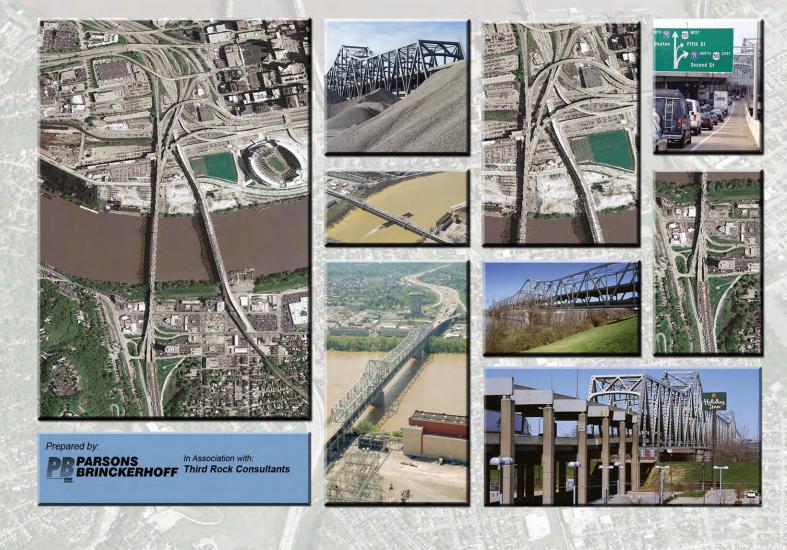
U.S. Department of Transportation Federal Highway Administration

Brent Spence Bridge Replacement/Rehabilitation Project

# Phase I Environmental Site Assessments

ODOT PID No. 75119 HAM-71/75-0.00/0.22 KYTC Project Item No. 6-17



#### EXECUTIVE SUMMARY

Phase I Environmental Site Assessments (ESA) were conducted on 33 sites for the proposed Brent Spence Bridge Replacement/Rehabilitation Project in the Greater Cincinnati / Northern Kentucky Region. The objective of the Phase I ESAs is to identify recognized environmental conditions present on sites located within the study area. An exhibit showing the study area is included in Appendix A. The sites assessed in this ESA document were selected by using information obtained from the *Environmental Site Assessment Screening* (April 2007). The Phase I ESAs were conducted in accordance with Ohio Department of Transportation Site Assessment Guidelines (April 2009). Each included an investigation of the historical land use, site reconnaissance, review of applicable regulatory records, and interviews with persons familiar with the sites.

The Phase I ESAs have identified recognized environmental conditions, which will require further investigation. Twelve (12) sites are recommended for Phase II investigations; 10 are located in Ohio and 2 are located in Kentucky. Sites recommended for Phase II ESA investigations are summarized below.

Site ID	State	Issue	Facility Address	Alternative Impacted
1	ОН	Former Filling Station	2310 Central Parkway	E, C/D
Adjacent to Site 2	ОН	Junkyard	2225 Buck St	E, C/D
29	ОН	Former Filling Station	Formerly 817 Mound Street	E, C/D
49	ОН	Former Filling Station	508 West 3 <sup>rd</sup> Street	E, C/D
51	ОН	Former Filling Station	SW Corner of Historic 4th and Central Alignment (Currently near I-71 Dead End Ramp)	E, C/D
53	ОН	Former Filling Station	605 West 3 <sup>rd</sup> Street	E, C/D
58	ОН	Former Filling Station, OH UST, OH LUST	205 Central Avenue	E, C/D
60	ОН	Former MGP	646 Mehring Way	E, C/D
64	ОН	Former MGP	655 Mehring Way	E, C/D
65	ОН	Former MGP	612 West Mehring Way	E, C/D
71	KY	Former Junkyard KY UST	666 West 3 <sup>rd</sup> Street	E, C/D
78	ΚY	Former Filling Station, KY UST	550 Pike Street	C/D

Sites Recommended for Phase II ESA Investigations

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#### APPENDICES

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- Appendix C Site Maps, Aerial Photos, Sanborn Maps
- Appendix D Agency File Review Materials

Appendix E – Photographic Journal

Appendix F – Environmental Data Resources Area Study Report, Executive Summary

# **1.0 INTRODUCTION**

Interstate 75 (I-75) within the Greater Cincinnati/Northern Kentucky region is a major thoroughfare for local and regional mobility (Exhibit 1, Appendix A). Locally, it connects to I-71, I-75 and US Route 50. The Brent Spence Bridge provides an interstate connection over the Ohio River and carries both I-71 and I-75 traffic. The bridge also facilitates local travel by providing access to downtown Cincinnati, Ohio, and Covington, Kentucky. Safety, congestion and geometric problems exist on the structure and its approaches. The Brent Spence Bridge, which opened to traffic in 1963, was designed to carry 80,000 vehicles per day. Currently, approximately 160,000 vehicles per day use the Brent Spence Bridge and traffic volumes are projected to increase to 200,000 vehicles per day by 2035.

The I-75 corridor within the Greater Cincinnati/Northern Kentucky region is experiencing problems, which threaten the overall efficiency and flexibility of this vital trade corridor. Areas of concern include, but are not limited to, growing demand and congestion, land use pressures, environmental concerns, adequate safety margins, and maintaining linkage in key mobility, trade, and national defense highways.

The I-75 corridor has been the subject of numerous planning and engineering studies over the years and is a strategic link in the region's and the nation's highway network. As such, the Ohio Department of Transportation (ODOT) and the Kentucky Transportation Cabinet (KYTC), in cooperation with the Federal Highway Administration (FHWA), are proposing to improve the operational characteristics of I-75 and the Brent Spence Bridge in the Greater Cincinnati/Northern Kentucky region through a major transportation project.

The Brent Spence Bridge Replacement/Rehabilitation Project is currently in Step 6 of the Ohio Department of Transportation's (ODOT) Project Development Process (PDP). Two feasible alternatives and the No Build Alternative are being developed and studied in more detail. The two feasible alternatives consist of Alternative E and a combination of Alternatives C and D from Step 5 of the PDP. The two feasible alternatives will be designed to provide three lanes in each direction on I-75.

# 1.1 Study Corridor

The overall project corridor is located along a 7.8-mile segment of I-75 within the Commonwealth of Kentucky (state line mile 186.7) and the State of Ohio (state line mile 2.7) (Exhibit 1). The southern limit of the project is 5,000 feet south of the midpoint of the Dixie Highway Interchange on I-71/I-75 in Fort Wright, south of Covington, Kentucky. The northern limit of the project is 1,500 feet north of the midpoint of the Western Hills Viaduct interchange on I-75 in Cincinnati, Ohio. The eastern and western limits of the study area generally follow the existing alignment of I-75.

# **1.2 Feasible Alternatives**

Two feasible alternatives, Alternative C/D and E are currently under study for the project (Exhibits 2A-2D). As the feasible alternatives are currently in the development stage, detailed right of way (ROW) acquisition information and earth disturbing activity information is not known at this time. General ROW information (whole take, partial take, etc) is included in the discussion concerning each individual site. The feasible alternatives are described below.

#### 1.2.1 Alternative C/D

Alternative C/D utilizes the existing I-71/I-75 alignment from the southern project limits at the Dixie Highway Interchange north to the Kyles Lane Interchange. The Dixie Highway and Kyles Lane interchanges will be modified slightly to accommodate a connector-distributor (C-D) roadway, which will be constructed along both sides of I-71/I-75 between the two interchanges. North of the Kyles Lane Interchange, the alignment shifts to the west to accommodate additional I-71/I-75 travel lanes. Between Kyles Lane and KY 12th Street, six lanes will be provided in each direction for a total of 12 travel lanes. Near KY 12th Street, the alignment separates into three routes for I-71, I-75 and a local C-D roadway.

In Alternative C/D, access into Covington from the interstate will be provided by the local C-D roadway; at KY 12th Street for northbound traffic and at KY 5th and 9th streets for southbound traffic. Direct access to I-71 from Covington will be provided at KY 9th Street with traffic to I-75 northbound using the C-D roadway through downtown Cincinnati and connecting at the Ezzard Charles merge. Access for southbound interstate traffic is located at KY 12th Street. Access from Covington to downtown Cincinnati will be provided by the C-D roadway from KY 9th and 4th streets. Bullock Street will be extended north from Pike Street to KY 9th, 5th, and 4th streets.

A new double deck bridge will be built just west of the existing Brent Spence Bridge to carry northbound and southbound I-75 (three lanes in each direction), two lanes for southbound I-71 and three lanes for southbound local traffic. The existing Brent Spence Bridge will be rehabilitated to carry two lanes for northbound I-71 and three lanes for northbound I-71 and three lanes for northbound local traffic.

Alternative C/D reconfigures I-75 through the I-71/I-75/US 50 Interchange and eliminates all access to and from I-75 from KY 12th Street to the US 50/6th Street overpass in the northbound direction. Alternative C/D also eliminates access to and from I-75 southbound between KY 12th Street and the Freeman Avenue exit.

In Ohio, a local C-D roadway will be constructed along both sides of I-75. The local northbound C-D roadway will carry local traffic from the existing bridge and provide access ramps to OH 2nd Street, I-71 northbound, US 50 westbound, OH 5th Street, and Winchell Avenue before reconnecting to I-75 just south of Ezzard Charles Drive. The northbound ramps from OH 6th and 9th streets to I-75 will be removed requiring traffic from these three points to utilize a new local roadway parallel to the northbound C-D roadway for access to I-75 around the Western Hills Viaduct Interchange. The northbound ramps from OH 4th Street will utilize the new local northbound C-D roadway for access to I-75. The southbound C-D roadway begins near the Ezzard Charles Drive overpass and carries both downtown Covington and Cincinnati traffic. The southbound C-D roadway will provide access to OH 7th, 5th, 3rd, and 2nd streets, as well as connecting to access ramps from Western Avenue, OH 9th Street, and US 50 eastbound. The C-D roadway will continue south over the new bridge into Covington.

Between Ezzard Charles Drive and the Western Hills Viaduct, northbound I-75 will have five lanes and southbound I-75 will have six lanes, for a total of 11 travel lanes. The ramps to Western Avenue and from Winchell Avenue just north of Ezzard Charles Drive

to the Interstate will be eliminated. The southbound ramp to Freeman Avenue and the northbound ramp from Freeman Avenue to I-75 will remain. Alternative C/D also improves Western and Winchell avenues to facilitate traffic flow and increase capacity. Ramps to Western Avenue and from Winchell Avenue will be provided around the Western Hills Viaduct Interchange, which will be reconfigured to provide a full movement interchange.

#### 1.2.2 Alternative E

Alternative E utilizes the existing I-71/I-75 alignment from the southern project limits at the Dixie Highway Interchange north to the Kyles Lane Interchange. The Dixie Highway and Kyles Lane interchanges will be modified slightly to accommodate a C-D roadway, which will be constructed along both sides of I-71/I-75 between the two interchanges. North of the Kyles Lane Interchange, the alignment shifts to the west to accommodate additional I-71/I-75 travel lanes. Between Kyles Lane and KY 12th Street, six lanes will be provided in each direction for a total of 12 travel lanes.

Near KY 12th Street, the northbound alignment separates into two routes; one for interstate traffic and one for a local C-D roadway. Between Pike Street and KY 9th Street, the interstate separates into I-71 and I- 75 only routes. The C-D roadway will carry local traffic northbound and provide access to Covington at KY 12th and 5th streets and access from KY 9th and 4th streets. The southbound C-D roadway will carry traffic from Ohio over I-71/I-75 and provide access to both the interstate and into Covington at KY 9th Street.

A new double deck bridge will be built just west of the existing Brent Spence Bridge to carry northbound and southbound I-71 and I-75 traffic. On the upper deck, I-71 southbound will have three lanes and I-71 northbound will have two lanes. On the lower deck, I-75 will have three northbound and three southbound lanes. The existing Brent Spence Bridge will be rehabilitated to carry northbound and southbound local traffic with two lanes in the southbound direction and three lanes in the northbound direction.

In Ohio, Alternative E reconfigures I-75 through the I-71/I-75/US 50 Interchange and eliminates some of the existing access points along I-75. Existing ramps to I-71, US 50 and downtown Cincinnati will be reconfigured. The existing direct connections between I-75 to westbound and from eastbound US 50 will be maintained in Alternative E. US 50 will be reconfigured to eliminate left-hand entrances and exits. The OH 5th Street overpass will be eliminated and the 6th Street Expressway will be reconfigured as a two-way, six-lane elevated roadway with a new signalized intersection for US 50 access and egress. Access between southbound I-71 (Fort Washington Way) and northbound I-75 will be provided near OH 9th Street as a direct connection. Both I-75 southbound and US 50 (Sixth Street Expressway) will have access to northbound I-71 (Fort Washington Way). Access to OH 3rd Street at the Clay Wade Bailey Bridge intersection will also be available via the I-75 southbound to northbound I-71 (Fort Washington Way) connection.

A local C-D roadway will carry local traffic northbound from the existing Brent Spence Bridge and provide access to OH 2nd, 5th, and 9th streets, Winchell Avenue and access from OH 4th before reconnecting to I-75 just south of the Linn Street overpass. The northbound ramps from OH 6th and 9th Street to I-75 will be removed requiring traffic from these points to utilize a new local roadway parallel to I-75 and access the interstate at Bank Street. Southbound I-75 traffic will separate from the local C-D roadway near Ezzard Charles Drive. The southbound C-D roadway will carry traffic over I-75 to OH 7th Street, allowing traffic to either; access downtown at 7th Street, travel south to OH 5th and 2nd streets, or travel across the existing Brent Spence Bridge into Covington. Access to the local southbound C-D roadway will be provided at Western Avenue and at OH 4th and 8th streets.

Alternative E also improves Western and Winchell avenues to facilitate traffic flow and increase capacity. The ramps to Western Avenue and from Winchell Avenue just north of Ezzard Charles Drive will be removed. The ramp from Freeman Avenue to I-75 northbound and the ramp from I-75 southbound to Freeman will remain. Between Ezzard Charles Drive and Western Hills Viaduct, southbound I-75 will have six lanes, northbound I-75 will have five lanes, and one auxiliary lane to the Western Hills Viaduct. The Western Hills Viaduct Interchange will be reconfigured to provide a full movement interchange.

## **1.3 Previous Environmental Work**

ESA Screenings for the study area were completed in 2007. The ESA Screening identified a total of 81 sites for Phase I ESA's. After further refinement of the feasible alternatives, 33 sites were ultimately selected for Phase I ESA's. The sites addressed in this ESA are included on Table 1, page 5. Additionally, Phase I ESA's and underground storage tank removals completed previously for local road improvements, Fort Washington Way, were reviewed prior to the completion of this report. The documents obtained form the previous ESA's are included in Appendix D.

# 2.0 METHODOLOGY

Third Rock Consultants, LLC (Third Rock) was retained by Parsons Brinckerhoff to conduct Phase I Environmental Site Assessments (ESAs). The purpose of these ESAs is to identify recognized environmental conditions present on sites within the study area. An exhibit detailing the entire study area is included in Appendix A.

The Phase I ESAs were conducted in accordance with the Ohio Department of Transportation Site Assessment Guidelines (April 2009).

The existing Brent Spence Bridge is not a listed site due to the fact that the existing bridge is right of way property. An existing condition, lead contamination is associated with the structure. The disposal of lead paint residue associated with previous bridge paintings was a concern noted in the ESA Screening Report. The existing Brent Spence Bridge was sandblasted and repainted in 1990. On the Kentucky side the sandblasting residue was stored in several piles under the bridge between 3<sup>rd</sup> Street and 4<sup>th</sup> Street in Covington, KY. Subsequent soil sampling in 1992 revealed elevated lead levels. Corrective actions have been performed at this site, with excavation and soil removal occurring in 1996 and 2008. Ultimately the Kentucky Division of Waste Management (DWM) issued a "No Further Action" letter regarding the lead contamination on July 16, 2009. This report concurs with the DWM determination; no further assessment is recommended regarding lead contamination associated with previous bridge paintings. A copy of the DWM correspondence is included in Appendix B.

# 2.1 Site History Research

The historical land use of a site can have a direct impact on the environmental condition. To better understand the historical land use, the following resources were utilized:

#### Aerial Photographs

Numerous aerial images were reviewed in an effort to identify the historic land use in the project area. Current aerial images were provided (2006), while Environmental Data Resources (EDR) and ODOT's Office of Aerial Engineering provided select historic aerial images (1950, 1958, 1964, 1968, 1973, 1981, 1986, and 1993). Aerial images prior to 1950 were not available for review.

Site Id	State	Issue	Facility Address	Alternative Impacted
1	ОН	Historic Filling Station	2310 Central Parkway	E, C/D
2	ОН	Transformer Yard	2219 Spring Grove Avenue	Not Impacted
3	ОН	OH LUST	1151 Harrison Avenue	Not Impacted
4	ОН	OH SPILLS, Historic UST location	2150 Winchell Avenue	Not Impacted
9	ОН	Multiple Manufacturing facilities	1101 York Street	Not Impacted
14	ОН	Historic Furniture Finishing	830 Ezzard Charles Drive	Not Impacted
17	ОН	Historic Filling Station	845 Ezzard Charles Drive	Not Impacted
29	ОН	Historic Filling Station	Formerly 817 Mound Street	E, C/D
31	ОН	OH LUST	500 West 7 <sup>th</sup> Street	E
49	ОН	Historic Filling Station	508 West 3 <sup>rd</sup> Street	E, C/D
50	ОН	OH LUST, OH UST	400 John St	E, C/D
51	ОН	Historic Filling Station	SW Corner of Historic 4th and Central Alignment (Currently near I-71 Dead End Ramp)	E, C/D
52	ОН	OH UST, OH LUST	351 John St	E, C/D
53	ОН	Historic Filling Station	605 West 3 <sup>rd</sup> Street	E, C/D
54	ОН	Historic Filling Station, OH LUST	514 West 3 <sup>rd</sup> St	E, C/D
55	ОН	LUST, RCRA-SQG, Historic Land use	444 West 3rd St, 314 John St	Not Impacted

## Table 1 – Sites Selected for Phase I Environmental Site Assessments

#### Table 1 (continued) – Sites Selected for Phase I Environmental Site Assessments

Site Id	State	Issue	Facility Address	Alternative Impacted
57	ОН	Historic Filling Station, OH LUST	302-304 Central Avenue	Not Impacted
58	ОН	Historic Filling Station, OH UST, OH LUST	205 Central Avenue	E, C/D
60	ОН	Historic MGP	646 Mehring Way	E, C/D
64	ОН	Historic MGP	655 Mehring Way	E, C/D
65	ОН	RCRA-NonGen, OH SPILLS	612 West Mehring Way	Not Impacted
66	ОН	OH SPILLS, Historic Coal Tar Refinery	511 West Water Street	Not Impacted
71	KY	Historic Junkyard Location, KY UST	666 West 3 <sup>rd</sup> Street	E, C/D
72	KY	Historic Filling Station	650 West 3 <sup>rd</sup> Street	Not Impacted
73	KY	Historic Machine Shop	677 West 3 <sup>rd</sup> Street	Not Impacted
74	KY	KY UST, RCRA- CESQG	670 West 4 <sup>th</sup> St	E, C/D
75	KY	Active Gas Station, KY UST, RCRA-CESQG	610 West 4 <sup>th</sup> St	Not Impacted
76	KY	Active gas Station KY UST, SB 193, ERNS, RCRA-NonGen,	613 West 4 <sup>th</sup> St	Not Impacted
77	KY	Active Gas Station, KY UST, RCRA NonGen	610 West 5 <sup>th</sup> St	Not Impacted
78	KY	Historic Filling Station, KY UST	550 Pike Street	C/D
79	KY	UST, RCRA-CESQG	555 Pike Street	E, C/D
80	KY	KY UST, RCRA- CESQG	542 West 12 <sup>th</sup> Street	E, C/D
81	KY	Historic Filling Station, KY UST	535 West 12 <sup>th</sup> Street	E, C/D

ERNS – Emergency Response Notification System FINDS - Facility Index System KY UST - Kentucky Underground Storage Tank

OH LUST - Ohio Leaking Underground Storage Tank OH UST - Ohio Underground Storage Tank

OH SPILLS - Ohio Spills

RCRA-CESQG - Resource Conservation and Recovery Act Conditionally Exempt Small Quantity Generator

RCRA-NonGen - Resource Conservation and Recovery Act Non Generator

RCRA-SQG - Resource Conservation and Recovery Act Small Quantity Generator

SB 193 – SB 193 Branch Site Inventory List

#### Sanborn Fire Insurance Maps

EDR provided Sanborn Fire Insurance mapping for the study area. The following Sanborn maps were reviewed for the Ohio sites: 1891, 1934, 1950, and 1981. Likewise, the following Sanborn maps were reviewed for the Kentucky sites: 1909, 1949, 1963, and 1980.

#### City Directory

City Directory information was researched at the University of Kentucky M.I. King Library and the Cincinnati Public Library. Additionally, EDR provided City Directory information for the study area.

#### 2.2 Regulatory Records Review

Various regulatory records were searched to provide additional information about each site.

#### 2.2.1 Environmental Data Resources

Environmental Data Resources (EDR) was contacted to provide environmental database information on numerous sites within the study area.

#### 2.2.2 State of Ohio

An inquiry concerning each site of interest was made with the following Ohio state specific resources.

#### 2.2.2.1 Ohio EPA Southwest District Office

The following divisions were contacted within the Ohio EPA:

- Division of Surface Water
- Division of Drinking Water and Groundwater
- Division of Hazardous Waste
- Division Solid and Infectious Waste, Water Quality, Pretreatment
- Division of Emergency Remedial Response

Generally speaking, the Ohio EPA provided very limited information concerning the sites in question. Only the Division of Emergency Remedial Response provided any applicable information.

# 2.2.2.2 Ohio Department of Commerce Division of State Fire Marshall Bureau of Underground Storage Tank Regulations

The Ohio Department of Commerce Division of State Fire Marshall Bureau of Underground Storage Tank Regulations (BUSTR) office provided information concerning past and current USTs located on the sites in question. Due to the fact that UST regulations changed significantly after 1988, only information concerning USTs that were removed or installed after 1988 was available within the BUSTR system. According to BUSTR representatives, local Fire Departments were responsible for USTs prior to 1988. Third Rock representatives reviewed numerous BUSTR files on January 5, 2010. Additional correspondence was completed at various times to address particular UST issues. Specifically, BUSTR representatives provided information regarding the Leaking Underground Storage Tank (LUST) database. According to the BUSTR representatives interviewed, numerous sites may be listed on the LUST database even though the USTs

may not have actually physically released a petroleum product into the environment. The LUST database frequently refers to sites and having a closure status of LTF 1 or LTF 6. LTF 6 status only refers to the fact that USTs were removed from the site. A status of LTF 1 indicates sites with an actual suspected or confirmed release of a petroleum product.

#### 2.2.2.3 Cincinnati Fire Department

In addition to BUSTR, the Cincinnati Fire Department was contacted to provide supplemental information regarding USTs in Ohio. The Cincinnati Fire Department provided only general information such as removal dates. The Cincinnati Fire Department did not provide specific closure reports or analytical results.

#### 2.2.2.4 Ohio Department of Natural Resources Water Well Log

The Ohio Department of Natural Resources online water well database provided water well information. The sites in question were searched by address location within the database. Due to the limited search parameters, only wells located at specific addresses were identified. Wells in the general vicinity were not identified by the database.

#### 2.2.3 Commonwealth of Kentucky

An inquiry concerning each site of interest was also made with the following Kentucky state specific resources.

# 2.2.3.1 Kentucky Division of Waste Management Underground Storage Tank Branch

The Kentucky Division of Waste Management Underground Storage Tank Branch (USTB) is the Kentucky version of Ohio's BUSTR. An inquiry was made with the USTB for all potential UST sites in Kentucky. Files concerning UST sites that closed prior to 1988 were not available within the USTB system. UST closures that occurred prior to April 18, 1994 were based upon 401 KAR Chapter 42 standards (backlog standards). It should be noted that the backlog standards are much less stringent than that of the revised 401 KAR Chapter 42:070 and 42:080 standards that were enforced after 1994. Third Rock representatives conducted numerous file reviews at the USTB at various times.

#### 2.2.3.2 Covington Fire Department

The Covington Fire Department was contacted to provide additional information in support of the USTB. All sites were researched, however the Covington Fire Department files contained information for only a select few sites.

#### 2.2.3.3 Kentucky Division of Waste Management

The Kentucky Division of Waste Management (DWM) was contacted in an effort to obtain any pertinent environmental information concerning the sites in Kentucky. Specifically, the Superfund Branch provided information regarding several of the sites in question.

#### 2.2.3.4 Kentucky Geological Survey Water Well Database

The Kentucky Geological Survey provided water well information for the subject sites as well as adjacent sites.

# 2.3 Interviews

Each specific site presented different interview circumstances. The actual site owner was interviewed when available, employees or other representatives were interviewed if the site owner was not. Interviews were conducted during the site reconnaissance and also on an as-needed basis during document production. An interview attempt was made for every site assessed in this report.

# 2.4 Site Reconnaissance

Third Rock representatives conducted individual visits for each site assessed. When appropriate, the interior of structures was entered and examined. In other instances, as many of the sites were vacant during the site visit or limited access was available, it was more appropriate to perform a less detailed site visit. Adjacent sites were observed as well, though not in as much detail as the target sites.

# 3.0 GEOLOGICAL SETTING

The surface geologic material of the southern portion of the project area consist Ordovician age interbedded shale and limestone of the Kope, Fairview, and Bull Fork formations. As the project moves to the north out of the upland area it crosses over glacial outwash and Holocene age alluvial material on the south side of the Ohio River. After crossing the river, the project is situated again over unconsolidated alluvium, lacustrine, and glacial outwash material of the Ohio River and Mill Creek. On both sides of the river these unconsolidated sediments can be as much as 150 feet thick.

# 4.0 CINCINNATI, OHIO SITE ASSESSMENTS

Phase I Environmental Site Assessments (ESAs) were conducted on a total of 22 sites in Ohio. The 22 sites were selected from the 2007 ESA Screening report based upon the proposed alternatives, C/D and E. Documents supporting the information summarized for each site are contained in the following appendices:

- Appendix C: Site maps, current aerial photos, and Sanborn maps
- Appendix D: Agency file review materials
- Appendix E: Photographic journal
- Appendix F: Environmental Data Resources (EDR) Executive Summary

# 4.1 2310 Central Parkway (Site 1)

Jasin Inc. is listed as the owner of a site located at 2310 Central Parkway. Parkway Market Food Mart currently occupies the site.

## 4.1.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1964, 1981, 1986, and 2007 were reviewed. The site itself appears virtually unchanged on all images reviewed. The structure currently present on the site appears to be the same structure evident on the 1950 aerial image as well. In the 1950 and 1958 images the site is configured as a services station with a pump island visible.

#### 4.1.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance mapping from 1891, 1950, and 1981 was reviewed. The site, along with the majority of the surrounding sites, is vacant on the 1891 mapping. The 1950 and 1981 mapping reveals a filling station on the site.

#### 4.1.3 City Directories

A search of Cincinnati city directories showed the following uses for Site 1.

Year	Uses	
2009	Jason Inc - grocers retail	
2005	Jason Inc - grocers retail	
1999	Parkway Market - grocers	
1996	Parkway Market - grocers	
1991	Not listed	
1985	Not listed	
1979	Not listed	
1974	Not listed	
1969	Not listed	
1961	Preventive Sprays Co - Undercoating	
1956	Perkins Texaco Station	
1951	Jack Yeckel filling station	
1947	Harold J. Uhlenbrock - filling station	
1940	George J. Schreiner - filling station	
1935	George J. Schreiner - filling station	
1930	John Hengehold tires (no #, just NWC of Central Avenue	
1927	Not listed	

Table 2 – 2310 Central Parkway, Cincinnati (Site 1)

#### 4.1.4 Water Well Logs

The Ohio Department of Natural Resources (ODNR) water well database did not contain well information for this site.

#### 4.1.5 Regulatory Records Review

The EDR report did not identify this facility.

#### 4.1.6 Adjacent and Surrounding Sites

This site is predominantly surrounded by residential sites. Interstate 75 and Central Parkway are located directly to the east.

#### 4.1.7 BUSTR File Review

No records exist for this site at the Ohio Division of State Fire Marshall Bureau of Underground Storage Tank Regulations (BUSTR).

#### 4.1.8 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

#### 4.1.9 Ohio EPA File Review

The Ohio Environmental Protection Agency (EPA) Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA.

#### 4.1.10 Interviews

T.J. Singh, the son of the site owner, was interviewed in person on December 9, 2009. Mr. Singh had very limited information concerning the site. He stated that Parkway Market Food Mart first occupied the site beginning in the 1980's. He believed that the Food Mart stopped selling gas at some point in the late 1970's or early 1980's. The actual owner of the site, Hardeep Singh, was out of the country at the time of the site visit and was not available for an interview. Mr. Singh did not know if the USTs had ever been removed.

#### 4.1.11 Site Reconnaissance

Parkway Market Food Mart, an operating convenience store, was observed on the site. The store was entered, although a detailed examination was not completed. No floor drains or sumps were identified during the site reconnaissance. The structure appeared to be very old with somewhat recent exterior updates. Three locations that appear to be UST fill ports are located on the site. Though not confirmed, the presence of the UST fill ports suggests that the USTs are still potentially located on the site.

#### 4.1.12 Conclusions and Recommendations

All evidence reviewed suggests that this convenience store ceased all gasoline sales prior to the 1988 UST regulations and thus never registered any USTs. If the USTs were in fact removed prior to 1988, no closure record would exist for this site. This site is expected to be a complete take, although construction details are not known at this time.

Due to the limited amount of information available regarding the USTs on site, a Phase II investigation is recommended. A supplementary field investigation to verify the presence or absence of USTs on this site is recommended. Additionally, soil borings to identify potential petroleum contamination are recommended in the vicinity of the historic UST location. The soil and/or groundwater samples should be analyzed according to current UST closure regulations.

# 4.2 2221 Spring Grove (Site 2)

An electrical substation (transformer yard) currently occupies this site. Duke Energy owns the site.

#### 4.2.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1964 1981, and 1986 were reviewed. The 1950 and 1958 images of the site show a transformer yard occupying about half of the space that the site covers today. There are smaller, possibly residential, structures that occupy what is the north half of the yard. In 1964 the adjacent freeway is open and the interchange is under construction. In 1981 the site has the same configuration as seen during the site visit. More recent aerial images from 2004 and 2006 shows a junk yard located on the property across the alley to the west.

#### 4.2.2 Sanborn Fire Insurance Maps

Sanborn maps from 1891, 1950 and 1981 were examined for this site. The most current 1981 map shows the site as a "transformer yard" with an adjacent building noted as the "Cincinnati Gas and Electric Brighton Substation" and noted as "built 1929." The only adjoining site to the south and is noted as "household goods warehouse." Buck Alley to the west separated the site from a "freight station." The property across Buck Alley is also shown as a "foundry" in 1891 and a "sheet metal works" in 1950.

In 1950 the site has a similar configuration with the building having the same notations but the site is not noted as having a "transformer yard." The site has residential sites adjoining to the north.

#### 4.2.3 Water Well Logs

The ODNR water well database did not contain well information for this site.

#### 4.2.4 Regulatory Records Review

The EDR report did not identify any records for this site.

#### 4.2.5 Adjacent and Surrounding Sites

The site is bounded by the Western Hills interchange to the north, Spring Grove Avenue/I-75 to the east. A commercial building is located to the south with signage indicating BIS Co (records storage). An automotive junkyard, Reynolds Aluminum Recycling, is located to the west across Buck Alley.

#### 4.2.6 BUSTR File Review

No records exist for this site at BUSTR.

#### 4.2.7 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

#### 4.2.8 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA.

#### 4.2.9 Interviews

An interview was conducted with Jessica Bednarcik of Duke Energy regarding the site. She indicated that she in not aware of any environmental issues with the site.

#### 4.2.10 Site Reconnaissance

A site reconnaissance was completed on December 9, 2009. The site is currently an electrical substation. No soil staining was observed, and there was no other evidence of any releases associated the transformers on site. The yard is fully fenced and there is a low berm constructed around the perimeter of the yard.

#### 4.2.11 Conclusions and Recommendations

This site is not expected to be impacted by either alternative. No further action is recommended regarding this site.

However, the parcel located across Buck Alley from this site is former junkyard, foundry and truck terminals to the west will be partially impacted. Definitive construction details are not yet known but it is assumed that a strip of ROW will be acquired from the adjacent property. Due to the previous land use, a Phase II assessment is recommended on the adjacent property. Borings should be advanced on the adjacent property to assess the area for polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH) and metals.

# 4.3 1151 Harrison Avenue (Site 3)

The site, Sunset Janitorial Supply, is located at 1151 Harrison Avenue. Sunset Janitorial is a commercial cleaning, chemical, and janitorial supply company.

#### 4.3.1 Aerial Photographs

Aerial images from 1950, 1958,1964, 1981 and 1986 were reviewed. Several individual storefront buildings are evident on the 1950 and 1958 images, with what appear to be semi-trailers parked in the rear of the building. The 1964 and 1981 images are very similar with the exception of the interstate system being much more developed on the 1981 image. The structure present today appears to be the same structure revealed on the 1964 image.

#### 4.3.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps for 1891, 1950, and 1981 were reviewed. The 1891 mapping revealed several unidentified storefronts and one stable on the site. The site appears much more developed on the 1950 mapping with additional unidentified storefronts. In addition to the storefronts, a large Cincinnati Street Railway warehouse is located to the south along Winchell Avenue on the 1950 mapping. The 1981 mapping indicates an auto repair facility located on the site with a large warehouse located just south. The structure evident on the 1981 mapping appears to be the same structure currently located on the site.

#### 4.3.3 City Directories

A search of city directories showed the following uses for Site 3.

Year	Uses	
2009	Sunset Janitorial Supply	
2005	Sunset Janitorial Supply	
1999	Sunset Janitorial Supply	
1995	Stigler Supply Co janitorial supplies	
1989	Stigler Supply Co janitorial supplies	
1983	Stigler Supplies	
1974	Clark Transfer Inc	
1969	Clark Van Lines Inc.	
1964	Budig Trucking Co.	
1958	Budig Trucking Co.	
1952	Middle States Motor Freight Inc.	
1947	Middle States Motor Terminal Freight	
1940	Middle States Motor Freight Inc.	
1935	Peter G. Buehlman Jr oils	
1930	Reliable Auto Repair Shop	
1925	Not listed	

Table 3 – 1151 Harrison Avenue, Cincinnati (Site 3)

#### 4.3.4 Water Well Logs

ODNR's water well database was searched concerning this site. No water wells were identified for this site.

#### 4.3.5 Regulatory Records Review

The EDR report lists this site on the following databases: Ohio Underground Storage Tank (OH UST); and Ohio Leaking Underground Storage Tank (OH LUST). According to the OH UST listing, one 2,000-gallon gasoline UST was removed from this site; however, the report does not list the actual removal date. Though the actual removal date is not recorded, a removal inspection did occur on December 19, 1995.

The OH LUST listing refers to a "release" that occurred on this site on December 19, 1995. The term "release" is not referring to an actual physical release of a petroleum product that occurred on the site. In this instance, the term "release" is referring to a closure as indicated by the LTF 6 status. The status of the "release" is currently listed as "No Further Action."

#### 4.3.6 Adjacent and Surrounding Sites

The site is adjoined by Interstate 75 and an associated ramp to the north and west. Site 4 is located to the south with residential and abandoned commercial sites positioned to the east.

#### 4.3.7 BUSTR File Review

According to the BUSTR office, one 2,000 gallon, unregistered gasoline UST was removed from this location on December 21, 1995. The Closure Assessment Report, prepared by Petro Environmental Technologies, estimates the UST system to have been approximately 40 years old at the time of closure (1995). A copy of the Closure

Assessment Report is included in Appendix D. BUSTR issued a "No Further Action Status" for this facility on September 8, 2003. A copy of the "No Further Action" letter is also included in Appendix D.

#### 4.3.8 Fire Department File Review

The Cincinnati Fire Department did provide information concerning the UST on this site; however, the information was somewhat limited. According to the Cincinnati Fire Department, one UST was removed from this site in April 1994.

#### 4.3.9 Interviews

Jerry Diers, the site owner, was interviewed via a phone conversation on January 4, 2010. Mr. Diers stated that Sunset Janitorial has been located on this site for approximately 10 years. Mr. Diers was aware of the previous UST on the site, however he did not recall any detailed information concerning the UST, as the UST was removed prior to Sunset Janitorial occupying the site. He recalled that CSX once owned a warehouse just south of Sunset Janitorial, on Winchell Avenue.

#### 4.3.10 Site Reconnaissance

Third Rock representatives conducted a site visit on December 9, 2009. One large brick/concrete block structure is currently located on the site. The main structure was not examined during the site visit; however, the building appeared to be very clean and in very good condition. No drums, barrels, above ground storage tanks or obvious signs of contamination were observed on the site.

#### 4.3.11 Conclusions and Recommendations

All evidence reviewed indicates that one 2,000 gallon UST was historically located on this site, approximately 150 feet east of the proposed alternatives. City Directory information suggests that UST was possibly associated with one of the trucking companies that previously occupied the site. Though various sources indicate conflicting UST removal dates, BUSTR ultimately issued a "No Further Action" status and corresponding letter concerning this UST on September 8, 2003. This site is not expected to be impacted by the proposed road improvements. This assessment concurs with the BUSTR office: no further action is recommended at this time.

#### 4.4 2154 Winchell Avenue (Site 4)

The site is located at 2150 Winchell Avenue. Currently the George E. Fern Company, a carpet company, occupies the large warehouse building.

#### 4.4.1 Aerial Photographs

Aerial images from 1950, 1958, 1964, 1981 and 1986 were reviewed. A different large warehouse structure is evident on the all images from 1973 back and it is vacant in 1986. A large number of busses are visible in the 1950 and 1958 images.

#### 4.4.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance maps form 1891, 1950, and 1981 were reviewed. The Cincinnati Street Railway Company and The Sextro Furniture Company are identified as occupants on the 1891 mapping. The 1950 and 1981 maps identify the Cincinnati Street Railway Company and Brighton Car Barns as site occupants.

#### 4.4.3 City Directories

A search of the Cincinnati directories showed the following uses for Site 4.

Year	Uses
2009 - 1966	Not listed
1960	2108 Silver Fleet Motor Express Inc - trucking 2113-15 Silver Fleet Motor Express - garage Remainder of 2000 block vacant
1956	Same as 1960, also: 2179-83 Michigan Motor Freight Inc. 2118-24 Witt Cornice Co - sheet metal works
1949	Same as 1960; also 2145 City Public Recreation Comn Const Hdqtrs Unit 2179 Michigan Motor Freight 2181 Coordinated Transport
1942-1948	Cincinnati Street Railroad Company - car barns
1939	2159 City Public Recreation (workshop) NEC Silver Fleet Motor - takes all even #s to 2186 2186 Bell Motor Freight

Table 4 – 2154 Winchell A	Avenue, Cincinnati (Site 4)
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#### 4.4.4 Water Well Logs

ODNR's water well database was searched concerning this site. No water wells were identified for this site.

#### 4.4.5 Regulatory Records Review

The EDR report lists this site on the Ohio Spills (OH SPILLS) database. The spill is reported to have occurred in 1991, with 50 pounds of Bisphenol Epoxy listed as the product spilled. Aristech Chemical Corporation is listed as the suspected spiller. Information obtained from the Ohio EPA Division of Emergency and Remedial Response concurs with the findings of the EDR report concerning the spill. This site is also listed on the LUST database. This particular listing refers to a confirmed release associated with previous USTs. The LUST status is listed as NFA: "No Further Action."

#### 4.4.6 Adjacent and Surrounding Sites

Interstate 75 adjoins the site to the west with Site 3 located to the north. The Young and Bertke Company, a site previously identified and consequently eliminated during the ESA Screening, is located to the south. Various other commercial and residential sites are located to the east.

#### 4.4.7 BUSTR File Review

The BUSTR office provided information regarding the LUST listing. According to information obtained from the numerous documents in the BUSTR file, the site was the former location of the Brighton Car Barns. The site was used for the storage and maintenance of streetcars and buses. The garage was demolished in 1984 with at least 7 UST's ranging in size from 500 gallons to 12,000 gallons removed from the site during the demolishment. Additional excavation at the site in 1988 and 1989 revealed one other 5,000-gallon UST. Numerous environmental reports and risk assessments conducted at

this site following the demolishment revealed significant petroleum contamination associated with the historic UST's. An unknown quantity of contaminated soil (estimated at 1500 loads) was removed from the site in the early 1990's. An exhibit detailing the excavation locations is included in Appendix D. Correspondence from the OH EPA dated December 21, 1990 suggests that clean fill was brought in and placed in the excavation following the removal of the contaminated soil. Ultimately, the BUSTR office issued "No Further Action" letter dated April 9, 1993 concerning the corrective actions. A copy of the "No Further Action" letter, analytical results associated with the remediation, and numerous historical documents concerning the site history is included in Appendix D.

#### 4.4.8 Fire Department File Review

No files concerning this site are in the possession of The Cincinnati Fire Department.

#### 4.4.9 Interviews

Tony Lestingi, a representative of the site owner, was interviewed on multiple occasions concerning the site history. Mr. Lestingi stated that the current structure was built approximately 15 years after the site was purchased from the City of Cincinnati. According to Mr. Lestingi, a substantial remediation effort associated with previous USTs was completed at this location prior to the construction of the present warehouse. Mr. Lestingi recalled that approximately 1500 loads of contaminated soil were removed from this site. Pete Mather with Petro Environmental was also interviewed concerning the remediation efforts. Mr. Mather concurred with Mr. Lestingi's recollection; approximately 1500 loads of petroleum-contaminated soil were removed from the site in the early 1990's.

Numerous attempts to locate additional evidence regarding the remediation activities were unsuccessful at the time of this report.

#### 4.4.10 Site Reconnaissance

Third Rock representatives conducted a site visit on December 9, 2009. One large warehouse structure is currently located on the site. Numerous semi trailers associated with the carpet warehouse operation were parked on the site during the site visit. The structure itself was not entered; however, no obvious environmental conditions were discovered during the site visit.

#### 4.4.11 Conclusions and Recommendations

Numerous different tenants have occupied the two warehouses that have been located on the site since the early 1900's. Several of the tenants are believed to have operated USTs on the site. The USTs were removed in the early 1990's with petroleum contamination being discovered during the removal. Remediation efforts were completed that resulted in approximately 1500 loads of contaminated soil being removed from the site in the early 1990's. Evidence obtained from the BUSTR file (Environmental Risk Assessment dated November 12, 1990) suggests that residual levels of TPH remain on the site up to 1300 ppm. Significant earth disturbing activities in the area can expect to encounter soil with elevated TPH levels. However, this site is not expected to be impacted in any way by the proposed road improvements. The BUSTR office ultimately issued a "No Further Action" letter concerning the corrective actions on April 9, 1993. This assessment concurs with the BUSTR determination; no further action is recommended at this time.

# 4.5 1101 York Street (Site 9)

The Wegman Company is located at 1101 York Street. Multiple manufacturing facilities once occupied this site.

#### 4.5.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1964, 1973, 1981 and 1986 were reviewed. Though the property to the west has changed with the development of the interstate system, the site itself appears virtually unchanged on all images reviewed.

#### 4.5.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance mapping from 1891, 1950, and 1981 was reviewed. The site is mostly vacant on the 1891 mapping with only two sheds and two stables located nearby. Numerous manufacturing facilities are evident on the 1950 mapping. Site tenants on the 1950 mapping include: Max Wocher & Son Surgical Instruments Company; a paper warehouse; and The Brunhoff Manufacturing Company, a metal pressing and silvering company. Gold Medal, a metal specialties manufacturer, and a paper warehouse are listed as the occupants on the 1981 mapping.

#### 4.5.3 City Directories

A search of city directories showed the following uses for Site 9.

Year	Uses
2009	Wegman Co office furniture & equipment
2005	Wegman Co
2005	Wegman Co
1964	Merchants Paper Co Inc
1952	Merchants Paper Co Inc
1947	Merchants Paper Co Inc
1940	Merchants Paper Co Inc
1930	Cincinnati Advertising Products Co
1925	Cincinnati Advertising Products Co
1920	Cincinnati Advertising Products Co

Table 5 – 1101 York Street, Cincinnati (Site 9)

#### 4.5.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

#### 4.5.5 Regulatory Records Review

The EDR report did not identify the Wegman facility. However a previous occupant, Gold Medal Products, is identified on the Resource Conservation and Recovery Act Conditionally Exempt Small Quantity Generator (RCRA-CESQG) and Facility Index System (FINDS) databases. Various solvents are listed as the RCRA waste. No violations are reported for this facility.

#### 4.5.6 Adjacent and Surrounding Sites

Interstate 75 is located to the west with residential sites to the north and east. An abandoned warehouse is located to the south of the site.

#### 4.5.7 BUSTR File Review

No records exist for this site at BUSTR.

#### 4.5.8 Fire Department File Review

The City of Cincinnati Fire Department files did not contain any UST records for this site.

#### 4.5.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA.

#### 4.5.10 Interviews

Scott Wegman with the Wegman Company was interviewed via a phone conversation on December 16, 2009. Mr. Wegman stated that his company, a furniture installation firm, has been located on the site since 1997. He recalled the Merchant Paper Company as a previous tenant. His recollection concurs with the Sanborn mapping and City Directories reviewed. Mr. Wegman did state that a previous Phase I ESA was conducted concerning this site. He could not recall who conducted the assessment; however, he was confident that the Phase I did not identify any environmental issues.

#### 4.5.11 Site Reconnaissance

Numerous interconnected, large warehouses are currently located on the site. The structures were not entered or examined during the site visit; however, the perimeter was walked in an effort to identify potential environmental issues. No obvious concerns were identified during the site visit.

#### 4.5.12 Conclusions and Recommendations

Numerous manufacturing facilities have previously occupied this site as well as adjacent sites. The Brunhoff Manufacturing Company, a previous occupant of an adjacent site, is of particular interest. Various sources indicate that the Brunhoff Company manufactured items that required some type of metal plating, potentially producing hazardous waste. However, this property is not expected to be impacted by the proposed road improvements. No further action is recommended at this time.

#### 4.6 830 Ezzard Charles Drive (Site 14)

The Center for Chemical Addiction Treatment is located at 830 Ezzard Charles Drive. The address was formerly 917 or 919 Clinton Street. A sheet metal works facility was historically located on this site.

#### 4.6.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1964 and 1981 were reviewed. Numerous structures consistent with a mixed land use are positioned along the current Ezzard Charles alignment are evident on the 1950 image. The same basic structure present today appears on all subsequent images.

#### 4.6.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance mapping from 1891, 1934, 1950, and 1981 was reviewed. Numerous residential structures and two furniture factories, F.J. Rennekamp and Betts St. Furniture Companies, are evident on the 1891 mapping. The 1934 mapping reveals an industrial sheet metal facility on the northwest site border. The Betts St. Furniture Company and numerous residential sites are also apparent on this mapping. The 1950 mapping is dominated by residential sites on and in the vicinity of the site. The 1981 Sanborn mapping reveals the present day structure currently occupied by the Center for Chemical Addiction Treatment.

#### 4.6.3 City Directories

Address information for this site was identified by 1934 Sanborn mapping. No Clinton Street information was available within the City Directories reviewed.

#### 4.6.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

#### 4.6.5 Regulatory Records Review

The EDR report did not identify this facility.

#### 4.6.6 Adjacent and Surrounding Sites

This site is predominantly surrounded by residential sites. Large apartment complexes are located to the north and south. Site 17 is also located to the south. Interstate 75 is located directly to the west with a medical office complex and school located to the east.

#### 4.6.7 BUSTR File Review

No records exist for this site at BUSTR.

#### 4.6.8 Fire Department File Review

The City of Cincinnati Fire Department provided information suggesting that one UST was removed from this location in April of 1997. Additional investigation could not verify this information. The Sanborn mapping reviewed does not identify potential UST tenants. The 1997 removal date identified by the Fire Department should result in a BUSTR file though the BUSTR office claims that no such UST file exists for this site. All evidence suggests that the Fire Department contains incorrect information concerning this site. However, the UST is reported as being removed.

#### 4.6.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA.

#### 4.6.10 Interviews

Ron Derstate, a supervisor with the Center for Chemical Addiction Treatment, was interviewed on December 17, 2009. Mr. Derstate stated that the business has been located on the site since 1977. He recalled that the site was purchased from the City of Cincinnati. According to Mr. Derstate, numerous residential buildings were previously located on the site. He believed that the residential buildings were possibly a convent for the nuns that worked at a nearby hospital. Previous construction activities on the site

unearthed general construction debris containing wood and stone fragments. Mr. Derstate assumed that the debris was related to the demolishment of the residential buildings that previously occupied the site. Mr. Derstate was not aware of environmental issues associated with the site.

#### 4.6.11 Site Reconnaissance

Third Rock representatives performed a site reconnaissance on December 7, 2009. One large, two-story brick building is located on the site. The structure itself was not entered or examined. A parking lot and adjacent yard are also located on the site. No obvious signs of contamination were observed during the site visit.

#### 4.6.12 Conclusions and Recommendations

Various occupants including two furniture companies, a sheet metal works facility and numerous residential buildings have occupied this site. This site is not expected to be impacted by, nor create an environmental condition for, the proposed highway improvements. No further action is recommended at this time.

#### 4.7 845 Ezzard Charles Drive (Site 17)

A large apartment complex is located at 845 Ezzard Charles Drive. A filling station was previously located on this site.

#### 4.7.1 Aerial Photographs

Aerial photographs from 1950, 1964, 1981, 1981, and 1986 were reviewed. Numerous structures are evident on the 1950 mapping, with a structure that appears to be a filling station located at the intersection of the historic alignments of Baymiller and Lincoln Park. The present apartment complex is evident on all subsequent images.

#### 4.7.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance mapping from 1891, 1934, 1950, and 1981 was reviewed. Numerous residential dwellings and storefront buildings are located on the 1891 and 1934 mapping. One filling station, located at the historic address of 1318 Baymiller, is identified as a tenant on the site on the 1950 mapping. The present apartment complex structures are located on the 1981 mapping.

#### 4.7.3 City Directories

A search of Cincinnati city directories showed the following uses for Site 17.

Year	Uses	
2009 - 1961	Not listed	
1952	White Rose Oil Station	
1947	White Rose Oil Station	
1940	William Hartmann Jr filling station	
1935	William Hartmann Jr filling station	
1930	Not listed	

#### Table 6 – 845 Ezzard Charles Drive, Cincinnati (Site 17)

#### 4.7.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

#### 4.7.5 Regulatory Records Review

The EDR report did not identify this facility.

#### 4.7.6 Adjacent and Surrounding Sites

Site 14 is located to the north directly across Ezzard Charles Drive. Interstate 75 is located to the west. A school is located to the south with various commercial sites positioned to the east.

#### 4.7.7 BUSTR File Review

No records exist for this site at BUSTR.

#### 4.7.8 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

#### 4.7.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA.

#### 4.7.10 Interviews

John Brawley, a project manager with the current site owner, was interviewed via a phone conversation on January 8, 2010. Mr. Brawley stated that his firm, the Medve Group, purchased the existing apartment complex approximately 20 years ago. Mr. Brawley did not have knowledge of the historic UST location.

#### 4.7.11 Site Reconnaissance

Third Rock representatives conducted a site reconnaissance on December 7, 2010. Internal roads within the apartment complex were driven in an effort to identify potential sources of contamination. No obvious environmental conditions were discovered during the site visit.

#### 4.7.12 Conclusions and Recommendations

Historic Sanborn mapping from 1950 identifies a filling station with three USTs located near the northwest site boundary. This station was positioned at the intersection of the historic alignments of Baymiller and Lincoln Park, currently the intersection of Ezzard Charles and Winchell. City Directory information suggests that the station operated from approximately 1935 to 1952. Due to the fact that the station closed prior to 1988, no formal closure records exist for this site. However, the proposed road improvements are not expected to impact the location of this historic UST site. No further action is recommended at this time.

#### 4.8 817 Mound Street (Site 29)

This site appears to be located within the existing right of way immediately east of the 8<sup>th</sup> Street viaduct at the juncture of the Winchell Avenue and 9<sup>th</sup> Street. The historic physical address was 817 Mound Street. The site owner is the City of Cincinnati. The

site was historically the southwest corner of Mound and 9<sup>th</sup> Streets but has been incorporated into the right of way.

## 4.8.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1964, 1973, 1981, and 1986 were reviewed. On the 1950 and 1958 images the site appears to be configured as a filling station on the southwest corner of Mound and 9<sup>th</sup> Streets. The building is aligned diagonally with the corner and has a short canopy. Subsequent images from 1964, 1981, and 2007 show the site incorporated into the approach to the 8<sup>th</sup> street viaduct and the I-75 north on ramp.

## 4.8.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance mapping from 1891, 1950, and 1981 was reviewed. The site is mostly vacant on the 1891 mapping, with a residential structure on the southern boundary and storefronts and a church on adjoining sites. The 1934 and 1950 maps show a filling station on the corner with a physical address of 817 Mound Street. A copy of the 1934 and 1950 Sanborn maps for this site are attached in Appendix C.

## 4.8.3 City Directories

The address shown on the Sanborn Fire Insurance maps does not appear in the city directories, with the 800 block of Mound Street showing only residential properties.

## 4.8.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.8.5 Regulatory Records Review

The EDR report did not identify any records at this site. A site was identified for a OH UST and OH LUST record at "Cityrama II Mound Street at 9<sup>th</sup> Street." This is near the same intersection as this site; however, it is actually nearly one block north nearest to Court Street. The City of Cincinnati was the owner of this 300-gallon tank discovered during a redevelopment project with removal occurring on May 28, 1997. A No Further Action status was achieved for this site.

The City of Cincinnati provided correspondence and the closure report for another OH UST on the opposite corner of Mound Street, which was removed on October 28, 2001. This site was not identified in the EDR report. This facility was identified in the Site Screening (Site # 30) process, but a Phase I was not recommended because it is just beyond the project study area boundary. A "No Further Action" status was achieved for this site.

## 4.8.6 Adjacent and Surrounding Sites

This site is predominantly surrounded by residential sites.

## 4.8.7 BUSTR File Review

One record exists for a site near this site at BUSTR. This agency provided a copy of the "Cityrama II Mound Street at 9<sup>th</sup> Street" correspondence and closure report.

## 4.8.8 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

## 4.8.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA for this site.

### 4.8.10 Interviews

Tom Klumb with the City of Cincinnati Real Estate Department was interviewed regarding this site. Mr. Klumb recalled UST removals related the redevelopment of the area north of 9<sup>th</sup> Street along Mound Street. He was not aware that there was a service station on the southwest corner of the intersection. He believed that if it were encountered during the construction of the 8<sup>th</sup> street viaduct it would have been informally removed in the early 1960s or left in place.

#### 4.8.11 Site Reconnaissance

A site reconnaissance was completed on December 12, 2009. The site is currently occupied by roadway and is adjacent to residential site to the north. The 8<sup>th</sup> Street viaduct is to the west, 9<sup>th</sup> street continues on to the east and south. No evidence of the former used of the site as a service station was visible.

## 4.8.12 Conclusions and Recommendations

The USTs that were located at this site may still be located within the right of way. This site is expected to be a complete take, though detailed construction activities are not known at this time. A Phase II ESA should be completed to determine if the USTs are still present. Either a geotechnical method should be employed to attempt to detect a buried UST or borings should be advanced in the likely position of the USTs. Samples should be analyzed for the appropriate parameters to comply with Ohio Bureau of Underground Storage Tank regulations.

# 4.9 500 West 7<sup>th</sup> Street (Site 31)

Automatic Data Processing (ADP), a payroll-processing center, previously occupied a site located at 500 West 7<sup>th</sup> Street. Burke Advertising currently owns the vacant building with the main structure under renovation.

## 4.9.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1964, 1973, 1981 and 1986 were reviewed. Numerous structures are evident suggesting a mixed land use on the 1950, 1958 and 1964 images with the major difference being the road infrastructure is much more developed on the 1964 image. A land use change is evident on the 1981 image, with the present structure formerly occupied by ADP revealed.

## 4.9.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance mapping from 1891, 1934, 1950, and 1981 was reviewed. Numerous residential structures are evident on the 1891 mapping. The 1934 and 1950 maps are dominated by unidentified storefront businesses. The 1981 mapping reveals the present structure, with ADP identified as the occupant.

## 4.9.3 City Directories

A search of the Cincinnati city directories showed the following uses for Site 31.

Year	Uses
2009	Automatic Data Processing
2005	Automatic Data Processing
1999	Automatic Data Processing
2002	Automatic Data Processing
1989	Automatic Data Processing Chatfield & Marshall, lawyers
1983	Automatic Data Processing
1979	Victor Corp Casting Dept Amalgamated Clothing Workers of America, AFLCIO
1974	Victor Corp Casting Dept Amalgamated Clothing Workers of America, AFLCIO Montgomery, William
1969	Amalgamated Clothing Workers of America, AFLCIO Montgomery, William
1920 - 1964	Residential

## Table 7 – 555 West 7<sup>th</sup> Street, Cincinnati (Site 31)

## 4.9.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.9.5 Regulatory Records Review

The EDR report identifies this facility on the OH UST and OH LUST database. According to the EDR report, three USTs were removed from this site. Two 10,000-gallon USTs (diesel and gasoline) were removed in 1992 and one 10,000-gallon diesel UST was removed in 1999.

The OH LUST listing refers to a "release" that occurred on this site on November 10, 1992. The term "release" is not referring to an actual physical release of a petroleum product that occurred on the site. In this instance, the term "release" is referring to a closure as indicated by the LTF 6 status. The status of the "release" is currently listed as "No Further Action."

## 4.9.6 Adjacent and Surrounding Sites

Interstate 75 and the 7<sup>th</sup> Street Viaduct are located to the west and south of the site. A parking lot is located to the north with several large offices buildings to the east. Several historic filling station locations eliminated during the ESA Screening are also located to the east.

## 4.9.7 BUSTR File Review

The Closure Report, dated April 30, 2002, states that one 10,000 gallon UST was removed from this site in 1999. The Closure Report estimated the UST to have been approximately 25 years old at the time of the removal. Ultimately BUSTR issued a letter dated May 8, 2002 stating that no further action is required concerning the 1999 UST removal. The NFA was granted based upon Category 3 action levels. A copy of the NFA letter and Closure Report is included in Appendix D.

## 4.9.8 Fire Department File Review

According to the City of Cincinnati Fire Department, two USTs were removed form this address in October of 1992. The Cincinnati Fire Department provided no further information regarding USTs.

#### 4.9.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA.

#### 4.9.10 Interviews

Terry Atkinson, operations manager for ADP, was interviewed via a phone conversation on January 4, 2010. Mr. Atkinson stated the previous USTs on site were used to fuel fleet vehicles. He was not aware of any issues associated with the USTs and he believed that the tanks were removed in 1999.

#### 4.9.11 Site Reconnaissance

Third Rock representatives performed a site reconnaissance on December 8, 2009. The main structure was under renovation with construction workers on site during the visit. The main structure was not entered or examined; however, no obvious environmental conditions were discovered during the site visit.

#### 4.9.12 Conclusions and Recommendations

All information reviewed suggests that numerous residences and commercial businesses occupied the site prior to the current structure being built in the late 1970's or early 1980's. ADP occupied the building from approximately 1983 until 2008 when Burke Advertising purchased the site, with renovations currently underway. ADP owned and operated three different UST systems on this site, and the last UST was removed in BUSTR issued a letter in 2002 stating that no further action was required 1999. regarding the 1999 UST removal. The LUST database lists the status of the 1992 "release" as LTF 6, NFA: "No Further Action." This site is not expected to be impacted in any way by Alternative C/D. Alternative E is expected to partially impact an approximate 30' strip near the northern parcel boundary. Construction details regarding this partial impact are not known at this time. Though partial impacts are possible, the potential impacts are expected near the northern boundary, well away from the historic UST This report agrees with the BUSTR determination; no further action is location. recommended at this time.

## 4.10 508 West 3<sup>rd</sup> Street (Site 49)

The Ohio Department of Transportation (ODOT) owns a site of land located 508 West 3<sup>rd</sup> Street. A filling station was historically located on this site.

## 4.10.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1964, 1973, 1981, and 1986 were reviewed. Before the interstate development a large structure, positioned at the intersection of the historic alignments of West 4<sup>th</sup> Street and Smith Street, is evident on the site on the 1950 and 1958 mapping. After interstate development the site is isolated by ramps and vacant on the 1964, 1973, 1981 and 1986 images.

## 4.10.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance mapping from 1891, 1934, 1950, and 1981 was reviewed. Two residential dwellings are evident on the site on the 1891 maps. The 1934 mapping reveals a filling station along the historic West 4<sup>th</sup> Street alignment. A large structure is evident on the 1950 mapping, although it does not appear to be the 1934 filling station. The 1981 mapping reveals the interstate system with the site itself vacant.

## 4.10.3 City Directories

A search of the Cincinnati city directories showed the following uses for Site 49.

Year	Uses
2009	Artimis Operations Control Center – government offices
2005	Artimis Operations Control Center - government offices
1999	Artimis Operations Control Center - government offices
1927 - 1996	Not listed

 Table 8 – 508 West 3<sup>rd</sup> Street / 600 West 4<sup>th</sup> Street (Site 49)

The filling station that once occupied this site was previously located at the intersection of the historical alignments of West 4<sup>th</sup> and Smith Streets. The City Directories reviewed did not identify a filling station located at this intersection.

## 4.10.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.10.5 Regulatory Records Review

According to the EDR report, this facility is listed on the OH UST database. However, no specific UST information is reported.

## 4.10.6 Adjacent and Surrounding Sites

This site is completely surrounded by the Interstate system. Site 54 is located just south of the site.

One particular adjacent site of interest positioned to the west across the interstate is UPS, located at 640 West 3'rd Street. The UPS site was identified during the ESA Screening and subsequently eliminated during the alternative development process. Consequently, this site was not selected for a Phase I investigation. However, recent alternative changes now include impacts to this site for both alternatives. Detailed impacts are not known at this time but a partial ROW take (approximately 50-foot strip) is expected to impact this site.

UPS is listed on the FINDS, RCRA-SQG, OH LUST, and OH UST databases. All database listings refer to the daily operations of a commercial shipping company. According to the OH UST and OH LUST listing, numerous UST's were removed from this site at various times in 1990 and 1991. The LUST status is referred to as LTF 6, simply indicating a UST removal, not an actual contamination concern. Four UST's (waste oil and diesel) were removed from this site in 1990. Four additional 10,000-gallon UST's (gas and diesel) were removed in 1991 and replaced with two larger (15,000 and 30,000 gallon) UST's. Copies of the NFA letters and closure reports regarding the UST removals are included Appendix D. Exhibits within the BUSTR file indicate the current

UST's as being positioned just south of the truck washing area, approximately 170' west of the proposed alternatives. An interview with Darrel Anderson, UPS maintenance employee, confirmed the current UST location. Mr. Anderson further stated that he was not aware of any UST's associated with the maintenance facility and that only two UST's are currently located on the site.

Historic mapping reviewed suggests that area to be disturbed has been utilized as a parking lot since at least 1981 with numerous residential and storefront structures occupying the area historically. Additionally, information obtained from the BUSTR file does not suggest that petroleum contamination may be present at this location. No further action regarding this site is recommended at this time.

## 4.10.7 BUSTR File Review

No records exist for this site at BUSTR. The lack of information within the BUSTR office suggests that the OH UST listing is incorrect.

## 4.10.8 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

## 4.10.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA.

## 4.10.10 Interviews

James Hungler, an ODOT Supervisor, was interviewed during the site reconnaissance on December 9, 2009. Mr. Hungler was not aware of the historic UST location. Likewise, Mr. Hungler was not aware of any environmental conditions associated with the site.

## 4.10.11 Site Reconnaissance

The Advanced Regional Traffic Interactive Management & Information System (ARTIMIS) transportation center is currently located on the site. One large generator was observed during the site visit. ARTIMIS employees stated that an above ground storage tank containing diesel fuel was incorporated into the generator. No sumps or floor drains were observed during the site reconnaissance. No obvious environmental conditions were observed during the site visit.

## 4.10.12 Conclusions and Recommendations

Historic mapping suggest a filling station was located along the former alignments of West 4<sup>th</sup> and Smith streets. The current structure, occupied by ARTIMIS, is located in the vicinity of the historic filling station. The filling station only appears on the 1934 Sanborn mapping suggesting that it only operated at this location for a short period of time. The station operated and closed prior to 1988, therefore no formal closure records exist for this site. Furthermore, it is unclear if ODOT cleared this site of contamination prior to the construction of the ARTIMIS facility. This site is expected to be a complete take, although construction details are not known at this time. Due to the lack of information available regarding the historic filling station, a Phase II investigation is warranted. Soil borings to identify potential petroleum contamination are recommended.

The soil / groundwater samples should be analyzed according to current UST closure regulations.

## 4.11 400 John Street (Site 50)

This site, located at 400 John Street, was formerly the location of a City of Cincinnati Sanitation Department. Three USTs were previously located at this site. The site owner is the City of Cincinnati.

## 4.11.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1964, 1973, 1981, 1986 and 2006 were reviewed. On the 1950 and 1958 images the site appears to be high-density urban development with multi story structures having addresses on the 400 block of West 4<sup>th</sup> Street. The site apparently became redeveloped after the site was separated from 4<sup>th</sup> Street. John Street became connected to an elevated 4<sup>th</sup> street around 1960. The subsequent images from 1981 shows the site redeveloped with a commercial type structure and loss of the connection between West 4<sup>th</sup> Street and John Street.

## 4.11.2 Sanborn Fire Insurance Maps

Sanborn maps from 1891, 1934, 1950 and 1981 were examined for this site. The most current image shows the site with a rectangular building with the notation "city garage." In 1950 the site is on the north side of West 4<sup>th</sup> Street with several buildings denoted as stores and dwellings. The 1934 image shows stores and a parking garage. In 1891 the site is noted as having stores, offices, residential, cloak factory and liquor storage.

## 4.11.3 City Directories

The listing of this site as "Sanitation Dept" is consistent with the known use of this site. West 4<sup>th</sup> Street addresses were not examined.

## 4.11.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.11.5 Regulatory Records Review

The EDR report identified an OH LUST record for this address indicating that a UST had been removed from the site with "No Further Action" as the status.

The City of Cincinnati provided correspondence and the closure report indicating that a 2,000-gallon UST was removed from the site in July 1992. A copy of this documentation is included in Appendix D.

## 4.11.6 Adjacent and Surrounding Sites

This site is predominantly surrounded by interstate system overpass and ramp system elements on the north, east, and west. A commercial site is located to the south. Site number 54 is located to the southwest. This site is a former UST site and is discussed in more detail in subsequent sections of this document.

## 4.11.7 BUSTR File Review

One record exists for this site at BUSTR. The record indicates that a 2,000-gallon UST was removed from the site by the City of Cincinnati. The agency review indicated that additional soil samples would be required for compliance. The City of Cincinnati

conducted the additional sampling and a No Further Action status was granted (based upon Category 3 action levels) to the site on August 11, 1993. A copy of the Closure Report and related correspondence is included in Appendix D.

## 4.11.8 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

### 4.11.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA for this site.

## 4.11.10 Interviews

Tom Klumb with the City of Cincinnati Real Estate Department was interviewed regarding this site. Mr. Klumb recalled that use of this site by the Sanitation Department was primarily related to landscape maintenance staff. The USTs were used to fuel their vehicles and equipment such as mowers and trimmers. He also believed that the site was used to store and maintain the landscaping equipment. He recalled the UST being removed from the site and the demolition of the structure "a few years ago."

#### 4.11.11 Site Reconnaissance

A site reconnaissance was completed on December 12, 2009. The site is currently occupied by a parking area for the use of the adjoining building occupant.

## 4.11.12 Conclusions and Recommendations

Both alternatives will partially impact this parcel, though the full extent of the impacts is not known at this time. Alternative E impacts include an elevated structure with bridge piers on the parcel. Alternative C/D is expected to impact the parcel with an at grade approach to 4'th Street, effectively eliminating access to the parking lot from John Street. Though this parcel will in fact be impacted, the UST that was located at this site has been removed to the satisfaction of the Bureau of Underground Storage Tank Regulations. No further assessment is recommended.

## 4.12 SW Corner 4<sup>th</sup> Street and Central Avenue (Site 51)

This site, located on a vacant site at the former southwest corner of West 4<sup>th</sup> Street and Central Avenue. The site was formerly the location of a filling station. The site is owned by the City of Cincinnati.

## 4.12.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1964, 1973, 1981 and 1986 were reviewed. On the 1950 and 1958 images the site appears to contain a small square building but is generally open space on the southwest corner of 4<sup>th</sup> and Central Avenue. The subsequent image from 1984 shows the site incorporated into the interstate right-of-way. More recent images from 2004 shows the site just below the dead ended 3<sup>rd</sup> Street ramp structure.

## 4.12.2 Sanborn Fire Insurance Maps

Sanborn maps from 1891, 1934, 1950 and 1981 were examined for this site. The most current 1981 map shows a viaduct reaching over the top of the site. In 1950, the site

contained a small filling station on the southwest corner of West 4<sup>th</sup> Street and Central Avenue. The 1934 image shows the site as a vacant lot. In 1891 the site contained part of the Grand Hotel, which covered most of the block from 4<sup>th</sup> Street to 3<sup>rd</sup> Street.

