facility contingency plan did not properly identify the addresses of all emergency coordinators; one pallet of spent D008 filters was improperly labeled; and one pallet of spent D008 filters was improperly containerized during accumulation. The IDEM inspector identified the material in the waste pile as being hazardous lead-contaminated soils carrying the D008 waste code that were generated during cleanup following a fire at the facility. However, according to the Hazardous Waste Pile Closure Plan, the materials in the waste pile were lead contaminated soils excavated during the course of a remodeling project at the Exide facility in 1996.

IDEM conducted another RCRA CEI at the facility on June 22, 2001. This inspection revealed that the facility was being used as a storage warehouse for equipment from Exide's other plants. At the time of the inspection, the facility was classified as a small quantity generator of D008 hazardous waste. These wastes included floor sweepings and debris associated with ongoing cleanup of the former manufacturing building. No violations were observed during the CEI.



In December 2001, a previous employee of Exide sent a complaint to the Ohio governor's office which was then forwarded to IDEM. The registered complaint alleged that the facility had excavated holes in the ground in two areas, filled the holes with scrap batteries, and covered the holes with concrete. The first area was allegedly located under the concrete inside the "old battery charging area." The second area was allegedly located near the loading dock on the east side of the contaminated gravel pile on the north side of the facility near the wastewater treatment plant. On January 14, 2002, IDEM initiated another complaint investigation of Exide to address these allegations. On April 16, 2002, IDEM conducted a citizen compliant inspection (CCI) at the facility, meeting with a long time employee of Exide, who denied the allegations and indicated that the batteries were recycled and managed as a valuable commodity. IDEM representatives inspected the alleged areas of concern and concluded that there was no basis to justify the allegations. The CCI Summary letter sent to Exide on May 14, 2002, indicated that no violations were observed.

IDEM conducted another RCRA CEI of the Exide plant on June 21, 2010. The inspection report noted that no hazardous waste was generated at the facility in 2009, and only one shipment of floor sweepings (D008) had occurred in 2010 as of the time of the inspection. No violations were observed during the inspection.

An operating permit (#16313) was issued by IDEM on June 30, 1983 which regulated lead emissions from the facility during operations. During the demolition project in October 2013, IDEM Office of Air Quality performed an inspection of the Site and did not note any deficiencies or violations.

With the exception of the recommendation to sample around the filter house and baghouses from the March 1988 PR/VSI; none of these previous inspections appear to have findings which presently require a follow-up action.



## 5.2 CITY OF FRANKFORT PERMITS

During manufacturing operations and prior to demolition, the WWTP discharged effluent from the onsite WWTP to the sanitary sewer in accordance with a permit obtained from the City of Frankfort. During the 2012 demolition project the City of Frankfort issued permits for fencing, demolition, and water discharge. Inspections were also performed by the Building Inspector and the Water Treatment Plant Superintendent. In 2014, accumulated waters within the UST removal excavations was tested and discharged to the Frankfort Sanitary Sewer under a temporary authorization.

## 5.3 SPILL, DISCHARGE, AND CLEANUP HISTORY

### 5.3.1 1976 Acid Spill

On September 8, 1976, valve malfunction on an acid mix tank resulted in approximately 500 gallons of sulfuric acid being spilled on the ground. The sulfuric acid flowed into a sanitary sewer and was discharged to the unnamed tributary of Prairie Creek northeast of the Site. Approximately 1,800 pounds of hydrated lime was applied to the Creek at a distance of approximately 0.75 miles downstream of the Spill. The pH of Prairie Creek downstream of the tributary confluence was measured to be 7.5. No fish kill was observed in the tributary or the Creek.

This incident does not appear to require any specific follow-up action.

### 5.3.2 1986 – 1988 Soil Cleanup

On April 3, 1986, IDEM conducted a RCRA compliance inspection at the facility and identified two areas of potential soil contamination. On July 18, 1986, IDEM issued NOV V-137 to the facility for improper labeling and closure of hazardous waste containers, deposition of oil contaminated boiler blow-down water on the ground next to the castings/grid building, and releases of wastes from spent batteries on the ground in the battery loading area. The NOV requested that the facility submit a cleanup plan for removal and disposal of contaminated soil in



the casting building and battery loading area. On December 15, 1986, IDEM issued a Notice of Inadequacy regarding plans the facility submitted for cleanup of the casting building and battery loading area. In this Notice, IDEM requested that soil excavated next to the casting building be tested for polychlorinated biphenyls (PCBs) and total halides, and that the proposed disposal site for the excavated soil be identified. In addition, IDEM requested that analytical results for the contaminated soil in the battery loading area be submitted. On March 27, 1987, IDEM issued another Notice of Inadequacy regarding NOV V-137 requesting the following: analytical results for excavated soil, General Battery's rationale for a 2-foot depth of excavation in the area of the grid cast building, analyses of the excavated soil from both the grid casting building area and the battery loading area for total lead and total cadmium, and excavation of all contaminated soil above background levels. The Notice also requested submission of a sampling and analysis plan for the castings/grid building and battery loading areas, rationale for sample locations chosen, and background metals concentrations.

On May 29, 1987, the facility reported that a plant engineer collected a soil sample in the stained area near the casting building, excavated soil to a depth of approximately 2 feet where the soil was visibly clean, and took another sample. The samples were analyzed for lead, cadmium, oil, and grease. Following receipt of the December 1986 Notice of Inadequacy letter, Exide collected additional samples of the excavated soil and soil in place at the bottom of the 2-foot excavation; these samples were analyzed for PCBs and total halides. In addition, the facility indicated that they would collect samples in a grid pattern at the battery loading area, with one sample collected every 10 feet. The facility also proposed to collect background samples at a depth of 5 feet bgs at random locations around the site. Exide submitted the results of the soil sampling at the loading dock on August 11, 1988 (summarized in Section 6.2). Based on the results from the grid sampling effort that indicated significant lead contamination in soil, Exide proposed to excavate an area of 35 feet by 45 feet to a depth of 0.5 feet bgs. Soil samples would then be collected from the bottom of the excavation to ensure that a cleanup level of 2,000 mg/kg for lead was attained.

On September 15, 1988, IDEM issued a Letter of Inadequacy indicating that the proposed cleanup level of 2,000 mg/kg for lead was unacceptable. This letter also required Exide to collect a minimum of three samples at least 100 feet from any roadway or process area to establish



background levels of total lead. The cleanup standard would be set at the mean range of the background sample results. On July 17, 1989, IDEM sent Exide a letter indicating that the acceptable cleanup level for lead in soil was 78 mg/kg, based on background sampling. On July 18, 1989, IDEM and Exide agreed that Exide would excavate 1 foot of soil from the surface of the 35 foot by 45 foot spill area and apply a lime buffer to the bottom of the excavation before backfilling to control pH. The soil removal was implemented as planned and IDEM issued a Notice of Compliance for V-327 on August 4, 1992.

No additional follow-up action appears to be required for this item.

### 5.3.3 1987 Alleged UST Release

On March 2, 1987, IDEM's Emergency Response Branch (ERB) filed an Incident Report for Incident #873001. This report was a follow-up to a citizen complaint that alleged that fuel oil had been detected in a residential basement and two storm sewer manholes in close proximity (within 50-ft of 20,000 gallon oil tank) to the General Battery facility. ERB collected and analyzed a sample of the material for oil and grease. Sampling results indicate that the material was 83.9% oil (by weight) in one manhole and only 0.92% oil (by weight) in another. As a result of this incident, ERB requested that the facility perform tightness testing on its underground storage tanks (USTs), particularly the 20,000-gallon fuel oil UST located on the north side of the property and approximately 50 feet from an affected manhole. On March 4, 1987, General Battery conducted tightness testing on three USTs, including the 20,000-gallon #2 fuel oil tank, a 10,000-gallon fuel oil tank on the southeast side of the property, and a 10,000-gallon fuel oil tank on the southwest side of the property. It is noted that the location descriptions for these tanks are relative. The 10,000 gallon fuel oil tank was located centrally on the property, but south of the Old Formation area. The 10,000 gallon fuel oil tank on the southeast side of the property was located beneath the former Fuel Shed location to the east of the Send Out area in the northeast corner of the Site and some records indicate it was used for storage of diesel fuel.





All three tanks failed to meet the tightness testing criteria. In April 1987, the facility closed the 20,000-gallon fuel oil tank in place. No evidence of release was reportedly observed at the time of the tank closure. The diesel UST was permanently taken out of service in December 1991. No information regarding the status of the 10,000-gallon fuel oil tank was available to ascertain the condition or usage after 1991.

On April 15, 1987, IDEM requested that the facility complete a narrative spill report for the fuel oil release identified in the storm sewer on March 2, 1987. At that time, IDEM did not require an Initial Site Characterization (ISC) because heating oil tanks were not regulated under IDEM's Leaking UST (LUST) program. On April 30, 1987, the facility submitted a spill response report to IDEM indicating that they were unaware of any spill occurring on their property. In September 1997, IDEM's LUST Section requested that the facility complete an ISC for Incident #8703001, because the initial incident report indicated that the release was from a diesel UST. In a letter from Exide's legal counsel (Mr. Lawrence Vanore) to the IDEM LUST Section in October 1997, Exide indicated that the former #2 fuel oil UST on their property was not believed to be the source of the release related to Incident #873001, because no releases were observed during closure of the tank. IDEM's LUST Section referred Exide's response to the Emergency Response Section, who handles releases from non-RCRA-regulated USTs. Currently, LUST incident #8703001 is listed as discontinued but still active.

The citizen complaint was filed by a resident at the 1403 Washington Avenue (a.k.a. Michigantown Road) property which is located approximately 150 north of the perimeter fence and is separated from the perimeter of any manufacturing related operations by the grassy lots owned by Exide as well as another residential property. The letter from Mr. Vanore to IDEM also indicated that in April 1987 a gasoline filling station was present "right across the street from the complainant's house". A more accurate location/description of the referenced gasoline station could not be obtained from the files, although a review of Google Earth aerials since 1999 and the earlier aerials obtained during preparation of this Current Conditions Report did not confirm or refute the statements by Mr. Vanore.



#### 5.3.4 1996 Hazardous Waste Pile Removal

In February 1996, Exide removed hazardous wastes managed in a 30-foot by 30-foot waste pile and disposed of them at a RCRA-permitted off-site TSD facility. An additional 6 inches of soil underlying the waste pile were removed during this action. Clean Harbors conducted the sampling, characterization, and removal of hazardous waste and underlying soil. According to the facility, there were no indications of spillage or run-off outside the immediate waste pile area.

#### 5.3.5 2000 Hazardous Waste Pile Closure

In August 1997, Exide and IDEM initiated negotiations to resolve the issues arising from the June 1997 inspection (Section 5.1), and Exide submitted additional information regarding the waste pile to IDEM on September 1997. On July 1998, Exide entered into an Administrative Order (AO) with IDEM that required Exide to determine the concentration of lead in soils beneath the former waste pile. In August 1988, soil samples were collected from four soil borings advanced within the former waste pile footprint and analyzed for total lead. The soil samples were collected every 6 inches to a depth of 3 feet bgs, and then at 4 feet bgs and at 5 feet bgs, for a total of 24 samples. Total lead concentrations decreased with depth before increasing near the 5-foot depth interval.

On September 18, 1998, Exide submitted the sampling results for the former waste pile to IDEM. Following review of this documentation, IDEM directed Exide to submit a RCRA Closure Plan to complete the requirements of the AO. On March 30, 1999, Exide submitted the Hazardous Waste Pile Closure Plan to IDEM. On March 28, 2000, IDEM approved the March 30, 1999 closure plan, with revisions dated September 9, 1999 (Addendum No. 1), January 20, 2000 (Addendum No. 2), and March 8, 2000 (Addendum No. 3). Exide conducted sampling and closure activities at the facility in accordance with Hazardous Waste Pile Closure Plan and Addenda Nos. 1, 2, and 3.

On March 22, 2000, in accordance with Addendum No. 3 to the closure plan, Exide conducted soil sampling to establish background lead concentrations for shallow fill in the vicinity of the former waste pile. Six soil samples were collected of fill materials to a maximum depth of 18 inches bgs.



Total lead concentrations in these samples ranged from 165 mg/kg to 2,970 mg/kg. As approved by IDEM in a letter dated June 29, 2000, Exide removed a uniform layer of 18 inches of soil in the proposed 30-foot by 30-foot excavation area in November 2000. No confirmatory samples were collected at the bottom of the excavation because previous sampling events in the proposed excavation area indicated that lead levels below 18 inches bgs were below the Risk Integrated System of Closure (RISC) Tier 1 Residential values (400 mg/kg).

Fate and transport analysis (SOLUTE model) was performed by Advanced GeoServices during the development of the closure plan Addenda. The model assumptions were very conservative (over-estimation of lead mobility). The model results indicated that dissolved lead migration from the waste piles was not able to have a discernable impact on groundwater or deeper soil. Lead impacts observed in deeper soils around the waste pile area were likely due to the presence of various fill materials observed at depths of up to 5 feet bgs.

On November 8, 2000, the excavation was backfilled with clean soil imported from Paddock Brothers, Inc. of Frankfort, Indiana. The excavated soils were characterized as hazardous for lead prior to excavation and disposal. Approximately 246 tons of excavated soil were treated to non-hazardous Toxicity Characteristic Leaching Procedure (TCLP) levels of lead and disposed at Max Environmental Inc.'s Mill Services TSD facility in Yukon, Pennsylvania. Exide submitted the Hazardous Waste Pile Closure Report to IDEM on January 9, 2001. IDEM approved the closure report on February 14, 2001. A copy of the Hazardous Waste Pile Closure Report is provided as Appendix F.

#### 5.3.6 2014 UST Closure

During the 2012 facility decommissioning project, USEPA visited the Site and inquired about the status of three USTs believed to be located onsite. Exide subsequently performed a Site reconnaissance and a review of internal records. It was determined that up to three USTs existed onsite (see Section 5.3.3) although the descriptions of the contents and locations varied somewhat between different documents.



- 10,000 gallon heating oil UST (unregulated) that was not closed; this UST is identified as UST-1 in closure documents submitted to IDEM in 2014 and herein.
- 10,000 gallon diesel fuel UST that was taken out of service in 1991 but not closed. This UST is identified as UST-2 in closure documents submitted to IDEM in 2014 and herein.
- 20,000 gallon #2 fuel oil UST that was closed in place in 1988 (referred to as UST-3 herein).

Although, not known at the time of removal the location of UST-3 appears to be adjacent to UST-2 near the former Fuel Shed area in the northeast portion of the Site (east of Send Out). UST-1 was located in the central portion of the Site (south of Old Formation). UST-1 and UST-2 were removed on April 16, 2014. The tanks appeared to be intact at the time of the removal. No damage, holes, or penetrations were observed prior to removal. No free product was observed during the removal. However, hydrocarbon odors and soil discoloration were observed in soils surrounding the tanks. The suspected releases were reported to IDEM LUST section on April 17, 2014. LUST #201404509 was assigned to the UST-1 release and LUST #201404505 was assigned to the UST-2 release.

Soils immediately around the tanks consisted of a non-native sand backfill. Native silty clay soils were observed further away from the tank. Real time soil screening with a photo-ionization detector (PID) was performed during the excavation and post-excavation confirmation samples were collected from the bottoms and sidewalls of the excavations. Analysis for poly-cyclic aromatic hydrocarbons (PAHs), semi-volatile organic compounds (SVOCs), and volatile organic compounds (VOCs) was performed. On May 5-8, 2014 additional soil excavation and post-excavation sampling was performed. Approximately 1,092 tons of impacted soils (as determined by direct observation, PID screening, and/or laboratory data) were removed and disposed of as part of the UST-1 and UST-2 removal. On July 28–August 1, 2014 the excavations were dewatered and backfilled.



### 5.3.6.1 UST-1

The final post-excavation soil samples indicated no exceedances of the 2014 IDEM RISC residential direct contact screening limits of migration to groundwater screening limits. Water collected within the excavation on April 16, 2014 had exceedances of the 2014 IDEM RISC residential tap water screening limits for “naptha compounds” such as: naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, benzo(a)anthracene, benzo(b)fluoranthene, and fluorine. However, a sample of excavation water in July did not have any such exceedances (likely due to source removal).

Based on the soil and water data presented during the UST removal, IDEM required that a limited subsurface investigation (LSI) be performed consisting of three groundwater samples collected within twenty feet of the UST-1 excavation. No exceedances of 2014 IDEM RISC screening limits for residential tap water or vapor exposure were detected. A copy of the Limited Subsurface Investigation report is provided as Appendix G.

### 5.3.6.2 UST-2

The final post-excavation soil samples indicated no exceedances of the 2014 IDEM RISC residential direct contact screening limits. However four soil samples collected from sidewalls and offset trenches detected exceedances of the migration to groundwater (MTG) standard for naphthalene. One soil sidewall sample also indicated an exceedance of the MTG standard for 1-methylnaphthalene. IDEM required that an initial Site Characterization be performed. Samples of water collected from within the UST-2 excavation on April 16, 2014 and May 7, 2014 indicated exceedances of the 2014 IDEM RISC residential tap water screening limits for naphthalene and vinyl chloride. The excavation water sample collected on May 7, 2014 also detected exceedances for cis-1,2-DCE, trans-1,2-DEC, and trichloroethene (TCE). The detections of chlorinated solvents were unexpected and not typically attributed to petroleum USTs. These detections were reported to IDEM and an Initial Site Characterization (ISC) was required.



As part of the ISC three (3) additional soil borings and three (3) additional temporary well geoprobe borings were performed within 20 feet of UST-2. Soil sample results continued to note exceedances of the MTG standards for vinyl chloride, cis-1,2-DCE, and/or TCE in deeper intervals (10 – 12 feet depth and/or 15 – 16 feet depth). All three groundwater samples indicated detections of the various chlorinated solvent compounds at concentrations exceeding the 2014 IDEM RISC residential tap water standard. 1,1-DCA, TCE, and vinyl chloride were also detected at concentrations exceeding the screening limits for vapor exposure. A copy of the Initial Site Characterization Report is provided as Appendix H.

#### 5.4 WASTE GENERATION AND MANAGEMENT

##### 5.4.1 During Manufacturing Operations

Because of the long and varied ownership of the Facility, specific information regarding past waste streams is not available. In general, during the operation of the facility, production operations resulted in the generation of wastewater, solids captured by air emission controls, sludge, used containers, off-spec products, and various hazardous and non-hazardous wastes. Secondary waste streams included items such as waste oils, fluids, filters, sorbent materials, personnel protective equipment (PPE), and office wastes.

Baghouse dust was accumulated in waste drums. Used air filters from the filter building as well as used PPE were accumulated onsite. The baghouse dust, filters, floor sweepings and used PPE were characterized as hazardous due to the lead content (D008). These materials were stored in the hazardous waste accumulation area (SWMU-4) prior being sent to a General Battery/Exide lead smelter facility for recycling.

Prior to June 1986, sludge from WWTP operations was accumulated for less than 90 days in an indoor waste pile (SWMU-1). Following closure of the indoor waste pile in June 1986, wastewater sludge (filter cake) was collected in a roll-off container for less than 90 days prior to offsite disposal (landfill).



Waste naphtha from two parts cleaners (SWMU-9) in the basement maintenance area was disposed of by Safety-Kleen.

#### 5.4.2 Post-Shutdown

Since the cessation of manufacturing operations in 1997 the only significant waste generation that has occurred onsite has been associated with various cleanup operations, the decontamination/demolition project, and the UST removal.

Floor sweepings and debris containing lead were generated in 1997-1999, collected in drums, and transported to an Exide lead smelter for processing. In December 1999, Heritage Environmental Services removed and disposed of waste from cleanup operations at the baghouses. One shipment of floor sweepings (D008) was made in 2010.

During closure of the hazardous waste pile in November 2000, approximately 246 tons of excavated soil were treated to achieve non-hazardous levels of TCLP-lead and disposed at the Mill Services TSD facility in Yukon, Pennsylvania.

During the October 2012 – January 2013 decommissioning project the following wastes were generated:

- 16.53 tons of asbestos containing material (ACM) disposal offsite (Clinton County Landfill non-hazardous)
- 508 tons of scrap metal recycled offsite
- 1,073 tons of Construction and Demolition Debris disposed offsite (Clinton County Landfill non-hazardous)
- 1,407 tons of hazardous materials disposed offsite (Heritage Environmental Services hazardous); and,
- collection and onsite treatment of 18,834 gallons of impacted wash water and other contact water prior to discharging to the Frankfort Sanitary Sewer under a discharge permit.



During the 2014 UST removal/closure the following wastes were generated:

- Following cleaning the steel tank bodies were recycled as scrap;
- 1,092 tons of petroleum contaminated soils disposed offsite (Clinton County Landfill non-hazardous);
- 10,200 gallons impacted water was collected during UST removal and disposed offsite (Future Environmental of Indianapolis non-hazardous);
- Up to 80,000 gallons of ground water and stormwater accumulated in the UST excavations while awaiting results of post-excavation sampling (estimated based on excavation dimensions). These waters were tested and discharge to the Frankfort Sanitary Sewer under a temporary authorization;
- 6 drums of petroleum sludge (removed from USTs during cleaning) were generated and disposed of by CGS Services Inc. of Morristown, Indiana (non-hazardous); and,
- 86 tons of concrete/asphalt rubble were disposed offsite.

The Site is currently vacant and no waste is being generated or managed onsite.

## 5.5 DESCRIPTIONS OF SWMUs AND AOCs

Figure 4 depicts the current site conditions (2017 aerial photo) along with the locations of the SWMUs and AOCs.

### 5.5.1 SWMU-1 Former Waste Pile #1 (Sludge Storage Area)

The former waste pile, also referred to as the Sludge Storage Area, was located in the sludge storage building on a concrete floor. The sludge storage building footprint was approximately 18 ft. x 18 ft. The waste pile was used for accumulation (less than 90 days) of dewatered calcium sulfate sludge (D008 hazardous waste) from wastewater treatment operations at the facility. Prior to June 1986, the calcium sulfate sludge was dewatered in a vacuum pan filter, and temporarily





accumulated at SWMU 1. Approximately 324 tons of dewatered sludge were generated each year and transported off site for disposal at the Adams Center Landfill in Fort Wayne, Indiana.

At the time of the 1988 PR/VSI, the waste pile no longer existed. The waste pile underwent closure in accordance with an ISBH-approved closure plan in 1986. No history of any releases from this waste pile has been identified because the waste pile was located indoors in an enclosed area on a concrete floor. Leachate generated during the temporary accumulation period was collected and transferred to the wastewater treatment system for processing.

According to the approved closure plan, sludge remaining in the waste pile at the time of closure was placed in a roll-off container and transported to the Adams Center Landfill in Fort Wayne, Indiana. The concrete walls and floors of the sludge storage area and adjacent areas were washed to remove contaminants. The building was subsequently modified to enable sludge to drop directly from dewatering equipment into a large roll-off container. Exide submitted closure certifications to ISBH in June and July 1986. ISBH issued a completion of closure letter to the facility in November 1986.

No additional investigation is necessary for SWMU-1.

#### 5.5.2 SWMU-2 Sludge Storage Tank

The sludge storage tank was located inside the wastewater treatment building on concrete slab and was used in conjunction with wastewater treatment operations at the facility. The sludge storage tank was used for temporary accumulation of liquid calcium sulfate sludge prior to dewatering. Sludge was withdrawn from the wastewater treatment system's clarification tank and pumped to this sludge storage tank for holding prior to dewatering. The sludge was classified as D008 hazardous waste for its lead content. After dewatering, the liquid waste was transferred back to the treatment system's reaction tank; the dewatered sludge was routed to SWMU 1. It is believed that use of the SWMU 2 sludge holding tank ended in 1997, when battery manufacturing operations ceased at the Exide facility.



The sludge storage tank was located inside on concrete slab. The tank measured approximately 12 feet in diameter and 12 feet tall (maximum capacity 10,000 gallons) and was constructed of fiberglass. The tank was in active operation at the time of the PR/VSI in 1988; however, no recommendations were provided for this unit in the PR/VSI report. Spilled material would have been contained by the building. No history of any releases has been identified with the sludge storage tank.

The WWTP facility including the sludge storage tank was decontaminated and demolished/removed as part of the 2012 decommissioning activities. No sludge remained in the sludge storage tank and no evidence of a release was observed at that time.

In 2014, soil boring B-13 was performed in the vicinity of the former WWTP. Refusal was encountered at a depth of 2-feet bgs. However, the 1.5 to 2 feet deep sample interval produced a lead detection of 13,200 mg/kg.

### 5.5.3 SWMU-3 Baghouses

The baghouses were located outside behind the plant building. When the facility was used to manufacture batteries, lead fumes from molten lead and lead oxide dusts were vented to the baghouses. Dust that accumulated in the baghouses was classified as D008 hazardous waste due to its lead content. The baghouse dust was transferred to drums, accumulated in the hazardous waste accumulation area (SWMU- 4) for less than 90 days and shipped to a lead smelter facility in Pennsylvania for reclamation.

The PR/VSI described the ground beneath the baghouses as appearing dark, indicating possible contamination from lead dust. The VSI recommended that soil samples be collected from several depths beneath all baghouses and analyzed for lead. It is expected that use of the baghouses ended in 1997, when the facility ceased manufacturing batteries.



A CEI conducted by IDEM in June 2001 indicated that cleanup of the baghouses had been completed, and that Heritage Environmental Services had removed and disposed of the waste generated from the cleanup activities. It is not known whether any post-cleanup samples were collected from the area beneath and around the baghouses. The remaining baghouse structures were removed from the Facility as part of the 2012 decommissioning.

In 2014, soil boring B-18 was performed in the vicinity of the former baghouse and filter building. B-18 was advanced to a depth of 8-feet bgs and nine samples were collected from various intervals. The maximum lead detection of 510 mg/kg occurred in the 0.5 – 1 foot depth interval. No other intervals had lead detections which exceeded an IDEM RISC screening level.

#### 5.5.4 SWMU-4 Hazardous Waste Accumulation Area

The hazardous waste accumulation area was located inside the south-central end of the plant building. The area is approximately 15 feet by 20 feet. When the facility was manufacturing batteries, this hazardous waste accumulation area was used for accumulation (less than 90 days) of drums containing lead-contaminated dust (D008 waste) from the baghouses, prior to off-site transport to a secondary lead smelter in Pennsylvania for recycling. Used air filters from the filter building and drums of used gloves, respirators, and floor sweepings were also accumulated in the hazardous waste accumulation area and transported off site as D008 waste to Reading, Pennsylvania for recycling. Approximately 125 tons of lead-containing materials were generated in 1984.

Hazardous waste drums were accumulated on a concrete floor inside the plant building. The used air filters shrink-wrapped with plastic were accumulated on pallets in the hazardous waste accumulation area. There are no documented releases from this unit, but spilled material would likely have been contained by the building. No violations associated with this unit were noted during the June 2001 and June 2010 CEIs. No hazardous waste was being accumulated in the hazardous waste accumulation area at the time of the June 2010 CEI.

No further action is needed for this SWMU.



### 5.5.5 SWMU-5 Wastewater Treatment Unit and Sump

The wastewater treatment facility was installed in 1970 and was located in the northwestern corner of the property. Battery manufacturing operations generated approximately 35,000 gallons of wastewater containing dilute sulfuric acid and lead (D002 and/or D008 waste) per day. Process wastewater was collected in a series of floor drains in the plant buildings and piped to the on-site treatment facility. At the treatment facility, wastewater was initially collected in a sump and pumped to one of two aboveground holding tanks for equalization. The holding tanks were located outside the treatment facility, and each tank held approximately 6,350 gallons of wastewater. From the holding tanks, wastewater was pumped into a three stage reaction tank where lime was added for pH neutralization and precipitation of lead. The reaction tank had a design capacity of 48,000 gallons.

In April 1984, an 865,700-gallon clarification tank located outside the wastewater treatment building was placed into operation and was used in the treatment scheme for solids and liquids separation. Solids consisted primarily of calcium sulfate from the lime neutralization process that had settled to the bottom of the clarification tank. Treated and clarified liquid from the clarification tank was discharged under a permit to the city sewer system. Semi-solid sludge at the bottom of the clarifier was withdrawn and pumped to a sludge tank (SWMU 2) for temporary holding prior to dewatering in a filter press. Filtrate from the sludge dewatering operations was collected and pumped back into the reaction tank for subsequent treatment. Dewatered sludge from the filter press was accumulated in a roll-off container (SWMU 6) prior to off-site transport to Adams Center Landfill for disposal. Prior to June 1986, the sludge was dewatered in a vacuum pan filter and dewatered sludge was accumulated in a waste pile (SWMU 1) in an enclosed building before being transported off site for disposal.

The aboveground wastewater treatment holding tanks were located outside on a concrete pad. The system's sump and reactor tanks were located inside the facility. There are no documented releases from either the sump or the wastewater treatment system itself. It is expected that a significant release of hazardous sludge or wastewater from this unit would have been noted in the historical file material, as it likely would have interrupted process operations at the facility.



The WWTP and sump were decontaminated and removed as part of the 2012 decommissioning activities. The areas below the sumps and clarifier were backfilled using crushed concrete rubble from the facility demolition. No evidence of a release was observed. In 2014, soil boring B-13 was performed in the vicinity of the former WWTP. Refusal was encountered at a depth of 2-feet bgs. However, the 1.5 to 2 feet deep sample interval produced a lead detection of 13,200 mg/kg.

#### 5.5.6 SWMU-6 Filter Building

This unit was not previously assigned a SWMU number at the time of the PR/VSI, but was assigned a SWMU number as part of the 2011 USEPA letter report. This unit functioned like a baghouse during the plant's manufacturing operations. Air from inside the plant building was sucked into the filter building where dust was caught in a system of filters. The clean air was then recycled back into the plant. The filters were cleaned or replaced as necessary. Old filters were treated as hazardous waste (D008), accumulated in the hazardous waste accumulation area for less than 90 days, and sent to a secondary lead smelter in Pennsylvania for recycling. Lead-contaminated dust (D008 waste) from the filters was collected in 55-gallon drums that were also accumulated in the hazardous waste accumulation area for less than 90 days and transported to a secondary lead smelter in Pennsylvania for recycling.

The filter system was totally encapsulated and there are no documented releases from the unit. Old filters were shrink-wrapped in plastic before being placed on pallets to prevent residual dust from falling off the used filters. It is assumed that this unit was regulated by the IDEM operating permit (#16313) which governed air emissions and was closed when facility operations ceased. The Filter Building was decontaminated and demolished during the 2012 decommissioning project. Masonry block from the building was crushed and reused onsite as fill material.



#### 5.5.7 SWMU-7 Roll-off Container

This unit was not previously assigned a SWMU number at the time of the PR/VSI, but was assigned a SWMU number the 2011 USEPA letter report. This unit was a roll-off container located indoors beneath the filter press. This unit was used for less than 90-day accumulation of dewatered wastewater treatment sludge carrying the D008 hazardous waste code until that waste was transported off site for disposal. It is estimated that use of the SWMU 7 roll-off container for collection of dewatered sludge ended in 1997, when battery manufacturing operations ceased at the Exide facility.

This unit was located inside the plant building on a concrete floor. The PR/VSI indicated that the facility was practicing good housekeeping and no concerns with this unit were identified in compliance inspections conducted at the facility. As a result, environmental releases are unlikely. Accordingly, there are no documented releases from this unit. The roll-off container was removed from the Facility prior to the 2012 decommissioning project.

#### 5.5.8 SWMU-8 Former Waste Pile #2

This unit did not exist at the time of the 1988 PR/VSI, but was assigned a SWMU number for purposes of the 2011 USEPA letter report. This unit was a 30-foot by 30-foot waste pile formerly located in the northeast portion of the facility. The waste pile contained lead-contaminated soil that was reportedly excavated during the course of a remodeling project conducted at the facility in 1996. Approximately 123 cubic yards of lead-contaminated soil were placed directly on the ground surface at this unit. All wastes managed in the waste pile were removed from the area and disposed at a permitted off-site TSD facility in February 1996. An additional 6 inches of soil beneath the waste pile was also removed during this operation. Reportedly, there were no indications of spillage or run-off outside the defined 30-foot by 30-foot pile footprint. Sampling, characterization, and removal of wastes and soil were conducted by Clean Harbors of Chicago, Illinois.



The waste pile came to the attention of IDEM during a routine CEI conducted in June 1997. Following the inspection, IDEM issued a NOV to Exide for creating a hazardous waste pile without a permit and for failure to meet the general requirements for a waste pile such as run-on/run-off management, wind dispersal controls, and leachate collection. On July 1998, Exide entered into an AO with IDEM to resolve issues arising from the inspection and resulting NOV.

Exide collected soil samples from four soil borings advanced within the former waste pile footprint and analyzed the soil samples for total lead in August 1998. The soil samples were collected every 6 inches to a depth of 3 feet bgs, and then again at 4 feet bgs and at 5 feet bgs, for a total of 24 samples. Total lead concentrations ranged from 11 to 3,800 mg/kg. The concentrations decreased with depth before increasing in fill materials near the 5-foot depth. Based on the sampling results, IDEM directed Exide to submit a closure plan for the hazardous waste pile. The Closure Plan and Addendas No. 1, 2, and 3 were approved by IDEM in March 2000.

On March 22, 2000, Exide conducted soil sampling to establish background lead concentrations for shallow fills in the vicinity of the former waste pile in accordance with Addendum No. 3 to the hazardous waste pile closure plan. Six soil samples were collected of fill materials to a maximum depth of 18 inches bgs and analyzed for total lead. Total lead concentrations ranged from 165 to 2,970 mg/kg. In November 2000, Exide removed a uniform layer of 18 inches of soil in an area with dimensions of 40 feet by 40 feet in accordance with the approved closure plan. The excavation area was expanded by 5 feet on each side of the original footprint of the waste pile. No confirmatory samples were collected at the bottom of the excavation because previous sampling events in the proposed excavation area indicated that lead levels below 18 inches bgs were below the RISC Tier 1 Residential values (400 mg/kg). However, lead levels at approximately 5 feet bgs increased to levels above RISC Tier 1 Residential values.

On November 8, 2000, the excavation was backfilled with clean soil imported from Paddock Brothers, Inc. of Frankfort, Indiana. The excavated soils were characterized as hazardous for lead prior to disposal. Approximately 246 tons of excavated materials were treated such that leachable levels of lead were below RCRA TCLP concentrations and disposed at Max Environmental Inc.'s Mill Services TSD facility in Yukon, Pennsylvania. Exide submitted the Hazardous Waste Pile



Closure Report to IDEM on January 9, 2001. IDEM approved the closure report on February 14, 2001.

It is not clear whether increasing lead concentrations detected in the fill at 5 feet bgs are isolated to this location or if fill is present at greater depths in other portions of the Site. Soil samples collected from the 2014 investigation boring B-4 in this portion of the Site had low concentrations of lead (< 23.7 mg/kg).

#### 5.5.9 SWMU-9 Parts Cleaners

This unit was not documented in the PR/VSI, but was assigned a SWMU number in the 2011 USEPA letter report. This unit consisted of two parts cleaners located in the maintenance area in the basement of the plant building. The parts cleaners generated waste naphtha, which was disposed off-site by Safety-Kleen. Inspections conducted in 2001 and 2010 did not mention the presence of the parts cleaners on site.

The parts cleaners were located inside the plant building on concrete slab. Spilled material would have been contained by the building. Moreover, because the waste naphtha was a valuable recyclable commodity, it would have made economic sense for both Exide and Safety-Kleen to ensure unit integrity and promptly clean up and containerize any waste naphtha that was spilled. There are no documented releases from this unit.

#### 5.5.10 AOC-1 Loading Dock Area

This AOC was identified by IDEM during a RCRA Compliance Inspection conducted on April 3, 1986. On July 18, 1986, IDEM issued General Battery an NOV (V-137) for depositing waste from spent batteries on the ground in the battery loading area. The loading dock was used for loading spent batteries. The area of contamination was a 35-foot by 45-foot area located east of the loading dock.





On January 19, 1988, Exide collected 32 soil samples in a 10-foot grid pattern throughout the 35-foot by 45-foot area east of the battery loading dock. Soil samples were randomly collected at depths up to 5 feet to support determination of background lead and cadmium concentrations in soil. Lead concentrations ranged from 12 to 9,300 mg/kg, and cadmium concentrations ranged from 0.11 to 13 mg/kg. Six samples were also analyzed for leachable levels of lead and cadmium, as measured using TCLP. TCLP lead concentrations ranged from 2.4 to 15 mg/L. TCLP concentrations greater than 5.0 mg/L of lead are considered characteristic hazardous waste (D008). The TCLP cadmium concentrations ranged from non-detect (ND) to 0.02 mg/L, which were below the TCLP regulatory level of 1.0 mg/L for cadmium.

Based on the sampling results, Exide proposed to excavate the 35-foot by 45-foot area to a depth of 6 inches bgs and collect confirmation samples to ensure that the cleanup level of 2,000 mg/kg for lead was successfully achieved. However, IDEM disagreed with the proposed 2,000 mg/kg cleanup level and required that a site-specific cleanup standard be established based on the mean range of a minimum of three background samples collected at least 100 feet from any roadway or process area. In November 1988, IDEM met with Exide to identify appropriate background sample locations. On July 17, 1989, IDEM informed Exide that the site-specific cleanup level would be 78 mg/kg for lead based on the results of the background samples collected by Pollution Control Systems, Inc. In a meeting at the site on July 18, 1989, IDEM and Exide agreed to excavate 1 foot of soil from the surface of the 35-foot by 45-foot spill area and apply a lime buffer to the bottom of the excavation before backfilling to control pH. In August 1992, IDEM issued a notice of compliance for NOV (V-327), which included the area now designated as AOC 1.

#### 5.5.11 AOC-2 Castings/Grid Building Area

This AOC was identified by IDEM during a RCRA Compliance Inspection conducted on April 3, 1986. On July 18, 1986, IDEM issued General Battery a NOV (V-137) for depositing oil-contaminated boiler blow-down waste on the ground next to the castings/grid building. During the inspection, oil spillage was noted on the railroad tracks outside of the casting department. According to a facility employee, the oil was from air compressor blow-out. The outfall pipe for "chiller water" was in the same area. Water from the outfall pipe flowed approximately 500 feet



through the area and into a loading dock drain. No information was obtained during the development of this CCR as to where the drain discharged.

The oil-contaminated boiler blow-down waste was released to the ground. Consequently, there were no release controls for this AOC. In response to the July 1986 NOV, the facility collected a sample of waste from the stained area, and then excavated soil in the stained area to a depth of approximately 2 feet bgs, where the soil was no longer visibly stained. The facility collected a soil sample at the bottom of this excavation. Both samples were analyzed for lead, cadmium, oil, and grease. Information regarding the excavation was submitted to IDEM in January 1987.

In a Notice of Inadequacy dated March 27, 1987, IDEM requested further explanation for the 2-foot depth of excavation and asked that the samples of excavated materials also be analyzed for PCBs and total halides. In response to the Notice of Inadequacy, the facility collected another sample of the excavated material and a confirmatory soil sample at the 2-foot depth of the excavation. The samples were analyzed for PCBs and total halides, but no data were found in the available file material during preparation of this CCR.

The facility provided a response letter dated May 29, 1987 which expressed that based on phone conversations with IDEM an excavation to a depth where soil was not visibly stained was sufficient.

Exide also indicated that, based on the analytical results, they planned to dispose of the excavated material as non-hazardous, special waste in a RCRA landfill approved by IDEM.

In August 1992, IDEM issued a notice of compliance for violations associated with AOC 2, including the release of oil-contaminated boiler blow-down waste in the Castings/Grid Building Area.



In 2014 soil boring B-11 was performed in the former grid casting area to a depth of 3 feet. Lead detections in five samples collected ranged from 203 mg/kg in the 0-0.5 feet interval to 9.9 mg/kg at the 2.5-3 feet depth interval. Soil boring B-12 was performed in the former parts casting area to a depth of four feet in five samples collected, the maximum detection was 13.3 mg/kg.

#### 5.5.12 AOC-3 Underground Petroleum Storage Tanks

In 1987, the facility had three active USTs: a 20,000-gallon #2 fuel oil tank located on the north side of the facility, a 10,000-gallon diesel tank located in the southeast side of the facility, and a 10,000-gallon #2 fuel oil tank located on the southwest side of the facility.

On March 2, 1987, as a follow-up to a citizen complaint, ERB filed an Incident Report indicating that fuel oil had been detected in a residential basement and two storm sewer manholes in close proximity to the General Battery facility, including the 20,000-gallon fuel oil tank located approximately 50 feet from an affected manhole. As a result of the incident, ERB requested that Exide perform tightness testing on its three USTs. Tightness testing was conducted on March 4, 1987, and all three tanks failed the tightness criteria of  $\pm 0.05$  gallons of leakage per hour. Based on these results and the fact that the UST was the nearest facility tank to the complainant's house, Exide decided to close the 20,000-gallon #2 fuel oil UST in April 1987. However, the facility did not agree that the fuel oil UST was the source of the release.

According to a letter from Exide's legal counsel dated October 6, 1997, the 20,000-gallon fuel oil UST (UST-3) was closed in place in April 1987, in accordance with Indiana Fire Marshall regulations in effect at that time. During closure, the UST was emptied of residual fuel oil, cleaned, inspected by the Fire Marshall, and filled with clean fill. According to the maintenance supervisor, no evidence of release was observed during the tank closure.

In addition, the 10,000-gallon diesel tank (UST-2) was permanently taken out of service in December 1991 and removed in April 2014. During and following the removal low level detections of chlorinated solvents and naphtha compounds were observed in surrounding soils



(exceeding 2014 IDEM RISC MTG screening levels) and groundwater (exceeding 2014 IDEM RISC residential tap water and vapor exposure screening levels).