## 4.12.3 City Directories

The city directory information is constant with the site being used as a filling station on two separate occasions.

#### 4.12.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

#### 4.12.5 Regulatory Records Review

The EDR report did not identify any regulatory records associated with this site

#### 4.12.6 Adjacent and Surrounding Sites

This site is predominantly surrounded by interstate system overpass and ramp system elements on the north, south, and west. Central Avenue is located to the east.

#### 4.12.7 BUSTR File Review

No record exists for this site at BUSTR.

#### 4.12.8 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

### 4.12.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA for this site.

#### 4.12.10 Interviews

Tom Klumb with the City of Cincinnati Real Estate Department was interviewed regarding this site. Mr. Klumb indicated that he did recall that a small filling station was located at this site. He did not recall any USTs being removed from the site.

#### 4.12.11 Site Reconnaissance

A site reconnaissance was completed on December 12, 2009. The site is currently occupied by a dead ended ramp structure. Most of the site is open and appears to have been filled above the original grade.

## 4.12.12 Conclusions and Recommendations

Sanborn mapping from 1950 suggests that a filling once occupied this site. The filling station operated and closed prior to UST regulations, therefore formal closure records for this site do not exist. This site is expected to be a complete take, though construction details are not known at this time. Do to the lack of information regarding the UST closure, a Phase II investigation is recommended. Soil borings to identify potential petroleum contamination are recommended. The samples should be analyzed according to current BUSTR regulations.

## 4.13 351 John Street (Site 52)

This site is currently part of a parking lot on the west side of John Street at 351 John Street. The site was formerly the location of a Hamilton County Sanitation District fueling station. The site is owned by the City of Cincinnati.

## 4.13.1 Aerial Photographs

Aerial photographs from 1950; 1958, 1964, 1981, 1986 and 1993 were reviewed. On the 1950 and 1958 images, the site is bisected by 4<sup>th</sup> Street, which is shown as a generally vacant area with some commercial use on the north side of 4<sup>th</sup> Street. Several rail lines on the site and contain freight cars associated with a rail terminal. The subsequent images from 1964 and 1981 shows an overhead viaduct bisecting the site. A utility building is visible on the south side of the viaduct and the fueling station is visible on the north side on the 1981 and 1986 images. In 1993 the fueling station is not visible.

#### 4.13.2 Sanborn Fire Insurance Maps

Sanborn maps from 1891, 1934, 1950 and 1981 were examined for this site. The most current 1981 image shows a viaduct extending over the top of the site. In 1950 the site is vacant with no notations. The 1934 image shows the site as a vacant lot noted as "parking," and in 1891 the site is occupied by a church and a bag manufacturer.

## 4.13.3 City Directories

The city directory only identified a parking lot on the east side of John Street. Most of the occupants near the site appear to have had 4<sup>th</sup> street addresses.

### 4.13.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.13.5 Regulatory Records Review

The EDR report identified a FINDS and a BUSTR record for 351 John Street.

## 4.13.6 Adjacent and Surrounding Sites

This site is predominantly surrounded by interstate system overpass and ramp system elements on the north, south and west. Dunnhumby USA's office building is located to the east.

#### 4.13.7 BUSTR File Review

A record exists for this site at BUSTR. The record indicates that three USTs were removed in February 1997. A subsequent excavation of contaminated soil and site assessment indicated that contamination remained at the site as detected in two borings, one located below the tank cavity and the other below the dispenser. A risk assessment was developed, indicating risk only to construction workers (ATC to Bonnie Phillips April 30, 1998). A "No Further Action" status letter was received by the City of Cincinnati dated February 2, 1999.

#### 4.13.8 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

### 4.13.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA for this site.

#### 4.13.10 Interviews

Tom Klumb with the City of Cincinnati Real Estate Department was interviewed regarding this site. Mr. Klumb indicated that he did recall that city employees used this site to fill vehicles. He did recall the USTs being removed from the site.

#### 4.13.11 Site Reconnaissance

A site reconnaissance was completed on December 12, 2009. The site is currently occupied by a parking lot

#### 4.13.12 Conclusions and Recommendations

The USTs that were located at this site were removed; however, contamination still is present. This site is expected to be partially impacted by Alternative E with both elevated structures and at grade work. Alternative C/D includes overhead structures that completely encompass the parcel. Though detailed construction information is not known at this time, it can be anticipated that significant cuts or placement of structures in this location (greater than five feet) should anticipate encountering petroleum-contaminated soil.

## 4.14 605 West 3<sup>rd</sup> Street (Site 53)

Speedway SuperAmerica is listed as the owner of a group of sites located at 605 West 3<sup>rd</sup> Street.

## 4.14.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1981, and 1986 were reviewed. The site itself appears virtually unchanged on all images reviewed. The existing structure is evident on all images typically with vehicles parked around the building. Though the site itself appears unchanged, the surrounding land use changed dramatically over the years, with the progress of the interstate system being the most obvious difference.

#### 4.14.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance mapping from 1891, 1950, and 1981 was reviewed. Sanborn mapping from 1891 reveals numerous residential structures and a bridge ticket office. The 1950 and 1981 mapping indicates the current service station structure. Three USTs are evident on the 1950 mapping.

#### 4.14.3 City Directories

A search of the Cincinnati city directories showed the following uses for Site 53.

Year	Uses
2009	Not listed
2005	Not listed
1999	Not listed
1996	Not listed
1991	Not listed
1985	Vacant
1979	All Truck Rental Services
1974	All American Truck Care - parking
1967	All Truck Rental Service Inc.
1961	Ralph Wischmeyer - gas station
1956	Ralph Wischmeyer - gas station
1951	Ralph Wischmeyer - filling station
1947	Ralph Wischmeyer - filling station
1940	Wasser & Wischmeyer - filling station
1935	Not listed
1930	Not listed
1927	Not listed

Table 9 – 605 West 3<sup>rd</sup> Street, Cincinnati (Site 53)

## 4.14.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.14.5 Regulatory Records Review

The EDR report did not identify this facility.

## 4.14.6 Adjacent and Surrounding Sites

This site is predominantly surrounded by parking lots, with Site 54 located to the north across 3<sup>rd</sup> Street. Site 58 is positioned to the east, and numerous other sites eliminated during the ESA Screening are located to the west. A large parking lot is situated to the south.

## 4.14.7 BUSTR File Review

No records exist for this site at BUSTR.

## 4.14.8 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

## 4.14.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA.

#### 4.14.10 Interviews

Multiple attempts to contact various individuals associated with this site were made with very limited success. Phone calls to the Speedway corporate environmental department

were not returned at the time of this report. Paul Caudill, a Marathon Oil real-estate representative, was interviewed via a phone conversation on January 7, 2010. Mr. Caudill stated that the station was originally owned and operated by the Tresler Comet Oil Company, a local Cincinnati based company that operated in the 1960's and 1970's. According to Mr. Caudill, Ashland Oil purchased the site from Tresler, and the USTs were not present at the time of the transaction. Outside sources state that the Ashland / Tresler merger took place in 1985. The actual date of sale has not been confirmed. Speedway acquired the site at some point after the Ashland merger, but it appears that gas has not been sold at this location since at least 1985 or earlier. Likewise, Mr. Caudill stated that no USTs are currently located on the site. Mr. Caudill also stated that he was not aware of any previous environmental studies associated with the site.

## 4.14.11 Site Reconnaissance

One small structure, which appears to be the remnants of an old service station, is currently located on the site. Though the structure appeared vacant and in a state of disrepair, a Speedway employee occupied the building at the time of the field visit. The purpose of the individual occupying the structure was not evident, as the station did not appear to be operational. The small office structure was not entered, however sumps or floor drains are not expected at this location due to the size and nature of the building. Two small manhole type covers are located on the site. Though not confirmed, it is possible that the manhole covers are in fact UST fill port covers. No gas pumps or evidence of previous gas pumps were discovered during the field visit.

## 4.14.12 Conclusions and Recommendations

Though somewhat limited, all evidence reviewed suggests that this station operated and closed prior to the 1988 UST regulations and thus never registered any USTs. If the USTs were removed prior to 1988, no closure record would exist for this site. This site is considered a complete take with both alternatives impacting the parcel. Construction details are not yet known but overhead structures with piers are expected on this parcel.

Due to limited amount of information available, a Phase II investigation is recommended. A supplementary field investigation to verify the presence or absence of USTs on this site is recommended. Existing monitoring wells were not identified during the site visit. Therefore, field borings in the vicinity of the suspected UST location are recommended to identify potential petroleum contamination. The soil and/or groundwater samples should be analyzed according to current UST closure regulations.

# 4.15 514 West 3<sup>rd</sup> Street (Site 54)

This site is currently a vacant site located at 514 West 3<sup>rd</sup> Street below the 2<sup>nd</sup> Street ramp from I-75 south. The site is owned by the City of Cincinnati. It is fenced and appears to sometimes be used for parking.

## 4.15.1 Aerial Photographs

Aerial photographs from 1950, 1958 and 1981 were reviewed. On the 1950 and 1958 images the site appears to be in a vacant area associated with a railroad terminal yard. Several rail lines terminate on the site and contain freight cars. The subsequent image from 1964 shows the site with an overhead viaduct bisecting the site, as seen today. A gas station is visible with a large canopy oriented perpendicular to the street after 1981.

## 4.15.2 Sanborn Fire Insurance Maps

Sanborn maps from 1891, 1934, 1950 and 1981 were examined for this site. The most current 1981 image shows a viaduct extending over the site and a filling station shown and noted. In 1950 the site is vacant with no notations. The 1934 and 1891 images show the site as part of a freight company warehouse with only the company name changed.

#### 4.15.3 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.15.4 Regulatory Records Review

The EDR report identified a BUSTR record for 514 West 3<sup>rd</sup> Street.

#### 4.15.5 Adjacent and Surrounding Sites

This site is predominantly surrounded by interstate system overpass and ramp system elements on the north, east, and west. A parking lot is located to the south across West 3<sup>rd</sup> Street.

#### 4.15.6 BUSTR File Review

A review of the BUSTR file indicates that five USTs were removed in June 1994. Third Street Enterprises owned the site at the time of the UST removal. The owner received a "No Further Action" status letter dated June 26, 1996.

In November 1995 a complaint was issued that road construction workers were improperly removing a UST from this site. The finding of the complaint was that the tanks were gone but the construction had encountered the product lines. The City of Cincinnati hired a contractor to remove the product line and conduct the appropriate test. This was completed in May 1999. A copy of the Closure Report and NFA letter is included in Appendix D.

## 4.15.7 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

## 4.15.8 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA for this site.

#### 4.15.9 Interviews

Tom Klumb with the City of Cincinnati Real Estate Department was interviewed regarding this site. He recalled the service station on this site prior to it being acquired for the Fort Washington road project. He did not recall the incident requiring the piping removal.

#### 4.15.10 Site Reconnaissance

A site reconnaissance was completed on December 8, 2009. The site is currently vacant with a fenced perimeter that was open at the time of the site visit. There was no indication that the site had been used as a filling station. Other than the ramp piers, no notable features were observed.

## 4.15.11 Conclusions and Recommendations

The USTs that were located at this site were removed and regulatory compliance achieved. This site is considered a complete take. However, no residual contamination associated with the UST system is anticipated and no further assessment is recommended.

## 4.16 444 West 3<sup>rd</sup> Street (Site 55)

The site, located at 444 West 3<sup>rd</sup> Street, is currently occupied by an international marketing firm, Dunnhumby USA. Previous tenants of this site include Dayton Hydraulic and Goodman Manufacturing. Goodman Manufacturing is listed at an alternate address, 314 John Street, Cincinnati, OH.

## 4.16.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1964, 1973, 1981, 1986, and 1993 were reviewed. Though the surrounding land use shows dramatic changes, the site itself appears virtually unchanged on all images reviewed. The structure revealed on the 1950 image appears to be the same structure present today. The roof of the building does reflect the major rehabilitation of the structure that the current occupant completed. In the images from 1950 and 1958, there are several multi-story buildings facing 4<sup>th</sup> Street that were likely demolished in conjunction with the interstate development.

## 4.16.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance mapping from 1891, 1934, 1950, and 1981 was reviewed. A school, church and numerous residential dwellings are identified as site occupants on the 1891 mapping. The present structure is evident on the 1934, 1950, and 1981 mapping. The 3<sup>rd</sup> Street Station Post Office Garage is listed as the tenant on the 1934 and 1950 mapping. The 1981 site tenant is not identified.

## 4.16.3 City Directories

Cincinnati city directories were searched for both 444 West 3<sup>rd</sup> Street and 314 John Street (Site 55). The structure is located on the corner of West 3<sup>rd</sup> Street and John Street. Thus occupants of the building may have used either 444 West 3<sup>rd</sup> Street or 314 John Street. Search results for both addresses are tabulated below.

Year	Uses
2009	System Parking - parking garage
2005	Not listed
1999	Not listed
1996	Not listed
1991	Hennegan Co - parking garage
1985	Hennegan Co - parking garage
1979	Clem A. Macke Bindery Inc. (book binding)
1974	Vacant
1967	General Electric Co Service Center/Macke Bindery Inc.
1961	General Electric Co - apparatus service
1956	General Electric Co - apparatus service
1951	General Electric Co - apparatus service
1947	Not listed
1940	Not listed
1930	Not listed

# Table 10 – 444 West 3<sup>rd</sup> Street, Cincinnati (Site 55)

## Table 11 – 314 John Street, Cincinnati (Site 55)

Year	Uses
2009	Not listed
2005	Not listed
2002	I B Goodman Mfg Co
1996	I B Goodman Mfg Co
1991	Hennegan Printing (wholesale)
1985	Hennegan Printing (wholesale)
1979	Hennegan Printing (wholesale)
1974	Blemker Co - gaskets
1967	Blemker Co - gaskets
1961	Barker Greeting Card Co
1956	Western Elec Co Inc wholesale
1951	(# 300-320) Modern Venetian Blinds of Ohio Inc
1947	War Assets Administration Southern Ohio Area Inc (site disposal)
1940	Not listed
1935	(no # - NEC) Cincinnati P O garage
1930	Cincinnati P O Third Street station
1920	residential

## 4.16.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.16.5 Regulatory Records Review

A previous site tenant, Goodman Manufacturing is listed on the FINDS and RCRA-CESQG databases. According the EDR database, numerous solvents are listed as the hazardous waste. No RCRA violations are recorded for this facility. Though listed as a CESQG, no hazardous waste is currently generated at this site as the site has been recently redeveloped.

Dayton Hydraulic is listed on the LUST database. According to the EDR report, one UST was removed from this site with a "release" occurring on December 6, 2000. The "release" status is listed as LTF 6, NFA: "No Further Action."

## 4.16.6 Adjacent and Surrounding Sites

Sites 50, 51 and 52 are located directly to the north, with Site 58 to the south across West 3<sup>rd</sup> Street. Site 54 is located to the west; Site 57 is positioned to the east.

#### 4.16.7 BUSTR File Review

The Dayton Hydraulic LUST file was reviewed at BUSTR. This particular "release" is merely referring to the UST removal, not a physical release of a petroleum product into the environment. According to the BUSTR files, one 5,000-gallon gasoline UST was removed from this site on May 20, 1999. The UST was discovered during excavation activities related the nearby Fort Washington Way project. The UST contained waste oil, paint cans, light bulbs and other garbage at the time of the removal. Numerous tests (BTEX, TPH, complete TCLP) associated with the UST did not indicate contaminated soil. According to the Closure Report, BTEX and TPH levels were determined to be below the detection limits. Though the analytical results were below detection limits, the report states that approximately 61.5 tons of contaminated soil was removed from the site. The origin of the contaminated soil is not clear. Ultimately, a "No Further Action" letter was issued on April 16, 2001. A copy of the "No Further Action" letter, Closure Report, raw analytical data, and exhibit detailing the UST location is included in Appendix D.

## 4.16.8 Fire Department File Review

The City of Cincinnati Fire Department records refer to one UST removed from 444 West 3rd Street in June of 1999. Though the date differs somewhat (May 1999 versus June 1999), the Fire Department records concur with the EDR report and BUSTR.

## 4.16.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA.

#### 4.16.10 Interviews

Chris Richter, a representative with Dunnhumby, the current occupant, was interviewed on December 16, 2009. Mr. Richter had very limited knowledge concerning the prior occupants due to the fact that Dunnhumby only recently moved into the newly renovated building. He was aware not aware of any previous activities that may have taken place on the site. Tim Holiday, a project manager with the renovation company, was also interviewed on January 8, 2010. Likewise, Mr. Holiday had very limited knowledge concerning the previous land use, as the building was vacant when the renovations began.

## 4.16.11 Site Reconnaissance

Third Rock representatives conducted a site reconnaissance on December 8, 2009. The large structure on the site appeared to have been recently renovated into an office building at the time of the visit. The interior of the structure itself was not examined. No obvious environmental conditions were observed during the site visit.

## 4.16.12 Conclusions and Recommendations

The current structure present on the site was constructed in 1923. Numerous tenants have occupied the site since the 1923 construction, with two of the tenants being listed on environmental databases. The RCRA listing refers to previous waste generation involving various solvents with no violations reported. Hazardous waste is no longer generated on the site; therefore the RCRA listing does not represent an environmental condition. Likewise, the LUST listing simply refers to a UST removal that occurred in 1999. BUSTR issued a "No Further Action" letter regarding the UST removal in 2001. Two particular tenants of interest are the Post Office Garage and General Electric. The actual activities associated with the Post Office Garage are not known, though it can be assumed that some type of auto repair may have occurred on this site. However, no USTs associated with the Post Office garage have been reported. Additionally, it can be reasonably assumed that if USTs were previously associated with this site, either the recent redevelopment or the previous Fort Washington Way project would have encountered them. It is also possible that General Electric stored or used electrical equipment that contained PCB's.

However, this site is not expected to be impacted by the proposed road improvements. No further assessment is recommended.

## 4.17 302-304 Central Avenue (Site 57)

This site, located at 302-304 Central Avenue, and is currently a parking lot and is owned by the City of Cincinnati.

## 4.17.1 Aerial Photographs

Aerial photographs from 1950, 1958, 1964, 1973, 1981, 1986 and 1993 were reviewed. On the 1958 and 1958 images a single non-descript building is present on the site. On all subsequent images from 1964, the site is apparently vacant and obscured by the elevated ramp from the westbound lanes of Fort Washington Way.

## 4.17.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance mapping from 1891, 1934, and 1981 was reviewed. The 1981 map shows the site as vacant with the use noted as "parking." The 1934 map shows the site as containing a filling station, several store fronts, hotels, and an office. The buildings are noted as three to five stories. The 1891 map shows the site as occupied by three hotels, shops, and residential structures.

## 4.17.3 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.17.4 Regulatory Records Review

This site is listed in the EDR database report as an OH LUST site.

## 4.17.5 Adjacent and Surrounding Sites

Commercial sites adjoin the site to the east. McFarland Street is to the north and Central Avenue is to the west and West 3<sup>rd</sup> Street is to the South. Parking lots are located to the south and east, with commercial buildings across McFarland Street to the north.

#### 4.17.6 BUSTR File Review

The 302-304 Central Avenue LUST file was reviewed at BUSTR. According the file, six USTs were removed from the site on October 15, 1999. The closure report indicated that one soil sample had a slightly elevated concentration of one contaminant. It was determined that based on the land use no further corrective action would be required. A "No Further Action" status was granted for the site on August 15, 2000. Copies of portions of the UST closure report and correspondence is included in Appendix D.

#### 4.17.7 Fire Department File Review

The City of Cincinnati Fire Department did not indicate any records for this site.

#### 4.17.8 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA.

#### 4.17.9 Interviews

Tom Klumb with the City of Cincinnati Real Estate Department was interviewed regarding this site. Mr. Klumb indicated that he did recall that a filling station was located at this site. He also recalled that the UST were removed in conjunction with a sewer project or possibly the Fort Washington Way project. He did not recall any other environmental issues associated with the site.

#### 4.17.10 Site Reconnaissance

Third Rock representatives conducted a site reconnaissance on December 9, 2009. The site was noted as a parking lot, and a significant grade change exists between West 3<sup>rd</sup> Street and McFarland Street. There was a large manhole located on the south side of the lot. Two piers for the elevated roadway are located on the lot.

## 4.17.11 Conclusions and Recommendations

This site is not expected to be impacted by either alternative. The site has received a "No Further Action" status from BUSTR and no significant soil contamination is associated with the site, therefore no further assessment is recommended.

## 4.18 West 3<sup>rd</sup>/Pete Rose Way/Central Ave/Smith St Block (Site 58)

This site is currently a large parking lot owned by the City of Cincinnati. It consists of the block bounded by West 3<sup>rd</sup> Street to the North, Pete Rose Way on the south, Central Avenue to the east, and Smith Street to the West.

## 4.18.1 Aerial Photographs

Aerial photographs from 1950; 1958, 1964, 1973, 1981, 1986, and 1993 were reviewed. The 1950 and 1958 images of the site shows a large warehouse type structure covering the entire southern third of the lot. Multiple railroad lines terminate on the site. There are numerous freight cars on these lines occupying most of the rest of the site. There is a multi-story structure with a smoke stack on the corner of West 3<sup>rd</sup> and Smith streets.

The subsequent image from 1964 shows the site largely redeveloped, with the large warehouse and rail lines removed and two new structures shown in 1973. The new structures appear to have significant truck docking capacity. The structure on the corner of West 3<sup>rd</sup> and Smith streets is still present but the smoke stack is gone.

## 4.18.2 Sanborn Fire Insurance Maps

Sanborn maps from 1891, 1934, 1950 and 1981 were examined for this site. The most current 1981 image shows the site as mostly parking, with commercial sites along West 3<sup>rd</sup> Street consisting of auto repair on the 400 block segment and undefined commercial offices on the corner of West 3<sup>rd</sup> and Smith streets. The other structures on the site are noted as "wholesale produce."

In 1950 the West 3<sup>rd</sup> Street segment shows a "heating plant" and stores and offices on the corner of West 3<sup>rd</sup> and Smith streets. The same auto repair building is present on the 400-block segment of West 3<sup>rd</sup> Street. The middle of the block if noted as "full of tracks from Smith Street to Central Avenue." The southern third of the block is occupies by a "freight warehouse."

The 1934 coverage is essentially the same as the 1950 land use, with removal of the auto repair shop along West 3<sup>rd</sup> Street.

The 1891 images show the site as the location of the Central Union Railroad Depot. The depot is a passenger and freight facility, with the freight warehouse on the southern third of the site and ticket hall and dinning hall on the eastern quarter. The "heating plant" is now shown as an "electric generating plant." The other structure at the corner of West 3<sup>rd</sup> and Smith streets is noted as "under construction."

## 4.18.3 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.18.4 Regulatory Records Review

The EDR report identified a BUSTR record for 205 Central Avenue (Crosset Co.), and an OH SPILLS record for 205 Central Avenue (Rumpke Waste, Inc). The OH SPILL incident is described as a leak from the hydraulic system of a solid waste packer truck.

## 4.18.5 Adjacent and Surrounding Sites

This site is crossed by multiple elevated roadways including I-71, Fort Washington Way and West 2<sup>nd</sup> Street. The Cincinnati Bengal's practice field is located to the South and additional parking is located to the north, east and west.

## 4.18.6 BUSTR File Review

A review of the BUSTR file indicates that one 12,000-gallon diesel fuel UST was removed from the Crosset Company located on the site in February 1999. A closure report was reviewed for this removal; however, a "No Further Action" status is not documented.

Additional records indicated that two 8,000-gallon diesel fuel USTs were located at the site on the Crosset Company site. A report was submitted to BUSTR dated May 10,1989 evaluating the site after the tanks failed tightness testing. The report details a site characterization to evaluate a possible release from the tanks. No follow up documentation was submitted to BUSTR to indicate that the tanks were removed. Five letters from BUSTR to the owner requesting information were dated September 1992 through July 27, 2007. The letters indicate that no closure report was submitted for these tanks.

#### 4.18.7 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

#### 4.18.8 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. One record concerning this site was on file with the Ohio EPA. This record indicated that a 30-gallon hydraulic oil spill occurred in January of 1997 and was cleaned up.

#### 4.18.9 Interviews

Tom Klumb with the City of Cincinnati Real Estate Department was interviewed regarding this site. He recalled the site was the site of produce distribution and Robert Castellini owned the entire block. He did not recall any environmental issues related to the site.

#### 4.18.10 Other Resources

The City of Cincinnati provided copies of three Environmental Site Assessments for the site, which were completed in 2007, 1998 and 1993. Only the 1993 report indicated that further sampling should be conducted in the vicinity of the tank cavity where two USTs had been removed and replaced by a 12,000-gallon UST. No other finding that would currently have relevance was noted in the document.

#### 4.18.11 Site Reconnaissance

A site reconnaissance was completed on December 9, 2009. The site is currently a large parking lot.

## 4.18.12 Conclusions and Recommendations

Three USTs are documented as being present at this site. Two 8,000-gallon USTs and one 12,000-gallon UST were operated by the Crosset Company. The removal of the 12,000-gallon UST occurred in February 1999 and was documented with a closure report. No files were found to document the removal of the 8,000-gallon USTs. Phase I ESA documentation suggests that the 12,000-gallon UST replaced the two 8,000-gallon USTs.

There is no documentation of the removal of the 8,000-gallon USTs and no "No Further Action" letter from BUSTR to confirm that the removal of the 12,000-gallon UST was conducted properly.

All these USTs were located midway between West 3<sup>rd</sup> Street and Pete Rose way near Smith Street. This location is based on site plan maps in the closure report and site check report. These maps have no scale and the precise location of the USTs may be difficult to determine without first hand information. This site is considered a complete take with overhead structures encompassing the entire parcel. Detailed construction information is not yet known but numerous piers are expected to be located on the site. A Phase II investigation to identify potential petroleum contamination is recommended.

## 4.19 646 Mehring Way (Site 60)

This site is currently a large parking lot owned by Duke Energy. It consist of the block bound by Pete Rose Way to the north, Mehring Street the south, Rose Street to the east, and Gas Alley to the west. The site has historically been the site of a gas manufacturing plant.

## 4.19.1 Aerial Photographs

Aerial photographs from 1950; 1958, 1964, 1973, 1981, 1986 and 1993 were reviewed. The earliest images from 1958 and 1958 shows five or six structures with on gas holder tank still visible. The site also appears to be in use as a substation with transformer structures apparent on the west side of the lot. The 1964 and subsequent images of the site shows progressively fewer buildings on site until it is in use primarily for parking with a transformer yard on the west side in 1993.

## 4.19.2 Sanborn Fire Insurance Maps

Sanborn maps from 1891, 1934, 1950 and 1981 were examined for this site. The 1981 image shows the western half of the site as a transformer yard. One existing building is in place and is noted as a "pipe shop."

In 1950 one gas holder ("Gasometer") is noted in the northeast corner of the lot and "transformers" are noted on the west side. Five buildings are noted on the lot.

The 1934 map shows five gas holders on the lot, with the southeast corner noted as containing "tar wells" and "purifier tanks." An "oil house" is noted near the center of the lot.

The 1891 images show the site with four gasholders. The site has three large buildings noted as "purifying houses." The southeastern quadrant of the site contains notations of "tar wells in basement," and "line room," "condenser room" and "scrubber."

## 4.19.3 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.19.4 Regulatory Records Review

The EDR report listed two manufactured gas plants in the area. One is listed as West Pete Rose Way and West 2<sup>nd</sup> Street and Mehring Way. A small electric generating/heating plant was located at the corner of West Pete Rose Way and West 2<sup>nd</sup> Street. Only one manufactured gas plant is located in the project area.

## 4.19.5 Adjacent and Surrounding Sites

This site is adjacent to Valley Asphalt (hot mix asphalt plant-Site 65) to the east, Longworth Hall to the north, a vacant lot to the west, and a large Duke Energy substation (Site 64) to the south.

## 4.19.6 BUSTR File Review

No records exist for this site at BUSTR.

## 4.19.7 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

## 4.19.8 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. No records concerning this site are on file with the Ohio EPA.

#### 4.19.9 Interviews

An interview with Jessica Bednarcik of Duke Energy was conducted on February 10, 2010. Ms Dednarcik indicated that the site was purchased in 1876 for use as a manufactured gas plant. She did not know what the use of the site was prior to the manufactured gas plant use. She indicated that a site characterization has been initiated to determine the extent of soil and groundwater contamination. Duke Energy has not conducted any previous site characterization at this site.

#### 4.19.10 Site Reconnaissance

A site reconnaissance was completed on December 9, 2009. The site is currently a large parking lot with a single two-story brick building and two steel frame high-tension power line towers.

## 4.19.11 Conclusions and Recommendations

The historic use of this site as part of a manufactured gas plant suggests significant soil and groundwater contamination may be present. The features noted on the Sanborn maps, including the gas holders, purifying houses, tar wells, line room, condenser room, and scrubber, each have significant potential to have released contaminants into the soil and groundwater at the site.

The contaminants of concern include those associated with coal tar, aromatic hydrocarbons, including the tar-acid phenols and cresols; the monocyclical aromatic hydrocarbons (MAHs), more commonly known as the BTEX series (benzene, toluene, ethylbenzene and xylene); the duocyclical aromatic hydrocarbons (DAHs) represented mainly by the base-neutral naphthalene; the polycyclical aromatic hydrocarbons (PAHs) represented by the medium and heavy oils (the "tars"), as well as various forms of cyanogens, sulfur, and some heavy metals concentrated from the trace metals of the coal and some of the enrichment oils. (Hatheway, Allen W. 2008. Internet website on former manufactured gas plants: www.hatheway.net, page dealing with environmental threat.)

Considering the large size of this facility and long period of operation the degree of contamination could be significant. Large volumes of highly contaminated soil and high

concentrations of hydrocarbon contamination should be anticipated. This condition could represent a significant consideration for this project. Numerous piers associated with both alternatives are expected to be located on this site, though the exact locations are not yet known. A Phase II site investigation is recommended.

## 4.20 655 Mehring Way (Site 64)

This site is currently a large substation owned by Duke Energy. It consist of the block bounded by Mehring Street the north and the Ohio River to the south The site was historically the site of a coal burning power plant and a gas manufacturing plant.

## 4.20.1 Aerial Photographs

Aerial photographs from 1950; 1958, 1964, 1973, 1986, 1981; 1986 and 1993 were reviewed. The 1950 and 1958 images show the power plant still active, with emission from one of four stacks. One gasholder is still in place and the remnants of gas plant retorts are prominent. The power plant is reduced in size in the 1964 and subsequent images to two stacks and coal piles still present. The 1981 and subsequent images shows the power plant still in place, but the stacks are sealed. The retorts are no longer present and the substation is located on the west side.

## 4.20.2 Sanborn Fire Insurance Maps

Sanborn maps from 1891, 1934, 1950 and 1981 were examined for this site. The 1981 map shows the western portion of the site as "power house built 1917 coal fired power generation."

In 1950 the power plant is present and one gas holder ("Gasometer") and a "measuring station."

The 1934 map shows a filter house just west of the "power house," one gasholder and the retort building is noted.

The 1891 map shows the western one third of the site occupied by the "Globe Rolling Mill Co." This is apparently a steel mill with multiple coal-fired furnaces. McCammon Alley separates the mill from the manufactured gas plant noted as the "Cincinnati Gas Light and Coke Co." Most of the gas plant site is occupied by coal storage and retorts with a single gasholder.

## 4.20.3 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.20.4 Regulatory Records Review

The EDR report listed two manufactured gas plants in the area. One is listed as West Pete Rose Way and West 2<sup>nd</sup> Street and Mehring Way. A small electric generating/heating plant was located at the corner of West Pete Rose Way and West 2<sup>nd</sup> Street. Only one manufactured gas plant was located in the project area located at Sites 60 and 64.

### 4.20.5 Adjacent and Surrounding Sites

This site is adjacent to Valley Asphalt (hot mix asphalt plant-Site 65) to the east, Longworth Hall to the north, a vacant lot to the west, and a large Duke Energy substation (Site 64) to the south.

#### 4.20.6 BUSTR File Review

No records exist for this site at BUSTR

#### 4.20.7 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

#### 4.20.8 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. One spill report was identified from November 2, 1999. The report indicated that approximately 300 gallons of non-PCB transformer oil was spilled and contained by a concrete sump. The report indicated that all of the oil was recovered.

#### 4.20.9 Interviews

An interview with Jessica Bednarcik of Duke Energy was conducted on February 10, 2010. Ms. Dednarcik indicated that the site was purchased in 1851 for use as a manufactured gas plant. She did not know what the use of the site was prior to the manufactured gas plant use. She indicated that a site characterization has been initiated to determine the extent of soil and groundwater contamination. Duke Energy has not conducted any previous site characterization at this site.

## 4.20.10 Site Reconnaissance

A site reconnaissance was completed on December 9, 2009. The site currently contains a large electrical substation and a large brick building. Oil filled transformers are common on the site with drums of waste oil noted on the east side of the building. The portion of the site located under the Interstate 75 Bridge is used for parking. The interior of the building was not inspected.

#### 4.20.11 Conclusions and Recommendations

The historic use of this site as part of a manufactured gas plant suggests significant soil and groundwater contamination will be present. The features noted on the Sanborn maps, including retorts have significant potential to have released contaminants into the soil and groundwater at the site.

The contaminants of concern include those associated with coal tar, aromatic hydrocarbons, including the tar-acid phenols and cresols; the monocyclical aromatic hydrocarbons (MAHs), more commonly known as the BTEX series (benzene, toluene, ethylbenzene and xylene); the duocyclical aromatic hydrocarbons (DAHs) represented mainly by the base-neutral naphthalene; the polycyclical aromatic hydrocarbons (PAHs) represented by the medium and heavy oils (the "tars"). (Hatheway, Allen W. 2008. Internet website on former manufactured gas plants: www.hatheway.net, page dealing with environmental threat.)

Considering the large size of this facility and long period of operation the degree of contamination could be significant. Large volumes of highly contaminated soil and high concentrations of hydrocarbon contamination should be anticipated. This condition could represent a significant consideration for this project. Both alternatives are expected to impact this site with numerous bridge support piers anticipated. A Phase II site investigation is recommended.

## 4.21 612 West Mehring Way (Site 65)

Valley Asphalt is located at 612 West Mehring Way. Valley Asphalt is an operating hot mix asphalt company.

## 4.21.1 Aerial Photographs

Aerial images from 1950, 1958, 1964, 1981 and 1986 were available for review. The site is vacant on the 1950, 1958 1964 and 1981 images. The 1986 images show a large number of trailers parked on the site.

## 4.21.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance mapping from 1891, 1934, 1950, and 1981 was reviewed. The Meader Furniture Company is identified as the occupant for this site on the 1891 mapping. The Cincinnati Electric Light Company Power Station is located just west of the site on the 1891 mapping. The site is vacant on the 1934, 1950 and 1981 mapping, with the historic alignment of Greenleaf Alley bisecting the site.

## 4.21.3 City Directories

A search of Cincinnati city directories showed the following uses for 612 West Mehring Way (Site 65). Prior to being referred to as West Mehring Way, the street was West Front Street. Both addresses were searched.

Year	Uses
2009	Valley Asphalt Corp - paving materials
2005	Valley Asphalt Corp - paving materials
1999	Valley Asphalt Corp - paving materials
1996	Valley Asphalt Corp - paving materials
1930 - 1991	Not listed

Table 12 – 612 West Mehring Way, Cincinnati (Site 65)

## 4.21.4 Water Well Logs

The ODNR water well database did not contain well information for this site.

## 4.21.5 Regulatory Records Review

The EDR report lists this facility on the FINDS, RCRA-Non Generator (RCRA NonGen), and OH SPILLS databases. No violations are reported for this facility concerning the RCRA-NonGen listing. Two separate OH SPILLS records exist for this site. One reported asphalt spill occurred on September 1, 2006. According to the Initial Pollution Incident Report (IPIR) provided by the Ohio EPA, a truck containing approximately 40

gallons of tack coat tipped over and spilled the contents. A small amount was recorded as entering the sewer system but was later cleaned up.

A separate report indicates that a diesel spill occurred on this site on November 23, 1990. The 1990 incident is listed for Valley Asphalt, though an alternate address is reported, 610 Augusta Street. The IPIR only states that 100 gallons of diesel fuel was leaked onto the site. No additional information regarding this spill is available.

## 4.21.6 Adjacent and Surrounding Sites

This site is currently surrounded by a variety of different land uses. Sites 64 and 66 are located to the south across Mehring Way. The Cincinnati Bengals practice facility is located to the east with The Cincinnati Dock, a restaurant and bar, positioned to the north. One 1996 diesel spill is reported behind The Cincinnati Dock, near the northern site boundary. The Initial Pollution Incident Report (IPIR) states that the spill occurred on an alley within the City of Cincinnati right of way. It is assumed that the alley referred to is actually Augusta Street. The IPIR further reports that the Fire Department cleaned the spill up with absorbent material. A parking lot owned by Duke Energy forms the western border.

## 4.21.7 BUSTR File Review

No records exist for this site at BUSTR.

#### 4.21.8 Fire Department File Review

The City of Cincinnati Fire Department did not contain any UST records for this site.

#### 4.21.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. The Division of Emergency Response Remedial provided information regarding the spills that occurred on the site in 2006 and 1990.

#### 4.21.10 Interviews

Bud Crifield, Valley Asphalt Site Manager, was interviewed via a phone conversation on December 16, 2009. Mr. Crifield stated that Hilltop Basic Resources, a nearby aggregate supply quarry, actually owns the site and Valley leases from Hilltop. Mr. Crifield stated that he was not sure of the previous use but he does recall that coal was previously stockpiled on this site. His recollection concurs with the 1981 aerial image of unidentified stockpiles on the site. Mr. Crifield stated that several truck axles and other miscellaneous auto parts were removed from this site in 1988 during the excavation associated with the construction of Valley Asphalt. Other than the auto parts that were removed in 1988, Mr. Crifield was not aware of waste burial on the site. Likewise, he was not aware of any potential soil or groundwater contamination associated with the site.

## 4.21.11 Site Reconnaissance

A site reconnaissance was performed concerning this site on December 7, 2009. Three large above ground storage tanks (ASTs) were observed on the site near the northern border along Augusta Street. Two of the ASTs display "hot" labels, presumably referring to the hot asphalt mix. One 9,400-gallon #2 Diesel AST is also located on the site. In

addition to the ASTs, numerous unidentified 55-gallon drums were observed on the site. Several aggregate hoppers and outbuildings are located on the site as well.

### 4.21.12 Conclusion and Recommendations

Historic and current evidence reviewed has identified numerous potential environmental issues associated with this site. Previous occupants of this site include furniture finishing company and power station, both of which represent potential environmental conditions. Additionally, the presence of a known Manufactured Gas Plant (MGP) site and coal tar refinery, Sites 64 and 66, on adjacent sites represents potential environmental conditions. The previous burial of auto parts on this site also suggests that some type of junkyard may have occupied this site at some point prior to 1988. The presence of petroleum products (asphalt and diesel) currently stored on site also potentially represents an environmental condition.

Alternative E is not expected to impact this site in any way. However, Alternative C/D is expected to partially impact this site with overhead structures and support piers. The buildings on the site will not impacted.

A Phase II investigation is recommended for this site. Soil borings are recommended to identify potential contamination associated with the historic land use. The soil and/or groundwater samples should be analyzed for PAH, TPH, VOC, and BTEX contamination.

## 4.22 511 West Water Street (Site 66)

Hilltop Basic Resources is located at 511 West Water Street, Cincinnati, Ohio. Hilltop is an aggregate supply and ready mix concrete company.

## 4.22.1 Aerial Photographs

Aerial images from 1950, 1958, 1964, 1981, 1986 and 1993 were available for review.

Numerous unidentified structures are evident on the 1950, 1958 and 1964 images. Several vehicles parked around structures near the southwest site boundary suggest that some type of auto repair facility may have been located on this site. Hilltop Basic Resources is evident on the 1981 and subsequent images, although the operation appears much smaller on the 1981 image than today. Several large warehouse or factory type structures are present near the northwest site boundary along Mehring Way on the 1981 image.

## 4.22.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance maps from 1891, 1934, 1950, and 1981 were reviewed. No fewer than five individual machine shops, one foundry, and one coal tar refinery are shown as occupants on the 1891 mapping. The 1934 and 1950 maps are very similar. A well-developed rail system is present, with the Jones and Laughlin Steel Corporation identified as the occupant. An auto repair and private garage structure with one gasoline UST is also evident on the mapping near the southwest site boundary. Several separate structures are evident on the 1981 mapping, with a ready mix concrete plant identified as the occupant.

## 4.22.3 City Directories

A search of Cincinnati city directories showed the following uses for Site 66.

Year	Uses
2009	Hilltop Basic Resources Inc - ready mix concrete
2005	Hilltop Basic Resources Inc
2002	Hilltop Basic Resources Inc
1995	Hilltop Basic Resources Inc
1983	Hilltop Concrete Terminal
1976	Street Not Listed
1951	Not listed
1940	Not listed
1935	(SEC w/ Central Ave) - Hatfield Campbell Creek Coal Co (no #)
1930	Not listed

Table 13 – 511 West Water Street, Cincinnati (Site 66)

## 4.22.4 Water Well Logs

According to the ODNR water well database, three water supply wells are located on the Hilltop site. It is assumed that the wells are in place to provide a water source for the concrete plant.

## 4.22.5 Regulatory Records Review

The EDR report lists this facility on the OH UST database. According to the EDR report, two 6,000-gallon diesel USTs were installed at this location in 1968 and removed on February 19, 1998.

## 4.22.6 Adjacent and Surrounding Sites

Sites 60 and 64 are located to the west with Site 65 and the Cincinnati Bengals practice facility to the north. A parking lot associated with Paul Brown Stadium is located to the west; the Ohio River is south of the site.

## 4.22.7 BUSTR File Review

The BUSTR office provided UST information. According to the BUSTR office, two 6,000-gallon diesel USTs were removed from this site on May 22, 1998. BUSTR issued a "No Further Action" letter concerning the UST removal on October 22, 1998. A copy of the "No Further Action" letter, closure assessment results, and UST exhibit are included in Appendix D.

## 4.22.8 Fire Department File Review

The City of Cincinnati Fire Department did not respond to a request concerning this site at the time of this report.

## 4.22.9 Ohio EPA File Review

The Ohio EPA Southwest District Office was contacted to provide any pertinent environmental information concerning this site. The Division of Emergency Response Remedial provided information regarding the spill that occurred on the site in 1998. The spill report dated April 9, 1998, states that approximately 1,500 gallons of an inhibitor (calcium nitrate) was released into the sewer. The wastewater treatment plant was notified of the spill.

## 4.22.10 Interviews

Mike Marchioni, site manager for Hilltop Basic Resources, was interviewed via telephone on December 15, 2009 and February 10, 2010. Mr. Marchioni stated that Hilltop has occupied this site since 1963. He was not sure of the previous occupants but he believed that some type of steel processing plant that manufactured tin cans was once located on the site. Mr. Marchioni stated that one 10,000-gallon diesel above ground storage tank was currently located on the site. He stated that the 10,000-gallon AST replaced the two USTs that were removed from the site in 1998. Mr. Marchioni was not aware of any environmental issues associated with the site.

Bud Crifield, site manager for Valley Asphalt, was interviewed on December 16, 2009. Mr. Crifield recalled that a small quantity of diesel fuel was released on the Hilltop site a few years ago. He stated the fuel was soaked up with sand and eventually processed within the concrete plant. Mr. Crifield recalled that Ohio EPA representatives were on site during the clean up activities. The Ohio EPA files did not contain information regarding this spill; therefore, the claim could not be validated.

## 4.22.11 Site Reconnaissance

A site reconnaissance was performed concerning this site on December 7, 2009. Internal service roads within the site boundary were driven in an effort to identify potential sources of contamination. One large diesel AST was observed on the site. Though not observed, it can be assumed that additional ASTs containing concrete additives are located on the site as well. The numerous buildings located on site were not entered or examined. Several stockpiles of sand and other aggregates, as well as a wash out pit, were observed on the site.

## 4.22.12 Conclusion and Recommendations

The Forest City Chemical Company, a coal tar refinery, previously occupied this site in the late 1800's. Additionally, a manufactured gas plant, Site 64, was historically located just west of the site. Sanborn mapping also suggests that at least one auto repair shop occupied the site from at least 1934 to 1950. No evidence of the removal of this UST exists at the BUSTR office. However, if the UST was removed prior to 1988, no record would exist. The historic UST location is not expected to be impacted.

The historic land use of this site, as well as an adjacent site, does in fact represent an environmental condition for the proposed project. This site is not expected to be impacted. No further action is recommended at this time.

However, if this site is impacted in any way, a Phase II investigation is recommended to identify potential contamination associated with the historic land use. The soil and/or groundwater samples should be analyzed for PAH and VOC contamination at a minimum.

# 5.0 COVINGTON, KENTUCKY SITE ASSESSMENTS

Phase I Environmental Site Assessments (ESA) were conducted on 11 sites in Kentucky. Just as with the Ohio sites, these 11 sites were selected based upon the findings of the 2007 ESA Screening. Documents supporting the information summarized for each site are contained in the following appendices:

- Appendix C: Site maps, current aerial photos, and Sanborn maps
- Appendix D: Agency file review materials
- Appendix E: Photographic journal
- Appendix F: Environmental Data Resources (EDR) Executive Summary

## 5.1 666 West Third Street (Site 71)

Rusk Heating and Air Conditioning is located at 666 West 3<sup>rd</sup> Street. Rusk is an operating residential heating and air conditioning service company.

## 5.1.1 Aerial Photographs

Aerial images from 1950, 1958, 1964, 1981, 1986, and 1993 were reviewed. A large disturbed area is evident on the 1950 image, with several vehicles parked on the site. An auto junk yard is evident in 1958 and 1964. The present structure, although altered somewhat, is evident on all of the subsequent images.

## 5.1.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps for 1909, 1949, 1963, and 1980 were reviewed. The site is vacant on the1909 and 1949 mapping. A junkyard is shown on the site on the 1963 mapping. One structure is evident on the 1980 mapping.

## 5.1.3 City Directories

A search of the Covington city directories showed the following uses for Site 71.

Year	Uses
2009	Rusk Heating & Cooling Inc.
2000	Rusk Heating & Cooling Inc.
1996	Rusk Doc Heating & Air Conditioning Co
1991	Rusk Doc Heating & Air Conditioning Co
1986	Rusk Doc Heating & Air Conditioning Co
1981	Rusk Doc Heating & Air Conditioning Co
1976	Rusk Doc Heating & Air Conditioning Co
1971	Montgomery Heating & Air Conditioning
1962	Ace Auto Parts (664-666)
1959	Ace Auto Parts (664-666)
1954	Ace Auto Parts (664-666)
1951	Not Listed
1948	Not Listed

Table 14 – 666 West 3<sup>rd</sup> Street, Covington (Site 71)

## 5.1.4 Water Well Logs

The Kentucky Geological Survey Water Well database was searched to determine if any water wells are located on the site. Numerous monitoring wells are located just west of the site; however, none of the wells are located on the site itself.

## 5.1.5 Regulatory Records Review

Rusk Heating and Air Conditioning is listed on the Kentucky Underground Storage Tank (KY UST) database. According to the EDR report, two USTs, one 500-gallon gasoline and one 6,000-gallon gasoline, were removed from this site on January 3, 1990. The status of the tanks is listed as "Tank Removed / Verified." Information obtained at the Kentucky Division of Waste Management Underground Storage Tank Branch (USTB) concurs with the EDR report.

## 5.1.6 Adjacent and Surrounding Sites

Interstate 75 and Site 72 adjoin the site to the east. Sites 73 and 74 and numerous other mixed-use sites are located to the south. Several sites eliminated during the ESA Screening are located to the west. The Ohio River is located directly north of the site.

## 5.1.7 KY USTB File Review

According to the USTB office, two gasoline USTs were removed from this site on January 3, 1990. The USTB issued a letter on January 27, 1994 stating "the Division agrees that this site has satisfied the requirements of KAR 42:070." The site was closed under backlog UST closure regulations for soil and groundwater standards. A copy of the following items are included in Appendix D: NFA letter, an exhibit detailing the former UST location, an exhibit detailing closure sample locations, and the closure analytical results.

## 5.1.8 Fire Department File Review

The Covington Fire Department did not contain any information regarding this site.

## 5.1.9 Interviews

A 20-year employee of Rusk Heating and Air Conditioning was interviewed in person on December 7, 2009. The employee was aware of the previous USTs on the site; however, he did not have detailed information concerning the UST. Likewise, he was not aware of any potential environmental issues located on the site.

## 5.1.10 Site Reconnaissance

Third Rock representatives conducted a site visit on December 7, 2009. One used oil above ground storage tank was observed on the west side of the building. Three additional 55-gallon drums containing motor oil were observed near the AST. Neither the AST nor barrels showed obvious signs of leakage. An employee on site stated that the AST was pumped monthly and that there was no history of problems with the tank. A partial examination of the maintenance portion of the building was conducted. No sumps or floor drains were observed. Normal items conducive to automobile maintenance including an above ground lift; tools, motor oil, solvents and cleaners were observed inside the well-organized shop.

## 5.1.11 Conclusions and Recommendations

Two USTs were removed from this site in 1990, with the USTB issuing a letter in 1994 stating that all closure requirements had been satisfied. Historic aerial images and Sanborn mapping has revealed a junkyard and potential dump associated with this site. Additionally, a file in the possession of the Kentucky Division of Waste Management (DWM) suggests that the old Covington landfill was located just south of this site. Numerous attempts to verify the specific location of the landfill were unsuccessful at the time of this report. Though not confirmed, it can be reasonably assumed that future geotechnical borings on the site have the potential to encounter solid waste.

This site is considered a complete take with both Alternative E and Alternative C/D impacting the parcel. Bridge support piers are expected, though the exact locations are not yet known.

Additional assessments regarding the potential landfill location are not recommended at this time. However, due to the confirmed junkyard, a Phase II investigation is warranted for this site. Borings are recommended in an effort to identify contamination associated with the historic junkyard. The soil and/or groundwater samples should be analyzed for the following parameters: PCB, PAH, and RCRA Metals.

# 5.2 652 West 3<sup>rd</sup> Street (Site 72)

A hotel, Extended Stay America currently occupies the site located at 650 West 3<sup>rd</sup> Street. A gas station previously occupied a portion of this site.

## 5.2.1 Aerial Photographs

Aerial images from 1950, 1958, 1964, 1973, 1981, 1986 and 1993 were reviewed. The images show three distinct developments at the site the first evident in three barracks style structures present on the 1958 through the 1973 image. A different commercial building is present in the 191981 through 1993 image. Currently a hotel is present on the site. An apparent service station is seen on the 1958 through the 1973 image located on the southwest corner of the site.

## 5.2.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps for 1909, 1949, and 1963 were reviewed. A vacant structure, previously occupied by the Republic Iron and Steel Company, is evident on the 1909 mapping. A filling station and the US Naval Reserve Training Center are identified as occupants on the 1949 and 1963 mapping. The filling station is located at the corner of West 3<sup>rd</sup> Street and the current Interstate 75 alignment.

## 5.2.3 City Directories

A search of the Covington city directories showed the following uses for Site 72.

Year	Uses
2009	Extended Stay America
2004	Extended Stay America
2000	Extended Stay America
1981	The Conservatory - restaurant
1980	The Conservatory
1979	The Conservatory
1978	Not Listed
1971	Not Listed

## Table 15 – 650 West 3<sup>rd</sup> Street, Covington (Site 72)

## 5.2.4 Water Well Logs

The Kentucky Geological Survey Water Well database was searched to determine if any water wells are located on the site. Numerous monitoring wells are located in the vicinity of the site, however none of the wells are located on the site itself.

## 5.2.5 Regulatory Records Review

The site is not identified by the EDR report.

## 5.2.6 Adjacent and Surrounding Sites

The Ohio River is located to the north, with numerous commercial sites to the west. Additional hotels are located to the east, with a car dealer to the south. Two USTs were removed from an adjacent car dealership located at 633 West 3<sup>rd</sup> Street in 1990. The KY USTB issued a letter on June 7, 1995 stating that the site satisfied closure requirements regarding the 1990 UST removal. A copy of the USTB letter is included in Appendix D. The letter also stated that elevated background lead levels were being referred to the Superfund Branch for further investigation. Information provided by DWM suggests that the elevated lead levels at the site are due to previous bridge painting activities. The Superfund Branch ultimately issued a letter dated May 18, 2001 declaring that no additional remedial work is recommended for the 633 West 3<sup>rd</sup> site. Additionally, information obtained from the DWM suggests that the former Covington dump was located near this site. Numerous attempts to verify the location of the former Covington dump were not successful at the time of this report.

## 5.2.7 KY USTB File Review

No files concerning this site are in the possession of the USTB.

## 5.2.8 Fire Department File Review

The Covington Fire Department did not contain any information concerning this site.

## 5.2.9 Interviews

The Extended Stay America manger was interviewed via a phone conversation on January 7, 2010. The manager had very limited knowledge concerning the site history. He stated that the hotel opened in 1997 and that a restaurant occupied the site prior to the hotel construction.

## 5.2.10 Site Reconnaissance

Third Rock representatives conducted a site visit on December 7, 2009. The hotel perimeter was walked in an effort to identify potential sources of contamination. No obvious issues were discovered during the site visit.

## 5.2.11 Conclusions and Recommendations

Sanborn mapping suggest that a filling station occupied a portion of the site from at least 1949 to 1963. The former filling station was previously located under the current Brent Spence Bridge approach alignment. All evidence reviewed suggest that the filling station operated and closed prior to 1988, therefore no formal closure records exist for this site. Additionally, it can be reasonably assumed that future geotechnical borings on the site have the potential to encounter solid waste associated with the historic Covington dump location. Additional assessments regarding the potential landfill location are not recommended at this time. The proposed road improvements are not expected to impact this site in any way. No further action is recommended at this time.

However, if future alignments are developed that do in fact impact this site, a Phase II investigation would be warranted.

# 5.3 677 West 3<sup>rd</sup> Street (Site 73)

Diversified Sales, a warehousing and shipping company, is located at 677 West 3rd Street.

## 5.3.1 Aerial Photographs

Historic aerial images from 1950, 1954, 1964, 1973, 1981, 1986 and 1993 were reviewed. The present commercial structures are evident on all images back until 1964 when fewer structures are evident on the on the image. The 1950, 1958 mapping indicates two structures on the site with a large portion of the site apparently recently graded.

## 5.3.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps for 1909, 1949, 1963, and 1980 were reviewed. One residential dwelling and one storefront building are identified on the 1909 mapping. A machine shop is identified as the site occupant on the 1949, 1963 and 1980 mapping with auto sales and repair appearing on the 1963 map. Additionally, the present structures are identified on the 1980 mapping.

## 5.3.3 City Directories

A search of the Covington city directories showed the following uses for Site 73.

Year	Uses
2009	Diversified Sales Associates
2000	Diversified Sales Associates Eagle Machine & Tool Weber Dental Services
1994	L & H Tool & Die Co Inc
1989	L & H Tool & Die Co Inc
1984	L & H Tool & Die Co Inc
1979	L & H Tool & Die Co Inc
1974	L & H Tool & Die Co Inc
1969	A-B Tool & Die Co L & H Tool & Die Co Inc
1964	A-B Tool & Die Co L & H Tool & Die Co Inc
1959	A-B Tool & Die Co L & H Tool & Die Co Inc
1954	L & H Tool & Die Co Inc
1948	Not Listed
1941	Not Listed
1936	Not Listed

## Table 16 – 677 West 3<sup>rd</sup> Street, Covington (Site 73)

## 5.3.4 Water Well Logs

The Kentucky Geological Survey Water Well database was searched to determine if any water wells are located on the site. No water wells are located on the site.

## 5.3.5 Regulatory Records Review

The site is not identified by the EDR report.

#### 5.3.6 Adjacent and Surrounding Sites

Site 71 and other sites eliminated by the ESA Screening are located to the north. Site 74 is located to the south with a vacant warehouse and vacant car dealership to the east. A residential development is positioned across Crescent Avenue to the west.

## 5.3.7 KY USTB File Review

No files are in the possession of the USTB regarding this site.

## 5.3.8 Fire Department File Review

No files are in the possession of the Covington Fire Department concerning this site.

#### 5.3.9 Interviews

Paul Edington, the current site owner, was interviewed in person on December 7, 2009. He was not aware of any potential environmental conditions associated with the site.

# 5.3.10 Site Reconnaissance

Third Rock representatives conducted a site visit on December 7, 2009. The perimeter of the site was examined in an effort to identify potential environmental conditions. No obvious signs of contamination were observed at the site.

## 5.3.11 Conclusions and Recommendations

All evidence reviewed concerning this site suggests that some type of machine shop occupied this site from approximately 1954 to 2000. Sanborn mapping indicates that only fabrication and welding occurred at this location, not production. Though not confirmed, it can be assumed that petroleum based cutting fluids were used at this location at some point in the past. It should also be noted that the historic Covington dump is located in the vicinity of this site; however, additional assessments regarding the suspected dump are not recommended at this time. Furthermore, the site is not expected to be impacted in any way by the proposed road improvements. No further action is recommended at this time.

However, if future alignments are developed that impact this site, a Phase II investigation would be warranted to identify potential contamination associated with the historic machine shop.

# 5.4 670 West 4<sup>th</sup> Street (Site 74)

River Center Collision occupies a site located at 670 West 4th Street. River Center Collision is an operating auto body repair shop.

#### 5.4.1 Aerial Photographs

Historic aerial images from 1950, 1958, and 1981 were reviewed. The site is vacant on the 1950 and 1958 image, with the site appearing recently graded. The 1964 and subsequent image reveals the present structures occupied by River Center Collision.

#### 5.4.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps for 1909, 1949, 1963, and 1980 were reviewed. The site is vacant on the 1909 and 1949 mapping. The present structure is evident on the 1963 and 1980 mapping as auto sales service and repair.

#### 5.4.3 City Directories

A search of the Covington city directories showed the following uses for Site 74.

Year	Uses
2009	Rivercenter Collision
2004	Rivercenter Collision
2000	H D I Holdings
1995	H D I Holdings
1991	Vacant
1986	Tri County V W Inc
1981	Tri County V W Inc
1976	Tri County V W Inc
1971	Tri County V W Inc
1966	Tri County Autos Inc.
1964	Tri County Auto Sales
1962	Not listed
1959	Not listed

# Table 17 – 670 West 4<sup>th</sup> Street, Covington (Site 74)

#### 5.4.4 Water Well Logs

The Kentucky Geological Survey Water Well database was searched to determine if any water wells are located on the site. No water wells are located on the site.

#### 5.4.5 Regulatory Records Review

The EDR report identifies this facility as listed the following databases: Resource Conservation and Recovery Act Non Generator (RCRA-NonGen); Facility Index System (FINDS); Permitted Airs Facility Listing (AIRS); and KY UST.

This facility was originally listed as producing RCRA hazardous waste related to auto bodywork and painting associated with the repair of wrecked vehicles. However, a December 2008 inspection report produced by the DWM states that no hazardous waste is currently generated by this facility. According to the DWM, all waste is recycled and handled by outside sources. Additionally, this facility generates no waste oil, antifreeze or other vehicle fluids. A copy of the DWM inspection report is included in Appendix D.

According to the EDR report, three USTs were removed from this site on September 19, 1989. The USTs removed include one 500-gallon waste oil UST, one 1,000-gallon new motor oil UST, and one 500-gallon gasoline UST.

#### 5.4.6 Adjacent and Surrounding Sites

Site 73, a vacant car dealership, and a vacant warehouse are located directly north of the site. Corken Steel, a metal roofing supply and fabrication company is located to the west. Interstate 75 is positioned to the east with a small green space area and Interstate 75 access ramps located to the south.

#### 5.4.7 KY USTB File Review

Information obtained from the USTB concurs with the findings of the EDR report. The USTB issued a "No Further Action" letter regarding the 1989 removal of three USTs on January 31, 1996. According to information obtained from the USTB file, the UST were

removed from the vacant car dealership, not the active body shop. A copy of the closure sample results and an exhibit detailing the former UST locations are included in Appendix D. The site was closed under backlog UST regulations for soil and groundwater standards. A copy of the "No Further Action" letter is included in Appendix D as well.

# 5.4.8 Fire Department File Review

No files are in the possession of the Covington Fire Department concerning this site.

#### 5.4.9 Interviews

Scott Yost, River Center Collision Parts Manager, was interviewed in person on December 9, 2009. Mr. Yost stated that a VW and Ford car dealership occupied the site prior to 2003 when River Center moved onto the site. Though not confirmed, Mr. Yost suspected that some type of AST or UST might be present in the vacant building located just north of the site. No records are on file within the USTB for the UST in question. Furthermore, the building in question is not expected to be impacted in any way by the proposed road improvements. Mr. Yost was not aware of any environmental conditions associated with the site.

# 5.4.10 Site Reconnaissance

Third Rock representatives conducted a site visit on December 7, 2009. The perimeter of the site was examined in an effort to identify potential environmental conditions. Two structures, an operating body shop and a vacant car dealership office / showroom were observed. Neither structure was entered during the site visit; however, no obvious signs of contamination were observed at the site.

#### 5.4.11 Conclusions and Recommendations

Various automobile dealers have historically occupied this site with an auto body shop presently located on the site. Three USTs were removed from this site in 1989, and the USTB subsequently issued a "No Further Action" letter regarding the UST removal. Additionally the site is listed on the RCRA database, although hazardous waste is no longer produced. Photos obtained from the DWM inspection report dated December 2008, show a clean and well-organized facility with no obvious areas of contamination. Though not confirmed, various historical documents suggest that some type of dumping occurred on and in the vicinity of this site. Therefore, it can be reasonably assumed that future geotechnical borings on the site have the potential to encounter solid waste. However, no additional assessments are recommended regarding the potential solid waste. This site is considered a complete take as both alternatives are expected to impact this site with overhead structures completely encompassing the structures. However, this assessment has not identified any environmental conditions associated with the site. No further action is recommended at this time.

# 5.5 610 West $4^{th}$ Street (Site 75), 613 West $4^{th}$ Street (Site 76), 610 West $5^{th}$ Street (Site 77)

Three individual gas stations are located near the proposed project, though the stations themselves are not expected to be impacted in any way. The stations in question are located at the following addresses:

- Site # 75 BP 610 West 4th St
- Site # 76
   Speedway # 9541
   613 West 4th St
- Site # 77 Road Ranger Shell # 172 610 West 5th St

# 5.5.1 Aerial Photographs

Historic aerial images from 1950, 1958, 1964, 1981, 1983 and 1993 were reviewed. The 1950 and 1958 image reveals high density development of occupying all three sites possibly a mixed used. The land use transitions after 1964 with more parking area with the gas stations appearing on the 1981 image. The gas stations are reconfigured but still present on all subsequent images.

# 5.5.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps for 1909, 1949, 1963, and 1980 were reviewed. All three sites were occupied by residential structures and church buildings on the 1909 and 1949 mapping. The 1963 mapping identified residential tenants on Sites 76 and 77. One filling station is evident on Site 76, with a rest area located on Site 77 on the 1980 mapping. Coverage was not available for Site 75 on the 1963 and 1980 mapping.

#### 5.5.3 City Directories

A search of the Covington city directories showed the following uses for Sites 75, 76 and 77.

Year	Uses		
2009	B P Service Station		
2004	B P Service Station		
2000	B P Oil Co		
1996	B P Oil Co		
1936 - 1962	Residential		

Table 18 – 610 West 4<sup>th</sup> Street, Covington (Site 75)

Year	Uses		
2009	Speedway Service Station		
2004	Speedway Service Station		
2000	Speedway Service Station		
1986	Save-Mart Service Station of KY		
1984	Save-Mart Service Station of KY (listed as 609)		
1981	Save-Mart Service Station of KY (listed as 609)		
1980	Not listed		
1976	Not listed, 609 "vacant"		

# Table 19 – 613 West 4<sup>th</sup> Street, Covington (Site 76)

# Table 20 – 610 West 5<sup>th</sup> Street, Covington (Site 77)

Year	Uses		
2009	Road Ranger Service Station		
2004	Ameristop Express		
1999	Waco Oil Gas Station		
1995	Waco Oil Co		
1991	Vacant		
1986	Waco Oil Co		
1981	Vacant		
1976	Texaco Service Station		
1971	Texaco Service Station		
1966	Texaco Service Station		
1928 - 1962	Residential		
1923-24	Not listed		

#### 5.5.4 Water Well Logs

The Kentucky Geological Survey Water Well database was searched to determine if any water wells are located on the site. No monitoring wells are located on the sites.

# 5.5.5 Regulatory Records Review

Site 75 is listed on the following databases: KY UST; (AIRS); FINDS; and Resource Conservation and recovery Act Conditionally Exempt Small Quantity Generator (RCRA-CESQG). According to the EDR report, four USTs ranging in size from 8,000 to 10,000 gallons are currently located on the site. The USTs were installed in 1981 and 1988. The RCRA-CESQG database lists benzene as the hazardous waste. Additional information provided by DWM, implies that the hazardous waste is actually absorbent, hoses, filters, and debris associated with the gas station operation. An inspection of this facility was completed by the DWM on November 2, 2009. No violations are reported.

Site 76 is listed on the following databases: KY UST; SB 193 Branch Site Inventory List (SB 193); Emergency Response Notification System (ERNS); Resource Conservation and Recovery Act Non Generator (RCRA-NonGen); and FINDS. The KY UST database identifies five active USTs at this location. The USTs, ranging in size from 6,000 to

12,000 gallons, were installed at this location in 1986. Three additional USTs were removed from this site prior to 1988. The ERNS database refers to two separate spill incidents that occurred on this site. Both incidents were minor and are not expected to create an environmental condition. The RCRA-NonGen listing refers to a different store number with the same address. The waste is not identified, however no violations are recorded for this site. No DWM files exist for this site.

Site 77 is listed on the following databases: KY UST and RCRA-NonGen. According to the EDR report, three active USTs are present on the site. The USTs, ranging in size from 8,000 to 15,000 gallons, were installed at this location on March 1, 1997. Three additional 10,000-gallon USTs were removed on October 2, 1996. The USTB issued a "No Further Action" letter regarding the removal on February 21, 1997. The RCRA listing is believed to be associated with the 1996 UST removal. No RCRA violations are reported.

# 5.5.6 Adjacent and Surrounding Sites

Numerous commercial sites including restaurants, hotels, and car dealerships are located in the vicinity of the gas stations in question. Two USTs were removed from an adjacent car dealership located at 633 West 3rd Street in1990. As mentioned in the Site 72 discussion, the USTB ultimately issued a letter stating that all closure requirements had been satisfied regarding the UST removal. Additionally, historic evidence suggests that the historic Covington dump is located just north and west of the gas stations in question.

# 5.5.7 KY USTB File Review

The USTB file information is summarized below:

<u>Site 75</u> -- A review of the USTB files concerning Site 75 concurs with information provided by EDR. Evidence of potential contamination was not discovered during the file review.

<u>Site 76</u> – The USTB file suggest that portions of the piping system were removed from the site in 2006. The USTB issued a "No Further Action" letter concerning the piping closure on September 15, 2006. According to the USTB, the site was closed based upon Class III, Soil Table I standards. A copy of the "No Further Action" letter is included in Appendix D. This site is listed on the SB 193 database as being the known location of contaminated soil. However, an exhaustive review of the USTB file was completed without any evidence of soil contamination being discovered. All evidence reviewed and all interviews conducted suggest that the site does not contain contaminated soil; therefore, the SB 193 listing is assumed to be incorrect.

<u>Site 77</u> – A gas station owned by the Waco Oil Company was demolished and removed from this site in October of 1996. Approximately 121 tons of contaminated soil was removed from the site following the UST removal. A letter from the USTB, dated February 21, 1997, states that the site satisfied closure requirements (Class III, Soil Table I) regarding the 1996 removal of three USTs with no further action recommended. A copy of the "No Further Action" letter is included in Appendix D. Additionally, one Incident Description Report states that a submersible pump leak was reported on

November 7, 2005. Very limited information regarding this suspected leak was available for review. The status of the report is "Env. Closed."

#### 5.5.8 Fire Department File Review

An inquiry was made with the Covington Fire Department concerning potential UST or hazardous materials issues. A letter from the Division of Fire Prevention dated October 17, 1985 states that the site plans and specifications for a gas station (Site 76) have been approved. This information concurs with the findings of the EDR report and the USTB concerning Site 76; the current USTs were installed in 1986.

#### 5.5.9 Interviews

<u>Site 75</u> -- Neil McDermont, Lehigh Gas regional manager, was interviewed via a phone conversation on December 14, 2009. Mr. McDermont stated that the site was purchased from the BP Oil Company in August 2009. BP owned and operated the facility for approximately 25 years prior to the Lehigh Gas merger. Mr. McDermont was not aware of environmental issues associated with the site.

<u>Site 76</u> – Rob Eubanks with Geo Science Consulting was interviewed concerning the 2006 piping closure on January 4, 2010, and February 11, 2010. Mr. Eubanks was not aware of the SB 193 database listing. Likewise, he was not aware of contaminated soil associated with the site.

<u>Site 77</u> – Hope Collins, a Shell Oil corporate representative, was interviewed on December 14, 2009. Ms. Collins stated that site was purchased out of bankruptcy approximately two years ago from the Ameristop Company. Ms. Collins was not aware of any potential environmental issues associated with the site.

#### 5.5.10 Site Reconnaissance

Third Rock representatives conducted a site visit on December 7, 2009. Each of the three gas stations in question appeared to be fully operational during the site reconnaissance. No obvious signs of contamination were observed at any site.