The 10,000 gallon #2 fuel oil tank (UST-1) was also removed in April 2014. Any remaining soil and groundwater impacts from petroleum in the vicinity of the former UST-1 location do not exceed the IDEM RISC screening criteria for direct contact or migration to groundwater scenarios. The groundwater sampled onsite around the UST-1 location does not appear to have petroleum contamination. Soil boring B-10, performed in March 2014 was located near the UST-1 location. Boring B-10 had a detection of lead at a concentration of 1,520 mg/kg in the 0.5 – 1 foot depth interval. However in other intervals going as deep as four feet, the other detections ranged from 8.4 mg/kg to 61.1 mg/kg.

Both UST-1 and UST-2 were closed through the IDEM LUST program and granted NFA-status on December 23, 2014. However, the detections of chlorinated solvents in the soils and groundwater (maximum detections of TCE 8,520 ug/L; vinyl chloride 3,590 ug/L) around UST-2 were noted as requiring additional investigation in the future. The EPA reportedly detected concentrations of TCE in an adjacent home at a concentration of 0.44 ppbv (exceeding the vapor intrusion screening limit). As a result, a vapor mitigation system was reportedly installed and is currently operating at the home to create acceptable indoor air quality inside the home.

Although the detections of the chlorinated solvents were observed during the removal of the UST located on the Exide property, interviews with a former plant manager (Appendix C) have not provided any indication that any of those compounds were used, stored, or disposed of onsite. The mechanism for introduction of these chemicals into the soil and groundwater around the former UST-2 location has not been identified.

Additional investigation of soil and groundwater in the vicinity of UST-2 is needed to determine the extent of contamination as well to identify/confirm an onsite or offsite source. Investigation to confirm the location of UST-3 and any potential impacts is also recommended.



## 6.0 HISTORIC INVESTIGATIONS AND DATA

Exide has performed sampling of site soils in various locations. The available data which is still considered relevant to current conditions is summarized in the following subsections. The determination of which historic data for the Site is still relevant is largely based on whether the conditions in a given area could have changed significantly since the collection of data (e.g. “was an area subject to excavation or disturbance?”).

### 6.1 1985 MANUFACTURING AREA BORINGS

In 1985, in response to an inspection/request by the Indiana State Board of Health, Exide performed soil testing in five (5) borings (Borings S-1 through 5) within the manufacturing area. Borings were typically performed to a depth of 8.5 feet with samples collected at two foot intervals. Borings were performed in a transformer room (S-1), an acid storage area which would later become New Formation (S-2), the north side of the Old Formation area (S-3), Outside of Pasting (S-4, not marked on a drawing), and Wet Formation (S-5). Data for soil pH, and TCLP Cadmium, TCLP lead, and TCLP selenium indicates that soil pH was generally neutral to alkaline and non-leaching. The 0.5 foot depth sample from location S-4 had a TCLP lead result of 5.1 mg/L, narrowly exceeding the RCRA hazardous standard. Only one other sample had TCLP detections for lead (0.06 mg/L).

It is believed that total lead samples were also collected, however records of the data have not been located. An internal letter dated June 15, 1987 indicates that a sample from “outside pasting” had a concentration of 39% lead. This could correspond to the TCLP result at the shallow S-4 location. Data from this sampling event is provided in Appendix I.



## 6.2 1988 LOADING DOCK SOIL SAMPLES

In January 1988, Exide performed soil sampling at the area immediately east of the loading dock. Twenty-three (23) soil borings were performed to depths of up to 5.0 feet bgs. Thirty-two (32) samples were collected and analyzed for total lead and Cadmium. The majority of the samples were collected from the 0-0.5 foot and 0.5-1.0 foot depth intervals.

The highest lead detection was 9,300 mg/kg in the 0-0.5 foot depth interval. Eleven (11) samples exceeded the IDEM RISC direct contact screening level of 400 mg/kg; eight (8) of which also exceeded the non-residential screening level of 800 mg/kg. All of these exceedances were observed in the 0-0.5 foot and 0.5-1.0 foot depth intervals.

The highest total cadmium detection was 13 mg/kg in a sample from the 0-0.5 foot depth interval (different boring from sample with highest total lead concentration). No sample results exceeded the IDEM RISC direct contact screening level of 99 mg/kg.

Six (6) samples were analyzed for TCLP. Three (3) of the samples exceeded the RCRA hazardous criteria for TCLP lead of 5.0 mg/L (highest result 15 mg/L). All three of those samples were from intervals with relatively low total lead concentrations (< 270 mg/kg). None of the samples had leachable cadmium (< 0.02 mg/L).

Soils in this area were remediated by Exide as described in Section 5.3.2. Data from this sampling event is provided in Appendix J.

## 6.3 HAZARDOUS WASTE PILE CLOSURE (1998 – 2000)

In August 1998, soil samples were collected from four soil borings advanced within the former waste pile footprint and analyzed for total lead. The soil samples were collected every 6 inches to a depth of 3 feet bgs, and then at 4 feet bgs and at 5 feet bgs, for a total of 24 samples. Total lead concentrations decreased with depth before increasing near the 5-foot depth interval. All samples collected from the 18 - 24 inch bgs depth interval satisfied the IDEM RISC Tier I residential



cleanup level (400 mg/kg). Brick fragments were encountered in the borings within the 4.5 - 5 foot bgs depth interval confirming the presence of fill at that depth.

In March 2000, Advanced GeoServices performed soil sampling in the vicinity of the former waste pile to establish “background conditions.” Samples were collected from six borings at depths of up to 18 inches to represent the fill interval in that area. The total lead values ranged from 165 mg/kg to 2,970 mg/kg with an average of 967 mg/kg.

The sample results obtained by Advanced GeoServices confirmed that there is variability within the onsite fill materials with respect to lead concentrations. Only minor surface disturbance occurred in this area during the facility demolition in 2012. Data from this closure is provided in the report in Appendix F.

#### 6.4 2012 FACILITY DECONTAMINATION AND DEMOLITION

After surface washing was completed, but prior to demolition, samples were collected from brick, concrete block, and other masonry materials. The samples were chipped away from the surface of the materials and used to create 5-point composite samples. A total of 5 samples were collected (Parts Casting Brick, Grid Casting Block, Burning/Pasting Brick, Send Out Brick, and Breakroom/Office Brick).

The samples were analyzed for Priority Pollutant Metals. The sample data indicated that the masonry materials were not characteristically hazardous based on TCLP results. The total concentrations of metals were also reviewed and compared to the 2012 IDEM RISC screening levels. All of the samples had metals concentrations below the industrial/commercial direct contact limits for soil exposure (maximum total lead concentration 490 mg/kg). Four of the five samples also had metals concentrations that were below the residential limits as well (180 mg/kg, 29 mg/kg, 18 mg/kg, and 9.6 mg/kg total lead respectively). Three of the samples (5.7 mg/kg, 8.5 mg/kg, and 11 mg/kg) exceeded the residential direct contact limit for arsenic. Sample results are provided on Table 3.



As the demolition of the structures progressed, the masonry materials were segregated and stockpiled. The masonry was broken up by running over it with heavy equipment. Typically, the maximum dimension of the crushed masonry was less than 8-in. Approximately 3,300 CY of masonry rubble material was generated and was later used as backfill onsite at locations shown on Figure 3.

## 6.5 2014 SOIL BORINGS

In March 2014, a site-wide soil investigation was performed by Exide. The 27 soil boring locations were selected to cover each of the former operational departments/locations (Oxide, Formation, etc.) as well as broader coverage of the Site (yards, lots and outlying areas). The attached Figure 5 depicts the location of each boring. This data set represents the most current and inclusive total lead data for the Site.

Typically, the total depth of the borings was 4 feet below the ground surface (or below the bottom of pavement/concrete); however, in some cases poor recovery resulted in shallower depth. At eight (8) locations, the total depth of the borings was 8-ft. The 8-ft deep borings were completed in locations with a higher potential for deeper migration of contaminants.

At each boring, samples were collected from the 0-6” interval, the 6”-12” interval, and then the bottom 6” of each 1-ft interval thereafter (i.e., 18”-24”, 30-36”, 42-48”, etc.). In some cases if soil conditions changed dramatically, a sample was collected at an alternate 6” interval. Samples were analyzed by Pace Analytical of Indianapolis for lead using method 6010B. A silty clay soil was observed in the majority of the boring locations. At locations B3, B9, and B13 a sandy fill material was encountered. This was expected at location B3 since it is near an elevated railroad embankment. Exide indicates that fill was placed beneath the Old Formation area where B9 was collected. It is also likely that fill or grading was performed during the construction of the former water treatment building where B13 was located. None of the fill material encountered in these borings was waste like in nature.





Each sample interval was field screened for total volatile organic compounds (TVOCs) using a photo-ionizing detector (PID). PID measurements ranged from 0 to 9.5 ppmV. The average of all TVOC measurements was approximately 2.1 ppmV. No oily sheens, organic or petroleum odors were noted. These observations indicate organic/petroleum impacts are not present. Soil conditions were damp in many locations, but no clearly identifiable groundwater surface was encountered.

Analytical results of soil samples collected as part of this investigation are provided on the attached Table 4. The table compares the lead results to the IDEM RISC Screening Levels. The residential screening level for lead in soil is 400 mg/kg. The commercial/industrial screening level for lead in soil is 800 mg/kg.

One hundred and seventy one (171) soil samples were collected and analyzed (including field duplicates). One hundred thirty-eight (138) samples were below all direct contact screening levels. Fifteen (15) samples, representing fourteen (14) boring locations, had lead results in excess of the commercial/industrial screening level.

No exceedance of the commercial/industrial screening level was observed in sample intervals deeper than 1.5-2'. This data confirms what would be anticipated, given leads extremely low solubility. In all but one location where an exceedance of the commercial/industrial screening level was detected, the next deeper sample interval had lead results below the commercial/industrial screening level. The sole exception is at location B-13, where poor recovery was experienced and the result of 13,200 mg/kg in the 1.5-2' sample interval represents the deepest sample obtained.

A copy of the letter summarizing this sample event is provided in Appendix D.

## 6.6 2014 UST REMOVAL

Data collected during the 2014 UST removal reflects the only recent non-lead/metals data for soil onsite. It is also includes the only groundwater data from the Site.



### 6.6.1 UST-1

The final post-excavation soil sample results were compared to IDEM 2014 RISC residential direct contact screening limits as well as the soil migration to groundwater values. The laboratory results for soils remaining after the excavation (post-excavation soil samples) are summarized on Table 5A.

The groundwater samples taken from each boring location were compared to the IDEM 2014 RISC screening levels for residential tap water and (potential) vapor exposure from groundwater. None of the groundwater sample results exceeded the IDEM 2014 RISC screening levels. These groundwater results are shown on Table 5B.

Post-excavation soil samples collected in the vicinity of the former UST-1 location do not exceed the IDEM RISC screening criteria for direct contact or migration to groundwater scenarios. The groundwater samples collected around UST-1 were all below detection for VOCs.

### 6.6.2 UST-2

The post excavation soil sample results were compared to IDEM 2014 RISC residential direct contact screening limits as well as the migration to groundwater values. The laboratory results are summarized on Table 6A. None of the post excavation sidewall or bottom samples exceeded the direct contact limits. Samples collected from the bottom of the excavation were typically at a nominal depth of 12-ft bgs. Samples collected from sidewall locations were collected at the mid-depth of the excavation sidewall; typically 6-ft bgs.

The samples collected from the bottom of the excavation, UST2-BW and UST2-BE had exceedances of the migration to groundwater standard for vinyl chloride (VC). Two samples associated with the exploratory trenches at the adjacent Fuel Storage Area, FS-N1 and FS-W1 had exceedances of the migration to groundwater standard for naphthalene. The sidewall sample collected at FS-W1 also had an exceedance of the migration to groundwater standard for 1-methylnaphthalene. However, additional samples that were collected from the trenches further



away from the UST-2/FS excavation at locations FS-N2 and FS-W2 did not produce any exceedances. These analytical results are summarized on Table 6A. The locations of the highest exceedances are summarized on Figure 6.

The soil results for the ISC investigation event were also compared to the IDEM 2014 RISC screening limits for residential direct contact. No contaminants were detected at concentrations exceeding the direct contact limits. However, at each of the three locations (4 soil samples) various chlorinated solvents were detected at concentrations that exceed the migration to groundwater screening limit.

- At location UST2-A, the sample collected from the 10-ft to 12-ft depth interval had concentrations of cis-1,2-DCE, TCE, and VC which exceed the migration to groundwater screening limit.
- At location UST2-B, the sample collected from the 10-ft to 12-ft depth interval had concentrations of VC which exceed the migration to groundwater screening limit.
- At location UST2-C, the sample collected from the 3-ft to 4-ft depth interval had concentrations of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene which exceed the migration to groundwater limit. The soil sample collected from the 15-ft to 16-ft depth interval had a concentration of VC which exceeds the migration to groundwater standard.

The groundwater/surface water sample collected during the UST removal and over-excavation events were compared to the RISC screening limits for residential tap water. Both of the samples had exceedances for Naphthalene and VC. The more recent sample (May 7, 2014) had additional exceedances for cis-1,2-DCE, trans-1,2-DCE and trichloroethene. The UST-2 groundwater analytical results can be found in Table 6B.



The groundwater samples collected from each boring location were compared to the IDEM 2014 RISC screening levels for residential tap water and [potential] vapor exposure from groundwater. The groundwater sample collected at the UST2-A location had concentrations that exceed the residential tap water standard for DCA, 1,1-DCE, cis-1,2-DCE, TCE and VC; the concentrations of 1,1-DCA, TCE, and VC also exceed the screening limits for potential vapor exposure.

Groundwater sampled at the UST2-B and UST2-C locations also had concentrations that exceed the residential tap water screening limit for cis-1,2-DCE and VC; the VC results also exceed the screening limit for potential vapor exposure. All analytical results can be found in Table 6B, exceedances and general locations are depicted on Figure 6.



## 7.0 CONTAMINANTS OF CONCERN

### 7.1 INORGANIC COMPOUNDS

Lead is the primary inorganic contaminant that has been observed on the Site. This is consistent with long term use of the Site for the manufacture of lead-acid batteries. Typically other related metals such as arsenic and cadmium may also be observed at the site of a former battery manufacturing operation. However, these other metal contaminants are typically present in conjunction with lead and not instead of lead. As a result, lead typically remains the driver for investigation, risk assessment, and remediation planning.

Other anthropogenic sources of lead on the Site could be attributed to emissions from combustion of leaded gasoline and the use of lead paint.

#### 7.1.1 Lead (Pb)

Lead is a heavy, ductile, and soft gray metal. Lead is soluble in nitric acid, insoluble in water, and dissolves slowly in weaker acids. Lead is one of the major components of lead-acid batteries. Lead is commonly found in ionic form in both the waste water and acids used during battery manufacture. The human toxicological effects of lead result from its adverse effect on the central nervous system, peripheral nerves, the kidneys, and the hematopoietic system. Lead is toxic by ingestion and inhalation of dust or fumes.

2017 IDEM RISC Screening Levels for Lead:

- Soil Residential Direct Contact: 400 mg/kg
- Soil Com/Industrial Direct Contact: 800 mg/kg
- Soil Excavation Direct Contact: 1,000 mg/kg
- Soil Migration to Groundwater: 270 mg/kg
- Residential Tap Water: 15 ug/L



### 7.1.2 Arsenic (As)

Arsenic is a gray, non-metallic element commonly used in the hardening of copper and lead alloys and their components. As a pure element, arsenic is insoluble in water; however, some arsenates are soluble. Arsenic is converted to arsenous (or arsenic acid) by hot sulfuric acid. Arsenous is freely soluble in water. Arsenic occurs in ionic form in lead-acid batteries. Arsenic is a human carcinogen and most compounds formed by arsenic are highly toxic.

2017 IDEM RISC Screening Levels for Arsenic:

- Soil Residential Direct Contact: 9.5 mg/kg
- Soil Com/Industrial Direct Contact: 30 mg/kg
- Soil Excavation Direct Contact: 920 mg/kg
- Soil Migration to Groundwater: 5.9 mg/kg
- Residential Tap Water: 10 ug/L

During previous work in Indianapolis, Advanced GeoServices has noted background arsenic concentrations of 12.7 mg/kg in native soils.

### 7.1.3 Cadmium (Cd)

Cadmium is a soft, white metallic element that is soluble in acids. Cadmium is commonly used in small amounts to lower the melting point of alloys. Cadmium is used in the production of lead alloys and is generally found in ionic form in lead-acid batteries. Cadmium is a carcinogen and soluble compounds of cadmium are highly toxic.

2017 IDEM RISC Screening Levels for Cadmium:

- Soil Residential Direct Contact: 99 mg/kg
- Soil Com/Industrial Direct Contact: 980 mg/kg
- Soil Excavation Direct Contact: 1,900 mg/kg



- Soil Migration to Groundwater: 7.5 mg/kg
- Residential Tap Water: 5 ug/L

## 7.2 NAPHTHA COMPOUNDS

Petroleum-derived fuels such as gasoline, #2 heating oil, and diesel fuel were stored onsite in underground storage tanks. Fuel oils are complex structures composed of varying fractions of alkanes, aromatic hydrocarbons, sulfur, nitrogen, and oxygenated compounds. Several of the organic compounds that are typically associated with these fuels include “naphtha compounds.” Naphtha compounds include several simple polycyclic aromatic hydrocarbons (PAHs) and were identified onsite during the closure of UST-1 and UST-2.

Naphtha compounds that were identified above the IDEM RISC soil MTG screening limit in post-excavation samples collected from the UST-2 excavation include: naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene.

### 7.2.1 Naphthalene

Naphthalene is the simplest (PAH). It is a white crystalline solid with a characteristic odor that is detectable in air at concentrations as low as 0.08 ppm (by mass) and in water at concentrations of 0.021 ppm. It’s most well-known application is traditional moth balls.

Most naphthalene is derived from coal tar (it is the most abundant component of coal tar). In the past (1960s – 1990s) naphthalene was also produced during petroleum refining. It is mainly used as a precursor to other chemicals such as azo dyes or phthalic anhydride (eventually used to make plasticizers). Naphthalene vapors are flammable and it is a component of fossil fuels.

Exposure to large amounts of naphthalene may damage or destroy red blood cells.

Naphthalene was detected in remaining soils in the vicinity of the UST-2 removal at a maximum concentration 0.311 mg/kg; it was not detected in groundwater samples after UST-2 removal.



#### 2017 IDEM RISC Screening Levels for naphthalene:

- Soil Residential Direct Contact: 53 mg/kg
- Soil Com/Industrial Direct Contact: 170 mg/kg
- Soil Excavation Direct Contact: 3,100 mg/kg
- Soil Migration to Groundwater: 0.11 mg/kg
- Residential Tap Water: 1.7 ug/L
- Groundwater Residential Vapor Exposure: 110 ug/L
- Groundwater Com/Industrial Vapor Exposure: 460 ug/L

#### 7.2.2 1-Methylnaphthalene and 2-Methylnaphthalene

1-Methylnaphthalene and 2-methylnaphthalene are related to naphthalene. They are chemically similar with the difference being the position of the methyl group on the molecule. They are used to make dyes and resins. 1-Methylnaphthalene is a clear liquid. 2-Methylnaphthalene is a white solid. Little is known about the behavior of these compounds in the environment. However it is generally accepted that they will behave similarly to naphthalene.

1-Methylnaphthalene and 2-Methylnaphthalene was detected in remaining soils in the vicinity of the UST-2 removal at maximum concentrations of 4.11 mg/kg and 3.81 mg/kg, respectively. Neither compound was detected in groundwater samples after UST-2 removal.

#### 2017 IDEM RISC Screening Levels for 1-methylnaphthalene:

- Soil Residential Direct Contact: 250 mg/kg
- Soil Com/Industrial Direct Contact: 390 mg/kg
- Soil Excavation Direct Contact: 390 mg/kg
- Soil Migration to Groundwater: 1.2 mg/kg
- Residential Tap Water: 11 ug/L
- Groundwater Residential Vapor Exposure: NA





- Groundwater Com/Industrial Vapor Exposure: NA

#### 2017 IDEM RISC Screening Levels for 2-methylnaphthalene:

- Soil Residential Direct Contact: 340 mg/kg
- Soil Com/Industrial Direct Contact: 3,000 mg/kg
- Soil Excavation Direct Contact: 6,800 mg/kg
- Soil Migration to Groundwater: 3.7 mg/kg
- Residential Tap Water: 36 ug/L
- Groundwater Residential Vapor Exposure: NA
- Groundwater Com/Industrial Vapor Exposure: NA

### 7.3 CHLORINATED SOLVENTS

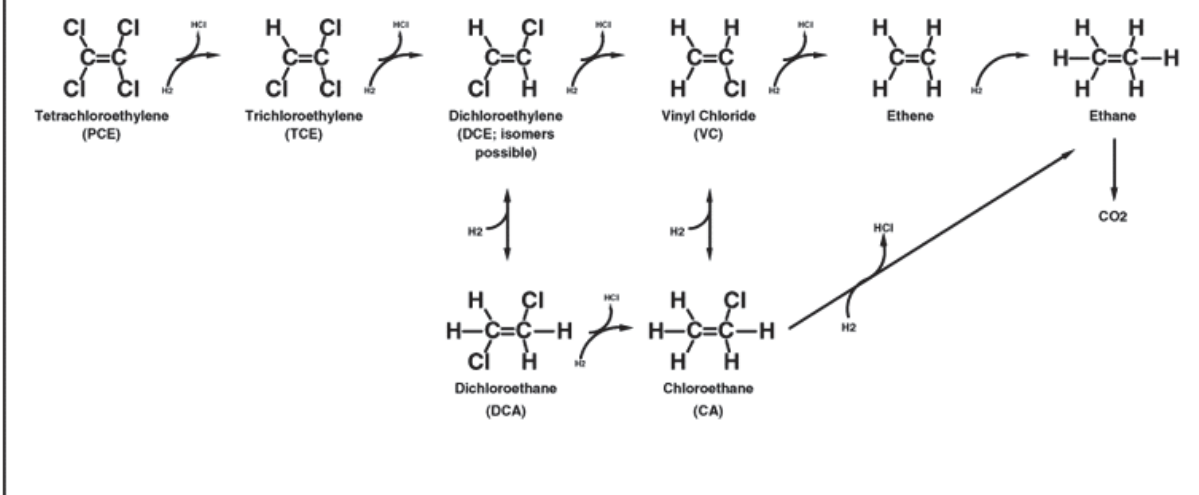
Chlorinated solvents have properties that make them useful for degreasing fats, oils, waxes, and resins. They are widely used and have been manufactured in large quantities. No specific use of chlorinated solvents in large quantities has been identified onsite. Chlorinated solvents are not typically associated with petroleum-derived fuel compounds. However, the presence of chlorinated solvents was identified in the vicinity of the UST-2 removal.

Chlorinated solvents are generally harmful to human and ecological health. They are suspected of causing cancer and are toxic or harmful to aquatic organisms. These contaminants can be present in the subsurface in the form of non-aqueous phase liquids (NAPL, free product), as dissolved contaminants in groundwater, within sediments in the aquifer, and as vapors in the unsaturated zone. The density of chlorinated solvents is greater than water so they tend to sink in groundwater systems (DNAPL).

Microbial degradation of chlorinated solvents can occur whereby the breakdown of parent compounds results in daughter compounds. It is common to see varying concentrations of multiple chlorinated solvents at a given location depending on the original parent product and the level of microbial degradation that has occurred.



## MICROBIAL PATHWAY FOR REDUCTIVE DEHALOGENATION FOR TETRACHLOROETHYLENE (PCE)



### 7.3.1 Tetrachloroethylene (PCE)

PCE has not been identified onsite to date. PCE is widely used for dry cleaning and often is referred to as “dry cleaning fluid”. It has a sweet odor detectable at concentrations as low as 1 part per million (ppmv). It is also used as a solvent to degrease metal parts in automotive and other metalworking industries where it is usually mixed with other chlorocarbons. It is also used in some consumer products such as paint strippers and spot removers. It was also used in the manufacturing of refrigerants at one time.

### 7.3.2 Trichloroethylene (TCE)

In general industry, TCE was widely used in the dry cleaning industry until it was by PCE in the 1950s. It has also been used to extract vegetable oils from plants and as an anesthetic. However,



the greatest use of TCE is as a degreaser for metal parts and in the manufacture of fluorocarbon refrigerants. TCE is a daughter product of the microbial degradation of PCE.

TCE is not known to have been used or stored onsite in small or large quantities. TCE has been detected in soil (0.135 mg/kg) and groundwater (8,520 ug/L) onsite in the vicinity of UST-2.

2017 IDEM RISC Screening Levels for TCE:

- Soil Residential Direct Contact: 110 mg/kg
- Soil Com/Industrial Direct Contact: 170 mg/kg
- Soil Excavation Direct Contact: 170 mg/kg
- Soil Migration to Groundwater: 0.045 mg/kg
- Residential Tap Water: 5 ug/L
- Groundwater Residential Vapor Exposure: 110 ug/L
- Groundwater Com/Industrial Vapor Exposure: 470 ug/L

### 7.3.3 1,1-Dichloroethane (1,1-DCA)

1,1-DCA is produced industrially in large volumes as a feed stock for chemical synthesis. It is also used as a solvent for plastics, oils and fats; and as a degreaser. It is also used as a fumigant in insecticide sprays, halon fire extinguishers, and in rubber cement.

1,1-DCE is not specifically known to have been used onsite in large or small quantities. 1,1-DCA is a daughter product of the microbial degradation of TCE. 1,1-DCA has been detected in onsite groundwater (61.1 ug/L) in the vicinity of UST-2.

2017 IDEM RISC Screening Levels for 1,1-DCA:

- Soil Residential Direct Contact: 50 mg/kg
- Soil Com/Industrial Direct Contact: 160 mg/kg



- Soil Excavation Direct Contact: 1,700 mg/kg
- Soil Migration to Groundwater: 0.16 mg/kg
- Residential Tap Water: 28 ug/L
- Groundwater Residential Vapor Exposure: 130 ug/L
- Groundwater Com/Industrial Vapor Exposure: 550 ug/L

#### 7.3.4 1,1-Dichloroethene (1,1-DCE)

1,1-DCE does not have a large industrial use. Prior to 2004 it was used in the production of cling wrap (i.e., Saran wrap). Health effects from exposure to 1,1-DCE are primarily on the central nervous system. It is considered a potential occupational carcinogen by the National Institute for Occupational Safety and Health (NIOSH).

1,1-DCE has been detected in groundwater (69.4 ug/L) onsite in the vicinity of UST-2. 1,1-DCE is not specifically known to have been used onsite in large or small quantities. 1,1-DCE is a daughter product of the microbial degradation of TCE.

#### 2017 IDEM RISC Screening Levels for 1,1-DCE:

- Soil Residential Direct Contact: 320 mg/kg
- Soil Com/Industrial Direct Contact: 1,000 mg/kg
- Soil Excavation Direct Contact: 1,200 mg/kg
- Soil Migration to Groundwater: 0.05 mg/kg
- Residential Tap Water: 7 ug/L
- Groundwater Residential Vapor Exposure: 300 ug/L
- Groundwater Com/Industrial Vapor Exposure: 1,300 ug/L



### 7.3.5 1,2-Dichloroethene (1,2-DCE)

1,2-DCE has two isomers: *cis*-1,2-DCE and *trans*-1,2-DCE. Both isomers are daughter products of TCE degradation and are also prevalent by-products of industrial vinyl chloride production. However 1,2-DCE is typically found as a mix of the two isomers. It is a highly flammable colorless liquid with a sharp, harsh odor. It has modest solubility in water. 1,2-DCE does not have many industrial applications. *Trans*-1,2-DCE is used in limited precision cleaning applications for certain metals and electronics. 1,2-DCE is not known to have been used onsite, but has been detected in groundwater onsite (*cis*-1,2-DCE 41,600 ug/L; *trans*-1,2-DCE 468 ug/L). 1,2-DCE is a daughter product of the microbial degradation of TCE.

#### 2017 IDEM RISC Screening Levels for *cis*-1,2-DCE:

- Soil Residential Direct Contact: 220 mg/kg
- Soil Com/Industrial Direct Contact: 2,300 mg/kg
- Soil Excavation Direct Contact: 2,400 mg/kg
- Soil Migration to Groundwater: 0.41 mg/kg
- Residential Tap Water: 70 ug/L
- Groundwater Residential Vapor Exposure: NA
- Groundwater Com/Industrial Vapor Exposure: NA

#### 2017 IDEM RISC Screening Levels for *trans*-1,2-DCE:

- Soil Residential Direct Contact: 1,900 mg/kg
- Soil Com/Industrial Direct Contact: 1,900 mg/kg
- Soil Excavation Direct Contact: 1,900 mg/kg
- Soil Migration to Groundwater: 0.62 mg/kg
- Residential Tap Water: 100 ug/L
- Groundwater Residential Vapor Exposure: NA
- Groundwater Com/Industrial Vapor Exposure: NA



### 7.3.6 Vinyl Chloride

Vinyl Chloride is a colorless industrial chemical that is produced in the United States on a vast scale. It is a chemical intermediate and not a final product. It is chiefly used in the production of polyvinyl chloride (PVC) plastics. Vinyl chloride is normally a gas at atmospheric temperatures and pressures. It has a sweet odor. It is highly toxic, flammable, and carcinogenic. Prior to 1974, vinyl chloride was used as an aerosol spray propellant.

Vinyl chloride is the daughter product of the microbial degradation of 1,2-DCE; and is the final chlorinated daughter product in the degradation chain. Further break down of vinyl chloride results in ethene. Vinyl chloride has been detected in remaining onsite soils at concentrations of up to 0.115 mg/kg; and in onsite groundwater at a maximum concentration of 8,520 ug/L.

2017 IDEM RISC Screening Levels for vinyl chloride:

- Soil Residential Direct Contact: 0.83 mg/kg
- Soil Com/Industrial Direct Contact: 17 mg/kg
- Soil Excavation Direct Contact: 1,300 mg/kg
- Soil Migration to Groundwater: 0.014 mg/kg
- Residential Tap Water: 2 ug/L
- Groundwater Residential Vapor Exposure: 2.1 ug/L
- Groundwater Com/Industrial Vapor Exposure: 35 ug/L



## 8.0 CONCEPTUAL SITE MODEL

### 8.1 FORMER MANUFACTURING AREAS

#### 8.1.1 Degree and Extent

The former manufacturing areas include the former facility structures that were dedicated to battery manufacturing, offices/administration, air emission control, and wastewater treatment. The soil data that exists for the former manufacturing areas is primarily focused on potential lead contamination in shallow intervals (<4 feet below the bottom of the existing concrete floor slabs and asphalt paving). The majority of the building structures were constructed prior to the start of battery manufacturing and associated potential lead impacts. Fill materials placed beneath buildings prior to the start of battery manufacturing onsite would be expected to have relatively low concentrations of lead and other battery manufacturing-related constituents. However, lead could still be present at elevated levels in early fill materials or former surface soils from other anthropogenic sources such as emissions from the combustion of leaded gasoline or lead paint.

Although the operating record does not indicate significant potential for migration of lead into the subgrade from interior sources, it is possible that in some locations within the former manufacturing areas such migration may have occurred due to damage to facility flooring in combination with infiltration of battery acid. However, despite the severely corroded flooring in Old Formation prior to demolition in 2012; the 2014 soil boring B-9 had a maximum lead detection of only 18.5 mg/kg. TCLP data from the 1985 soil boring is also generally indicative of a lack of high concentrations of lead and other metals contaminants within the manufacturing area.

In general, the averaged data for lead in soils within the former manufacturing areas is a relatively low 243 mg/kg (below IDEM RISC soil MTG and residential direct contact screening levels). Where elevated lead concentrations are found they are concentrated within the shallow intervals (<2 feet bgs).



It should also be noted that lead is a common metal with other prevalent anthropogenic sources. It can be found at background concentrations in excess of 30 ppm in natural soils and 1 – 10 ug/L in surface water. Arsenic has also been observed naturally occurring in regional soils at levels that exceed the IDEM RISC default residential direct contact screening levels.

### 8.1.2 Contaminant Migration

Most lead salts are relatively insoluble in water. However, the solubility depends on pH and increases in more acidic conditions. The movement of lead in soils depends on its absorption, chelation with organic matter, and precipitation of less soluble salts. In general, lead reacts with soil anions or clays to form insoluble complexes, inhibiting mobility. Historic data indicates that even within the manufacturing area where acids were utilized the soil pH was typically neutral-alkaline.

Arsenic and cadmium are all considered insoluble inorganic constituents and their behavior in soils is generally similar to the behavior of lead. Arsenic is relatively more soluble than lead and also has an adiabatic solubility curve. Arsenic solubility decreases as pH becomes more alkaline up to a pH of approximately 9-10 (depending on the compound). At higher pH, the solubility increases again.

Lead and other inorganic contaminants that are present onsite in shallow soils are likely the result of soil mixing that resulted during construction activities which blended impacted fill materials and native soils. Spills and leaks of low pH wastewater or acids within the facility may also have facilitated the migration of lead into soils beneath paved surfaces in select locations.

Since the majority of the Site is paved and the ground water table is relatively deep, it is unlikely that lead and other inorganic contaminants have a pathway for leaching into groundwater aquifers used for water supply. However, shallow perched groundwater may be present in some portions of the Site (as observed during the UST removal). Given the silty/clayey consistency of the native soils on the site and in the region a significant vertical migration of





contaminants is not expected. Migration of inorganic contaminants via wind or stormwater runoff is also not likely.

## 8.2 UNDERGROUND STORAGE TANKS

### 8.2.1 Degree and Extent of Contamination

Following removal of UST-1 and surrounding impacted soils no petroleum related contaminants, PAHs, or chlorinated solvents were detected in soils or groundwater near the tank. UST-1 was located south of the Old Formation area. It is believed that the removal of UST-1 and impacted soils removed all or nearly all potential source materials from this area.

Following the removal of UST-2 various naphtha compounds and chlorinated solvents were detected in soil at concentrations that exceeded the IDEM RISC soil MTG screening limits (but not direct contact values).

Maximum soil concentrations of remaining soil contaminants at UST-1 were:

- Naphthalene: 0.311 mg/kg
- 1-methylnaphthalene: 4.11 mg/kg
- 2-methylnaphthalene: 3.81 mg/kg
- TCE: 0.135 mg/kg
- Cis-1,2-DCE: 1.38 mg/kg
- Vinyl chloride: 0.115 mg/kg

Naphtha compounds were not detected in groundwater samples collected from the UST-2 area (20-ft offset from UST-2 location). Chlorinated solvents were also detected in groundwater at concentrations that exceeded the IDEM RISC residential tap water standard or the IDEM RISC vapor exposure screening levels at an offset of 20-feet from the UST-2 location (see section 8.4). Samples collected as part of the UST closure were collected at depths equivalent to the bottom of the UST (11-12 feet bgs) and within 20-feet from UST-2.



Maximum groundwater concentrations of remaining groundwater contaminants which exceed residential tap water screening limits at UST-2 were:

- 1,1-DCA 61.1 ug/L
- 1,1-DCE 69.4 ug/L
- Cis-1,2-DCE: 41,600 ug/L
- trans-1,2-DCE: 468 ug/L

Maximum groundwater concentrations of groundwater contaminants which exceed residential tap water screening limits and vapor exposure screening limits at UST-2 were:

- TCE: 8,520 ug/L
- Vinyl chloride: 3,590 ug/L

### 8.2.2 Contaminant Migration

Source material soils have been largely removed and the excavation areas are backfilled with imported stone fill. Migration or direct contact by the public with any remaining contamination associated with the former USTs is not likely. The clayey silty native soils which underlie the Site provide a natural barrier against vertical contaminant migration. USEPA has reportedly detected TCE in indoor air samples at a residence near the Site. This suggests that via groundwater (Section 8.4) TCE from an onsite source has migrated offsite or that TCE from an offsite source has migrated onsite.

## 8.3 OVERALL SITE SOILS

### 8.3.1 Degree and Extent of Contamination

Grass covered portions of the Site along Washington Avenue (north of the existing security fence) were not used for battery manufacturing activities and are not believed to have been disturbed during the operating history of the Site. Investigation of a soil mound during the March 2014 soil



investigation (B-27) did not identify lead at concentration that exceed IDEM RISC direct contact screening limits.

The grassy area north of Send Out which was associated with the Hazardous Waste Pile Closure in 2000 was also investigated by the March 2014 soil investigation (B-27) which did not identify lead exceeding IDEM RISC direct contact screening limits.

Other portions of the Site outside the manufacturing areas exhibited slightly higher concentrations of lead within the shallow subsurface interval (0-2 feet bgs) than was observed within the former manufacturing areas. This is not unexpected given that many of the non-manufacturing areas within the perimeter fence were unpaved for a significant portion of the operational history. Aerial deposition of lead from onsite and offsite sources in conjunction with the use of various fill materials could have resulted in concentration of lead in areas where stormwater collected or where past grading and soil turnover occurred.

### 8.3.2 Contaminant Migration

Since the majority of the Site is paved and the groundwater table is relatively deep, it is unlikely that lead and other inorganic contaminants have a pathway for leaching into groundwater. However, shallow perched groundwater may be present in some portions of the Site (as observed during the UST removal). Given the silty/clayey consistency of the native soils on the site and in the region a significant vertical migration of contaminants is not expected. Migration of inorganic contaminants via wind or stormwater runoff is also not likely.

## 8.4 GROUNDWATER

### 8.4.1 Degree and Extent of Contamination

The Site does not have an active groundwater monitoring program. The only groundwater data that exists was generated during the 2014 UST removal. Prior to the removal of UST-1 and UST-2 (and associated impacted soils) the groundwater that collected within both excavations had



detections of naphtha compounds and PAHs. These contaminants were not detected in post-removal groundwater samples. Samples of groundwater collected around UST-2 had detections of various chlorinated solvents at levels that exceeded IDEM RISC screening limits for residential tap water and vapor exposure. Samples collected as part of the UST closure were collected at depths equivalent to the bottom of the UST (11-12 feet bgs) and at an offset of up to 20-feet from UST-2.

Maximum groundwater concentrations of remaining groundwater contaminants which exceed residential tap water screening limits are:

- 1,1-DCA 61.1 ug/L
- 1,1-DCE 69.4 ug/L
- Cis-1,2-DCE: 41,600 ug/L
- trans-1,2-DCE: 468 ug/L

Maximum groundwater concentrations of groundwater contaminants which exceed residential tap water screening limits and vapor exposure screening limits are:

- TCE: 8,520 ug/L
- Vinyl chloride: 3,590 ug/L

#### 8.4.2 Contaminant Migration

The clayey silty native soils which underlie the Site provide a natural barrier against vertical contaminant migration. USEPA has reportedly detected TCE in indoor air samples at a residence near the Site. This indicates that TCE from an onsite source has migrated offsite or that TCE from an offsite source has migrated onsite.

If the source of the chlorinated solvents is onsite at the location of former UST-2 then concentrations further away from the source could be lower due to biological degradation (Section 7.3) and mixing with unimpacted groundwater.



There does not appear to be any shallow groundwater wells used for potable or non-potable water supply in the immediate vicinity of the Site based on the well search performed at the time of the UST-removal in 2014. No groundwater receptors are identified.



## 9.0 INTERIM CORRECTIVE MEASURES ASSESSMENT

### 9.1 ONSITE SOILS

All of the locations where lead has been detected above IDEM RISC direct contact screening levels are within paved areas. No exposure pathway exists for human or ecological receptors. Similarly, naphtha compounds and chlorinated solvents detected within the vicinity of UST-2, were not found at concentrations that exceed direct contact standards. The UST-2 excavation was backfilled with crushed stone and is not paved. However, there is still no exposure pathway for the soil remaining in the UST-2 excavation to be reached by the public or ecological receptors. No interim corrective measures are proposed for onsite soils.

### 9.2 GROUNDWATER

Chlorinated solvents such as various isomers of DCE, vinyl chloride, and TCE have been detected in groundwater onsite in 2014 at concentrations that exceed the IDEM RISC residential tap water standard. However, all properties neighboring the Site are provided with municipally supplied potable water. It is not believed that human or ecological receptors are being exposed to chlorinated solvents via groundwater ingestion. No interim corrective measures are proposed to address groundwater ingestion.

Chlorinated solvents such as TCE and vinyl chloride have been detected in groundwater onsite in 2014 at concentrations that exceed the IDEM RISC vapor exposure screening levels. It is unclear if the source of the TCE is from within the Exide Property. The USEPA reportedly performed indoor air sampling at a neighboring property in 2015 and detected TCE in the indoor air. As a result a vapor mitigation system was installed by USEPA. No interim corrective measures are proposed to address vapor intrusion from impacted groundwater on or offsite.



## 10.0 DATA GAPS

### 10.1 FORMER MANUFACTURING AREAS

The 2014 soil investigation provided many useful data points. However some follow up sampling would aid in defining the extent of contamination on the Site. A site-wide sample grid should be established to collect soil data from the fill onsite (samples collected up to 4 feet bgs, with additional depth in select locations). In grids that have existing data from 2014 (or relevant data from previous investigation work), additional sampling may not be necessary.

Additional focused sampling may also be performed within grids that contain the following features to supplement existing data and aid in decision making:

- Former sludge storage tank (SWMU 2);
- Former baghouse and filter building (SWMU 3); and,
- Former wastewater treatment plan (SWMU 5).

### 10.2 UNDERGROUND STORAGE TANKS

Following the removal of UST-1, UST-2, and surrounding impacted soils in 2014 it is believed that UST-related source materials have been removed. It is believed that the closure of UST-3 in April 1987 was also performed in a manner that would have removed the majority of potential source materials. However, additional subsurface investigation to formally complete the closure of UST-3 is warranted.

### 10.3 OVERALL SITE

The 2014 soil investigation provided many useful data points. However some follow up sampling would aid in defining the extent of contamination on the Site. A site-wide sample grid should be established to collect soil data from the fill onsite (samples collected up to 4 feet bgs, with



additional depth in select locations). In grids that have existing data from 2014, additional sampling may not be necessary.

#### 10.4 GROUNDWATER

Only limited groundwater exists onsite and round the Site. In order to determine the full nature and extent of the chlorinated solvents on and offsite a groundwater monitoring network must be established in the northeast portion of the Site. Additional upgradient background wells and offsite wells should be installed to determine the hydraulic gradient and contaminant isoconcentrations in order to identify the source of the chlorinated solvents. Additional groundwater monitoring wells in the former manufacturing areas are not believed to be necessary.





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## **TABLES**

**Exide Technologies Frankfort, Indiana**  
**Table 1 - Site Parcel Summary**

Parcel ID	Address	Area (AC)	Area (SF)	Paved	Fenced	Notes
12-10-02-456-001.000-021	Washington Ave	0.80	34,848	Yes	Yes	WWTP
12-10-02-456-002.000-021	1357 Washington Ave	0.59	25,700	No	No	ROW
12-10-02-456-005.000-021	1359 Washington Ave	0.78	33,977	No	No	
12-10-02-456-006.000-021	650 Kelley Ave	0.18	7,841	No	No	
12-10-11-201-001.000-021	555 Hoke Ave	10.00	435,600	Yes	Yes	UST, Manufacturing Areas
12-10-11-201-002.000-021	386 Kelley Ave	0.14	6,314	Yes	Yes	Vacated Alley
12-10-11-201-003.000-021	385 Kelley Ave	0.10	4,400	Yes	Yes	
12-10-11-201-004.000-021	384 Kelley Ave	0.10	4,400	Yes	Yes	UST
12-10-11-201-005.000-021	383 Kelley Ave	0.10	4,400	Yes	Yes	
12-10-11-201-006.000-021	382 Kelley Ave	0.10	4,400	Yes	Yes	
12-10-11-201-007.000-021	381 Kelley Ave	0.10	4,400	Yes	Yes	
12-10-11-201-008.000-021	380 Kelley Ave	0.10	4,400	Yes	Yes	
12-10-11-201-009.000-021	364 Kelley Ave	0.10	4,400	Yes	Yes	
12-10-11-201-010.000-021	363 Kelley Ave	0.10	4,400	Yes	Yes	
12-10-11-201-011.000-021	362 Kelley Ave	0.10	4,400	Yes	Yes	
12-10-11-201-012.000-021	361 Kelley Ave	0.10	4,400	Yes	Yes	
12-10-11-201-013.000-021	360 Kelley Ave	0.10	4,400	Yes	Yes	
12-10-11-201-014.000-021	359 Kelley Ave	0.05	2,300	Yes	Yes	

Total	13.66
Paved	12.11
Fenced	12.11
Open/Grassy	1.55

**Exide Technologies Frankfort, Indiana**  
**Table 2 - Groundwater Elevations**

<b>Location</b>	<b>Groundwater Depth in Boring (Initial) (ft bgs)</b>	<b>Groundwater Depth (Perched in Boring)</b>
UST2-A	12	3.31
UST2-B	11	2.87
UST2-C	11	NA

Initial depth to groundwater refers to depth as initially measured in a geoprobe boring, which represents the confined/undisturbed elevations.

Perched in boring depth refers to a depth that was later observed in the geoprobe boring and is assumed to represent a perched or artesian condition where groundwater is filling a void left by the boring.

**Exide Technologies Frankfort, Indiana  
Table 3 - Analytical Results, Demolition Rubble Fill**

Chemical Name	CASRN	Soil Exposure - Direct Contact (2012)		Parts Casting Brick		Grid Bldg Cast Block		Burning Pasting Brick		Send Out Brick		Breakroom Office Brick	
		Residential	Com/Ind	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Arsenic	7440-36-0	5.5	16.0	5.7	0.48	8.5	0.42	11	0.45	0.82	0.43	U	0.45
Barium	7440-39-3	21,000.0	100,000.0	250	0.19	35	0.17	1400	0.18	15	0.17	6.9	0.18
Cadmium	7440-43-9	98.0	8,000.0	0.38	0.19	1.3	0.17	0.25	0.18	0.67	0.17	U	0.18
Chromium*	7440-47-3			8.2	0.19	9.1	0.17	9.1	0.18	1.1	0.17	1.5	0.18
Lead	7439-92-1	400.0	1,300.0	490	0.36	180	0.32	29	0.34	18	0.32	9.6	0.34
Selenium	7782-49-2	550.0	5,100.0	U	1.4	U	1.3	U	1.4	U	1.3	U	1.4
Silver	7440-22-4	550.0	5,100.0	U	0.48	U	0.42	U	0.45	0.48	0.43	U	0.45
Mercury	7439-97-6	3.1	3.1	0.072	0.038	U	0.041	U	0.039	U	0.037	U	0.038

\* IDEM RISC Table A-6 contains Chromium III, Chromium IV, and Chromium - Total standards. Direct Contact standards are only listed for IV: Res 4.1 mg/kg, Com/Ind 56 mg/kg

5.7 Exceeds Residential Direct Contact standard

16.7 Exceeds Com/Ind Direct Contact Standard

**EXIDE TECHNOLOGIES - FRANKFORT, INDIANA**  
**TABLE 4 - ANALYTICAL RESULTS, 2014 SOIL INVESTIGATION**

2017 IDEM RISC OLQ SCREENING LEVELS

SOIL-DIRECT CONTACT  
 SOIL MTG

400	Residential	800	Com/Ind
270	Residential		

Sample Location/Depth	Lab ID	Sample Date	Matrix	Remarks	Parameters	Units	Result	Q	RL
B1-03192014-0.5	5094917096	3/19/2014	Soil		Lead	mg/kg	12.3		0.98
B1-03192014-1	5094917097	3/19/2014	Soil		Lead	mg/kg	92.1		1
B1-03192014-1D	5094917098	3/19/2014	Soil	FD of B1-03192014-1	Lead	mg/kg	117		1
B1-03192014-2	5094917099	3/19/2014	Soil		Lead	mg/kg	18.8		1
B1-03192014-3	5094917100	3/19/2014	Soil		Lead	mg/kg	14.5		1.2
B2-03192014-0.5	5094917101	3/19/2014	Soil		Lead	mg/kg	175		0.96
B2-03192014-1	5094917102	3/19/2014	Soil		Lead	mg/kg	114		1
B2-03192014-2	5094917103	3/19/2014	Soil		Lead	mg/kg	1010		1.2
B2-03192014-3	5094917104	3/19/2014	Soil		Lead	mg/kg	22		1.1
B2-03192014-4	5094917105	3/19/2014	Soil		Lead	mg/kg	11.6		1.2
B3-03182014-0.5	5094917069	3/18/2014	Soil		Lead	mg/kg	3140		1
B3-03182014-1	5094917070	3/18/2014	Soil		Lead	mg/kg	19300		5.4
B3-03182014-2	5094917073	3/18/2014	Soil		Lead	mg/kg	31.6		1.3
B3-03182014-3	5094917071	3/18/2014	Soil		Lead	mg/kg	28.9	J	1.2
B3-03182014-3D	5094917072	3/18/2014	Soil	FD of B3-03182014-3	Lead	mg/kg	16	J	1.1
B4-03192014-0.5	5094917153	3/19/2014	Soil		Lead	mg/kg	116		1.2
B4-03192014-1	5094917154	3/19/2014	Soil		Lead	mg/kg	23.7		0.97
B4-03192014-2	5094917155	3/19/2014	Soil		Lead	mg/kg	18.9	J	1.1
B4-03192014-2D	5094917156	3/19/2014	Soil	FD of B4-03192014-2	Lead	mg/kg	10.4	J	0.98
B4-03192014-3	5094917157	3/19/2014	Soil		Lead	mg/kg	14		1.1
B4-03192014-4	5094917158	3/19/2014	Soil		Lead	mg/kg	15.5		1.2
B4-03192014-5	5094917159	3/19/2014	Soil		Lead	mg/kg	18.5		1.1
B4-03192014-6	5094917160	3/19/2014	Soil		Lead	mg/kg	9.7		1.1
B4-03192014-6D	5094917161	3/19/2014	Soil	FD of B4-03192014-6	Lead	mg/kg	8.8		1.2
B4-03192014-7	5094917162	3/19/2014	Soil		Lead	mg/kg	6.5		1.1
B4-03192014-8	5094917163	3/19/2014	Soil		Lead	mg/kg	5.7		1
B5-03192014-0.5	5094917130	3/19/2014	Soil		Lead	mg/kg	8		1
B5-03192014-1	5094917131	3/19/2014	Soil		Lead	mg/kg	7.3	J	0.92
B5-03192014-1D	5094917132	3/19/2014	Soil	FD of B5-03192014-1	Lead	mg/kg	11.7	J	0.93
B5-03192014-2	5094917133	3/19/2014	Soil		Lead	mg/kg	6.2		1
B5-03192014-3	5094917134	3/19/2014	Soil		Lead	mg/kg	10		1
B5-03192014-3.5	5094917135	3/19/2014	Soil		Lead	mg/kg	25.7		1.2
B6-03192014-0.5	5094917087	3/19/2014	Soil		Lead	mg/kg	10.2		1
B6-03192014-1	5094917088	3/19/2014	Soil		Lead	mg/kg	16.3		1.1
B6-03192014-2	5094917089	3/19/2014	Soil		Lead	mg/kg	14		1.2
B6-03192014-3	5094917090	3/19/2014	Soil		Lead	mg/kg	12.6		1.3
B6-03192014-4	5094917091	3/19/2014	Soil		Lead	mg/kg	15.4		1.4
B6-03192014-5	5094917092	3/19/2014	Soil		Lead	mg/kg	12.5		1.2
B6-03192014-6	5094917093	3/19/2014	Soil		Lead	mg/kg	5.9		1.3
B6-03192014-7	5094917094	3/19/2014	Soil		Lead	mg/kg	28.4		1
B6-03192014-8	5094917095	3/19/2014	Soil		Lead	mg/kg	5.6		1
B7-03192014-0.5	5094917082	3/19/2014	Soil		Lead	mg/kg	101		0.92
B7-03192014-1	5094917083	3/19/2014	Soil		Lead	mg/kg	69.4		1.1
B7-03192014-2	5094917084	3/19/2014	Soil		Lead	mg/kg	6.6		1
B7-03192014-2D	5094917085	3/19/2014	Soil	FD of B7-03192014-2	Lead	mg/kg	7.1		1.1
B7-03192014-3	5094917086	3/19/2014	Soil		Lead	mg/kg	6.5		1.1
B8-03182014-0.5	5094917064	3/18/2014	Soil		Lead	mg/kg	2130		0.93
B8-03182014-1	5094917065	3/18/2014	Soil		Lead	mg/kg	6250		5.6
B8-03182014-2	5094917066	3/18/2014	Soil		Lead	mg/kg	76.8		5.4
B8-03182014-3	5094917067	3/18/2014	Soil		Lead	mg/kg	24.5		1.1
B8-03182014-3D	5094917068	3/18/2014	Soil	FD of B8-03182014-3	Lead	mg/kg	21.3		1.1
B9-03192014-0.5	5094917106	3/19/2014	Soil		Lead	mg/kg	18.5		1
B9-03192014-1	5094917107	3/19/2014	Soil		Lead	mg/kg	9.4		0.99
B9-03192014-2	5094917108	3/19/2014	Soil		Lead	mg/kg	4.9		0.93
B9-03192014-3	5094917109	3/19/2014	Soil		Lead	mg/kg	6.6		1

**EXIDE TECHNOLOGIES - FRANKFORT, INDIANA**  
**TABLE 4 - ANALYTICAL RESULTS, 2014 SOIL INVESTIGATION**

Sample Location/Depth	Lab ID	Sample Date	Matrix	Remarks	Parameters	Units	Result	Q	RL
B9-03192014-4	5094917110	3/19/2014	Soil		Lead	mg/kg	5.6		1
B9-03192014-5	5094917111	3/19/2014	Soil		Lead	mg/kg	9.8		1.1
B9-03192014-6	5094917112	3/19/2014	Soil		Lead	mg/kg	6.5		1.1
B9-03192014-6D	5094917113	3/19/2014	Soil	FD of B9-03192014-6	Lead	mg/kg	8		1
B9-03192014-7	5094917114	3/19/2014	Soil		Lead	mg/kg	6.4		1
B9-03192014-8	5094917115	3/19/2014	Soil		Lead	mg/kg	9.4		1.1
B10-03182014-0.5	5094917076	3/18/2014	Soil		Lead	mg/kg	47.4		0.88
B10-03182014-1	5094917077	3/18/2014	Soil		Lead	mg/kg	1520		1.1
B10-03182014-2	5094917078	3/18/2014	Soil		Lead	mg/kg	61.1		1.1
B10-03182014-3	5094917079	3/18/2014	Soil		Lead	mg/kg	11.9		0.94
B10-03192014-4	5094917080	3/19/2014	Soil		Lead	mg/kg	9.1		1
B10-03192014-4D	5094917081	3/19/2014	Soil	FD of B10-03182014-4	Lead	mg/kg	8.4		1.1
B11-03182014-0.5	5094917048	3/18/2014	Soil		Lead	mg/kg	203		1
B11-03182014-1	5094917049	3/18/2014	Soil		Lead	mg/kg	69.5		1.1
B11-03182014-2	5094917050	3/18/2014	Soil		Lead	mg/kg	12.2		1.1
B11-03182014-2D	5094917051	3/18/2014	Soil	FD of B11-03182014-2	Lead	mg/kg	13.6		1.2
B11-03182014-3	5094917052	3/18/2014	Soil		Lead	mg/kg	9.9		1.1
B12-03182014-0.5	5094917043	3/18/2014	Soil		Lead	mg/kg	11.8		1
B12-03182014-1	5094917044	3/18/2014	Soil		Lead	mg/kg	13.3		1.1
B12-03182014-2	5094917045	3/18/2014	Soil		Lead	mg/kg	12.2		1.1
B12-03182014-3	5094917046	3/18/2014	Soil		Lead	mg/kg	10.3		1
B12-03182014-4	5094917047	3/18/2014	Soil		Lead	mg/kg	6.6		0.93
B13-03192014-0.5	5094917150	3/19/2014	Soil		Lead	mg/kg	120		1
B13-03192014-1	5094917151	3/19/2014	Soil		Lead	mg/kg	9.6		1
B13-03192014-2	5094917152	3/19/2014	Soil		Lead	mg/kg	13200		6.2
B14-03192014-0.5	5094917145	3/19/2014	Soil		Lead	mg/kg	11.2		1
B14-03192014-1	5094917146	3/19/2014	Soil		Lead	mg/kg	12.9		1.2
B14-03192014-2	5094917147	3/19/2014	Soil		Lead	mg/kg	7.2		0.96
B14-03192014-2D	5094917148	3/19/2014	Soil	FD of B14-03192014-2	Lead	mg/kg	7.6		1.1
B14-03192014-3	5094917149	3/19/2014	Soil		Lead	mg/kg	7.3		0.99
B15-03192014-0.5	5094917125	3/19/2014	Soil		Lead	mg/kg	1410		1
B15-03192014-1	5094917126	3/19/2014	Soil		Lead	mg/kg	16		1
B15-03192014-2	5094917127	3/19/2014	Soil		Lead	mg/kg	179		1
B15-03192014-3	5094917128	3/19/2014	Soil		Lead	mg/kg	215		1.1
B15-03192014-4	5094917129	3/19/2014	Soil		Lead	mg/kg	77.1		1.1
B16-03192014-0.5	5094917116	3/19/2014	Soil		Lead	mg/kg	6.6		0.94
B16-03192014-1	5094917117	3/19/2014	Soil		Lead	mg/kg	147		1
B16-03192014-2	5094917118	3/19/2014	Soil		Lead	mg/kg	1410		1.3
B16-03192014-3	5094917119	3/19/2014	Soil		Lead	mg/kg	109		1.4
B17-03192014-0.5	5094917120	3/19/2014	Soil		Lead	mg/kg	204		1.1
B17-03192014-1	5094917121	3/19/2014	Soil		Lead	mg/kg	9.7		0.97
B17-03192014-2	5094917122	3/19/2014	Soil		Lead	mg/kg	8.3		0.94
B17-03192014-2D	5094917123	3/19/2014	Soil	FD of B17-03192014-2	Lead	mg/kg	7.5		1
B17-03192014-3	5094917124	3/19/2014	Soil		Lead	mg/kg	9.4		1
B18A-03192014-0.5	5094917137	3/19/2014	Soil		Lead	mg/kg	109		1.1
B18A-03192014-1	5094917138	3/19/2014	Soil		Lead	mg/kg	510		1.1
B18A-03192014-1.5	5094917139	3/19/2014	Soil		Lead	mg/kg	33.4		1.3
B18-03192014-3	5094917136	3/19/2014	Soil		Lead	mg/kg	187		2.6
B18A-03192014-4.5	5094917140	3/19/2014	Soil		Lead	mg/kg	217		1.2
B18A-03192014-5	5094917141	3/19/2014	Soil		Lead	mg/kg	17.8		1.2
B18A-03192014-6	5094917142	3/19/2014	Soil		Lead	mg/kg	19.5		1.3
B18A-03192014-7	5094917143	3/19/2014	Soil		Lead	mg/kg	16.9		1.3
B18A-03192014-8	5094917144	3/19/2014	Soil		Lead	mg/kg	8.4		1
B19-03182014-0.5	5094917031	3/18/2014	Soil		Lead	mg/kg	708		1
B19-03182014-1	5094917032	3/18/2014	Soil		Lead	mg/kg	188		0.93
B19-03182014-5.5	5094917033	3/18/2014	Soil		Lead	mg/kg	22.1		1.2
B19-03182014-6	5094917034	3/18/2014	Soil		Lead	mg/kg	7.1		0.95
B20-03182014-0.5	5094917021	3/18/2014	Soil		Lead	mg/kg	91.9		0.98
B20-03182014-1	5094917022	3/18/2014	Soil		Lead	mg/kg	27.2		1

**EXIDE TECHNOLOGIES - FRANKFORT, INDIANA**  
**TABLE 4 - ANALYTICAL RESULTS, 2014 SOIL INVESTIGATION**

Sample Location/Depth	Lab ID	Sample Date	Matrix	Remarks	Parameters	Units	Result	Q	RL
B20-03182014-2	5094917023	3/18/2014	Soil		Lead	mg/kg	33.4	J	1.1
B20-03182014-2D	5094917024	3/18/2014	Soil	FD of B20-03182014-2	Lead	mg/kg	20.1	J	1
B20-03182014-3	5094917025	3/18/2014	Soil		Lead	mg/kg	11.6		1.1
B20-03182014-4	5094917026	3/18/2014	Soil		Lead	mg/kg	31.5		1.1
B20-03182014-5	5094917027	3/18/2014	Soil		Lead	mg/kg	6.1		1.1
B20-03182014-6	5094917028	3/18/2014	Soil		Lead	mg/kg	6.6		0.98
B20-03182014-7	5094917029	3/18/2014	Soil		Lead	mg/kg	14.6		1.1
B20-03182014-8	5094917030	3/18/2014	Soil		Lead	mg/kg	11.1		1
B21-03182014-0.5	5094917016	3/18/2014	Soil		Lead	mg/kg	1060		1
B21-03182014-1	5094917017	3/18/2014	Soil		Lead	mg/kg	12.7		1.1
B21-03182014-2	5094917018	3/18/2014	Soil		Lead	mg/kg	12.1		1.2
B21-03182014-3	5094917019	3/18/2014	Soil		Lead	mg/kg	14.8		1.2
B21-03182014-4	5094917020	3/18/2014	Soil		Lead	mg/kg	10.1		1.1
B22-03182014-0.5	5094917001	3/18/2014	Soil		Lead	mg/kg	64.9		1.1
B22-03182014-1	5094917002	3/18/2014	Soil		Lead	mg/kg	18.1		1.2
B22-03182014-2	5094917003	3/18/2014	Soil		Lead	mg/kg	14.7		1.2
B22-03182014-3	5094917004	3/18/2014	Soil		Lead	mg/kg	11.8		1.2
B22-03182014-4	5094917005	3/18/2014	Soil		Lead	mg/kg	12.8		1.1
B23-03182014-0.5	5094917006	3/18/2014	Soil		Lead	mg/kg	15.1		1.1
B23-03182014-1	5094917007	3/18/2014	Soil		Lead	mg/kg	27.6		1.1
B23-03182014-2	5094917008	3/18/2014	Soil		Lead	mg/kg	14.2		1.1
B23-03182014-3	5094917009	3/18/2014	Soil		Lead	mg/kg	7.1		0.92
B23-03182014-4	5094917010	3/18/2014	Soil		Lead	mg/kg	6.8		0.97
B23-03182014-4D	5094917011	3/18/2014	Soil	FD of B23-03182014-4	Lead	mg/kg	5.8		0.96
B23-03182014-5	5094917012	3/18/2014	Soil		Lead	mg/kg	8.2		0.95
B23-03182014-6	5094917013	3/18/2014	Soil		Lead	mg/kg	9.2		0.98
B23-03182014-7	5094917014	3/18/2014	Soil		Lead	mg/kg	8.2		0.99
B23-03182014-8	5094917015	3/18/2014	Soil		Lead	mg/kg	6.2		1.1
B24-03182014-0.5	5094917035	3/18/2014	Soil		Lead	mg/kg	3140		0.98
B24-03182014-1.5	5094917075	3/18/2014	Soil		Lead	mg/kg	858		1
B24-03182014-1	5094917036	3/18/2014	Soil		Lead	mg/kg	154		1.1
B24-03182014-2	5094917037	3/18/2014	Soil		Lead	mg/kg	748		1.1
B24-03182014-5	5094917038	3/18/2014	Soil		Lead	mg/kg	74.8		1.1
B24-03182014-5D	5094917039	3/18/2014	Soil	FD of B24-03182014-5	Lead	mg/kg	65.4		1.1
B24-03182014-6	5094917040	3/18/2014	Soil		Lead	mg/kg	23.9		1.1
B24-03182014-7	5094917041	3/18/2014	Soil		Lead	mg/kg	11.1		1.1
B24-03182014-8	5094917042	3/18/2014	Soil		Lead	mg/kg	9.8		1.1
B25-03182014-0.5	5094917059	3/18/2014	Soil		Lead	mg/kg	61.6		0.92
B25-03182014-1	5094917060	3/18/2014	Soil		Lead	mg/kg	3880		0.91
B25-03182014-2	5094917061	3/18/2014	Soil		Lead	mg/kg	4500		0.96
B25-03182014-3	5094917062	3/18/2014	Soil		Lead	mg/kg	37.4		1.2
B25-03182014-4	5094917063	3/18/2014	Soil		Lead	mg/kg	11.5		1
B26-03182014-0.5	5094917053	3/18/2014	Soil		Lead	mg/kg	125		0.99
B26-03182014-1	5094917054	3/18/2014	Soil		Lead	mg/kg	2820		1
B26-03182014-2	5094917055	3/18/2014	Soil		Lead	mg/kg	18.7		1.1
B26-03182014-2D	5094917058	3/18/2014	Soil	FD of B26-03182014-2	Lead	mg/kg	16.5		1.2
B26-03182014-3	5094917056	3/18/2014	Soil		Lead	mg/kg	11.2		1
B26-03182014-3.5	5094917057	3/18/2014	Soil		Lead	mg/kg	7.9		1
B27-03192014-0.5	5094917164	3/19/2014	Soil		Lead	mg/kg	368		1.2
B27-03192014-1	5094917165	3/19/2014	Soil		Lead	mg/kg	53.6		1.2
B27-03192014-2	5094917166	3/19/2014	Soil		Lead	mg/kg	22.5		1.2
B27-03192014-3	5094917167	3/19/2014	Soil		Lead	mg/kg	8.7		1
B27-03192014-4	5094917168	3/19/2014	Soil		Lead	mg/kg	7.2		0.98
B27-03192014-5	5094917169	3/19/2014	Soil		Lead	mg/kg	8.3		1.1
B27-03192014-6	5094917170	3/19/2014	Soil		Lead	mg/kg	6.6		1.1
B27-03192014-7	5094917171	3/19/2014	Soil		Lead	mg/kg	6.4		0.94
B27-03192014-8	5094917172	3/19/2014	Soil		Lead	mg/kg	6.3		0.97
EB-03182014	5094917074	3/18/2014	Aqueous	Equipment Blank	Lead	ug/L		U	10
EB-03192014	5094917173	3/19/2014	Aqueous	Equipment Blank	Lead	ug/L		U	10





EXIDE TECHNOLOGIES FRANKFORT, INDIANA  
TABLE 5A: UST-1 SOIL SAMPLE DATA

Sample Location				041720147-UST1-N1	041720147-UST1-Pipe	041720147-UST1-W	041720147-UST1-S1	041720147-UST1-S2	041720147-UST1-N2	041720147-UST1-E	Trip Blank	05062014-UST1-S1	05062014-UST1-BE	05062014-UST1-BE1	05062014-UST1-BW	Trip Blank																								
Lab ID				5096338001	5096338002	5096338003	5096338004	5096338005	5096338006	5096338007	5096338008	5097260001	5097260002	5097260003	5097260004	5097260005																								
Sample Date				4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014	5/6/2014																								
Matrix	2014 IDEM RISC Screening Limit			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Aqueous																								
Remarks				Residential	Com/Ind.	Soil MTG	Soil excavated/removed										Trip Blank	Replaces 041720147-UST1-S1			FD of UST1-BE			Trip Blank																
Parameter	Units	ug/kg	ug/kg	ug/kg	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL									
Indeno(1,2,3-cd)pyrene	ug/kg			92		U	6		U	5.6		U	5.5		U	5.6		U	5.6		U	5.5		U	6.5		U	5.5		U	6		U	5.5						
Naphthalene	ug/kg	50000	180000			U	6	11.4		U	5.6		U	5.5	1720		U	5.6		U	5.6		U	5.5		U	6.5		U	5.5		U	6		U	5.5				
Phenanthrene	ug/kg	--	--	--	7		U	6		U	5.6		U	5.5	851		U	5.6		U	5.6		U	5.5		U	6.5	8.7		U	5.5		U	6		U	5.5			
Pyrene	ug/kg	2400000	17000000	190000		U	6		U	5.6		U	5.5	15.9		U	5.6		U	5.6	5.7		U	5.5		U	6.5		U	5.5		U	6		U	5.5				
<b>Conventionals</b>																																								
Percent Moisture	%				17.4		0.1	11		0.1	10.8		0.1	10.7		0.1	11.9		0.1	11.6		0.1	9		0.1	NA		23.6		0.1	10.2		0.1	17.6		0.1	10.6		0.1	NA

Soil in excavation sidewall represented by sample 041720147-UST1-S1 was removed/excavated. Sidewall sample 05062014-UST1-S1 represents that sidewall location after the additional excavation.  
 IDEM 2014 RISC screening limits only shown for parameters with results that exceed the detection limit.  
 IDEM 2014 RISC screening limits converted from mg/kg to ug/kg to match Pace Analytical reporting.  
 U - Not Detected

**EXIDE TECHNOLOGIES FRANKFORT, INDIANA  
TABLE 5B: UST-1 GROUNDWATER SAMPLE DATA**

Sample Location		2014 IDEM RISC Screening Limit			UST1-A			UST1-A-D			UST-1-B			UST1-C		
Lab ID		Ground Water	Vapor Exposure		50100213002			50100213003			50100213007			50100213001		
Sample Date		Tap	Ground Water		7/1/2014			7/1/2014			7/1/2014			7/1/2014		
Matrix		Residential	Residential	Com/Ind	Groundwater			Groundwater			Groundwater			Groundwater		
Remarks		ug/L	ug/L	ug/L	FD of UST1-A			FD of UST1-A			FD of UST1-A			FD of UST1-A		
Parameter	Units				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
<b>Volatiles</b>																
1,1,1,2-Tetrachloroethane	ug/L					U	5		U	5		U	5		U	5
1,1,1-Trichloroethane	ug/L					U	5		U	5		U	5		U	5
1,1,2,2-Tetrachloroethane	ug/L					U	5		U	5		U	5		U	5
1,1,2-Trichloroethane	ug/L					U	5		U	5		U	5		U	5
1,1-Dichloroethane	ug/L					U	5		U	5		U	5		U	5
1,1-Dichloroethene	ug/L					U	5		U	5		U	5		U	5
1,1-Dichloropropene	ug/L					U	5		U	5		U	5		U	5
1,2,3-Trichlorobenzene	ug/L					U	5		U	5		U	5		U	5
1,2,3-Trichloropropane	ug/L					U	5		U	5		U	5		U	5
1,2,4-Trichlorobenzene	ug/L					U	5		U	5		U	5		U	5
1,2,4-Trimethylbenzene	ug/L					U	5		U	5		U	5		U	5
1,2-Dibromoethane (EDB)	ug/L					U	5		U	5		U	5		U	5
1,2-Dichlorobenzene	ug/L					U	5		U	5		U	5		U	5
1,2-Dichloroethane	ug/L					U	5		U	5		U	5		U	5
1,2-Dichloropropane	ug/L					U	5		U	5		U	5		U	5
1,3,5-Trimethylbenzene	ug/L					U	5		U	5		U	5		U	5
1,3-Dichlorobenzene	ug/L					U	5		U	5		U	5		U	5
1,3-Dichloropropane	ug/L					U	5		U	5		U	5		U	5
1,4-Dichlorobenzene	ug/L					U	5		U	5		U	5		U	5
2,2-Dichloropropane	ug/L					U	5		U	5		U	5		U	5
2-Butanone (MEK)	ug/L					U	25		U	25		U	25		U	25
2-Chlorotoluene	ug/L					U	5		U	5		U	5		U	5
2-Hexanone	ug/L					U	25		U	25		U	25		U	25
4-Chlorotoluene	ug/L					U	5		U	5		U	5		U	5
4-Methyl-2-pentanone (MIBK)	ug/L					U	25		U	25		U	25		U	25
Acetone	ug/L					U	100		U	100		U	100		U	100
Acrolein	ug/L					U	50		U	50		U	50		U	50
Acrylonitrile	ug/L					U	100		U	100		U	100		U	100
Benzene	ug/L					U	5		U	5		U	5		U	5
Bromobenzene	ug/L					U	5		U	5		U	5		U	5
Bromochloromethane	ug/L					U	5		U	5		U	5		U	5
Bromodichloromethane	ug/L					U	5		U	5		U	5		U	5
Bromoform	ug/L					U	5		U	5		U	5		U	5
Bromomethane	ug/L					U	5		U	5		U	5		U	5
Carbon disulfide	ug/L					U	10		U	10		U	10		U	10
Carbon tetrachloride	ug/L					U	5		U	5		U	5		U	5
Chlorobenzene	ug/L					U	5		U	5		U	5		U	5
Chloroethane	ug/L					U	5		U	5		U	5		U	5
Chloroform	ug/L					U	5		U	5		U	5		U	5
Chloromethane	ug/L					U	5		U	5		U	5		U	5
cis-1,2-Dichloroethene	ug/L					U	5		U	5		U	5		U	5
cis-1,3-Dichloropropene	ug/L					U	5		U	5		U	5		U	5
Dibromochloromethane	ug/L					U	5		U	5		U	5		U	5
Dibromomethane	ug/L					U	5		U	5		U	5		U	5
Dichlorodifluoromethane	ug/L					U	5		U	5		U	5		U	5
Ethyl methacrylate	ug/L					U	100		U	100		U	100		U	100
Ethylbenzene	ug/L					U	5		U	5		U	5		U	5
Hexachloro-1,3-butadiene	ug/L					U	5		U	5		U	5		U	5
Iodomethane	ug/L					U	10		U	10		U	10		U	10
Isopropylbenzene (Cumene)	ug/L					U	5		U	5		U	5		U	5
Methylene Chloride	ug/L					U	5		U	5		U	5		U	5
Methyl-tert-butyl ether	ug/L					U	4		U	4		U	4		U	4
Naphthalene	ug/L	1.4	91	460		U	5		U	5		U	5		U	5
n-Butylbenzene	ug/L					U	5		U	5		U	5		U	5
n-Hexane	ug/L					U	5		U	5		U	5		U	5
n-Propylbenzene	ug/L					U	5		U	5		U	5		U	5
p-Isopropyltoluene	ug/L					U	5		U	5		U	5		U	5
sec-Butylbenzene	ug/L					U	5		U	5		U	5		U	5
Styrene	ug/L					U	5		U	5		U	5		U	5
tert-Butylbenzene	ug/L					U	5		U	5		U	5		U	5
Tetrachloroethene	ug/L					U	5		U	5		U	5		U	5

IDEM 2014 RISC Screening Limits only shown for parameters with results that exceed the detection limit

U - Not detected

**EXIDE TECHNOLOGIES FRANKFORT, INDIANA  
TABLE 5B: UST-1 GROUNDWATER SAMPLE DATA**

Sample Location		2014 IDEM RISC Screening Limit			UST1-A			UST1-A-D			UST1-B			UST1-C		
Lab ID		Ground Water	Vapor Exposure		50100213002			50100213003			50100213007			50100213001		
Sample Date		Tap	Ground Water		7/1/2014			7/1/2014			7/1/2014			7/1/2014		
Matrix		Residential	Residential	Com/Ind	Groundwater			Groundwater			Groundwater			Groundwater		
Remarks		ug/L	ug/L	ug/L	FD of UST1-A			FD of UST1-A			FD of UST1-A			FD of UST1-A		
Parameter	Units				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Toluene	ug/L				U	5		U	5		U	5		U	5	
trans-1,2-Dichloroethene	ug/L				U	5		U	5		U	5		U	5	
trans-1,3-Dichloropropene	ug/L				U	5		U	5		U	5		U	5	
trans-1,4-Dichloro-2-butene	ug/L				U	100		U	100		U	100		U	100	
Trichloroethene	ug/L				U	5		U	5		U	5		U	5	
Trichlorofluoromethane	ug/L				U	5		U	5		U	5		U	5	
Vinyl acetate	ug/L				U	50		U	50		U	50		U	50	
Vinyl chloride	ug/L				U	2		U	2		U	2		U	2	
Xylene (Total)	ug/L				U	10		U	10		U	10		U	10	
<b>Semivolatiles</b>																
1-Methylnaphthalene	ug/L	9.7	--	--	U	1		U	1		U	1		U	1	1.2
2-Methylnaphthalene	ug/L	27	--	--	U	1		U	1		U	1		U	1	1.2
Acenaphthene	ug/L	400	--	--	U	1		U	1		U	1		U	1	1.2
Acenaphthylene	ug/L				U	1		U	1		U	1		U	1	1.2
Anthracene	ug/L	1300	--	--	U	0.1		U	0.1		U	0.1		U	0.1	0.12
Benzo(a)anthracene	ug/L	0.29	--	--	U	0.1		U	0.1		U	0.1		U	0.1	0.12
Benzo(a)pyrene	ug/L				U	0.1		U	0.1		U	0.1		U	0.1	0.12
Benzo(b)fluoranthene	ug/L	0.56	--	--	U	0.1		U	0.1		U	0.1		U	0.1	0.12
Benzo(g,h,i)perylene	ug/L				U	0.1		U	0.1		U	0.1		U	0.1	0.12
Benzo(k)fluoranthene	ug/L				U	0.1		U	0.1		U	0.1		U	0.1	0.12
Chrysene	ug/L				U	0.5		U	0.5		U	0.5		U	0.5	0.62
Dibenz(a,h)anthracene	ug/L				U	0.1		U	0.1		U	0.1		U	0.1	0.12
Fluoranthene	ug/L	630	--	--	U	1		U	1		U	1		U	1	1.2
Fluorene	ug/L	220	--	--	U	1		U	1		U	1		U	1	1.2
Indeno(1,2,3-cd)pyrene	ug/L				U	0.1		U	0.1		U	0.1		U	0.1	0.12
Naphthalene	ug/L	1.4	91	460	U	1		U	1		U	1		U	1	1.2
Phenanthrene	ug/L	--	--	--	U	1		U	1		U	1		U	1	1.2
Pyrene	ug/L	87	--	--	U	1		U	1		U	1		U	1	1.2

IDEM 2014 RISC Screening Limits only shown for parameters with results that exceed the detection limit  
U - Not detected



**Exide Technologies Frankfort, Indiana**  
**Table 6B - UST-2 Groundwater Analytical Data**

Sample Location		2014 IDEM RISC Screening Limit			UST-2-A			UST-2-B			UST-2-C			Trip Blank		
Lab ID		Groundwater	Vapor Exposure		50100213004	50100213005		50100213006			50100213008					
Sample Date		Tapwater	Groundwater		7/1/2014			7/1/2014			7/1/2014					
Matrix		Residential	Residential	Com/Ind	Groundwater			Groundwater			Aqueous					
Remarks		ug/L	ug/L	ug/L							Trip Blank ug/L					
Parameter	Units				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
<b>Volatiles</b>																
1,1,1,2-Tetrachloroethane	ug/L					U	50		U	5		U	5		U	5
1,1,1-Trichloroethane	ug/L					U	50		U	5		U	5		U	5
1,1,2,2-Tetrachloroethane	ug/L					U	50		U	5		U	5		U	5
1,1,2-Trichloroethane	ug/L					U	50		U	5		U	5		U	5
1,1-Dichloroethane	ug/L	24	110	550	61.1		50		U	5		U	5		U	5
1,1-Dichloroethene	ug/L	7	300	1,300	69.4		50		U	5		U	5		U	5
1,1-Dichloropropene	ug/L					U	50		U	5		U	5		U	5
1,2,3-Trichlorobenzene	ug/L					U	50		U	5		U	5		U	5
1,2,3-Trichloropropane	ug/L					U	50		U	5		U	5		U	5
1,2,4-Trichlorobenzene	ug/L					U	50		U	5		U	5		U	5
1,2,4-Trimethylbenzene	ug/L					U	50		U	5		U	5		U	5
1,2-Dibromoethane (EDB)	ug/L					U	50		U	5		U	5		U	5
1,2-Dichlorobenzene	ug/L					U	50		U	5		U	5		U	5
1,2-Dichloroethane	ug/L					U	50		U	5		U	5		U	5
1,2-Dichloropropane	ug/L					U	50		U	5		U	5		U	5
1,3,5-Trimethylbenzene	ug/L					U	50		U	5		U	5		U	5
1,3-Dichlorobenzene	ug/L					U	50		U	5		U	5		U	5
1,3-Dichloropropane	ug/L					U	50		U	5		U	5		U	5
1,4-Dichlorobenzene	ug/L					U	50		U	5		U	5		U	5
2,2-Dichloropropane	ug/L					U	50		U	5		U	5		U	5
2-Butanone (MEK)	ug/L					U	250		U	25		U	25		U	25
2-Chlorotoluene	ug/L					U	50		U	5		U	5		U	5
2-Hexanone	ug/L					U	250		U	25		U	25		U	25
4-Chlorotoluene	ug/L					U	50		U	5		U	5		U	5
4-Methyl-2-pentanone (MIBK)	ug/L					U	250		U	25		U	25		U	25
Acetone	ug/L					U	1000		U	100		U	100		U	100
Acrolein	ug/L					U	500		U	50		U	50		U	50
Acrylonitrile	ug/L					U	1000		U	100		U	100		U	100
Benzene	ug/L					U	50		U	5		U	5		U	5
Bromobenzene	ug/L					U	50		U	5		U	5		U	5
Bromochloromethane	ug/L					U	50		U	5		U	5		U	5
Bromodichloromethane	ug/L					U	50		U	5		U	5		U	5
Bromoform	ug/L					U	50		U	5		U	5		U	5
Bromomethane	ug/L					U	50		U	5		U	5		U	5
Carbon disulfide	ug/L					U	100		U	10		U	10		U	10
Carbon tetrachloride	ug/L					U	50		U	5		U	5		U	5
Chlorobenzene	ug/L					U	50		U	5		U	5		U	5
Chloroethane	ug/L					U	50		U	5		U	5		U	5
Chloroform	ug/L					U	50		U	5		U	5		U	5
Chloromethane	ug/L					U	50		U	5		U	5		U	5
cis-1,2-Dichloroethene	ug/L	70	--	--	41600		1000	508		50	253		5		U	5
cis-1,3-Dichloropropene	ug/L					U	50		U	5		U	5		U	5
Dibromochloromethane	ug/L					U	50		U	5		U	5		U	5
Dibromomethane	ug/L					U	50		U	5		U	5		U	5
Dichlorodifluoromethane	ug/L					U	50		U	5		U	5		U	5
Ethyl methacrylate	ug/L					U	1000		U	100		U	100		U	100
Ethylbenzene	ug/L					U	50		U	5		U	5		U	5
Hexachloro-1,3-butadiene	ug/L					U	50		U	5		U	5		U	5

IDEM 2014 RISC screening limits only shown for parameters with results that exceed the detection limit.  
IDEM 2014 RISC screening limits converted from mg/kg to ug/kg to match Pace Analytical reporting.  
U - Not Detected  
J - Estimated