#### 5.5.11 Conclusions and Recommendations

Three active gas stations, operated by BP, Speedway, and Shell respectively, are located at Sites 75, 76, and 77. Though the active gas stations are located near the project corridor, the gas stations themselves are not expected to create an environmental condition for, nor be impacted by, the proposed highway improvements. No further action is recommended at his time.

However, due to the fact that these sites have a UST history, in conjunction with the SB 193 listing, a Phase II investigation would be warranted if these sites are impacted in any way by future alternative developments.

# 5.6 550 Pike Street (Site 78)

Kerry Toyota is located at 550 Pike Street. The Marshall Dodge car sales facility previously occupied this site.

# 5.6.1 Aerial Photographs

Aerial images from 1958, 1986, 1981 and 1993 were reviewed. The 1958 images shows the east half of the block as apparent residential structures and commercial use on the west half. The northwest corner appears to be occupied by a junkyard. One structure is evident on the 1981 and subsequent images with numerous vehicles parked around the structure.

## 5.6.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps for 1949, 1963, and 1980 were reviewed. A filling station with five USTs is identified on the 1949, 1963 and 1980 mapping. A junkyard is also identified on this site on the 1949 and 1963 maps.

# 5.6.3 City Directories

A search of the Covington city directories showed the following uses for Site 78.

Year	Uses
2009	Kerry Toyota
2004	Marshall Dodge
1999	Marshall Dodge
1995	Marshall Dodge
1986	Kentucky Speed Center
1966	Murphy & Lemox Texaco Station
1962	Murphy & Lemox Texaco Station
1954	Murphy & Lemox Gas Station
1948	Murphy & Lemox - filling station
1940-41	John W. Todd - filling station
1936-37	John W. Todd - filling station
1928-29	Not listed

#### Table 21 – 550 Pike Street, Covington (Site 78)

#### 5.6.4 Water Well Logs

The Kentucky Geological Survey Water Well database was searched to determine if any water wells are located on the site. No water wells are located near the site.

# 5.6.5 Regulatory Records Review

The site is listed on the KY UST database. According to the EDR report, three unknown USTs ranging in size from 6,000 gallons to 8,000 gallons were removed from this site in 1986. The tanks were removed prior to 1988; therefore, no formal closure status would exists for this site.

#### 5.6.6 Adjacent and Surrounding Sites

Site 79 is located directly to the south across US 25. Interstate 75 is located to the west. Numerous residential buildings are located to the east with a warehouse to the north. The Willow Run Drive Thru, located at 918 Willow Run Road, was previously located to the north as well. The Willow Run Drive Thru is listed on the Kentucky State Hazardous Waste Sites (KY SHWS) database due to the removal of two 55-gallon drums. The

drums, originally thought to be hazardous, were found to only contain rusty rainwater. In addition to the drums, two 4,000-gallon gasoline USTs were removed from the Willow Run site in 1994, with approximately 5.7 tons of petroleum contaminated soil removed from the pump island location.

# 5.6.7 KY USTB File Review

The USTB and the EDR report contain conflicting information as to the location of a specific 550-gallon waste oil UST. The official address of the UST in question is registered to 555 Pike Street, Site 79. However, numerous documents in the possession of the USTB suggest that the 550-gallon waste oil UST was actually removed from this site, Site 78. After a detailed examination of both files, it was determined that one 550-gallon waste oil UST was removed from this site, 550 Pike Street, on October 10, 1991. A Record of Communication, dated November 22, 1993, states that the tank was originally incorrectly registered as a 250-gallon UST when it was in fact a 550-gallon UST. The USTB consequently issued a letter dated December 14, 1994 stating that the closure requirements (backlog standards for soil and groundwater) were satisfied. The letter further stated that the Superfund Branch was to be notified concerning elevated lead levels on the site. The elevated lead levels were obtained from a background sample collected on the site associated with the 1991 UST removal. The CARTEC Technical Consultants report suggests that the elevated lead levels are a result of previous dumping activities that may have occurred on the site. The Kentucky Division of Waste Management Superfund Branch did not contain any files associated with this site.

In addition to the 550-gallon waste oil UST that was removed in 1991, three additional unknown USTs were removed from this site in 1986. The actual number of USTs removed from this site varies according to the source, as this site has a complicated history concerning the USTs. A letter from Paul R. Markgraf, Attorney at Law, states that no more than three USTs associated with a former Tressler Comet Oil Station were removed from this site prior to December 22, 1988. The USTB contains UST registrations that refer to eight USTs owned by the Ashland Oil Company. Sanborn mapping suggests that five USTs were previously located on this site. In any event, at least three USTs were removed prior to 1988, no official closure records exist for this site. A copy of the 1994 "No Further Action" letter, attorney documents, closure sampling results, and record of communication is included in Appendix D.

#### 5.6.8 Fire Department File Review

No information concerning this site is in the possession of the Covington Fire Department.

# 5.6.9 Interviews

Numerous attempts to contact individuals familiar with the history of this site were unsuccessful at the time of this report.

#### 5.6.10 Site Reconnaissance

Third Rock representatives conducted a site visit on December 7, 2009. The auto dealer appeared to operational during the site visit, although on a somewhat limited basis. The main structure itself was not entered and examined. One waste oil AST contained within

a concrete catch basin was observed on the site. No obvious signs of contamination were observed during the site reconnaissance.

#### 5.6.11 Conclusions and Recommendations

It appears that a gas station was located on this site from at least 1936 to 1986. Conflicting reports exist as to the actual number of USTs associated with the station; however, three USTs were removed from this site in 1986. One additional waste oil UST was removed from this site in 1991. Additional evidence suggests that elevated lead levels occur on this site, possibly due to the junkyard that once occupied this site.

Alternative E is not expected to impact this site. Alternative C/D is expected to partially impact this site with an approximate 30' strip ROW acquisition.

Due to the lack of information concerning the number of USTs historically present, and accordingly the number of USTs removed, additional assessments are recommended for this site. A Phase II investigation to identify contamination associated with the historic filling station and historic junkyard is warranted. The soil and/or groundwater samples should be analyzed for the following parameters: Lead, PAH, PCB, RCRA Metals, and current Kentucky UST closure standard parameters.

# 5.7 555 Pike Street (Site 79)

Performance Motors, an auto repair facility, currently occupies a site located at 555 Pike Street.

#### 5.7.1 Aerial Photographs

Aerial images from 1958, 1981, 1986, and 1993 were reviewed. The same structures present today appear to be on all of the images. Numerous vehicles parked on the site suggest that some type of auto sales occurred on the site in 1958.

#### 5.7.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps for 1909, 1949, 1963, and 1980 were reviewed. The Bavarian Brewing Company is listed as the occupant on the 1909 mapping. Several wagon sheds, stables and one leather-finishing structure are also evident on this mapping. One woodworking shop and several residential structures are evident on the 1949 mapping. Auto repair facilities occupied the site on both the 1963 and 1980 mapping.

#### 5.7.3 City Directories

A search of the Covington city directories showed the following uses for Site 79.

Year	Uses		
2009	Tri City Auto		
1991	Marshall Dodge		
1986	Marshall Dodge		
1981	Vacant		
1976	Zimmer Motor Co (555-559)		
1971	Zimmer Motor Co.		
1966	Zimmer Motor Co.		
1962	Zimmer Car Clinic		
1954	Zimmer Motor Co.		
1948	Zimmer Motor Co.		
1940-41	Zimmer Motor Car Co.		
1937-37	Chas Zimmer Hardware, also garage (559)		
1928-29	Not listed		

Table 22 – 555 Pike Street, Covington (Site 79)

# 5.7.4 Water Well Logs

The Kentucky Geological Survey Water Well database was searched to determine if any water wells are located on the site. Numerous monitoring wells are located just south of the site; however, none of the wells are located on the site itself.

# 5.7.5 Regulatory Records Review

The site is listed on the FINDS, RCRA-CESQG, and KY UST database. The RCRA-CESQG listing records lead as the waste generated. It is assumed that the RCRA listing refers to automobile painting activities that took place on this site with previous occupants. No RCRA violations are recorded. The Kentucky Division of Waste Management did not contain files concerning the RCRA listing. According to the KY UST database, one used oil UST was removed from this site on October 10, 1991.

The Bavarian Brewery previously occupied a portion of this site; however, the majority of the brewery structures were historically located approximately 250 feet to the east. Therefore, the Covington city directory does not reflect the primary address for the brewery at this location. One 4,000-gallon exempt UST was closed in place on the brewery site in 1996. Benzene contamination was discovered on the brewery site; however, remediation efforts at this site have since satisfied the closure requirements for exempt USTs. A letter from the DWM dated April 18, 2001, states that the site is in compliance. A copy of the DWM letter and a summary of the groundwater sampling results are included in Appendix D.

# 5.7.6 Adjacent and Surrounding Sites

Site 78 is located directly to the north across US 25. Interstate 75 is located to the west. Site 80 is positioned to the south, with a hardware store to the east. One 550-gallon gasoline UST and three 6,000-gallon gasoline USTs were previously removed from just west of the site, underneath Interstate 75 along Pike Street. The KY USTB issued "No Further Action" letters regarding the UST removals in 1996. A copy of the "No Further Action" letters is included in Appendix D.

# 5.7.7 KY USTB File Review

Marshall Dodge is listed as the previous owner of this site within the USTB system. Marshall Dodge also previously owned an adjacent UST facility located at 550 Pike Street, Covington, KY (Site 78). The USTB files contain conflicting information as to the location of a specific 550-gallon waste oil tank that was removed in 1991. According to the EDR report's KY UST database, the official registered address of the removed 550-gallon UST is 555 Pike Street. However, numerous documents at the USTB suggest the tank was actually removed from 550 Pike Street, Site 78. According to all files reviewed, the UST in question is believed to have been removed from 550 Pike Street, Site 78.

# 5.7.8 Fire Department File Review

No files associated with this site are in the possession of the Covington Fire Department.

# 5.7.9 Interviews

Matt Kilgore, the owner of Performance Motors, was interviewed on December 14, 2009. Mr. Kilgore had very limited knowledge of the site history as his company had only occupied the site for about three months. Mr. Kilgore stated that waste oil was currently stored on site in a 55-gallon drum. He stated that while the facility did have auto painting capabilities, he was not currently painting on the site. He was not aware of any potential environmental issues associated with the site.

# 5.7.10 Site Reconnaissance

Third Rock representatives conducted a site visit on December 7, 2009. One large, metal-sided auto repair facility is currently located on the site. The structure itself was not entered or examined. No obvious signs of contamination were observed during the site visit.

# 5.7.11 Conclusions and Recommendations

Numerous auto repair facilities have occupied this site from at least 1963 to the present time. Auto repair facilities typically have associated USTs. This site is not an exception, with evidence suggesting that one waste oil UST was previously located on this site. Conflicting reports suggest that the UST was actually located at an adjacent site, Site 78. Wherever the UST may have been located, the UST in question was removed in 1991, with the USTB stating in 1994 that the closure requirements (backlog standards for soil and groundwater) were satisfied concerning the UST removal.

This site is considered a complete take with both alternatives impacting the site. The construction details are not yet known but it can be assumed that the majority of the work will be occurring at or near the existing grade. Though impacts are expected, this assessment has not revealed any potential environmental issues associated with this site. No further action is currently recommended.

# 5.8 542 West 12<sup>th</sup> Street (Site 80)

The site, a vacant parking lot, is located at 542 West 12th Street. A Sunoco food mart and convenience store once occupied this site.

# 5.8.1 Aerial Photographs

Aerial images from 1958, 1981, 1986 and 1993 were reviewed. The 1958 image shows high density development with possible residential use on the west side and commercial

structures on the east side. Current conditions indicate that the residential structures on the west side of the site have been demolished and the area is currently used for parking.

## 5.8.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps for 1909, 1949, 1963, and 1980 were reviewed. Residential dwellings are evident on the west portion of the site in 1909, 1949, and 1963 maps and brewery buildings are present on the west. One structure, identified as a store, is present on the 1980 mapping. With the interstate development much of the block was taken leaving the current configuration.

# 5.8.3 City Directories

A search of the Covington city directories showed the following uses for Site 80.

Year	Uses			
2009	Vacant			
2004	Vacant			
2000	Vacant			
1999	Vacant			
1994	"not verified - I-75 crosses"			
1991	Vacant			
1986	Stop & Go Foods			
1981	King Kwik Minute Mart			
1975	Happy Food Stores			
1973-74	Not listed			

 Table 23 – 542 West 12<sup>th</sup> Street, Covington (Site 80)

According to the City Directories reviewed, various convenience stores and food marts occupied this site from approximately 1975 through at least 1986. It appears that the site has been vacant since approximately 1991.

#### 5.8.4 Water Well Logs

The Kentucky Geological Survey Water Well database was searched to determine if any water wells are located on the site. Numerous monitoring wells are located near the northern site boundary. Though not confirmed, it is assumed that the monitoring wells are associated with the UST system previously located on this site, or the historic Bavarian Brewery facility location.

# 5.8.5 Regulatory Records Review

The site is listed on the KY UST, FINDS and RCRA-CESQG databases. According to the KY UST database, one 4,000-gallon Kerosene UST was removed from this location on August 8, 1990.

The RCRA-CESQG listing refers to the activities involved with the 1990 removal of the Kerosene UST. DWM issued a report, dated August 5, 2009, requesting that the site be removed from the hazardous waste generators list. According to the DWM report, the

site no longer generates hazardous waste, as the site has been redeveloped into a parking lot since the 1990 RCRA listing.

#### 5.8.6 Adjacent and Surrounding Sites

Site 79 is located to the north, with Site 81 to the south across West 12<sup>th</sup> Street. Interstate 75 is located to the west, and numerous commercial and residential sites are positioned to the east. The Bavarian Brewery previously occupied a site of land just northeast of the site. One 4,000-gallon exempt UST was closed in place on the brewery site in 1996. Benzene contamination was discovered; however, remediation efforts have since satisfied the closure requirements for exempt USTs. A letter from the DWM dated April 18, 2001, states the adjacent site is in compliance. A copy of the DWM letter and a summary of the groundwater sampling results are included in Appendix D.

Additionally, one exempt 4,000-gallon fuel oil UST is registered at 530 Riedlin Avenue. The fuel oil UST was registered in error on the UST database, as fuel oil tanks are exempt from UST regulations. The Kentucky Division of Waste Management Superfund Branch is responsible for maintaining information on exempt USTs; however, the Superfund Branch did not contain any information regarding this particular fuel oil UST. According to Superfund Branch, the 530 Riedlin Avenue file had been lost. Riedlin Avenue no longer exists; however, Sanborn mapping places 530 Riedlin in the approximate location of the Bavarian Brewery UST. All evidence reviewed suggests that the 530 Riedlin Avenue UST listing is actually referring to the Bavarian Brewery UST.

# 5.8.7 KY USTB File Review

The USTB file concurs with the findings of the EDR report. A "No Further Action" letter regarding the 1990 removal of one 4,000-gallon Kerosene UST was issued on June 17, 1992. The UST closure was granted based upon backlog soil and groundwater standards. A copy of the "No Further Action" letter and exhibit detailing the former UST location is included in Appendix D. No files concerning the fuel oil UST are in the possession of the USTB.

#### 5.8.8 Fire Department File Review

The Covington Fire Department produced a letter dated March 25, 1975. The letter, addressed to the Tresler Oil Company, grants permission to install one 4,000-gallon UST on the site.

#### 5.8.9 Interviews

Alex Knapp, a Sunoco real estate representative, was contacted on January 8, 2010. Mr. Knapp stated that no record for this site exists within the Sunoco system. Multiple attempts to contact additional individuals familiar with the site were unsuccessful at the time of this report. Ron Lovitt with the DWM Superfund Branch was interviewed on February 18, 2010, concerning the status of the fuel oil UST. Mr. Lovitt stated that the Superfund Branch was aware of the 530 Riedlin Avenue exempt UST listing; however, the Superfund Branch did not contain any specific information concerning the UST. Mr. Lovitt suspected that the file was lost during a database transfer years earlier.

# 5.8.10 Site Reconnaissance

Third Rock representatives conducted a site visit on December 7, 2009. As the site consists of only a vacant parking lot, no obvious environmental conditions were observed during the site visit.

# 5.8.11 Conclusions and Recommendations

One 4,000-gallon kerosene UST was removed from this site in 1990 with the USTB issuing a "No Further Action" letter in 1992. The site has been redeveloped and is currently being utilized as a parking lot. An adjacent site, Bavarian Brewery, represents a history of benzene contamination. However, subsequent remediation efforts resulted in the Superfund Branch issuing a letter dated April 18, 2001 stating that all closure requirements had been satisfied. The presence of historic contamination on the adjacent site does not represent an environmental condition for the proposed project.

Both Alternative E and Alternative C/D will acquire an approximate 50' strip form this site. Construction details for this site are not known at this time. Though partial impacts are expected at this site, the impacts are expected to occur well away from the former UST location. This assessment agrees with the USTB and Superfund determination; no further action is currently recommended.

# 5.9 535 West 12<sup>th</sup> Street (Site 81)

The site, located at 535 West 12th Street, is currently vacant. A gas station operated by Jess and Sons previously occupied this site.

# 5.9.1 Aerial Photographs

Aerial images from 1981 were reviewed. One structure that appears to be a gas station is evident on the 1981 mapping.

# 5.9.2 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps for 1909, 1949, 1963, and 1980 were reviewed. Numerous residential structures occupy the site on the 1909, 1949, and 1963 mapping. A filling station is evident on the 1980 mapping.

#### 5.9.3 City Directories

A search of the Covington city directories showed the following uses for Site 81.

Year	Uses
2009	Vacant
2004	Vacant
2000	Morgan Auto Sales
1999	Not verified
1995	Jess & Sons Towing Service
1991	Jess & Sons Towing Service
1986	Jess & Sons Towing Service
1981	Vacant
1976	Standard Oil Co
1971	Standard Oil Co
1920 - 1962	Residential

# Table 24 – 535 West 12<sup>th</sup> Street, Covington (Site 81)

# 5.9.4 Water Well Logs

The Kentucky Geological Survey Water Well database was searched to determine if any water wells are located on the site. Numerous monitoring wells are located just north of the site; however, none of the wells are located on the site itself.

# 5.9.5 Regulatory Records Review

Jess and Sons is listed on the KY UST database. According to the EDR report, one used oil and six gasoline USTs, ranging in size from 550 gallons to 5,000 gallons, were removed from this site on November 3, 1998. The status of the tanks is listed as "Tank Removed / Verified." Information obtained at the Kentucky Division of Waste Management Underground Storage Tank Branch (USTB) concurs with the EDR report.

#### 5.9.6 Adjacent and Surrounding Sites

Site 80, and various other abandoned sites, is located to the north across West 12<sup>th</sup> Street. Interstate 75 is positioned to the west, with numerous residential structures to the east and south. One dry cleaner is located to the east of the site at the intersection of Main and West 12<sup>th</sup> Streets.

#### 5.9.7 KY USTB File Review

According to the USTB office, six USTs were removed from this site on November 3, 1998. The USTB office issued a letter on March 30, 1999 stating that closure requirements (Class III, Soil Table I) were satisfied and no further action is required. A copy of this letter is included in Appendix D.

#### 5.9.8 Fire Department File Review

The Covington Fire Department does not contain any information concerning this site.

#### 5.9.9 Interviews

Stacy Hans, Kentucky Transportation Cabinet District 6 Environmental Coordinator, was contacted via a phone conversation on December 17, 2009. Ms. Hans stated that the site was previously assessed concerning a separate local road construction project and was closed under Class 3, Soil Table 1 regulations.

# 5.9.10 Site Reconnaissance

Third Rock representatives conducted a site visit on December 7, 2009. The aforementioned local road construction project was underway during the site visit. Numerous excavators, dozers and other pieces of heavy equipment were observed working on the site. General grading and sewer line installation work was taking place on the site during the site reconnaissance. The demolishment and removal of the gas station and adjacent sites occurred prior to the site visit. Construction workers on site did not have any knowledge concerning the previous land use.

# 5.9.11 Conclusions and Recommendations

All evidence reviewed suggests that numerous individuals resided on the site prior to approximately 1970. City Directories identify service stations on the site from at least 1971 to 1995. Though numerous USTs once occupied this site, all have been removed with the USTB granting NFA letters for each removal. This site is expected to be partially impacted by both alternatives with an approximate 10-foot strip being acquired to tie into the new 12<sup>th</sup> Street alignment. This assessment concurs with the findings of the USTB; no further action is recommended.

# 6.0 SUMMARY

Phase I Environmental Site Assessments (ESA) were conducted on 33 sites for the proposed Brent Spence Bridge Replacement/Rehabilitation Project in the Greater Cincinnati / Northern Kentucky Region. The objective of the Phase I ESAs was to identify "recognized environmental conditions" present on sites located within the study area. An exhibit detailing the study area is included in Appendix A. The sites assessed in this document were selected using information obtained from the *Environmental Site Assessment Screening* (April 2007). The Phase I ESAs were conducted in accordance with Ohio Department of Transportation Site Assessment Guidelines (April 2009). Each included an investigation of the historical land use, site reconnaissance, review of applicable regulatory records, and interviews with persons familiar with the sites.

The Phase I ESAs have identified recognized environmental conditions, which will require further investigation. Twelve (12) sites are recommended for Phase II investigations; 10 are located in Ohio and 2 are located in Kentucky. Sites recommended for Phase II ESA investigations are summarized below.

Site ID	State	Issue	Facility Address	Alternative Impacted
1	ОН	Historic Filling Station	2310 Central Parkway	E, C/D
Adjacent to Site 2	ОН	Junkyard	2225 Buck St	E, C/D
29	ОН	Historic Filling Station	Formerly 817 Mound Street	E, C/D
49	ОН	Historic Filling Station	508 West 3 <sup>rd</sup> Street	E, C/D
51	ОН	Historic Filling Station	SW Corner of Historic 4th and Central Alignment (Currently near I-71 Dead End Ramp)	E, C/D
53	ОН	Historic Filling Station	605 West 3 <sup>rd</sup> Street	E, C/D
58	ОН	Historic Filling Station, OH UST, OH LUST	205 Central Avenue	E, C/D
60	ОН	Historic MGP	646 Mehring Way	E, C/D
64	ОН	Historic MGP	655 Mehring Way	E, C/D
65	ОН	Historic MGP	612 West Mehring Way	E, C/D
71	KY	Historic Junkyard Location, KY UST	666 West 3 <sup>rd</sup> Street	E, C/D
78	KY	Historic Filling Station, KY UST	550 Pike Street	C/D

# Table 25 – Sites Recommended for Phase II ESA Investigations

# REFERENCES

Cincinnati Public Library. Cincinnati City Directories: Polk and Williams for the following years: 2009, 2005, 1999, 1996, 1991, 1988, 1985, 1979, 1976, 1974, 1966, 1961, 1960, 1956, 1955, 1951, 1949, 1948, 1947, 1944, 1942, 1940, 1939, 1935, 1934, 1933, 1930, 1929, 1927, 1918, 1917.

Environmental Data Resources Inc. December 2009, January 2010. City Directory review. Inquiry numbers: 26601241; 26601361; 26601621; 26601701; 26601791; 26601851; 26601921; 266502061; 26651961; 26695901; 26696211; 26712731.

Environmental Data Resources Inc. December 24, 2009. Environmental database review. BSB Inquiry number 02663392.1.

Environmental Data Resources Inc. Sanborn Fire Insurance Mapping. OH: 1891; 1934; 1950; 1981. KY: 1909; 1949; 1963; 1980.

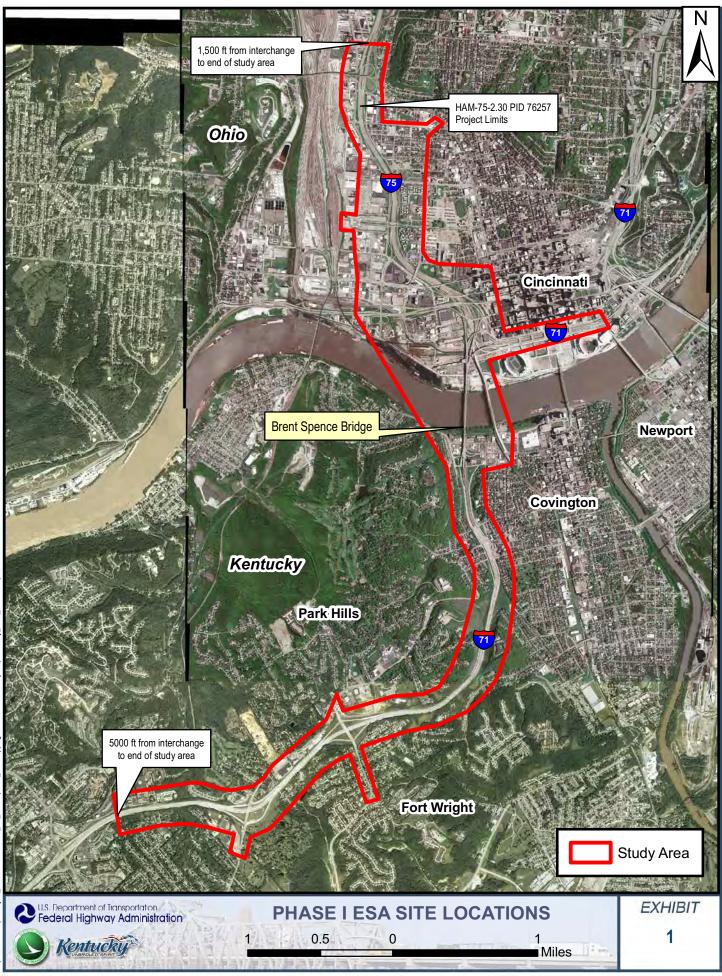
Kentucky Geological Survey Water Well Database. <u>http://www.uky.edu/KGS/</u>

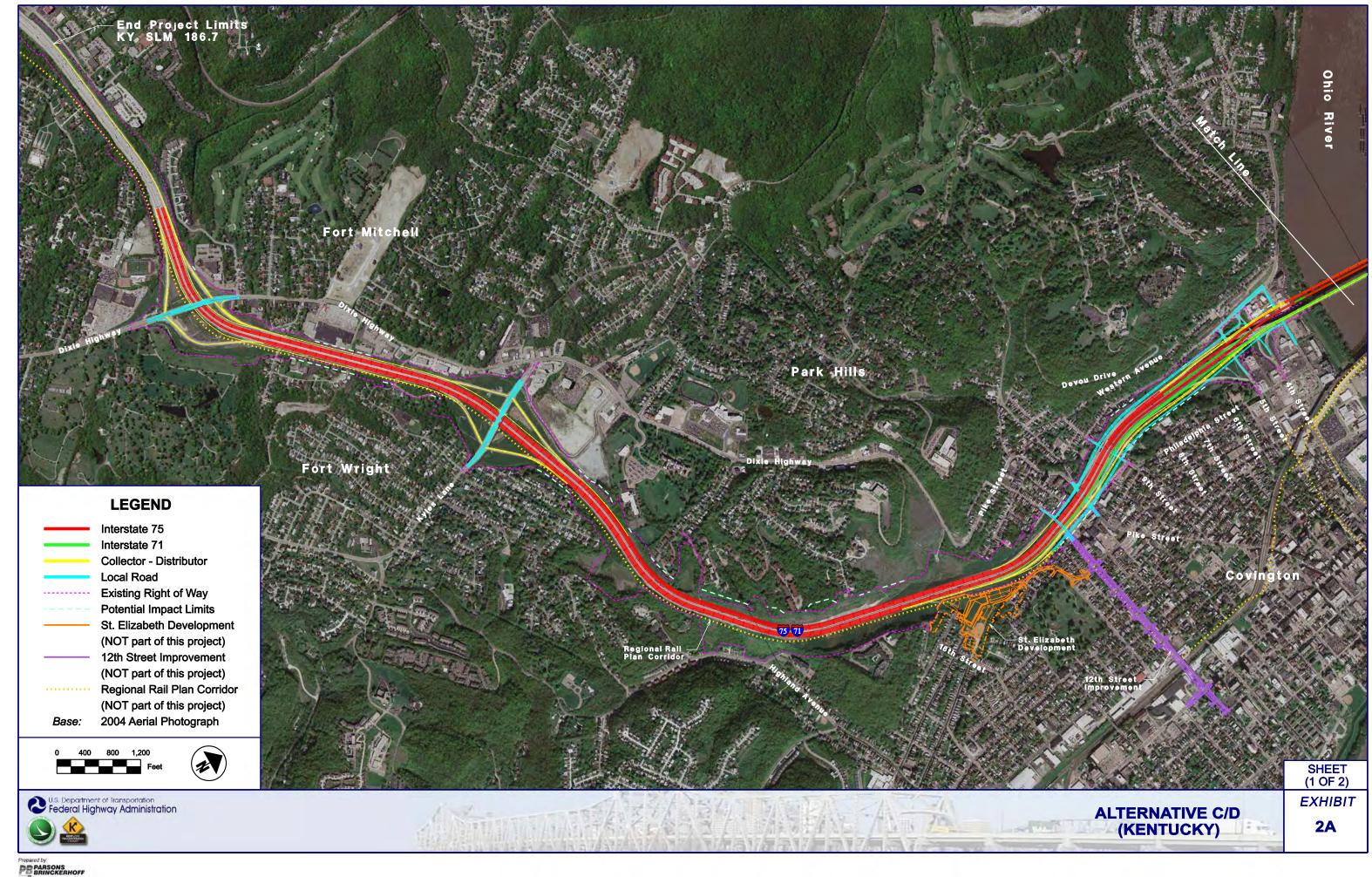
Margaret I. King Library, University of Kentucky. Covington City Directories, Polk and Williams for the following years: 2009, 2004, 2000, 1999, 1994, 1991, 1985, 1984, 1982, 1981, 1980, 1979, 1978, 1976, 1975, 1973, 1972, 1971, 1966, 1964, 1962, 1961, 1960, 1959, 1954, 1951, 1948, 1941, 1936, 1928, 1923, 1920.

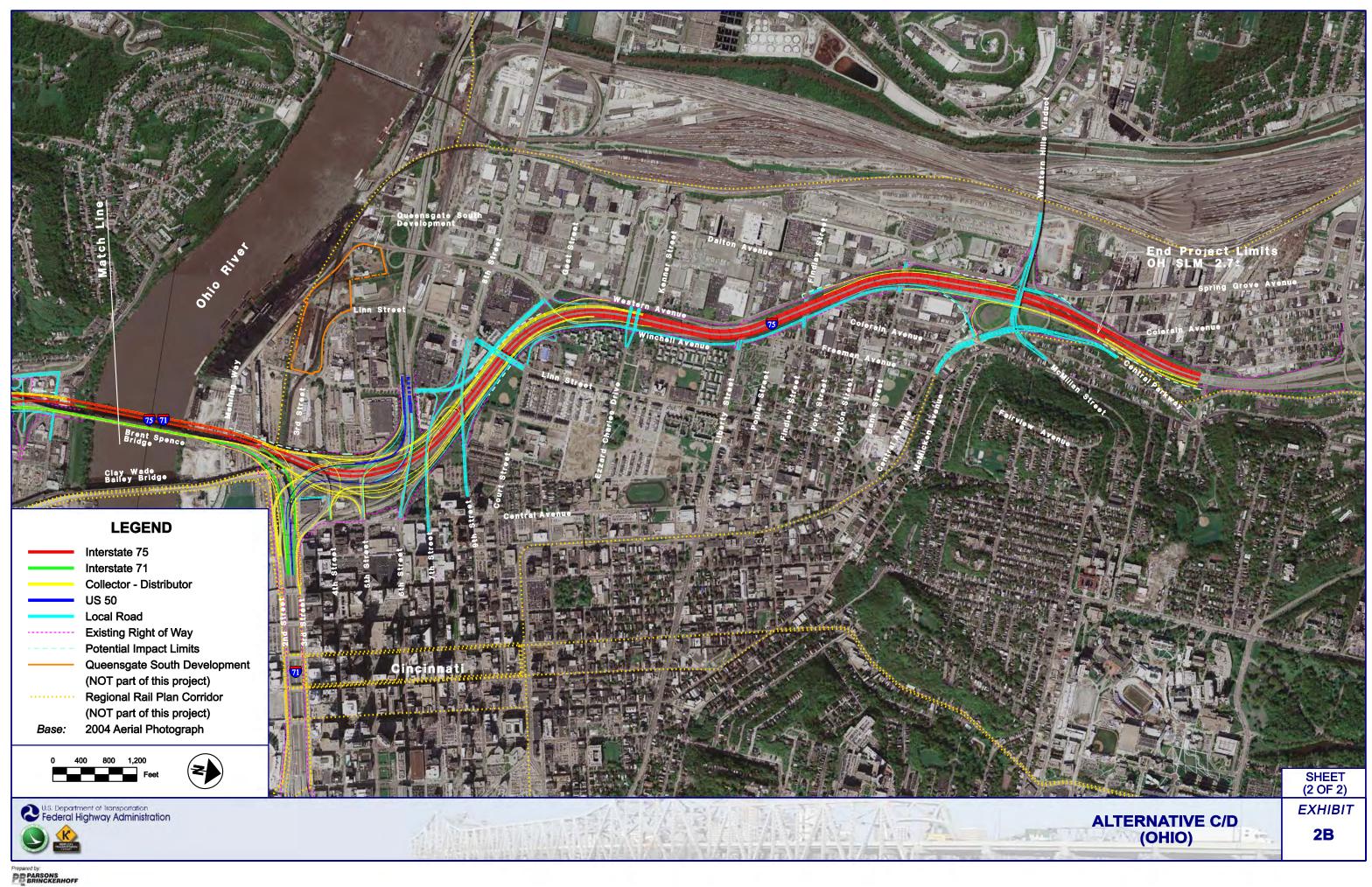
Ohio Department of Natural Resources Water Well Log. http://www.dnr.state.oh.us/water/maptechs/wellogs/app/default.asp

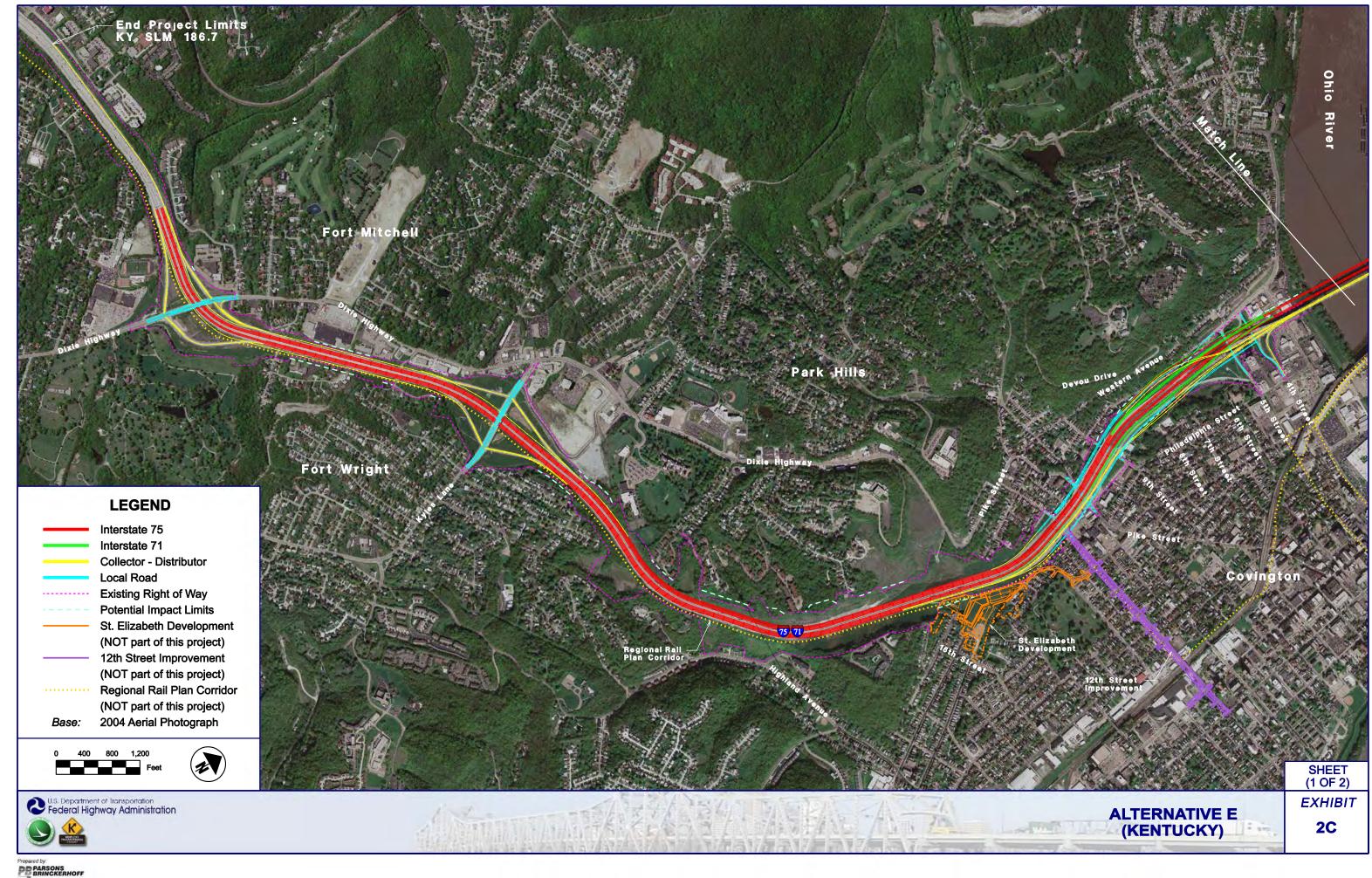
# **APPENDIX A – EXHIBITS**

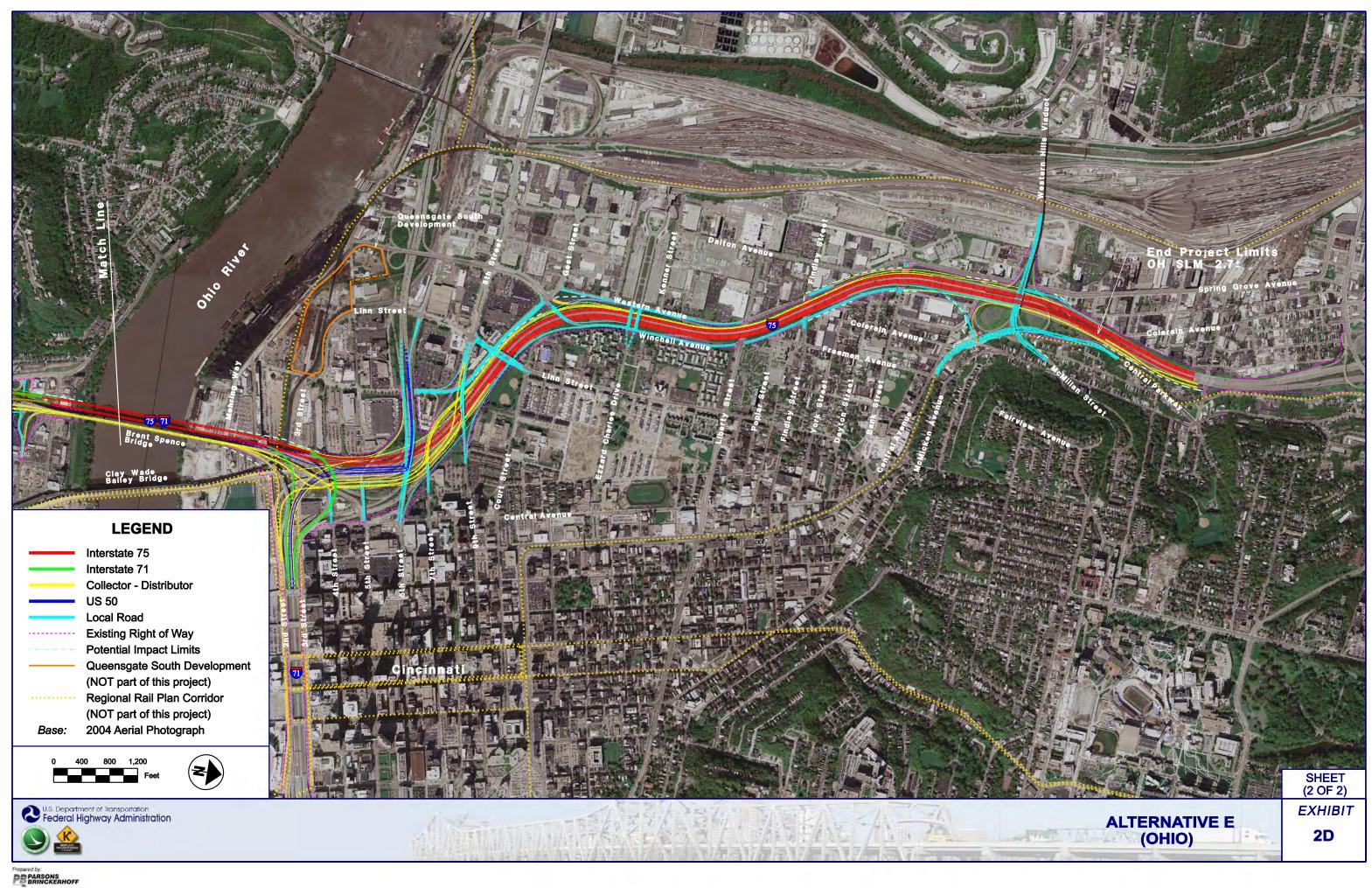
Exhibit 1: Study Area Exhibits 2A – 2D: Feasible Alternatives











# APPENDIX B – BRENT SPENCE BRIDGE NFA CORRESPONDENCE, 7/16/09



#### ENERGY AND ENVIRONMENT CABINET

Steven L. Beshear Governor

Department for Environmental Protection Division of Waste Management 200 Fair Oaks Lane Frankfort, Kentucky 40601-1190 www.kentucky.gov Leonard K. Peters Secretary

July 16, 2009

Mr. Chris Cummins Kentucky Transportation Cabinet 200 Mero Street Frankfort, KY 40622

RE: CMI Final Approval Brent Spence Bridge EPA I.D. #KYD 985 081 421 Agency Interest #48294

Dear Mr. Cummins:

The public comment/public hearing period has been completed for the above referenced project without any responses from the public. KDWM is also in receipt of the fees associated with this project. Therefore, the Corrective Measures Implementation Plan is approved, no further action (NFA) is required and this project is complete.

If you have any questions regarding any of these issues, please contact Joe Wellner at (502) 564-6716 or at joseph.wellner@ky.gov.

Sincerely,

Bill Schneider

For April J. Webb, P.E., Manager Hazardous Waste Branch

c: Karen Knight, U.S. EPA, Region 4 Bart Schaffer, HWB



# RECEIVED

ENERGY AND ENVIRONMENT CABINER 26 A 10: 36

Steven L. Beshear Governor Leonard K. Peters Secretary

Department for Environmental Protection ICH OF WASTE MGMT Division of Waste Management AZ AUTOUS WASTE BRANCH 200 Fair Oaks Lane Frankfort, Kentucky 40601-1190 www.kentucky.gov

#### **MEMORANDUM**

- SUBJECT: Evaluation of I-75 Brent Spence Bridge status under the RCRAInfo Corrective Action Environmental Indicator Event Codes CA400 and CA550 EPA I.D. Number: KYD 985 081 421 TEMPO Agency Interest Number: 48294
- TO: April J. Webb, P.E., Manager
- FROM: Bart Schaffer, P.G., Geologist Registered **B**S Hazardous Waste Corrective Action Section

DATE: March 25, 2009

I. PURPOSE OF MEMO

The purpose of this memo is to document the status of the I-75 Brent Spence Bridge site in relation to the following corrective action event codes recently redefined in RCRAInfo data management system. The I-75 Brent Spence Bridge site has successfully achieved the following for the *entire* facility.

1) Remedy Decision Determination (CA400)

2) Remedy Construction Determination (CA550)

All soil contaminated above the EPA Region 9 Residential PRGs has been removed from the site.

The I-75 Brent Spence Bridge will have a CA400 "YES" and/or a CA550 "YES" entered into RCRAINFO for 3/24/2009.

Concurrence by the Hazardous Waste Branch Manager is required prior to entering these event codes into RCRAInfo. Your concurrence with the interpretations provided in the following paragraphs and the subsequent recommendations is satisfied by initialing above.

# II. REMEDY CONSTRUCTION DETERMINATION (CA550)

There are two (2) national status codes under CA550. These status codes are:

1) NR-No Remedy Constructed

#### 2) RC-Remedy Constructed

Note that the two national status codes for CA550 are based on the entire facility (i.e., the codes are not SWMU specific). Therefore, every area at the facility must meet the definition before a NR or RC status code can be entered for CA550.

#### III. FACILITY BACKGROUND/CHRONOLOGY

The Brent Spence Bridge is located on the Ohio River in Covington, Kentucky. The span extends approximately 600 yards south of the river. The Bridge was repainted in 1989-90 and as a precursor to this activity, the Bridge was sandblasted to remove existing paint. Sandblast grit was stored under the Bridge and paint flakes containing lead were dispersed throughout the area during the sandblasting. Following closure of the sandblast grit waste pile areas, KDEP personnel conducted a RCRA Facility Assessment. It was concluded that there were eleven Areas of Concern (AOCs) warranting further investigation for lead in soil.

Several rounds of soil sampling were conducted as part of the investigation to detemine the extent of lead contamination. During the final phase, the property and surrounding potentially affected areas was divided into grids. A total of 256 surface soil samples were collected during this phase of the investigation. Reported lead concentrations ranged from 4 to 2,100 mg/kg (parts per million). Grids containing lead at concentrations of over 400 mg/kg were identified and targeted for soil removal in the *Site Remediation and Management Plan*. Remedial work was performed as interim measures. The *Site Remediation and Management Plan*. *Plan* was approved on September 28, 2007.

#### IV. SUPPORT FOR CONCLUSION

Excavatory activities were conducted between October-November, 2007 and April-June, 2008. Affected soils were removed with heavy equipment and trucked to a solid waste landfill for final disposal. Following excavation of contaminated soils in each grid, verification sampling was conducted. In all grids all soils containing lead at higher than a concentration of 400 mg/kg (the residential use PRG) were removed. The interim measures that were performed have resulted in the removal of all soils contaminated above allowable regulatory levels.

Groundwater monitoring was conducted as part of closure activities for the former waste pile. Lead in groundwater was not found above levels of concern. The monitoring wells were abandoned after the closure period sampling.

Document Review Summary:

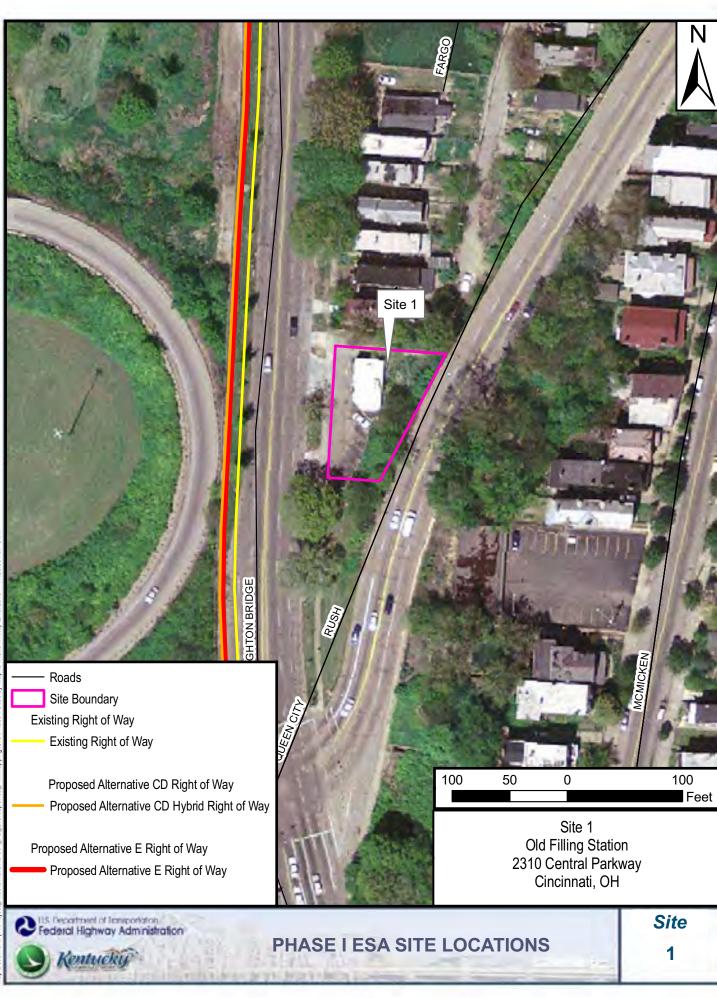
- Corrective Measures Implementation Plan
- Final Corrective Action Measures Report

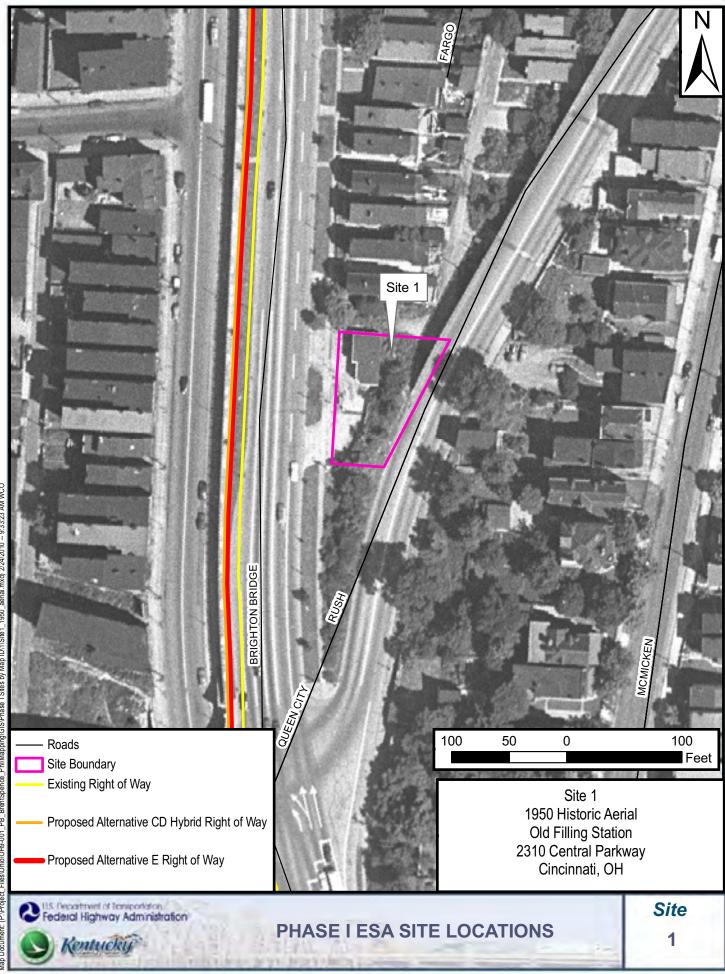
#### V. CONCLUSION FOR REMEDY DECISION (CA400)

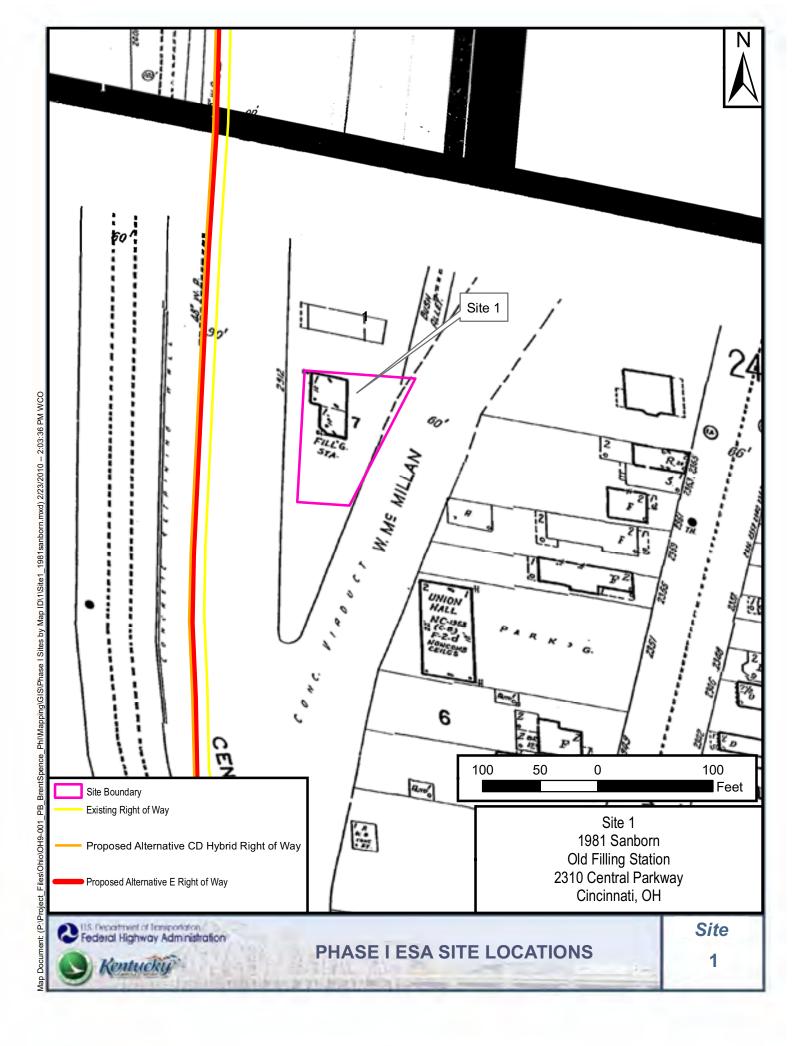
The appropriate status code to be entered for RCRAInfo event code CA400 (Remedy Decision) is the date of approval of the remedial plan, September 28, 2007.

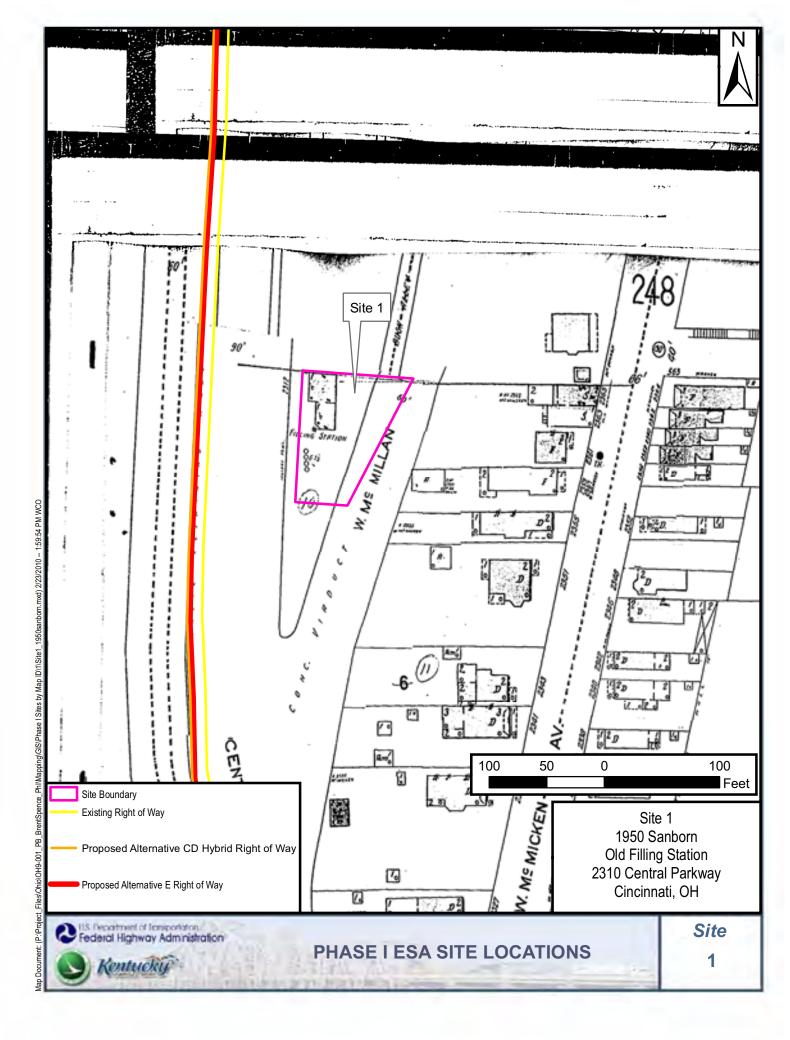
#### CONCLUSION FOR REMEDY CONSTRUCTION (CA550)

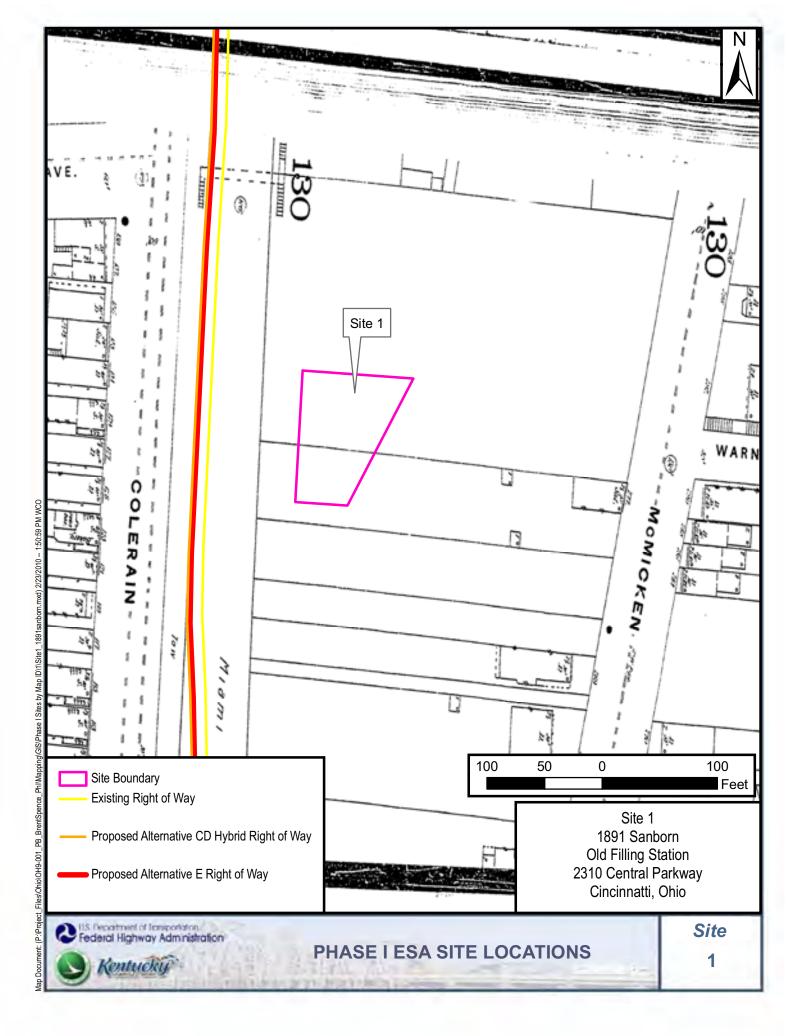
The appropriate status code to be entered for RCRAInfo event code CA550 (Remedy Construction) is "RC" – Remedy Constructed.

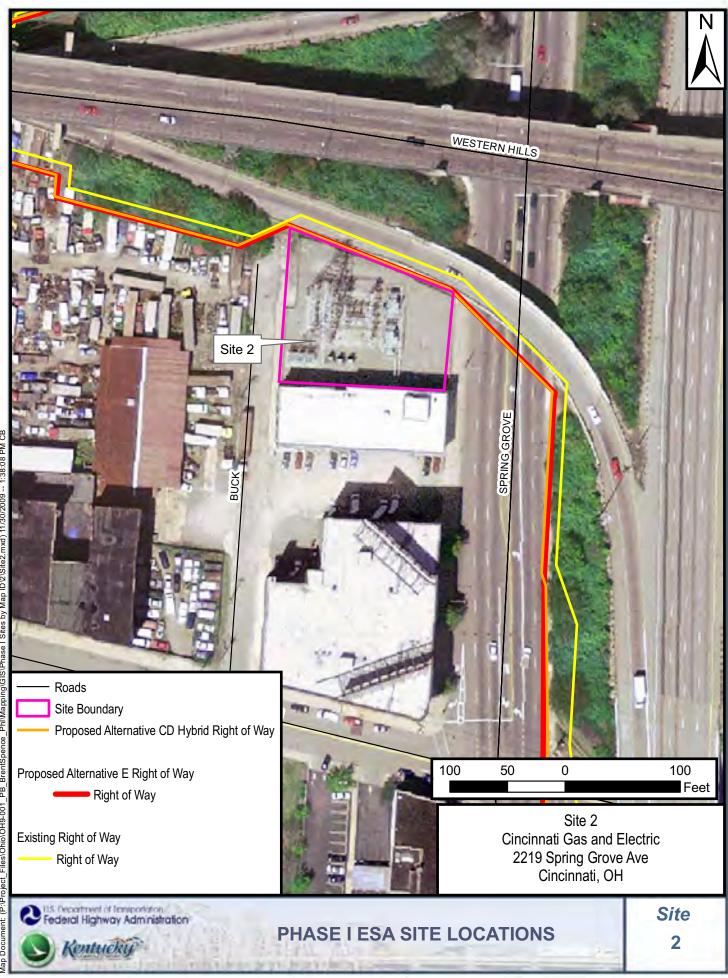




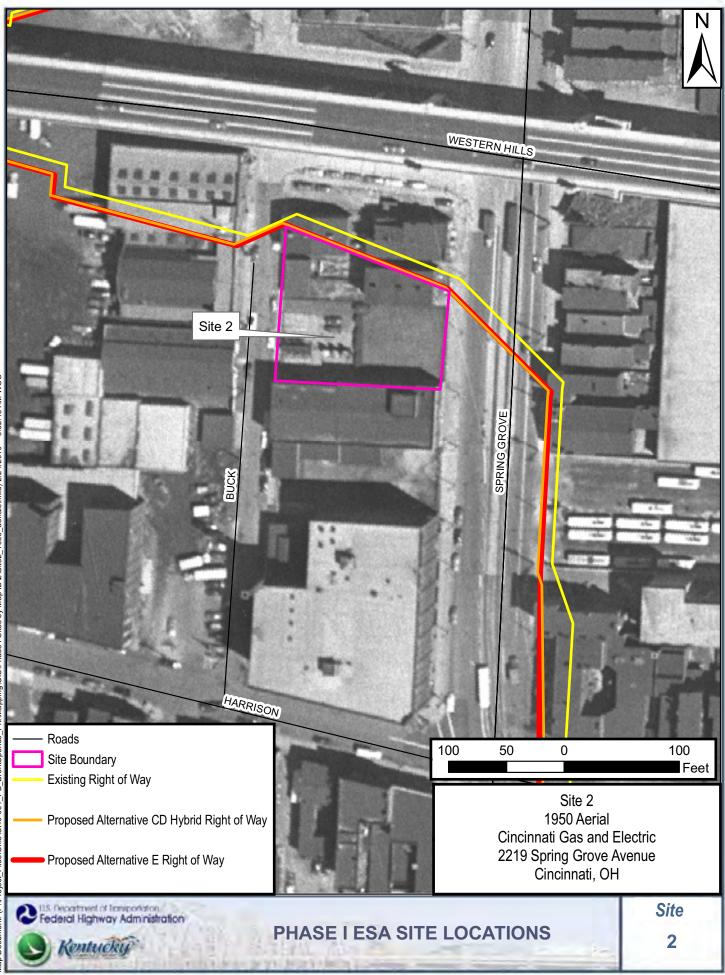


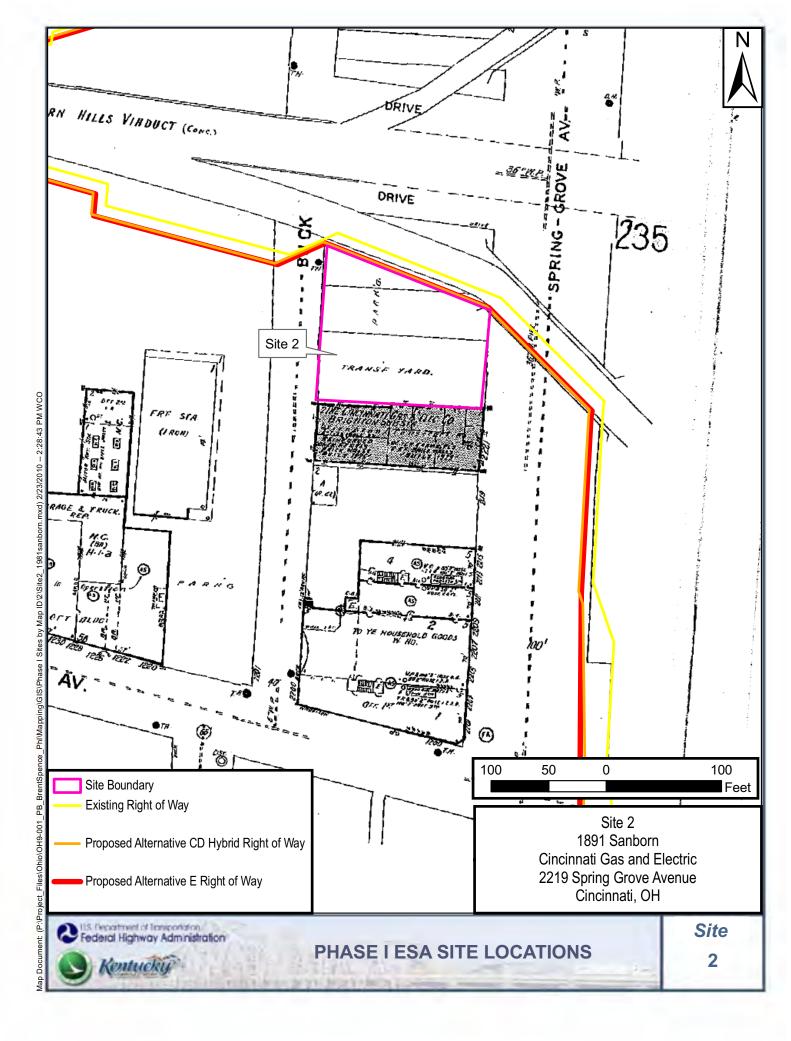


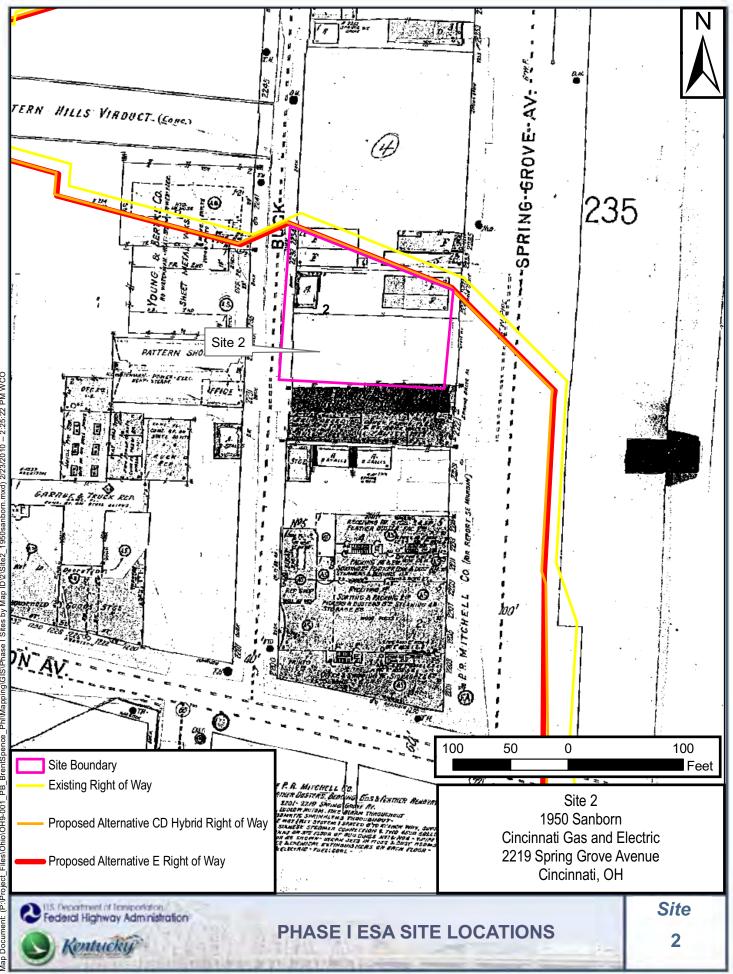




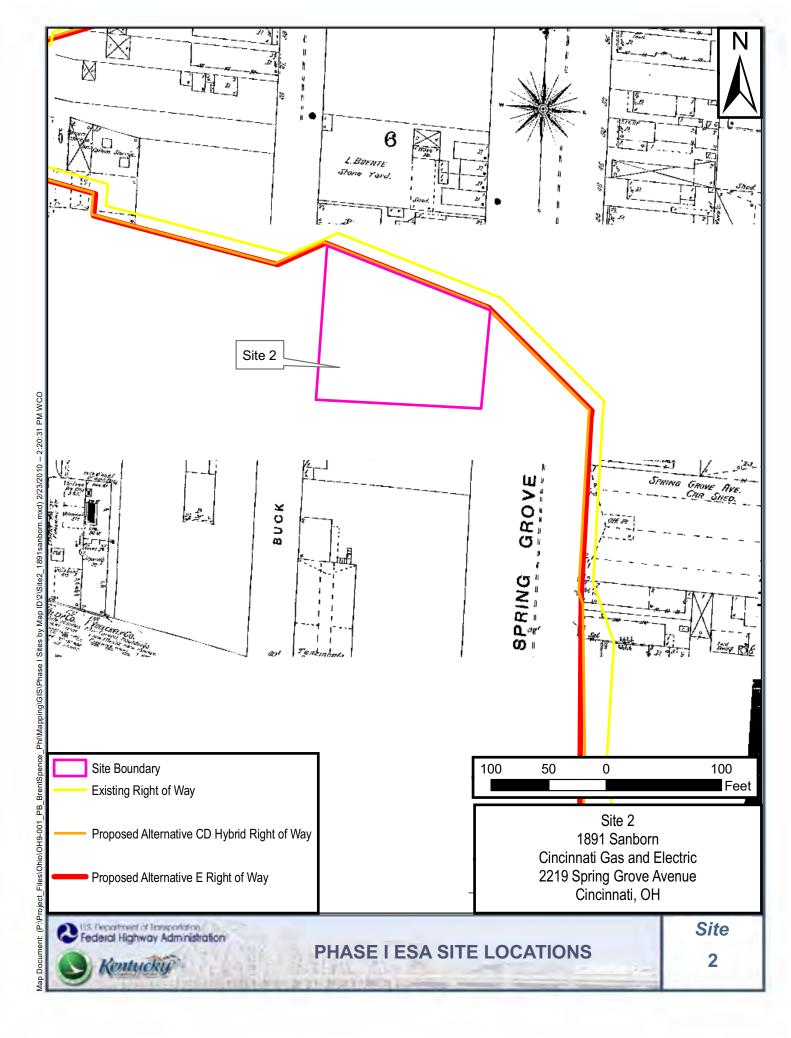
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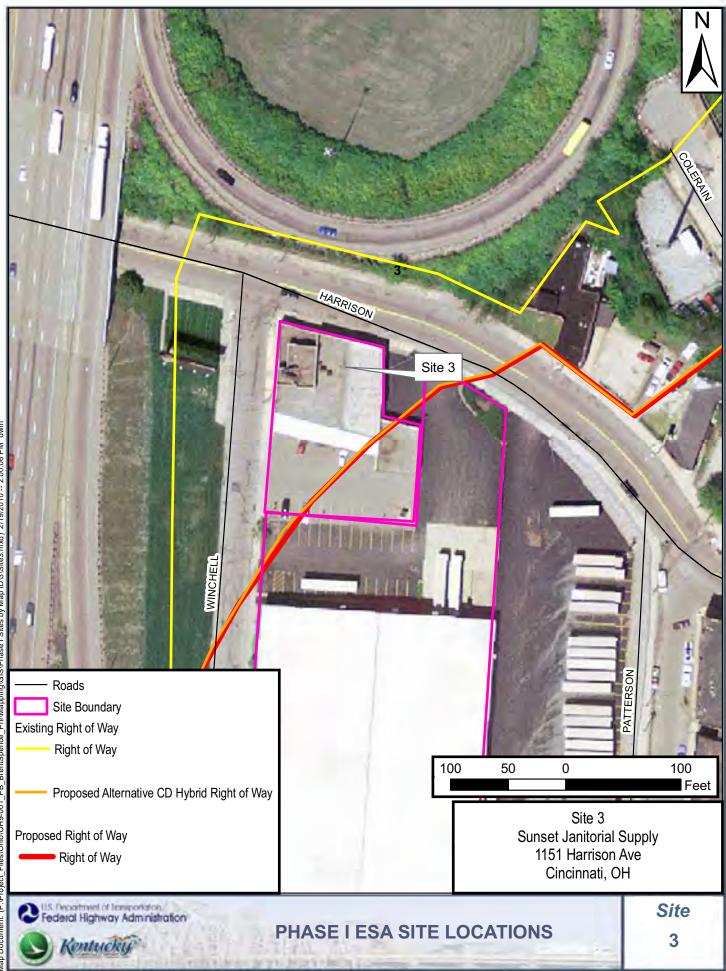




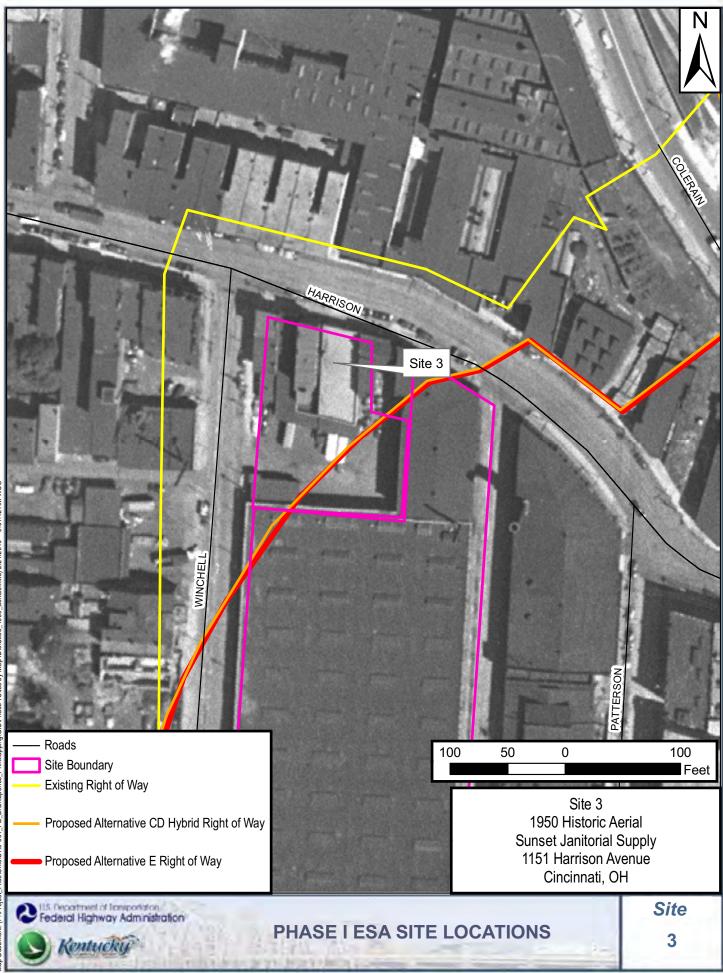


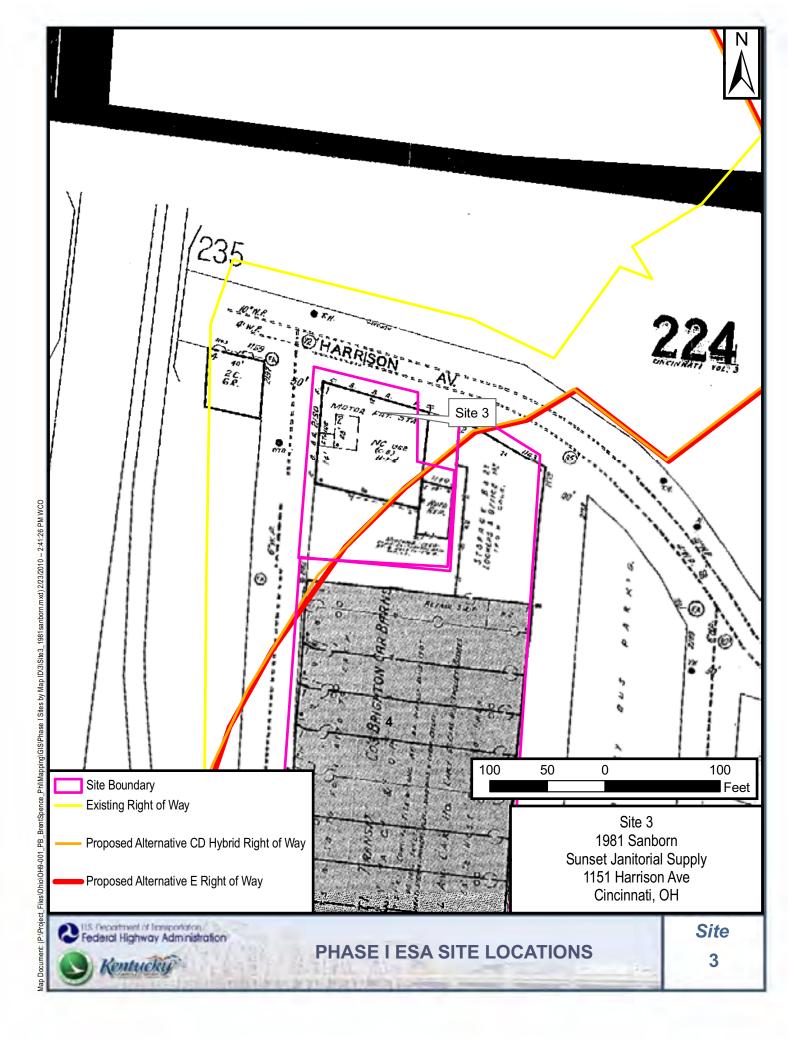
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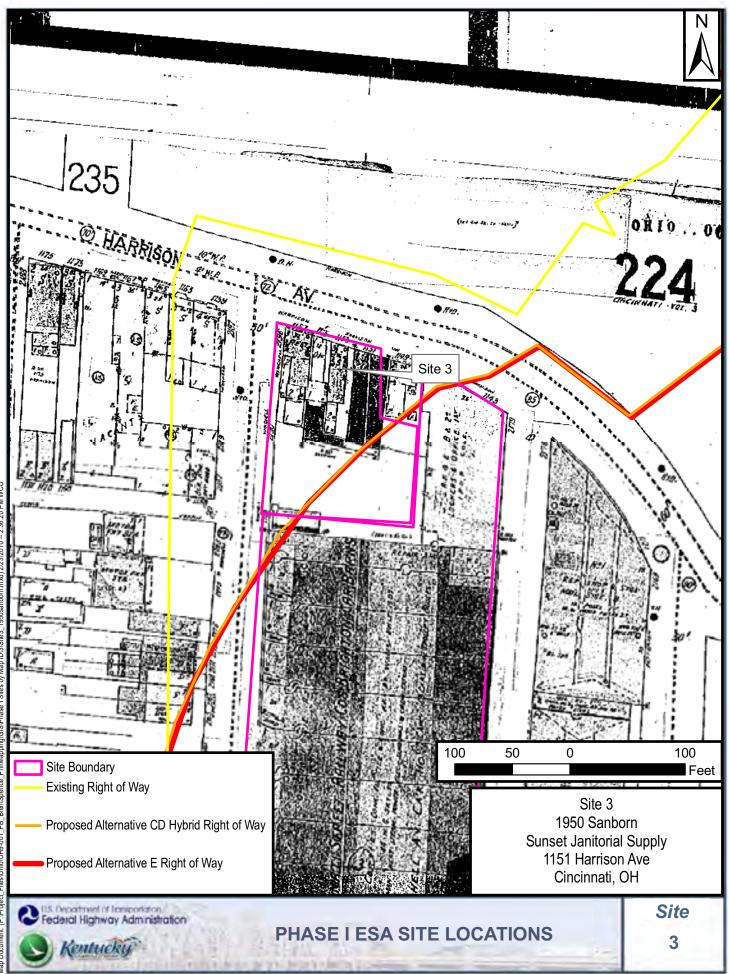


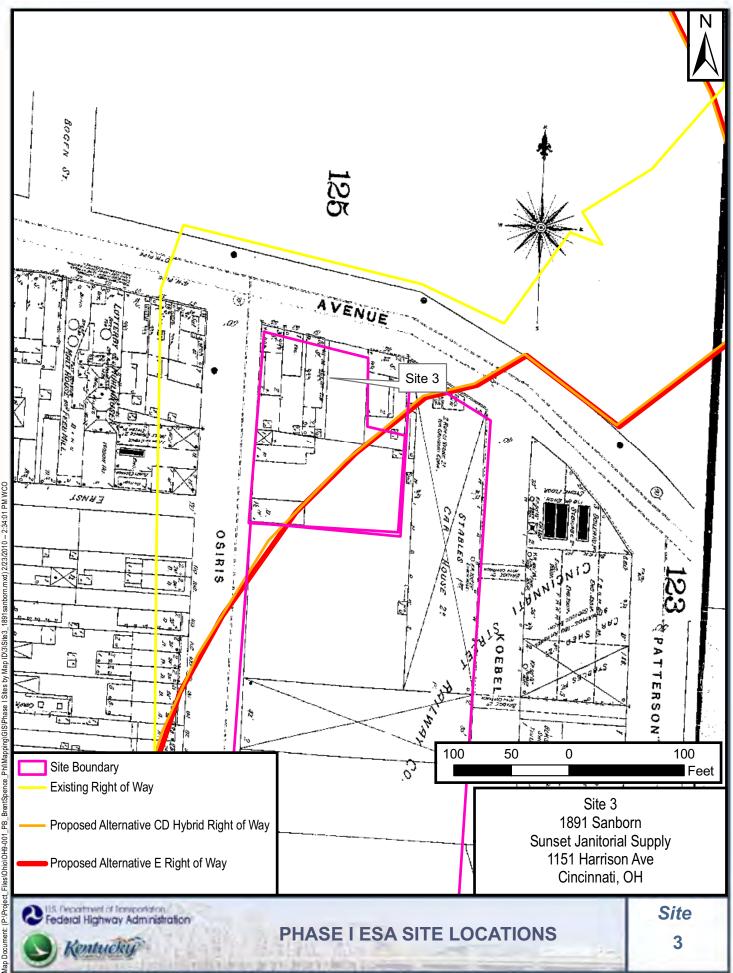


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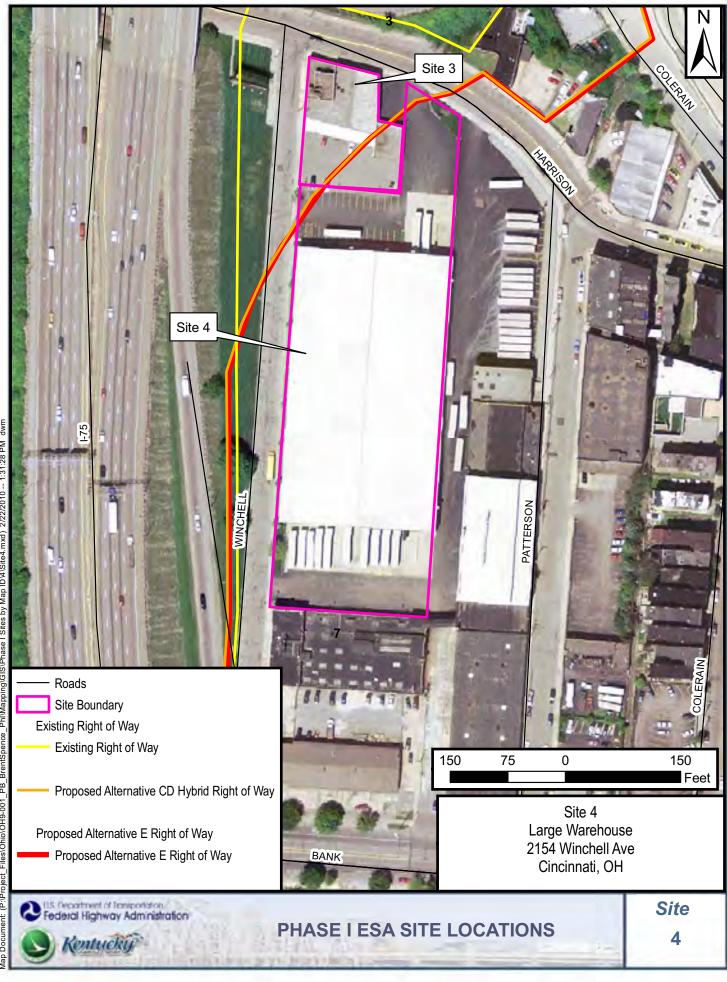




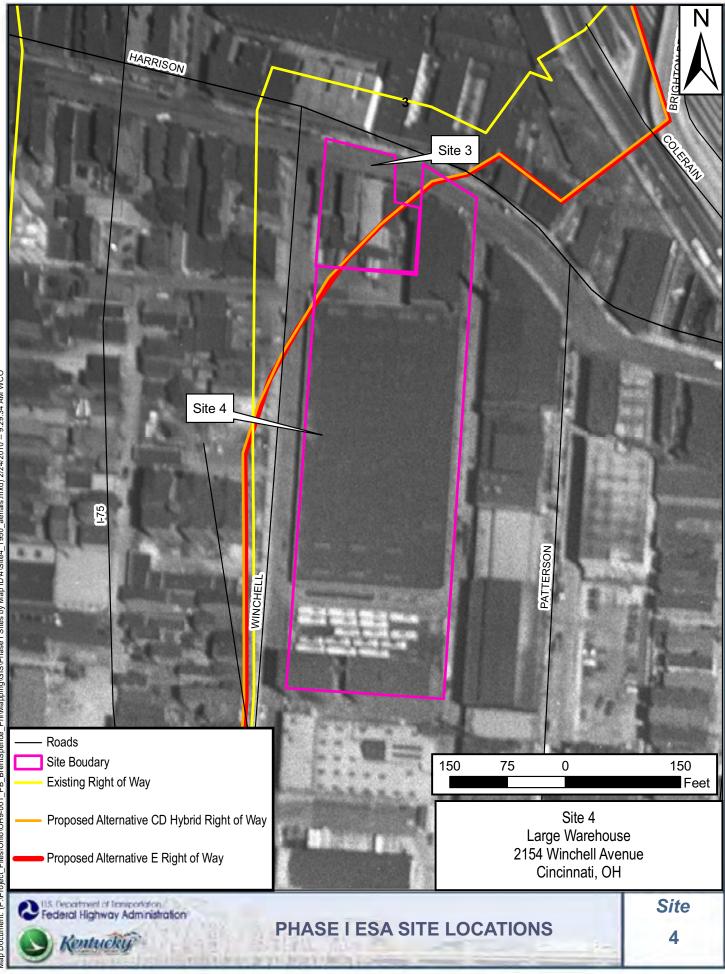


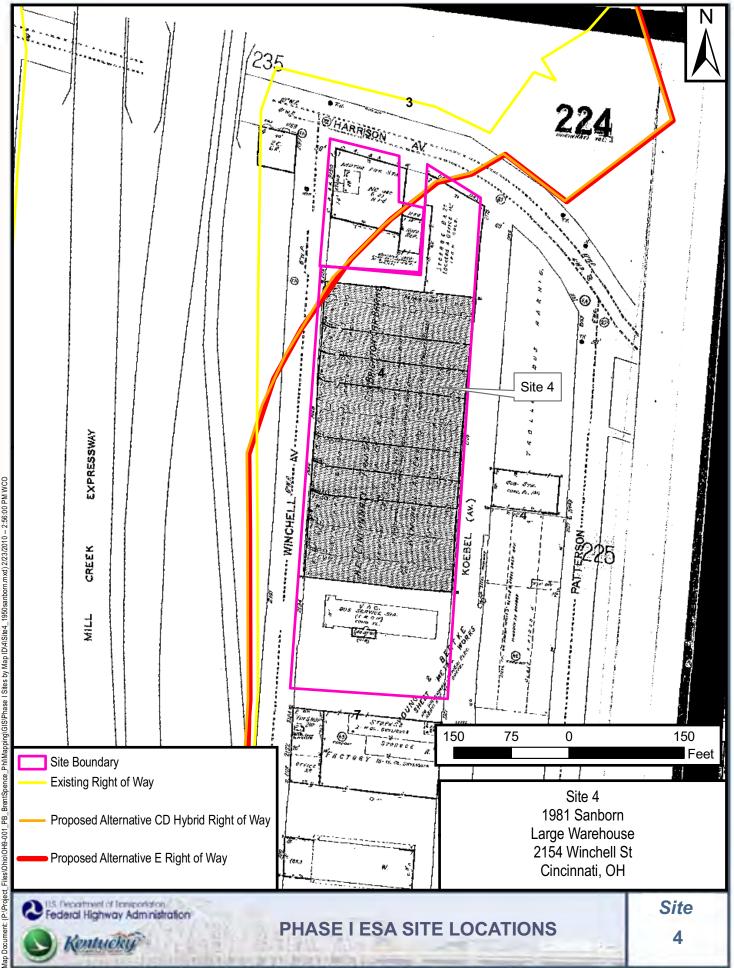


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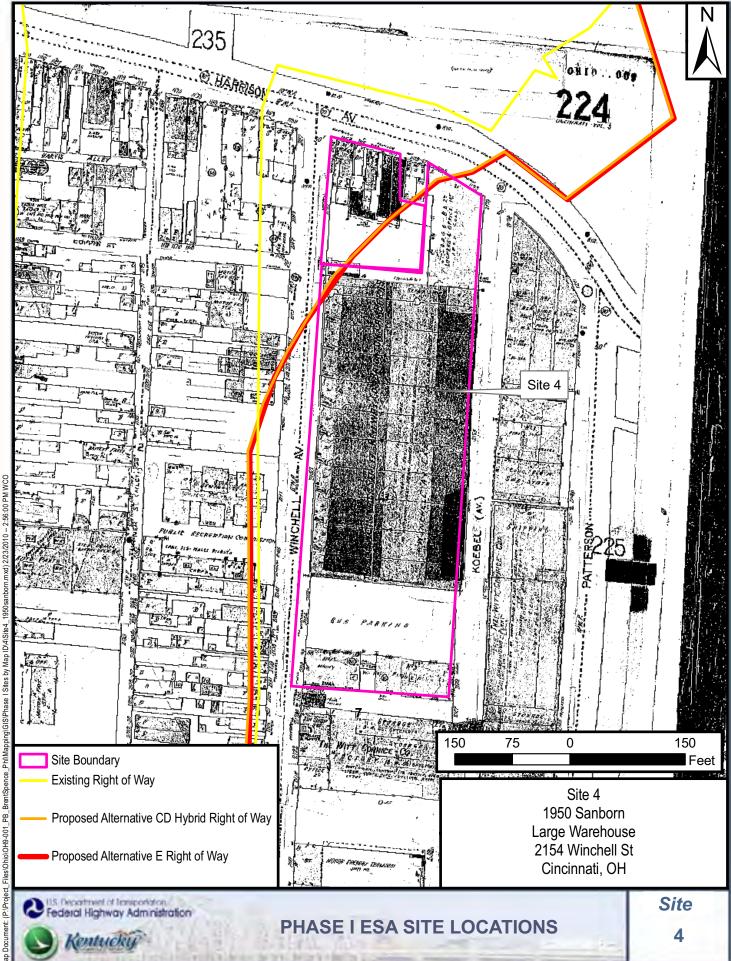


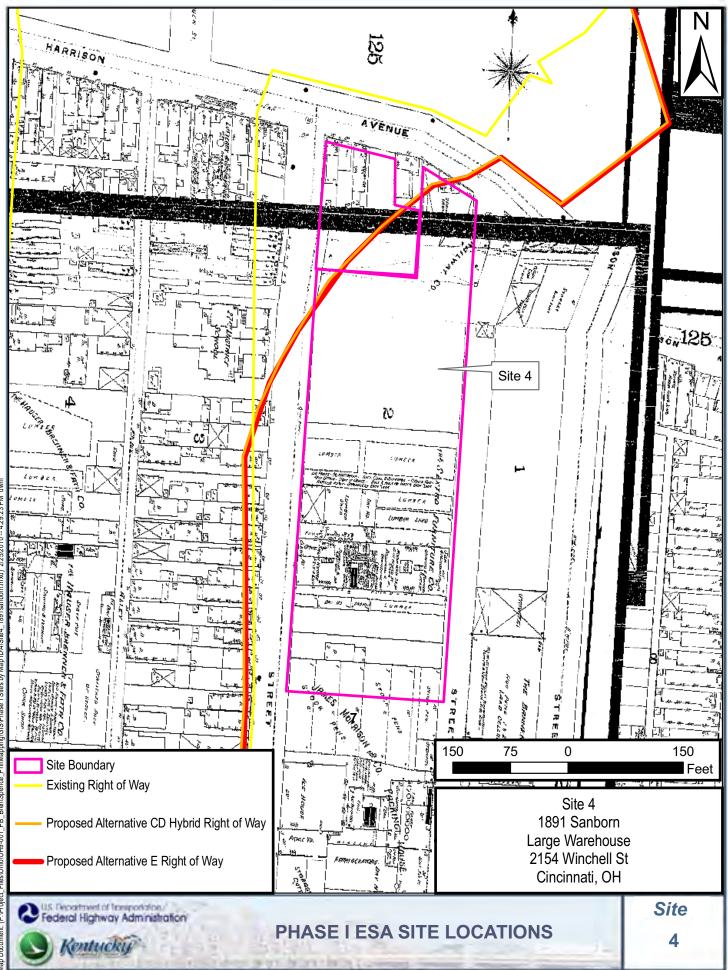
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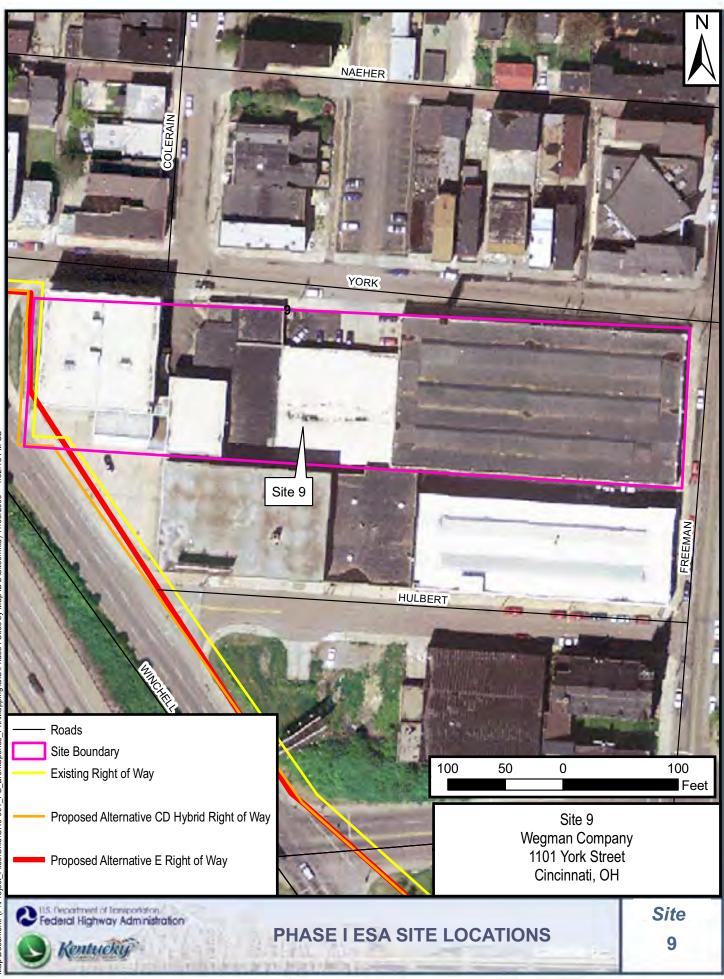


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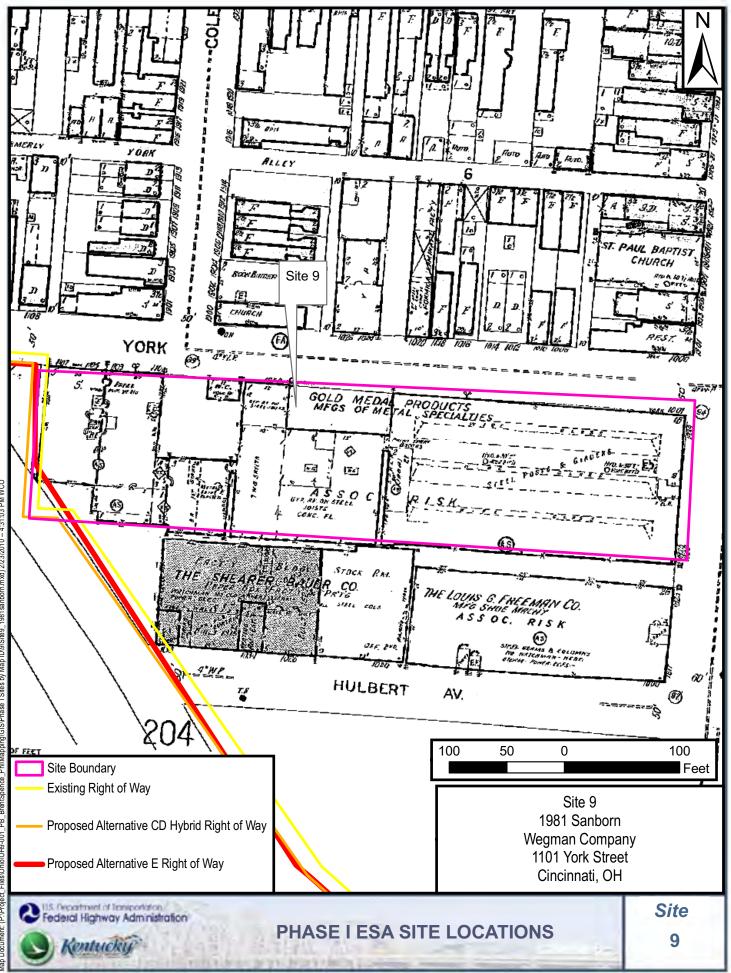


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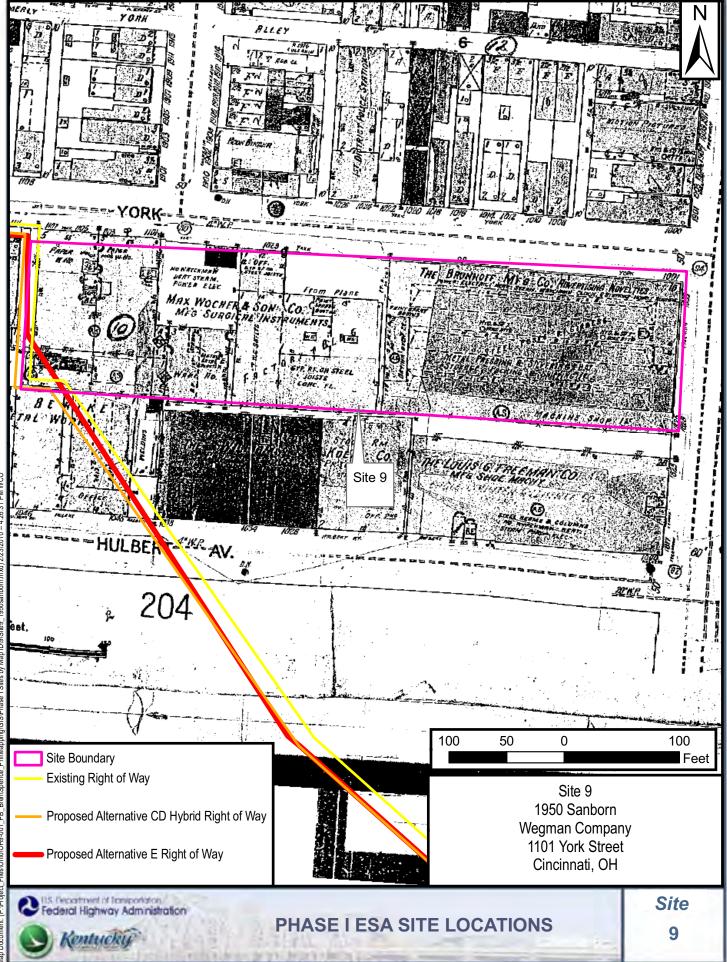


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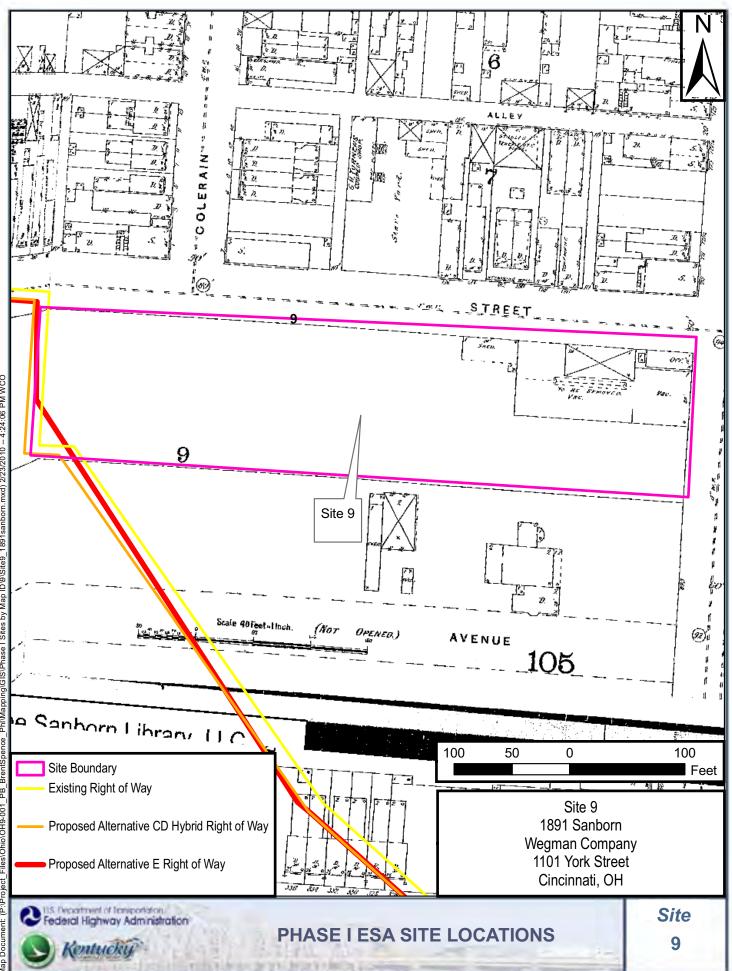




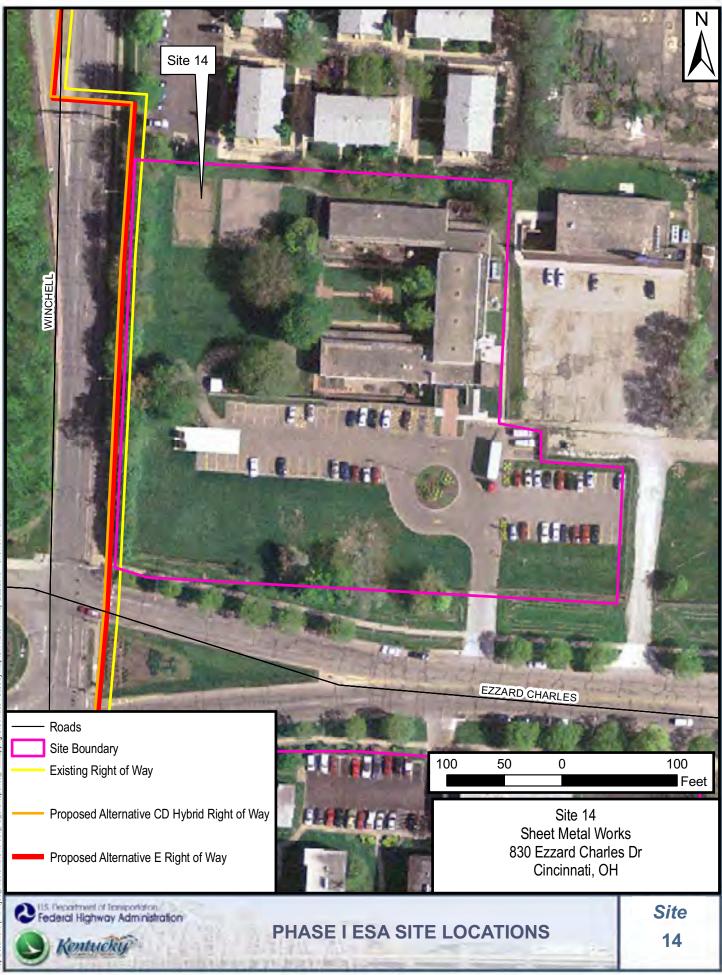
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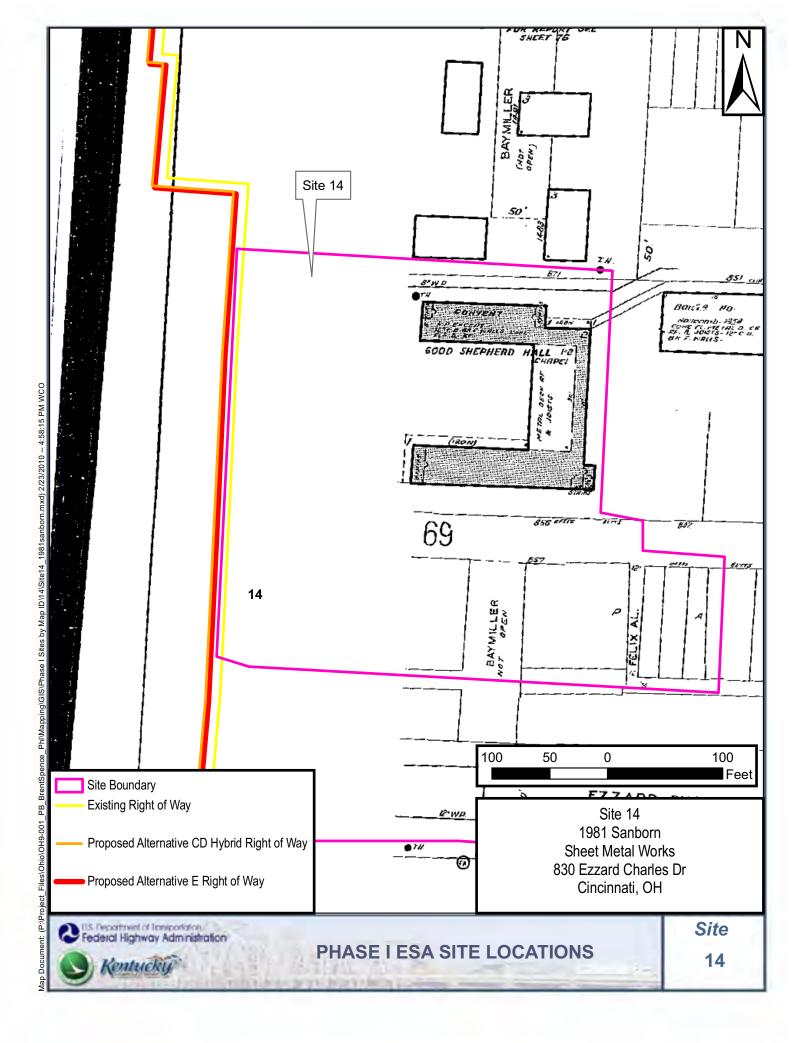
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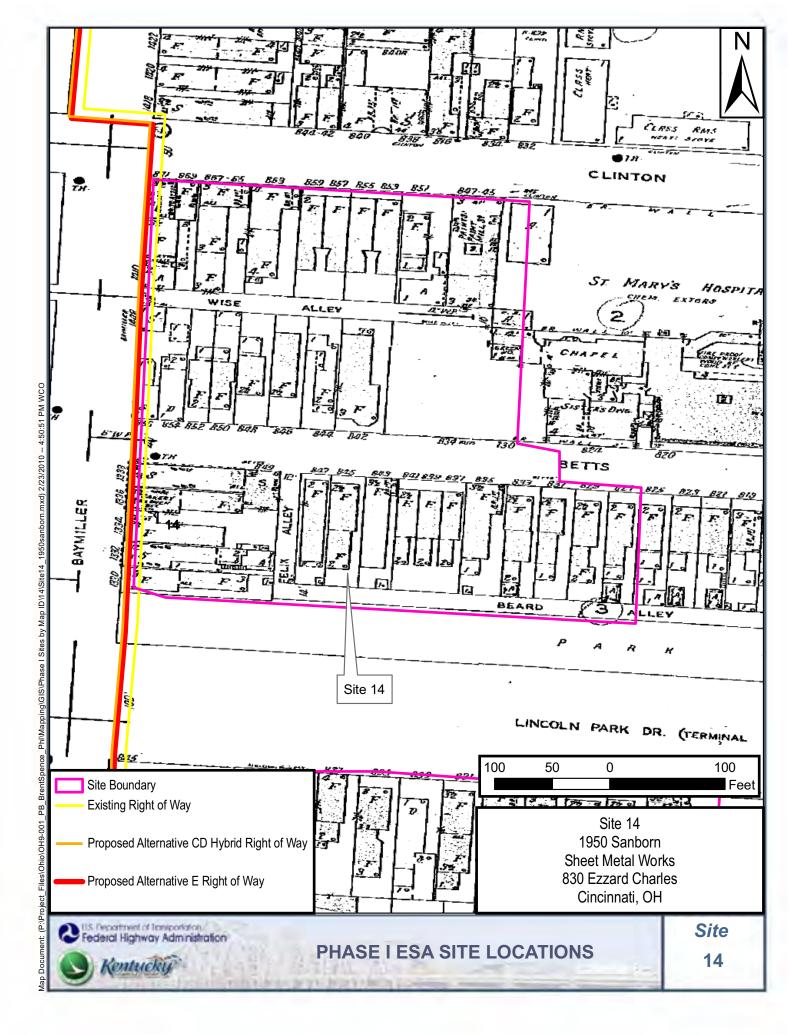


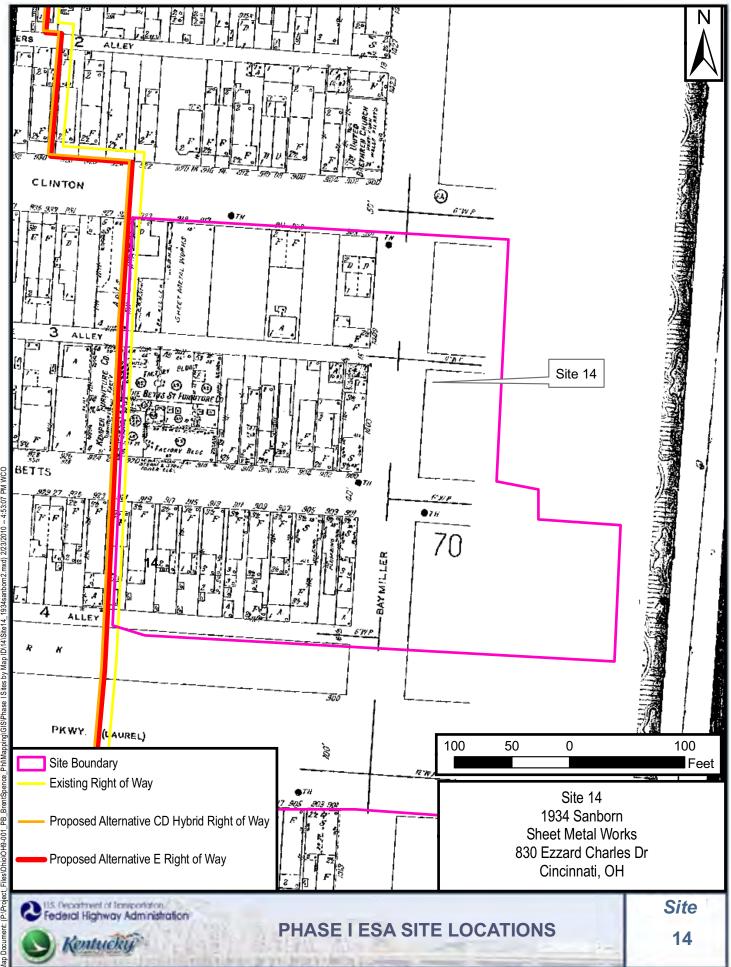
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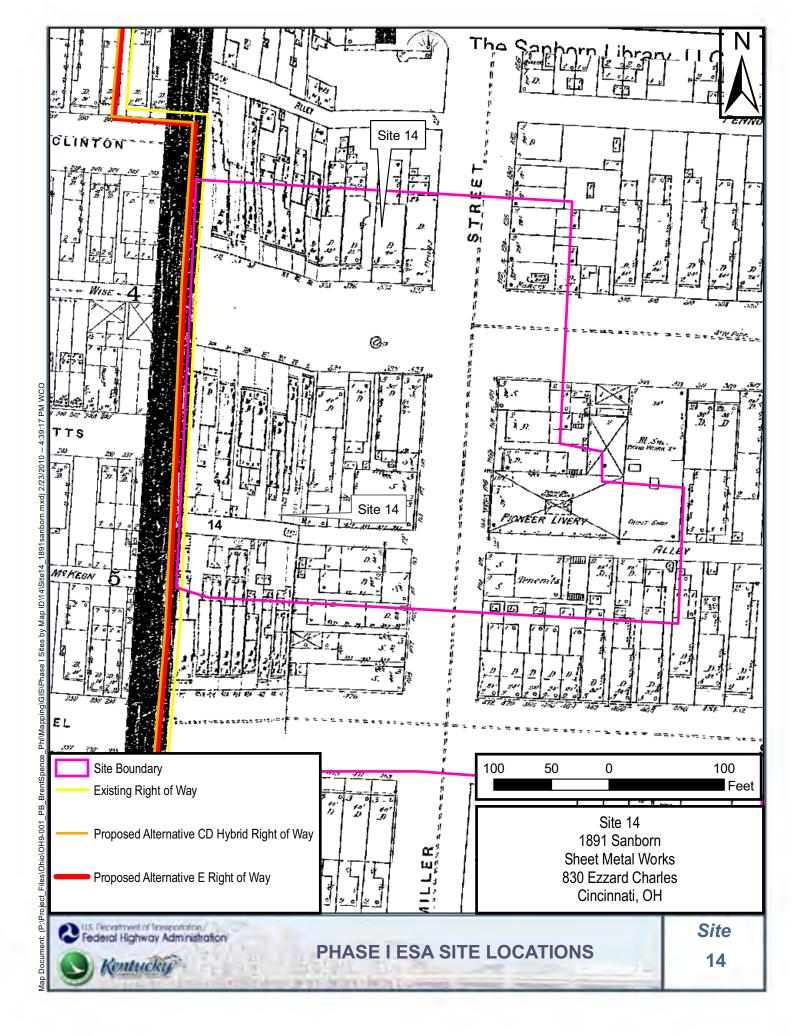


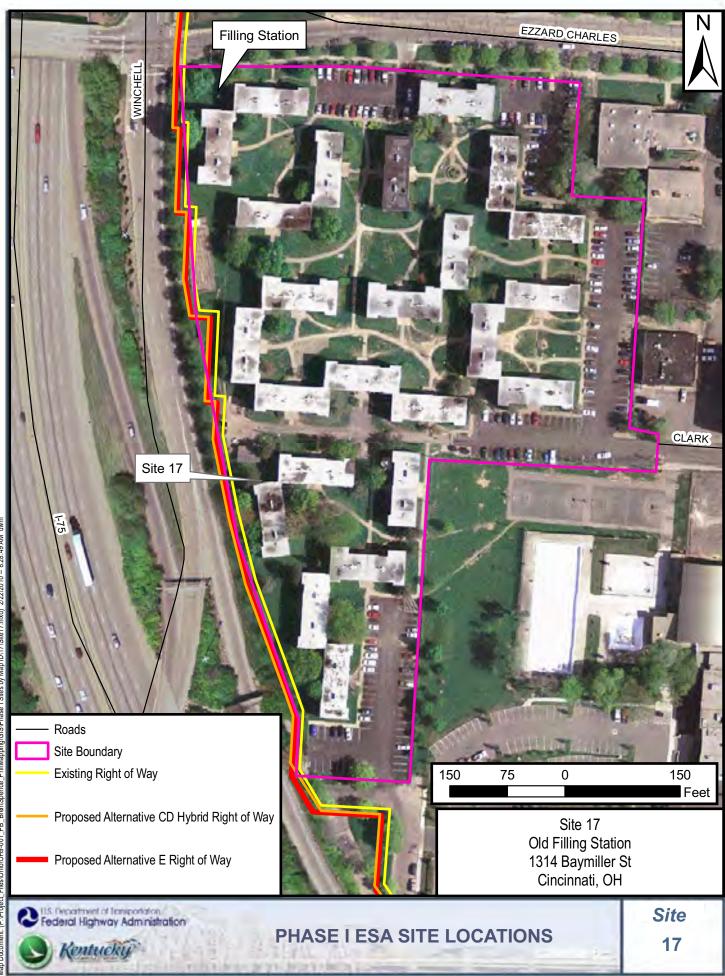




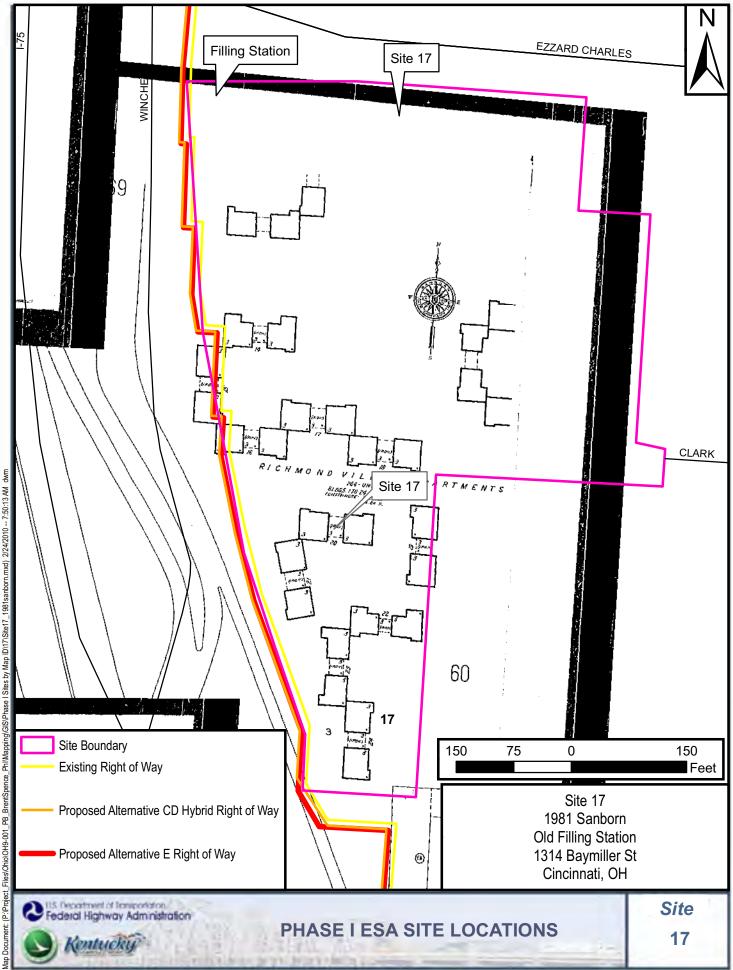


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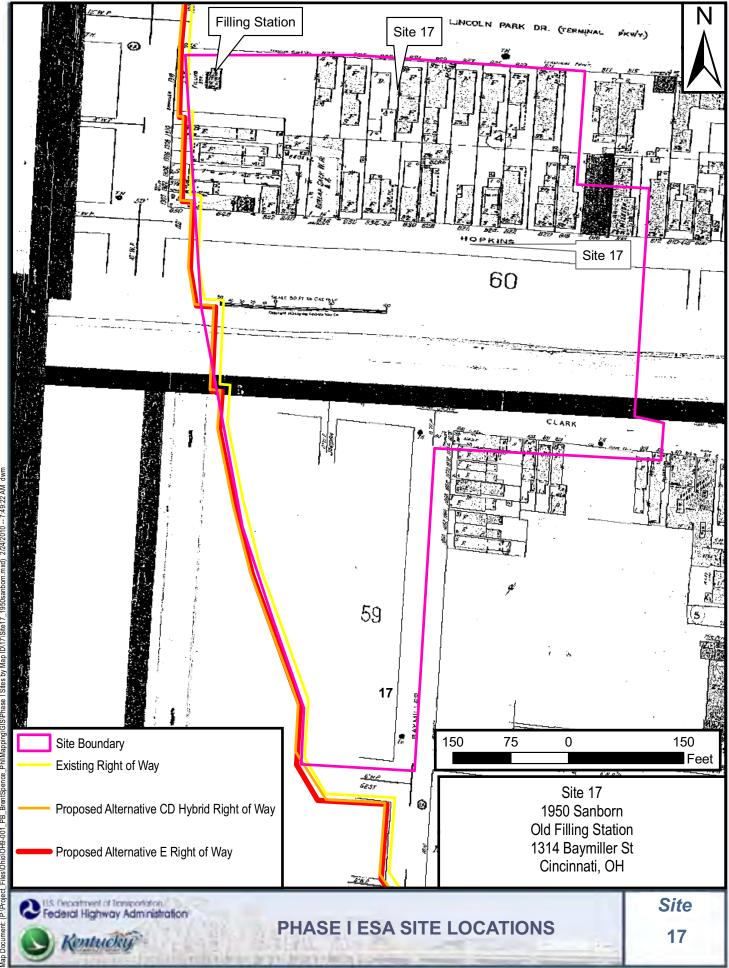




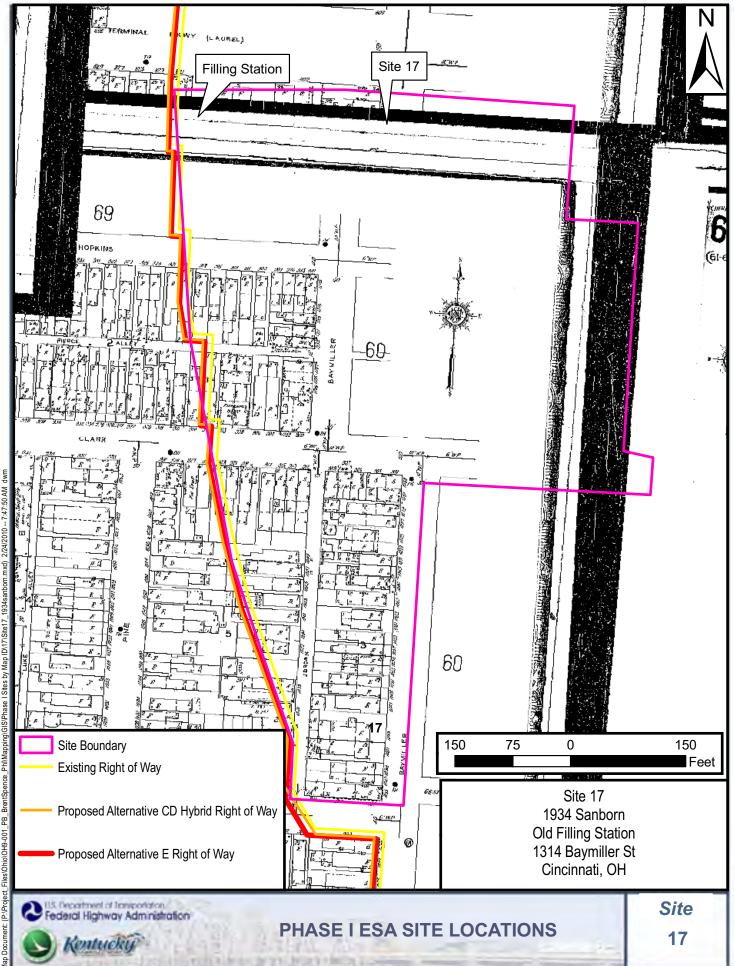




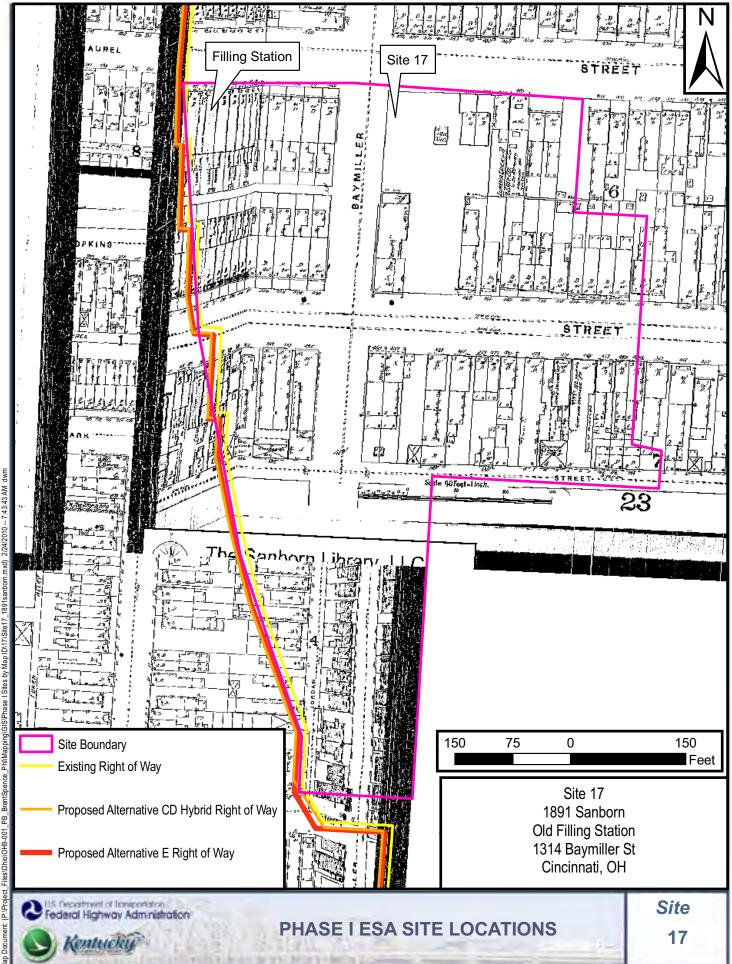
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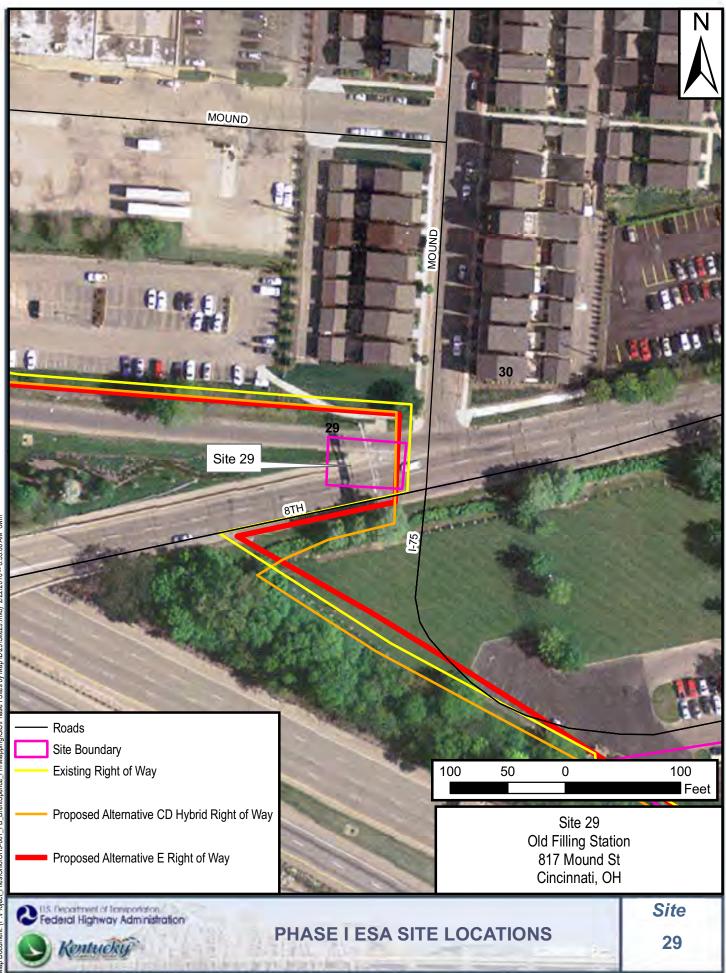
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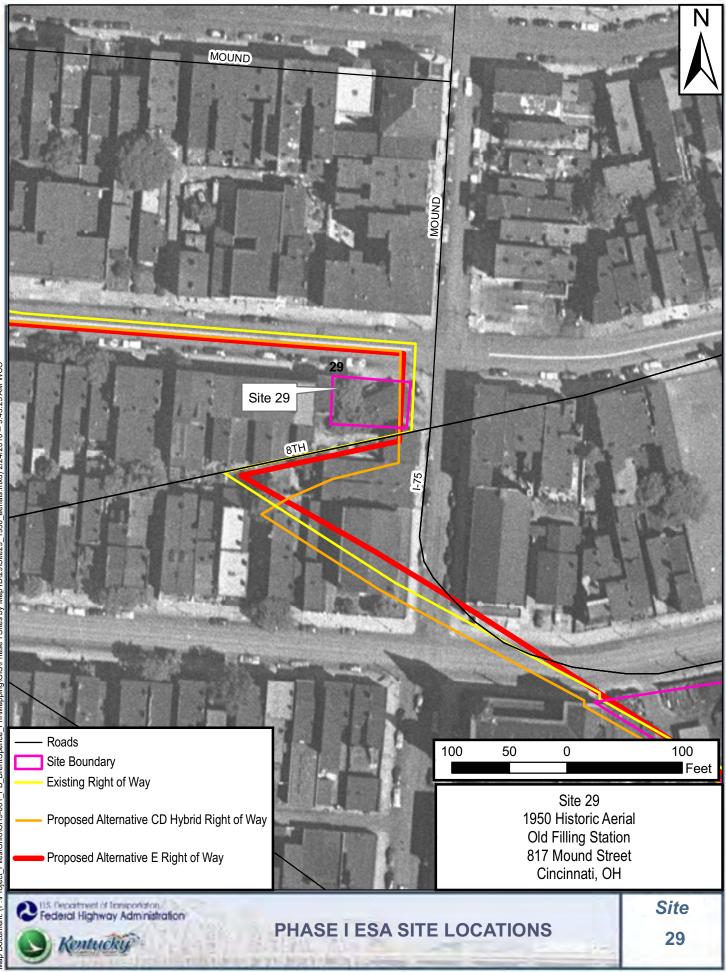


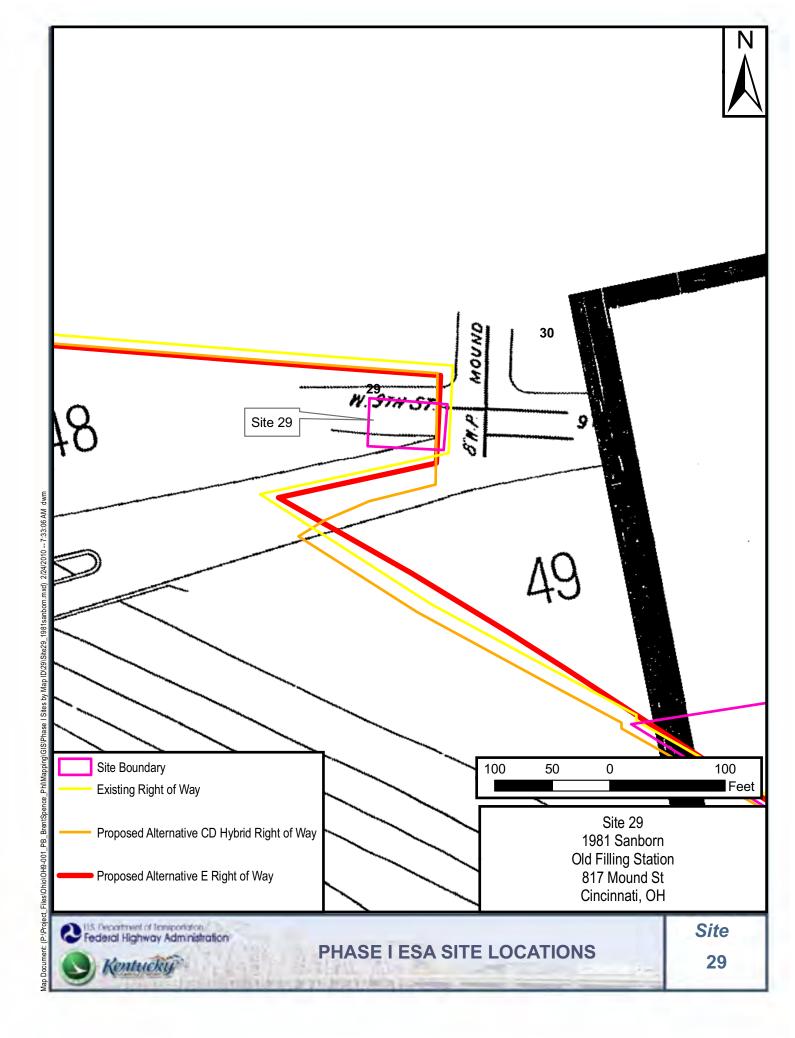
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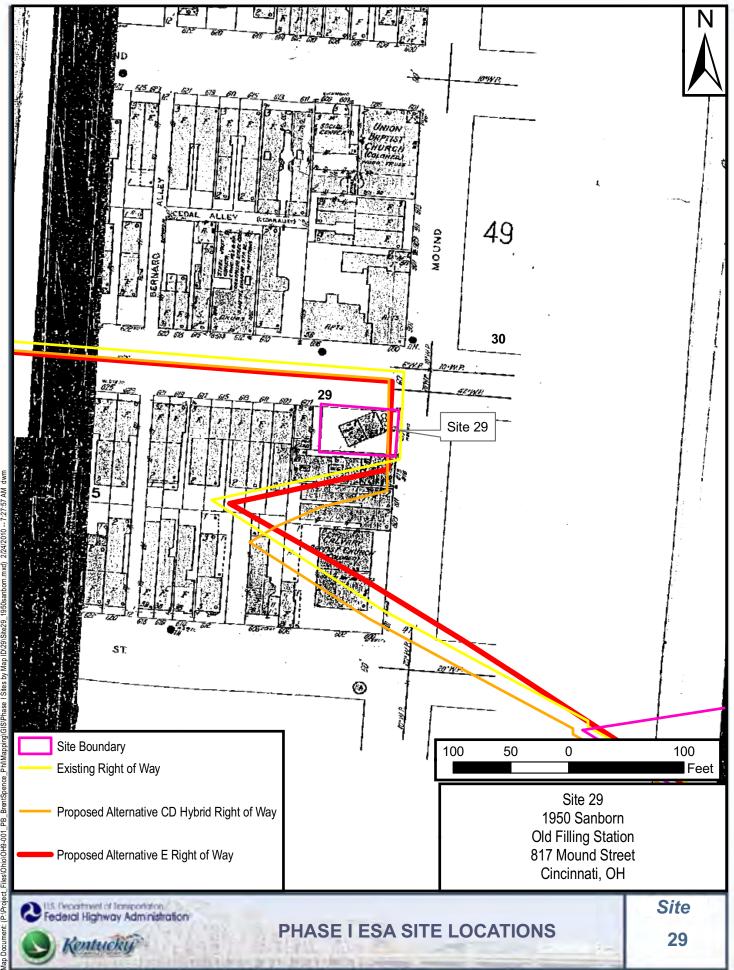


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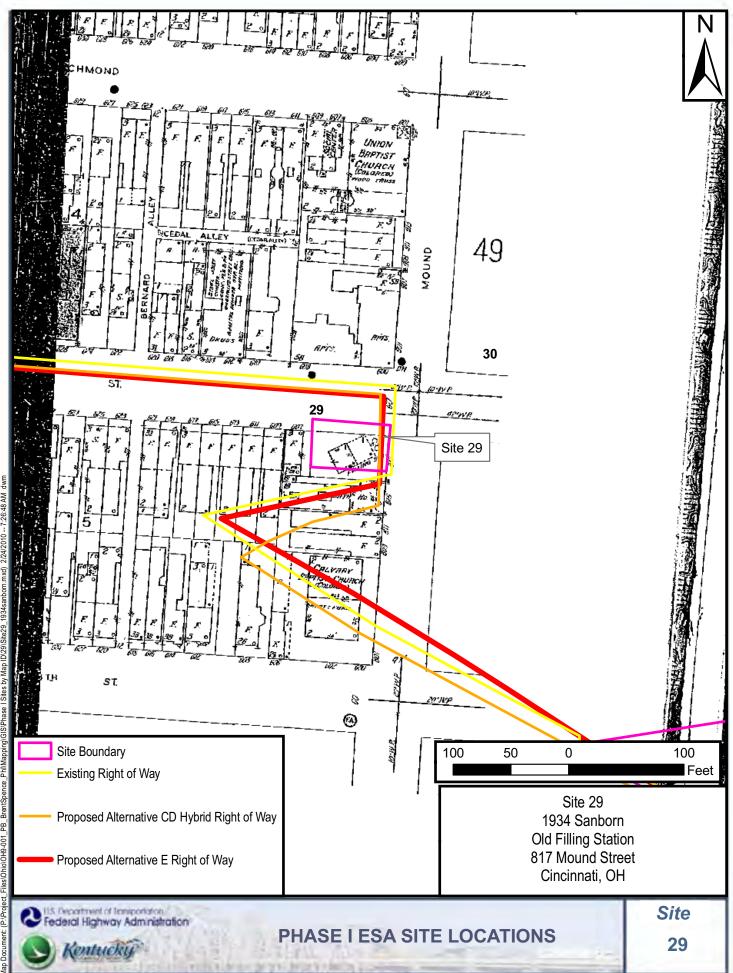