**Exide Technologies Frankfort, Indiana**  
**Table 6B - UST-2 Groundwater Analytical Data**

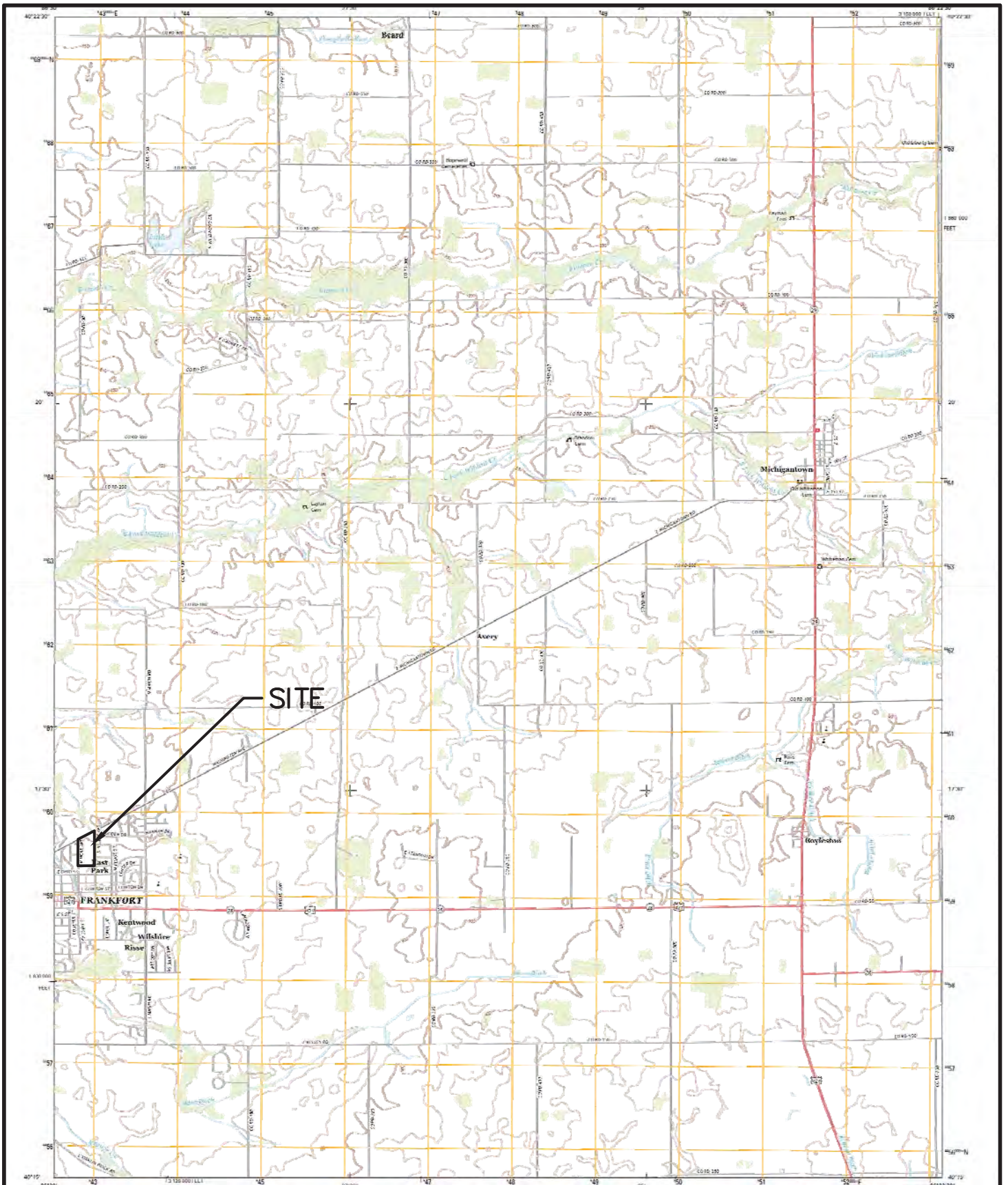
Sample Location	2014 IDEM RISC Screening Limit				UST-2-A			UST-2-B			UST-2-C			Trip Blank		
Lab ID	Groundwater	Vapor Exposure			50100213004			50100213005			50100213006			50100213008		
Sample Date	Tapwater	Groundwater			7/1/2014			7/1/2014			7/1/2014			7/1/2014		
Matrix	Residential	Residential	Com/Ind	Groundwater			Groundwater			Groundwater			Aqueous			
Remarks	ug/L	ug/L	ug/L										Trip Blank ug/L			
Parameter	Units				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Iodomethane	ug/L					U	100		U	10		U	10		U	10
Isopropylbenzene (Cumene)	ug/L					U	50		U	5		U	5		U	5
Methylene Chloride	ug/L					U	50		U	5		U	5		U	5
Methyl-tert-butyl ether	ug/L					U	40		U	4		U	4		U	4
Naphthalene	ug/L	1.4	91	460		U	50		U	5		U	5		U	5
n-Butylbenzene	ug/L					U	50		U	5		U	5		U	5
n-Hexane	ug/L					U	50		U	5		U	5		U	5
n-Propylbenzene	ug/L	530	--	--		U	50		U	5		U	5		U	5
p-Isopropyltoluene	ug/L					U	50		U	5		U	5		U	5
sec-Butylbenzene	ug/L					U	50		U	5		U	5		U	5
Styrene	ug/L					U	50		U	5		U	5		U	5
tert-Butylbenzene	ug/L					U	50		U	5		U	5		U	5
Tetrachloroethene	ug/L					U	50		U	5		U	5		U	5
Toluene	ug/L								U	5		U	5		U	5
trans-1,2-Dichloroethene	ug/L	7	--	--	468		50		U	5	25		5		U	5
trans-1,3-Dichloropropene	ug/L					U	50		U	5		U	5		U	5
trans-1,4-Dichloro-2-butene	ug/L					U	1000		U	100		U	100		U	100
Trichloroethene	ug/L	5	9.1	38	8520		1000		U	5		U	5		U	5
Trichlorofluoromethane	ug/L					U	50		U	5		U	5		U	5
Vinyl acetate	ug/L					U	500		U	50		U	50		U	50
Vinyl chloride	ug/L	2	2	35	3590		400	293		20	65.6		2		U	2
Xylene (Total)	ug/L					U	100		U	10		U	10		U	10
<b>Semivolatiles</b>																
1-Methylnaphthalene	ug/L	9.7	--	--		U	1		U	1		U	1		NA	
2-Methylnaphthalene	ug/L	27	--	--		U	1		U	1		U	1		NA	
Acenaphthene	ug/L	400	--	--		U	1		U	1		U	1		NA	
Acenaphthylene	ug/L					U	1		U	1		U	1		NA	
Anthracene	ug/L	1300	--	--		U	0.1		U	0.1		U	0.1		NA	
Benzo(a)anthracene	ug/L	0.29	--	--		U	0.1		U	0.1		U	0.1		NA	
Benzo(a)pyrene	ug/L					U	0.1		U	0.1		U	0.1		NA	
Benzo(b)fluoranthene	ug/L	0.56	--	--	0.12		0.1		U	0.1		U	0.1		NA	
Benzo(g,h,i)perylene	ug/L					U	0.1		U	0.1		U	0.1		NA	
Benzo(k)fluoranthene	ug/L					U	0.1		U	0.1		U	0.1		NA	
Chrysene	ug/L					U	0.5		U	0.5		U	0.5		NA	
Dibenz(a,h)anthracene	ug/L					U	0.1		U	0.1		U	0.1		NA	
Fluoranthene	ug/L					U	1		U	1		U	1		NA	
Fluorene	ug/L	220		--		U	1		U	1		U	1		NA	
Indeno(1,2,3-cd)pyrene	ug/L					U	0.1		U	0.1		U	0.1		NA	
Naphthalene	ug/L	1.4	91	460		U	1		U	1		U	1		NA	
Phenanthrene	ug/L					U	1		U	1		U	1		NA	
Pyrene	ug/L					U	1		U	1		U	1		NA	

Note:  
Only IDEM 2014 RISC screening levels are shown where the parameter exceeded the detection limit.



## **FIGURES**





**SITE**



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tel 610.840.9100 fax 610.840.9199 www.advancedgeoservices.com

**USGS TOPOGRAPHIC MAP**

**EXIDE TECHNOLOGIES  
FRANKFORT, INDIANA**

PROJECT ENGINEER:	PGS	SCALE:	NTS
CHECKED BY:	JSD	PROJECT NUMBER:	2011-2678
DRAWN BY:	KEZ	DATE:	FIGURE: 1

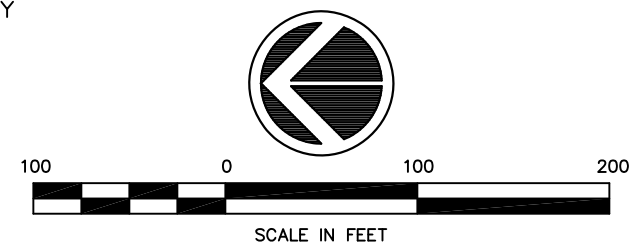


**NOTES:**

1. THIS DRAWING DEVELOPED FROM EXIDE DRAWING 55-SLI-1D (REV38) DATED 4-29-98.
2. PARCEL BOUNDARIES OBTAINED FROM CLINTON COUNTY BEACON ONLINE TAX MAP. APPROXIMATE LOCATION AS SHOWN.
3. UST LOCATIONS ARE APPROXIMATE.
4. AERIAL PHOTO FROM GOOGLE MAPS (2011).

**LEGEND:**

——— APPROXIMATE PARCEL BOUNDARY



**EXIDE TECHNOLOGIES**  
555 HOKE AVENUE  
FRANKFORT, INDIANA

**PRE-DEMOLITION CONDITIONS**  
2012

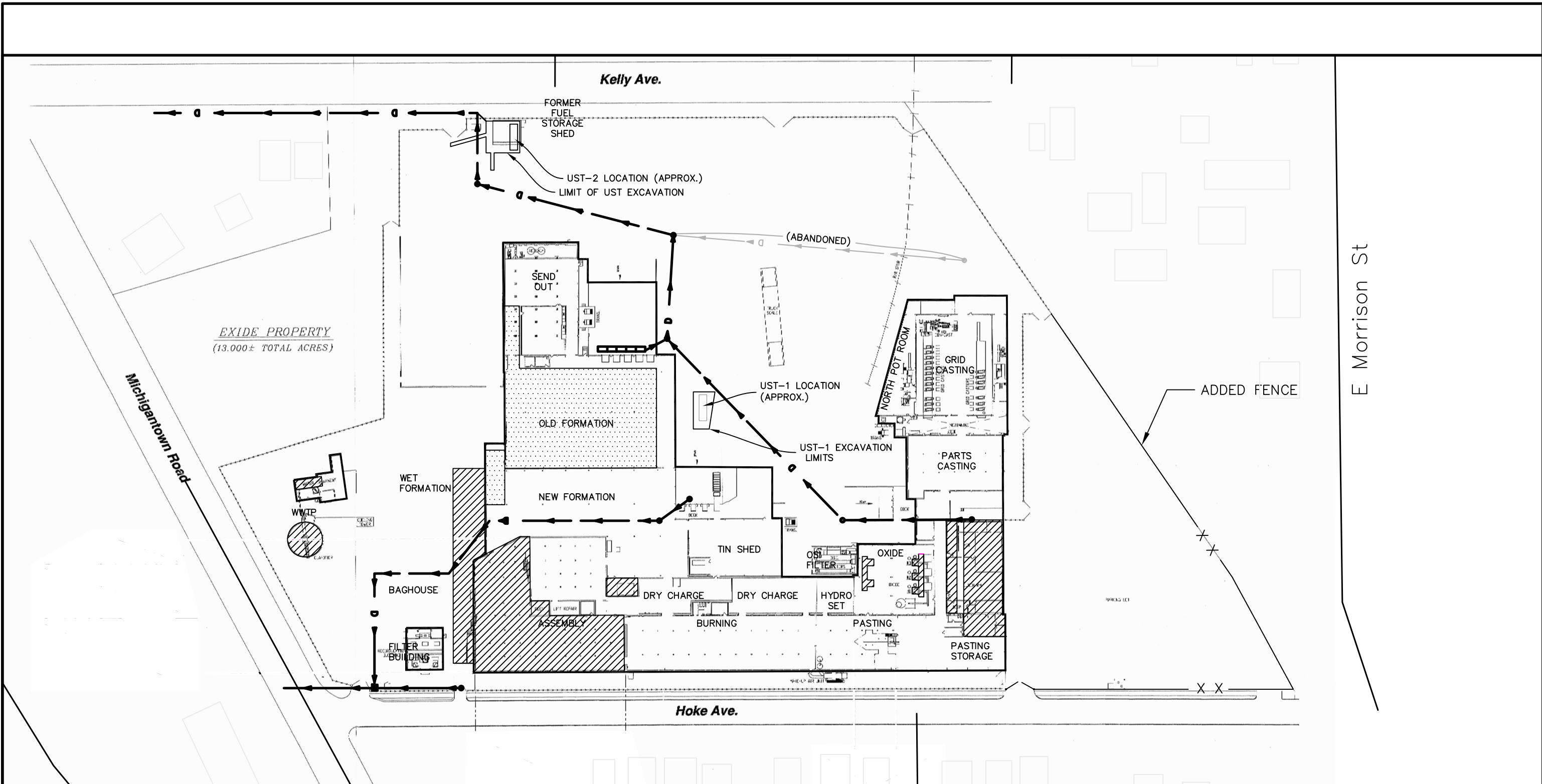
**ADVANCED**  
**GeoServices**

Engineering for the Environment. Planning for People.  
1055 ANDREW DRIVE, SUITE A  
WEST CHESTER, PENNSYLVANIA 19380  
Tel: 610.840.9100 Fax: 610.840.9199 Web: www.advancedgeoservices.com

Scale:	1" = 100'
Drawn By:	JSD
Checked By:	J.S.D.
Project Mgr.:	P.G.S.
Originated By:	J.S.D.
Project No.:	20112678
Drawing Date:	6/30/2014
Sheet No.:	2 OF 1
Revision Number:	

FIGURE 2


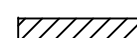
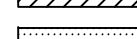
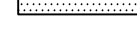



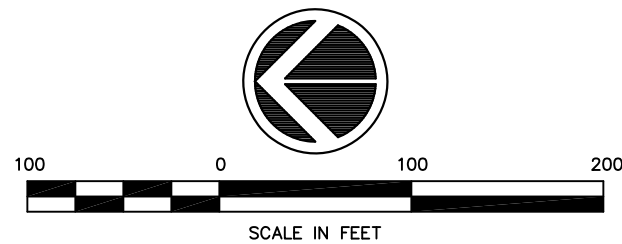


**NOTES:**

1. THIS DRAWING DEVELOPED FROM EXIDE DRAWING 55-SLI-1D (REV38) DATED 4-29-98.
2. AREAS SHOWN FOR REMAINING CONCRETE SLAB AND UTILITY LINES ARE APPROXIMATE.
3. UST LOCATIONS ARE APPROXIMATE.
4. UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO VERIFY, MARK, AND PROTECT.

**LEGEND:**

-  REMAINING CONCRETE SLAB PERIMETER
-  CRUSHED RUBBLE/MASONRY FILL
-  GEOMEMBRANE/STONE CAP
-  REMAINING STORMWATER COLLECTION PIPING
-  NEW SITE FENCE



<b>EXIDE TECHNOLOGIES</b> 555 HOKE AVENUE FRANKFORT, INDIANA																			
<b>POST-DEMOLITION CONDITIONS</b> 2014																			
 Engineering for the Environment. Planning for People. 1055 ANDREW DRIVE, SUITE A WEST CHESTER, PENNSYLVANIA 19380 Tel: 610.840.9100 Fax: 610.840.9199 Web: www.advancedgeoservices.com	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Scale:</td><td>1" = 100'</td></tr> <tr><td>Drawn By:</td><td>JSD</td></tr> <tr><td>Checked By:</td><td>PGS</td></tr> <tr><td>Project Mgr.:</td><td>PGS</td></tr> <tr><td>Originated By:</td><td>JSD</td></tr> <tr><td>Project No.:</td><td>20112678</td></tr> <tr><td>Drawing Date:</td><td>5/26/2017</td></tr> <tr><td>Sheet No.:</td><td>3 OF 1</td></tr> <tr><td>Revision Number:</td><td></td></tr> </table>	Scale:	1" = 100'	Drawn By:	JSD	Checked By:	PGS	Project Mgr.:	PGS	Originated By:	JSD	Project No.:	20112678	Drawing Date:	5/26/2017	Sheet No.:	3 OF 1	Revision Number:	
Scale:	1" = 100'																		
Drawn By:	JSD																		
Checked By:	PGS																		
Project Mgr.:	PGS																		
Originated By:	JSD																		
Project No.:	20112678																		
Drawing Date:	5/26/2017																		
Sheet No.:	3 OF 1																		
Revision Number:																			

FIGURE 3



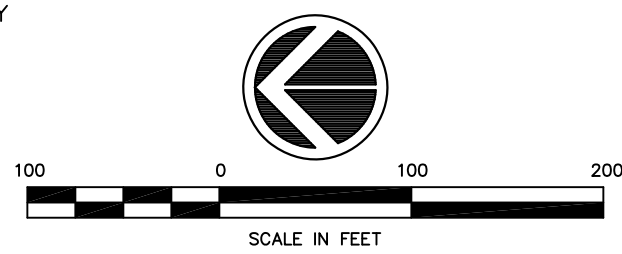


**NOTES:**

1. THIS DRAWING DEVELOPED FROM EXIDE DRAWING 55-SLI-1D (REV38) DATED 4-29-98.
2. PARCEL BOUNDARIES OBTAINED FROM CLINTON COUNTY BEACON ONLINE TAX MAP. APPROXIMATE LOCATION AS SHOWN.
3. UST LOCATIONS ARE APPROXIMATE.
4. AERIAL PHOTO FROM GOOGLE MAPS (2017).
5. SWMU AND AOC LOCATIONS INFERRED FROM REVIEW OF RCRA DOCUMENTS AND INTERVIEW WITH EXIDE EMPLOYEE.

**LEGEND:**

— — — — — APPROXIMATE PARCEL BOUNDARY



**EXIDE TECHNOLOGIES**  
555 HOKE AVENUE  
FRANKFORT, INDIANA

**CURRENT CONDITIONS 2017**  
**SWMU AND AOC LOCATIONS**

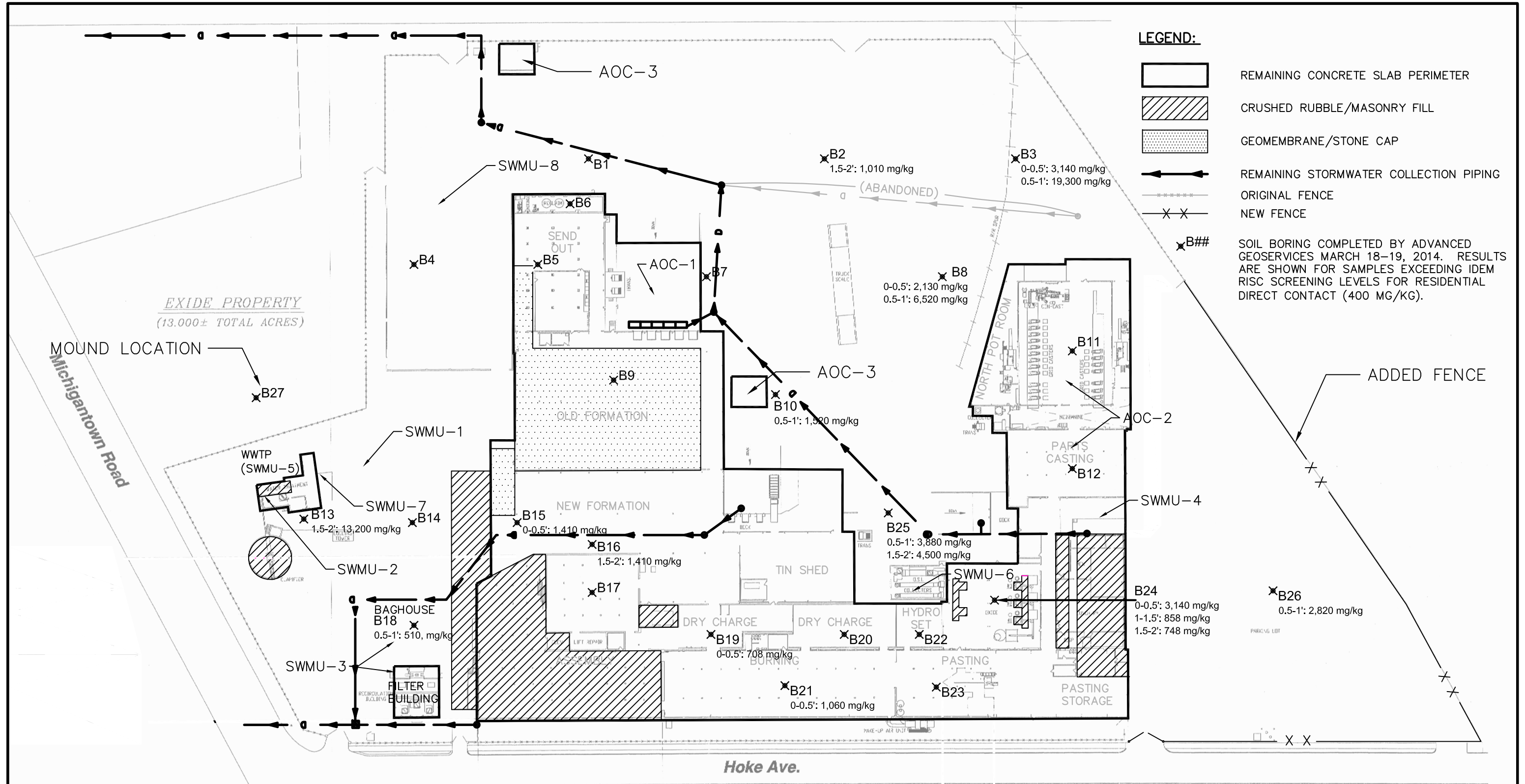


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Scale:	1" = 100'
Drawn By:	JSD
Checked By:	PGS
Project Mgr.:	PGS
Originated By:	JSD
Project No.:	20112678
Drawing Date:	6/26/2017
Sheet No.:	4 OF 1
Revision Number:	

**FIGURE 4**





**LEGEND:**

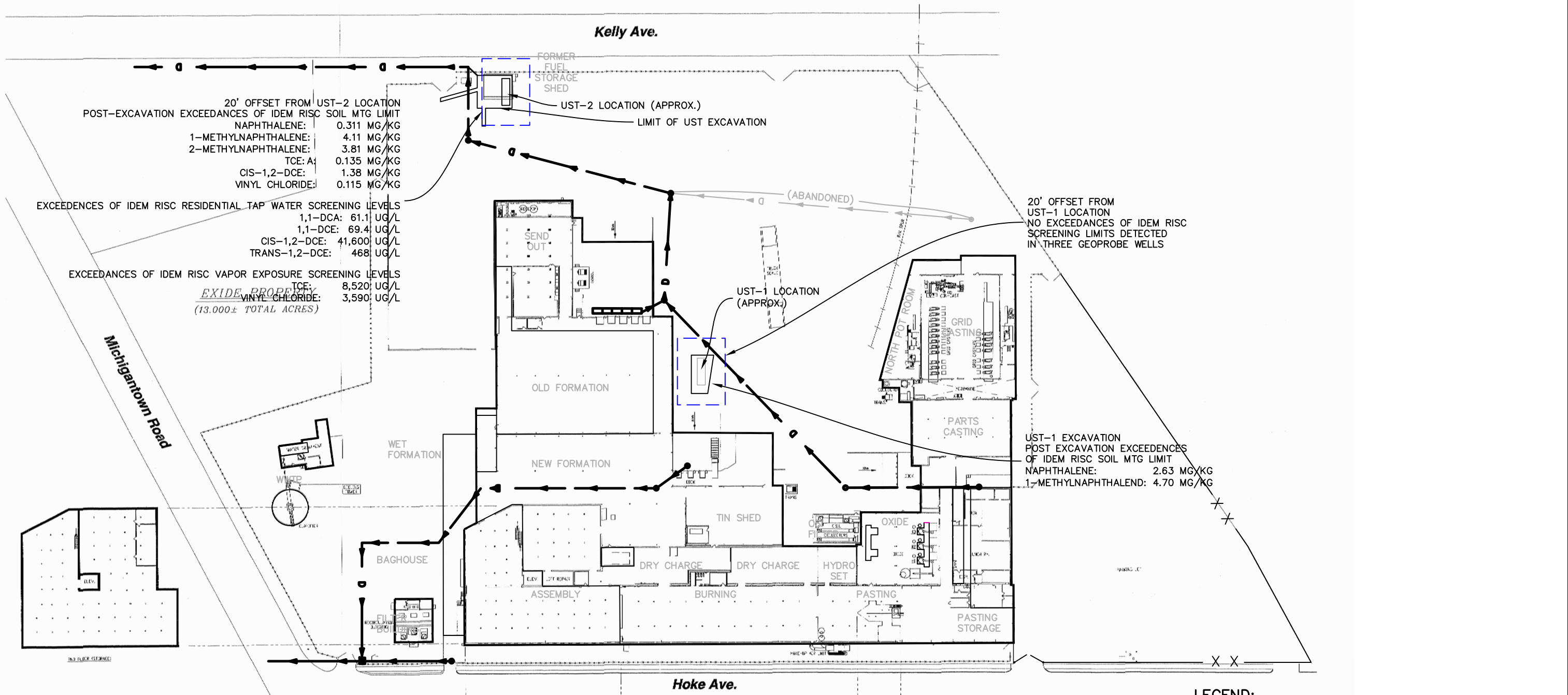
- REMAINING CONCRETE SLAB PERIMETER
- CRUSHED RUBBLE/MASONRY FILL
- GEOMEMBRANE/STONE CAP
- REMAINING STORMWATER COLLECTION PIPING
- ORIGINAL FENCE
- NEW FENCE
- SOIL BORING COMPLETED BY ADVANCED GEOSERVICES MARCH 18-19, 2014. RESULTS ARE SHOWN FOR SAMPLES EXCEEDING IDEM RISC SCREENING LEVELS FOR RESIDENTIAL DIRECT CONTACT (400 MG/KG).

- NOTES:**
- THIS DRAWING DEVELOPED FROM EXIDE DRAWING 55-SLI-1D (REV38) DATED 4-29-98.
  - AREAS SHOWN FOR REMAINING CONCRETE SLAB, CRUSHED RUBBLE/MASONRY FILL, GEOMEMBRANE/STONE CAP, USTs, AND UTILITY LINES ARE APPROXIMATE, ACTUAL LOCATION MAY VARY.
  - FORMER BUILDING AND WORK AREAS SHOWN FOR REFERENCE ONLY. STRUCTURES NO LONGER EXIST.

**EXIDE TECHNOLOGIES**  
555 HOKE AVENUE  
FRANKFORT, INDIANA

**MARCH 2014 SOIL INVESTIGATION DATA**

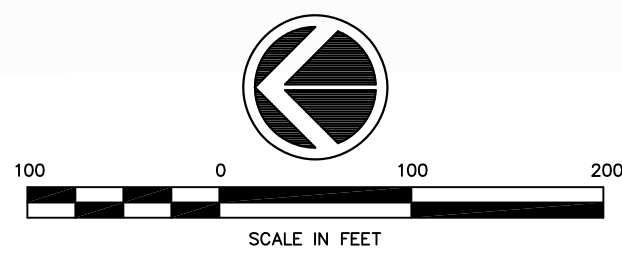
	Scale: 1" = 80'	<b>FIGURE 5</b>
	Drawn By: J.S.D.	
	Checked By: PGS	
	Project Mgr.: P.G.S.	
	Originated By: JSD	
	Project No.: 20112678	
Engineering for the Environment. Planning for People. 1055 ANDREW DRIVE, SUITE A WEST CHESTER, PENNSYLVANIA 19380 Tel: 610.840.9100 Fax: 610.840.9199 Web: www.advancedgeoservices.com	Drawing Date: 05/26/2017	Revision Number: 5 OF 5



**LEGEND:**

- REMAINING CONCRETE SLAB PERIMETER
- REMAINING STORMWATER COLLECTION PIPING
- SITE FENCE

- NOTES:**
1. THIS DRAWING DEVELOPED FROM EXIDE DRAWING 55-SLI-1D (REV38) DATED 4-29-98.
  2. AREAS SHOWN FOR REMAINING CONCRETE SLAB AND UTILITY LINES ARE APPROXIMATE.
  3. UST LOCATIONS ARE APPROXIMATE.
  4. HIGHEST CONTAMINANT DETECTIONS ARE SHOWN. MORE DETAILED INFORMATION, FIGURES, AND DATA PROVIDED IN 2014 LIMITED SUBSURFACE INVESTIGATION REPORT (CCR, APPENDIX F) AND INITIAL SITE INVESTIGATION REPORT (CCR, APPENDIX G).



**EXIDE FRANKFORT**  
EXIDE TECHNOLOGIES  
FRANKFORT, INDIANA

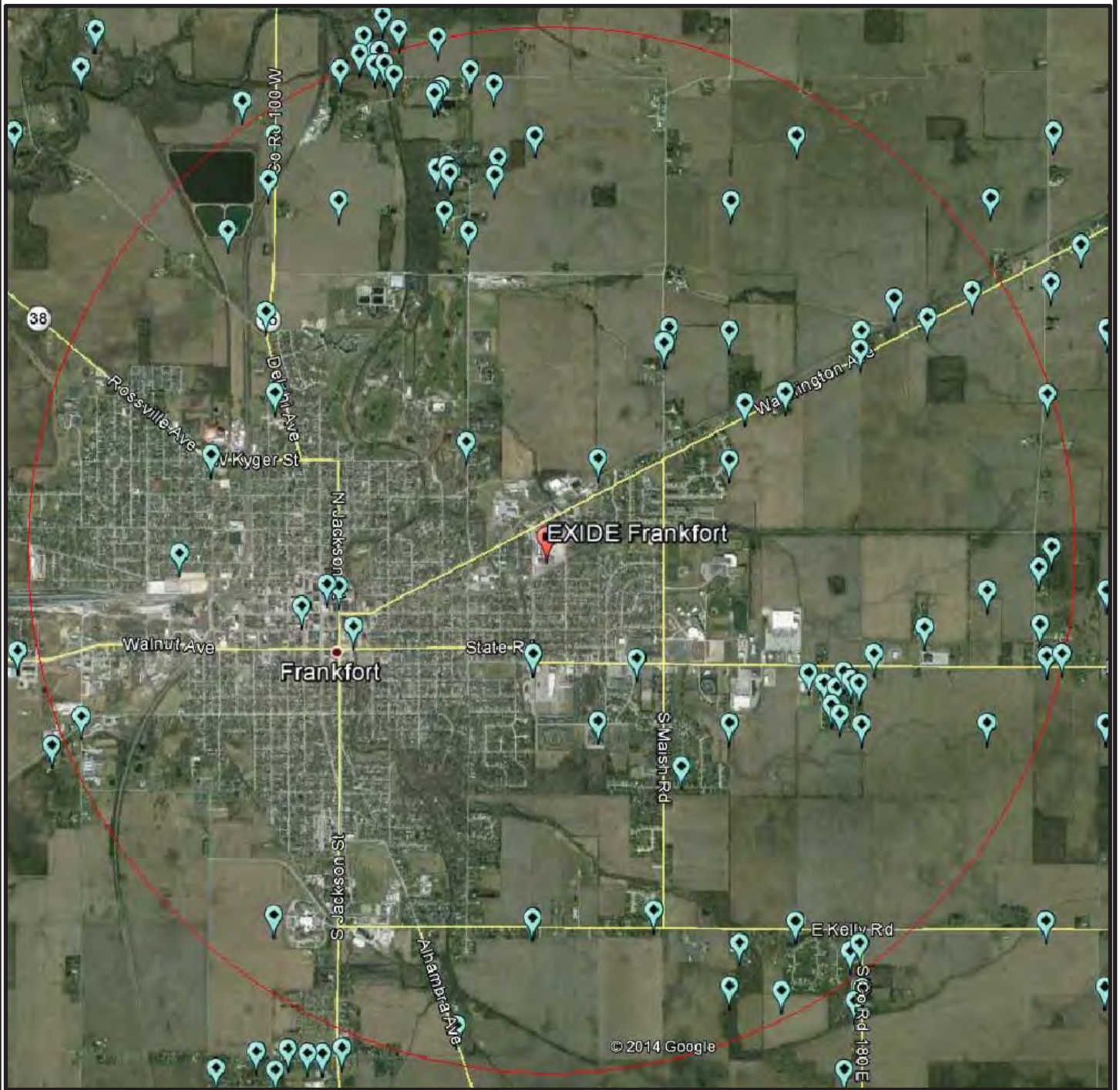
**2014 UST REMOVAL SUMMARY**

Scale:	1" = 100'
Drawn By:	K.E.Z.
Checked By:	J.S.D.
Project Mgr.:	P.G.S.
Originated By:	J.S.D.
Project No.:	20112678
Drawing Date:	6/30/2014
Sheet No.:	6 OF 1
Revision Number:	

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WEST CHESTER, PENNSYLVANIA 19380  
Tel: 610.840.9100 Fax: 610.840.9199 Web: www.advancedgeoservices.com

**FIGURE 6**





WELL LOCATIONS TAKEN FROM INDIANA DEPARTMENT OF NATURAL RESOURCES – WATER WELL RECORD DATABASE

— 2 MILE RADIUS FROM SITE



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1055 ANDREW DRIVE, SUITE A, WEST CHESTER PA, 19380  
tel 610.840.9100 fax 610.840.9199 www.advancedgeoservices.com

WELL SEARCH 2014  
OVER 70 GPM & WITHIN 2 MILES  
EXIDE TECHNOLOGIES  
FRANKFORT, INDIANA

PROJECT ENGINEER:	PGS	SCALE:	NTS
CHECKED BY:	JSD	PROJECT NUMBER:	2011-2678
DRAWN BY:	KEZ	DATE:	7/21/14
		FIGURE:	7A





WELL LOCATIONS TAKEN FROM INDIANA DEPARTMENT OF NATURAL RESOURCES – WATER WELL RECORD DATABASE

— 1 MILE RADIUS FROM SITE



Engineering for the Environment. Planning for People.™

1055 ANDREW DRIVE, SUITE A, WEST CHESTER PA, 19380  
tel 610.840.9100 fax 610.840.9199 www.advancedgeoservices.com

WELL SEARCH 2014  
UNDER 70 GPM & WITHIN 1 MILE  
EXIDE TECHNOLOGIES  
FRANKFORT, INDIANA

PROJECT ENGINEER:	PGS	SCALE:	NTS
CHECKED BY:	JSD	PROJECT NUMBER:	2011-2678
DRAWN BY:	KEZ	DATE:	7/21/14
		FIGURE:	7B



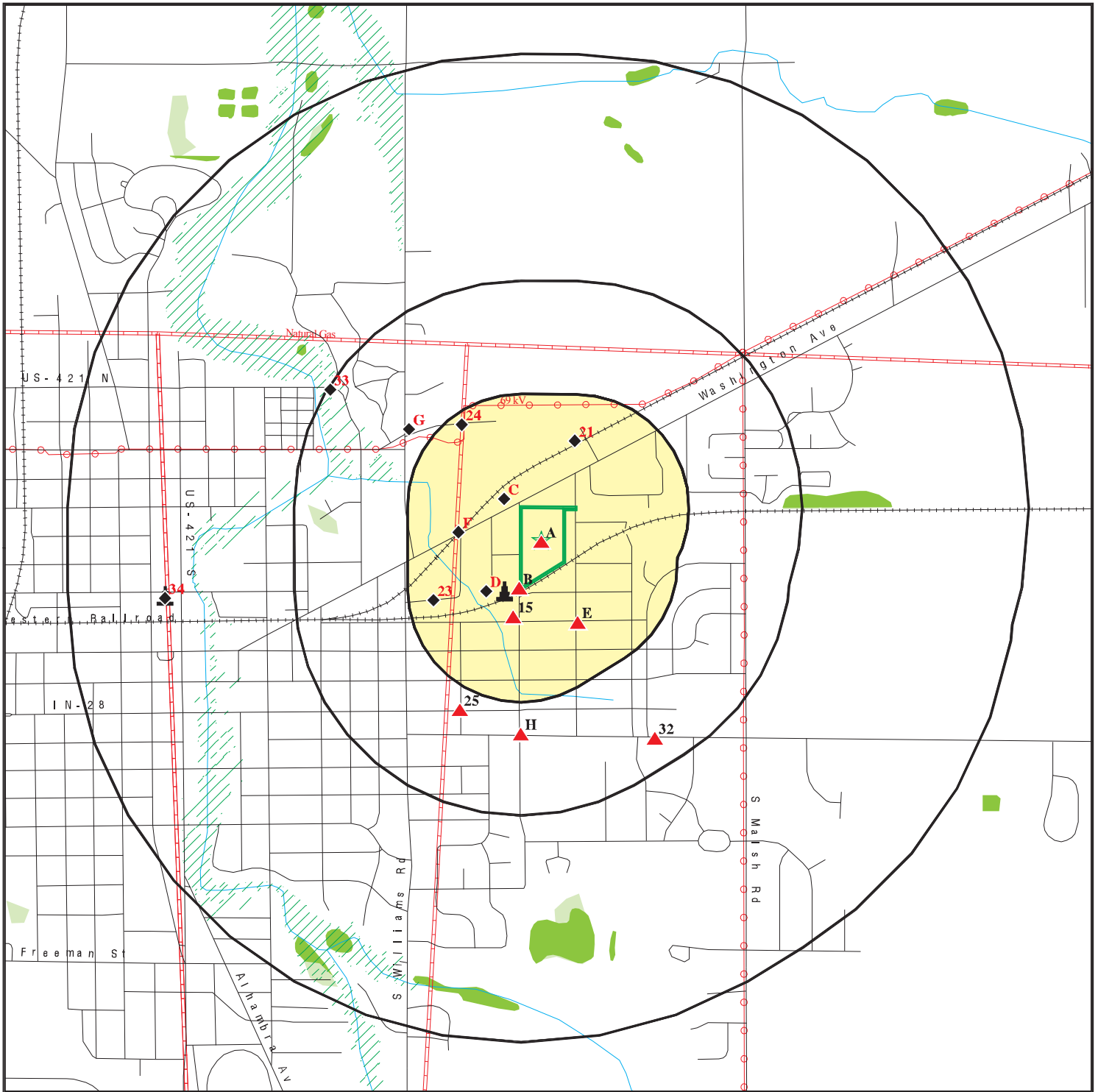








## **APPENDIX A**








### **EDR Reports**

**Sanborn Map Certification  
Radius Report (Electronic Only)  
Aerial Photo Report  
Topographical Map Report  
City Directory Report (Electronic Only)  
VI/UST Report (Electronic Only)**

# OVERVIEW MAP - 4919664.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Dept. Defense Sites

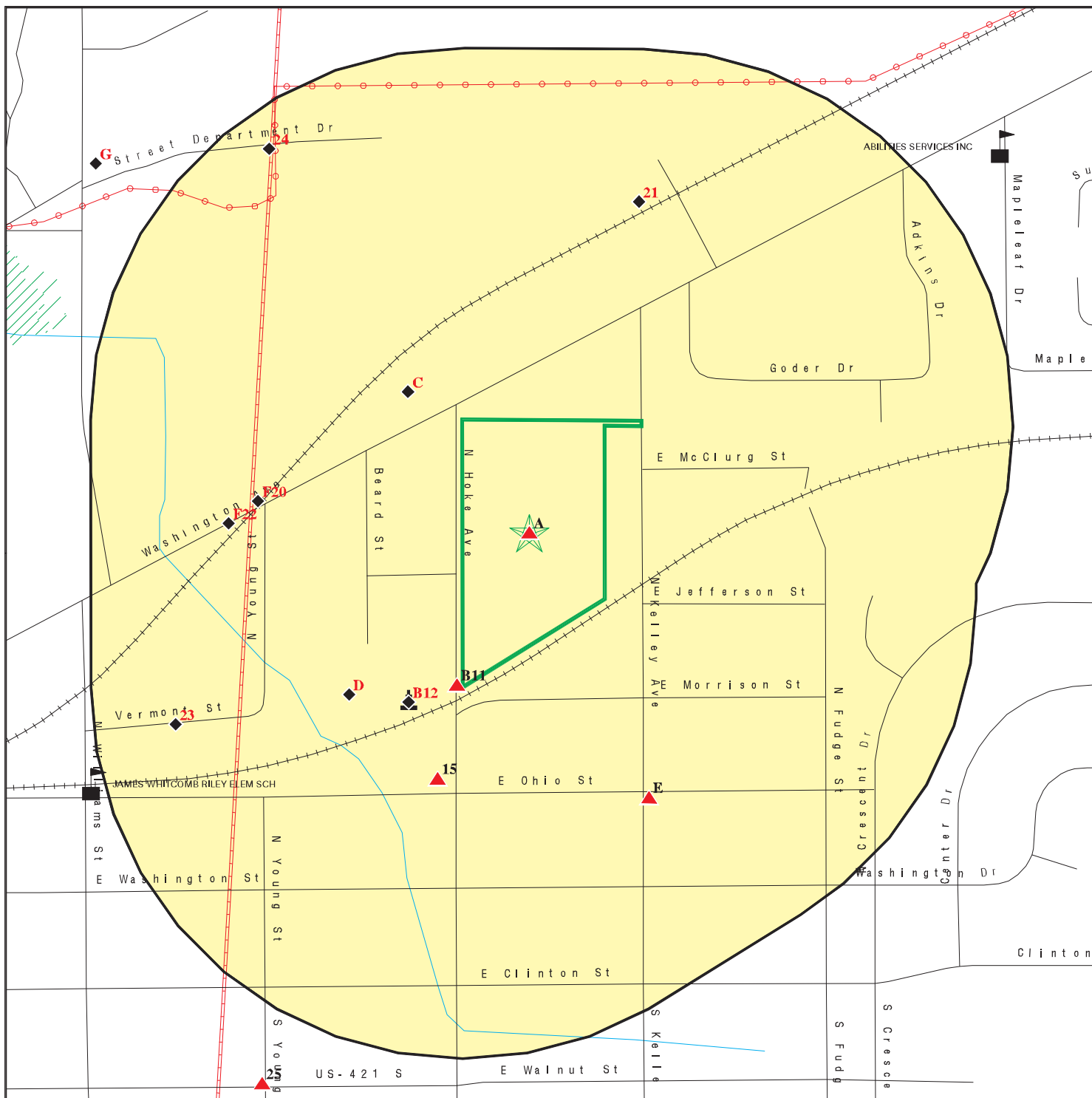
-  Indian Reservations BIA
-  Power transmission lines
-  Pipelines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  State Wetlands








This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.