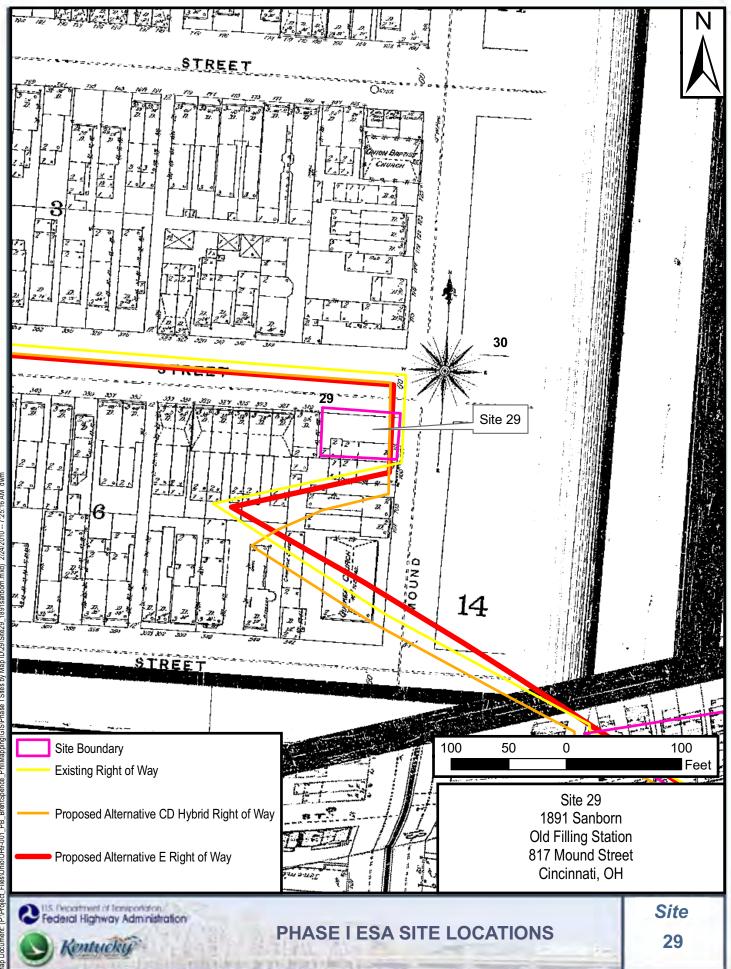




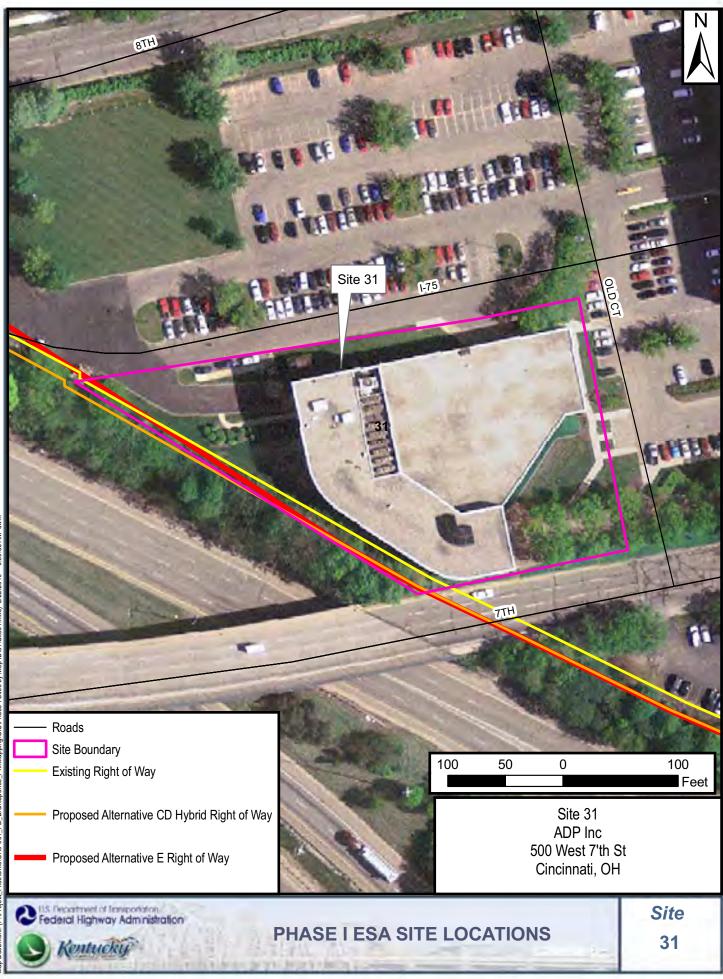


VA 73-7C-2/24/2010 Sites by Map ID\29\Site29 (P:\Project\_Files\Ohio\OH9-001\_PB\_BrentSpence\_Ph\Mapping\GIS\Phase 1

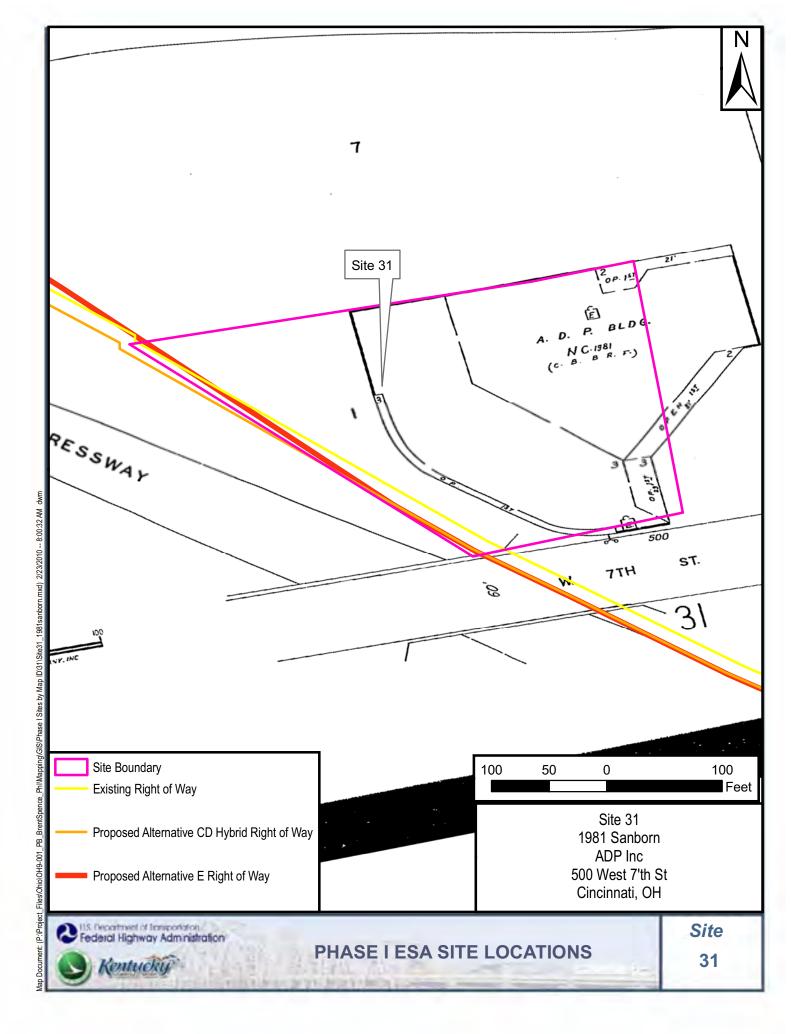


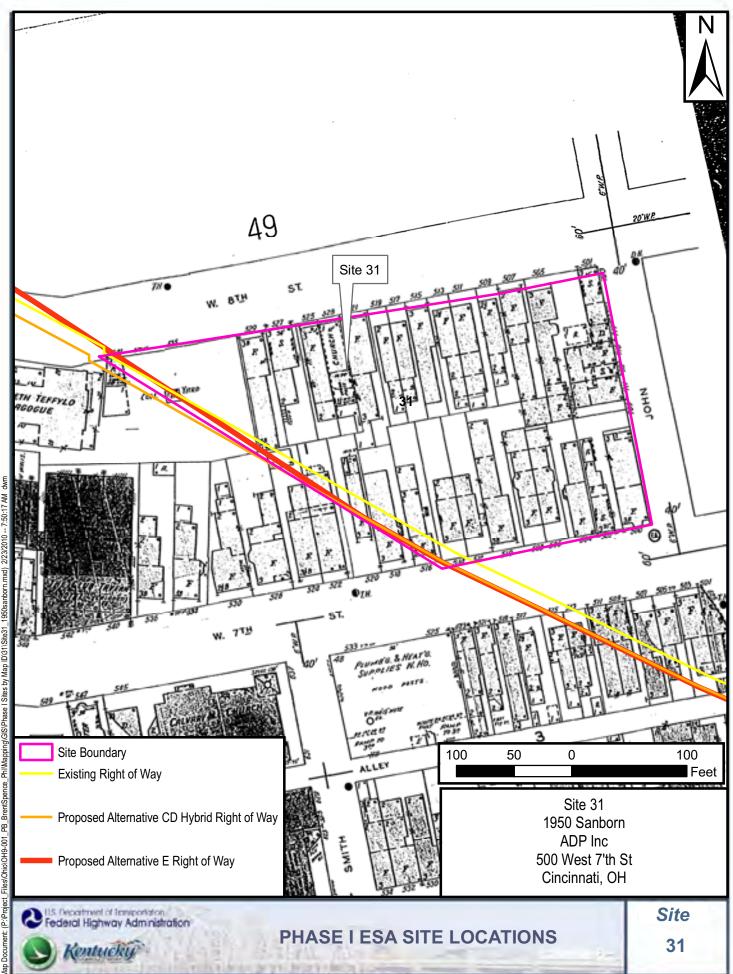


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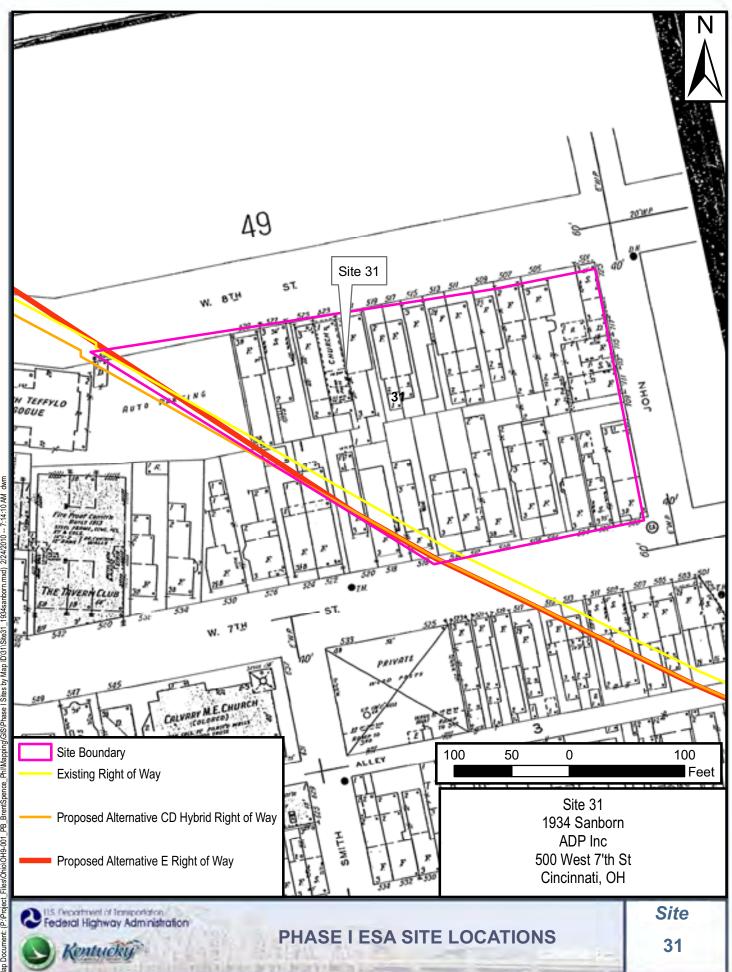




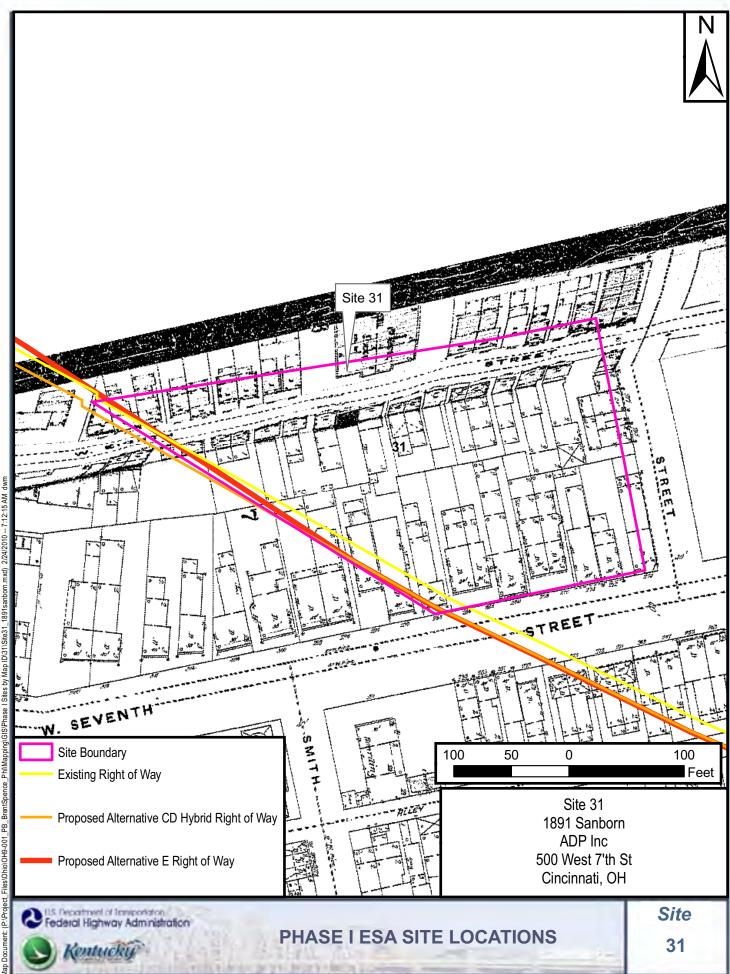




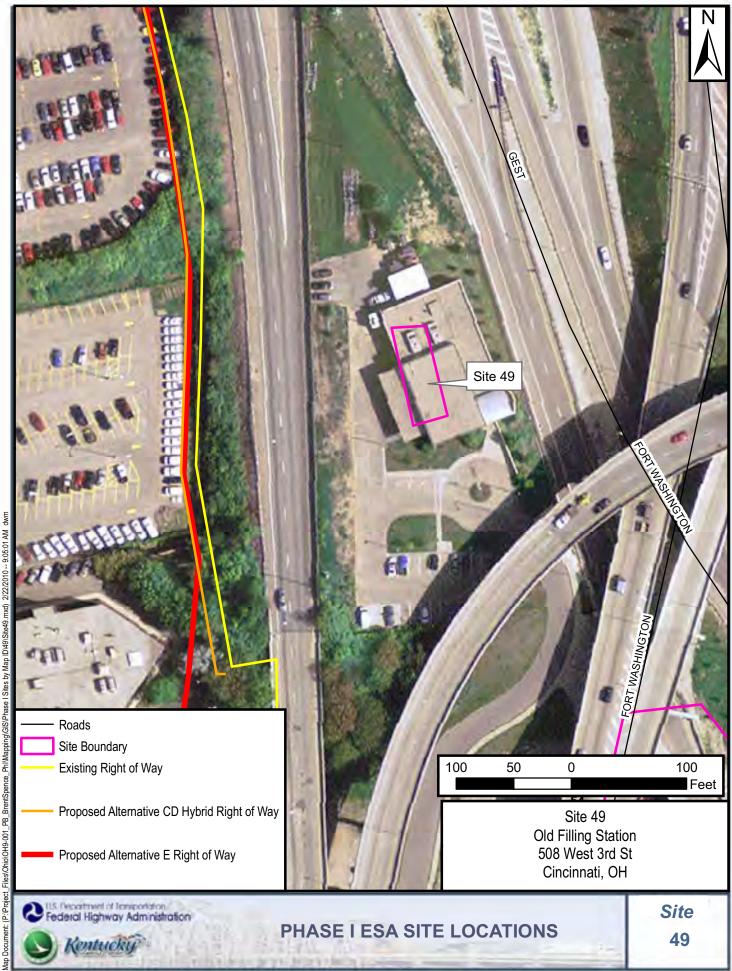
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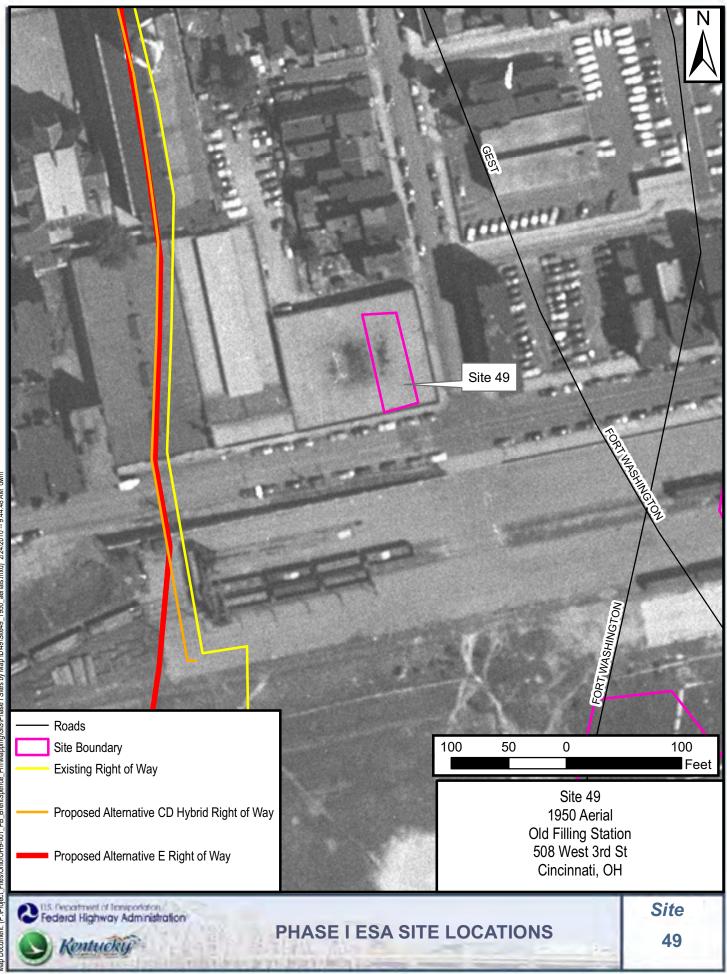
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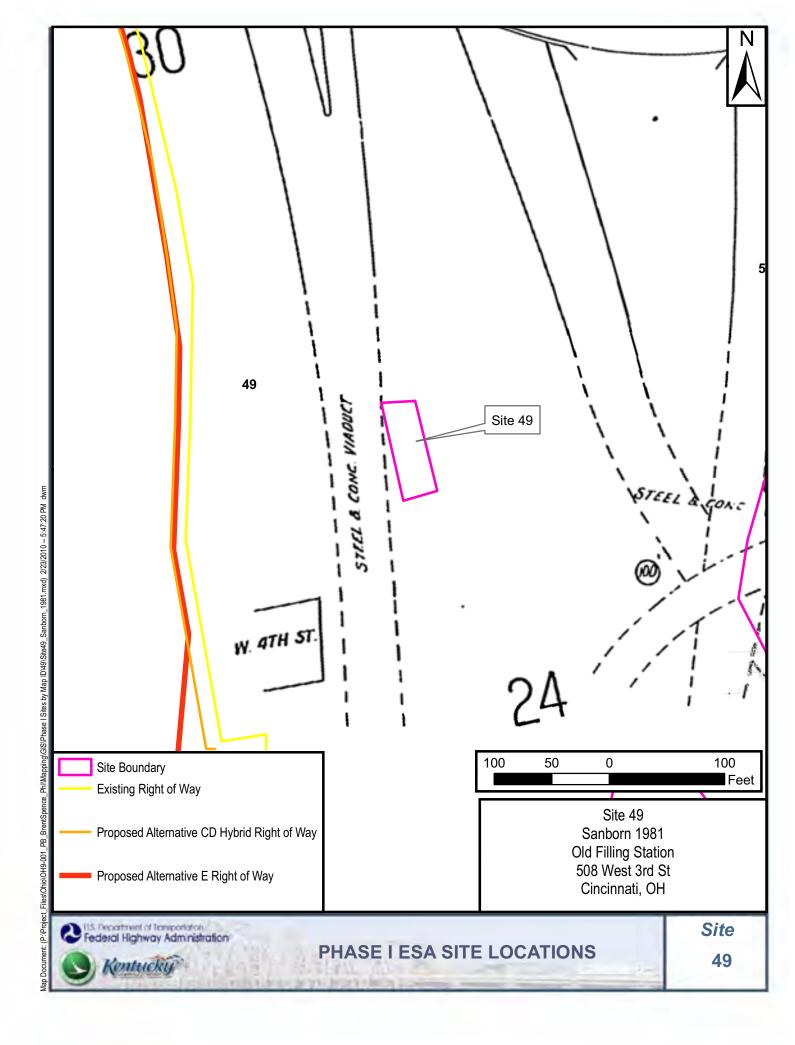


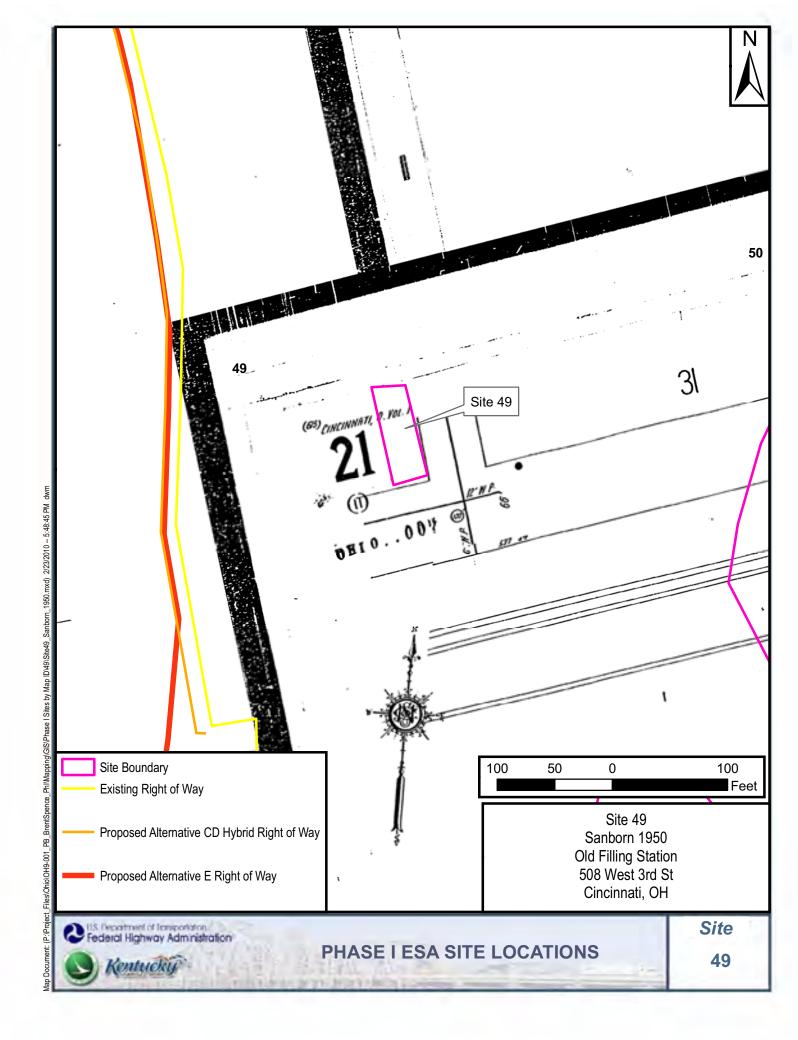
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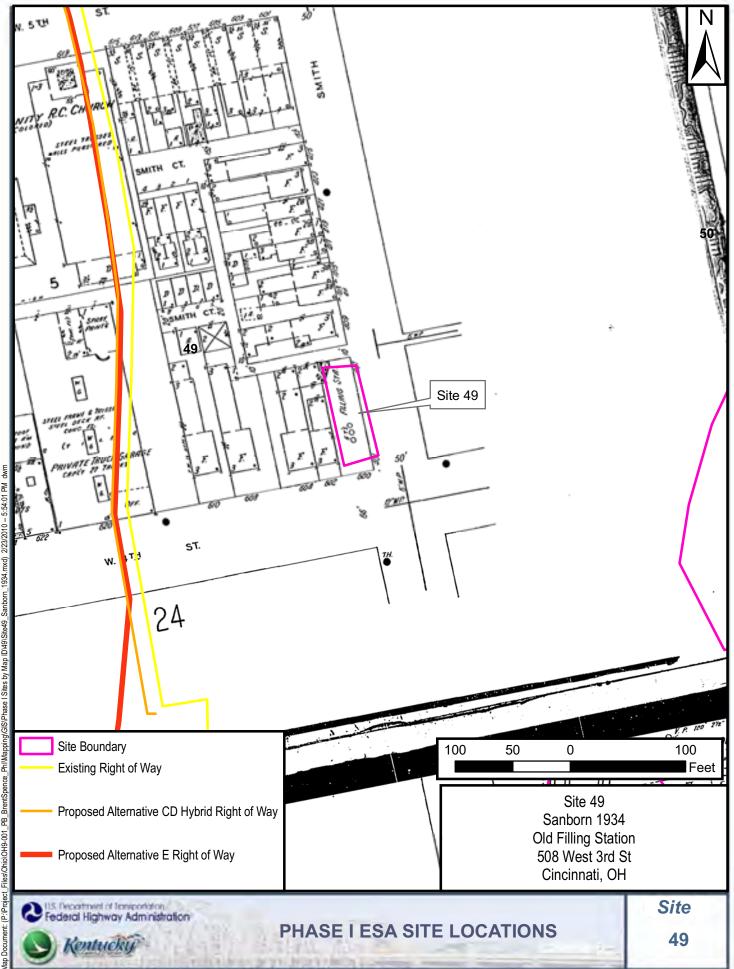


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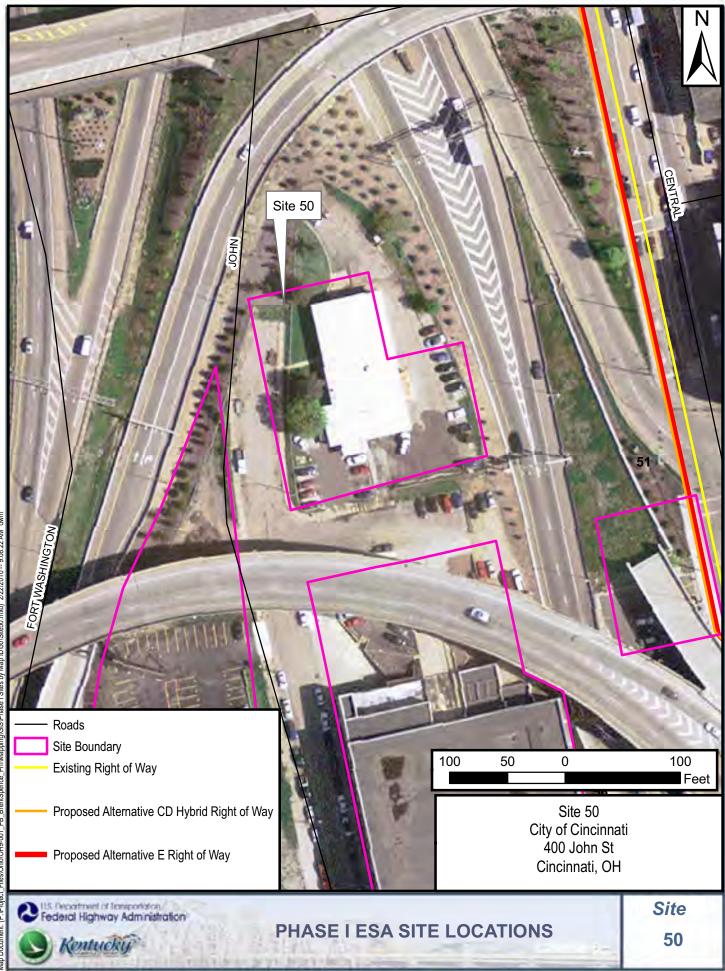


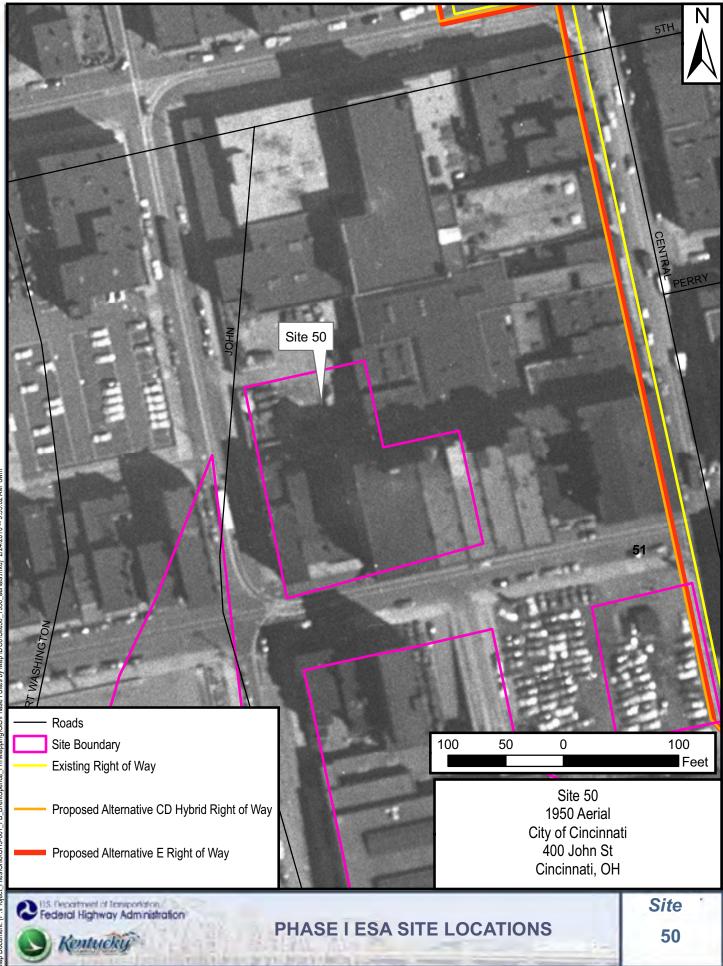


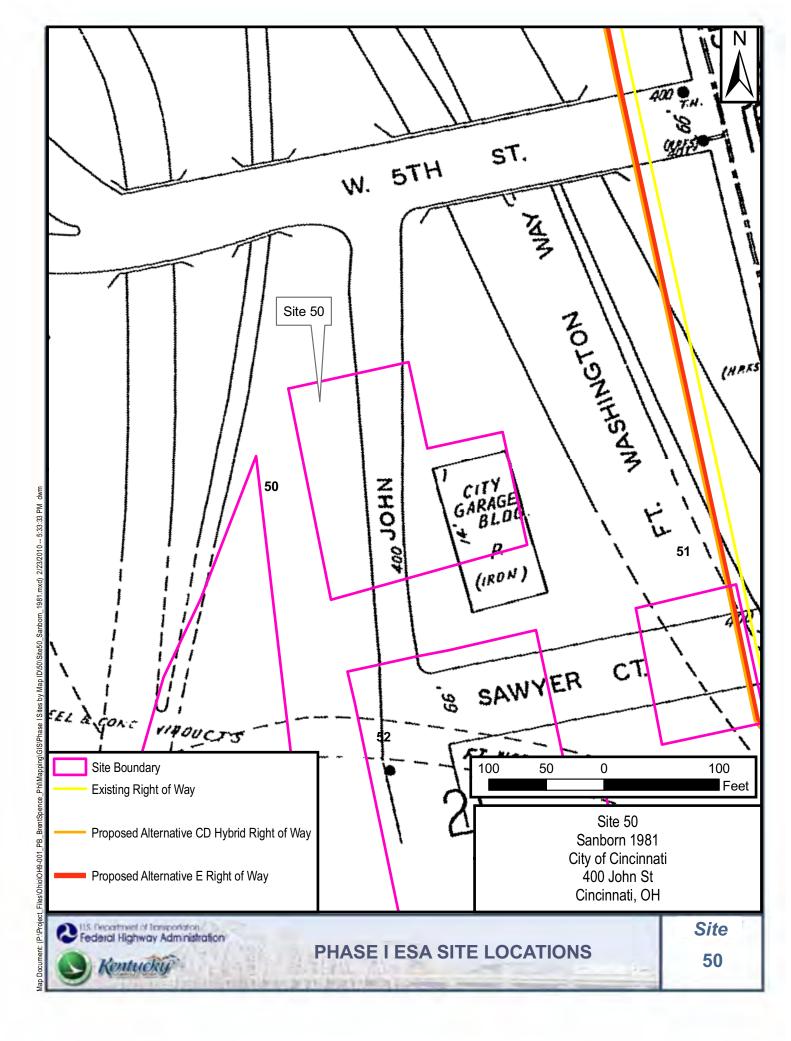
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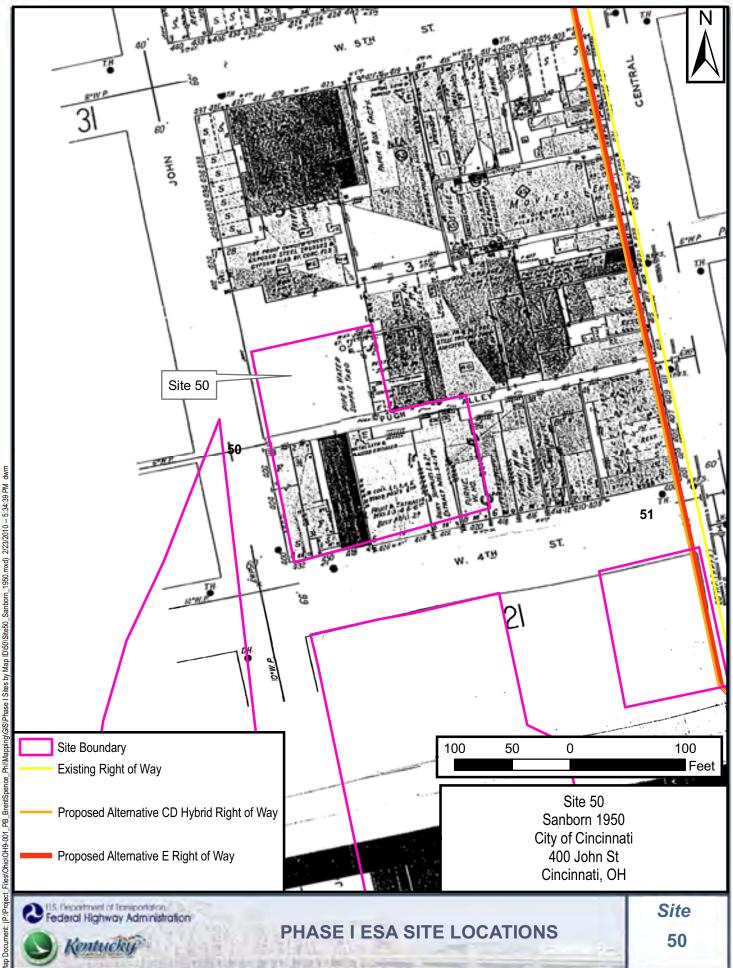


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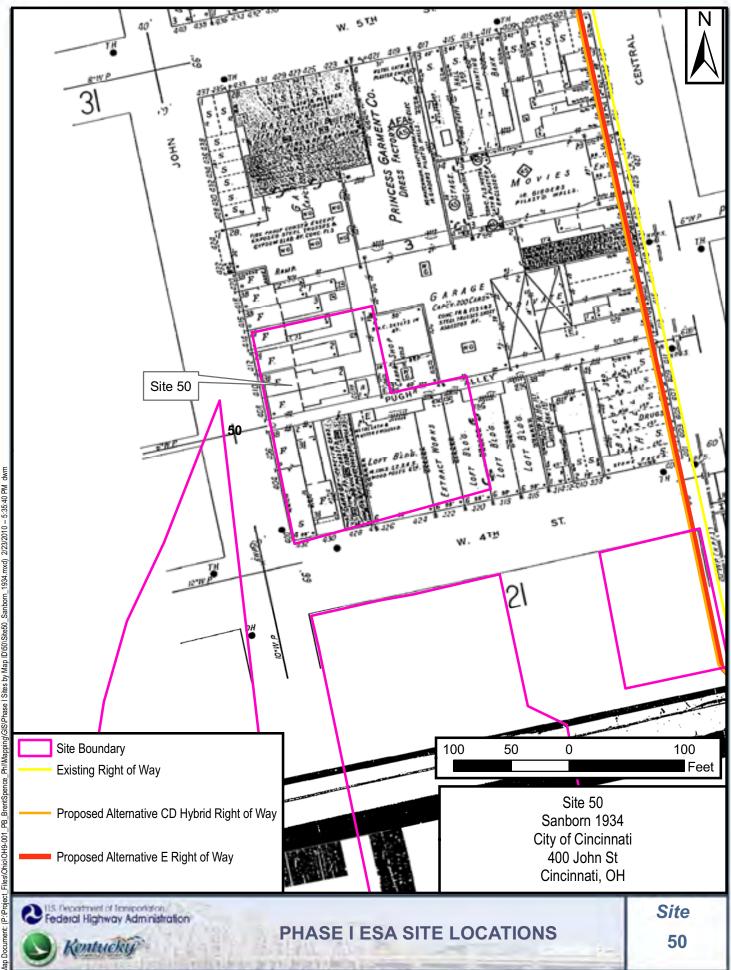




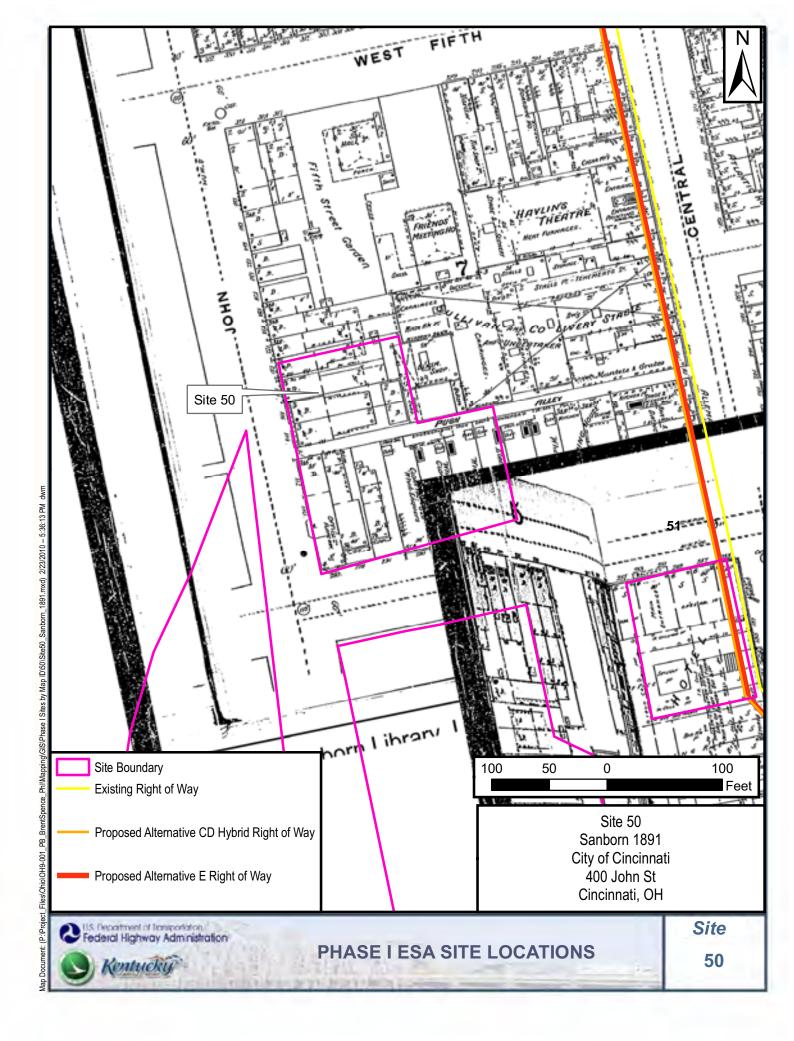


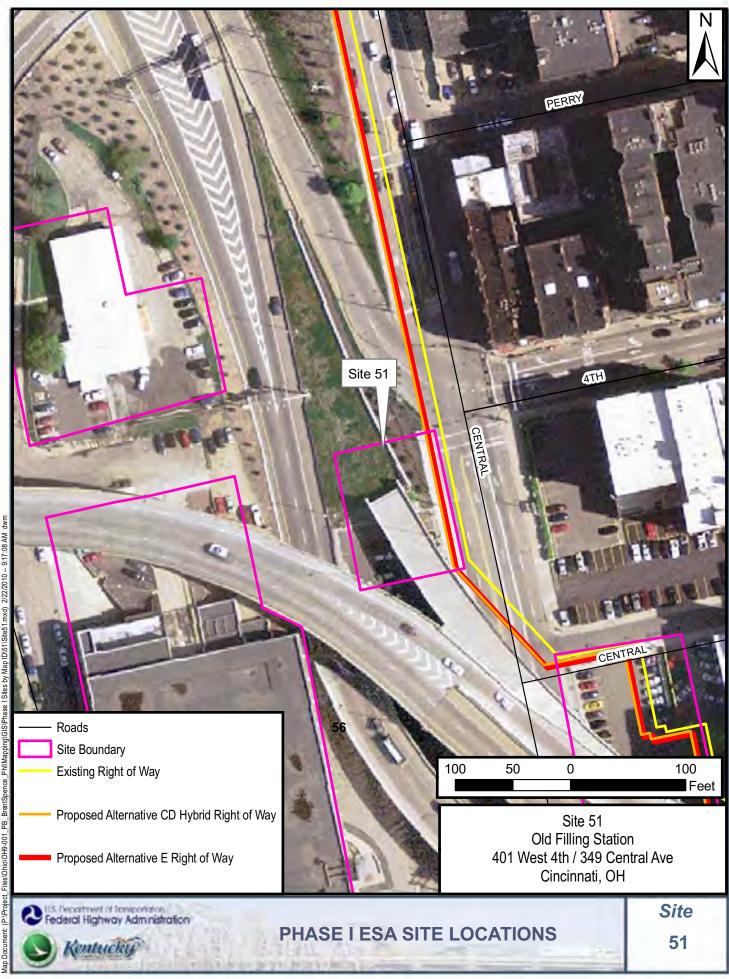


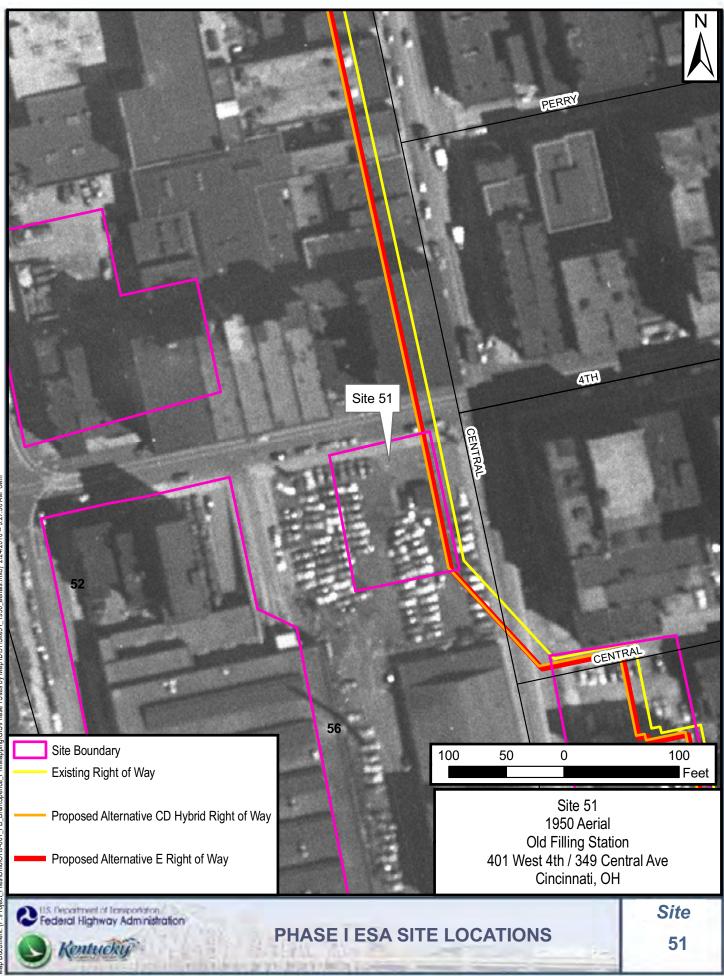
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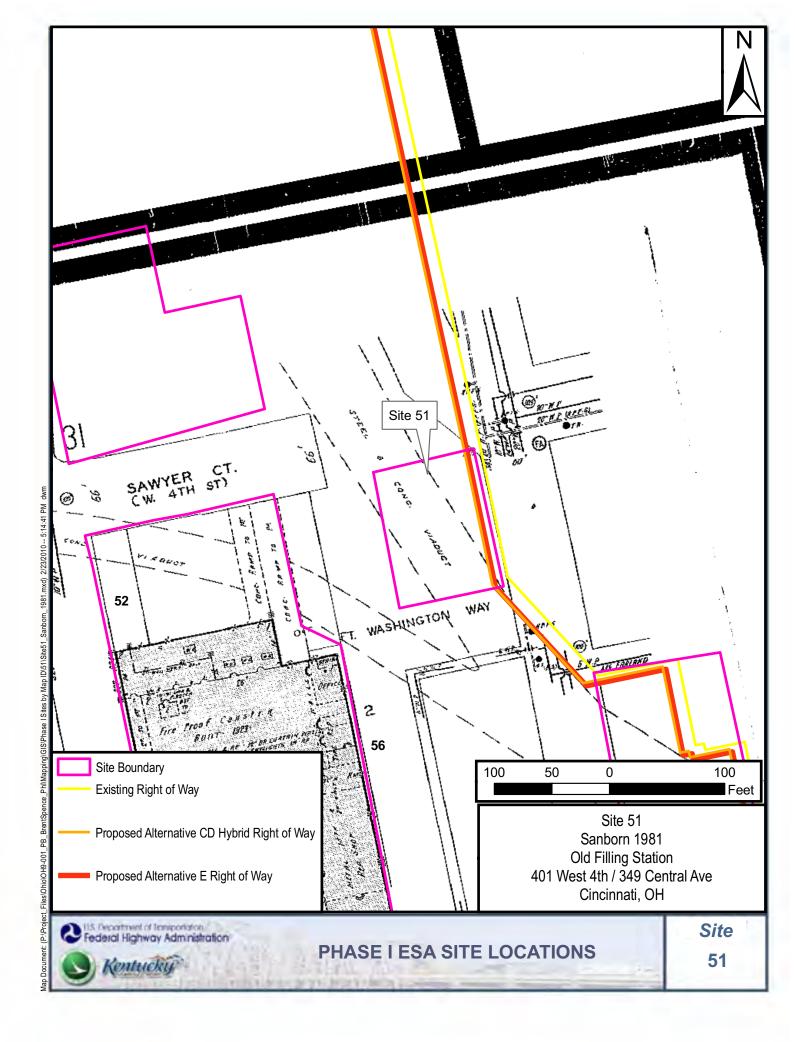


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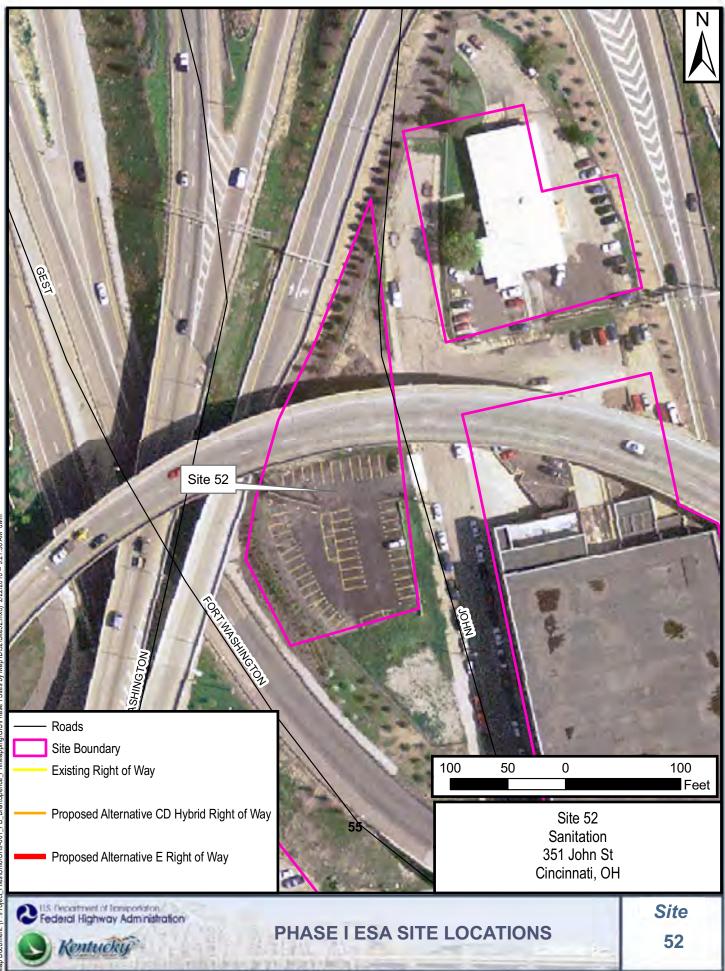


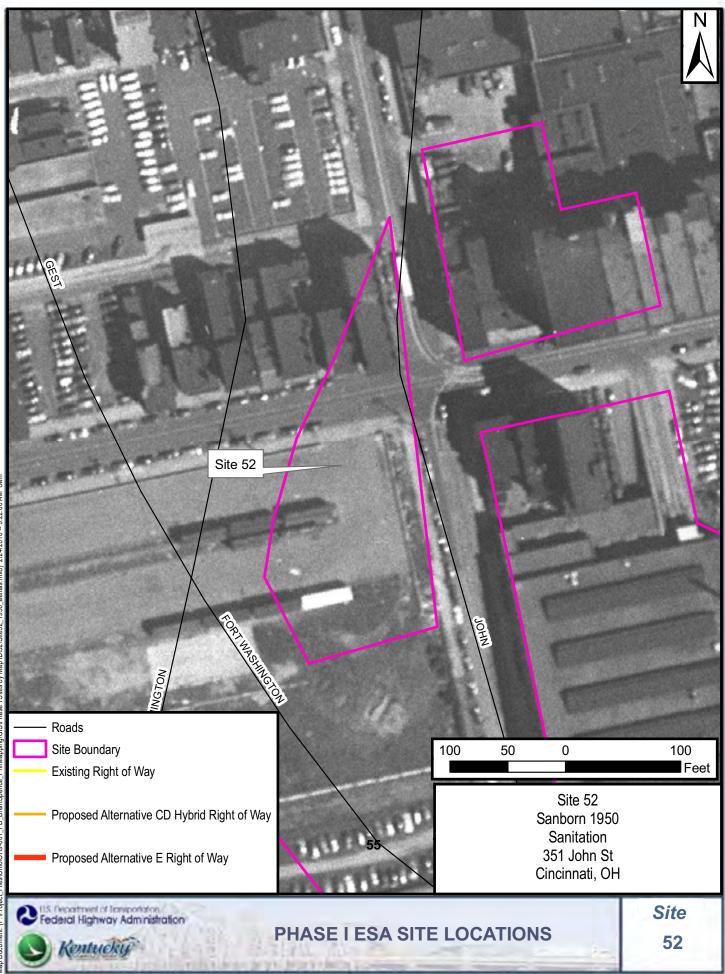


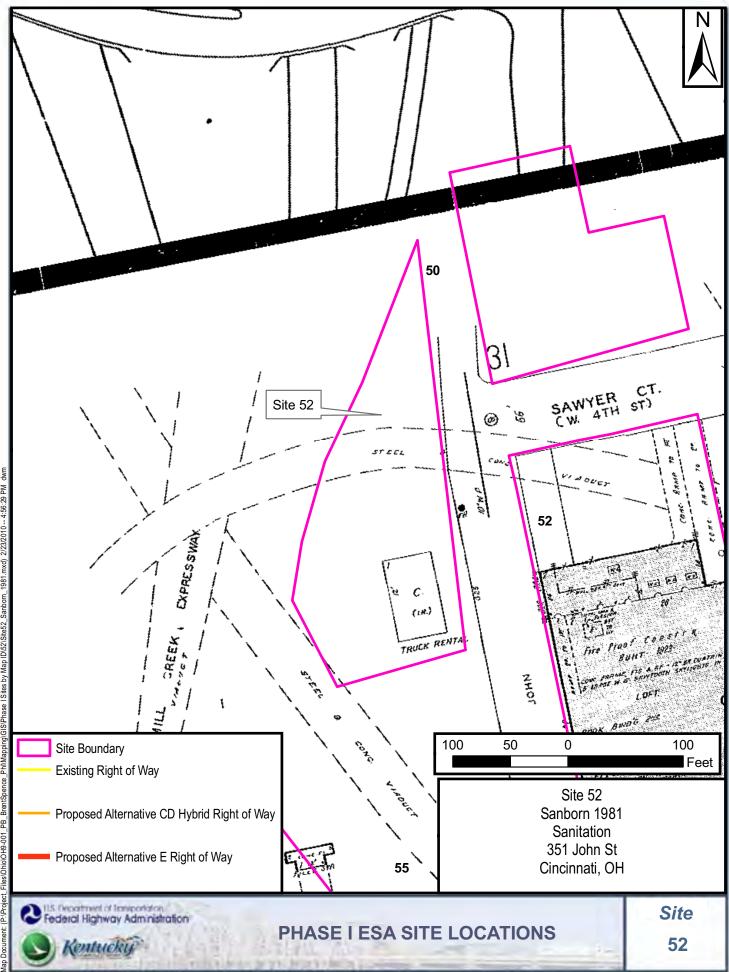
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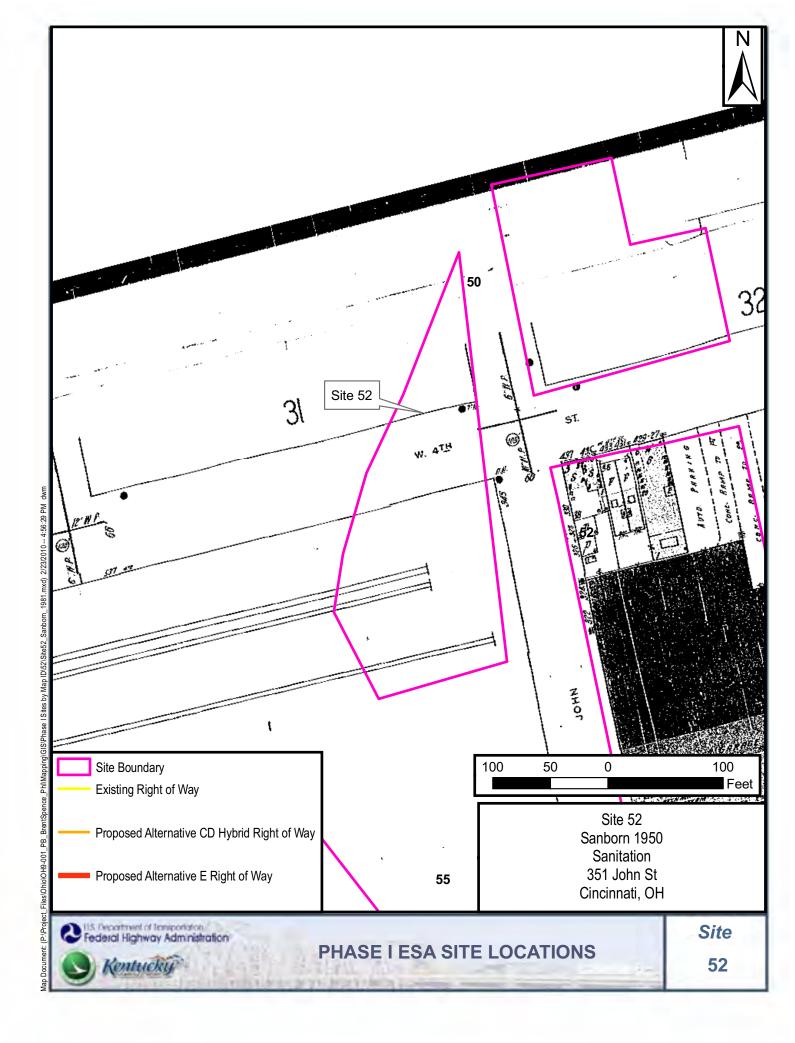
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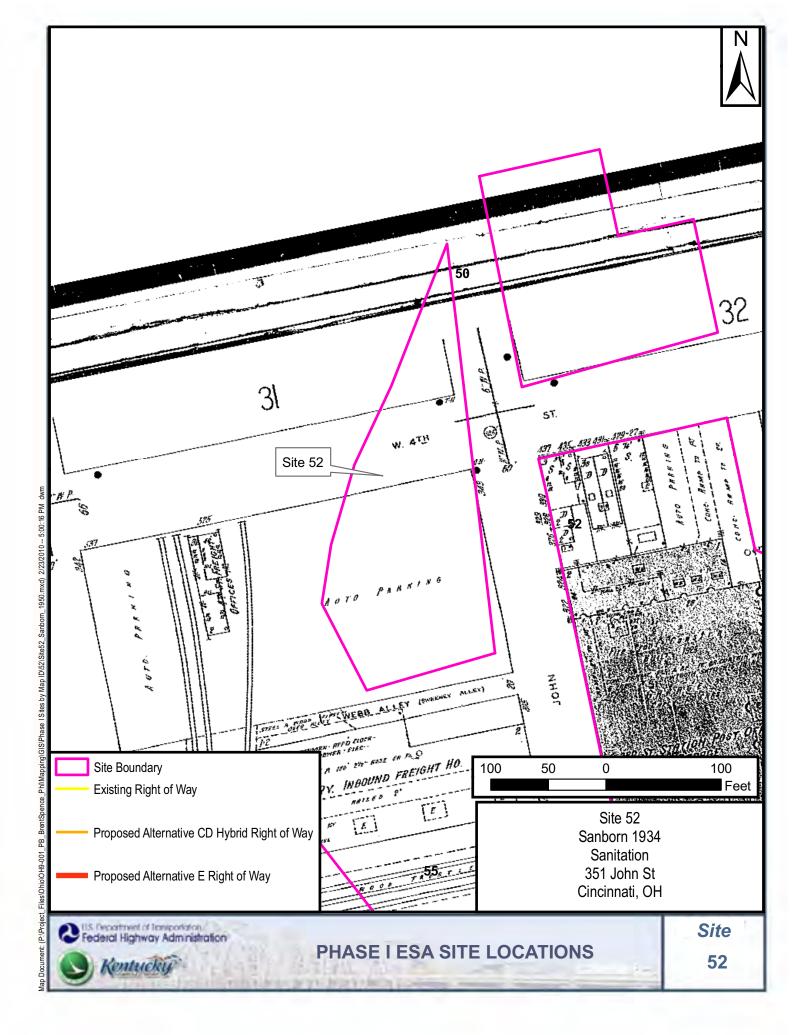


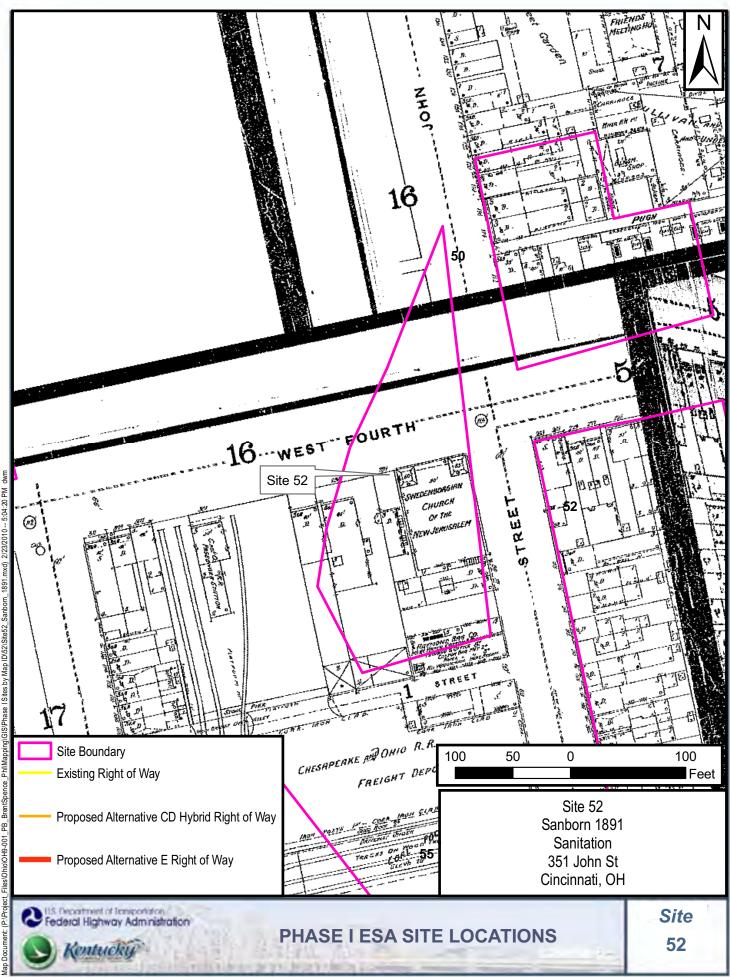




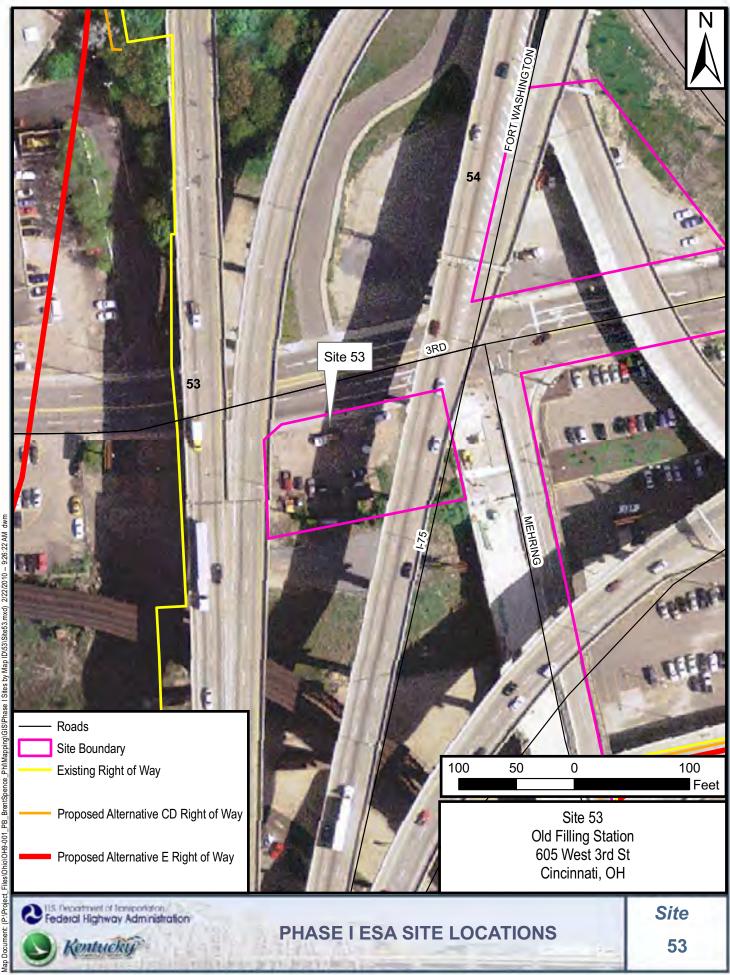
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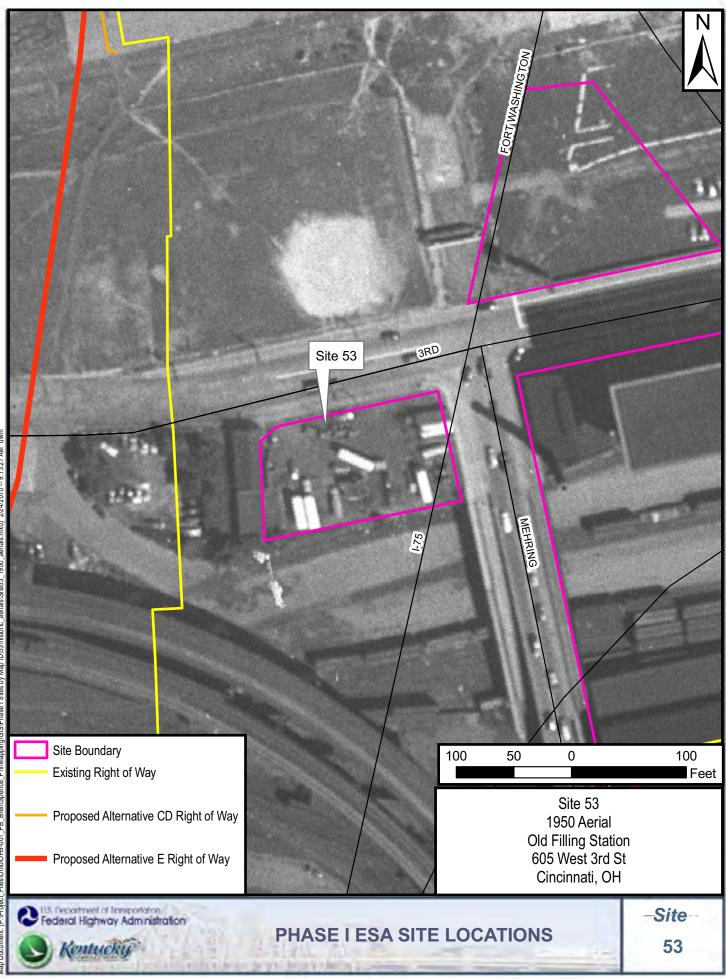


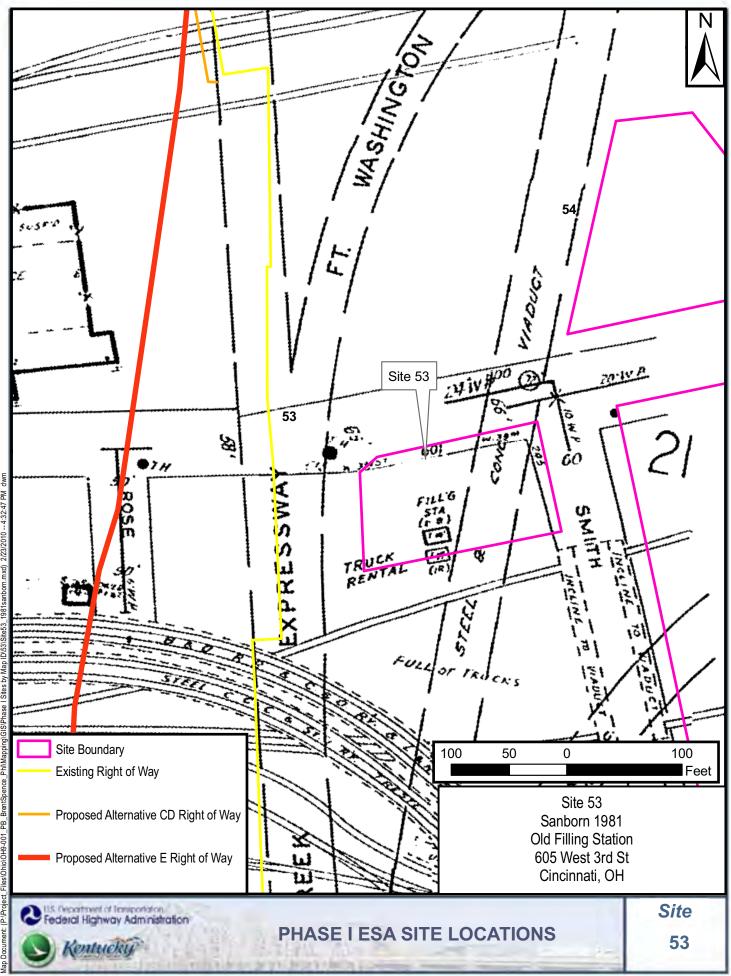


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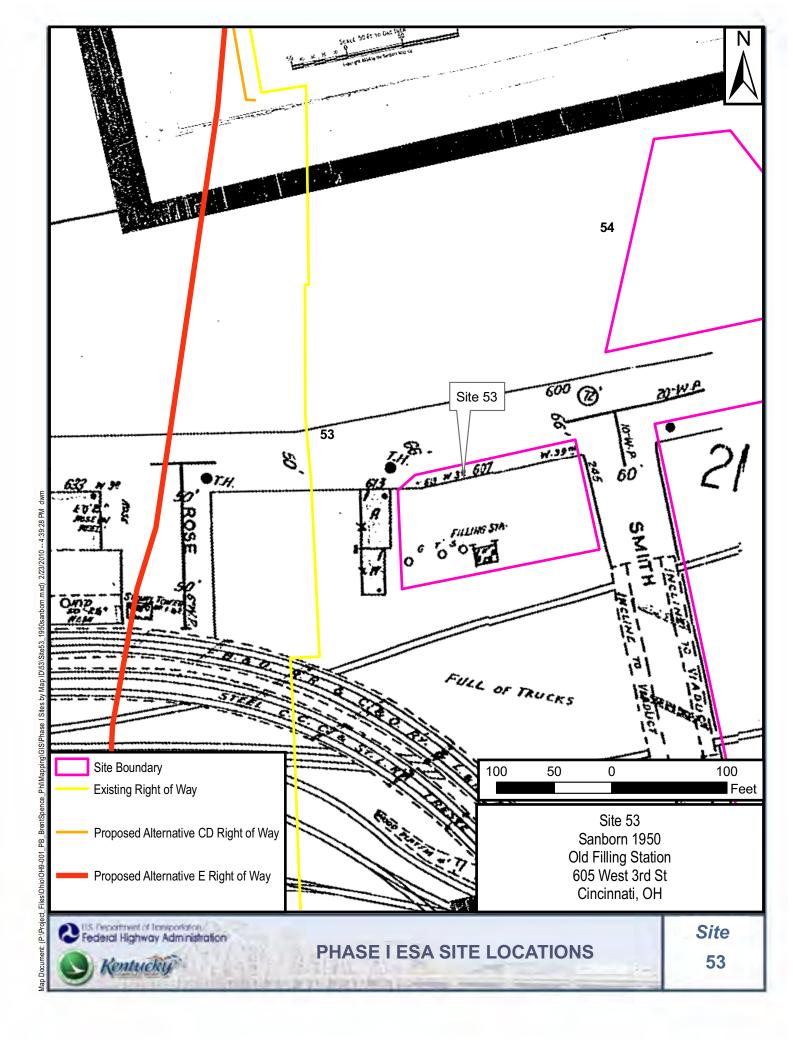


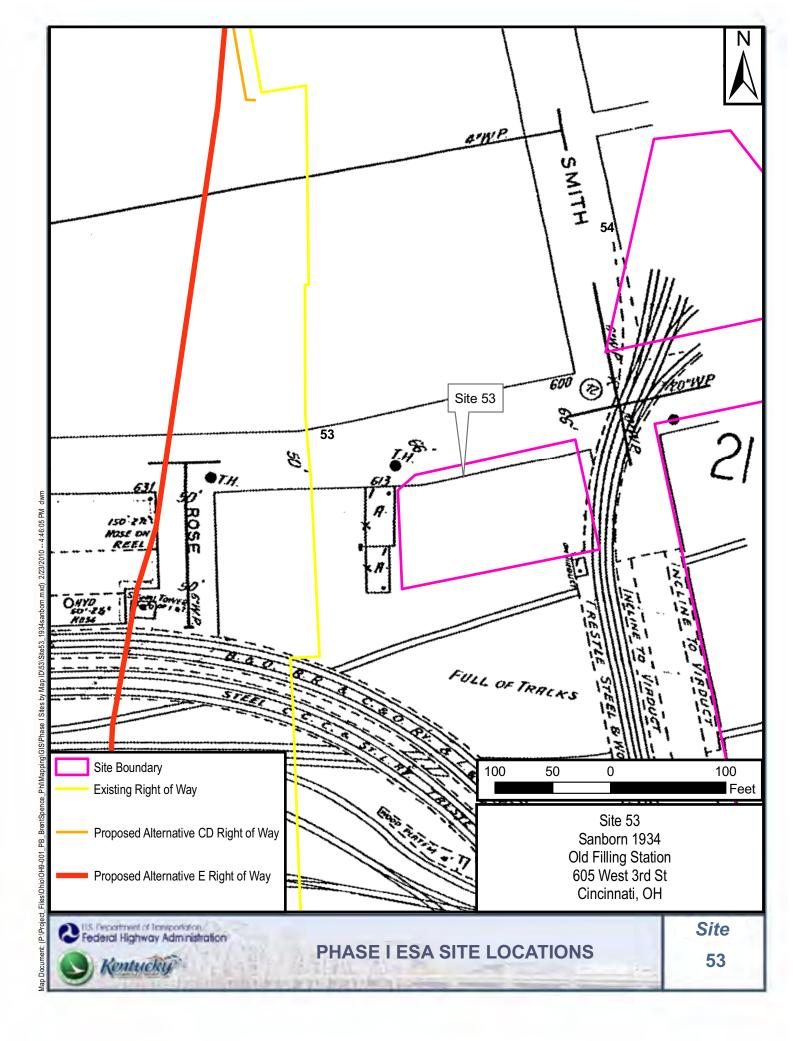
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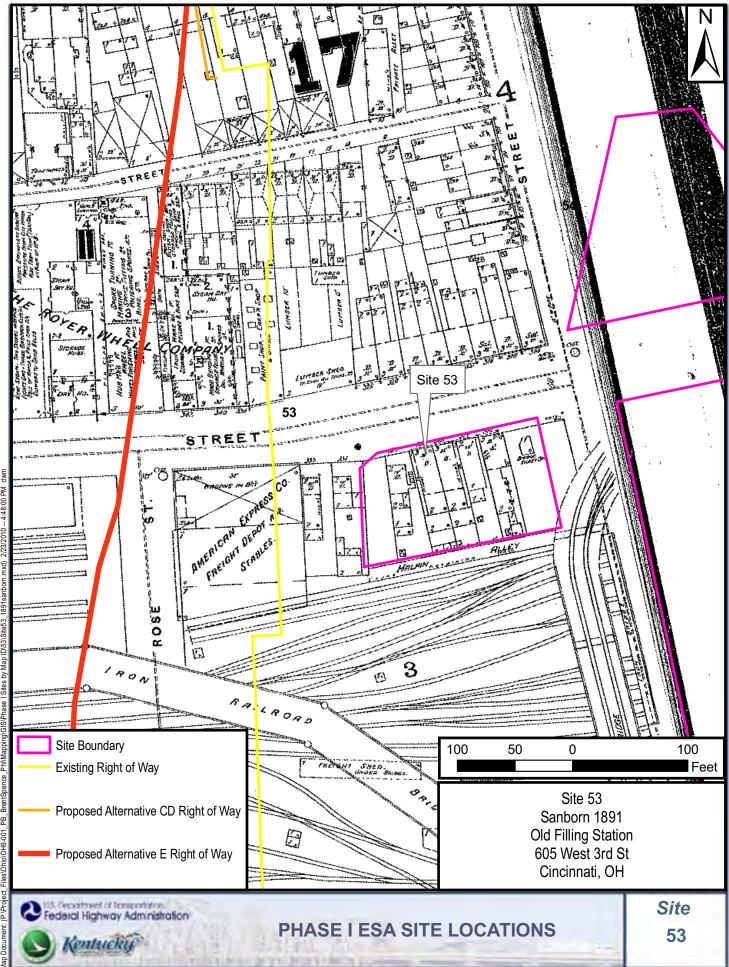


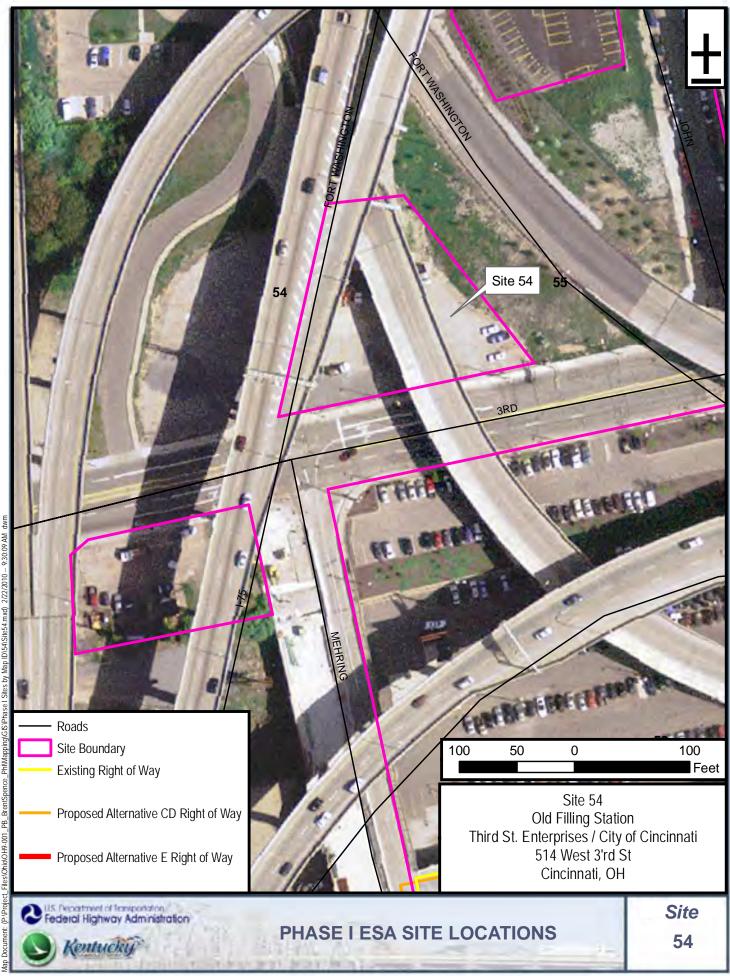


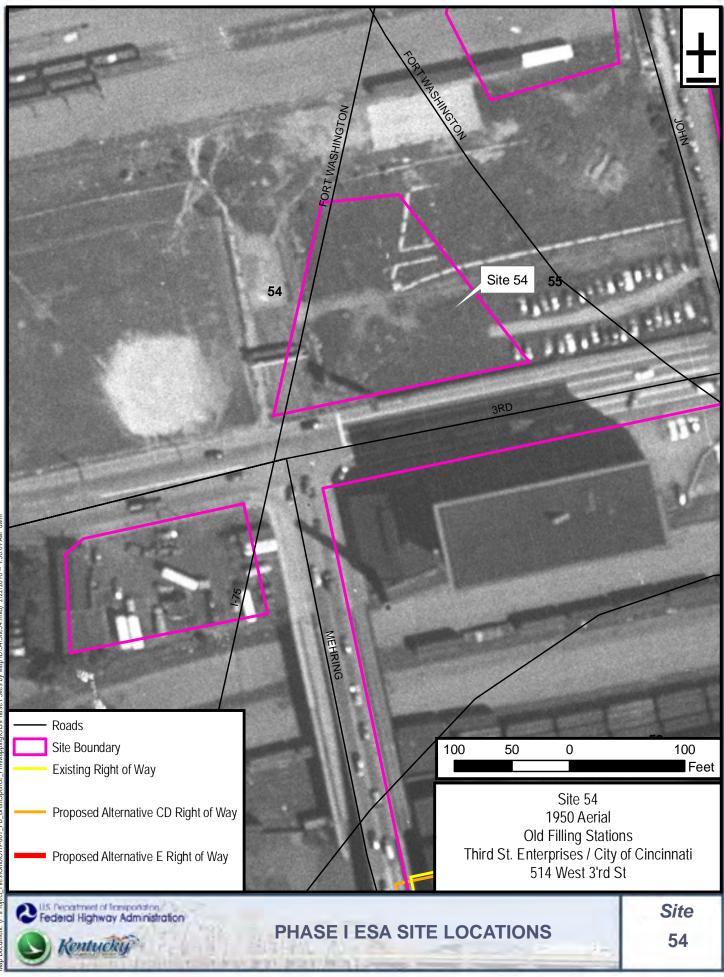
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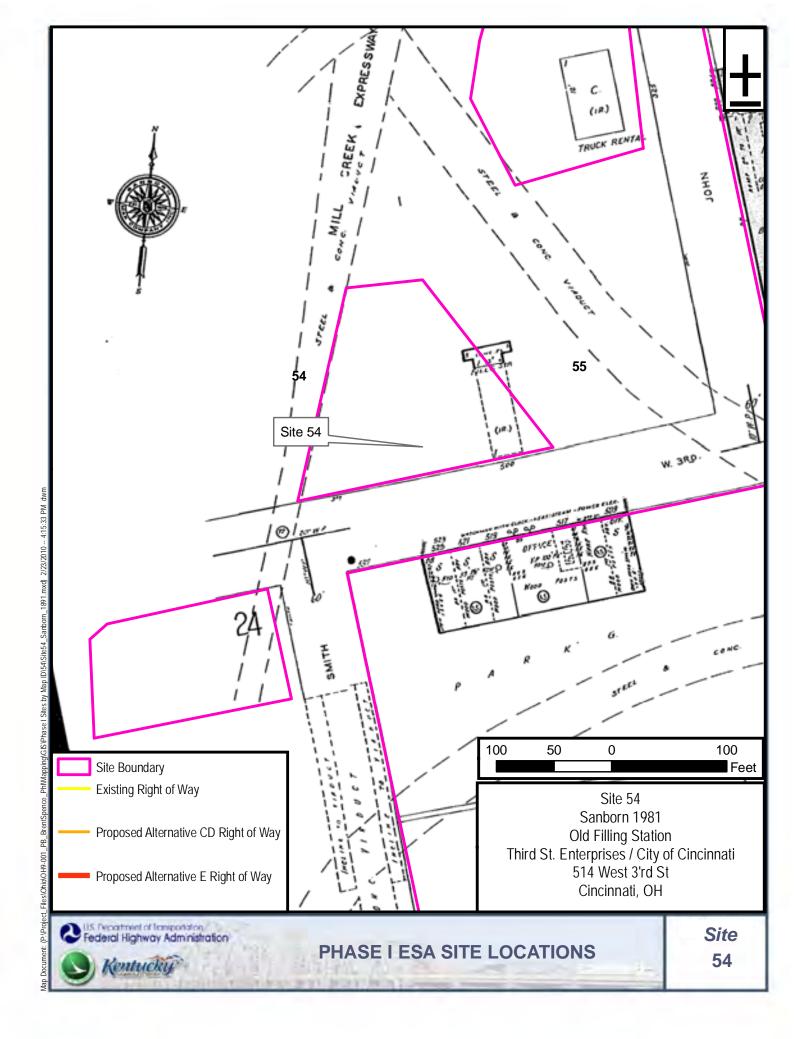


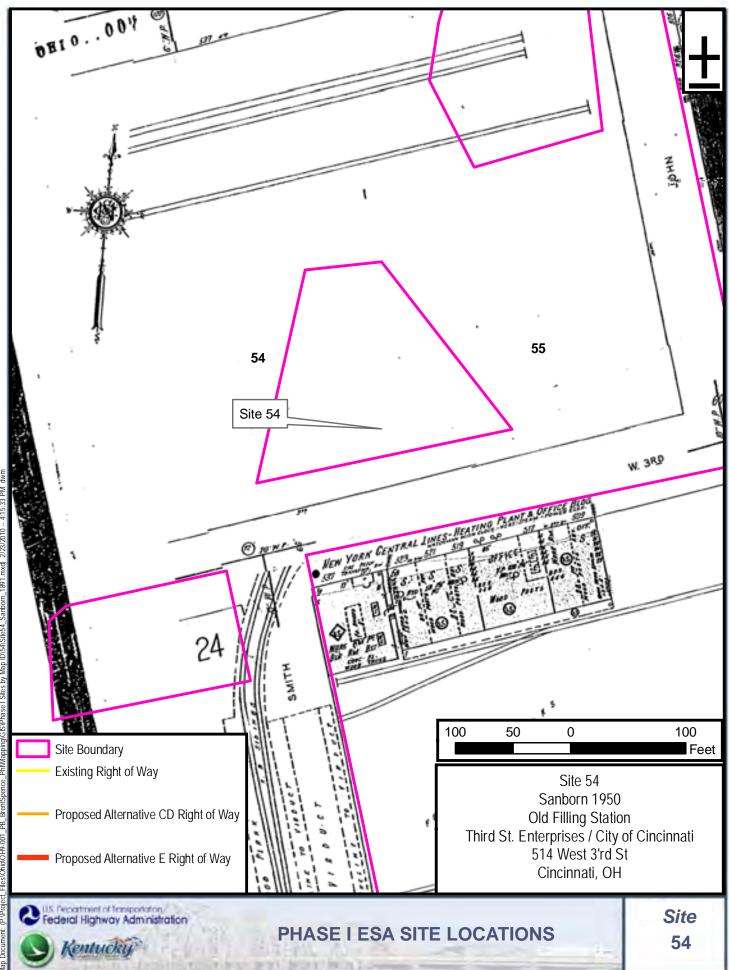




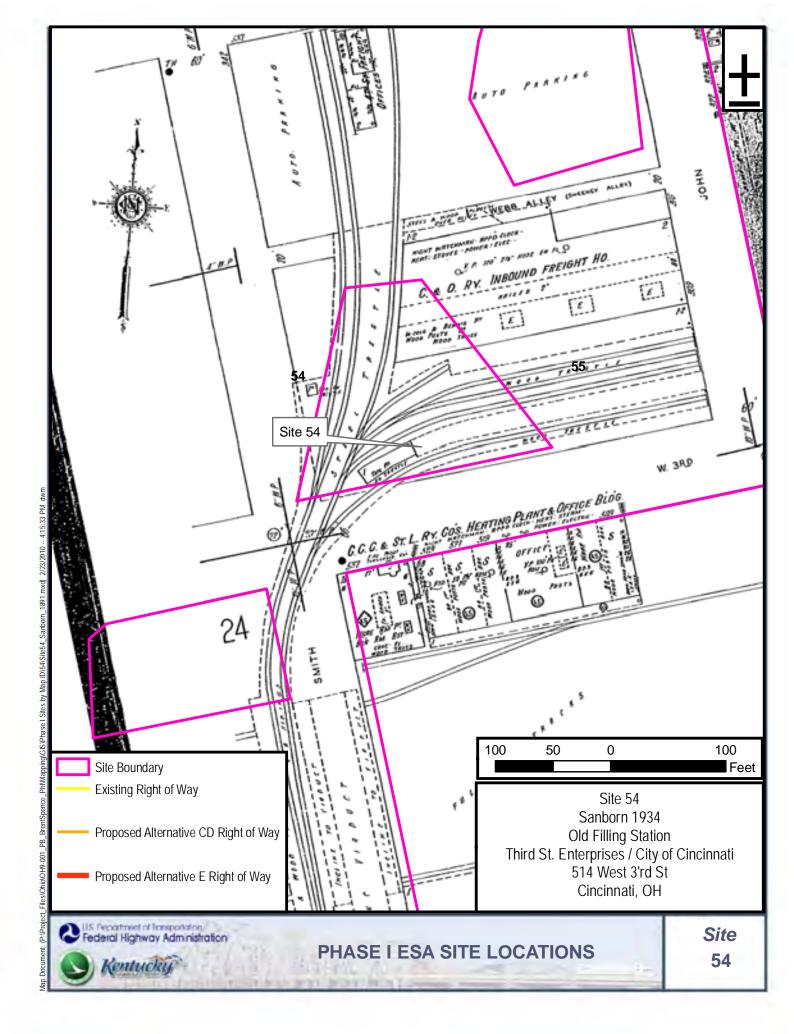


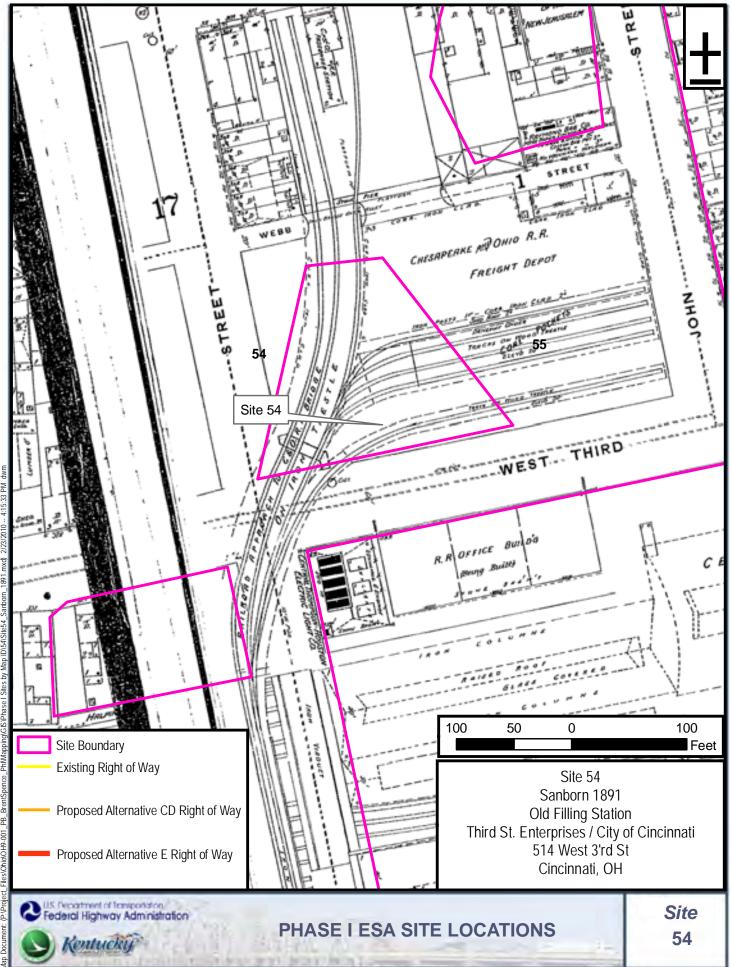


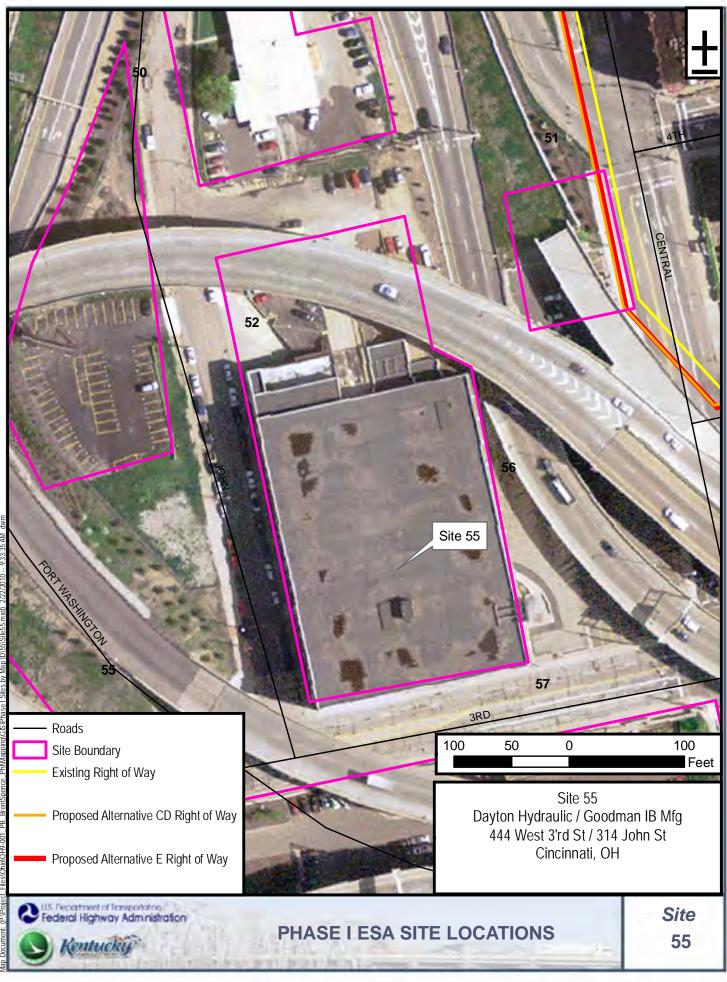




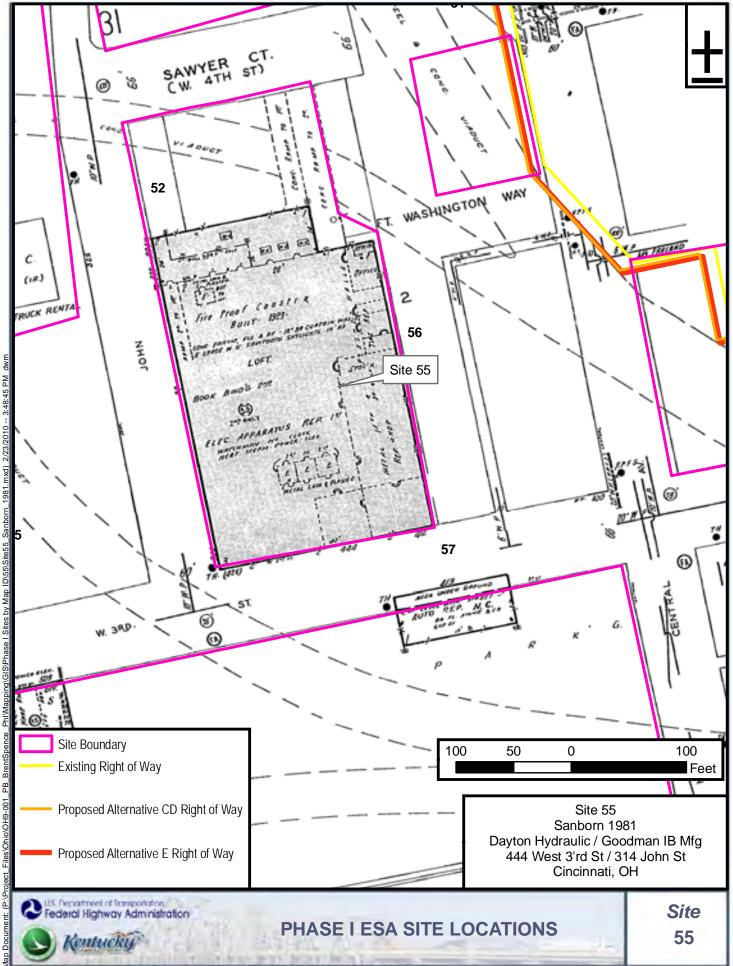
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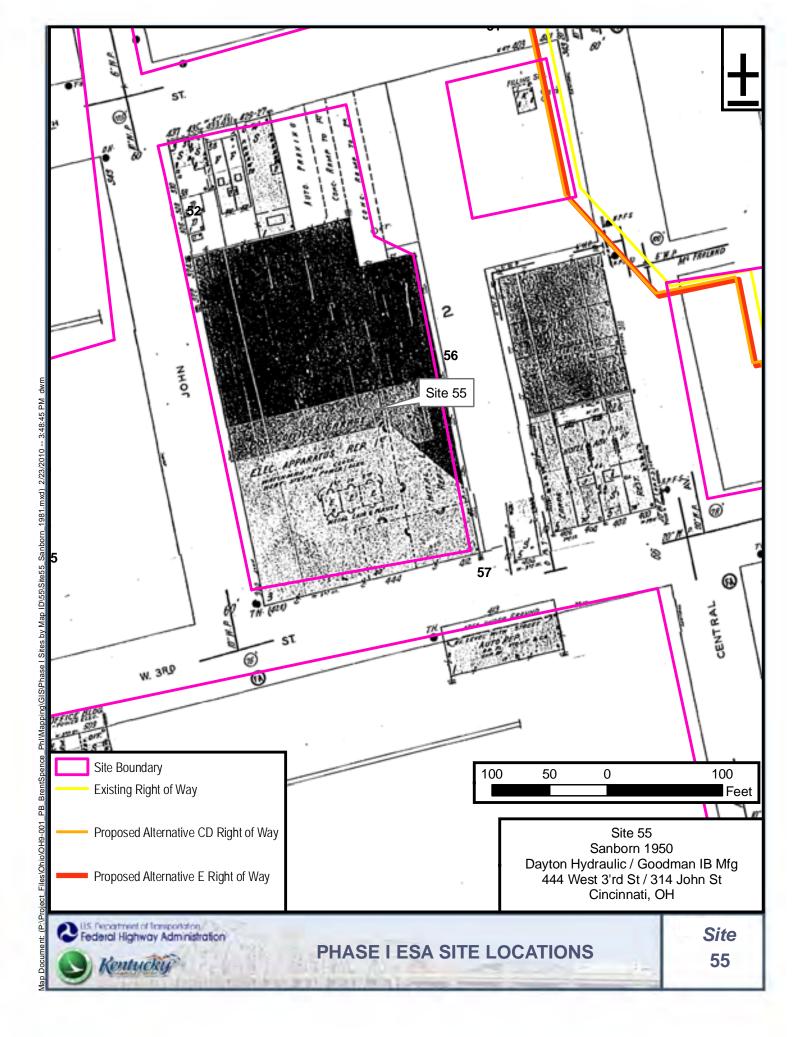


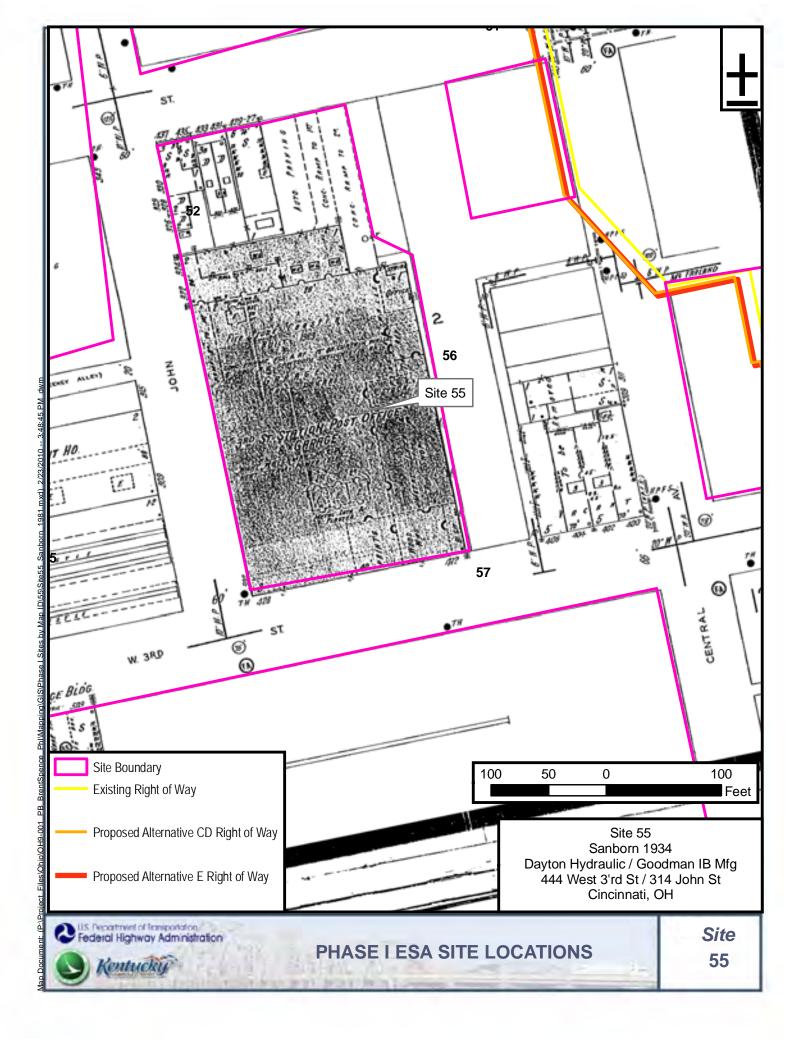


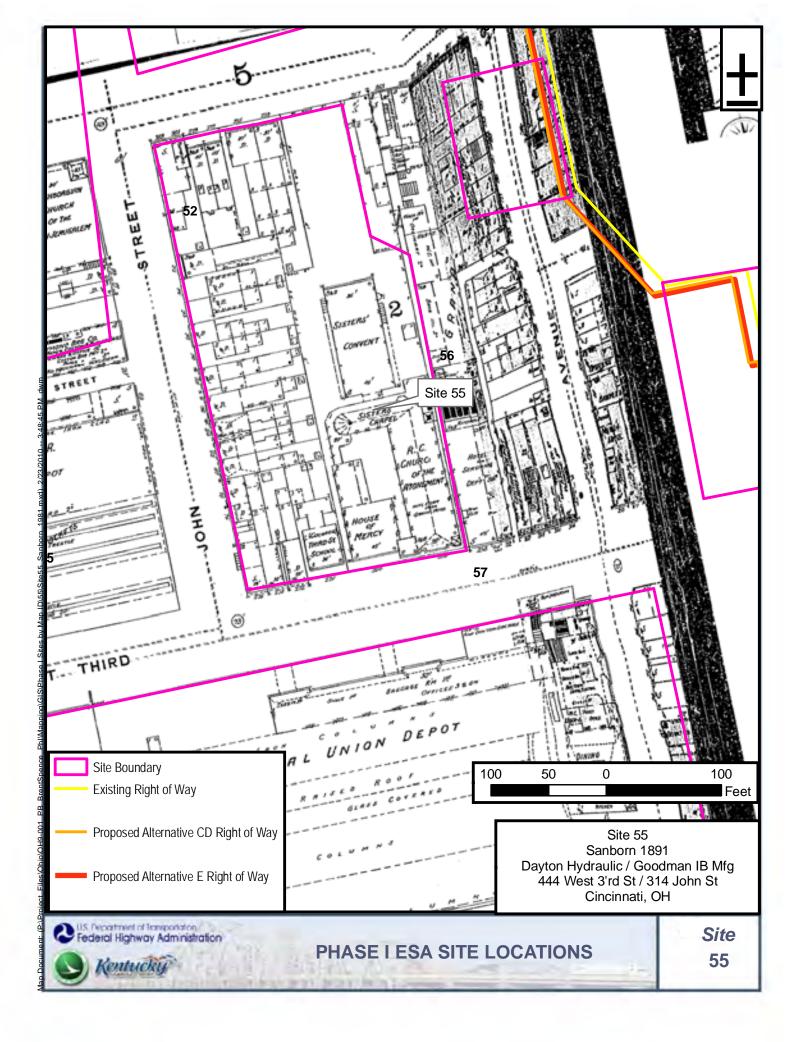


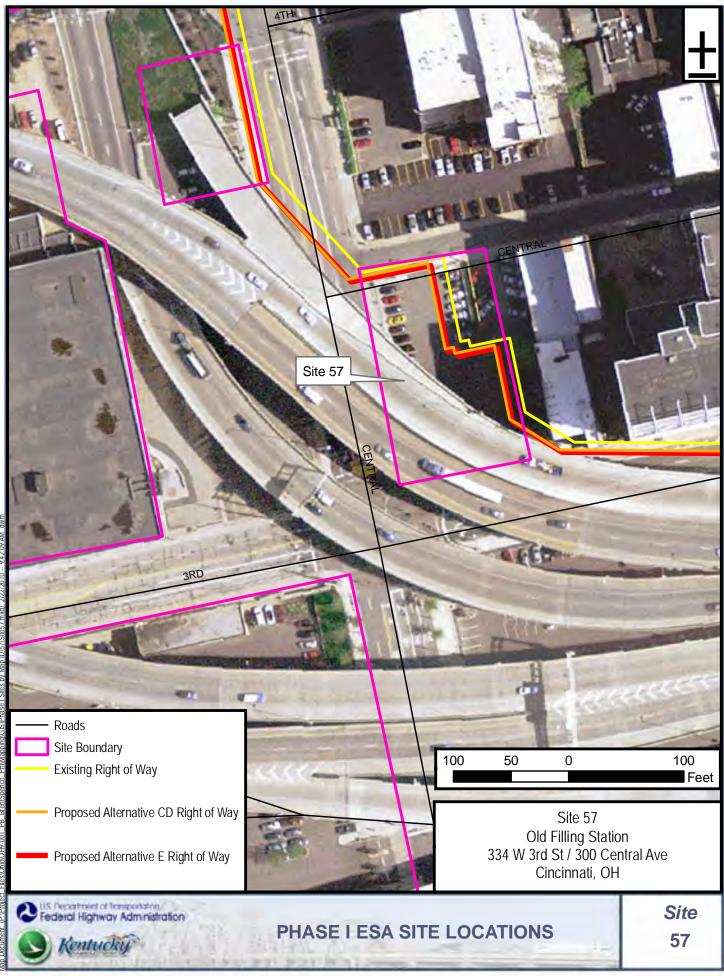


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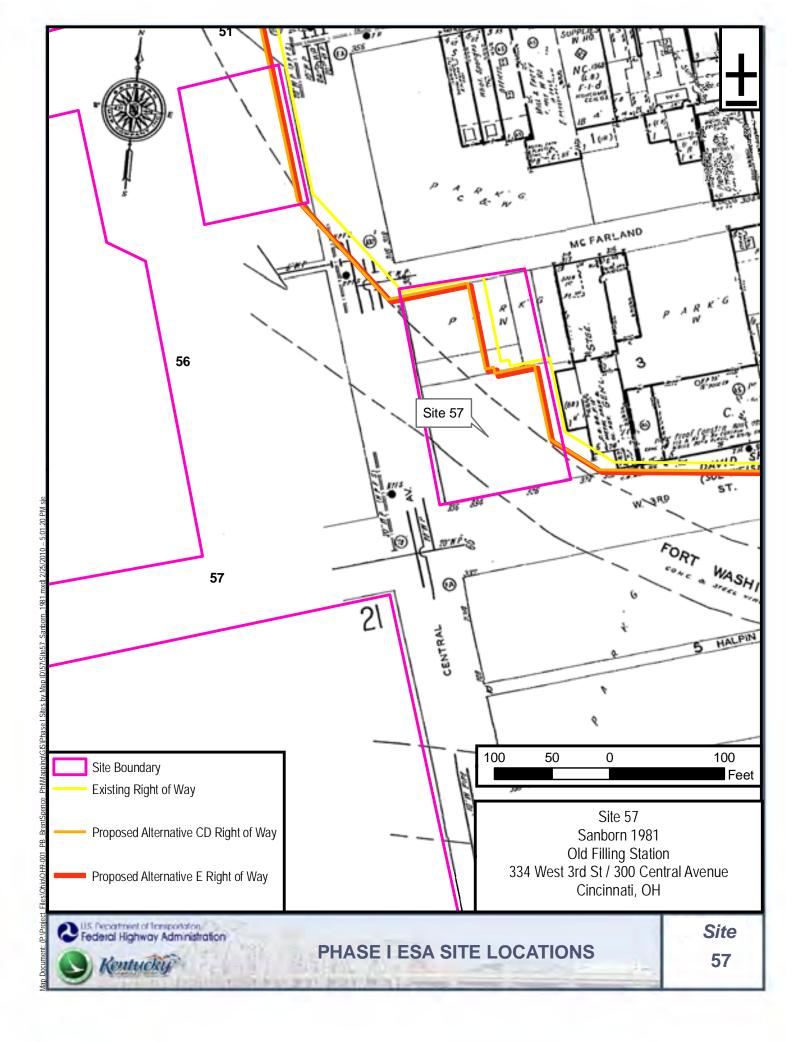