SITE NAME: Exide - Frankfort, IN  
 ADDRESS: 555 Hoke Avenue  
 Frankfort IN 46041  
 LAT/LONG: 40.285174 / 86.495695

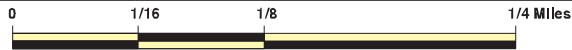
CLIENT: Advanced GeoServices Corp.  
 CONTACT: Jan Dobinsky  
 INQUIRY #: 4919664.2s  
 DATE: April 27, 2017 10:33 am

# DETAIL MAP - 4919664.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Power transmission lines
-  Pipelines
-  100-year flood zone
-  500-year flood zone

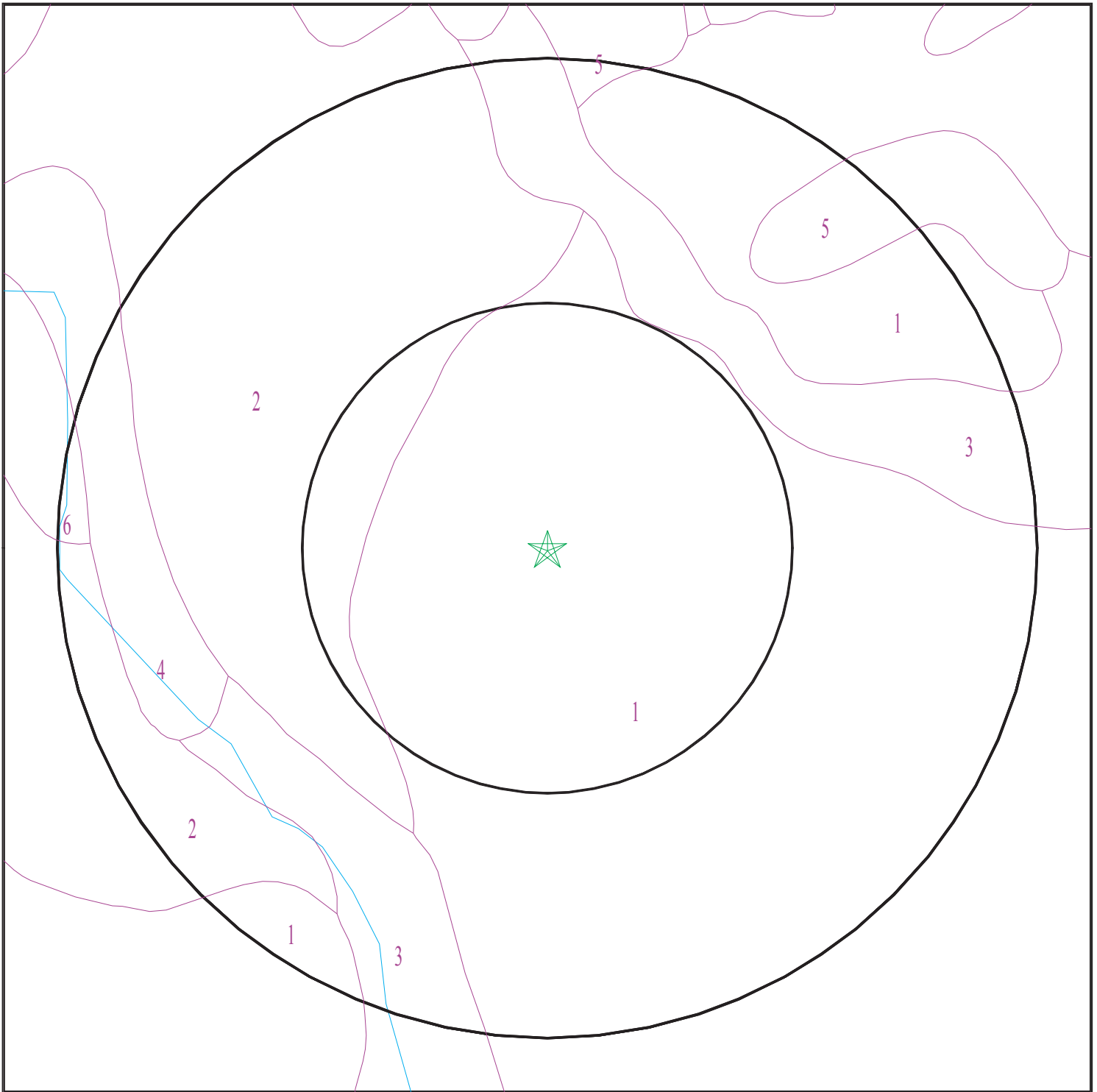


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

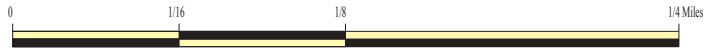
SITE NAME: Exide - Frankfort, IN  
 ADDRESS: 555 Hoke Avenue  
 Frankfort IN 46041  
 LAT/LONG: 40.285174 / 86.495695

CLIENT: Advanced GeoServices Corp.  
 CONTACT: Jan Dobinsky  
 INQUIRY #: 4919664.2s  
 DATE: April 27, 2017 10:34 am

# SSURGO SOIL MAP - 4919664.2s



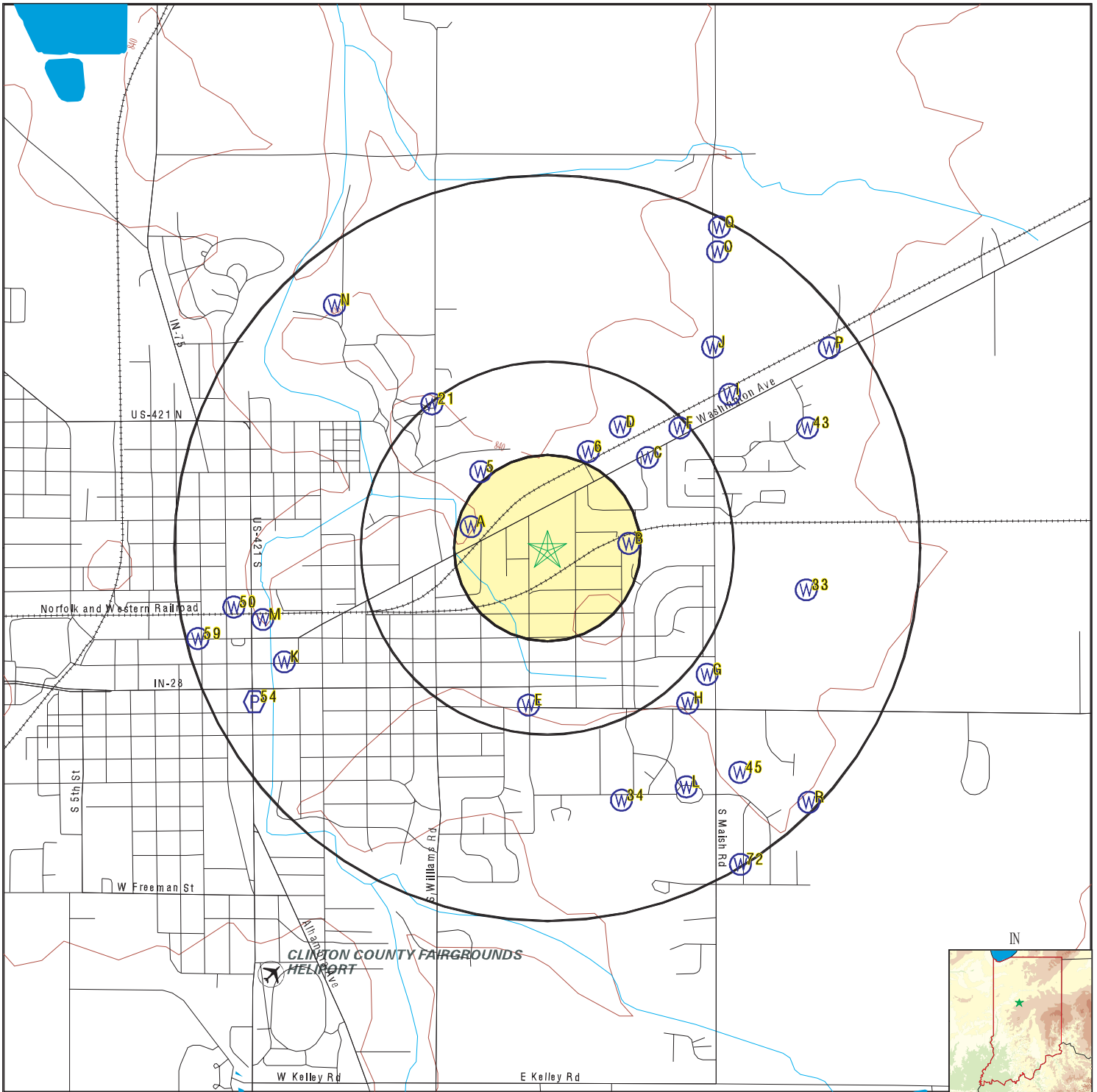
- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Exide - Frankfort, IN  
ADDRESS: 555 Hoke Avenue  
Frankfort IN 46041  
LAT/LONG: 40.285174 / 86.495695

CLIENT: Advanced GeoServices Corp.  
CONTACT: Jan Dobinsky  
INQUIRY #: 4919664.2s  
DATE: April 27, 2017 10:36 am

# PHYSICAL SETTING SOURCE MAP - 4919664.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location



SITE NAME: Exide - Frankfort, IN  
 ADDRESS: 555 Hoke Avenue  
 Frankfort IN 46041  
 LAT/LONG: 40.285174 / 86.495695

CLIENT: Advanced GeoServices Corp.  
 CONTACT: Jan Dobinsky  
 INQUIRY #: 4919664.2s  
 DATE: April 27, 2017 10:35 am



Exide - Frankfort, IN

555 Hoke Avenue

Frankfort, IN 46041

Inquiry Number: 4919664.9

April 27, 2017

## The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Aerial Photo Decade Package

04/27/17

**Site Name:**

Exide - Frankfort, IN  
555 Hoke Avenue  
Frankfort, IN 46041  
EDR Inquiry # 4919664.9

**Client Name:**

Advanced GeoServices Corp.  
1055 Andrew Drive  
West Chester, PA 19380  
Contact: Jan Dobinsky



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

**Search Results:**

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2008	1"=500'	Flight Year: 2008	USDA/NAIP
2007	1"=500'	Flight Year: 2007	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1999	1"=500'	Acquisition Date: March 04, 1999	USGS/DOQQ
1992	1"=500'	Flight Date: April 05, 1992	USGS
1987	1"=1000'	Flight Date: June 17, 1987	USGS
1981	1"=500'	Flight Date: November 12, 1981	USDA
1977	1"=1000'	Flight Date: April 10, 1977	USGS
1969	1"=500'	Flight Date: October 07, 1969	USGS
1952	1"=500'	Flight Date: September 25, 1952	USGS

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Exide - Frankfort, IN

555 Hoke Avenue

Frankfort, IN 46041

Inquiry Number: 4919664.4

April 26, 2017

## EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)



# EDR Historical Topo Map Report

04/26/17

**Site Name:**

Exide - Frankfort, IN  
555 Hoke Avenue  
Frankfort, IN 46041  
EDR Inquiry # 4919664.4

**Client Name:**

Advanced GeoServices Corp.  
1055 Andrew Drive  
West Chester, PA 19380  
Contact: Jan Dobinsky



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Advanced GeoServices Corp. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

**Search Results:****Coordinates:**

<b>P.O.#</b>	20112678	<b>Latitude:</b>	40.285174 40° 17' 7" North
<b>Project:</b>	Exide - Frankfort, IN CCR	<b>Longitude:</b>	-86.495695 -86° 29' 45" West
		<b>UTM Zone:</b>	Zone 16 North
		<b>UTM X Meters:</b>	542867.81
		<b>UTM Y Meters:</b>	4459531.51
		<b>Elevation:</b>	852.31' above sea level

**Maps Provided:**

2013  
1991  
1980  
1961

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## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 2013 Source Sheets



Frankfort  
2013  
7.5-minute, 24000



Michigantown  
2013  
7.5-minute, 24000

### 1991 Source Sheets



Frankfort  
1991  
7.5-minute, 24000  
Aerial Photo Revised 1987

### 1980 Source Sheets

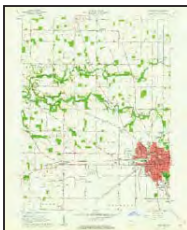


Michigantown  
1980  
7.5-minute, 24000  
Aerial Photo Revised 1977



Frankfort  
1980  
7.5-minute, 24000  
Aerial Photo Revised 1977

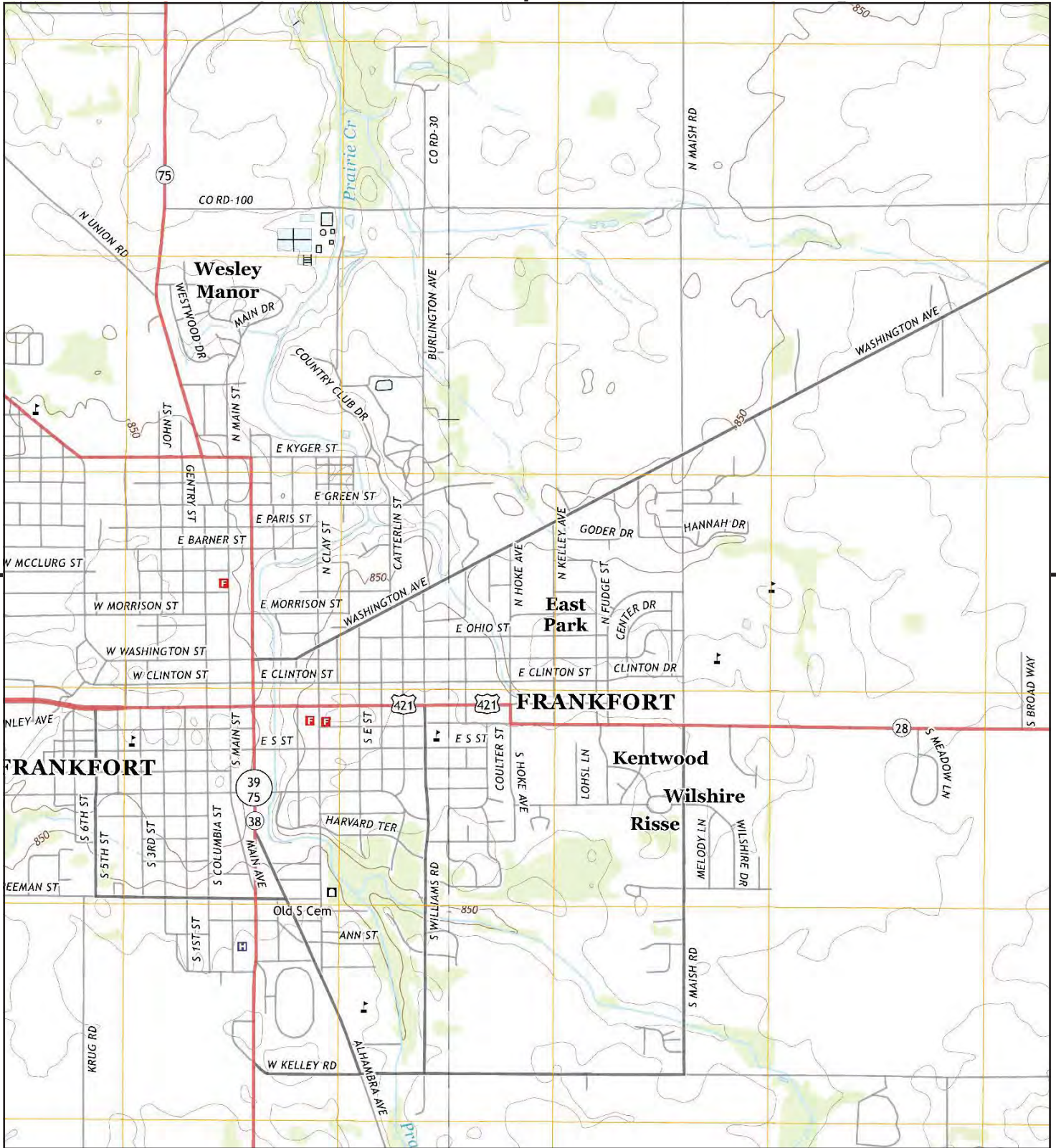
### 1961 Source Sheets



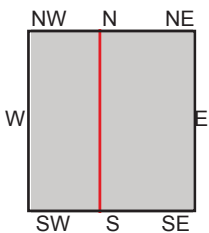
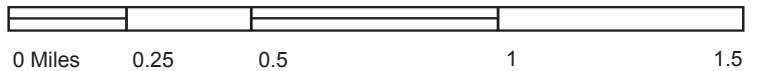
Frankfort  
1961  
7.5-minute, 24000  
Aerial Photo Revised 1958



Michigantown  
1961  
7.5-minute, 24000  
Aerial Photo Revised 1958



This report includes information from the following map sheet(s).

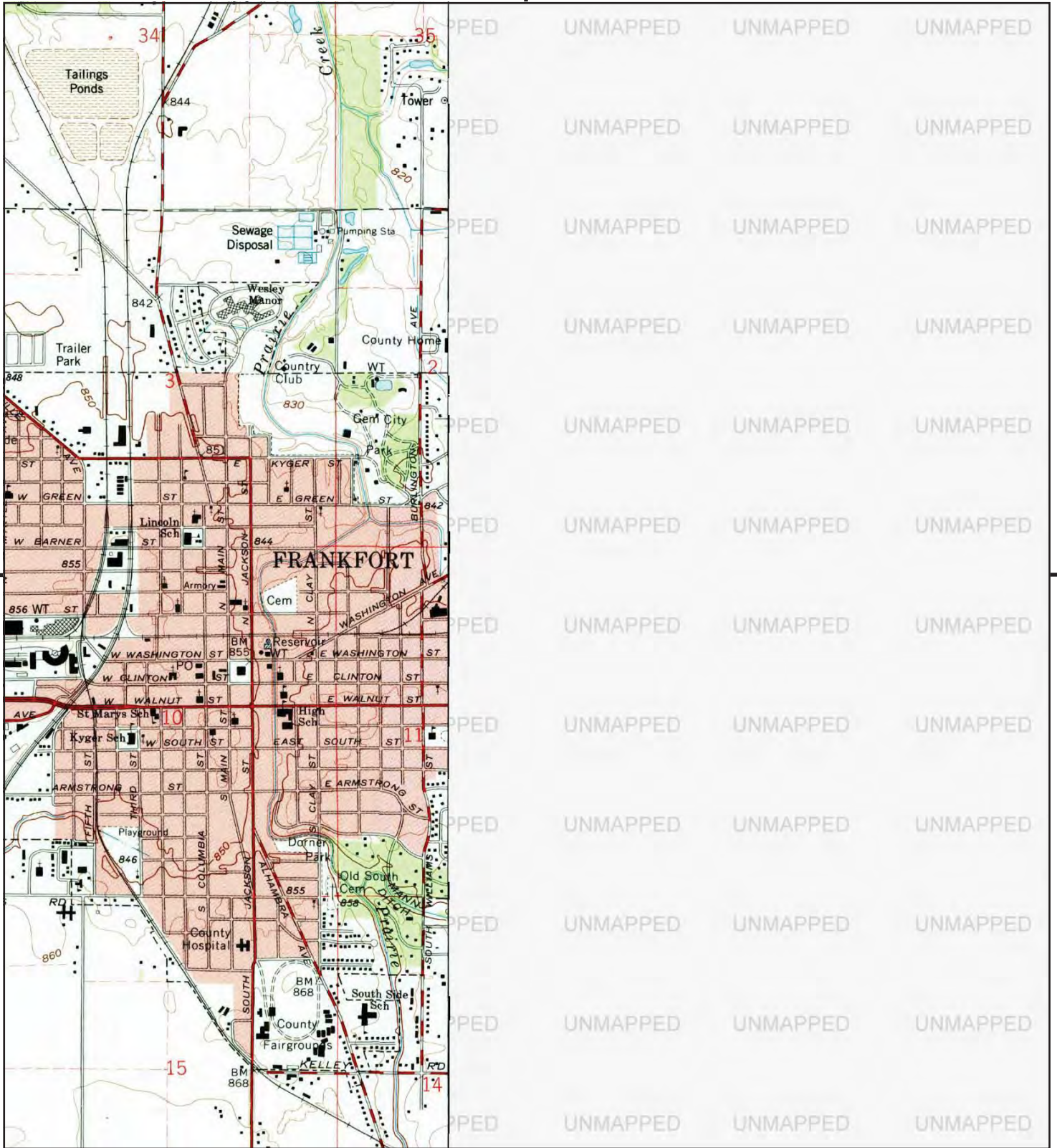


TP, Michigantown, 2013, 7.5-minute  
 NW, Frankfort, 2013, 7.5-minute

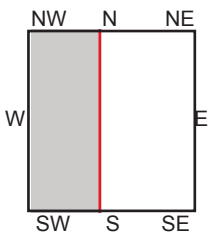
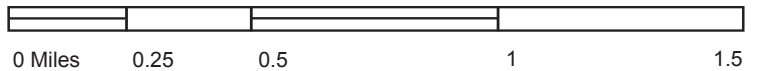
SITE NAME: Exide - Frankfort, IN  
 ADDRESS: 555 Hoke Avenue  
 Frankfort, IN 46041  
 CLIENT: Advanced GeoServices Corp.







This report includes information from the following map sheet(s).

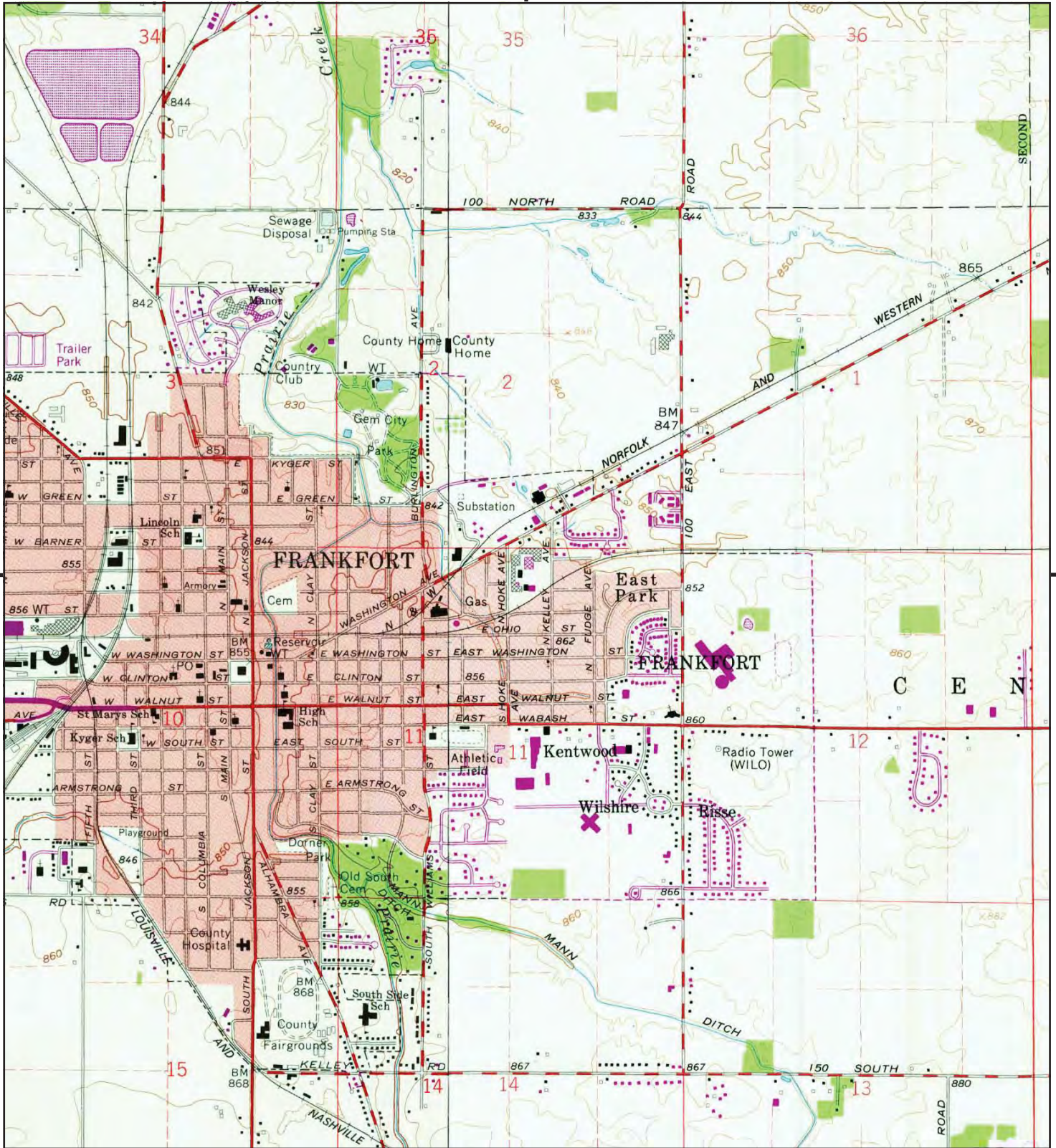


NW, Frankfort, 1991, 7.5-minute

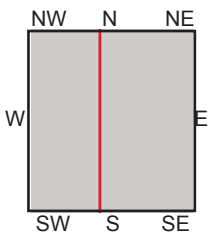
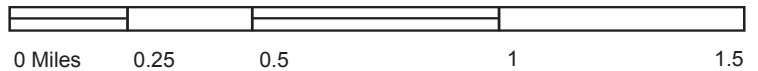
SITE NAME: Exide - Frankfort, IN  
 ADDRESS: 555 Hoke Avenue  
 Frankfort, IN 46041  
 CLIENT: Advanced GeoServices Corp.







This report includes information from the following map sheet(s).

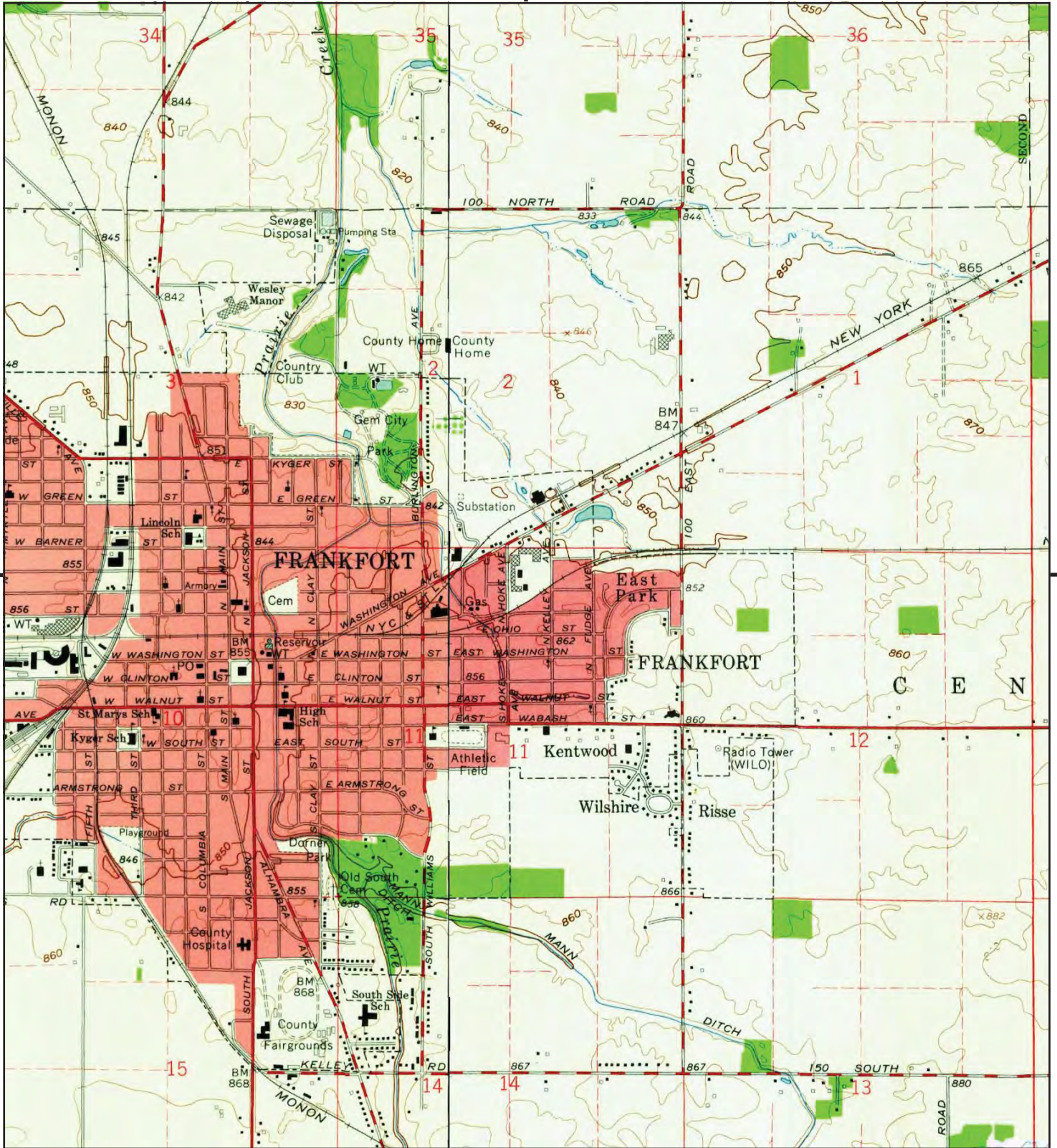


TP, Michigantown, 1980, 7.5-minute  
 NW, Frankfort, 1980, 7.5-minute

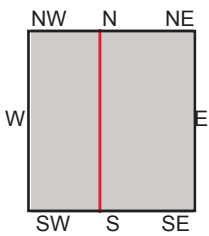
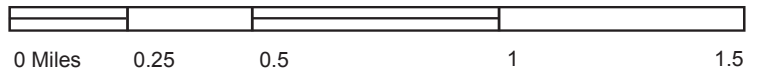
SITE NAME: Exide - Frankfort, IN  
 ADDRESS: 555 Hoke Avenue  
 Frankfort, IN 46041  
 CLIENT: Advanced GeoServices Corp.







This report includes information from the following map sheet(s).



TP, Michigantown, 1961, 7.5-minute  
 NW, Frankfort, 1961, 7.5-minute

SITE NAME: Exide - Frankfort, IN  
 ADDRESS: 555 Hoke Avenue  
 Frankfort, IN 46041  
 CLIENT: Advanced GeoServices Corp.



**Exide - Frankfort, IN**

555 Hoke Avenue  
Frankfort, IN 46041

Inquiry Number: 4919664.5  
May 01, 2017

# The EDR-City Directory Image Report

**Exide - Frankfort, IN**

555 Hoke Avenue  
Frankfort, IN 46041

Inquiry Number: 4919664.6s  
April 27, 2017

## EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet



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Secondary Map .....	3
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Map Findings .....	5
Record Sources and Currency .....	GR-1

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600).

ENVIRONMENTAL RECORDS	Maximum Search Distance*	Summary		
		property	1/10	1/10 - 1/3
Federal NPL site list	0.333	0	0	0
Federal CERCLIS list	0.333	1	0	0
Federal RCRA CORRACTS facilities list	0.333	1	0	0
Federal RCRA TSD facilities list	0.333	1	0	0
Federal RCRA generators list	property	1	-	-
Federal institutional controls / engineering controls registries	0.333	0	0	0
Federal ERNS list	property	0	-	-
State and tribal - equivalent NPL	not searched	-	-	-
State and tribal - equivalent CERCLIS	0.333	0	0	0
State and tribal landfill / solid waste disposal	0.333	0	1	4
State and tribal leaking storage tank lists	0.333	1	0	4
State and tribal registered storage tank lists	property	1	-	-
State and tribal institutional control / engineering control registries	property	0	-	-
State and tribal voluntary cleanup sites	0.333	0	1	1
State and tribal Brownfields sites	0.333	0	0	0
Other Records	0.333	4	1	3
<b>HISTORICAL USE RECORDS</b>				
Former Manufactured Gas Plants	0.333	0	1	0
Historical Gas Stations	0.125	0	1	0
Historical Dry Cleaners	0.125	0	0	0
Exclusive Recovered Govt. Archives	property	4	-	-

\*Each category may include several separate databases, each having a different search distance. For each category, the table reports the maximum search distance applied. See the section 'Record Sources and Currency' for information on individual databases.

# EXECUTIVE SUMMARY

## TARGET PROPERTY INFORMATION

### ADDRESS

EXIDE - FRANKFORT, IN  
555 HOKE AVENUE  
FRANKFORT, IN 46041

### COORDINATES

Latitude (North): 40.285174 - 40° 17' 6.6311646"  
Longitude (West): 86.495695 - 86° 29' 44.509277"  
Elevation: 854 ft. above sea level

## TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records.

<u>Site</u>	<u>Database(s)</u>
EXIDE CORPORATION 555 N HOKE AVE FRANKFORT, IN 46041	FINDS Registry ID:: 110000700313 ECHO
EXIDE CORPORATION 555 HOKE AVE. FRANKFORT, IN	RGA LUST Facility ID: 2282 Facility ID: 2282.0
GENERAL BATTERY FACTORY 555 HOKE AVE. FRANKFORT, IN	RGA LUST Facility ID: 2282.0
EXIDE BATTERY 555 N. HOKE AVENUE FRANKFORT, IN 46041	SEMS EPA Id: INN000510504 Site ID: 0510504
EXIDE CORPORATION 555 N HOKE AVE FRANKFORT, IN	RGA LUST Facility ID: 2282

# EXECUTIVE SUMMARY

## Site

EXIDE CORP/GENERAL BATTERY  
555 HOKE AVE  
FRANKFORT, IN 46041

EXIDE CORPORATION  
555 N HOKE AVE  
FRANKFORT, IN 460410748

## Database(s)

### AIRS

Permit ID: 023-3309-00015 (No Electronic File Exists)  
Permit ID: 023-3396-00015 (No Electronic File Exists)  
Permit ID: 023-3445-00015 (No Electronic File Exists)  
Permit ID: 023-4735-00015 (No Electronic File Exists)  
Permit ID: 023-4768-00015 (No Electronic File Exists)  
Permit ID: 023-4888-00015 (No Electronic File Exists)  
Permit ID: 023-4918-00015 (No Electronic File Exists)  
Permit ID: 023-5261-00015 (No Electronic File Exists)  
Permit ID: 023-5323-00015 (No Electronic File Exists)  
Permit ID: 023-6128-00015 (No Electronic File Exists)  
Permit ID: 023-7988-00015 (No Electronic File Exists)

Status: Issued

Status: Withdrawn

### SPILLS

Facility Id: 199005117

Facility Id: 200510124

Facility Id: 200710160

### UST

Tank Status: Permanently Out of Service

Facility Id: 2282

### IND WASTE

Regulatory: IND001647460

### LUST

Description: NFA-Unconditional Closure

Facility Id: 2282

# EXECUTIVE SUMMARY

Site

EXIDE TECHNOLOGIES  
555 N HOKE AVE  
FRANKFORT, IN 46041

GENERAL BATTERY FACTORY  
555 HOKE AVE  
FRANKFORT, IN

Database(s)

2020 COR ACTION

EPA ID:: IND001647460

RCRA-SQG

EPA ID:: IND001647460

EPA ID:: IND001647460

EPA ID:: IND001647460

EPA ID:: IND001647460

EPA ID:: IND001647460

EPA ID:: IND001647460

EPA ID:: IND001647460

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EPA ID:: IND001647460

EPA ID:: IND001647460

EPA ID:: IND001647460

EPA ID:: IND001647460

EPA ID:: IND001647460

EPA ID:: IND001647460

RCRA-TSDF

EPA ID:: IND001647460

CORRACTS

EPA ID:: IND001647460

ICIS

FRS ID:: 110000700313

MANIFEST

EPA ID:: IND001647460

RGA LUST

Facility ID: 2282.0

# EXECUTIVE SUMMARY

## PHYSICAL SETTING INFORMATION

Flood Zone: Available  
 NWI Wetlands: Available

## **AQUIFLOW®**

Search Radius: 0.333 Mile.