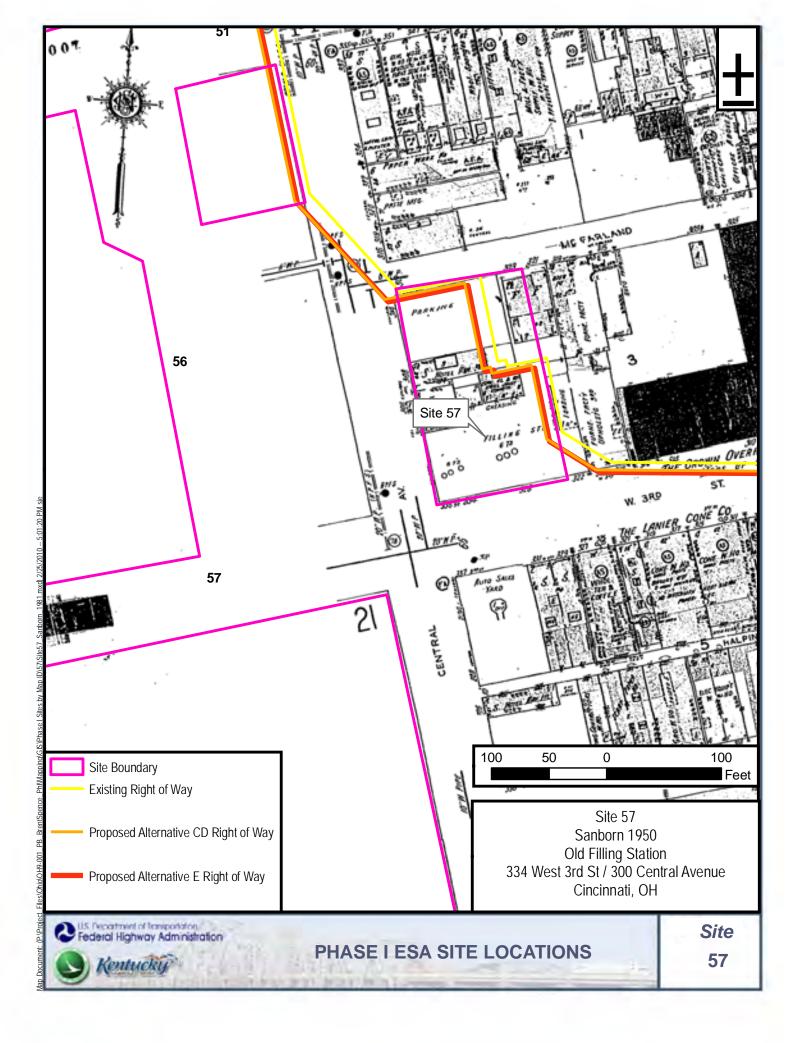


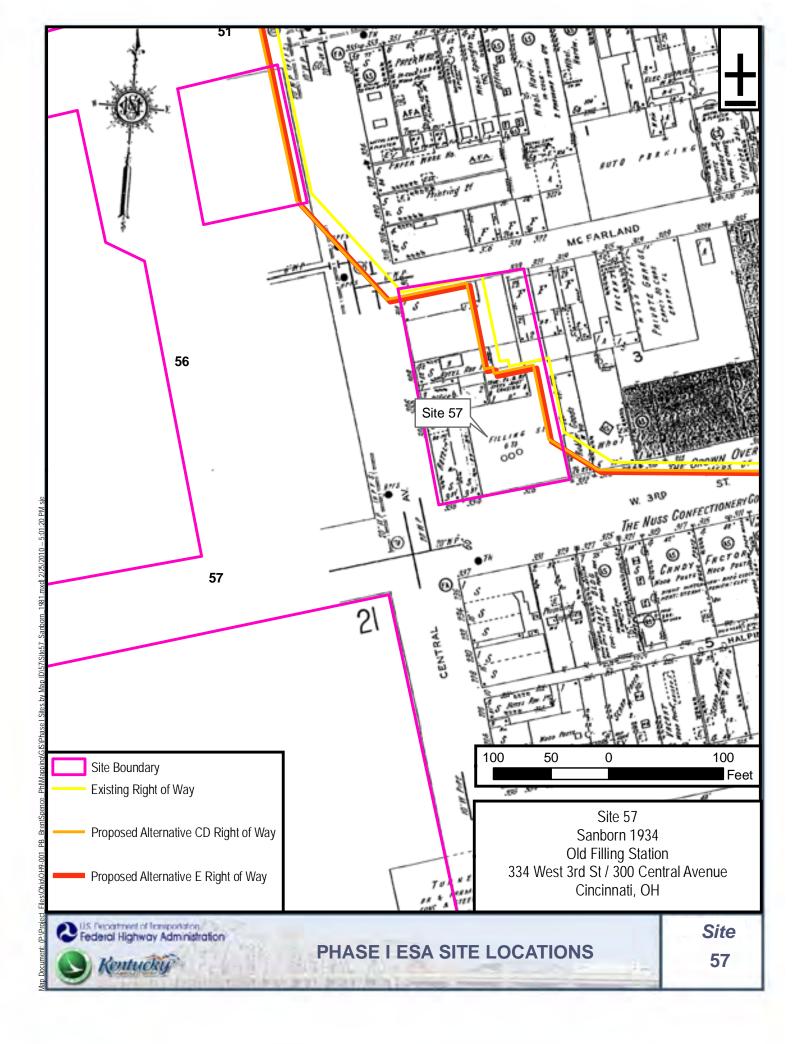


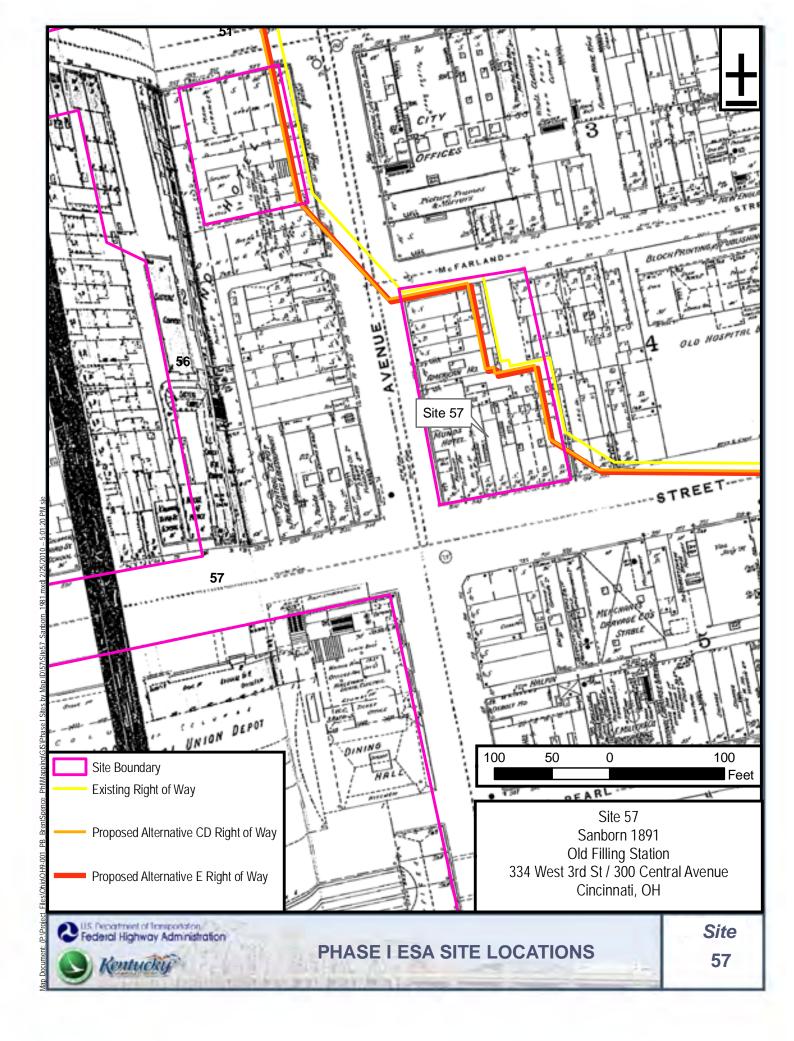


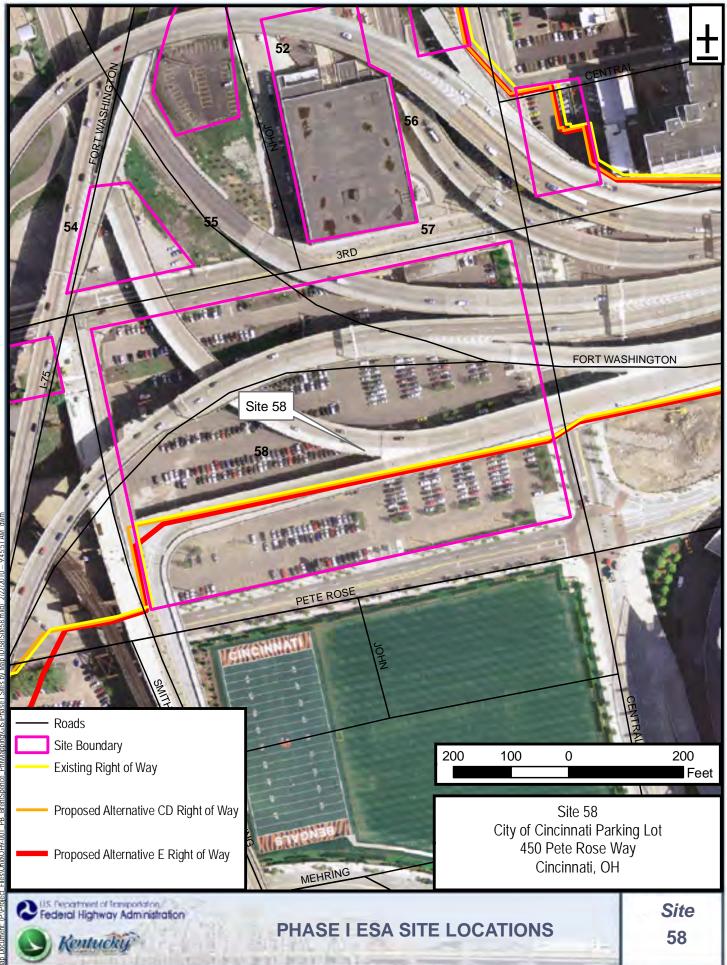


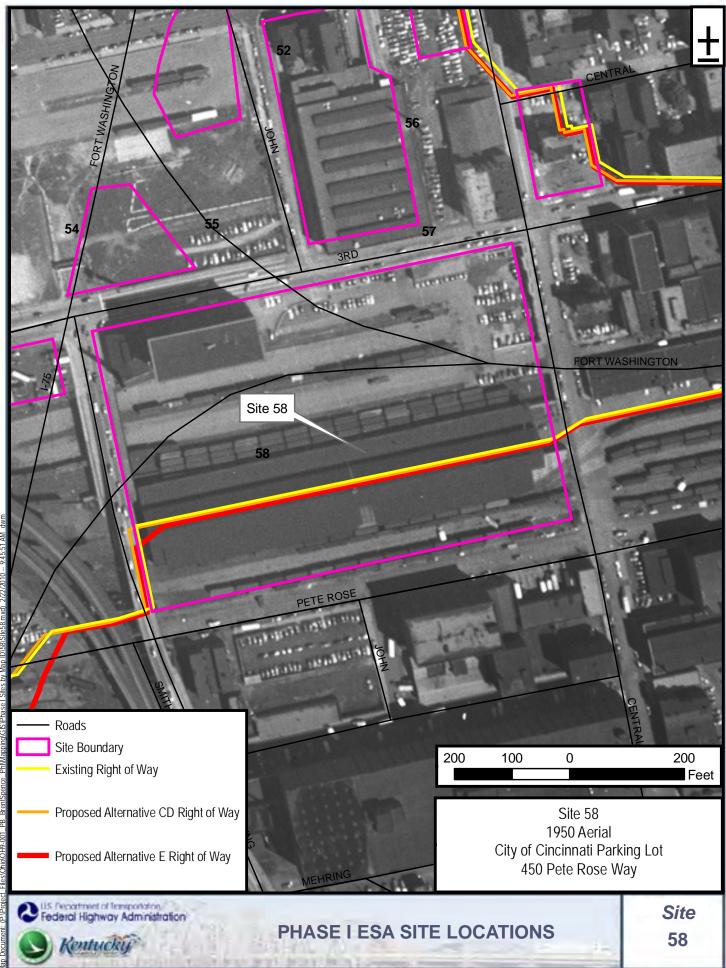


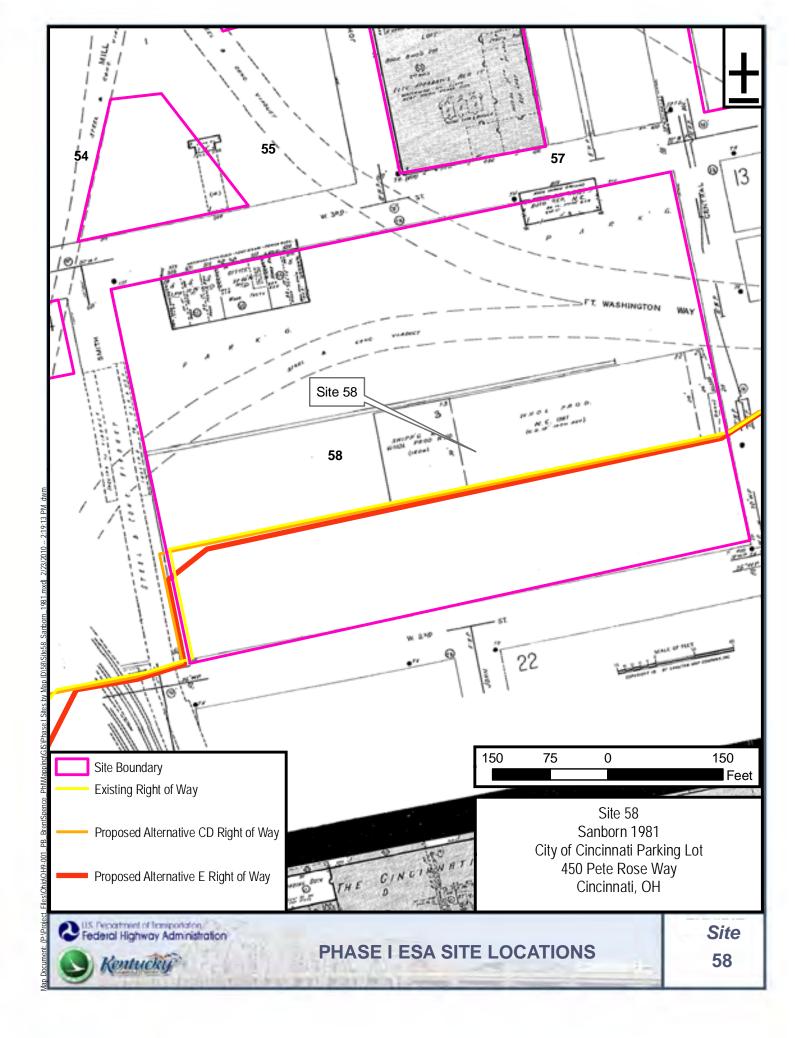


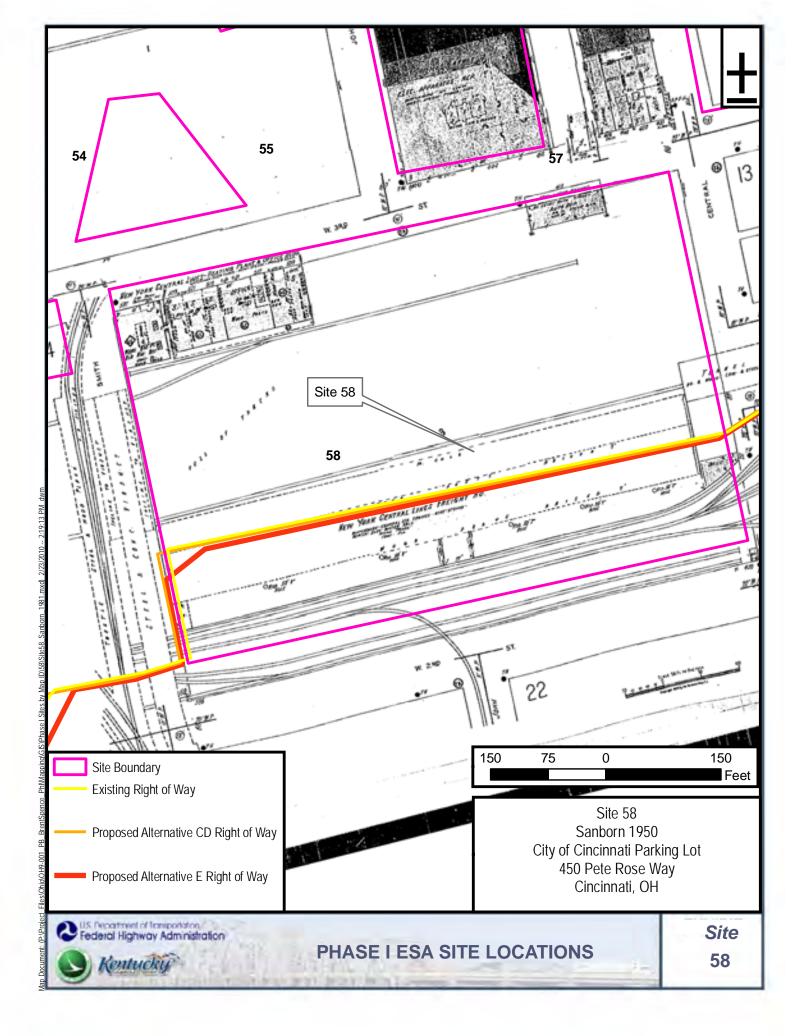


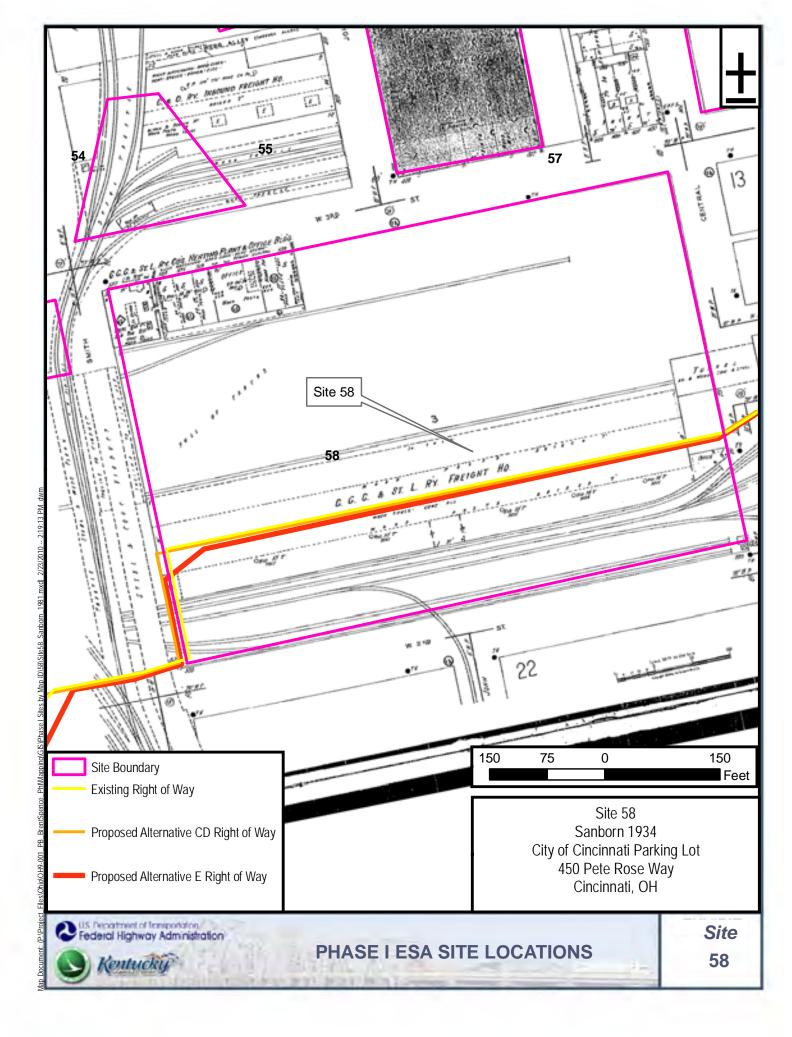


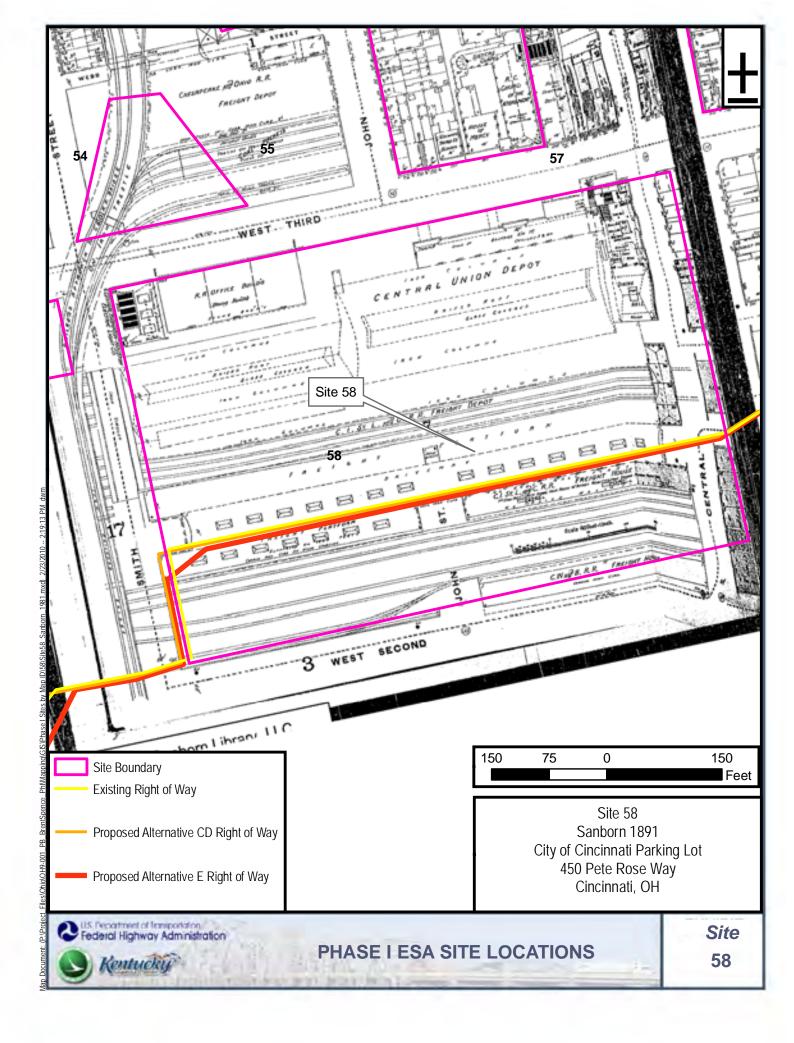


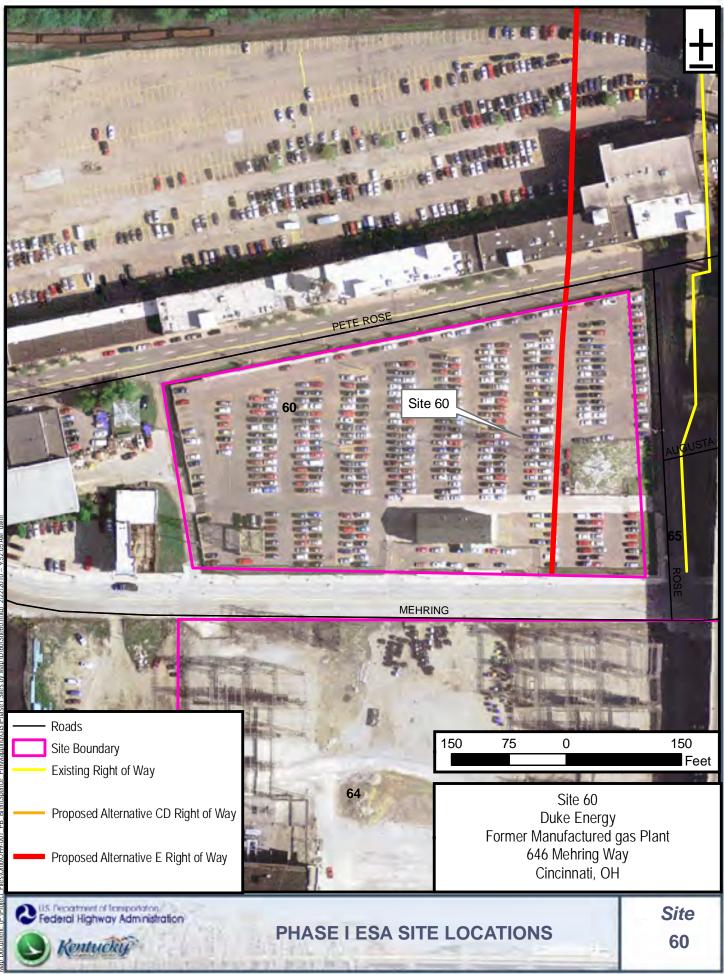


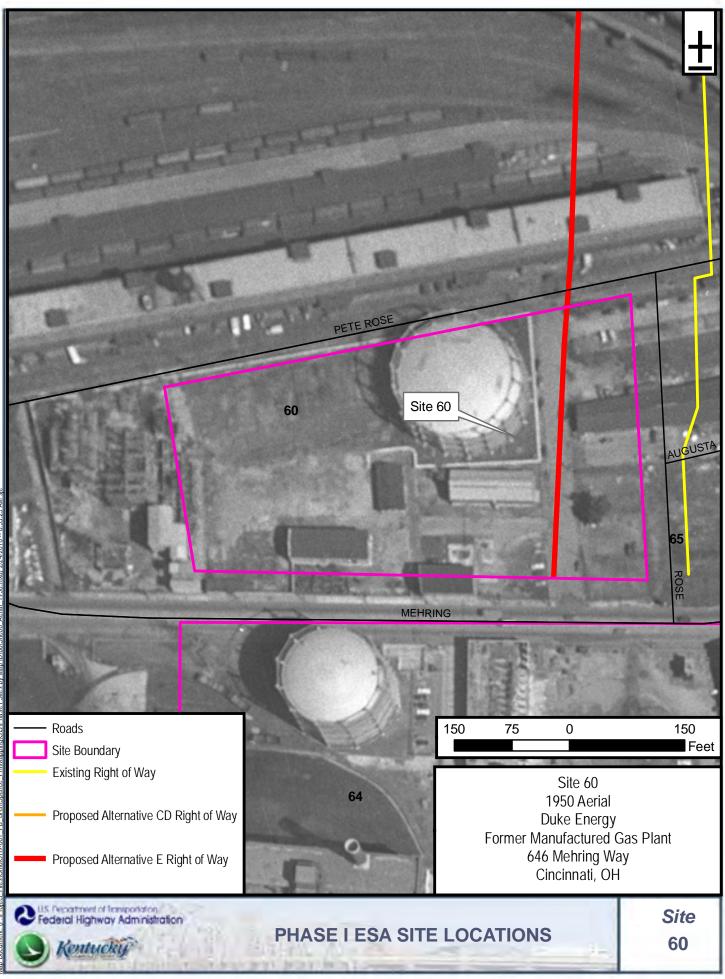




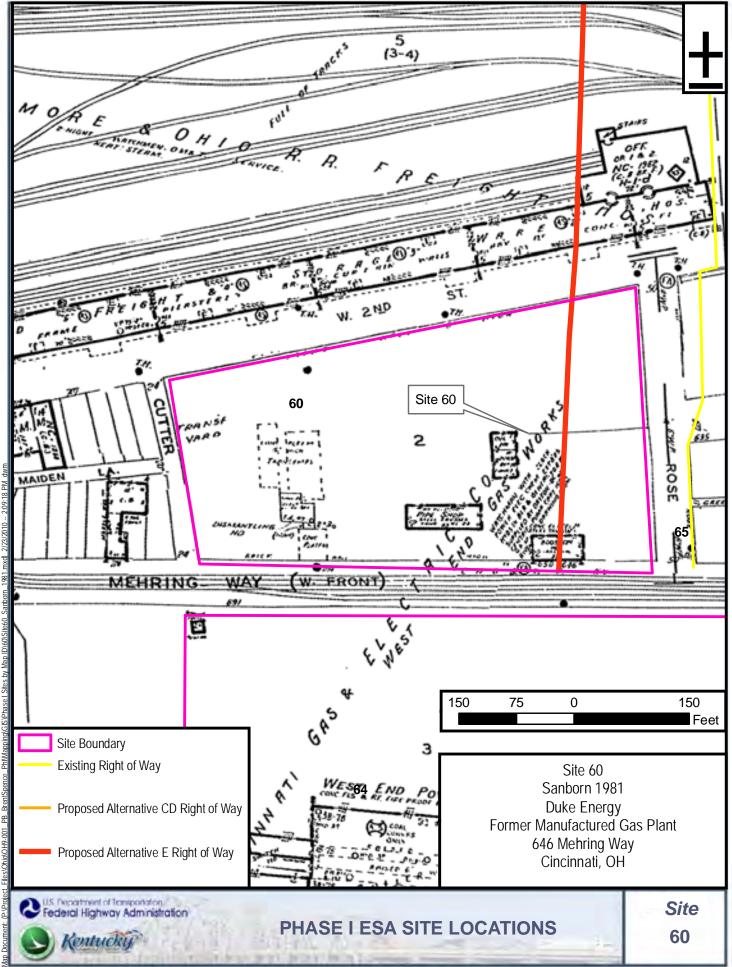




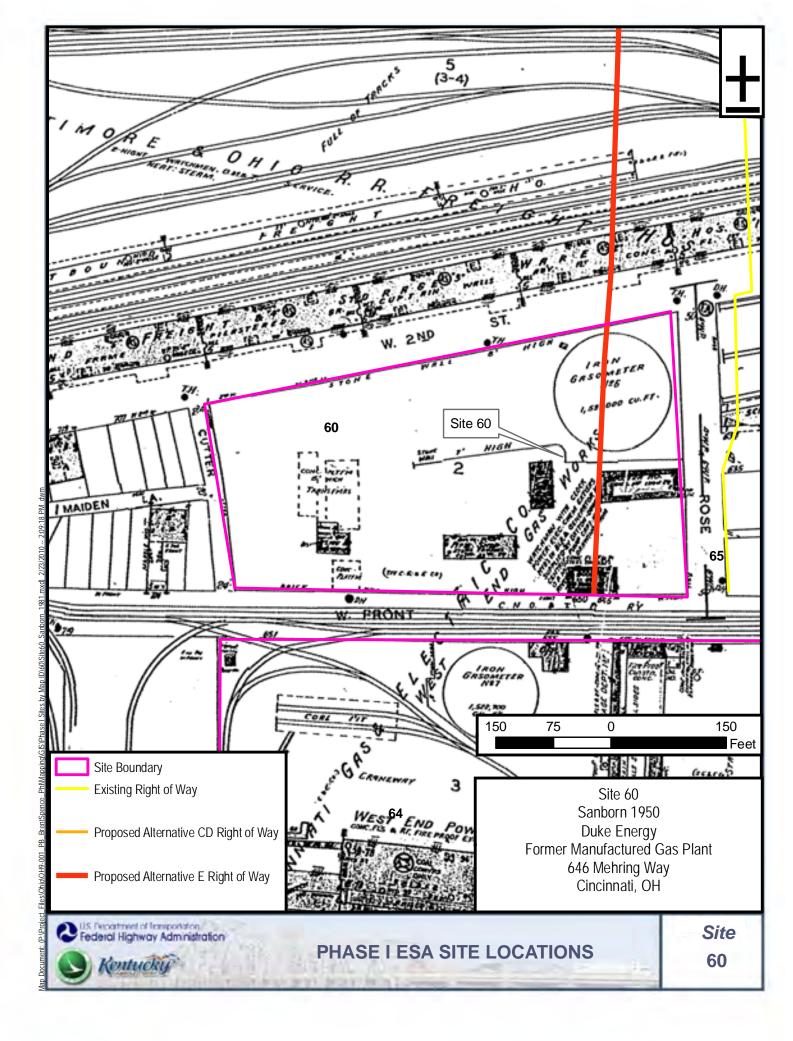


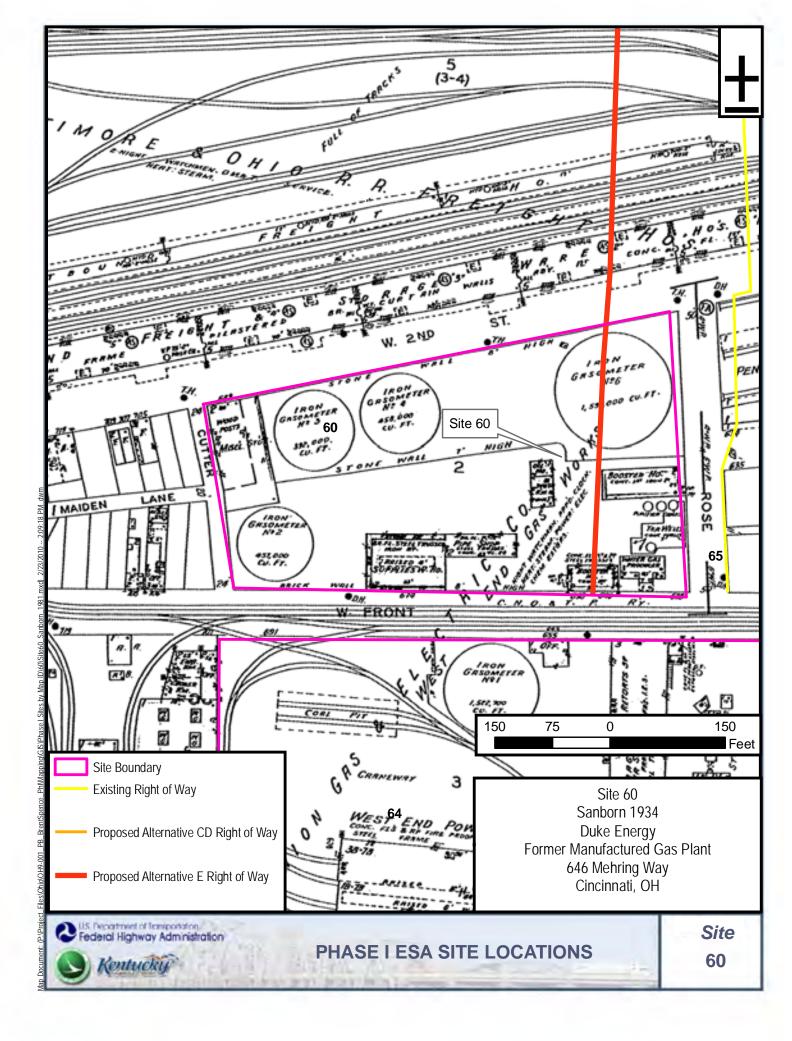


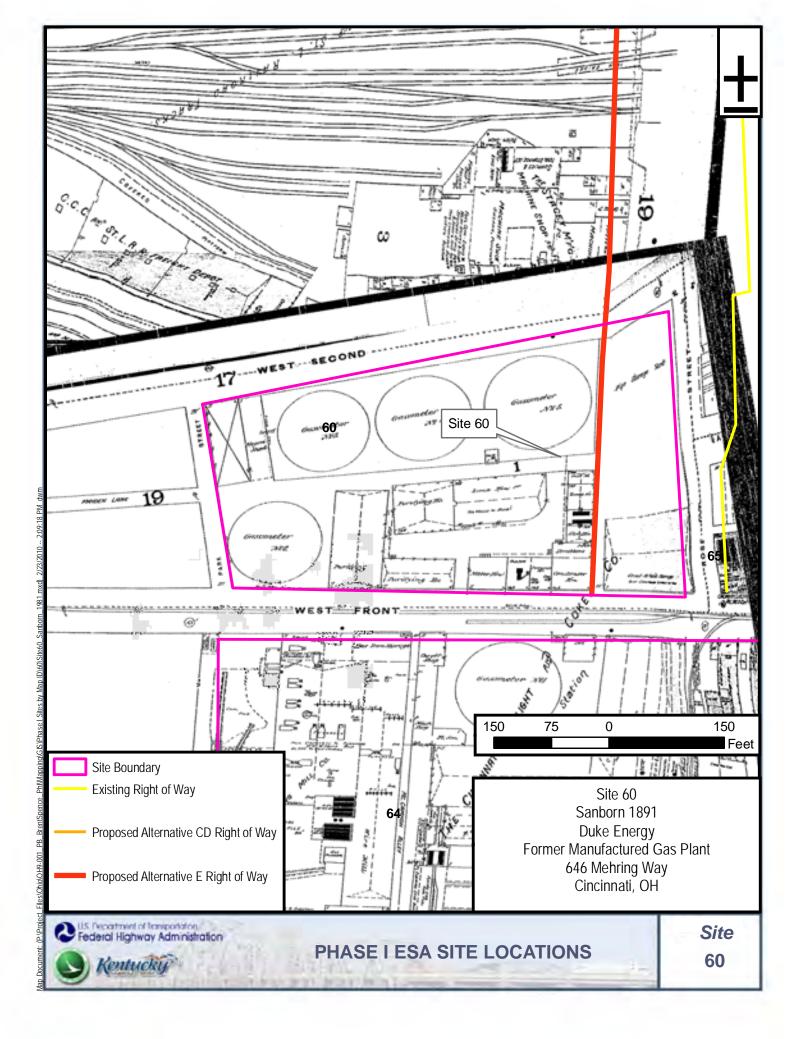
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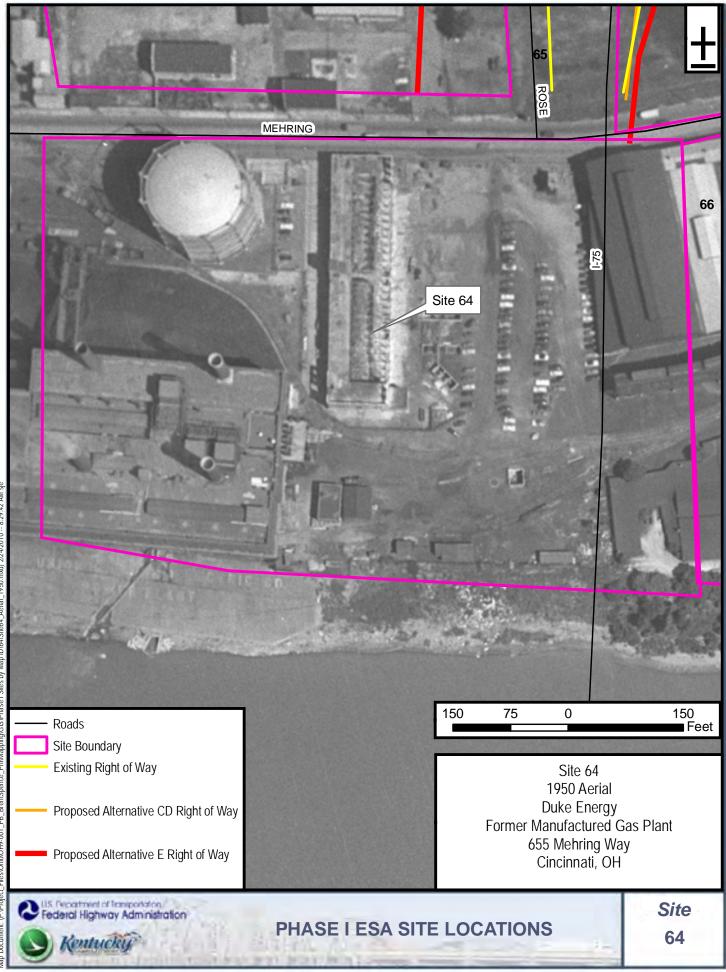
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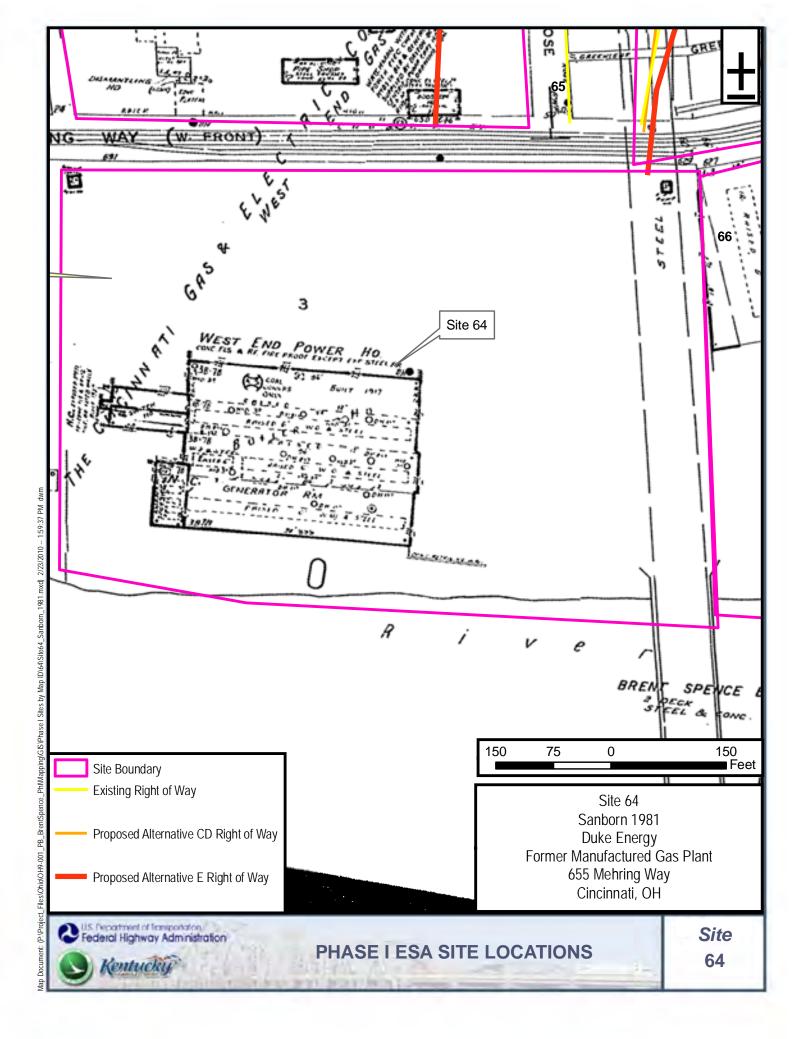


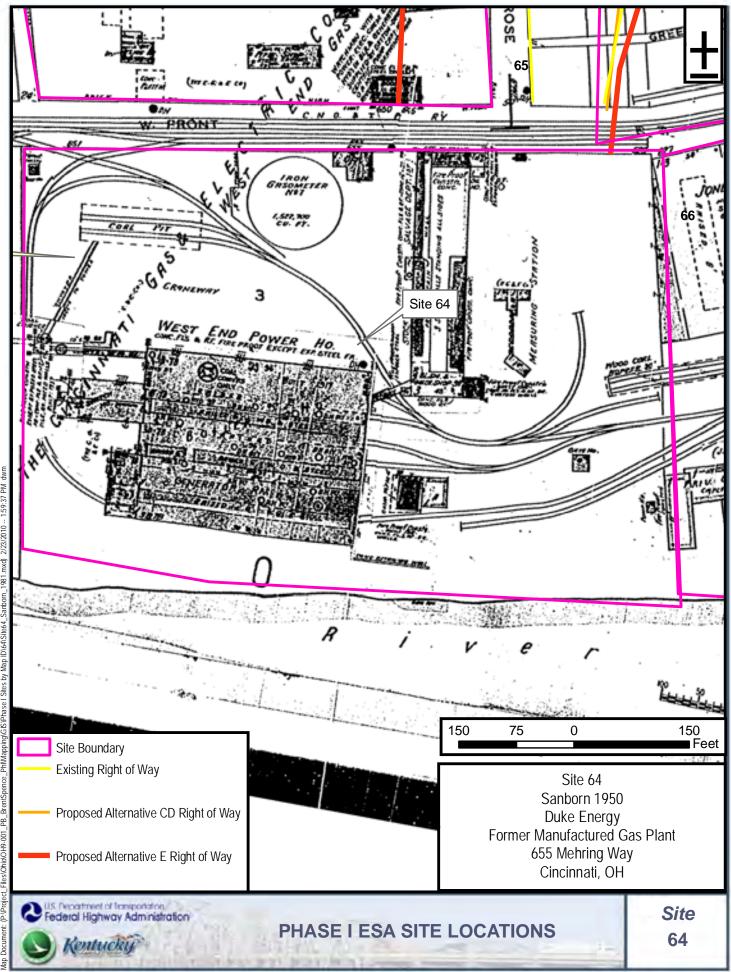


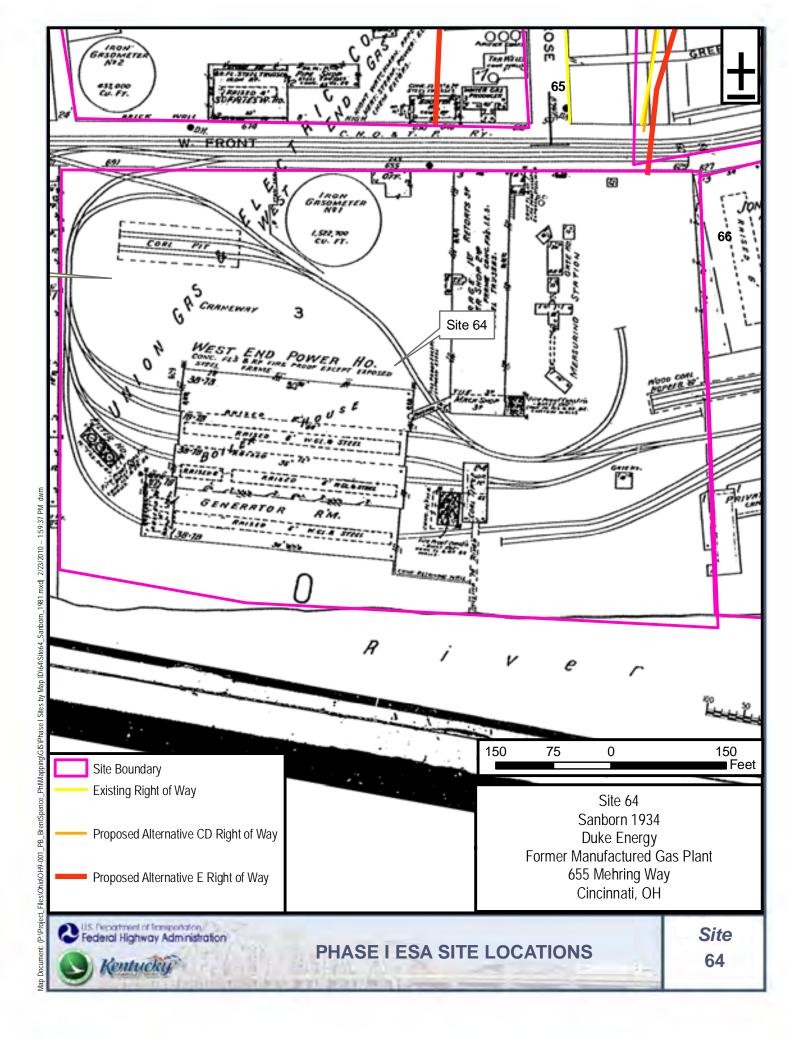


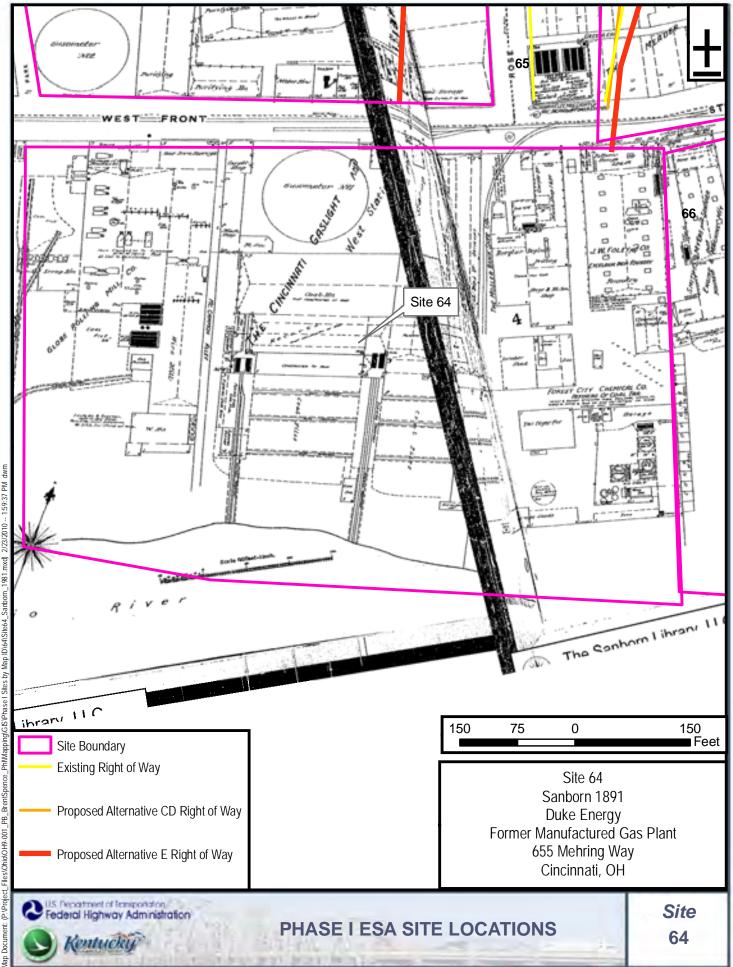




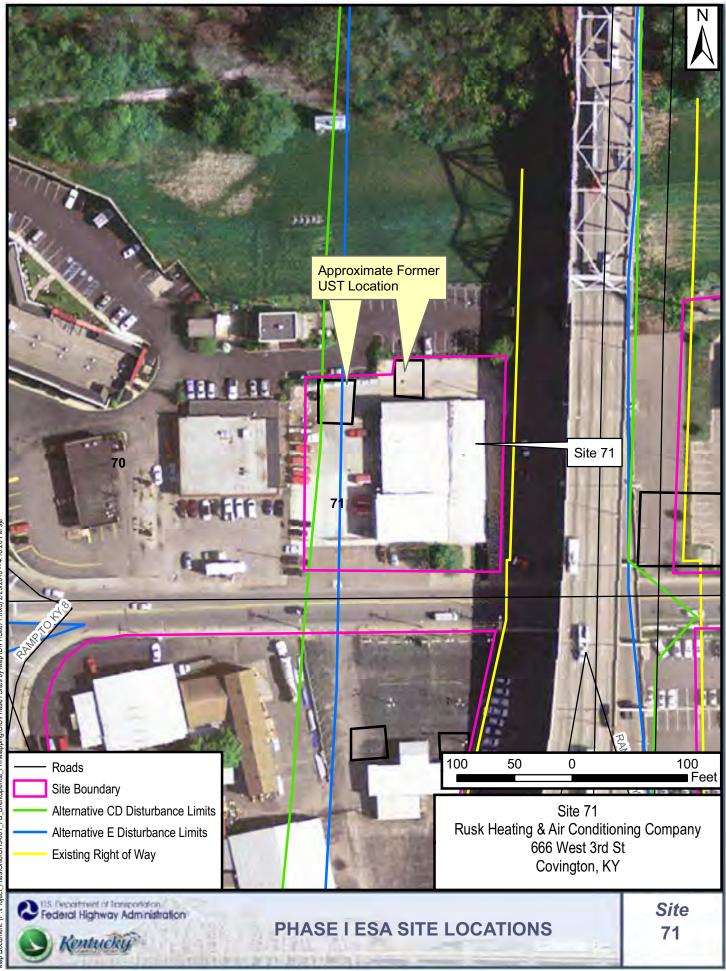


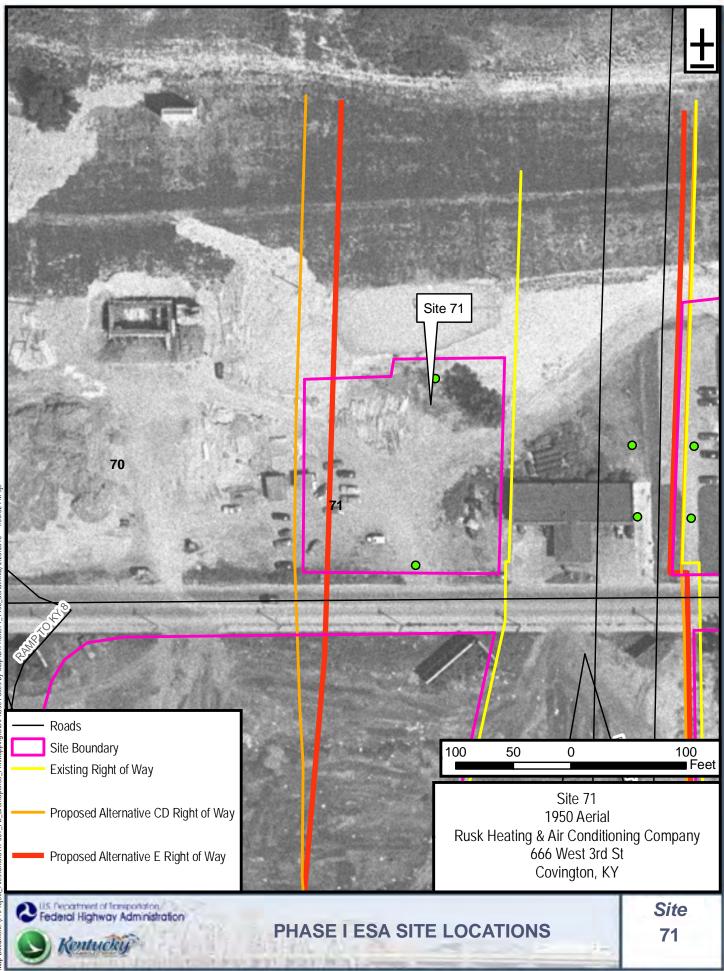


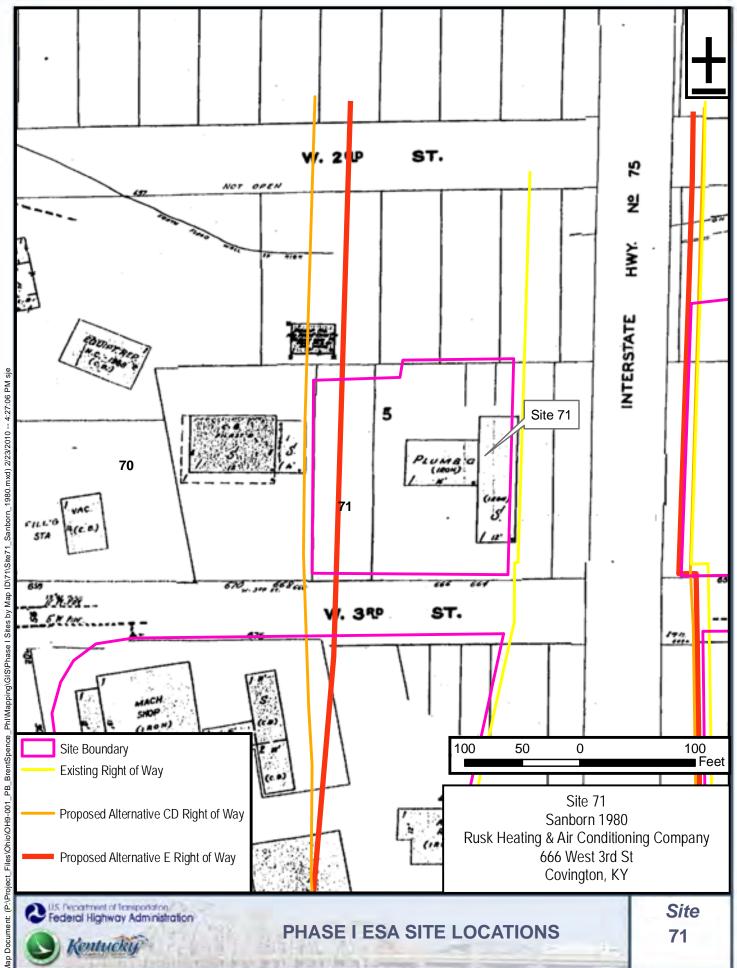




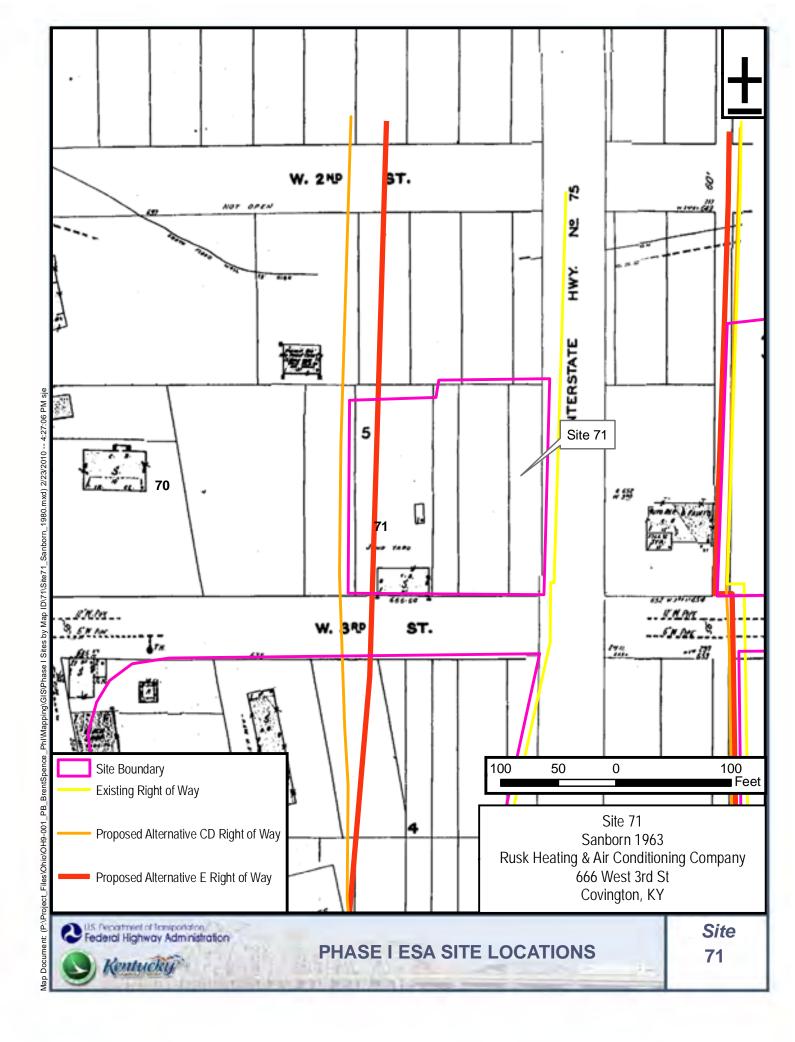
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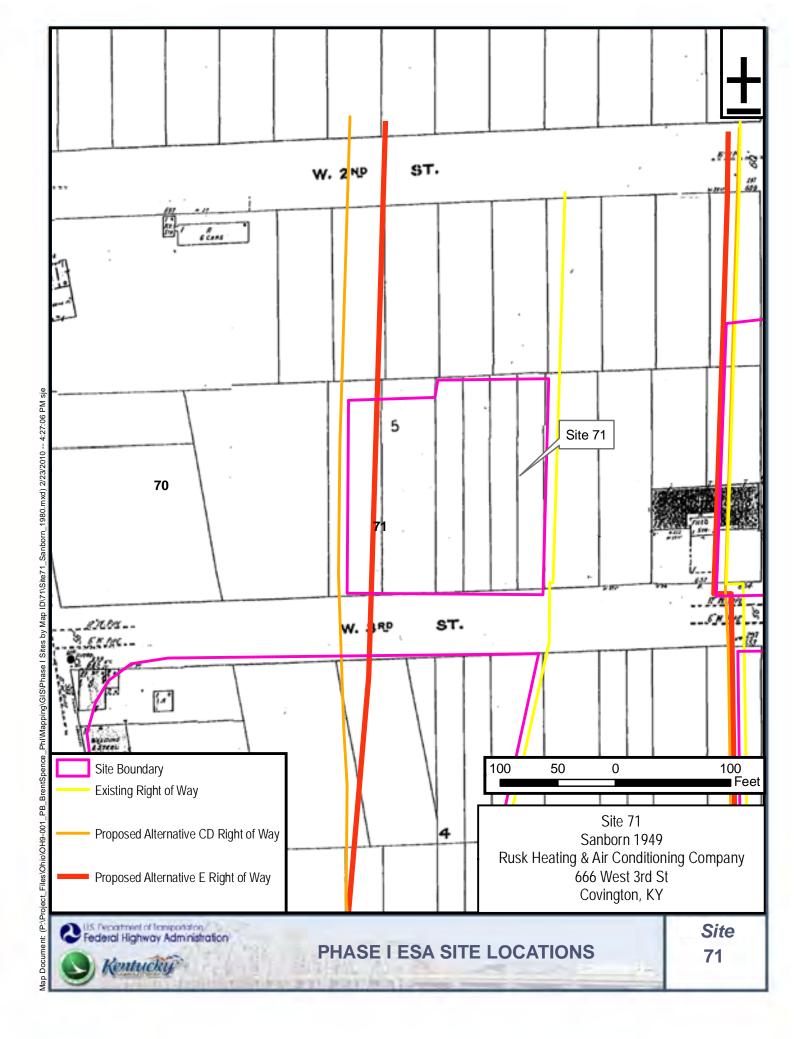


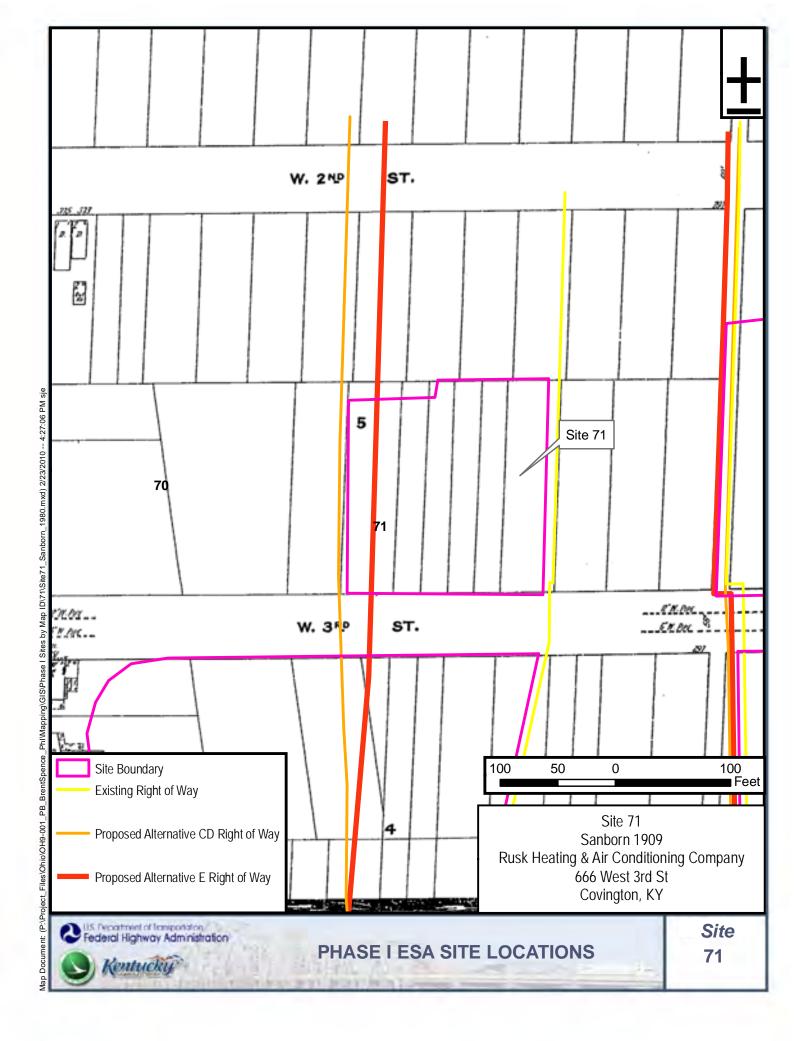


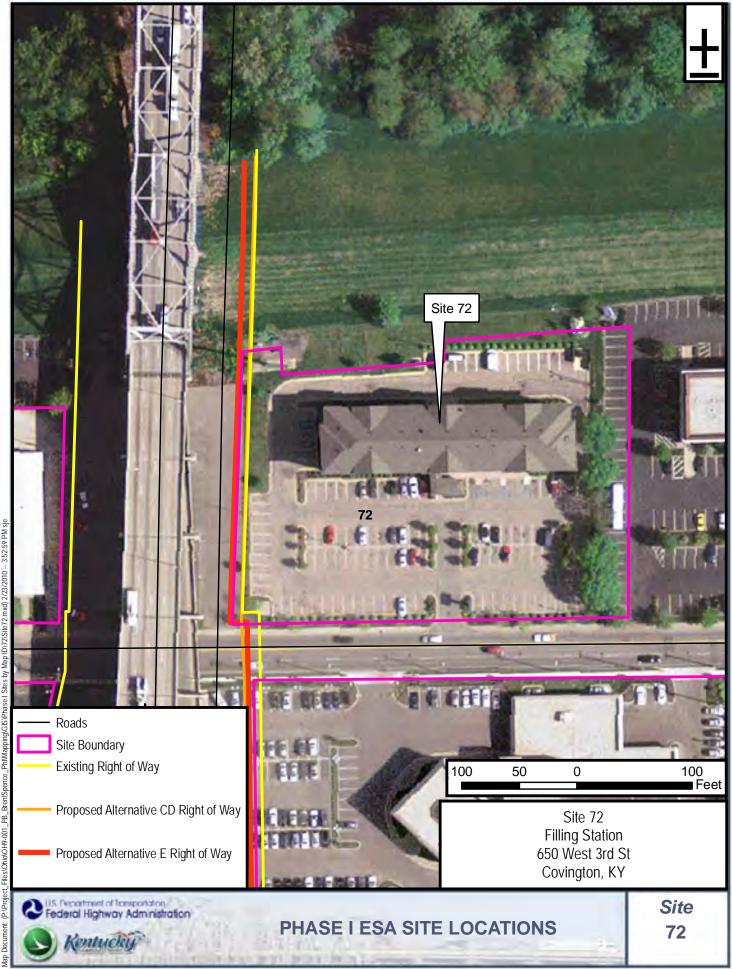


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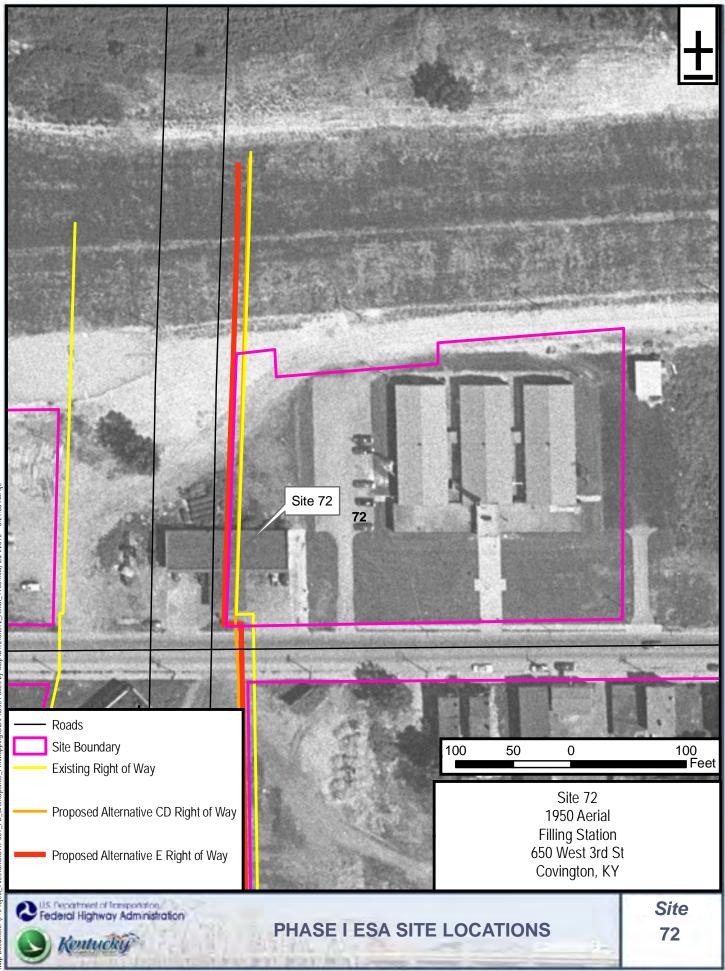


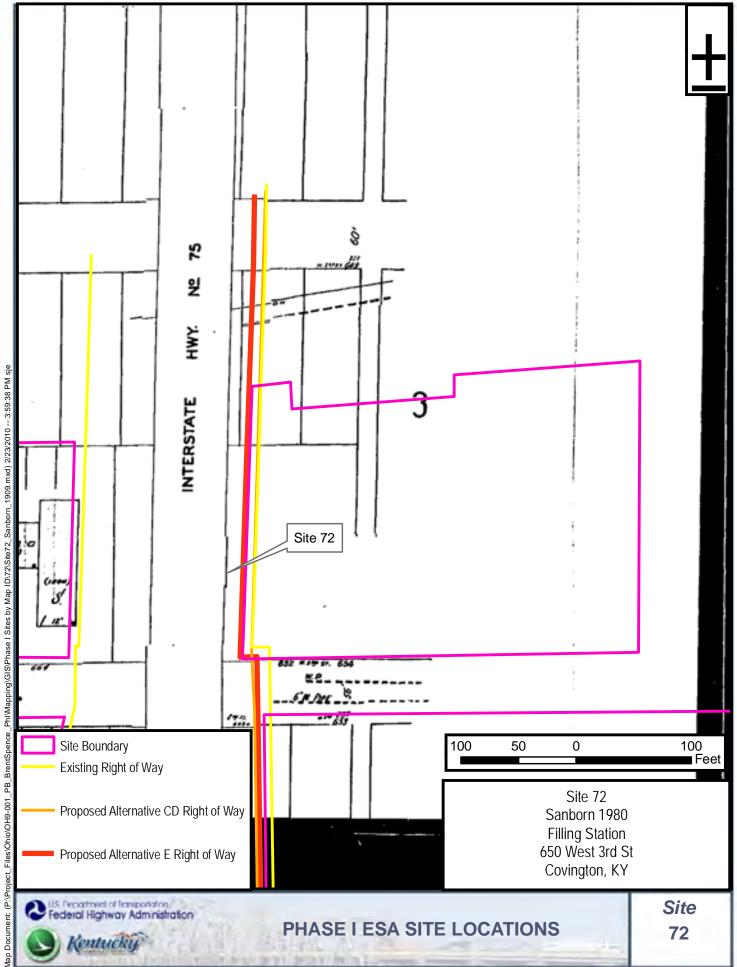


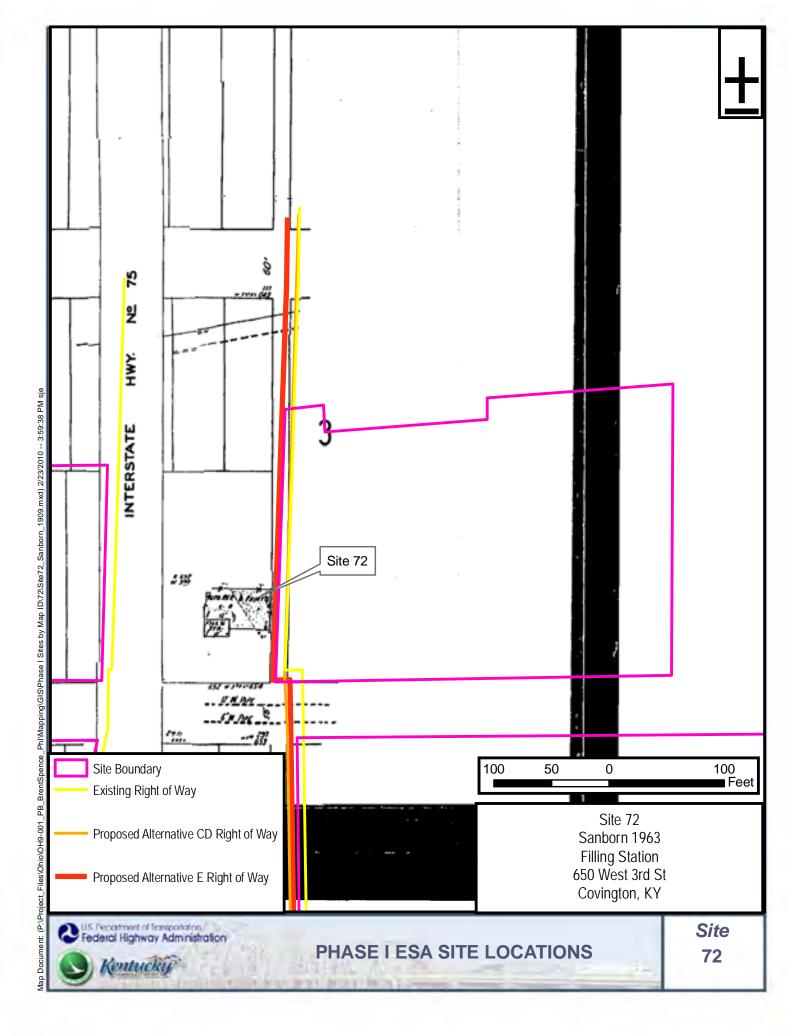


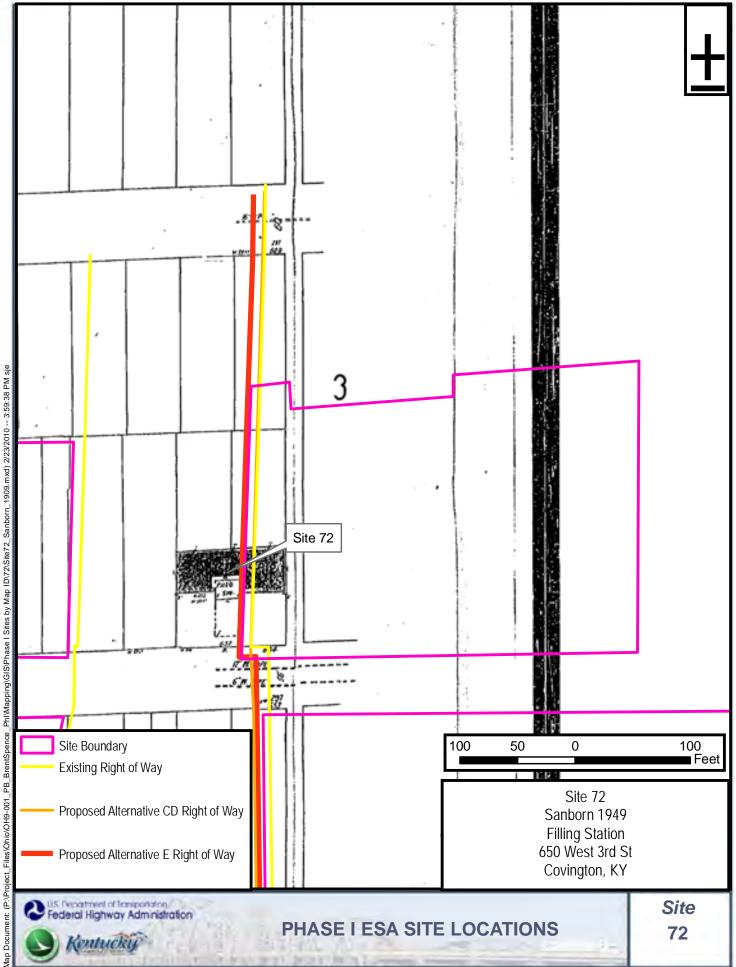


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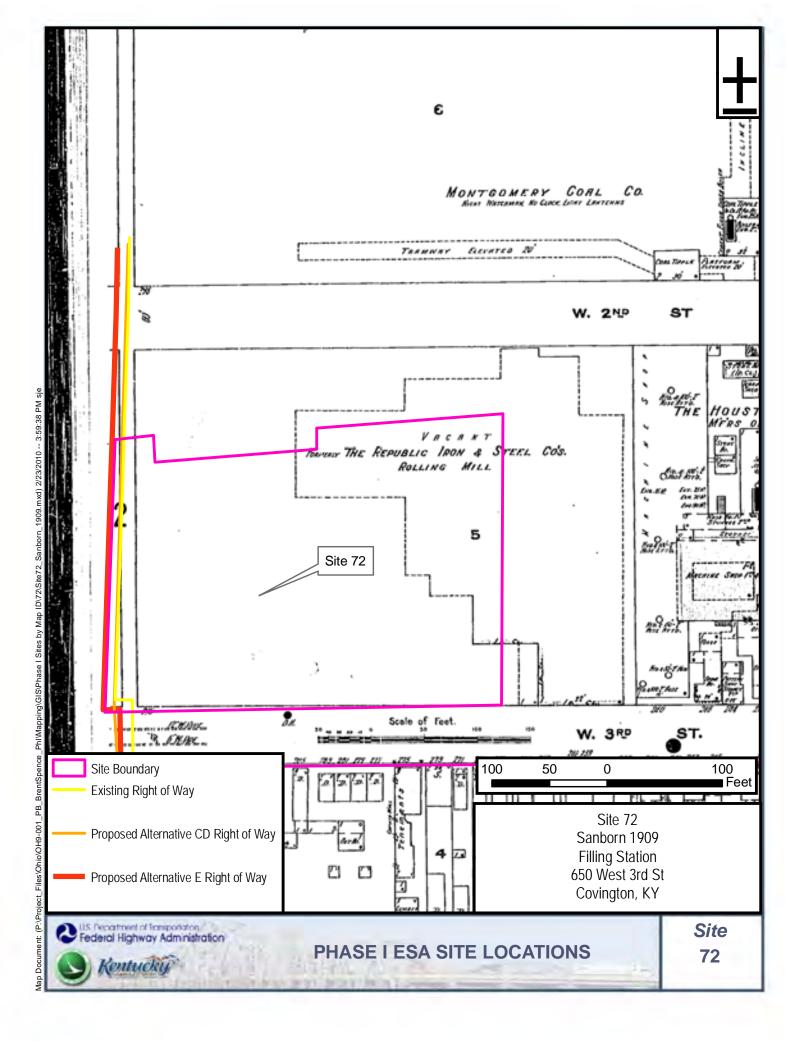


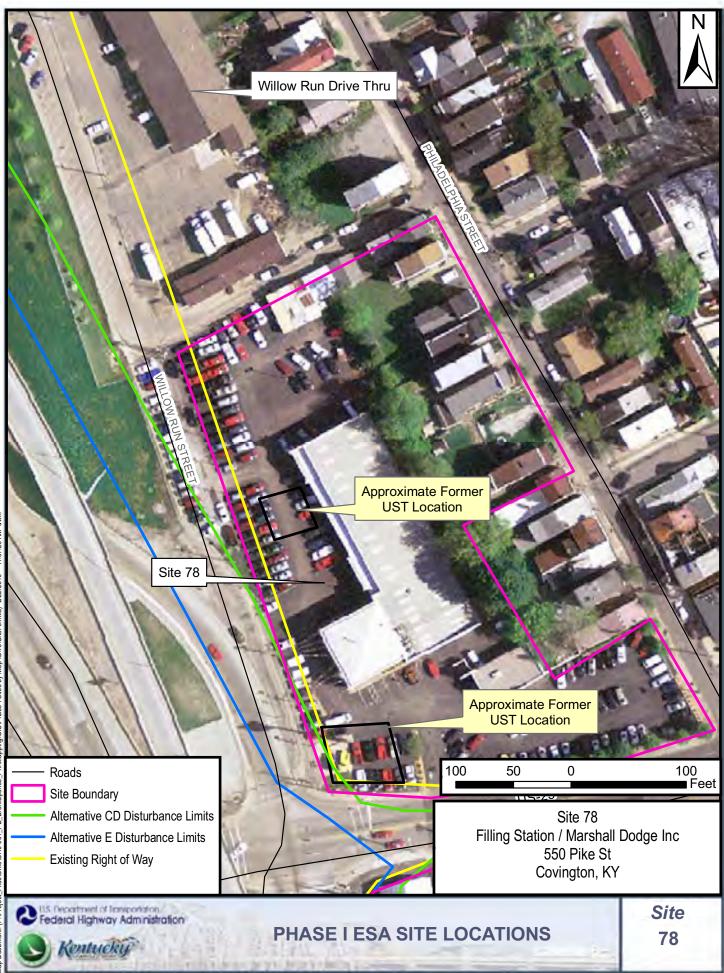




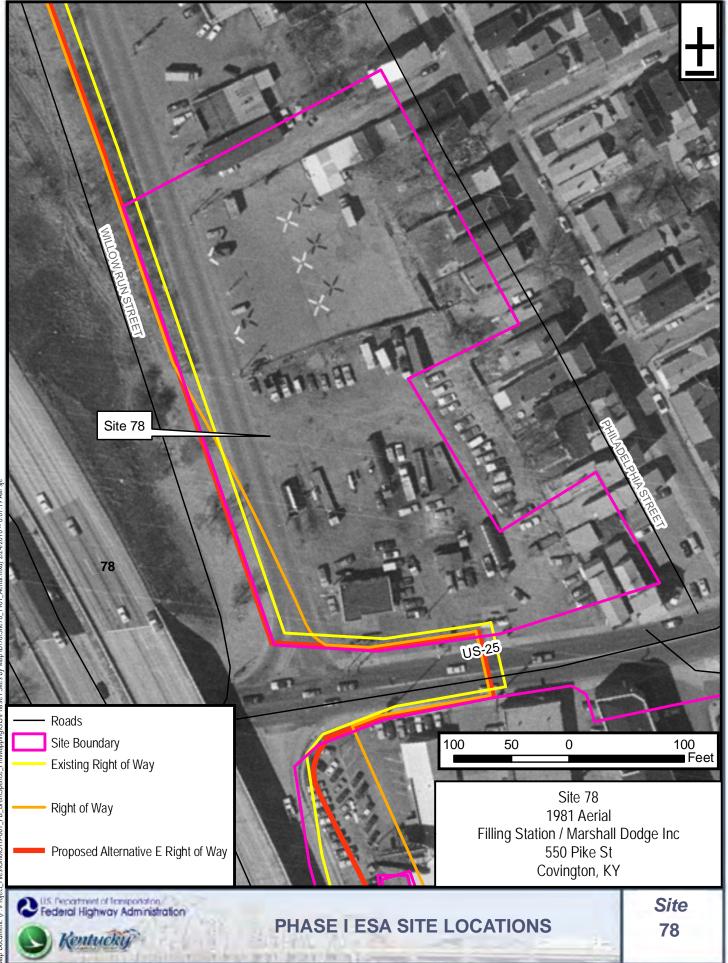


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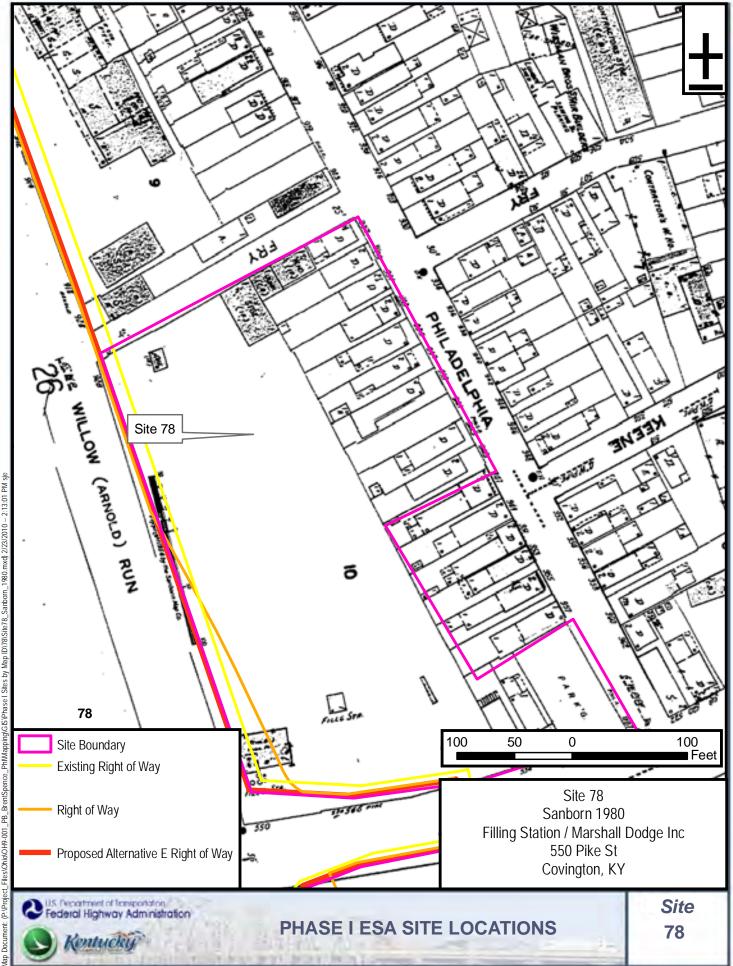




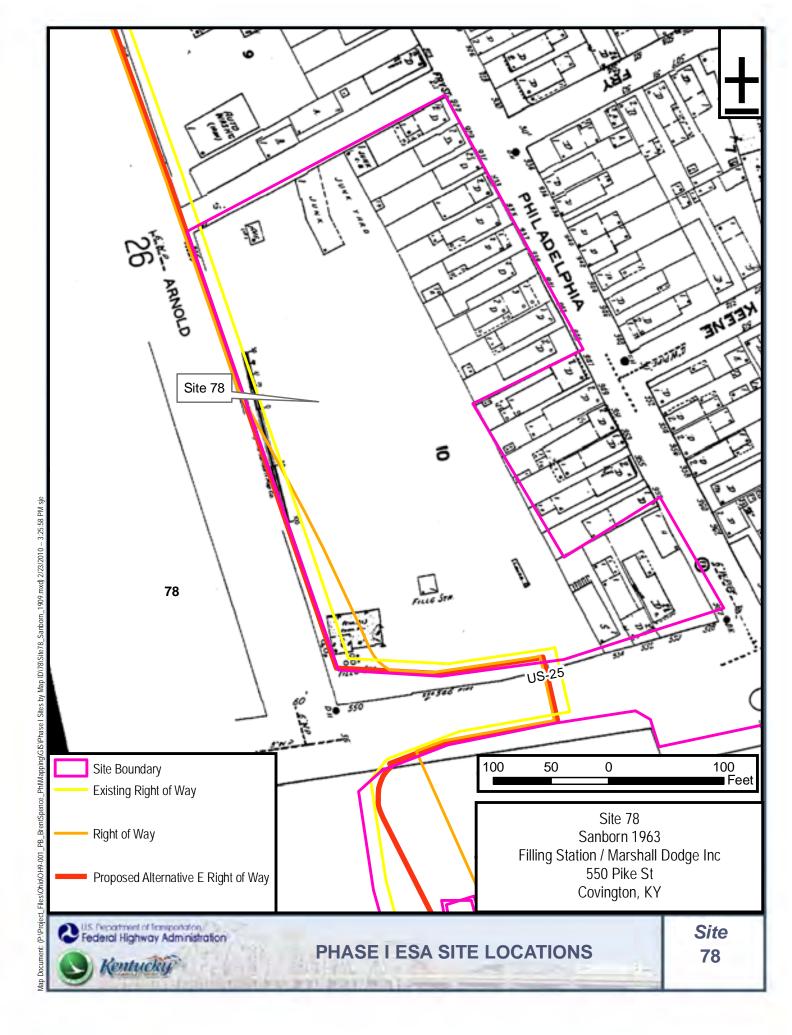
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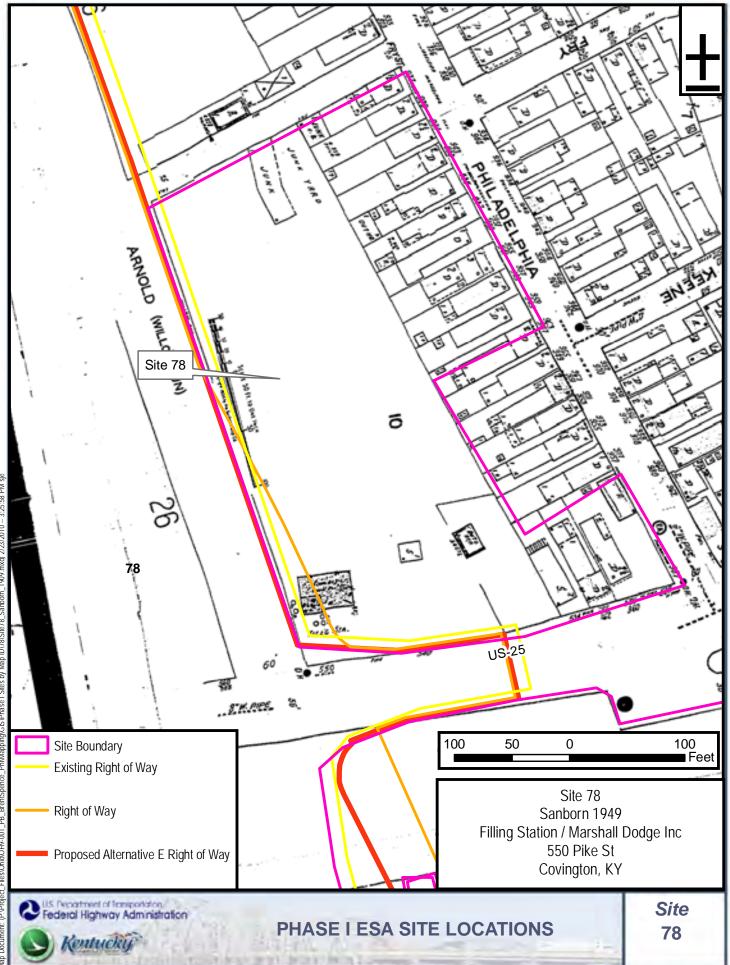


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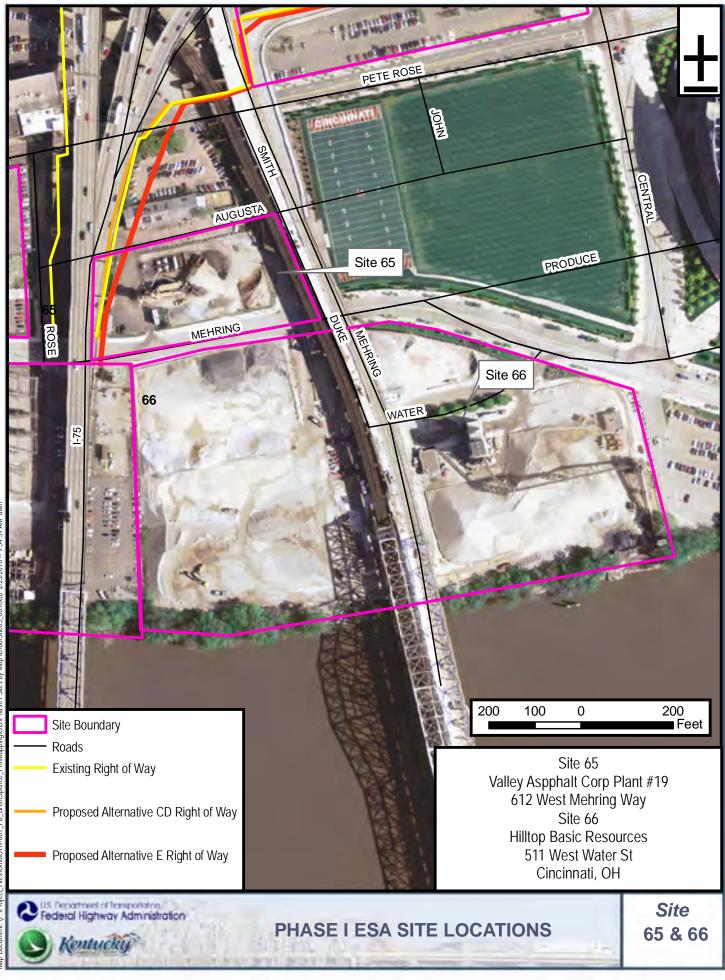


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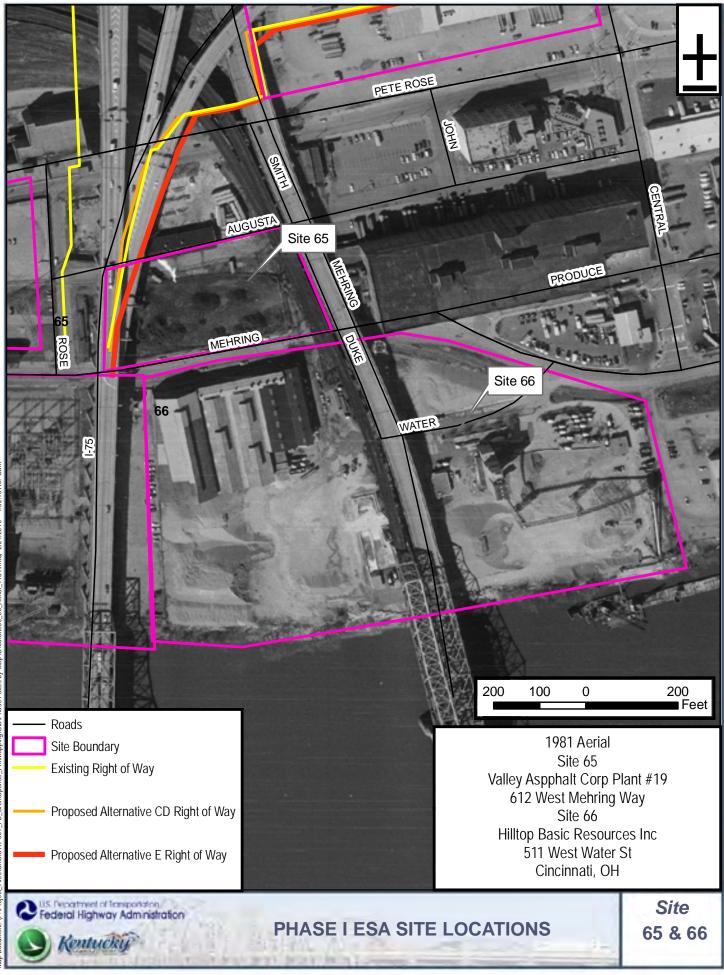


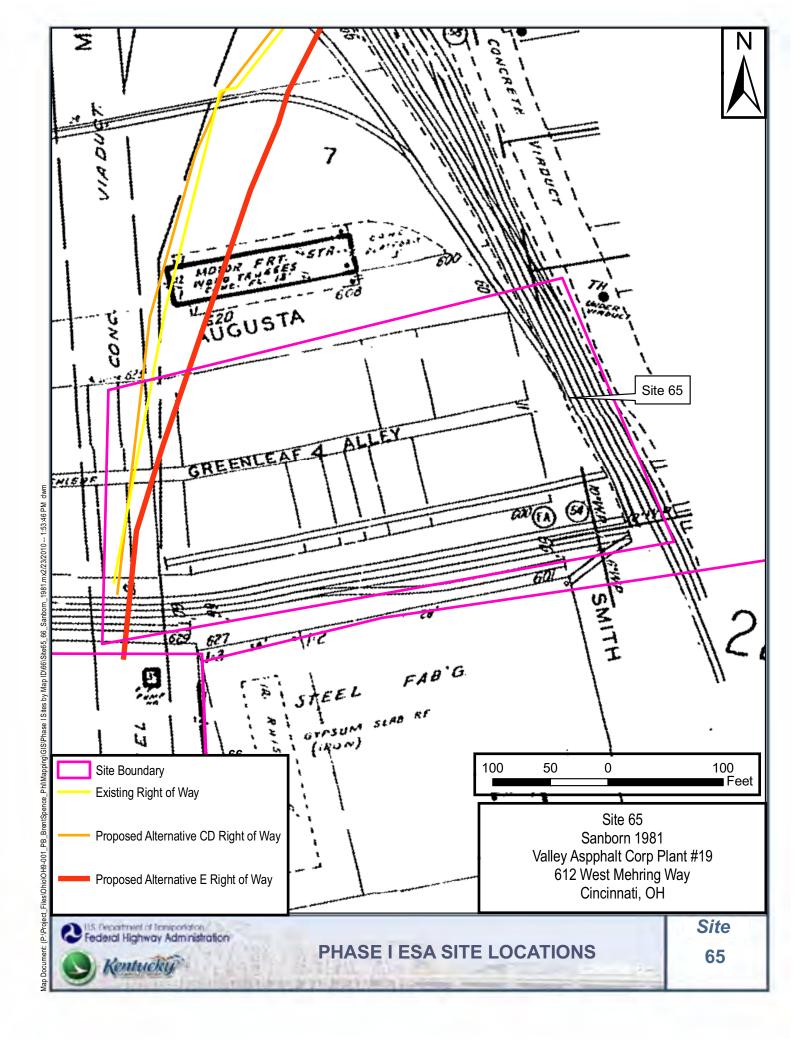


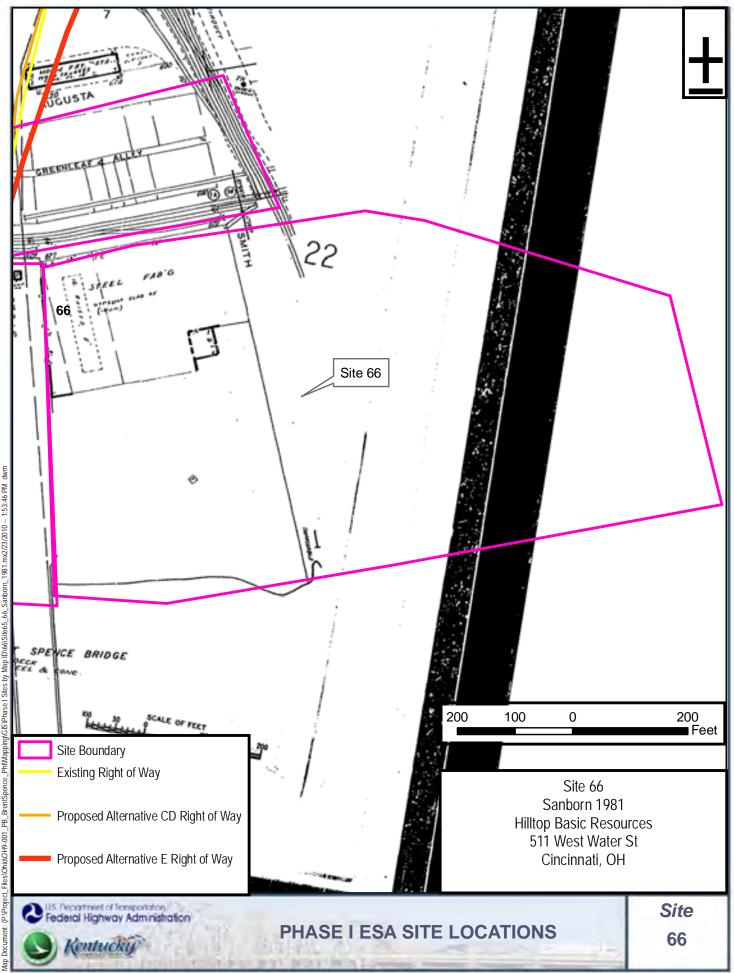
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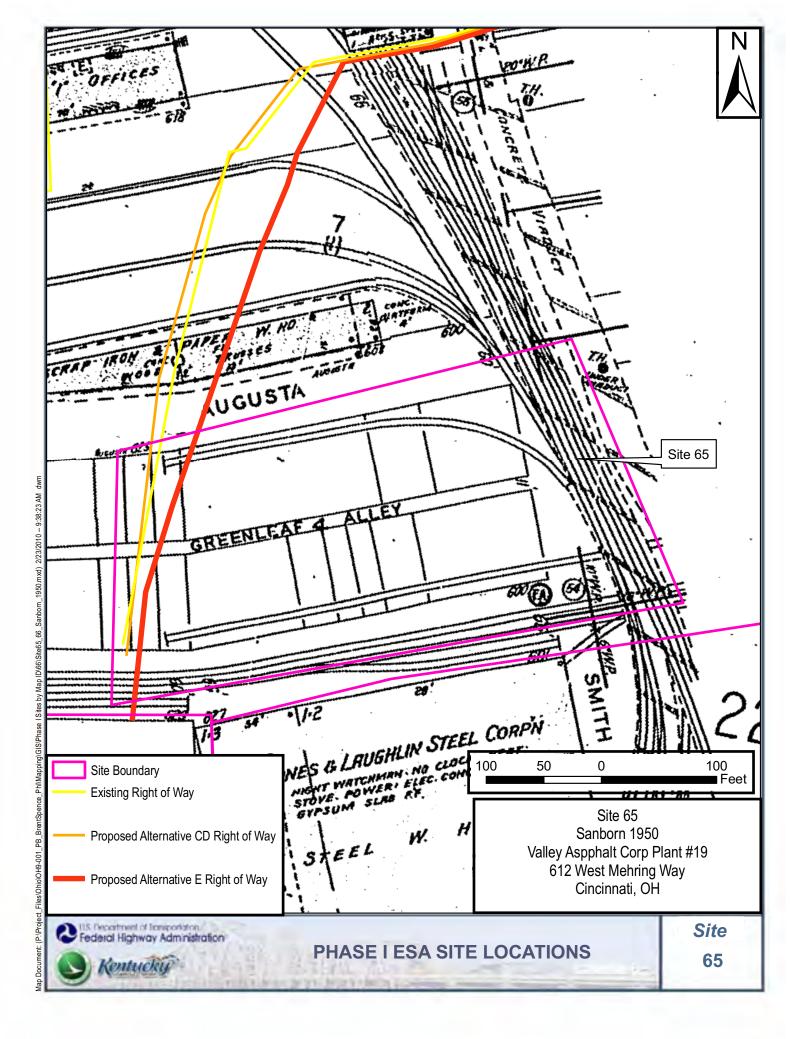
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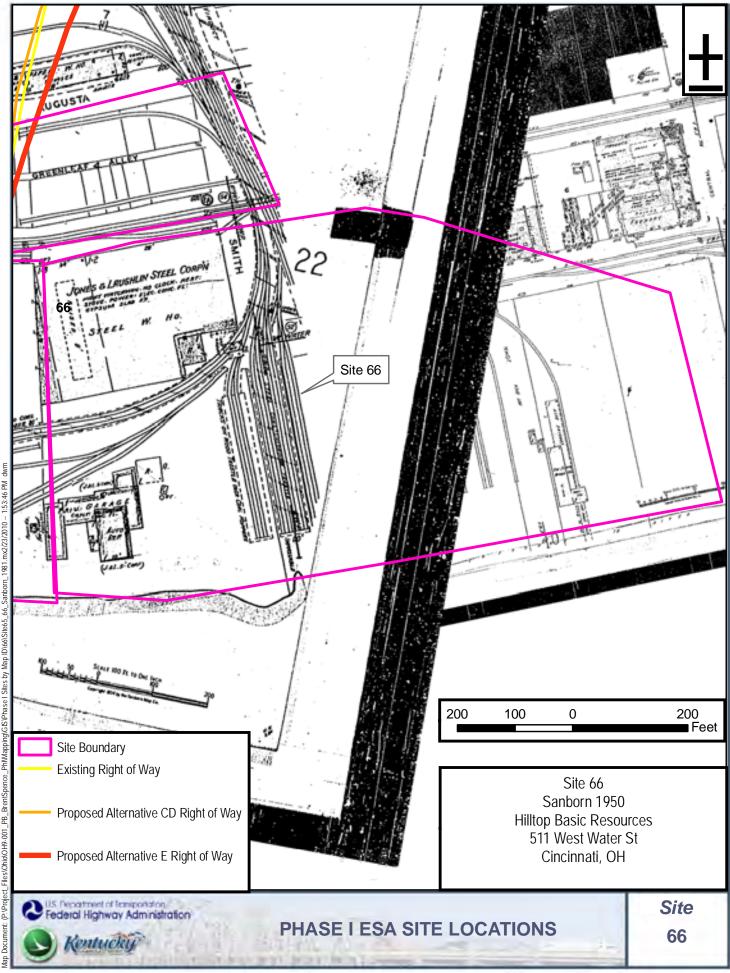