**No Aquiflow sites reported.**

## **DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

### **Soil Map ID: 1**

Soil Component Name: Fincastle  
 Soil Surface Texture: silt loam  
 Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.  
 Soil Drainage Class: Somewhat poorly drained  
 Hydric Status: Not hydric  
 Corrosion Potential - Uncoated Steel: High  
 Depth to Bedrock Min: > 0 inches  
 Depth to Watertable Min: > 38 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	12 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.1

# EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	12 inches	31 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 6.5 Min: 4.5
3	31 inches	59 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4.23 Min: 1.41	Max: 7.8 Min: 5.1
4	59 inches	70 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 1.41 Min: 0.07	Max: 8.4 Min: 7.4

## Soil Map ID: 2

Soil Component Name: Miami

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 38 inches

## EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.6
2	7 inches	31 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.1
3	31 inches	35 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.6
4	35 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 1.41 Min: 0.07	Max: 8.4 Min: 7.4

### Soil Map ID: 3

Soil Component Name: Treaty

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches



## EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	12 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.6
2	12 inches	35 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.1
3	35 inches	64 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4.23 Min: 1.41	Max: 7.8 Min: 6.6
4	64 inches	70 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4

### Soil Map ID: 4

Soil Component Name: Ceresco

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 38 inches

## EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 42.34 Min: 14.11	Max: 7.8 Min: 6.1
2	14 inches	59 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 42.34 Min: 4.23	Max: 8.4 Min: 6.1

### Soil Map ID: 5

Soil Component Name: Udorthents

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

### Soil Map ID: 6

Soil Component Name: Miami

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

## EXECUTIVE SUMMARY

Hydric Status: Not hydric  
 Corrosion Potential - Uncoated Steel: Moderate  
 Depth to Bedrock Min: > 0 inches  
 Depth to Watertable Min: > 84 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.6
2	7 inches	31 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 6 Min: 5.1
3	31 inches	35 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.6
4	35 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.41 Min: 0.07	Max: 8.4 Min: 7.4

**Soil Map ID: 7**

Soil Component Name: Westland  
 Soil Surface Texture: silty clay loam  
 Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.  
 Soil Drainage Class: Poorly drained

## EXECUTIVE SUMMARY

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 15 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.3 Min: 6.1
2	9 inches	46 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.3 Min: 6.1
3	46 inches	53 inches	gravelly loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.6
4	53 inches	59 inches	gravelly coarse sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 141.14	Max: 8.4 Min: 7.4

### Soil Map ID: 8

Soil Component Name: Martinsville

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

## EXECUTIVE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.1
2	9 inches	33 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
3	33 inches	38 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
4	38 inches	59 inches	stratified loamy sand to sandy loam to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 8.4 Min: 5.6

### Soil Map ID: 9

Soil Component Name: Milford

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Very poorly drained

## EXECUTIVE SUMMARY

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 7 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.6
2	9 inches	31 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 4.23 Min: 1.41	Max: 7.8 Min: 5.6
3	31 inches	59 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4.23 Min: 1.41	Max: 8.4 Min: 6.6

### Soil Map ID: 10

Soil Component Name: Whitaker

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 38 inches

## EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.6
2	14 inches	44 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.1
3	44 inches	70 inches	stratified loamy sand to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 42.34 Min: 4.23	Max: 8.4 Min: 6.6

---

### Soil Map ID: 11

Soil Component Name: Martinsville

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.1
2	9 inches	33 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
3	33 inches	38 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
4	38 inches	59 inches	stratified loamy sand to sandy loam to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 42.34 Min: 4.23	Max: 8.4 Min: 5.6

### Soil Map ID: 12

Soil Component Name: Fincastle

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 38 inches



## EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	12 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.1
2	12 inches	31 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 6.5 Min: 4.5
3	31 inches	59 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4.23 Min: 1.41	Max: 7.8 Min: 5.1
4	59 inches	70 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 1.41 Min: 0.07	Max: 8.4 Min: 7.4

### Soil Map ID: 13

Soil Component Name: Fox

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.1
2	5 inches	31 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 5.1
3	31 inches	59 inches	gravelly coarse sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.14 Min: 141.14	Max: 8.4 Min: 7.4

# EXECUTIVE SUMMARY

## SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

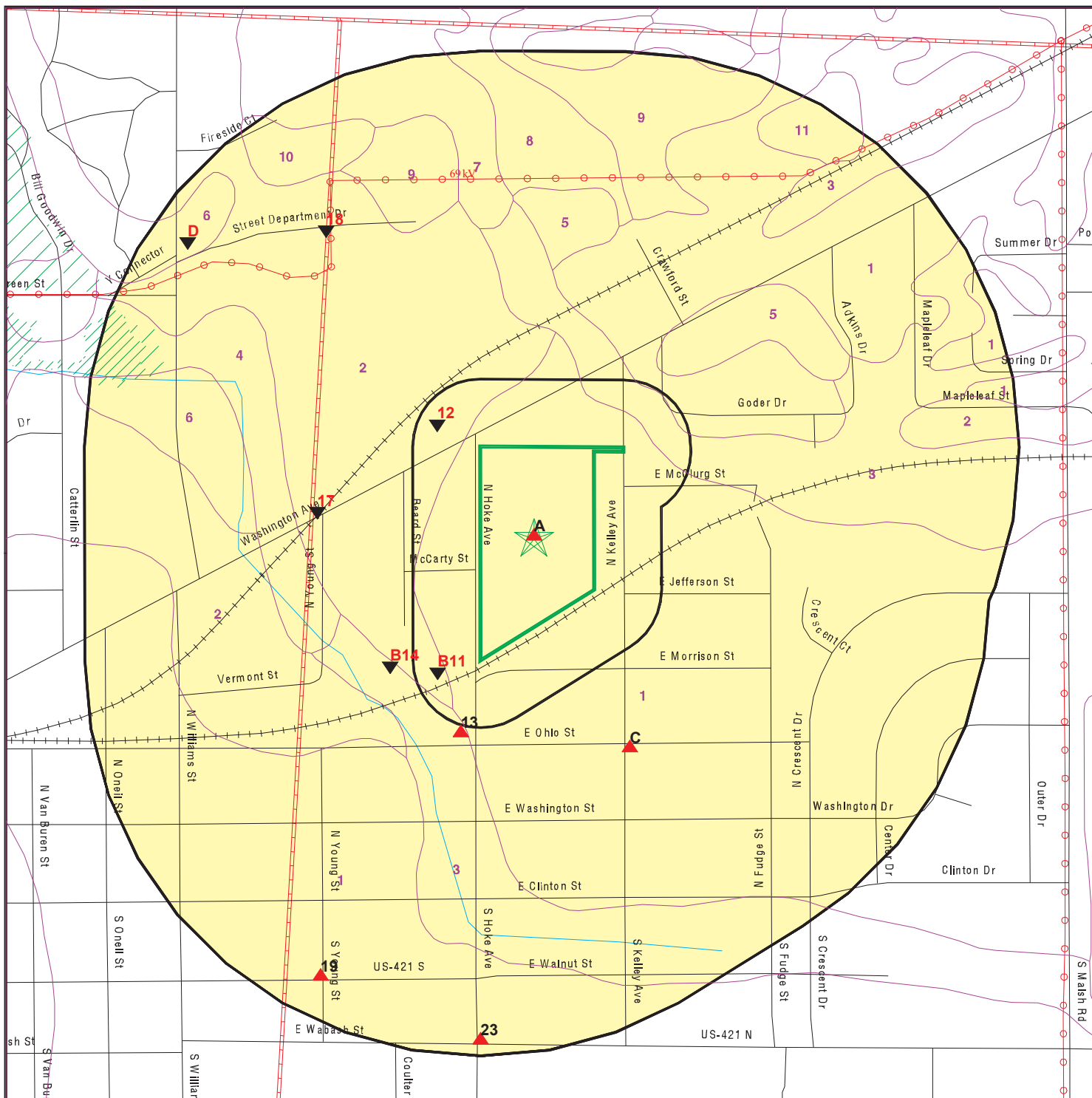
## ENVIRONMENTAL RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
EXIDE CORPORATION FINDS: Other Standard Environmental Records ECHO: Other Standard Environmental Records	555 N HOKE AVE	Property	▲ A1	24
EXIDE BATTERY SEMS: Federal CERCLIS	555 N. HOKE AVENUE	Property	▲ A4	28
EXIDE CORP/GENERAL BATTERY AIRS: Other Standard Environmental Records SPILLS: Other Standard Environmental Records	555 HOKE AVE	Property	▲ A7	31
EXIDE CORPORATION UST: State and tribal registered storage tank lists IND WASTE: Other Standard Environmental Records LUST: State and tribal leaking storage tank lists	555 N HOKE AVE	Property	▲ A8	37
EXIDE TECHNOLOGIES 2020 COR ACTION: Other Standard Environmental Records RCRA-SQG: Federal RCRA generators list RCRA-TSDF: Federal RCRA TSD facilities list CORRACTS: Federal RCRA CORRACTS facilities list ICIS: Other Standard Environmental Records MANIFEST: Other Standard Environmental Records	555 N HOKE AVE	Property	▲ A9	38
WAMPLER SERVICES INCORPORATED SPILLS: Other Standard Environmental Records SWF/LF: State and tribal landfill / solid waste disposal	1270 WASHINGTON AVE	<1/10 NW	▼ 12	59
INDIANA GAS - FRANKFORT MGP VCP: State and tribal voluntary cleanup sites	500 HOKE AVE.	<1/10 SW	▼ B14	62
NORFOLK SOUTHERN RAILWAY CO UST: State and tribal registered storage tank lists LUST: State and tribal leaking storage tank lists	1601 W OHIO ST	1/10 - 1/3 SSE	▲ C15	63
NORFOLK AND WESTERN RAILROAD FINDS: Other Standard Environmental Records ECHO: Other Standard Environmental Records RCRA NonGen / NLR: Other Standard Environmental Records MANIFEST: Other Standard Environmental Records VCP: State and tribal voluntary cleanup sites	1601 W OHIO ST	1/10 - 1/3 SSE	▲ C16	65
FRANKFORT CITY LIGHT & POWER UST: State and tribal registered storage tank lists LUST: State and tribal leaking storage tank lists NPDES: Other Standard Environmental Records	1000 WASHINGTON AVE	1/10 - 1/3 W	▼ 17	69
FRANKFORT STREET DEPARTMENT SWTIRE: State and tribal landfill / solid waste disposal	Not Reported	1/10 - 1/3 NW	▼ 18	71

## EXECUTIVE SUMMARY

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
CLINTON COUNTY LANDFILL AIRS: Other Standard Environmental Records TIER 2: Other Standard Environmental Records SWF/LF: State and tribal landfill / solid waste disposal	2700 N SR 39	1/10 - 1/3 SSW	▲ 19	72
CITY OF FRANKFORT STREET DEPT UST: State and tribal registered storage tank lists LUST: State and tribal leaking storage tank lists	905 BURLINGTON AVE	1/10 - 1/3 NW	▼ D20	76
SAFETY KLEEN SWRCY: State and tribal landfill / solid waste disposal	905 BURLINGTON	1/10 - 1/3 NW	▼ D21	78
FRANKFORT STREET DEPT. SWRCY: State and tribal landfill / solid waste disposal	905 BURLINGTON	1/10 - 1/3 NW	▼ D22	79
INDIANA DEPT OF HIGHWAYS LUST: State and tribal leaking storage tank lists	HOKE RD AND SR 28 E	1/10 - 1/3 S	▲ 23	80
<b><u>HISTORICAL USE RECORDS</u></b>				
<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
EXIDE CORPORATION RGA LUST: Exclusive Recovered Govt. Archives	555 HOKE AVE.	Property	▲ A2	26
GENERAL BATTERY FACTORY RGA LUST: Exclusive Recovered Govt. Archives	555 HOKE AVE.	Property	▲ A3	27
EXIDE CORPORATION RGA LUST: Exclusive Recovered Govt. Archives	555 N HOKE AVE	Property	▲ A5	30
GENERAL BATTERY FACTORY RGA LUST: Exclusive Recovered Govt. Archives	555 HOKE AVE	Property	▲ A10	57
INDIANA GAS/FRANKFORT MGP EDR MGP: Former manufactured Gas Plants	500 HOKE AVE	<1/10 SW	▼ B11	58
358 N HOKE AVE EDR Hist Auto: Historical Gas Stations	358 N HOKE AVE	<1/10 SSW	▲ 13	61

# PRIMARY MAP - 4919664.6S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 300 1/3 Miles



Indian Reservations BIA

Power transmission lines

Pipelines

100-year flood zone

500-year flood zone

Groundwater Flow Direction

Indeterminate Groundwater Flow at Location

Groundwater Flow Varies at Location

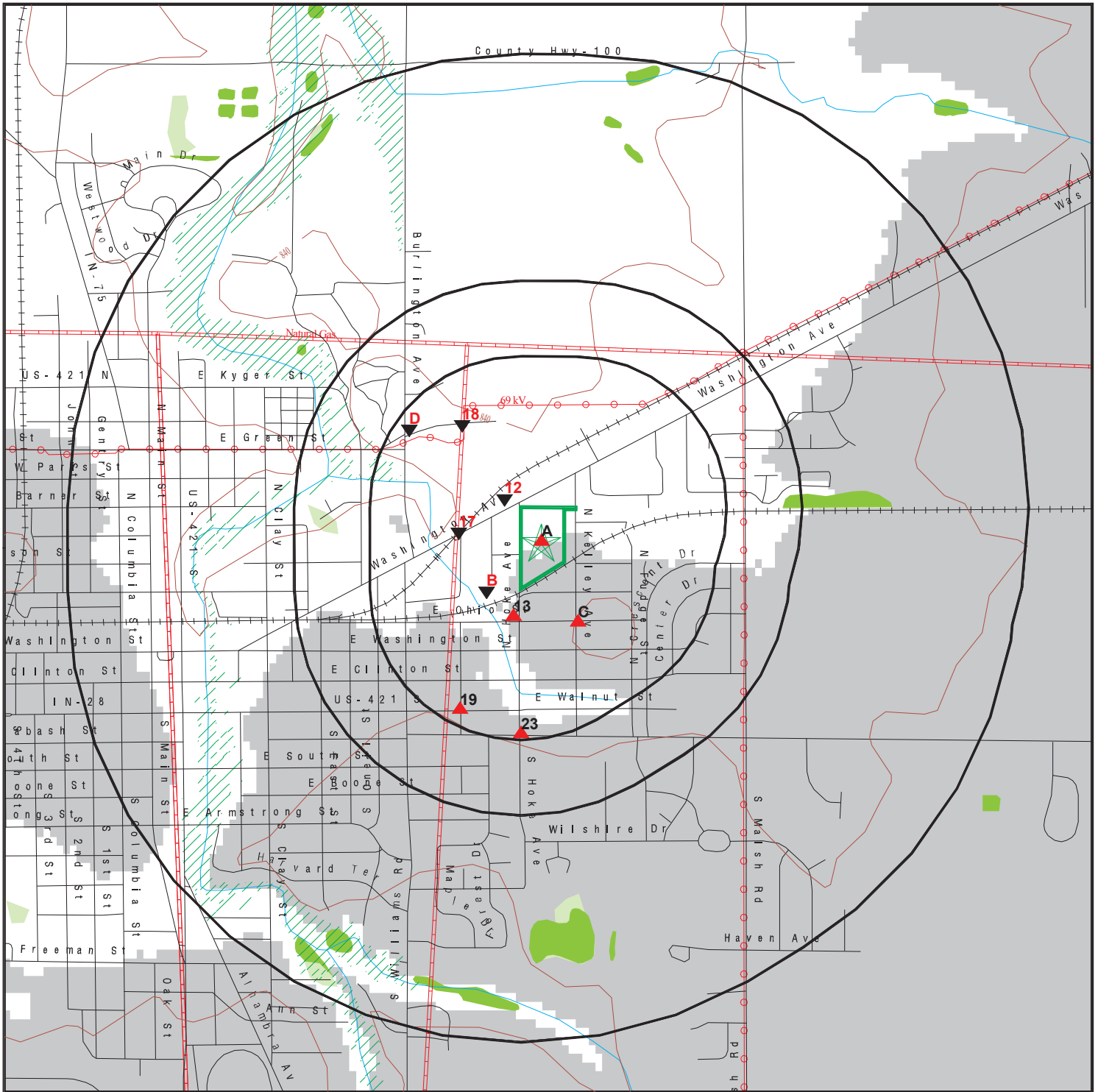
SSURGO Soil



SITE NAME: Exide - Frankfort, IN  
 ADDRESS: 555 Hoke Avenue  
 Frankfort IN 46041  
 LAT/LONG: 40.285174 / 86.495695

CLIENT: Advanced GeoServices Corp.  
 CONTACT: Jan Dobinsky  
 INQUIRY #: 4919664.6S  
 DATE: April 27, 2017 2:08 pm

# SECONDARY MAP - 4919664.6S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Contour Lines

Power transmission lines

Pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Upgradient Area

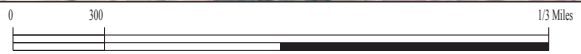


SITE NAME: Exide - Frankfort, IN  
 ADDRESS: 555 Hoke Avenue  
 Frankfort IN 46041  
 LAT/LONG: 40.285174 / 86.495695

CLIENT: Advanced GeoServices Corp.  
 CONTACT: Jan Dobinsky  
 INQUIRY #: 4919664.6S  
 DATE: April 27, 2017 2:06 pm



# AERIAL PHOTOGRAPHY - 4919664.6s



<p><b>SITE NAME:</b> Exide - Frankfort, IN <b>ADDRESS:</b> 555 Hoke Avenue Frankfort IN 46041 <b>LAT/LONG:</b> 40.285174 / 86.495695</p>	<p><b>CLIENT:</b> Advanced GeoServices Corp. <b>CONTACT:</b> Jan Dobinsky <b>INQUIRY #:</b> 4919664.6s <b>DATE:</b> April 27, 2017 2:09 pm</p>
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MAP FINDINGS

LEGEND

FACILITY NAME FACILITY ADDRESS, CITY, ST, ZIP		EDR SITE ID NUMBER
▼ MAP ID#	Direction Distance Range (Distance feet / miles)	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.
	Relative Elevation Feet Above Sea Level	
<b>Worksheet:</b>		
<b>Comments:</b> Comments may be added on the online Vapor Encroachment Worksheet.		

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

EXIDE CORPORATION 555 N HOKE AVE, FRANKFORT, IN, 46041		1016105452
▲ A1	Target Property	Other Records
	854 ft. Above Sea Level	

Worksheet:

FINDS: Other Records

Registry ID: 110000700313

Environmental Interest/Information System:

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (IDEM) has implemented the Indiana-Facility Registry System (I-FRS). The I-FRS provides the interface and processes to link facility data monitored by multiple State and EPA program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

STATE MASTER

SUPERFUND (NON-NPL)

ECHO: Other Records

Envid: 1016105452



MAP FINDINGS

**EXIDE CORPORATION, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Registry ID:

110000700313

DFR URL:

[http://echo.epa.gov/detailed\\_facility\\_report?fid=110000700313](http://echo.epa.gov/detailed_facility_report?fid=110000700313)

MAP FINDINGS

EXIDE CORPORATION 555 HOKE AVE., FRANKFORT, IN,		S116003748
▲ A2	Target Property	Exclusive Recovered Govt. Archives
	854 ft. Above Sea Level	

**Worksheet:**

**RGA LUST: Exclusive Recovered Govt. Archives**

- 2007 EXIDE CORPORATION 555 HOKE AVE.
- 2006 EXIDE CORPORATION 555 HOKE AVE.
- 2005 EXIDE CORPORATION 555 HOKE AVE.
- 2003 EXIDE CORPORATION 555 HOKE AVE.
- 2002 EXIDE CORPORATION 555 HOKE AVE.

MAP FINDINGS

GENERAL BATTERY FACTORY 555 HOKE AVE., FRANKFORT, IN,		S116004683
▲ A3	Target Property	Exclusive Recovered Govt. Archives
	854 ft. Above Sea Level	

**Worksheet:**

**RGA LUST: Exclusive Recovered Govt. Archives**

- 2004 GENERAL BATTERY FACTORY 555 HOKE AVE.
- 2001 GENERAL BATTERY FACTORY 555 HOKE AVE.

MAP FINDINGS

EXIDE BATTERY 555 N. HOKE AVENUE, FRANKFORT, IN, 46041		1014202194
▲ A4	Target Property	Federal CERCLIS list
	854 ft. Above Sea Level	

**Worksheet:**

**SEMS: Federal CERCLIS list**

Site ID: 510504  
 EPA ID: INN000510504  
 Federal Facility: N  
 NPL: Not on the NPL  
 Non NPL Status: Removal Only Site (No Site Assessment Work Needed)

**Following information was gathered from the prior CERCLIS update completed in 10/2013:**

Site ID: 0510504  
 EPA ID: INN000510504  
 Facility County: CLINTON  
 Short Name: EXIDE BATTERY  
 Congressional District: 04  
 IFMS ID: B5YX  
 SMSA Number: Not Reported  
 USGC Hydro Unit: Not Reported  
 Federal Facility: Not a Federal Facility  
 DMNSN Number: 0.00000  
 Site Orphan Flag: Not Reported  
 RCRA ID: Not Reported  
 USGS Quadrangle: Not Reported  
 Site Init By Prog: R  
 NFRAP Flag: Not Reported  
 Parent ID: Not Reported  
 RST Code: Not Reported  
 EPA Region: 05  
 Classification: Not Reported  
 Site Settings Code: Not Reported  
 NPL Status: Not on the NPL  
 DMNSN Unit Code: Not Reported  
 RBRAC Code: Not Reported  
 RResp Fed Agency Code: Not Reported  
 Non NPL Status: Removal Only Site (No Site Assessment Work Needed)  
 Non NPL Status Date: 09/10/10  
 Site Fips Code: 18023  
 CC Concurrence Date: / /  
 CC Concurrence FY: Not Reported  
 Alias EPA ID: Not Reported  
 Site FUDS Flag: Not Reported  
 Alias Comments: Not Reported  
 Site Description: Abandoned battery manufacturing facility. Former employee has alleged that

MAP FINDINGS

**EXIDE BATTERY, 555 N. HOKE AVENUE, FRANKFORT, IN 46041 (Continued)**

facility buried scrap batteries on property.

MAP FINDINGS

EXIDE CORPORATION 555 N HOKE AVE, FRANKFORT, IN,		S116003749
▲ A5	Target Property	Exclusive Recovered Govt. Archives
	854 ft. Above Sea Level	

**Worksheet:**

**RGA LUST: Exclusive Recovered Govt. Archives**

2012	EXIDE CORPORATION	555 N HOKE AVE
2011	EXIDE CORPORATION	555 N HOKE AVE
2010	EXIDE CORPORATION	555 N HOKE AVE
2009	EXIDE CORPORATION	555 N HOKE AVE
2008	EXIDE CORPORATION	555 N HOKE AVE

MAP FINDINGS

EXIDE CORP/GENERAL BATTERY 555 HOKE AVE, FRANKFORT, IN, 46041		S103796224
▲ A7	Target Property	Other Records
	854 ft. Above Sea Level	

**Worksheet:**

**AIRS: Other Records**

Status: Issued  
Source ID: 023-00015  
Responsible Official Name: Sriram Srinivasan  
Responsible Official Phone: 800-451-6027  
SIC Code: 3691  
Permit ID: 023-3309-00015 (No Electronic File Exists)  
Permit Level: Construction  
Subtype Qualifier: State  
Issue Date: 03/02/1994  
End Date: Not Reported  
Source Contact: Not Reported  
Application Received Start Date: 10/04/1993  
Application Received End Date: Not Reported  
Public Notice Begins Start Date: 01/12/1994  
Public Notice Begins End Date: 02/11/1994  
Proposed Internet Upload Start Date: Not Reported  
Proposed Internet Upload End Date: Not Reported

Status: Issued  
Source ID: 023-00015  
Responsible Official Name: David Whitmer  
Responsible Official Phone: 317-233-1111  
SIC Code: 3691  
Permit ID: 023-3445-00015 (No Electronic File Exists)  
Permit Level: Construction  
Subtype Qualifier: Interim (State)  
Issue Date: 01/03/1994  
End Date: Not Reported  
Source Contact: Not Reported  
Application Received Start Date: 12/14/1993  
Application Received End Date: Not Reported  
Public Notice Begins Start Date: Not Reported  
Public Notice Begins End Date: Not Reported  
Proposed Internet Upload Start Date: Not Reported  
Proposed Internet Upload End Date: Not Reported

Status: Issued  
Source ID: 023-00015  
Responsible Official Name: Donald R. Poole  
Responsible Official Phone: 800-451-6027  
SIC Code: 3691  
Permit ID: 023-5323-00015 (No Electronic File Exists)



MAP FINDINGS

**EXIDE CORP/GENERAL BATTERY, 555 HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Permit Level:	Review Request
Subtype Qualifier:	Not Reported
Issue Date:	03/15/2002
End Date:	Not Reported
Source Contact:	Not Reported
Application Received Start Date:	02/12/1996
Application Received End Date:	Not Reported
Public Notice Begins Start Date:	Not Reported
Public Notice Begins End Date:	Not Reported
Proposed Internet Upload Start Date:	Not Reported
Proposed Internet Upload End Date:	Not Reported
Status:	Withdrawn
Source ID:	023-00015
Responsible Official Name:	Warren McPhail
Responsible Official Phone:	800-451-6027
SIC Code:	3691
Permit ID:	023-7988-00015 (No Electronic File Exists)
Permit Level:	FESOP
Subtype Qualifier:	Not Reported
Issue Date:	Not Reported
End Date:	Not Reported
Source Contact:	Not Reported
Application Received Start Date:	12/13/1996
Application Received End Date:	Not Reported
Public Notice Begins Start Date:	Not Reported
Public Notice Begins End Date:	Not Reported
Proposed Internet Upload Start Date:	Not Reported
Proposed Internet Upload End Date:	Not Reported
Status:	Withdrawn
Source ID:	023-00015
Responsible Official Name:	Not Reported
Responsible Official Phone:	Not Reported
SIC Code:	3691
Permit ID:	023-6128-00015 (No Electronic File Exists)
Permit Level:	FESOP
Subtype Qualifier:	Not Reported
Issue Date:	Not Reported
End Date:	Not Reported
Source Contact:	Not Reported
Application Received Start Date:	06/12/1996
Application Received End Date:	Not Reported
Public Notice Begins Start Date:	Not Reported
Public Notice Begins End Date:	Not Reported
Proposed Internet Upload Start Date:	Not Reported
Proposed Internet Upload End Date:	Not Reported
Status:	Issued
Source ID:	023-00015
Responsible Official Name:	Angie Lee

MAP FINDINGS

**EXIDE CORP/GENERAL BATTERY, 555 HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Responsible Official Phone:	317-234-4240
SIC Code:	3691
Permit ID:	023-5261-00015 (No Electronic File Exists)
Permit Level:	Construction
Subtype Qualifier:	Registration
Issue Date:	04/09/1996
End Date:	Not Reported
Source Contact:	Not Reported
Application Received Start Date:	01/24/1996
Application Received End Date:	Not Reported
Public Notice Begins Start Date:	Not Reported
Public Notice Begins End Date:	Not Reported
Proposed Internet Upload Start Date:	Not Reported
Proposed Internet Upload End Date:	Not Reported
Status:	Withdrawn
Source ID:	023-00015
Responsible Official Name:	Allen Davidson
Responsible Official Phone:	317-233-5693
SIC Code:	3691
Permit ID:	023-4918-00015 (No Electronic File Exists)
Permit Level:	Construction
Subtype Qualifier:	Administrative Amendment
Issue Date:	Not Reported
End Date:	Not Reported
Source Contact:	Not Reported
Application Received Start Date:	10/10/1995
Application Received End Date:	Not Reported
Public Notice Begins Start Date:	Not Reported
Public Notice Begins End Date:	Not Reported
Proposed Internet Upload Start Date:	Not Reported
Proposed Internet Upload End Date:	Not Reported
Status:	Issued
Source ID:	023-00015
Responsible Official Name:	Angie Lee
Responsible Official Phone:	317-234-4240
SIC Code:	3691
Permit ID:	023-4888-00015 (No Electronic File Exists)
Permit Level:	Construction
Subtype Qualifier:	Administrative Amendment
Issue Date:	10/03/1995
End Date:	Not Reported
Source Contact:	Not Reported
Application Received Start Date:	09/21/1995
Application Received End Date:	Not Reported
Public Notice Begins Start Date:	Not Reported
Public Notice Begins End Date:	Not Reported
Proposed Internet Upload Start Date:	Not Reported
Proposed Internet Upload End Date:	Not Reported

MAP FINDINGS

**EXIDE CORP/GENERAL BATTERY, 555 HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Status: Issued  
 Source ID: 023-00015  
 Responsible Official Name: Angie Lee  
 Responsible Official Phone: 317-234-4240  
 SIC Code: 3691  
 Permit ID: 023-4768-00015 (No Electronic File Exists)  
 Permit Level: Construction  
 Subtype Qualifier: Administrative Amendment  
 Issue Date: 09/06/1995  
 End Date: Not Reported  
 Source Contact: Not Reported  
 Application Received Start Date: 07/13/1995  
 Application Received End Date: Not Reported  
 Public Notice Begins Start Date: Not Reported  
 Public Notice Begins End Date: Not Reported  
 Proposed Internet Upload Start Date: Not Reported  
 Proposed Internet Upload End Date: Not Reported

Status: Issued  
 Source ID: 023-00015  
 Responsible Official Name: Angie Lee  
 Responsible Official Phone: 317-234-4240  
 SIC Code: 3691  
 Permit ID: 023-4735-00015 (No Electronic File Exists)  
 Permit Level: Construction  
 Subtype Qualifier: Administrative Amendment  
 Issue Date: 09/05/1995  
 End Date: Not Reported  
 Source Contact: Not Reported  
 Application Received Start Date: 07/28/1995  
 Application Received End Date: Not Reported  
 Public Notice Begins Start Date: Not Reported  
 Public Notice Begins End Date: Not Reported  
 Proposed Internet Upload Start Date: Not Reported  
 Proposed Internet Upload End Date: Not Reported

Status: Withdrawn  
 Source ID: 023-00015  
 Responsible Official Name: Penny Flickinger  
 Responsible Official Phone: 800-451-6027  
 SIC Code: 3691  
 Permit ID: 023-3396-00015 (No Electronic File Exists)  
 Permit Level: Construction  
 Subtype Qualifier: Registration  
 Issue Date: Not Reported  
 End Date: Not Reported  
 Source Contact: Not Reported  
 Application Received Start Date: 11/16/1993  
 Application Received End Date: Not Reported  
 Public Notice Begins Start Date: Not Reported  
 Public Notice Begins End Date: Not Reported

MAP FINDINGS

**EXIDE CORP/GENERAL BATTERY, 555 HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Proposed Internet Upload Start Date: Not Reported  
 Proposed Internet Upload End Date: Not Reported

**SPILL: Other Records**

Facility ID:	199005117
Incident Date:	05/15/1990
Report Date:	05/15/1990
Material:	Conc Sulferic Acid
Spill Source:	Industrial
Recovered Amount:	U
Recovered Units:	50.00
Spilled Amount:	50.00
Spilled Units:	U
Contained:	Y
Water Affected:	None
Spill Type:	Spill
Area Affected:	150 Sq Ft
Fish Killed:	0.00
Water Supply Affected:	Not Reported
Public Intake:	N
Incident Status:	Not Reported
Facility ID:	200510124
Incident Date:	10/18/2005
Report Date:	10/18/2005
Material:	FIRE SUPRESSION WATER
Spill Source:	Other
Recovered Amount:	Not Reported
Recovered Units:	Not Reported
Spilled Amount:	Not Reported
Spilled Units:	Not Reported
Contained:	Not Reported
Water Affected:	Not Reported
Spill Type:	Other
Area Affected:	PAVEMENT
Fish Killed:	Not Reported
Water Supply Affected:	Not Reported
Public Intake:	N
Incident Status:	Not Reported
Facility ID:	200710160
Incident Date:	10/26/2007
Report Date:	10/26/2007
Material:	demolition complaint
Spill Source:	Industrial
Recovered Amount:	Not Reported
Recovered Units:	Not Reported
Spilled Amount:	Not Reported
Spilled Units:	Not Reported
Contained:	Not Reported

MAP FINDINGS

**EXIDE CORP/GENERAL BATTERY, 555 HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Water Affected:	Not Reported
Spill Type:	Other
Area Affected:	Not Reported
Fish Killed:	Not Reported
Water Supply Affected:	Not Reported
Public Intake:	N
Incident Status:	Not Reported

MAP FINDINGS

EXIDE CORPORATION 555 N HOKE AVE, FRANKFORT, IN, 460410748		U003950991
▲ A8	Target Property	State and tribal leaking storage tank lists
	854 ft. Above Sea Level	State and tribal registered storage tank lists Other Records

**Worksheet:**

**UST: State and tribal registered storage tank lists**

Facility ID: 2282  
 Owner Id: 324  
 Company Name: General Battery Corp  
 Mailing Address: 645 Penn St  
 Mailing Address 2: Not Reported  
 Mailing City,St,Zip: Reading, PA 19601  
 Tank Number: 1  
**Tank Status: Permanently Out of Service**  
 Install Date: Not Reported  
 Tank Capacity: 10000  
 Substance Desc: Diesel  
 Closed Date: 10/01/1990

**IND WASTE: Other Records**

Regulatory: IND001647460  
 Program: HW  
 Reference: Access Point  
 Date Data Collect: 04/11/2002  
 Object ID: 221845

**LUST: State and tribal leaking storage tank lists**

Facility ID: 2282  
 Incident Number: 198703001  
 Description: NFA-Unconditional Closure  
 Priority: Low  
 Facility ID: 2282  
 Incident Number: 201404509  
 Description: NFA-Unconditional Closure  
 Priority: Medium  
 Facility ID: 2282  
 Incident Number: 201404505  
 Description: NFA-Unconditional Closure  
 Priority: Medium

MAP FINDINGS

EXIDE TECHNOLOGIES 555 N HOKE AVE, FRANKFORT, IN, 46041		1000185442
▲ A9	Target Property	Federal RCRA CORRACTS facilities list
	854 ft. Above Sea Level	Federal RCRA TSD facilities list Federal RCRA generators list Other Records

**Worksheet:**

**2020 COR ACTION: Other Records**

EPA ID: IND001647460  
 Region: 5  
 Action: Not Reported

**RCRA-SQG: Federal RCRA generators list**

Date form received by agency: 01/12/2016  
 Facility name: EXIDE TECHNOLOGIES  
 Facility address: 555 N HOKE AVE  
 FRANKFORT, IN 46041  
 EPA ID: IND001647460  
 Mailing address: W BARNER ST  
 FRANKFORT, IN 46041  
 Contact: DALE REYNOLDS  
 Contact address: W BARNER STREET  
 FRANKFORT, IN 46041  
 Contact country: US  
 Contact telephone: 765-654-6662  
 Contact email: DALE.REYNOLDS@EXIDE.COM  
 EPA Region: 05  
 Land type: Private  
 Classification: TSDF  
 Description: Handler is engaged in the treatment, storage or disposal of hazardous waste

**Owner/Operator Summary:**

Owner/operator name: EXIDE TECHNOLOGIES  
 Owner/operator address: DEERFIELD PARKWAY, BLDG 200  
 MILTON, GA 30004  
 Owner/operator country: US  
 Owner/operator telephone: (678) 566-9000  
 Legal status: Private  
 Owner/Operator Type: Owner  
 Owner/Op start date: 01/01/1983  
 Owner/Op end date: Not Reported  
 Owner/operator name: EXIDE TECHNOLOGIES  
 Owner/operator address: DEERFIELD PARKWAY, BLDG 200  
 MILTON, GA 30004  
 Owner/operator country: US



MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Owner/operator telephone: 678-566-9000  
 Legal status: Private  
 Owner/Operator Type: Operator  
 Owner/Op start date: 01/01/1983  
 Owner/Op end date: Not Reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No  
 Mixed waste (haz. and radioactive): No  
 Recycler of hazardous waste: No  
 Transporter of hazardous waste: No  
 Treater, storer or disposer of HW: No  
 Underground injection activity: No  
 On-site burner exemption: No  
 Furnace exemption: No  
 Used oil fuel burner: No  
 Used oil processor: No  
 User oil refiner: No  
 Used oil fuel marketer to burner: No  
 Used oil Specification marketer: No  
 Used oil transfer facility: No  
 Used oil transporter: No  
 . Waste code: D008  
 . Waste name: LEAD

**Historical Generators:**

Date form received by agency: 02/19/2014  
 Site name: EXIDE TECHNOLOGIES  
 Classification: Large Quantity Generator  
 . Waste code: D008  
 . Waste name: LEAD

Date form received by agency: 03/04/2013  
 Site name: EXIDE TECHNOLOGIES  
 Classification: Large Quantity Generator  
 . Waste code: D008  
 . Waste name: LEAD

Date form received by agency: 02/06/2012  
 Site name: EXIDE TECHNOLOGIES  
 Classification: Small Quantity Generator  
 . Waste code: D008  
 . Waste name: LEAD

Date form received by agency: 02/12/2010  
 Site name: EXIDE TECHNOLOGIES  
 Classification: Small Quantity Generator

Date form received by agency: 02/26/2009

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Site name:	EXIDE TECHNOLOGIES
Classification:	Large Quantity Generator
Date form received by agency:	02/12/2008
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	01/19/2007
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	02/01/2006
Site name:	EXIDE TECHNOLOGIES
Classification:	Large Quantity Generator
Date form received by agency:	02/14/2005
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	02/25/2004
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	01/02/2003
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	01/02/2003
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	08/14/2001
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
. Waste code:	D000
. Waste name:	Not Defined
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D008
. Waste name:	LEAD
Date form received by agency:	03/23/2001
Site name:	EXIDE CORP.
Classification:	Large Quantity Generator
Date form received by agency:	01/22/2001
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	02/27/1998
Site name:	EXIDE CORP

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Classification:	Large Quantity Generator
Date form received by agency:	02/27/1996
Site name:	EXIDE CORPORATION
Classification:	Large Quantity Generator
Date form received by agency:	02/09/1994
Site name:	EXIDE CORP
Classification:	Large Quantity Generator
Date form received by agency:	01/26/1994
Site name:	EXIDE TECHNOLOGIES
Classification:	Large Quantity Generator
Date form received by agency:	04/01/1992
Site name:	EXIDE CORPORATION
Classification:	Large Quantity Generator
Date form received by agency:	03/01/1990
Site name:	EXIDE CORP
Classification:	Large Quantity Generator
Date form received by agency:	11/19/1980
Site name:	EXIDE TECHNOLOGIES
Classification:	Not a generator, verified
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D008
. Waste name:	LEAD
Date form received by agency:	11/19/1980
Site name:	EXIDE TECHNOLOGIES
Classification:	Large Quantity Generator
Date form received by agency:	08/18/1980
Site name:	EXIDE TECHNOLOGIES
Classification:	Large Quantity Generator

**Corrective Action Summary:**

Event date:	03/31/1992
Event:	CA Prioritization, Facility or area was assigned a medium corrective action priority.

**Facility Has Received Notices of Violations:**

Regulation violated:	Not Reported
Area of violation:	Generators - Pre-transport
Date violation determined:	06/17/1997
Date achieved compliance:	02/13/2001
Violation lead agency:	State
Enforcement action:	PROPOSED AGREED ORDER (PAO) SENT
Enforcement action date:	06/23/1998
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Waste Pile Standards
Date violation determined:	06/17/1997
Date achieved compliance:	02/13/2001
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	07/27/1998
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	23625
Paid penalty amount:	23625
Regulation violated:	Not Reported
Area of violation:	TSD - Waste Pile Standards
Date violation determined:	06/17/1997
Date achieved compliance:	02/13/2001
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	02/03/1998
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Pre-transport
Date violation determined:	06/17/1997
Date achieved compliance:	02/13/2001
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	02/03/1998
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Pre-transport
Date violation determined:	06/17/1997
Date achieved compliance:	02/13/2001
Violation lead agency:	State

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	07/27/1998
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	23625
Paid penalty amount:	23625
Regulation violated:	Not Reported
Area of violation:	TSD - Waste Pile Standards
Date violation determined:	06/17/1997
Date achieved compliance:	02/13/2001
Violation lead agency:	State
Enforcement action:	PROPOSED AGREED ORDER (PAO) SENT
Enforcement action date:	06/23/1998
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General
Date violation determined:	01/15/1988
Date achieved compliance:	07/18/1988
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	03/16/1988
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - General
Date violation determined:	04/03/1986
Date achieved compliance:	08/04/1992
Violation lead agency:	State
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

MAP FINDINGS

EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)

Evaluation Action Summary:

Evaluation date:	04/06/2015
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/21/2010
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	01/14/2002
Evaluation:	FOCUSED COMPLIANCE INSPECTION
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/22/2001
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	02/13/2001
Evaluation:	NOT A SIGNIFICANT NON-COMPLIER
Area of violation:	TSD - Waste Pile Standards
Date achieved compliance:	02/13/2001
Evaluation lead agency:	State
Evaluation date:	02/13/2001
Evaluation:	NOT A SIGNIFICANT NON-COMPLIER
Area of violation:	Generators - Pre-transport
Date achieved compliance:	02/13/2001
Evaluation lead agency:	State
Evaluation date:	02/03/1998
Evaluation:	SIGNIFICANT NON-COMPLIER
Area of violation:	TSD - Waste Pile Standards
Date achieved compliance:	02/13/2001
Evaluation lead agency:	State
Evaluation date:	02/03/1998
Evaluation:	SIGNIFICANT NON-COMPLIER
Area of violation:	Generators - Pre-transport
Date achieved compliance:	02/13/2001
Evaluation lead agency:	State
Evaluation date:	06/17/1997
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Waste Pile Standards
Date achieved compliance:	02/13/2001

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Evaluation lead agency:	State
Evaluation date:	06/17/1997
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - Pre-transport
Date achieved compliance:	02/13/2001
Evaluation lead agency:	State
Evaluation date:	05/29/1997
Evaluation:	FOCUSED COMPLIANCE INSPECTION
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	01/17/1994
Evaluation:	FOCUSED COMPLIANCE INSPECTION
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/09/1988
Evaluation:	COMPLIANCE SCHEDULE EVALUATION
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	01/15/1988
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - General
Date achieved compliance:	07/18/1988
Evaluation lead agency:	State
Evaluation date:	04/03/1986
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - General
Date achieved compliance:	08/04/1992
Evaluation lead agency:	State

**RCRA-TSDF: Federal RCRA TSD facilities list**

Date form received by agency:	01/12/2016
Facility name:	EXIDE TECHNOLOGIES
Facility address:	555 N HOKE AVE FRANKFORT, IN 46041
EPA ID:	IND001647460
Mailing address:	W BARNER ST FRANKFORT, IN 46041
Contact:	DALE REYNOLDS
Contact address:	W BARNER STREET FRANKFORT, IN 46041
Contact country:	US
Contact telephone:	765-654-6662
Contact email:	DALE.REYNOLDS@EXIDE.COM



MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

EPA Region: 05  
 Land type: Private  
 Classification: TSDF  
 Description: Handler is engaged in the treatment, storage or disposal of hazardous waste

**Owner/Operator Summary:**

Owner/operator name: EXIDE TECHNOLOGIES  
 Owner/operator address: DEERFIELD PARKWAY, BLDG 200  
 MILTON, GA 30004

Owner/operator country: US  
 Owner/operator telephone: (678) 566-9000  
 Legal status: Private  
 Owner/Operator Type: Owner  
 Owner/Op start date: 01/01/1983  
 Owner/Op end date: Not Reported

Owner/operator name: EXIDE TECHNOLOGIES  
 Owner/operator address: DEERFIELD PARKWAY, BLDG 200  
 MILTON, GA 30004

Owner/operator country: US  
 Owner/operator telephone: 678-566-9000  
 Legal status: Private  
 Owner/Operator Type: Operator  
 Owner/Op start date: 01/01/1983  
 Owner/Op end date: Not Reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No  
 Mixed waste (haz. and radioactive): No  
 Recycler of hazardous waste: No  
 Transporter of hazardous waste: No  
 Treater, storer or disposer of HW: No  
 Underground injection activity: No  
 On-site burner exemption: No  
 Furnace exemption: No  
 Used oil fuel burner: No  
 Used oil processor: No  
 User oil refiner: No  
 Used oil fuel marketer to burner: No  
 Used oil Specification marketer: No  
 Used oil transfer facility: No  
 Used oil transporter: No  
 . Waste code: D008  
 . Waste name: LEAD

**Historical Generators:**

Date form received by agency: 02/19/2014  
 Site name: EXIDE TECHNOLOGIES

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Classification:	Large Quantity Generator
. Waste code:	D008
. Waste name:	LEAD
Date form received by agency:	03/04/2013
Site name:	EXIDE TECHNOLOGIES
Classification:	Large Quantity Generator
. Waste code:	D008
. Waste name:	LEAD
Date form received by agency:	02/06/2012
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
. Waste code:	D008
. Waste name:	LEAD
Date form received by agency:	02/12/2010
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	02/26/2009
Site name:	EXIDE TECHNOLOGIES
Classification:	Large Quantity Generator
Date form received by agency:	02/12/2008
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	01/19/2007
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	02/01/2006
Site name:	EXIDE TECHNOLOGIES
Classification:	Large Quantity Generator
Date form received by agency:	02/14/2005
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	02/25/2004
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	01/02/2003
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	01/02/2003
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	08/14/2001
Site name:	EXIDE TECHNOLOGIES

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Classification:	Small Quantity Generator
. Waste code:	D000
. Waste name:	Not Defined
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D008
. Waste name:	LEAD
Date form received by agency:	03/23/2001
Site name:	EXIDE CORP.
Classification:	Large Quantity Generator
Date form received by agency:	01/22/2001
Site name:	EXIDE TECHNOLOGIES
Classification:	Small Quantity Generator
Date form received by agency:	02/27/1998
Site name:	EXIDE CORP
Classification:	Large Quantity Generator
Date form received by agency:	02/27/1996
Site name:	EXIDE CORPORATION
Classification:	Large Quantity Generator
Date form received by agency:	02/09/1994
Site name:	EXIDE CORP
Classification:	Large Quantity Generator
Date form received by agency:	01/26/1994
Site name:	EXIDE TECHNOLOGIES
Classification:	Large Quantity Generator
Date form received by agency:	04/01/1992
Site name:	EXIDE CORPORATION
Classification:	Large Quantity Generator
Date form received by agency:	03/01/1990
Site name:	EXIDE CORP
Classification:	Large Quantity Generator
Date form received by agency:	11/19/1980
Site name:	EXIDE TECHNOLOGIES
Classification:	Not a generator, verified
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D008
. Waste name:	LEAD
Date form received by agency:	11/19/1980
Site name:	EXIDE TECHNOLOGIES

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Classification: Large Quantity Generator  
 Date form received by agency: 08/18/1980  
 Site name: EXIDE TECHNOLOGIES  
 Classification: Large Quantity Generator

**Corrective Action Summary:**

Event date: 03/31/1992  
 Event: CA Prioritization, Facility or area was assigned a medium corrective action priority.

**Facility Has Received Notices of Violations:**

Regulation violated: Not Reported  
 Area of violation: Generators - Pre-transport  
 Date violation determined: 06/17/1997  
 Date achieved compliance: 02/13/2001  
 Violation lead agency: State  
 Enforcement action: PROPOSED AGREED ORDER (PAO) SENT  
 Enforcement action date: 06/23/1998  
 Enf. disposition status: Not Reported  
 Enf. disp. status date: Not Reported  
 Enforcement lead agency: State  
 Proposed penalty amount: Not Reported  
 Final penalty amount: Not Reported  
 Paid penalty amount: Not Reported

Regulation violated: Not Reported  
 Area of violation: TSD - Waste Pile Standards  
 Date violation determined: 06/17/1997  
 Date achieved compliance: 02/13/2001  
 Violation lead agency: State  
 Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
 Enforcement action date: 07/27/1998  
 Enf. disposition status: Not Reported  
 Enf. disp. status date: Not Reported  
 Enforcement lead agency: State  
 Proposed penalty amount: Not Reported  
 Final penalty amount: 23625  
 Paid penalty amount: 23625

Regulation violated: Not Reported  
 Area of violation: TSD - Waste Pile Standards  
 Date violation determined: 06/17/1997  
 Date achieved compliance: 02/13/2001  
 Violation lead agency: State  
 Enforcement action: WRITTEN INFORMAL  
 Enforcement action date: 02/03/1998  
 Enf. disposition status: Not Reported  
 Enf. disp. status date: Not Reported  
 Enforcement lead agency: State  
 Proposed penalty amount: Not Reported

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Pre-transport
Date violation determined:	06/17/1997
Date achieved compliance:	02/13/2001
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	02/03/1998
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Pre-transport
Date violation determined:	06/17/1997
Date achieved compliance:	02/13/2001
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	07/27/1998
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	23625
Paid penalty amount:	23625
Regulation violated:	Not Reported
Area of violation:	TSD - Waste Pile Standards
Date violation determined:	06/17/1997
Date achieved compliance:	02/13/2001
Violation lead agency:	State
Enforcement action:	PROPOSED AGREED ORDER (PAO) SENT
Enforcement action date:	06/23/1998
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General
Date violation determined:	01/15/1988
Date achieved compliance:	07/18/1988
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	03/16/1988

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - General
Date violation determined:	04/03/1986
Date achieved compliance:	08/04/1992
Violation lead agency:	State
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

**Evaluation Action Summary:**

Evaluation date:	04/06/2015
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/21/2010
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	01/14/2002
Evaluation:	FOCUSED COMPLIANCE INSPECTION
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/22/2001
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	02/13/2001
Evaluation:	NOT A SIGNIFICANT NON-COMPLIER
Area of violation:	TSD - Waste Pile Standards
Date achieved compliance:	02/13/2001
Evaluation lead agency:	State

MAP FINDINGS
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**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Evaluation date:	02/13/2001
Evaluation:	NOT A SIGNIFICANT NON-COMPLIER
Area of violation:	Generators - Pre-transport
Date achieved compliance:	02/13/2001
Evaluation lead agency:	State
Evaluation date:	02/03/1998
Evaluation:	SIGNIFICANT NON-COMPLIER
Area of violation:	TSD - Waste Pile Standards
Date achieved compliance:	02/13/2001
Evaluation lead agency:	State
Evaluation date:	02/03/1998
Evaluation:	SIGNIFICANT NON-COMPLIER
Area of violation:	Generators - Pre-transport
Date achieved compliance:	02/13/2001
Evaluation lead agency:	State
Evaluation date:	06/17/1997
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Waste Pile Standards
Date achieved compliance:	02/13/2001
Evaluation lead agency:	State
Evaluation date:	06/17/1997
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - Pre-transport
Date achieved compliance:	02/13/2001
Evaluation lead agency:	State
Evaluation date:	05/29/1997
Evaluation:	FOCUSED COMPLIANCE INSPECTION
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	01/17/1994
Evaluation:	FOCUSED COMPLIANCE INSPECTION
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/09/1988
Evaluation:	COMPLIANCE SCHEDULE EVALUATION
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	01/15/1988
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - General
Date achieved compliance:	07/18/1988
Evaluation lead agency:	State



MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Evaluation date: 04/03/1986  
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
 Area of violation: Generators - General  
 Date achieved compliance: 08/04/1992  
 Evaluation lead agency: State

**CORRACTS: Federal RCRA CORRACTS facilities list**

EPA ID: IND001647460  
 EPA Region: 5  
 Area Name: ENTIRE FACILITY  
 Actual Date: 19920331  
 Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority  
 NAICS Code(s): 335911  
 Storage Battery Manufacturing  
 Original schedule date: Not Reported  
 Schedule end date: Not Reported

**ICIS: Other Records**

Enforcement Action ID: 05-2014-1004  
 FRS ID: 110000700313  
 Action Name: EXIDE TECHNOLOGIES GLOBAL SETTLEMENT (BOWERS BATTERY) BANKRUPTCY (CERCLA)  
 Facility Name: EXIDE CORPORATION  
 Facility Address: 555 N HOKE AVE  
 FRANKFORT, IN 46041

Enforcement Action Type: Bankruptcy  
 Facility County: CLINTON  
 Program System Acronym: RCRAINFO  
 Enforcement Action Forum Desc: Judicial  
 EA Type Code: BNK  
 Facility SIC Code: Not Reported  
 Federal Facility ID: Not Reported  
 Latitude in Decimal Degrees: 40.284304  
 Longitude in Decimal Degrees: -86.49623  
 Permit Type Desc: Not Reported  
 Program System Acronym: IND001647460  
 Facility NAICS Code: Not Reported  
 Tribal Land Code: Not Reported

Facility Name: EXIDE CORPORATION  
 Address: 555 N HOKE AVE  
 Tribal Indicator: N  
 Fed Facility: No  
 NAIC Code: Not Reported  
 SIC Code: Not Reported

Facility Name: EXIDE CORPORATION  
 Address: 555 N HOKE AVE  
 Tribal Indicator: N

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Facility Name:	EXIDE CORPORATION
Address:	555 N HOKE AVE
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Facility Name:	EXIDE CORPORATION
Address:	555 N HOKE AVE
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Facility Name:	EXIDE CORPORATION
Address:	555 N HOKE AVE
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Facility Name:	EXIDE CORPORATION
Address:	555 N HOKE AVE
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Facility Name:	EXIDE CORPORATION
Address:	555 N HOKE AVE
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Facility Name:	EXIDE CORPORATION
Address:	555 N HOKE AVE
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

**IN MANIFEST: Other Records**

Year:	2013
EPA ID:	IND001647460
Tons Generated:	921.5
Tons Shipped OffSite:	921.5

**Manifest Handler:**

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

EPA Id #: IND001647460  
 Generator Type: SQG  
 Generator Status: Active Handler  
 Transporter Type: Code no longer valid  
 Transporter Status: Non Active  
 TSD Type: Not Reported  
 TSD Status: Closed  
 Handler Mailing Address: 555 N HOKE AVE  
 Handler Mailing City/State/Zip: FRANKFORT, IN 46041  
 Contact Name: DALE REYNOLDS  
 Contact Telephone: 765-654-6662  
 Contact Type: Environmental Coordinator

**Submitted Records:**

EPA Id: IND001647460  
 Report Type: Biennial report  
 Contact Name: DALE REYNOLDS  
 Phone: 765-654-6662  
 Contact Address: 555 N HOKE AVE  
 Contact Address2: Not Reported  
 Contact City/State/Zip: FRANKFORT, IN 46041

**Waste Report:**

EPA Id: IND001647460  
 Report Type: Biennial report  
 Page #: 1  
 Amount Generated: 77186  
 Generated Unit Of Measure: pounds  
 Amount Shipped: 77186  
 Shipped Unit Of Measure: pounds  
 TSD Id: IND000717959  
 TSD Name: EXIDE TECHNOLOGIES  
 System Type: H010  
 Source Code: G19  
 Form Code: W316  
 Description: LEAD WITH ACUTE AND CHRONIC HAZARDS FROM PLANT CLEANUP INCLUDING FLOOR SWEEPINGS

Year: 2012  
 EPA ID: IND001647460  
 Tons Generated: 0.00  
 Tons Shipped OffSite: 538.04

Year: 2010  
 EPA ID: IND001647460  
 Tons Generated: 0.00  
 Tons Shipped OffSite: 1.55

Year: Not Reported  
 EPA ID: IND001647460

MAP FINDINGS

**EXIDE TECHNOLOGIES, 555 N HOKE AVE, FRANKFORT, IN 46041 (Continued)**

Tons Generated: Not Reported

Tons Shipped OffSite: Not Reported

Year: Not Reported

EPA ID: IND001647460

Tons Generated: Not Reported

Tons Shipped OffSite: Not Reported

The IN MANIFEST database contains 4 additional records for this site. Please contact your EDR Account Executive for more information.

MAP FINDINGS

GENERAL BATTERY FACTORY 555 HOKE AVE, FRANKFORT, IN,		S116004684
▲ A10	Target Property	Exclusive Recovered Govt. Archives
	854 ft. Above Sea Level	

**Worksheet:**

**RGA LUST: Exclusive Recovered Govt. Archives**

2000 GENERAL BATTERY FACTORY 555 HOKE AVE

MAP FINDINGS

INDIANA GAS/FRANKFORT MGP 500 HOKE AVE, FRANKFORT, IN, 46041		1008408233
▼ B11	SW <1/10 (199 ft. / 0.038 mi.)	Former Manufactured Gas Plants
	2 ft. Lower Elevation 852 ft. Above Sea Level	

**Worksheet:**

**Manufactured Gas Plants: Former Manufactured Gas Plants**

No additional information available

MAP FINDINGS

WAMPLER SERVICES INCORPORATED 1270 WASHINGTON AVE, FRANKFORT, IN, 46041-2134			S106199094
▼ 12	NW <1/10	(216 ft. / 0.041 mi.)	State and tribal landfill / solid waste disposal Other Records
	8 ft. Lower Elevation	846 ft. Above Sea Level	

**Worksheet:**

**SPILL: Other Records**

Facility ID:	200402141
Incident Date:	02/26/2004
Report Date:	02/26/2004
Material:	TRASH
Spill Source:	Commercial
Recovered Amount:	Not Reported
Recovered Units:	Not Reported
Spilled Amount:	Not Reported
Spilled Units:	Not Reported
Contained:	Not Reported
Water Affected:	Not Reported
Spill Type:	Other
Area Affected:	SOIL
Fish Killed:	Not Reported
Water Supply Affected:	Not Reported
Public Intake:	N
Incident Status:	Not Reported
Facility ID:	200711041
Incident Date:	Not Reported
Report Date:	11/09/2007
Material:	trash
Spill Source:	Commercial
Recovered Amount:	Not Reported
Recovered Units:	Not Reported
Spilled Amount:	Not Reported
Spilled Units:	Not Reported
Contained:	Not Reported
Water Affected:	Not Reported
Spill Type:	Other
Area Affected:	Not Reported
Fish Killed:	Not Reported
Water Supply Affected:	Not Reported
Public Intake:	N
Incident Status:	Not Reported

**LF: State and tribal landfill / solid waste disposal**

Facility ID:	Not Reported
Facility Type:	SOLID WASTE PROCESSING FACILITY - OTH
Facility Status:	Not Reported
SR No:	28



MAP FINDINGS

**WAMPLER SERVICES INCORPORATED, 1270 WASHINGTON AVE, FRANKFORT, IN 46041-2134 (Continued)**

Contact:	JOHN WAMPLER
Operating Num:	12-02
Date Closed:	Not Reported
Responsible Party:	JOHN WAMPLER
RP Phone:	765-659-3721
RP Address:	1270 WASHINGTON AVE
RP City,St,Zip:	FRANKFORT, IN 46041-2134
Contact Phone:	765-659-3721
Owner Name:	WAMPLER SERVICES INCORPORATED
Owner Type:	P
Permanent Expiration:	02/01/2019
Open To Public:	N

MAP FINDINGS

358 N HOKE AVE 358 N HOKE AVE, FRANKFORT, IN, 46041			1015447042
▲ 13	SSW <1/10	(336 ft. / 0.064 mi.)	Historical Gas Stations
	Equal Elevation	854 ft. Above Sea Level	

**Worksheet:**

**EDR Historical Auto Stations: Historical Gas Stations**

Name: JAYS CAR CARE  
Year: 2001  
Address: 358 N HOKE AVE

Name: JAYS CAR CARE  
Year: 2002  
Address: 358 N HOKE AVE

Name: JAYS CAR CARE  
Year: 2003  
Address: 358 N HOKE AVE

Name: JAYS CAR CARE  
Year: 2004  
Address: 358 N HOKE AVE

Name: JAYS CAR CARE  
Year: 2007  
Address: 358 N HOKE AVE

Name: JAYS CAR CARE  
Year: 2008  
Address: 358 N HOKE AVE

Name: JAYS CAR CARE  
Year: 2009  
Address: 358 N HOKE AVE

Name: JAYS CAR CARE  
Year: 2010  
Address: 358 N HOKE AVE

Name: JAYS CAR CARE  
Year: 2011  
Address: 358 N HOKE AVE

Name: JAYS CAR CARE  
Year: 2012  
Address: 358 N HOKE AVE

MAP FINDINGS

INDIANA GAS - FRANKFORT MGP 500 HOKE AVE., FRANKFORT, IN,		S105202416
▼ B14	SW <1/10	(404 ft. / 0.076 mi.)
	5 ft. Lower Elevation	849 ft. Above Sea Level
State and tribal voluntary cleanup sites		

**Worksheet:**

**VCP: State and tribal voluntary cleanup sites**

Status:	CNTS
VRP Id Number:	6980709
Applicant Name:	Indiana Gas Company
LandUse Restrictions/Institutional Controls:	Property shall not be used for residential purposes
Project Manager:	Robertson
Covenant Not To Sue Date:	05/24/2002
Certificate of Completion Date:	02/15/2002
New Coding Number:	VN0JP
App# Date:	07/09/1998
App# Acceptance:	Not Reported
VRA executed:	03/05/1999
RWP Received:	08/04/2000
RWP Approved:	03/01/2001
Comp Date:	Not Reported
Comments:	Not Reported

MAP FINDINGS

NORFOLK SOUTHERN RAILWAY CO 1601 W OHIO ST, FRANKFORT, IN, 46041		U001079080
▲ C15	SSE 1/10 - 1/3 (682 ft. / 0.129 mi.)	State and tribal leaking storage tank lists
	6 ft. Higher Elevation 860 ft. Above Sea Level	State and tribal registered storage tank lists

**Worksheet:**

**UST: State and tribal registered storage tank lists**

Facility ID: 10978  
 Owner Id: 343  
 Company Name: Norfolk & Western Railroad  
 Mailing Address: 8 N Jefferson  
 Mailing Address 2: Not Reported  
 Mailing City,St,Zip: Roanoke, VA 240420013

Tank Number: 1  
**Tank Status: Permanently Out of Service**  
 Install Date: Not Reported  
 Tank Capacity: 1000  
 Substance Desc: Diesel  
 Closed Date: 12/11/1990

Tank Number: 2  
**Tank Status: Permanently Out of Service**  
 Install Date: Not Reported  
 Tank Capacity: 10000  
 Substance Desc: Diesel  
 Closed Date: 08/05/1991

Tank Number: 3  
**Tank Status: Permanently Out of Service**  
 Install Date: Not Reported  
 Tank Capacity: 1000  
 Substance Desc: Gasoline  
 Closed Date: 12/11/1990

**LUST: State and tribal leaking storage tank lists**

Facility ID: 10978  
 Incident Number: 199503507  
 Description: Referred to another IDEM program  
 Priority: High

Facility ID: 10978  
 Incident Number: 199012537  
 Description: Referred to another IDEM program  
 Priority: Medium

Facility ID: 10978  
 Incident Number: 199108506  
 Description: Referred to another IDEM program

MAP FINDINGS

**NORFOLK SOUTHERN RAILWAY CO, 1601 W OHIO ST, FRANKFORT, IN 46041 (Continued)**

Priority:

Low

MAP FINDINGS

NORFOLK AND WESTERN RAILROAD 1601 W OHIO ST, FRANKFORT, IN, 46041		1004488553
▲ C16	SSE 1/10 - 1/3 (682 ft. / 0.129 mi.)	State and tribal voluntary cleanup sites Other Records
	6 ft. Higher Elevation 860 ft. Above Sea Level	

**Worksheet:**

**FINDS: Other Records**

Registry ID: 110032896472

**Environmental Interest/Information System:**

IN-FRS (Indiana - Facility Registry System). The Indiana Department of Environmental Management (IDEM) has implemented the Indiana-Facility Registry System (I-FRS). The I-FRS provides the interface and processes to link facility data monitored by multiple State and EPA program systems. In addition, I-FRS enables IDEM to reconcile environmental data and exchange it with EPA FRS using the electronic data exchange over the Network Node.

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Registry ID: 110058431629

**Environmental Interest/Information System:**

STATE MASTER

**ECHO: Other Records**

Envid: 1004488553  
 Registry ID: 110032896472  
 DFR URL: [http://echo.epa.gov/detailed\\_facility\\_report?fid=110032896472](http://echo.epa.gov/detailed_facility_report?fid=110032896472)

**RCRA NonGen / NLR: Other Records**

Date form received by agency: 07/01/2016  
 Facility name: NORFOLK AND WESTERN RAILROAD  
 Facility address: 1601 W OHIO ST  
 FRANKFORT, IN 46041  
 EPA ID: IND984918201  
 Mailing address: N 34TH ST  
 LOUISVILLE, KY 402122113  
 Contact: BRYAN SALLEY  
 Contact address: HALL ST  
 SAINT LOUIS, MO 63147  
 Contact country: US

MAP FINDINGS

**NORFOLK AND WESTERN RAILROAD, 1601 W OHIO ST, FRANKFORT, IN 46041 (Continued)**

Contact telephone: 404-740-9005  
 Contact email: BRYAN.SALLEY@NSCORP.COM  
 EPA Region: 05  
 Classification: Non-Generator  
 Description: Handler: Non-Generators do not presently generate hazardous waste

**Owner/Operator Summary:**

Owner/operator name: NORFOLK SOUTHERN RAILWAY COMPANY  
 Owner/operator address: PEACHTREE ST  
 ATLANTA, GA 30309

Owner/operator country: US  
 Owner/operator telephone: 404-529-1000  
 Legal status: Private  
 Owner/Operator Type: Operator  
 Owner/Op start date: 01/01/1900  
 Owner/Op end date: Not Reported

Owner/operator name: NORFOLK SOUTHERN RAILWAY COMPANY  
 Owner/operator address: PEACHTREE ST  
 ATLANTA, GA 30309

Owner/operator country: US  
 Owner/operator telephone: 404-529-1000  
 Legal status: Private  
 Owner/Operator Type: Owner  
 Owner/Op start date: 01/01/1900  
 Owner/Op end date: Not Reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No  
 Mixed waste (haz. and radioactive): No  
 Recycler of hazardous waste: No  
 Transporter of hazardous waste: No  
 Treater, storer or disposer of HW: No  
 Underground injection activity: No  
 On-site burner exemption: No  
 Furnace exemption: No  
 Used oil fuel burner: No  
 Used oil processor: No  
 User oil refiner: No  
 Used oil fuel marketer to burner: No  
 Used oil Specification marketer: No  
 Used oil transfer facility: No  
 Used oil transporter: No

. Waste code: D001  
 . Waste name: IGNITABLE WASTE

. Waste code: D008  
 . Waste name: LEAD



MAP FINDINGS

**NORFOLK AND WESTERN RAILROAD, 1601 W OHIO ST, FRANKFORT, IN 46041 (Continued)**

**Historical Generators:**

Date form received by agency: 08/13/1997  
 Site name: NORFOLK AND WESTERN RAILROAD  
 Classification: Conditionally Exempt Small Quantity Generator  
 . Waste code: D001  
 . Waste name: IGNITABLE WASTE  
 . Waste code: D008  
 . Waste name: LEAD  
 Violation Status: No violations found

**IN MANIFEST: Other Records**

Year: Not Reported  
 EPA ID: IND984918201  
 Tons Generated: Not Reported  
 Tons Shipped OffSite: Not Reported

**Manifest Handler:**

EPA Id #: IND984918201  
 Generator Type: CEG  
 Generator Status: Active Handler  
 Transporter Type: Code no longer valid  
 Transporter Status: Non Active  
 TSD Type: Not Reported  
 TSD Status: Not Reported  
 Handler Mailing Address: 575 N 34TH ST  
 Handler Mailing City/State/Zip: LOUISVILLE, KY 40212-2113  
 Contact Name: DAVID LEFLER  
 Contact Telephone: 502-775-4940  
 Contact Type: Environmental Coordinator

Year: Not Reported  
 EPA ID: IND984918201  
 Tons Generated: Not Reported  
 Tons Shipped OffSite: Not Reported

Year: Not Reported  
 EPA ID: IND984918201  
 Tons Generated: Not Reported  
 Tons Shipped OffSite: Not Reported

**VCP: State and tribal voluntary cleanup sites**

Status: Active  
 VRP Id Number: 6020104  
 Applicant Name: Norfolk Southern Railway Corp.  
 LandUse Restrictions/Institutional Controls: Not Reported  
 Project Manager: Green

MAP FINDINGS

**NORFOLK AND WESTERN RAILROAD, 1601 W OHIO ST, FRANKFORT, IN 46041 (Continued)**

Convenant Not To Sue Date:	Not Reported
Certificate of Completion Date:	Not Reported
New Coding Number:	V202W
App# Date:	01/11/2002
App# Acceptance:	Not Reported
VRA executed:	02/13/2002
RWP Received:	02/11/2005
RWP Approved:	Not Reported
Comp Date:	Not Reported
Comments:	Not Reported

MAP FINDINGS

FRANKFORT CITY LIGHT & POWER 1000 WASHINGTON AVE, FRANKFORT, IN, 46041		U003950710
▼ 17	W 1/10 - 1/3 (726 ft. / 0.137 mi.)	State and tribal leaking storage tank lists
	10 ft. Lower Elevation 844 ft. Above Sea Level	State and tribal registered storage tank lists Other Records

**Worksheet:**

**UST: State and tribal registered storage tank lists**

Facility ID: 1937  
 Owner Id: 1679  
 Company Name: Frankfort City Light & Power  
 Mailing Address: 1000 Washington Ave  
 Mailing Address 2: Not Reported  
 Mailing City,St,Zip: Frankfort, IN 46041

Tank Number: 1  
**Tank Status: Permanently Out of Service**  
 Install Date: Not Reported  
 Tank Capacity: 1000  
 Substance Desc: Gasoline  
 Closed Date: 05/01/1989

Tank Number: 11  
**Tank Status: Currently in use**  
 Install Date: Not Reported  
 Tank Capacity: 2000  
 Substance Desc: Gasoline  
 Closed Date: Not Reported

Tank Number: 12  
**Tank Status: Currently in use**  
 Install Date: Not Reported  
 Tank Capacity: 2000  
 Substance Desc: Diesel  
 Closed Date: Not Reported

Tank Number: 2  
**Tank Status: Permanently Out of Service**  
 Install Date: Not Reported  
 Tank Capacity: 500  
 Substance Desc: Gasoline  
 Closed Date: 05/01/1989

Tank Number: 3  
**Tank Status: Permanently Out of Service**  
 Install Date: Not Reported  
 Tank Capacity: 1000  
 Substance Desc: Diesel  
 Closed Date: 05/01/1989

MAP FINDINGS

FRANKFORT CITY LIGHT & POWER, 1000 WASHINGTON AVE, FRANKFORT, IN 46041 (Continued)

LUST: State and tribal leaking storage tank lists

Facility ID: 1937  
Incident Number: 199011572  
Description: NFA-Unconditional Closure  
Priority: Medium

NPDES: Other Records

NPDES Id: IN0029611  
Primary Facility Sic Code: Not Reported  
Primary Facility Sic Desc: Not Reported  
Facility Type Desc: Privately Owned Facility  
Permit Status Desc: Terminated  
MJR: Minor  
Issue Date: 10/17/1975  
Effective Date: 12/01/1975  
Expiration Date: 06/30/1980  
Latitude In Decimal Degrees: 40.283333  
Longitude In Decimal Degrees: -86.5  
DMR Cognizant Official: Not Reported  
DMR Cognizant Offcl Telephone: Not Reported  
Primary Facility Sic Code: Not Reported  
Primary Facility Sic Desc: Not Reported  
State Water Body Name: I  
Total Actual Average Flow (MGD): Not Reported  
Total App. Design Flow (MGD): Not Reported

MAP FINDINGS

FRANKFORT STREET DEPARTMENT Not Reported, , IN,		S114543451
▼ 18	NW 1/10 - 1/3 (1182 ft. / 0.224 mi.)	State and tribal landfill / solid waste disposal
	12 ft. Lower Elevation 842 ft. Above Sea Level	

**Worksheet:**

**SWTIRE: State and tribal landfill / solid waste disposal**

Regulatory: 012-P-00412  
 Program: WT  
 Reference: Access Point  
 Date Data Collected: 06/06/2002  
 Latitude: -86.49901244900  
 Longitude: 40.28891771600

MAP FINDINGS

CLINTON COUNTY LANDFILL 2700 N SR 39, FRANKFORT, IN, 46041		S106862087
▲ 19	SSW 1/10 - 1/3 (1577 ft. / 0.299 mi.)	State and tribal landfill / solid waste disposal Other Records
	6 ft. Higher Elevation 860 ft. Above Sea Level	

**Worksheet:**

**AIRS: Other Records**

Status:	Issued
Source ID:	023-00043
Responsible Official Name:	David Matousek
Responsible Official Phone:	317-232-8253
SIC Code:	4953
Permit ID:	023-36195-00043
Permit Level:	Title V
Subtype Qualifier:	Significant Permit Modification
Issue Date:	01/11/2016
End Date:	Not Reported
Source Contact:	Kevin Armstrong
Application Received Start Date:	08/27/2015
Application Received End Date:	Not Reported
Public Notice Begins Start Date:	11/17/2015
Public Notice Begins End Date:	12/17/2015
Proposed Internet Upload Start Date:	12/23/2015
Proposed Internet Upload End Date:	01/07/2016
Status:	Issued
Source ID:	023-00043
Responsible Official Name:	David Matousek
Responsible Official Phone:	317-232-8253
SIC Code:	4953
Permit ID:	023-36193-00043
Permit Level:	Title V
Subtype Qualifier:	Significant Source Mod. (Minor PSD/EO) (120)
Issue Date:	12/23/2015
End Date:	Not Reported
Source Contact:	Kevin Armstrong
Application Received Start Date:	08/27/2015
Application Received End Date:	Not Reported
Public Notice Begins Start Date:	11/17/2015
Public Notice Begins End Date:	12/17/2015
Proposed Internet Upload Start Date:	Not Reported
Proposed Internet Upload End Date:	Not Reported
Status:	Issued
Source ID:	023-00043
Responsible Official Name:	James Mackenzie
Responsible Official Phone:	317-233-2641
SIC Code:	4953
Permit ID:	023-32123-00043

MAP FINDINGS

**CLINTON COUNTY LANDFILL, 2700 N SR 39, FRANKFORT, IN 46041 (Continued)**

Permit Level:	Title V
Subtype Qualifier:	Renewal
Issue Date:	04/22/2013
End Date:	Not Reported
Source Contact:	Kevin Armstrong
Application Received Start Date:	07/17/2012
Application Received End Date:	Not Reported
Public Notice Begins Start Date:	02/19/2013
Public Notice Begins End Date:	03/21/2013
Proposed Internet Upload Start Date:	04/02/2013
Proposed Internet Upload End Date:	04/17/2013
Status:	Issued
Source ID:	023-00043
Responsible Official Name:	Deborah Cole
Responsible Official Phone:	317-234-5377
SIC Code:	4953
Permit ID:	023-28221-00043
Permit Level:	Title V
Subtype Qualifier:	Administrative Amendment
Issue Date:	07/17/2009
End Date:	Not Reported
Source Contact:	Kevin Armstrong
Application Received Start Date:	07/10/2009
Application Received End Date:	Not Reported
Public Notice Begins Start Date:	Not Reported
Public Notice Begins End Date:	Not Reported
Proposed Internet Upload Start Date:	Not Reported
Proposed Internet Upload End Date:	Not Reported
Status:	Issued
Source ID:	023-00043
Responsible Official Name:	Eastern Research Group
Responsible Official Phone:	919-468-7800
SIC Code:	4953
Permit ID:	023-25399-00043
Permit Level:	Title V
Subtype Qualifier:	Not Reported
Issue Date:	04/17/2008
End Date:	Not Reported
Source Contact:	Kevin Armstrong
Application Received Start Date:	10/12/2007
Application Received End Date:	Not Reported
Public Notice Begins Start Date:	02/14/2008
Public Notice Begins End Date:	03/15/2008
Proposed Internet Upload Start Date:	04/02/2008
Proposed Internet Upload End Date:	04/17/2008

**TIER 2: Other Records**

Facility Id:	15693
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MAP FINDINGS

**CLINTON COUNTY LANDFILL, 2700 N SR 39, FRANKFORT, IN 46041 (Continued)**

SIC Code: Not Reported  
 Chemical Name: Straight-run middle distillate  
 Chemical Info: CAS Num:64741442 Chemical Id: Submission Code:  
 More Chemical Info: Max Daily Amt: 10000 - 99999 Quantity: 365 Container Type: A - Above-Ground Tank  
 Location Description: 5000 gl tank W exterior of pole bldg #2  
 Storage Info: Storage Loc: Storage Loc2: Storage Loc3: Storage Loc4 Max Daily Amt: 10000 - 99999

Facility Id: 15693  
 SIC Code: Not Reported  
 Chemical Name: Straight-run middle distillate  
 Chemical Info: CAS Num:64741442 Chemical Id: Submission Code:  
 More Chemical Info: Max Daily Amt: 1000 - 4999 Quantity: 365 Container Type: A - Above-Ground Tank  
 Location Description: West of shop  
 Storage Info: Storage Loc: Storage Loc2: Storage Loc3: Storage Loc4 Max Daily Amt: 1000 - 4999

Facility Id: 15693  
 SIC Code: Not Reported  
 Chemical Name: Straight-run middle distillate  
 Chemical Info: CAS Num:64741442 Chemical Id: Submission Code:  
 More Chemical Info: Max Daily Amt: 1000 - 4999 Quantity: 365 Container Type: A - Above-Ground Tank  
 Location Description: West of shop  
 Storage Info: Storage Loc: Storage Loc2: Storage Loc3: Storage Loc4 Max Daily Amt: 1000 - 4999

Facility Id: 15693  
 SIC Code: Not Reported  
 Chemical Name: Straight-run middle distillate  
 Chemical Info: CAS Num:64741442 Chemical Id: Submission Code:  
 More Chemical Info: Max Daily Amt: 1000 - 4999 Quantity: 365 Container Type: A - Above-Ground Tank  
 Location Description: West of shop  
 Storage Info: Storage Loc: Storage Loc2: Storage Loc3: Storage Loc4 Max Daily Amt: 1000 - 4999

Facility Id: 15693

**LF: State and tribal landfill / solid waste disposal**

Facility ID: Not Reported  
 Facility Type: MUNICIPAL SOLID WASTE LANDFILL  
 Facility Status: Not Reported  
 SR No: 27  
 Contact: KEVIN ARMSTRONG  
 Operating Num: 12-01  
 Date Closed: Not Reported  
 Responsible Party: JOANNE FIRSTENBURG  
 RP Phone: 570-947-3209  
 RP Address: 865 WHEELER ST  
 RP City,St,Zip: CROWN POINT, IN 46307  
 Contact Phone: 317-283-7143  
 Owner Name: MIDWEST DISPOSAL OF INDIANA LLC  
 Owner Type: P  
 Permanent Expiration: 06/01/2020  
 Open To Public: Y

MAP FINDINGS

CLINTON COUNTY LANDFILL, 2700 N SR 39, FRANKFORT, IN 46041 (Continued)

MAP FINDINGS

CITY OF FRANKFORT STREET DEPT 905 BURLINGTON AVE, FRANKFORT, IN, 46041		U003950734
▼ D20	NW 1/10 - 1/3 (1588 ft. / 0.301 mi.)	State and tribal leaking storage tank lists
	7 ft. Lower Elevation 847 ft. Above Sea Level	State and tribal registered storage tank lists

**Worksheet:**

**UST: State and tribal registered storage tank lists**

Facility ID: 1971  
 Owner Id: 1681  
 Company Name: City Of Frankfort  
 Mailing Address: 301 E Clinton St  
 Mailing Address 2: Not Reported  
 Mailing City,St,Zip: Frankfort, IN 46041  
  
 Tank Number: 1  
**Tank Status: Permanently Out of Service**  
 Install Date: 01/01/1968  
 Tank Capacity: 2000  
 Substance Desc: Gasoline  
 Closed Date: 10/02/1997  
  
 Tank Number: 2  
**Tank Status: Permanently Out of Service**  
 Install Date: 01/01/1968  
 Tank Capacity: 1000  
 Substance Desc: Diesel  
 Closed Date: 10/02/1997  
  
 Tank Number: 3  
**Tank Status: Permanently Out of Service**  
 Install Date: 01/01/1968  
 Tank Capacity: 1000  
 Substance Desc: Gasoline  
 Closed Date: 10/02/1997  
  
 Tank Number: 4  
**Tank Status: Permanently Out of Service**  
 Install Date: 01/01/1968  
 Tank Capacity: 1000  
 Substance Desc: Diesel  
 Closed Date: 10/02/1997  
  
 Tank Number: 5  
**Tank Status: Permanently Out of Service**  
 Install Date: 01/01/1968  
 Tank Capacity: 1000  
 Substance Desc: Diesel  
 Closed Date: 10/02/1997

MAP FINDINGS

CITY OF FRANKFORT STREET DEPT, 905 BURLINGTON AVE, FRANKFORT, IN 46041 (Continued)

**LUST: State and tribal leaking storage tank lists**

Facility ID:	1971
Incident Number:	199803532
Description:	NFA-Unconditional Closure
Priority:	Low

MAP FINDINGS

SAFETY KLEEN 905 BURLINGTON, FRANKFORT, IN, -46041		S109950673
▼ D21	NW 1/10 - 1/3 (1588 ft. / 0.301 mi.)	State and tribal landfill / solid waste disposal
	7 ft. Lower Elevation 847 ft. Above Sea Level	

**Worksheet:**

**SWRCY: State and tribal landfill / solid waste disposal**

Program Company:	Not Reported
Program Contact Name:	Not Reported
Address:	Not Reported
City:	Not Reported
State:	Not Reported
Zip:	Not Reported
Contact Phone:	Not Reported
County:	Not Reported
Entity Type:	Not Reported
Sites Notes:	Not Reported
Customers:	Not Reported
Materials Accepted:	Household Hazardous Waste, Motor Oil
Website:	Not Reported
Contact Name:	Not Reported
Manufacturer:	Not Reported
Processor:	Not Reported
Broker:	Not Reported
Other:	Not Reported
Automotive Fluids:	Not Reported
Batteries:	Not Reported
Construction/Related Products:	Not Reported
Electronics/Related Products:	Not Reported
Glass:	Not Reported
Industrial Materials:	Not Reported
Metals:	Not Reported
Paper:	Not Reported
Plastics:	Not Reported
Rubber:	Not Reported
Textiles:	Not Reported
Wood/Organics:	Not Reported

MAP FINDINGS

FRANKFORT STREET DEPT. 905 BURLINGTON, FRANKFORT, IN, 46041		S109949886
▼ D22	NW 1/10 - 1/3 (1588 ft. / 0.301 mi.)	State and tribal landfill / solid waste disposal
	7 ft. Lower Elevation 847 ft. Above Sea Level	

**Worksheet:**

**SWRCY: State and tribal landfill / solid waste disposal**

Program Company:	City of Frankfort
Program Contact Name:	Ron Niemesh
Address:	16 N. Main Street
City:	Frankfort
State:	IN
Zip:	46041
Contact Phone:	765-659-2912
County:	Clinton
Entity Type:	City/town
Sites Notes:	Not Reported
Customers:	Not Reported
Materials Accepted:	#1 PETE, #2 HDPE Natural, Green Containers, AluminumCans, Steel Cans, Newspaper, Motor Oil
Website:	Not Reported
Contact Name:	Not Reported
Manufacturer:	Not Reported
Processor:	Not Reported
Broker:	Not Reported
Other:	Not Reported
Automotive Fluids:	Not Reported
Batteries:	Not Reported
Construction/Related Products:	Not Reported
Electronics/Related Products:	Not Reported
Glass:	Not Reported
Industrial Materials:	Not Reported
Metals:	Not Reported
Paper:	Not Reported
Plastics:	Not Reported
Rubber:	Not Reported
Textiles:	Not Reported
Wood/Organics:	Not Reported

MAP FINDINGS

INDIANA DEPT OF HIGHWAYS HOKE RD AND SR 28 E, FRANKFORT, IN, 46041		U003209487
▲ 23	S 1/10 - 1/3 (1691 ft. / 0.32 mi.)	State and tribal leaking storage tank lists
	5 ft. Higher Elevation 859 ft. Above Sea Level	

**Worksheet:**

**LUST: State and tribal leaking storage tank lists**

Facility ID: 20036  
 Incident Number: 198608011  
 Description: Discontinued (active)  
 Priority: Low

# RECORD SOURCES AND CURRENCY

To maintain currency of the following databases, EDR contacts the appropriate agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## ENVIRONMENTAL RECORDS

### **PRP:** Potentially Responsible Parties

Standard Environmental Record Source: Other Records

Search Distance: Property

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013

Source: EPA

Number of Days to Update: 3

Telephone: 202-564-6023

Last EDR Contact :04/25/2017

### **RMP:** Risk Management Plans

Standard Environmental Record Source: Other Records

Search Distance: Property

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017

Source: Environmental Protection Agency

Number of Days to Update: 57

Telephone: 202-564-8600

Last EDR Contact :04/21/2017

### **AIRS:** Permitted Sources & Emissions Listing

Standard Environmental Record Source: Other Records

Search Distance: Property

Current permitted sources and emissions inventory information.

Date of Government Version: 08/03/2016

Source: Department of Environmental Management

Number of Days to Update: 18

Telephone: 317-233-0185

Last EDR Contact :03/31/2017

### **AUL:** Sites with Restrictions

Standard Environmental Record Source: State and tribal institutional control / engineering control registries

Search Distance: Property

Activity and use limitations include both engineering controls and institutional controls. A listing of Comfort/Site Status Letter sites that have been issued with controls.

Date of Government Version: 11/02/2016

Source: Department of Environmental Management

Number of Days to Update: 46

Telephone: 317-232-8603

Last EDR Contact :02/27/2017

### **BROWNFIELDS:** Brownfields Site List

Standard Environmental Record Source: State and tribal Brownfields sites



## RECORD SOURCES AND CURRENCY

Search Distance: 0.333 Mile

A brownfield site is an industrial or commercial property that is abandoned, inactive, or underutilized, on which expansion or redevelopment is complicated due to the actual or perceived environmental contamination.

Date of Government Version: 09/06/2016

Source: Department of Environmental Management

Number of Days to Update: 46

Telephone: 317-233-2570

Last EDR Contact :02/27/2017

### **BULK:** Registered Bulk Fertilizer and Pesticide Storage Facilities

Standard Environmental Record Source: Other Records

Search Distance: Property

A listing of registered dry or liquid bulk fertilizer and pesticide storage facilities.

Date of Government Version: 04/01/2015

Source: Office of Indiana State Chemist

Number of Days to Update: 15

Telephone: 765-494-0579

Last EDR Contact :03/31/2017

### **CDL:** Clandestine Drug Lab Listing

Standard Environmental Record Source: Other Records

Search Distance: Property

A listing of clandestine drug labs that have been cleaned up.

Date of Government Version: 08/29/2016

Source: Department of Environmental Management

Number of Days to Update: 15

Telephone: 317-416-5031

Last EDR Contact :04/10/2017

### **CFO:** Confined Feeding Operations

Standard Environmental Record Source: Other Records

Search Distance: Property

This dataset consists of Confined Feeding Operations - i.e. A swine, chicken, turkey, beef or dairy agri-business that has large enough numbers of animals that IDEM regulates for environmental concerns, as defined by IC 13-18-10 of the Indiana Code.

Date of Government Version: 09/03/2013

Source: Department of Environmental Management

Number of Days to Update: 37

Telephone: 317-232-8726

Last EDR Contact :12/12/2014

### **COAL ASH:** Coal Ash Disposal Sites

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

A listing of coal ash disposal site locations.

Date of Government Version: 11/19/2016

Source: Department of Environmental Management

Number of Days to Update: 16

Telephone: 317-233-4624

Last EDR Contact :03/17/2017

### **DEL SHWS:** Deleted Commissioner's Bulletin Sites List

Standard Environmental Record Source: State and tribal - equivalent CERCLIS

Search Distance: 0.333 Mile

A listing of sites deleted/removed from the Commissioner's Bulletin List

Date of Government Version: 04/03/2008

Source: Department of Environmental Management

## RECORD SOURCES AND CURRENCY

Number of Days to Update: 10  
Last EDR Contact :02/27/2017

Telephone: 317-234-0347

### **DRYCLEANERS:** Drycleaner Facility Listing

Standard Environmental Record Source: Other Records  
Search Distance: 0.25 Mile

A list of drycleaners involved in the Indiana 5-Star Environmental Recognition Program. It is a voluntary program that ranks participating drycleaners on a scale of one to five stars. The program recognizes those drycleaners willing to do more for the environment and worker safety than the rules require. These drycleaners are going above and beyond the rules to protect the environment, their employees and their neighbors and customers.

Date of Government Version: 06/27/2016  
Number of Days to Update: 48  
Last EDR Contact :03/13/2017

Source: Department of Environmental Management  
Telephone: 800-988-7901

### **IN MANIFEST:** Manifest Data

Standard Environmental Record Source: Other Records  
Search Distance: Property

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2015  
Number of Days to Update: 13  
Last EDR Contact :04/07/2017

Source: Department of Environmental Management  
Telephone: 317-233-4624

### **IND WASTE:** Industrial Waste Sites Listing

Standard Environmental Record Source: Other Records  
Search Distance: Property

The listing contains industrial waste site locations in Indiana, provided by personnel of Indiana Department of Environmental Management, Office of Land Quality.

Date of Government Version: 08/04/2015  
Number of Days to Update: 28  
Last EDR Contact :03/10/2017

Source: Department of Environmental Management  
Telephone: 317-232-8726

### **LUST:** Lust Leaking Underground Storage Tank List

Standard Environmental Record Source: State and tribal leaking storage tank lists  
Search Distance: 0.333 Mile

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 11/01/2016  
Number of Days to Update: 50  
Last EDR Contact :02/28/2017

Source: Department of Environmental Management  
Telephone: 317-232-8900

### **NPDES:** NPDES Permit Listing

Standard Environmental Record Source: Other Records  
Search Distance: Property

A listing of active NPDES Permit Section facility locations.

Date of Government Version: 10/11/2016  
Number of Days to Update: 100  
Last EDR Contact :04/10/2017

Source: Department of Environmental Management  
Telephone: 317-233-0676

## RECORD SOURCES AND CURRENCY

### **OISC:** Office of Indiana State Chemist Database

Standard Environmental Record Source: Other Records

Search Distance: Property

Restricted use pesticide dealers and pesticide & fertilizer applicators.

Date of Government Version: 12/19/2016

Source: Office of Indiana State Chemist & Seed

Number of Days to Update: 51

Telephone: 765-494-1492

Last EDR Contact :03/21/2017

### **OPEN DUMPS:** Open Dump Waste Sites

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

Search Distance: 0.333 Mile

Open Dumps are sites that are not regulated and are illegal dump sites of solid waste, as defined by IAC 10-2-28 329 and IAC 10-2-128 of the Indiana Administrative Code.

Date of Government Version: 06/26/2009

Source: Department of Environmental Management

Number of Days to Update: 40

Telephone: 317-232-8726

Last EDR Contact :03/10/2017

### **SCP:** State Cleanup Program Sites

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

The goals for the State Cleanup Section are to mitigate risk to human health and the environment.

Date of Government Version: 08/29/2016

Source: Department of Environmental Management

Number of Days to Update: 52

Telephone: 317-233-0068

Last EDR Contact :04/10/2017

### **SHWS:** List of Hazardous Waste Response Sites Scored Using the Indiana Scoring Model

Standard Environmental Record Source: State and tribal - equivalent CERCLIS

Search Distance: 0.333 Mile

List of hazardous waste response sites scored utilizing the Indiana Scoring Model. The Indiana Scoring Model is a method of prioritizing, for state response actions, those hazardous substances response sites which are not on the National Priorities List. The ISM serves as the Commissioners management tool to address those sites which pose the most significant threat to human health and the environment in addition to assuring the departments resources are allocated accordingly.

Date of Government Version: 03/01/2007

Source: Department of Environmental Management

Number of Days to Update: 22

Telephone: 317-308-3052

Last EDR Contact :02/27/2017

### **SPILLS:** Spills Incidents

Standard Environmental Record Source: Other Records

Search Distance: Property

Oil, hazardous, or objectionable materials that may be released to soil and water.

Date of Government Version: 11/01/2016

Source: Department of Environmental Management

Number of Days to Update: 50

Telephone: 317-308-3038

Last EDR Contact :02/28/2017

### **SWF/LF:** Permitted Solid Waste Facilities

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

## RECORD SOURCES AND CURRENCY

Search Distance: 0.333 Mile

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/16/2016

Source: Department of Environmental Management

Number of Days to Update: 100

Telephone: 317-232-0066

Last EDR Contact :03/13/2017

### **SWRCY:** Recycling Facilities

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

Search Distance: 0.333 Mile

A listing of recycling facilities located in the state of Indiana.

Date of Government Version: 05/01/2014

Source: Department of Environmental Management

Number of Days to Update: 46

Telephone: 317-234-4050

Last EDR Contact :04/17/2017

### **SWTIRE:** Waste Tire Sites Listing

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

Search Distance: 0.333 Mile

This listing consists of Tire Sites - sites which contain tires - either for processing, for storage, or transport - as well as some illegal tire dumps, as defined by IC 13-11-2-251, IC 13-11-2-252, and IC 13-11-250.5 of the Indiana Code.

Date of Government Version: 08/04/2015

Source: Department of Environmental Management

Number of Days to Update: 28

Telephone: 317-232-8726

Last EDR Contact :03/10/2017

### **TIER 2:** Tier 2 Facility Listing

Standard Environmental Record Source: Other Records

Search Distance: Property

A listing of facilities which store or manufacture hazardous materials that submit a chemical inventory report.

Date of Government Version: 12/31/2015

Source: Department of Environmental Management

Number of Days to Update: 73

Telephone: 317-233-0066

Last EDR Contact :02/27/2017

### **UIC:** UIC Site Listing

Standard Environmental Record Source: Other Records

Search Distance: Property

A listing of class II well locations

Date of Government Version: 12/12/2016

Source: Department of Natural Resources

Number of Days to Update: 36

Telephone: 317-232-0045

Last EDR Contact :02/27/2017

### **UST:** Indiana Registered Underground Storage Tanks

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

## RECORD SOURCES AND CURRENCY

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 11/01/2016  
Number of Days to Update: 50  
Last EDR Contact :02/28/2017

Source: Department of Environmental Management  
Telephone: 317-308-3008

### **VCP:** Voluntary Remediation Program Site List

Standard Environmental Record Source: State and tribal voluntary cleanup sites  
Search Distance: 0.333 Mile

A current list of Voluntary Remediation Program sites that are no longer confidential.

Date of Government Version: 08/22/2014  
Number of Days to Update: 21  
Last EDR Contact :04/10/2017

Source: Department of Environmental Management  
Telephone: 317-234-0966

### **2020 COR ACTION:** 2020 Corrective Action Program List

Standard Environmental Record Source: Other Records  
Search Distance: 0.25 Mile

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013  
Number of Days to Update: 6  
Last EDR Contact :02/10/2017

Source: Environmental Protection Agency  
Telephone: 703-308-4044

### **ABANDONED MINES:** Abandoned Mines

Standard Environmental Record Source: Other Records  
Search Distance: 0.333 Mile

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017  
Number of Days to Update: 21  
Last EDR Contact :03/13/2017

Source: Department of Interior  
Telephone: 202-208-2609

### **COAL ASH DOE:** Steam-Electric Plant Operation Data

Standard Environmental Record Source: Other Records  
Search Distance: Property

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005  
Number of Days to Update: 76  
Last EDR Contact :03/06/2017

Source: Department of Energy  
Telephone: 202-586-8719

### **COAL ASH EPA:** Coal Combustion Residues Surface Impoundments List

Standard Environmental Record Source: Other Records

## RECORD SOURCES AND CURRENCY

Search Distance: 0.333 Mile

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014

Source: Environmental Protection Agency

Number of Days to Update: 40

Telephone: Not Reported

Last EDR Contact :03/06/2017

### **CONSENT:** Superfund (CERCLA) Consent Decrees

Standard Environmental Record Source: Federal NPL site list

Search Distance: 0.333 Mile

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016

Source: Department of Justice, Consent Decree Library

Number of Days to Update: 77

Telephone: Varies

Last EDR Contact :03/27/2017

### **CORRACTS:** Corrective Action Report

Standard Environmental Record Source: Federal RCRA CORRACTS facilities list

Search Distance: 0.333 Mile

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2016

Source: EPA

Number of Days to Update: 44

Telephone: 800-424-9346

Last EDR Contact :03/02/2017

### **DEBRIS REGION 9:** Torres Martinez Reservation Illegal Dump Site Locations

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

Search Distance: 0.333 Mile

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009

Source: EPA, Region 9

Number of Days to Update: 137

Telephone: 415-947-4219

Last EDR Contact :04/24/2017

### **DOCKET HWC:** Hazardous Waste Compliance Docket Listing

Standard Environmental Record Source: Other Records

Search Distance: Property

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016

Source: Environmental Protection Agency

Number of Days to Update: 91

Telephone: 202-564-0527

Last EDR Contact :02/24/2017

### **DOT OPS:** Incident and Accident Data

Standard Environmental Record Source: Other Records

Search Distance: Property

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012

Source: Department of Transportation, Office of Pipeline Safety

## RECORD SOURCES AND CURRENCY

Number of Days to Update: 42  
Last EDR Contact :02/01/2017

Telephone: 202-366-4595

### **Delisted NPL:** National Priority List Deletions

Standard Environmental Record Source: Other Records  
Search Distance: 0.333 Mile

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/05/2016  
Number of Days to Update: 29  
Last EDR Contact :04/21/2017

Source: EPA  
Telephone: Not Reported

### **ECHO:** Enforcement & Compliance History Information

Standard Environmental Record Source: Other Records  
Search Distance: Property

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 12/11/2016  
Number of Days to Update: 59  
Last EDR Contact :03/21/2017

Source: Environmental Protection Agency  
Telephone: 202-564-2280

### **EPA WATCH LIST:** EPA WATCH LIST

Standard Environmental Record Source: Other Records  
Search Distance: Property

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013  
Number of Days to Update: 88  
Last EDR Contact :02/03/2017

Source: Environmental Protection Agency  
Telephone: 617-520-3000

### **ERNS:** Emergency Response Notification System

Standard Environmental Record Source: Federal ERNS list  
Search Distance: Property

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016  
Number of Days to Update: 43  
Last EDR Contact :03/29/2017

Source: National Response Center, United States Coast Guard  
Telephone: 202-267-2180

### **FEMA UST:** Underground Storage Tank Listing

Standard Environmental Record Source: State and tribal registered storage tank lists  
Search Distance: Property

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010

Source: FEMA

## RECORD SOURCES AND CURRENCY

Number of Days to Update: 55  
Last EDR Contact :04/11/2017

Telephone: 202-646-5797

**FINDS:** Facility Index System/Facility Registry System

Standard Environmental Record Source: Other Records  
Search Distance: Property

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/15/2016  
Number of Days to Update: 65  
Last EDR Contact :04/07/2017

Source: EPA  
Telephone: Not Reported

**FTTS:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Standard Environmental Record Source: Other Records  
Search Distance: Property

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009  
Number of Days to Update: 25  
Last EDR Contact :02/17/2017

Source: EPA/Office of Prevention, Pesticides and Toxic Substances  
Telephone: 202-566-1667

**FTTS INSP:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Standard Environmental Record Source: Other Records  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009  
Number of Days to Update: 25  
Last EDR Contact :02/17/2017

Source: EPA  
Telephone: 202-566-1667

**FUDS:** Formerly Used Defense Sites

Standard Environmental Record Source: Other Records  
Search Distance: 0.333 Mile

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015  
Number of Days to Update: 97  
Last EDR Contact :02/24/2017

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285

**FUELS PROGRAM:** EPA Fuels Program Registered Listing

Standard Environmental Record Source: Other Records  
Search Distance: Property

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/21/2016

Source: EPA



## RECORD SOURCES AND CURRENCY

Number of Days to Update: 73  
Last EDR Contact :02/22/2017

Telephone: 800-385-6164

**FUSRAP:** Formerly Utilized Sites Remedial Action Program  
Standard Environmental Record Source: Other Records  
Search Distance: 0.333 Mile

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016  
Number of Days to Update: 52  
Last EDR Contact :02/03/2017

Source: Department of Energy  
Telephone: 202-586-3559

**HIST FTTS:** FIFRA/TSCA Tracking System Administrative Case Listing  
Standard Environmental Record Source: Other Records  
Search Distance: Property

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Number of Days to Update: 40  
Last EDR Contact :12/17/2007

Source: Environmental Protection Agency  
Telephone: 202-564-2501

**HMIRS:** Hazardous Materials Information Reporting System  
Standard Environmental Record Source: Other Records  
Search Distance: Property

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016  
Number of Days to Update: 37  
Last EDR Contact :03/29/2017

Source: U.S. Department of Transportation  
Telephone: 202-366-4555

**ICIS:** Integrated Compliance Information System  
Standard Environmental Record Source: Other Records  
Search Distance: Property

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016  
Number of Days to Update: 79  
Last EDR Contact :04/10/2017

Source: Environmental Protection Agency  
Telephone: 202-564-2501

**INDIAN LUST R1:** Leaking Underground Storage Tanks on Indian Land  
Standard Environmental Record Source: State and tribal leaking storage tank lists  
Search Distance: 0.333 Mile

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015  
Number of Days to Update: 67

Source: EPA Region 1  
Telephone: 617-918-1313

## RECORD SOURCES AND CURRENCY

Last EDR Contact :01/26/2017

**INDIAN LUST R10:** Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016

Source: EPA Region 10

Number of Days to Update: 41

Telephone: 206-553-2857

Last EDR Contact :01/26/2017

**INDIAN LUST R4:** Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists  
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016

Source: EPA Region 4

Number of Days to Update: 35

Telephone: 404-562-8677

Last EDR Contact :01/24/2017

**INDIAN LUST R5:** Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists  
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016

Source: EPA, Region 5

Number of Days to Update: 37

Telephone: 312-886-7439

Last EDR Contact :01/26/2017

**INDIAN LUST R6:** Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists  
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015

Source: EPA Region 6

Number of Days to Update: 105

Telephone: 214-665-6597

Last EDR Contact :01/26/2017

**INDIAN LUST R7:** Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015

Source: EPA Region 7

Number of Days to Update: 112

Telephone: 913-551-7003

Last EDR Contact :01/26/2017

**INDIAN LUST R8:** Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists  
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015

Source: EPA Region 8

Number of Days to Update: 118

Telephone: 303-312-6271

Last EDR Contact :01/26/2017

**INDIAN LUST R9:** Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists  
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

## RECORD SOURCES AND CURRENCY

Date of Government Version: 02/25/2016  
Number of Days to Update: 37  
Last EDR Contact :01/26/2017

Source: Environmental Protection Agency  
Telephone: 415-972-3372

**INDIAN ODI:** Report on the Status of Open Dumps on Indian Lands

Standard Environmental Record Source: Other Records  
Search Distance: 0.333 Mile

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Number of Days to Update: 52  
Last EDR Contact :10/31/2016

Source: Environmental Protection Agency  
Telephone: 703-308-8245

**INDIAN UST R1:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists  
Search Distance: Property

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015  
Number of Days to Update: 67  
Last EDR Contact :01/26/2017

Source: EPA, Region 1  
Telephone: 617-918-1313

**INDIAN UST R10:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016  
Number of Days to Update: 41  
Last EDR Contact :01/26/2017

Source: EPA Region 10  
Telephone: 206-553-2857

**INDIAN UST R4:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016  
Number of Days to Update: 35  
Last EDR Contact :01/24/2017

Source: EPA Region 4  
Telephone: 404-562-9424

**INDIAN UST R5:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015  
Number of Days to Update: 52  
Last EDR Contact :01/26/2017

Source: EPA Region 5  
Telephone: 312-886-6136

**INDIAN UST R6:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

## RECORD SOURCES AND CURRENCY

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015

Source: EPA Region 6

Number of Days to Update: 120

Telephone: 214-665-7591

Last EDR Contact :01/26/2017

### **INDIAN UST R7:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014

Source: EPA Region 7

Number of Days to Update: 65

Telephone: 913-551-7003

Last EDR Contact :01/26/2017

### **INDIAN UST R8:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016

Source: EPA Region 8

Number of Days to Update: 119

Telephone: 303-312-6137

Last EDR Contact :01/26/2017

### **INDIAN UST R9:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016

Source: EPA Region 9

Number of Days to Update: 37

Telephone: 415-972-3368

Last EDR Contact :01/26/2017

### **INDIAN VCP R1:** Voluntary Cleanup Priority Listing

Standard Environmental Record Source: State and tribal voluntary cleanup sites

Search Distance: Property

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015

Source: EPA, Region 1

Number of Days to Update: 142

Telephone: 617-918-1102

Last EDR Contact :03/27/2017

### **INDIAN VCP R7:** Voluntary Cleanup Priority Listing

Standard Environmental Record Source: State and tribal voluntary cleanup sites

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008

Source: EPA, Region 7

Number of Days to Update: 27

Telephone: 913-551-7365

Last EDR Contact :04/20/2009

### **LEAD SMELTER 1:** Lead Smelter Sites

Standard Environmental Record Source: Other Records

Search Distance: Property

## RECORD SOURCES AND CURRENCY

A listing of former lead smelter site locations.

Date of Government Version: 12/05/2016

Source: Environmental Protection Agency

Number of Days to Update: 36

Telephone: 703-603-8787

Last EDR Contact :04/21/2017

### **LEAD SMELTER 2:** Lead Smelter Sites

Standard Environmental Record Source: Other Records

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001

Source: American Journal of Public Health

Number of Days to Update: 36

Telephone: 703-305-6451

Last EDR Contact :12/02/2009

### **LIENS 2:** CERCLA Lien Information

Standard Environmental Record Source: Federal CERCLIS list

Search Distance: Property

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014

Source: Environmental Protection Agency

Number of Days to Update: 37

Telephone: 202-564-6023

Last EDR Contact :04/21/2017

### **LUCIS:** Land Use Control Information System

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: 0.333 Mile

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/28/2016

Source: Department of the Navy

Number of Days to Update: 93

Telephone: 843-820-7326

Last EDR Contact :02/13/2017

### **MLTS:** Material Licensing Tracking System

Standard Environmental Record Source: Other Records

Search Distance: Property

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016

Source: Nuclear Regulatory Commission

Number of Days to Update: 43

Telephone: 301-415-7169

Last EDR Contact :02/03/2017

### **NPL:** National Priority List

Standard Environmental Record Source: Federal NPL site list

Search Distance: 0.333 Mile

## RECORD SOURCES AND CURRENCY

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/05/2016

Source: EPA

Number of Days to Update: 29

Telephone: Not Reported

Last EDR Contact :04/21/2017

### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-566-0690

EPA Region 1  
Telephone: 617-918-1102

EPA Region 2  
Telephone: 212-637-4293

EPA Region 3  
Telephone: 215-814-5418

EPA Region 4  
Telephone: 404-562-8681

EPA Region 5  
Telephone: 312-353-1063

EPA Region 6  
Telephone: 214-655-6659

EPA Region 7  
Telephone: 913-551-7247

EPA Region 8  
Telephone: 303-312-6118

EPA Region 9  
Telephone: 415-947-4579

EPA Region 10  
Telephone: 206-553-4479

### **NPL LIENS: Federal Superfund Liens**

Standard Environmental Record Source: Federal NPL site list

Search Distance: Property

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991

Source: EPA

Number of Days to Update: 56

Telephone: 202-564-4267

Last EDR Contact :08/15/2011

### **ODI: Open Dump Inventory**

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985

Source: Environmental Protection Agency

Number of Days to Update: 39

Telephone: 800-424-9346

## RECORD SOURCES AND CURRENCY

Last EDR Contact :06/09/2004

**PADS:** PCB Activity Database System

Standard Environmental Record Source: Other Records

Search Distance: Property

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016

Source: EPA

Number of Days to Update: 127

Telephone: 202-566-0500

Last EDR Contact :04/10/2017

**PCB TRANSFORMER:** PCB Transformer Registration Database

Standard Environmental Record Source: Other Records

Search Distance: Property

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011

Source: Environmental Protection Agency

Number of Days to Update: 83

Telephone: 202-566-0517

Last EDR Contact :01/29/2016

**Proposed NPL:** Proposed National Priority List Sites

Standard Environmental Record Source: Federal NPL site list

Search Distance: 0.333 Mile

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet their requirements for listing.

Date of Government Version: 12/05/2016

Source: EPA

Number of Days to Update: 29

Telephone: Not Reported

Last EDR Contact :04/21/2017

**RAATS:** RCRA Administrative Action Tracking System

Standard Environmental Record Source: Other Records

Search Distance: Property

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995

Source: EPA

Number of Days to Update: 35

Telephone: 202-564-4104

Last EDR Contact :06/02/2008

**RADINFO:** Radiation Information Database

Standard Environmental Record Source: Other Records

Search Distance: Property

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/04/2017

Source: Environmental Protection Agency

Number of Days to Update: 35

Telephone: 202-343-9775

## RECORD SOURCES AND CURRENCY

Last EDR Contact :04/06/2017

### **RCRA NonGen / NLR:** RCRA - Non Generators / No Longer Regulated

Standard Environmental Record Source: Other Records

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/12/2016

Source: Environmental Protection Agency

Number of Days to Update: 44

Telephone: 703-308-8895

Last EDR Contact :03/02/2017

### **RCRA-CESQG:** RCRA - Conditionally Exempt Small Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016

Source: Environmental Protection Agency

Number of Days to Update: 44

Telephone: 703-308-8895

Last EDR Contact :03/02/2017

### **RCRA-LQG:** RCRA - Large Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016

Source: Environmental Protection Agency

Number of Days to Update: 44

Telephone: 703-308-8895

Last EDR Contact :03/02/2017

### **RCRA-SQG:** RCRA - Small Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/12/2016

Source: Environmental Protection Agency

Number of Days to Update: 44

Telephone: 703-308-8895

Last EDR Contact :03/02/2017

### **RCRA-TSDF:** RCRA - Treatment, Storage and Disposal

Standard Environmental Record Source: Federal RCRA TSD facilities list

Search Distance: 0.333 Mile



## RECORD SOURCES AND CURRENCY

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/12/2016

Source: Environmental Protection Agency

Number of Days to Update: 44

Telephone: 703-308-8895

Last EDR Contact :03/02/2017

### **ROD:** Records Of Decision

Standard Environmental Record Source: Federal NPL site list

Search Distance: 0.333 Mile

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013

Source: EPA

Number of Days to Update: 74

Telephone: 703-416-0223

Last EDR Contact :03/06/2017

### **SCRD DRYCLEANERS:** State Coalition for Remediation of Drycleaners Listing

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017

Source: Environmental Protection Agency

Number of Days to Update: 63

Telephone: 615-532-8599

Last EDR Contact :02/03/2017

### **SEMS:** Superfund Enterprise Management System

Standard Environmental Record Source: Federal CERCLIS list

Search Distance: 0.333 Mile

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/10/2016

Source: EPA

Number of Days to Update: 78

Telephone: 800-424-9346

Last EDR Contact :04/21/2017

### **SEMS-ARCHIVE:** Superfund Enterprise Management System Archive

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

## RECORD SOURCES AND CURRENCY

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/10/2016

Source: EPA

Number of Days to Update: 78

Telephone: 800-424-9346

Last EDR Contact :04/25/2017

### **SSTS:** Section 7 Tracking Systems

Standard Environmental Record Source: Other Records

Search Distance: Property

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009

Source: EPA

Number of Days to Update: 77

Telephone: 202-564-4203

Last EDR Contact :04/26/2017

### **TRIS:** Toxic Chemical Release Inventory System

Standard Environmental Record Source: Other Records

Search Distance: Property

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014

Source: EPA

Number of Days to Update: 133

Telephone: 202-566-0250

Last EDR Contact :02/24/2017

### **TSCA:** Toxic Substances Control Act

Standard Environmental Record Source: Other Records

Search Distance: Property

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012

Source: EPA

Number of Days to Update: 14

Telephone: 202-260-5521

Last EDR Contact :03/24/2017

### **UMTRA:** Uranium Mill Tailings Sites

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010

Source: Department of Energy

Number of Days to Update: 146

Telephone: 505-845-0011

## RECORD SOURCES AND CURRENCY

Last EDR Contact :02/21/2017

### **US AIRS (AFS):** Aerometric Information Retrieval System Facility Subsystem (AFS)

Standard Environmental Record Source: Other Records

Search Distance: Property

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016

Source: EPA

Number of Days to Update: 100

Telephone: 202-564-2496

Last EDR Contact :03/07/2017

### **US AIRS MINOR:** Air Facility System Data

Standard Environmental Record Source: Other Records

A listing of minor source facilities.

Date of Government Version: 10/12/2016

Source: EPA

Number of Days to Update: 100

Telephone: 202-564-2496

Last EDR Contact :03/07/2017

### **US BROWNFIELDS:** A Listing of Brownfields Sites

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/02/2017

Source: Environmental Protection Agency

Number of Days to Update: 36

Telephone: 202-566-2777

Last EDR Contact :03/02/2017

### **US CDL:** Clandestine Drug Labs

Standard Environmental Record Source: Other Records

Search Distance: Property

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/30/2016

Source: Drug Enforcement Administration

Number of Days to Update: 67

Telephone: 202-307-1000

Last EDR Contact :02/28/2017

### **US ENG CONTROLS:** Engineering Controls Sites List

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: Property

## RECORD SOURCES AND CURRENCY

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/15/2016

Source: Environmental Protection Agency

Number of Days to Update: 66

Telephone: 703-603-0695

Last EDR Contact :02/28/2017

### **US FIN ASSUR:** Financial Assurance Information

Standard Environmental Record Source: Other Records

Search Distance: Property

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 10/11/2016

Source: Environmental Protection Agency

Number of Days to Update: 79

Telephone: 202-566-1917

Last EDR Contact :02/15/2017

### **US HIST CDL:** National Clandestine Laboratory Register

Standard Environmental Record Source: Other Records

Search Distance: Property

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/30/2016

Source: Drug Enforcement Administration

Number of Days to Update: 36

Telephone: 202-307-1000

Last EDR Contact :02/28/2017

### **US INST CONTROL:** Sites with Institutional Controls

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: Property

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/15/2016

Source: Environmental Protection Agency

Number of Days to Update: 66

Telephone: 703-603-0695

Last EDR Contact :02/28/2017

### **US MINES:** Mines Master Index File

Standard Environmental Record Source: Other Records

Search Distance: Property

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/08/2017

Source: Department of Labor, Mine Safety and Health Administration

Number of Days to Update: 38

Telephone: 303-231-5959

Last EDR Contact :02/28/2017

### **US MINES 2:** Ferrous and Nonferrous Metal Mines Database Listing

Standard Environmental Record Source: Other Records

## RECORD SOURCES AND CURRENCY

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005

Source: USGS

Number of Days to Update: 49

Telephone: 703-648-7709

Last EDR Contact :03/03/2017

### **US MINES 3:** Active Mines & Mineral Plants Database Listing

Standard Environmental Record Source: Other Records

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011

Source: USGS

Number of Days to Update: 97

Telephone: 703-648-7709

Last EDR Contact :03/03/2017

### **DOD:** Department of Defense Sites

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005

Source: USGS

Number of Days to Update: 62

Telephone: 888-275-8747

Last EDR Contact :04/14/2017

### **INDIAN RESERV:** Indian Reservations

Standard Environmental Record Source: Other Records

Search Distance: Property

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014

Source: USGS

Number of Days to Update: N/A

Telephone: 202-208-3710

Last EDR Contact :04/14/2017

### **PWS:** Public Water System Data

Standard Environmental Record Source: Other Records

Search Distance: Property

This Safe Drinking Water Information System (SDWIS) file contains public water systems name and address, population served and the primary source of water

Date of Government Version: 12/17/2013

Source: EPA

Number of Days to Update: 279

Telephone: Not Reported

Last EDR Contact :02/27/2017

# RECORD SOURCES AND CURRENCY

## HISTORICAL USE RECORDS

### **RGA HWS:** Recovered Government Archive State Hazardous Waste Facilities List

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: Property

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Management in Indiana.

Date of Government Version: Not Reported

Source: Department of Environmental Management

Number of Days to Update: 176

Telephone: Not Reported

Last EDR Contact :06/01/2012

### **RGA LF:** Recovered Government Archive Solid Waste Facilities List

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: Property

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Management in Indiana.

Date of Government Version: Not Reported

Source: Department of Environmental Management

Number of Days to Update: 203

Telephone: Not Reported

Last EDR Contact :06/01/2012

### **RGA LUST:** Recovered Government Archive Leaking Underground Storage Tank

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: Property

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Management in Indiana.

Date of Government Version: Not Reported

Source: Department of Environmental Management

Number of Days to Update: 176

Telephone: Not Reported

Last EDR Contact :06/01/2012

### **EDR Hist Auto:** EDR Exclusive Historic Gas Stations

Standard Environmental Record Source: Historical Gas Stations

Search Distance: 0.125 Mile

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007

Source: EDR, Inc.

Number of Days to Update: 42

Telephone: Not Reported

Last EDR Contact :02/21/2007

### **EDR Hist Cleaner:** EDR Exclusive Historic Dry Cleaners

Standard Environmental Record Source: Historical Dry Cleaners

Search Distance: 0.125 Mile

## RECORD SOURCES AND CURRENCY

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007

Source: EDR, Inc.

Number of Days to Update: 42

Telephone: Not Reported

Last EDR Contact :02/21/2007

### **EDR MGP: EDR Proprietary Manufactured Gas Plants**

Standard Environmental Record Source: Former Manufactured Gas Plants

Search Distance: 0.333 Mile

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: 08/28/2009

Source: EDR, Inc.

Number of Days to Update: 55

Telephone: Not Reported

Last EDR Contact :11/30/2012

# RECORD SOURCES AND CURRENCY

## TOPOGRAPHIC INFORMATION

### **USGS 7.5' Digital Elevation Model (DEM)**

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5' minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### **AQUIFLOW<sup>®</sup> Information System**

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW<sup>®</sup> Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### **STATSGO: State Soil Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services. The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### **SSURGO: Soil Survey Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

## STREET AND ADDRESS INFORMATION

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## **APPENDIX B**

### **Historic Site Plans and Photographs**



**APPENDIX C**

**Facility Employee Interview**

The following questions were provided to Mr. Dale Reynolds, an Exide employee at the Frankfort Facility/Site from 1980 through the present. Mr. Reynolds was also provided with Figures 2 and 4 and a draft version of the CCR.

**Question:** *Please confirm your dates of employment with Exide and at the Frankfort Facility;*

*Response:* *Hired by General Battery at the Frankfort facility on 07/07/1980, and have been involved in various capacities at this location since then.*

**Question:** *Please describe your level of knowledge of the Site and former Facility operations.*

*Response:* *Knowledge included the Quality Control areas from 1980 through 1991, then the Material Control areas into 1997, special projects after manufacturing ceased into 1998, when I became the Facility Manager, handling the temporary storage services of the corporation's idle equipment inventory.*

**Question:** *Do you have any knowledge of use at the three grassy areas/parcels located outside of the current perimeter fence?*

*Response:* *Exide owned a house which was rented to an Exide employee located on the lot with the address of 650 Kelley Avenue, which was demolished after manufacturing ceased. Not aware of any specific manufacturing use of the other parcels.*

**Question:** *In addition to the nine SWMUs and three AOCs identified on the facility plan, are you aware of any other locations where potential contamination pathways are present? This could include leaking sumps, pits, severely damaged flooring, past spills, tanks, waste storage areas, etc.?*

*Response:* *Am not aware of other areas where contamination actually occurred, just know of various concrete areas which became significantly corroded.*

**Question:** *Are you aware of any locations where lead, acid, battery casings, or other waste materials were spilled, dumped, buried onsite?*

*Response:* *Please see the response just below for the "yard" question.*

**Question:** *For areas of the facility “yard” that are currently paved, are you aware of any sites of spills or materials handling that may have occurred on the ground prior to paving?*

**Response:** *Before the "yard" was paved, consolidation of returned spent batteries occurred in the yard, and this was probably the "battery loading area" identified in the "1986-1988 Soil Cleanup" section 5.3.2.*

**Question:** *Is there currently any problem with trespassers or other members of the general public entering the Site property (albeit without authorization);*

**Response:** *No current problem is noted; a neighbor child retrieving a stray ball previously reported by a neighbor.*

**Question:** *Are you aware of any current or former gasoline filling stations in the immediate vicinity of the Site and/or across the street from the property at 1403 Washington Avenue? If so, please describe the approximate location.*

**Response:** *Do not recall noticing any gasoline filling stations in the immediate vicinity. Do not know whether or not Wampler's has a fuel tank for filling their own equipment.*

**Question:** *During the removal of UST-2 do you recall observing any remnants of an additional UST on the north side of the removal area?*

**Response:** *Do not recall observing any remnants of an additional UST.*

**Question:** *Are you aware of any usage of chlorinated solvents onsite? This includes compounds such as tetrachloroethylene, commonly referred to as PCE; and trichloroethylene, commonly referred to as TCE. Both are also described as “dry cleaning fluid” and both are most often used industrially as degreasing compounds. If you are aware of the use of chlorinated solvents onsite - how were they managed as a waste?*

**Response:** *None, to my knowledge, the materials department did not order any of this type material.*

**Question:** *Please confirm the date/year when the new formation building was constructed. Was the underlying area paved prior to construction of the building?*

**Response:** *Believe this area was enclosed in the late 1980's, and it was initially used for material storage. A few years later the "New Formation" was set up in this area. Before this area was enclosed, a number of fiberglass tanks, for the mixing of acid, were located in this area, with a concrete containment system below the tanks. Do not believe the remainder of this area was paved until it was enclosed.*

**Question:** *Can you describe the approximate dimensions, capacity, and materials of construction of the former sludge holding tank (SWMU-2).*

**Response:** *SWMU-2 was a round fiberglass tank approximately 12' diameter and 12' tall which contained large high speed mixer blades for agitation of the sludge material.*

**Question:** *To your knowledge were there ever any wells operated onsite for water production?*

**Response:** *Have no knowledge of water well usage.*



**APPENDIX D**

**2014 Soil Investigation**



## **APPENDIX E**

### **Well Search Information (Electronic Only)**

## Jan Dobinsky

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**From:** LEMASTERS, GREGG <GLEMASTE@idem.IN.gov>  
**Sent:** Monday, May 12, 2014 9:30 AM  
**To:** Jan Dobinsky  
**Subject:** RE: wellhead proximity

You are correct. 555 North Hoke Street, Frankfort, Indiana is not located within a wellhead protection area. I will get a letter to you.

---

**From:** Jan Dobinsky [mailto:jdobinsky@advancedgeoservices.com]  
**Sent:** Thursday, May 08, 2014 4:01 PM  
**To:** LEMASTERS, GREGG  
**Subject:** RE: wellhead proximity

Mr. Lemasters,

Thank you for sending me the findings of your well head proximity review for the property at 555 north hoke avenue in Frankfort, Indiana. The letter indicates that the reference location is within a WHPA. However, when I used the IDEM WHPA online tool it indicated that the location was not in a WHPA. Please see attached screenshot. Which source of information takes precedence?

Regards,

Jan

**Jan S. Dobinsky**  
*Project Professional*  
**Advanced GeoServices Corp.**

**Direct:** (610)840-9136

**Cell:** (610)334-0511

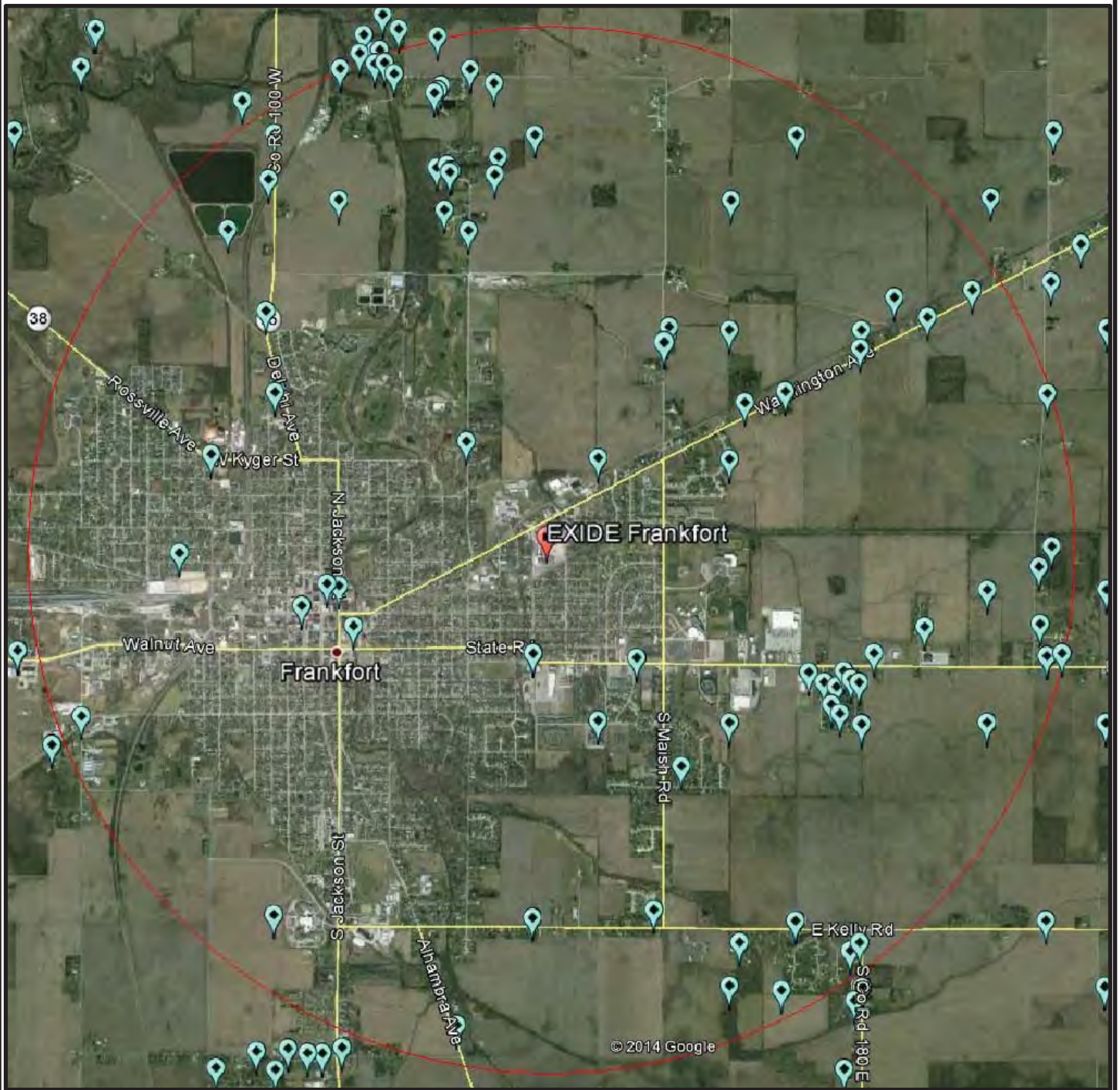
**Email:** [jdobinsky@advancedgeoservices.com](mailto:jdobinsky@advancedgeoservices.com)

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**From:** LEMASTERS, GREGG [mailto:GLEMASTE@idem.IN.gov]  
**Sent:** Wednesday, May 07, 2014 12:24 PM  
**To:** Jan Dobinsky  
**Subject:** wellhead proximity





WELL LOCATIONS TAKEN FROM INDIANA DEPARTMENT OF NATURAL RESOURCES – WATER WELL RECORD DATABASE

— 2 MILE RADIUS FROM SITE



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**WELLS OVER 70 GPM  
WITHIN 2 MILES  
EXIDE FRANKFORT  
FRANKFORT, INDIANA**

PROJECT ENGINEER:	PGS	SCALE:	NTS
CHECKED BY:	JSW	PROJECT NUMBER:	2011-2678
DRAWN BY:	KEZ	DATE:	7/21/14
		FIGURE:	2



## **APPENDIX F**

# **2000 Hazardous Waste Pile Closure Report (Electronic Only)**



## **APPENDIX G**

# **2014 UST-1 Limited Subsurface Investigation Report (Electronic Only)**



## **APPENDIX H**

# **2014 UST-2 Initial Site Characterization Report (Electronic Only)**



## **APPENDIX I**

### **Historic Site Soil Investigation (1985)**



## **APPENDIX J**

### **Historic Dock Soil Investigation (1988)**