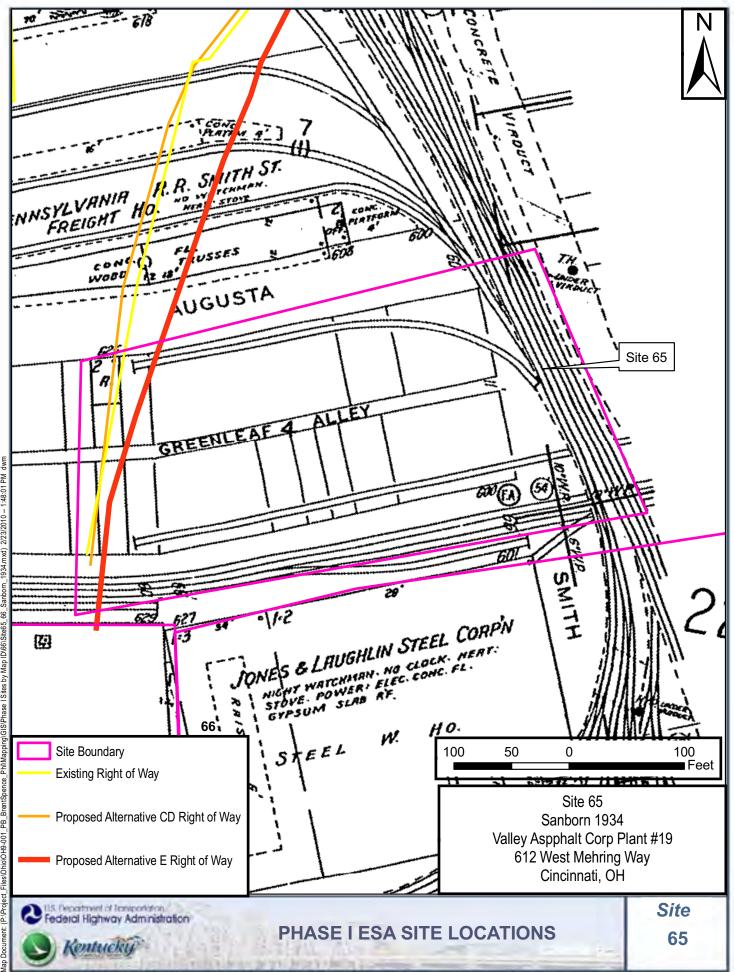




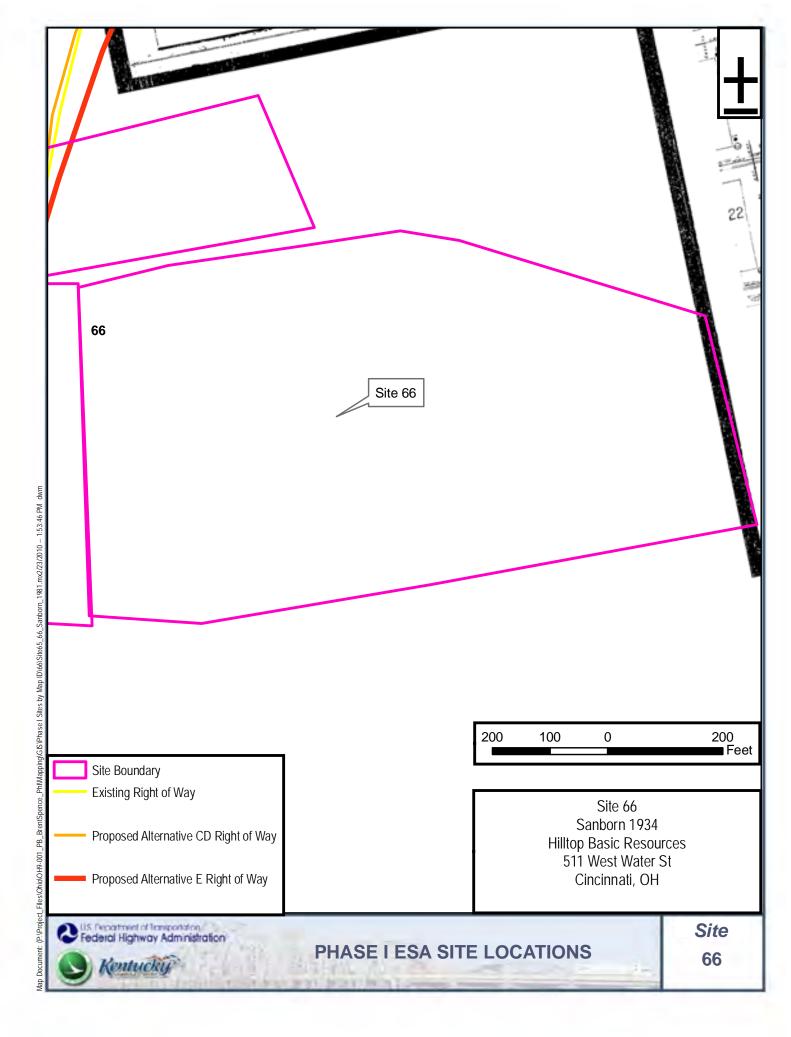
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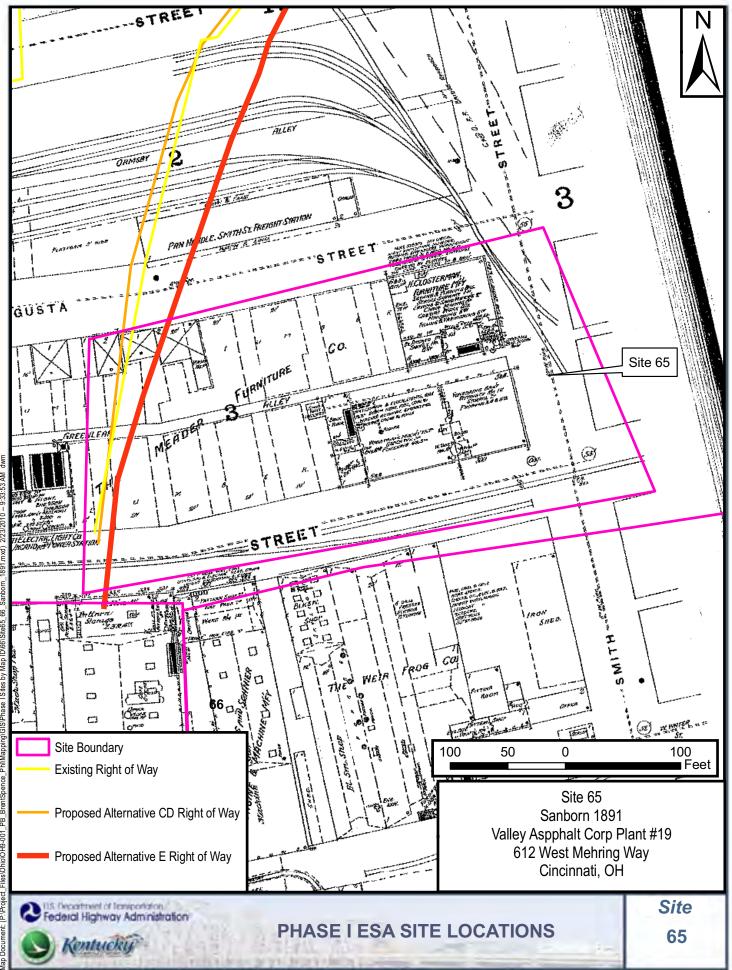


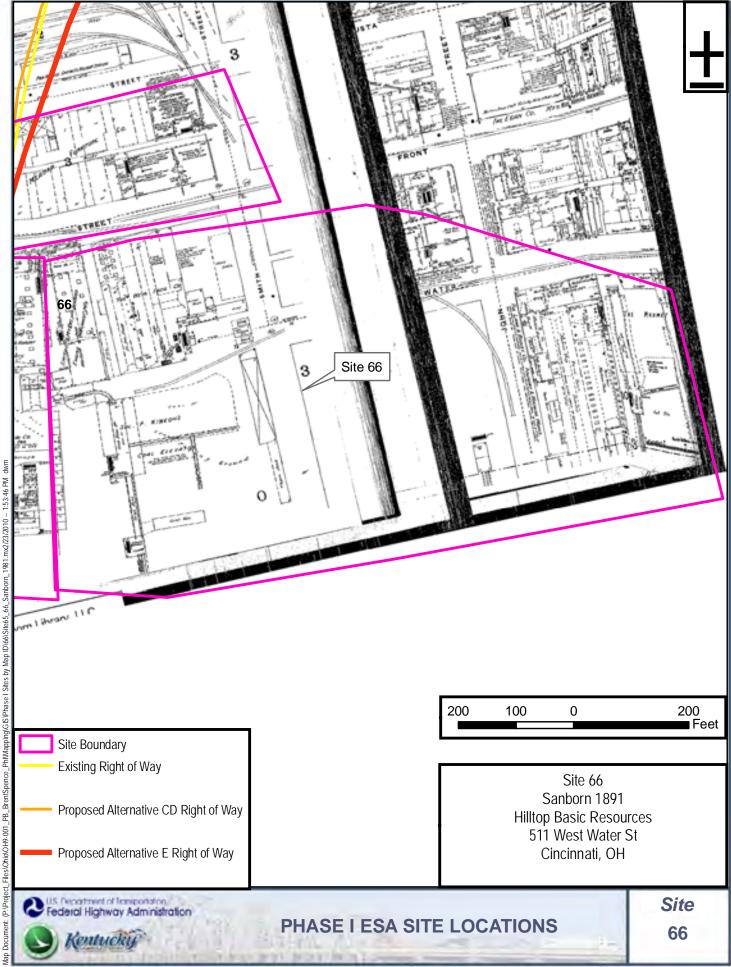




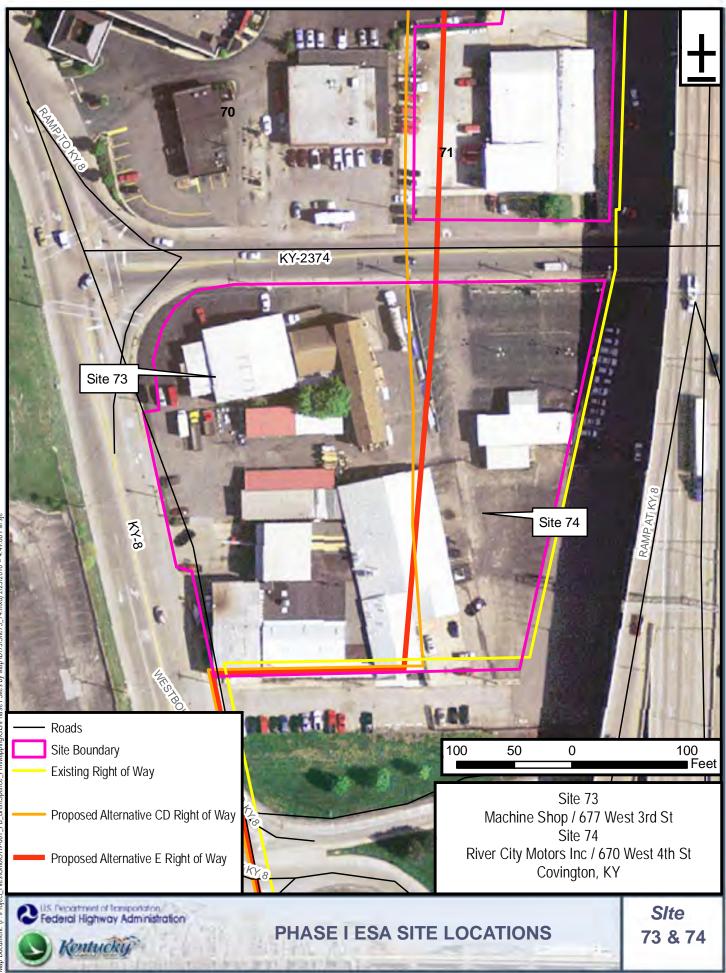
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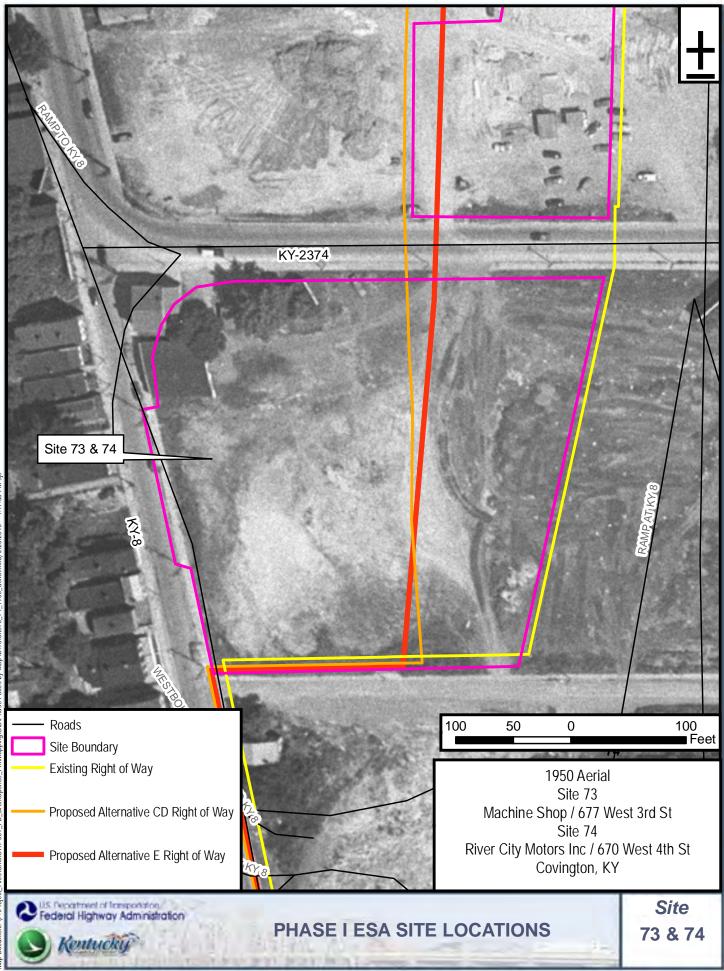




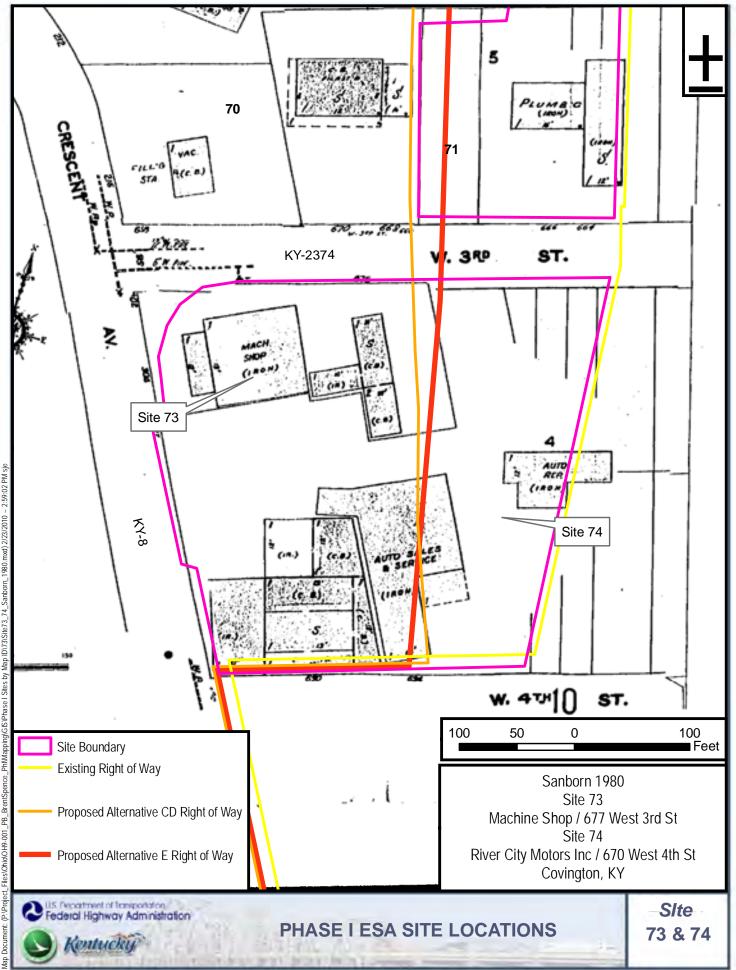


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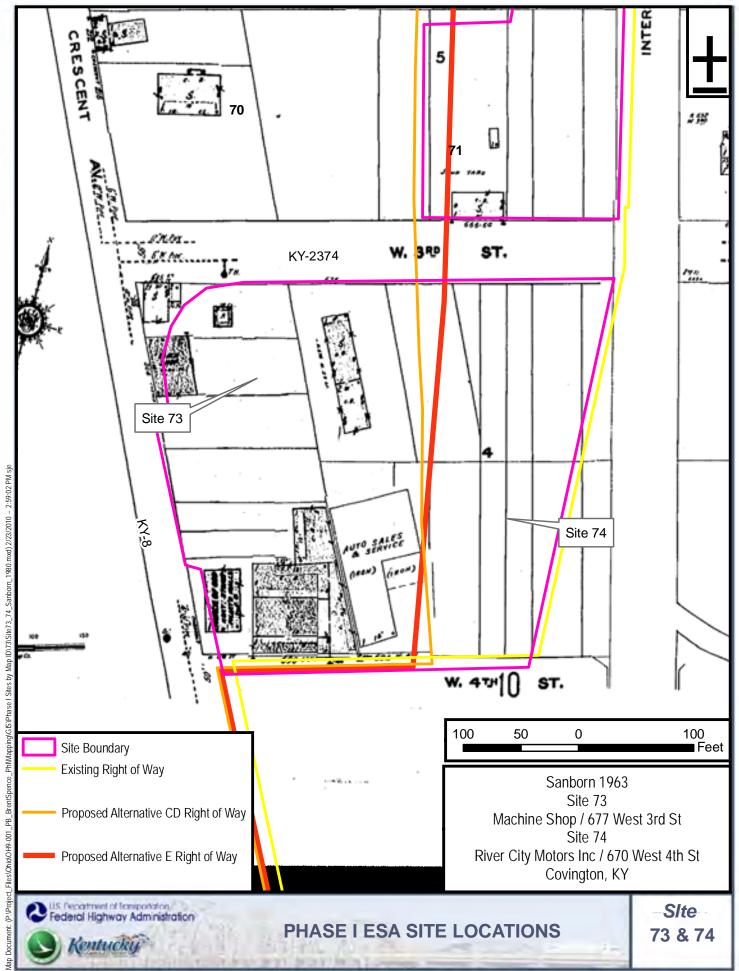




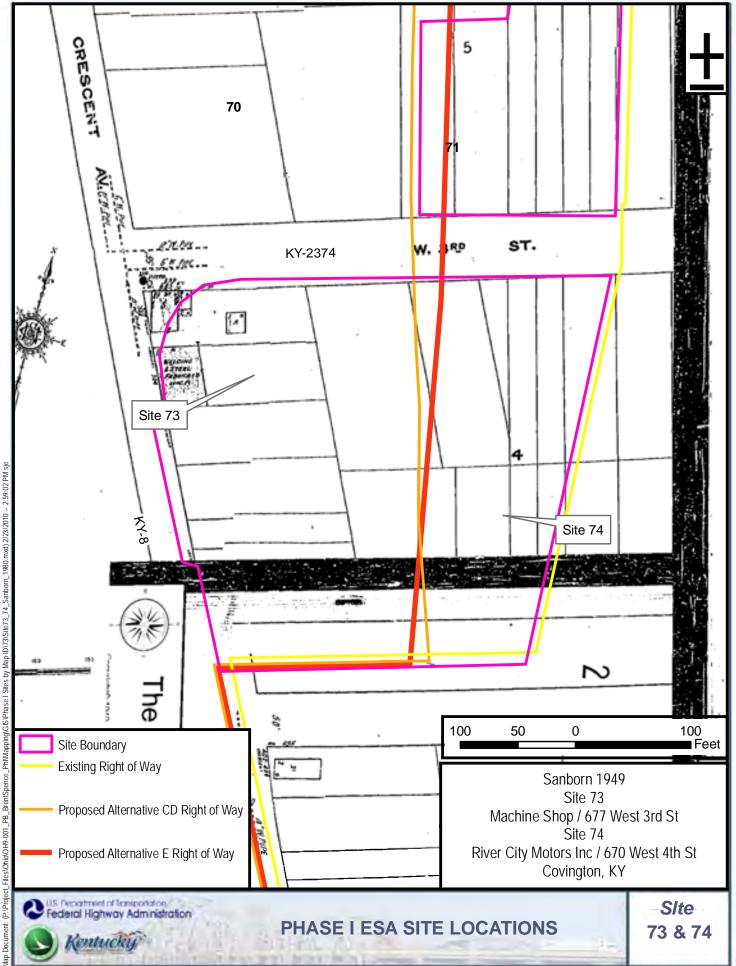
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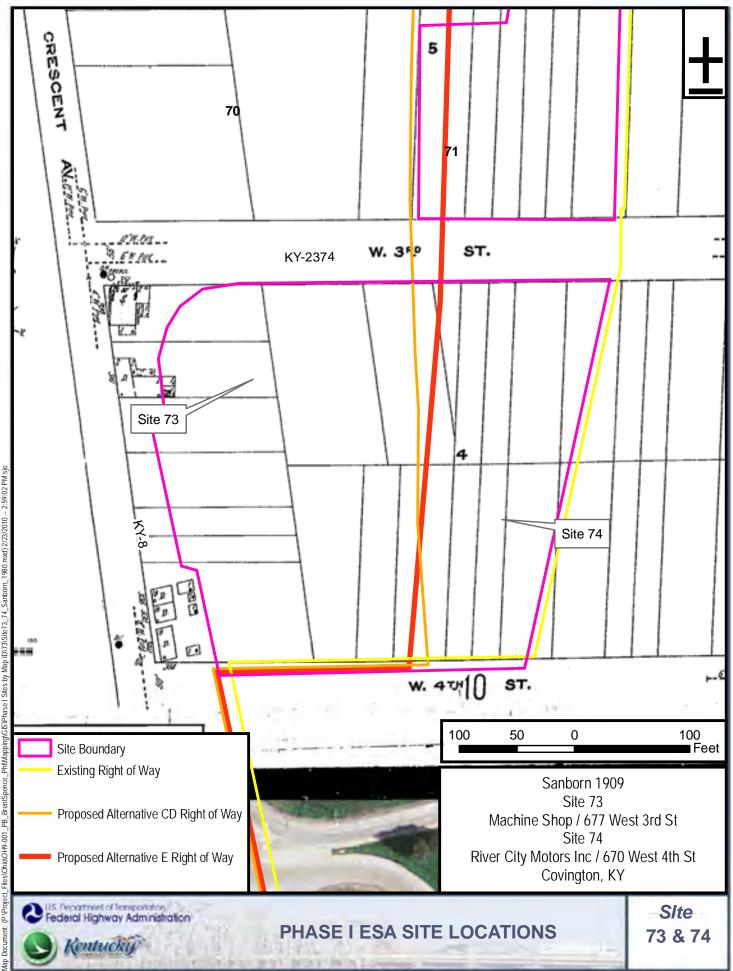
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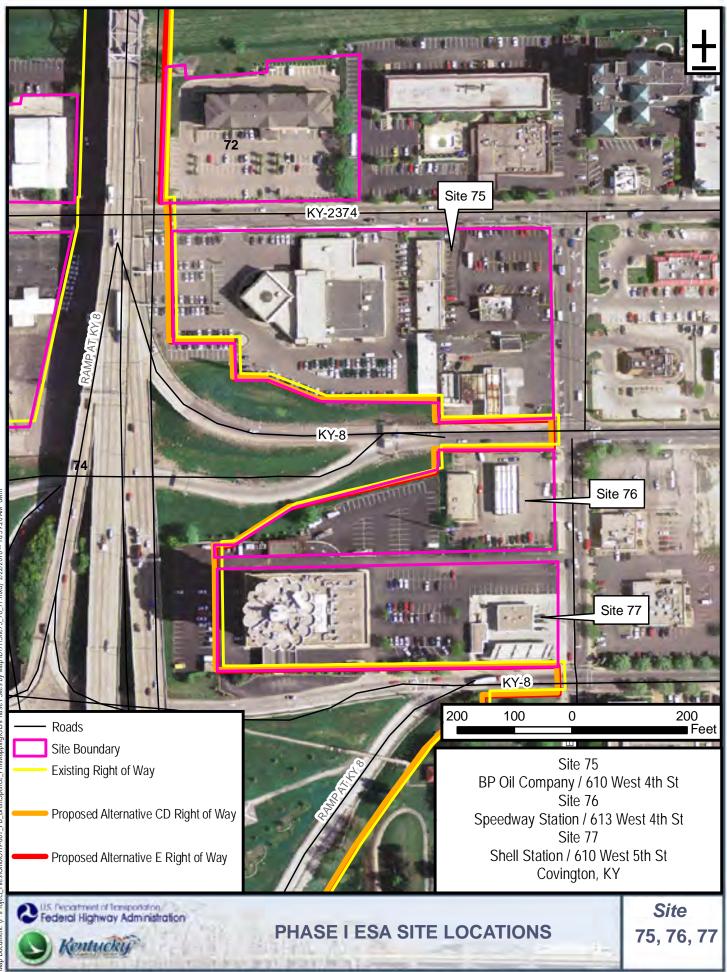
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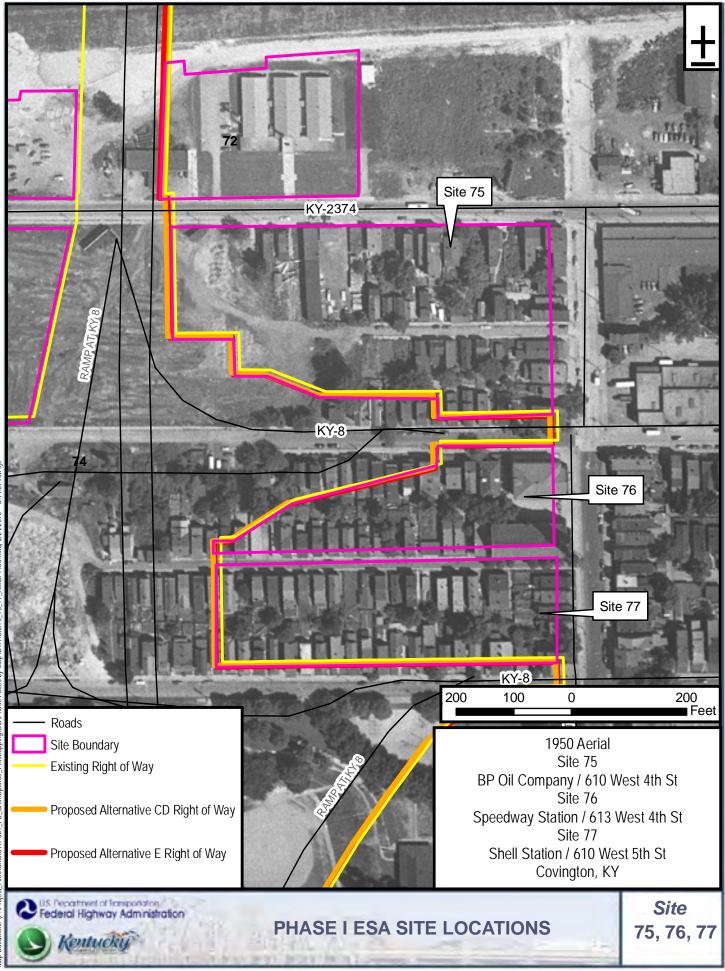


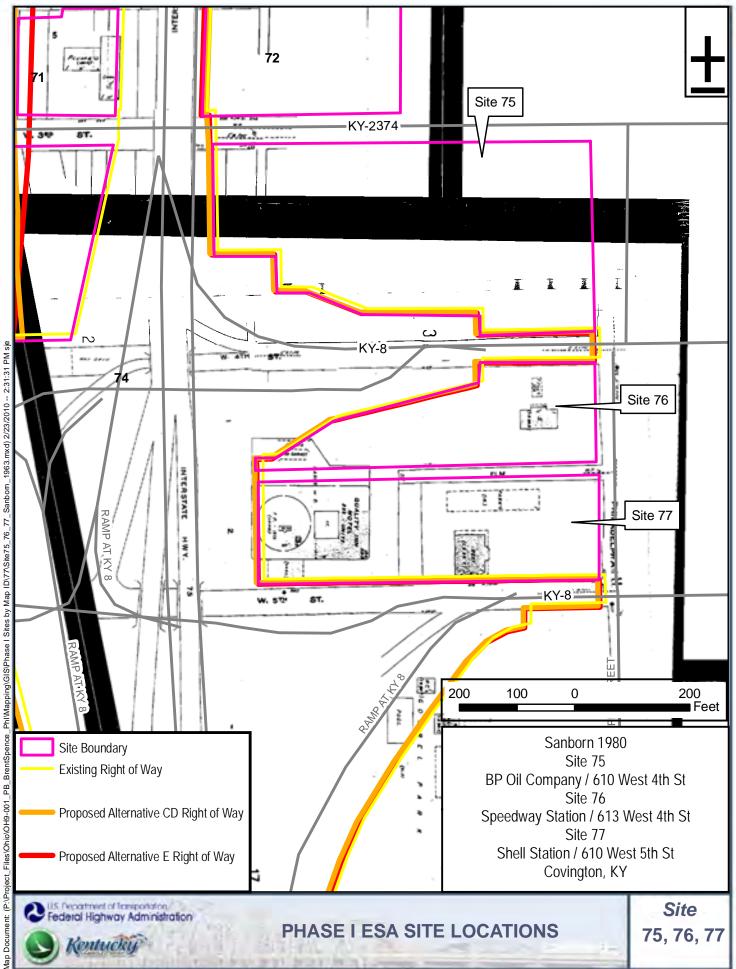
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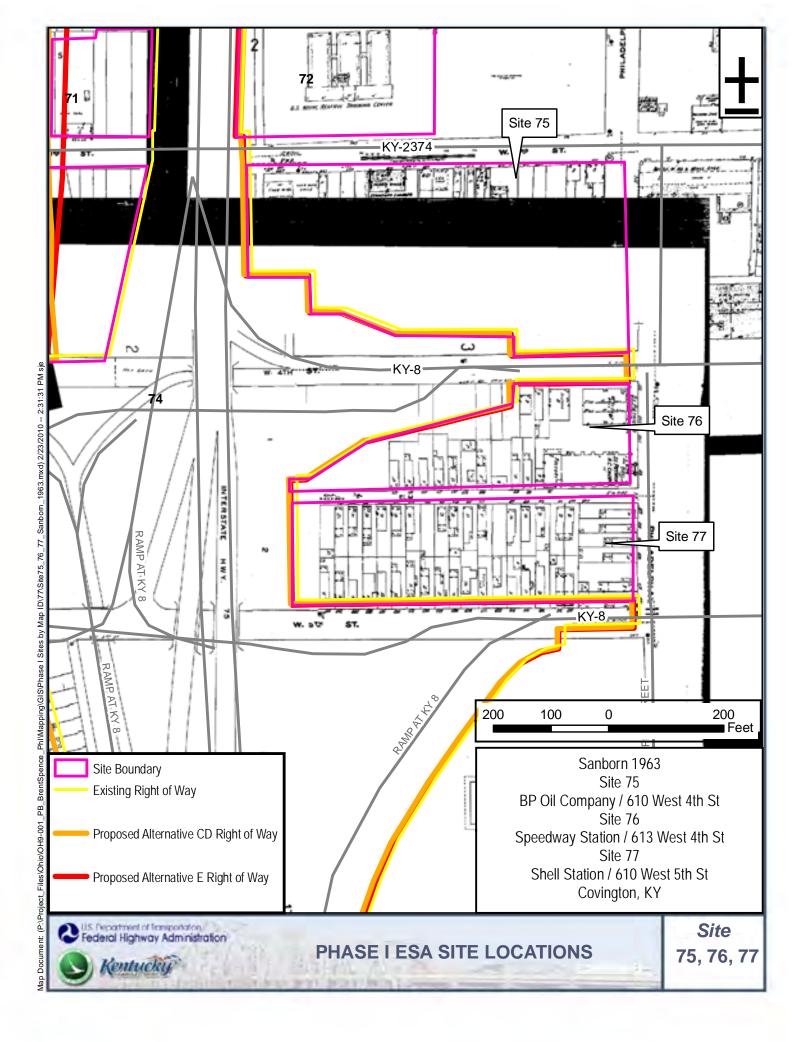
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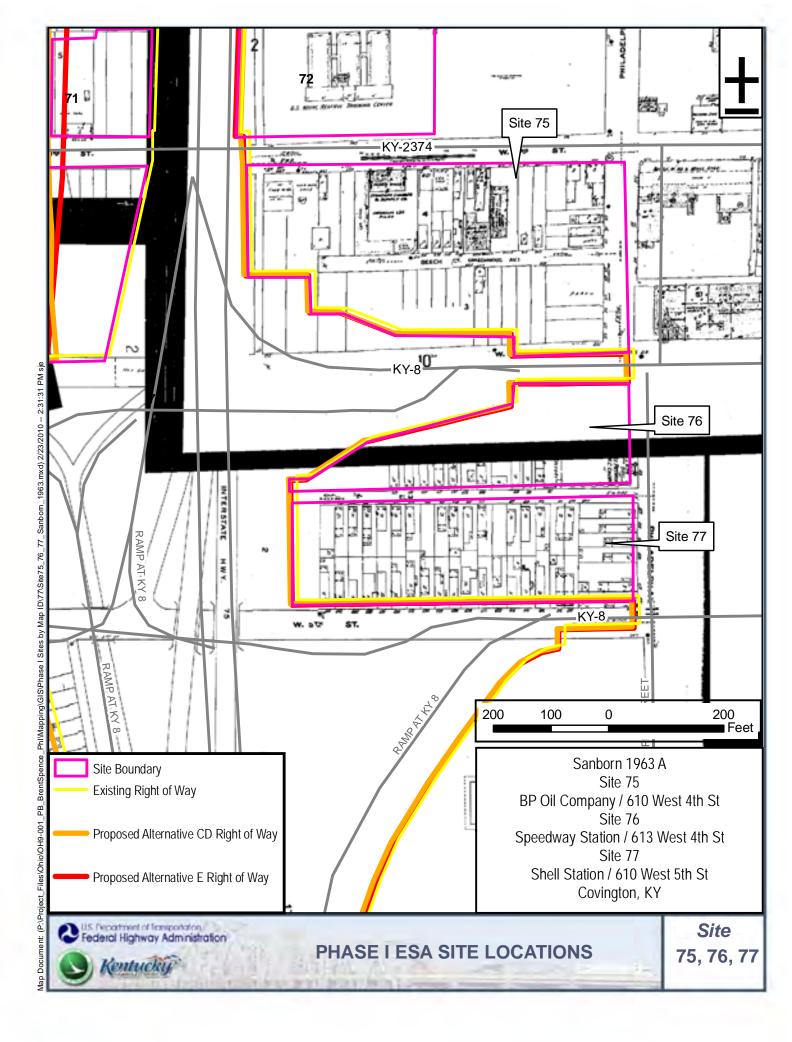


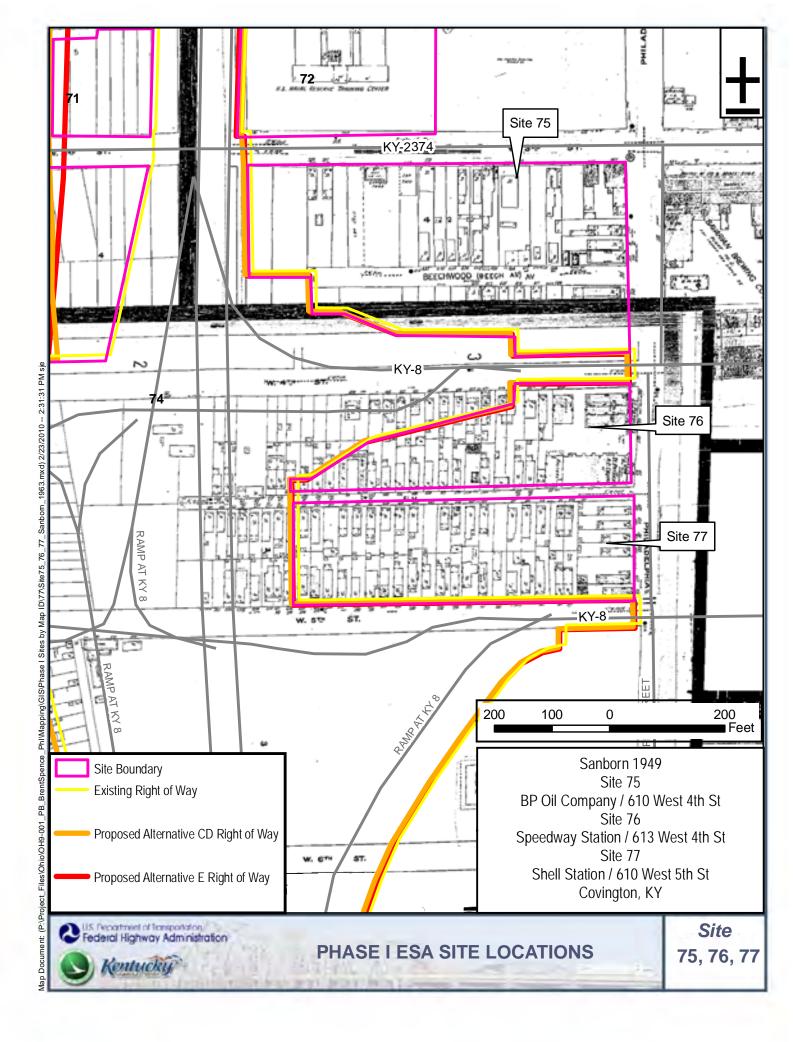


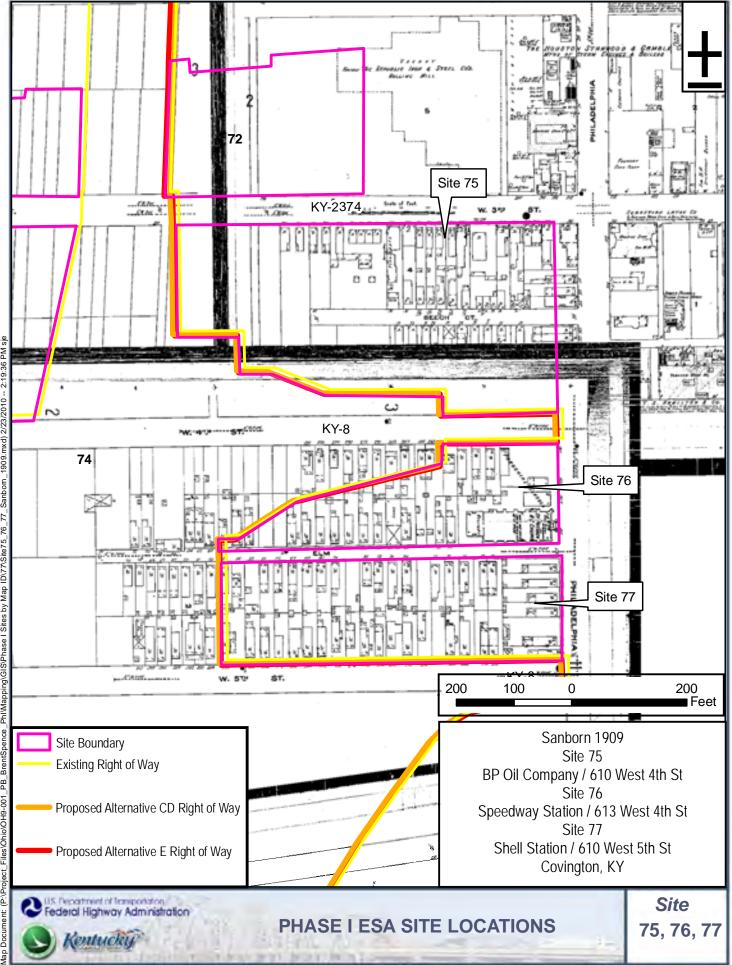


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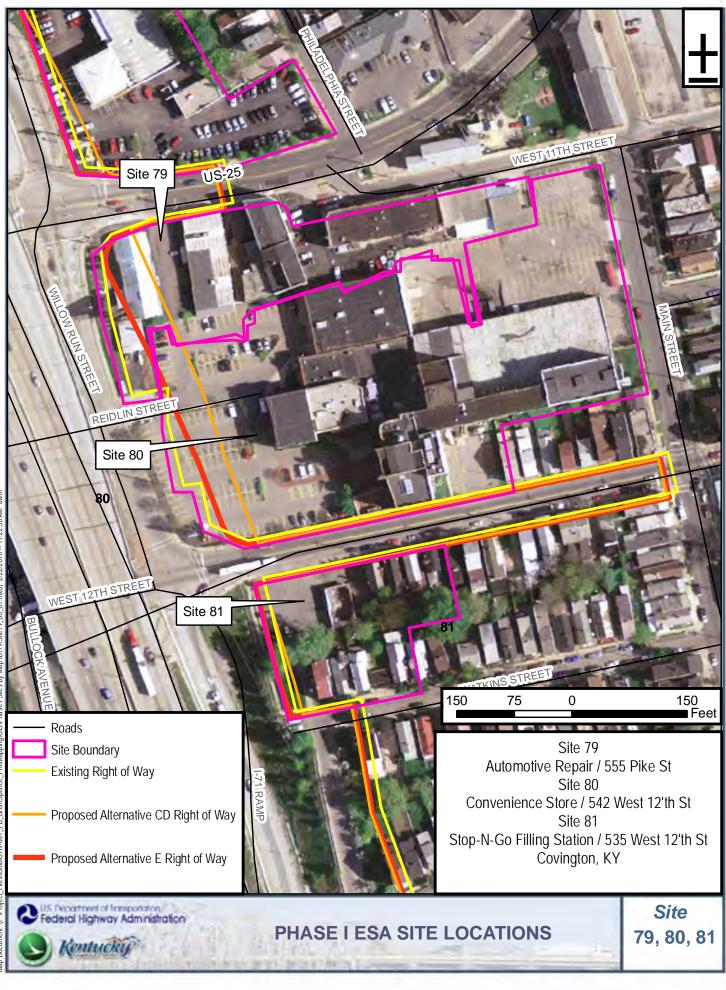




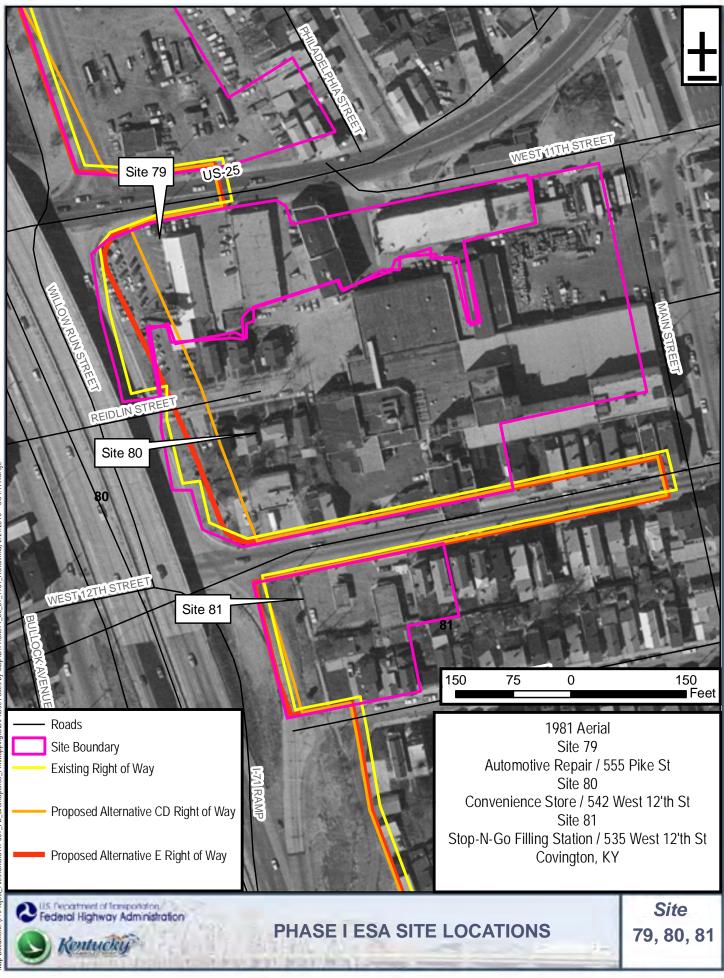




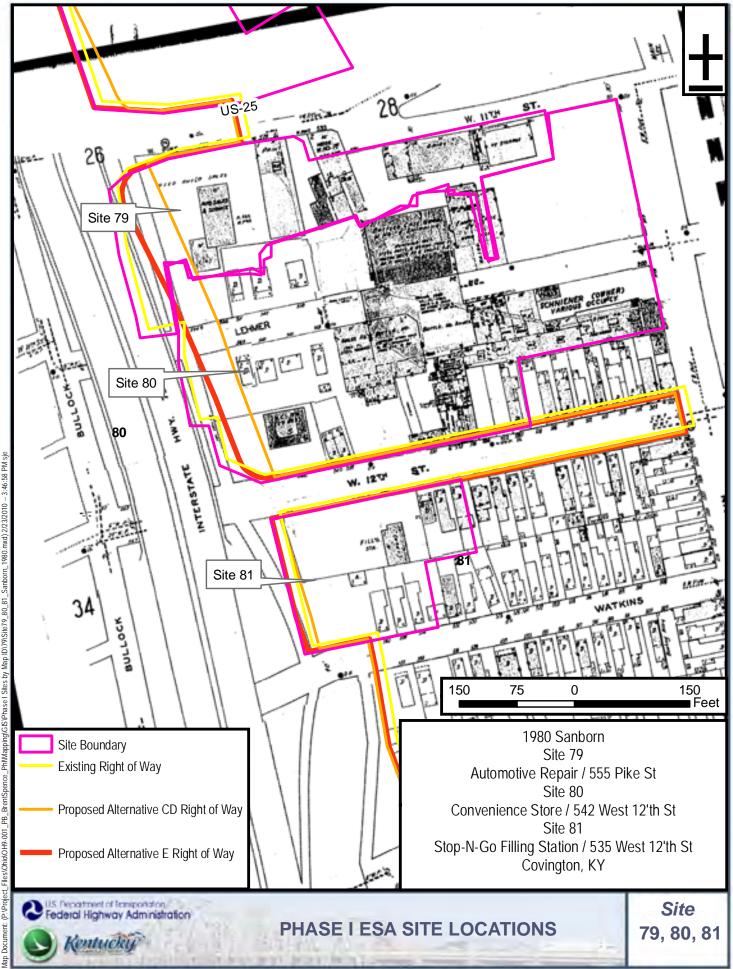




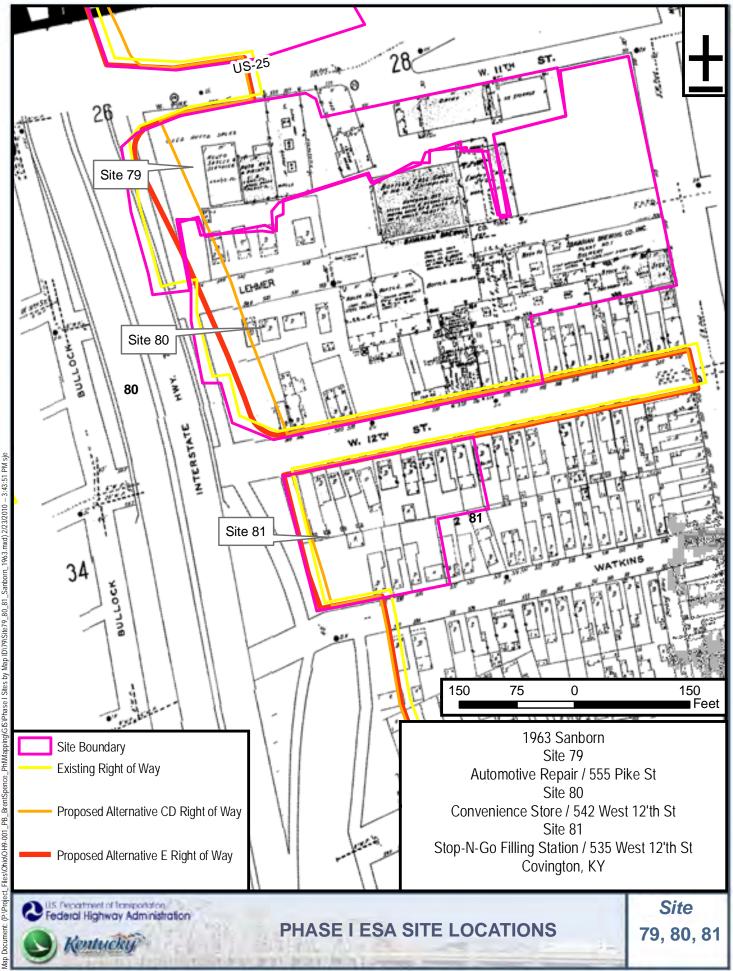
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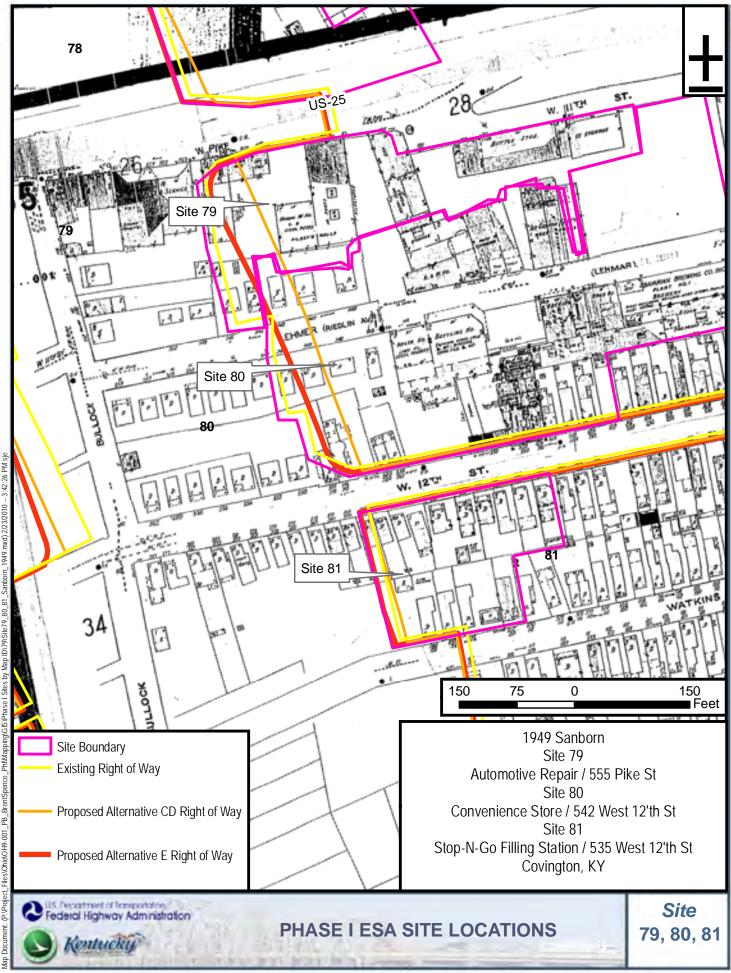
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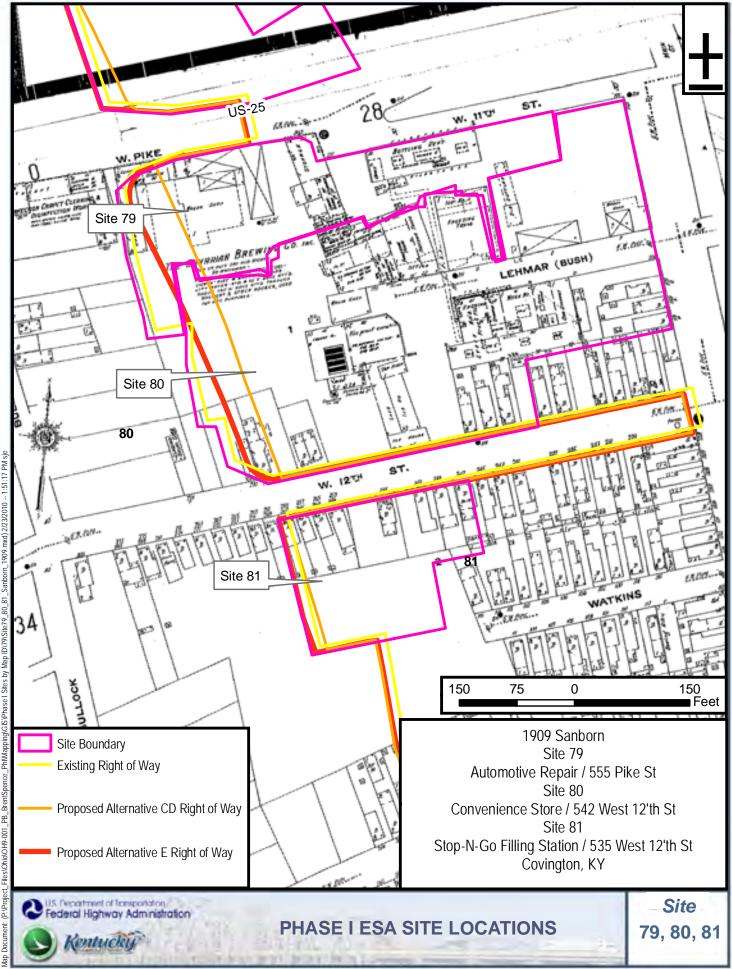
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**APPENDIX D – AGENCY FILE REVIEW MATERIALS** 

Site 3



Appendix Item # 3

Ohio Department of Commerce Division of Stare Fire Marshal Durend of Underground Storage Tank Regulations 8895 St. Main St. + P.O. Box 687 Reynoldsborg, OH 43068-9009 (614) 752-7928 FAX (614) 752-7942 9999 com state.ob.05

Bob Taft Governor

L1. Governor Jeanette Stradley Director

September 8, 2003

GEORGE E FERN COMPANY 1100 GEST STREET CINCINNATI OIL 45203 SITE: SUNSET JANITORIAL SUPPLY CO-US FREMOVAL ON 9/4/03 1151 HARRISON AVE CINCINNATION RAMILTON COUNTY FORMER INCIDENT #3151735-00 RELEASE #31002571-N00001

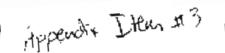
#### RESIDENT NO FURTHER ACTION STATUS REGARDING CLOSURE REQUIREMENTS.

Dear Strict Modern.

Unink you for your cooperation. If you have any questions, glease contact out office at (614) 752-7935

Sincerely, Kelly J. Gill of Supervisor Connective: A Sile File ×.

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#### EXECUTIVE SUMMARY

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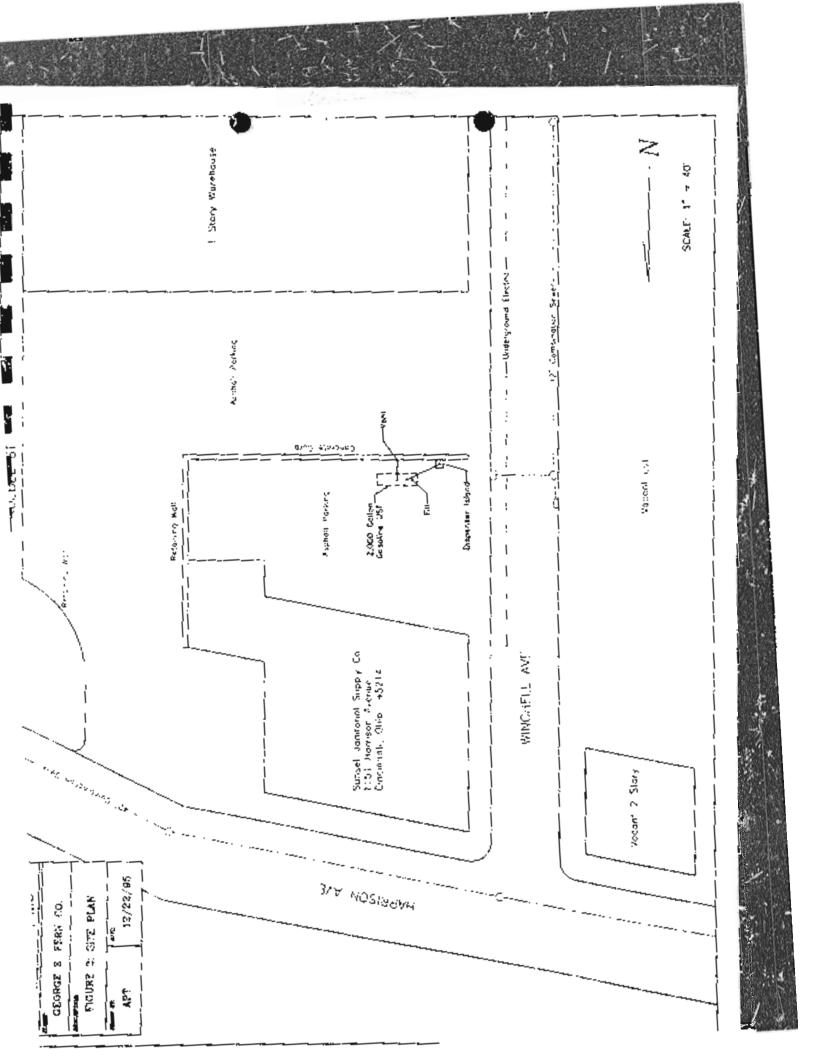
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Beginning and concluding on December 21, 1995, Petro Environmental Technologies, Inc. con/U20rd the closure and assessment of an abandoned, unregistered 2,000 gallon gasoline underground storage tank (UST) system for the George E. Fern Company. The UST system was located at Sunset Janitorial Supply Co., 1151 Harrison Avenue, Cincinnatr, Ohio 45214. The UST was of single walt steel construction, estimated to be approximately 40 years old. The UST was used a former fuel dispensing system, which had been abandoned for approximately 20 years. All tank removal activities were witnessed by City of Cincinnati UST Coordinator/Inspector, Gary Brehm.

Visual evaluation of the UST site did not identify any surficial staining. Excavation of subsurface soil and backfill around the UST and dispenser area revealed only slight signs of petroleum hydrocarbon contamination. No water was encountered during the excavation and closure procedures for the UST system.

Using the BUSTR Site Feature Scoring System, a score of 50 was calculated for this site, placing it into Category 2 on the Action Level Table. The analytical results for both the closure and the stockpile samples were below Category 2 Action Levels. Therefore, the stockpiled soil (approximately 100 cubic yards) was returned to the excavation and covered with clean aggregate fill material. Approximately 20 gallons of residual liquid and sludge were recovered from the UST system. This material was disposed of by Ceorge E. Fern Co. personnel.





Site 4



Ceorge V. Vamavich, Gaverner

Nancy S. Chiles, Director

Orvision of State Fire Marshall Bareau of Underground Storage Tank Regulations 6450 Pos Avenue - Suite 304 - Dayton, OH 45414-2546 (513) 454-7500 - FAX (513) 454-7503

Aprl. 9, 1993

Dr. Michael H. Sunn Cifies of the City Manager City of Circinsati Room 26, City Rail Cincinnati, DR 45202 RE: Old Brighton Garage 2147 Winchell Avenue Cincinnati, OH Hamilton County Incident #318476-00

Deuc Dr. Gunne

The State Fire Marghal. Bureau of Underground Storage Tank Regulations, (FK, BUSTR) has seconded all regulard information regarding corrective actions of an underground storage tank (UST) release at the aforementioned location. Upon review of the adalytical country and required reports, at this time BUSTR is not requiring further corrective actions of any contamination resulting from petroleum UST activity at the facility.

Due to information potentially not discovered or revealed, nothing in this latter whould be interpreted as a guarantee or warrantee that no problems exist at the inforementioned location. In addition, this latter does not release the responsible party (committee responsibility and liability under sections 3737.88 through 3737.89 of the Ohio Revised Code and other state laws and regulations of under the Fuderal Clean Mater Act, Resource Conservation and Recovery Act. of Comprehensing Constructions, Responde, Componention, and Clebility Act for revisions consistions revising from any release of contaminants to the Polyroment.

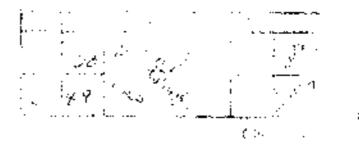
if you have any quencious about this determination, you can contact me at (614) (52-794).

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kga \_\_\_\_\_Y #318476-901



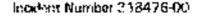


Petro Environmentel Technologies, Inc.

March 4, 1993

Mr. Verne Ord BUS18 - Dayton Field Office 6450 Pole Avenue Dayton, Ohio 45414

RE: Brighten Street PET Project 91-005



Dear Mense:

The enclosed sampling table is a detail of the analytical results from quartarly sampling from the old Brighten Street Garage. Copies of the analytical results hall been previously forwarded as the results were made known. The results confirm that shoe has been no consistent amount of petroleum contamination round in the monitoring weils.

RECEIVER

262 0 8 293

SAVE O

We have used the new score sheet from BUSTR to determine acceptable levels of contamination. Enclosed, please find a completed score sheet for this location. By comparing the water sampling results to the score sheet, we find that all hample results are below action levels in the scoring. It is our professional opimion that the there is no environmental risk associated with petroleum contamination and that a NFA letter is warranted.

Should you require additional information, please contact me at our new music more 489-6789

Most sincriely.

ENVIRONMENTAL TECHNOLOGIES, INC. Márk S. Máthei

Enclos:vol

cc: George Vila Mike Guan

CALLSON MARKING AN AREA SHOWN

11 0 852 (85) West Chatter (256 45)01 11 nove 25 (513) 779-7766 · FAX (513) 779-7807

9257 Crosenall-Caylon Road West Chester, Onto 165069 Physics effects

# BRIGHTON STREET

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Petro Project No. 91-005									
	06/06/91	08/05/91	11/14/91	02/12/32	05/22/92	08/24/92			
MW-1									
TRPH	1.23	0.8	0.29	U.127	BOL	BDI.			
BENZENE	BDL	BOL	BDL	9DL	BOL	BOL			
TOLUENS	BDL	BDL.	BDL	BDL	BOL	BOL			
ETHYLBENZENE	BOL	BOL	BDL	BÔL	10E	301			
XYLENE	BDL	BDL	BDL	BDL	BDL	5DL			
MW-3									
TRPH	1.52	BDL	1.12	3.11	8DL	8DL			
BENZENE	BDL	BOL	BDL	BDL	BDL	BDL			
TOLUENE	BDL	BDL	BOL	BDL	BDL	BDL			
ETHYLBENZENE	BOL	BOL	8DL	80L	BÓL	BDL			
XYLENE	BDL	BDL	6DL	0.002	80!.	BOL			
MW-4									
TRPH	4.17	BOL	BDL	0.121	BDL	1.98			
BENZENE	BOL	BDL	8DL	BDL	BOL	BÓI,			
TOLUENE	5 6DL	BOL	BOL	BDL	0.04	50L			
ETHMLBENZENE	BOL	BOL	90L	8DL	BÓL	BDL			
YYLENE	BOL	BDL	BÐL	. 8DL	BOL	BDI,			

ONITS

Water - ug/l

F:/COM\_JC6S191/005WVFLUT9L

80	ISTR ACTION LEVEL	
	ITY OF CINCINNATI BRIGHTON SYREET To Project No. 91-005	
CONSTITUENT	CATEGORY 3	MAX. SITE LEVELS
TOTAL SCORE	51-70	55
SOIL BTEX	.335/9/14/67	N/A
GROUNDWATER BENZENE	0.005	BOL
OPOUNDWATER TOLUENE	1	BÓL
GROUNDWATER ETHYL <b>EE</b> NXENE	0.700	801
GROUNDWATER XYLENE	10	8DL
SOIL TPH (GASOLINE)	450	N/A
SOIL TPH (OTHERS)	904	8DL

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DIVISION OF STATE FIRE MARSHAL BUSTR

#### SITE FEATURE SCORING SYSTER WORK SHEET

Project Name: BRIGHTON STREET Project Manher: 91-005

\_\_\_\_ .

	COLUMN A		COLUMN B		COLUMN C		COLUMN D	
SITE "Extored	SCORE 20 IF TRUE	SCORE	SOORE 15 IF TRUE	SCORE	SCORE 10 LF TRUE	SCORE	SCORE 5 IF TRUE	SCORE
1. Distants of UST system for prosest drinking whose supply well or intake currently in use.	>1000 feet	20	301-1000 feet	-	<301 feet		INSIDE OF DESIGNATIO SENSITIVE AREA	
2. Average depth to ground water.	>50 feet		31-50 feet		15-30 feet or unknown		<15 feet	
3. Predominant soil type or substitute	CLAY OR STAL2		SILT OR CLAYEY SANDS OP FINE SANDSTONE		SILLIY SAND OR YINE SAND OR SANDSTONE OR LINONOVAN		CLEAN SAUD OR GRAVEL OR CON- GLOMERATE	\$
4. Natural and/or narrade conduits or receptors.	<\$ stnicg	20	8-10 points		11-13 points		>\3 points	
SJITOTAL:		40		0	- <u></u>	10		5

TOTAL SCORE = \_\_\_\_55

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In the report of the Library states from

#### TABLE 1.

DIVISION OF STRUE VIRE MARSHAL BUSIX

> SITE FEATURE FUMBER 4 CORFSILLER

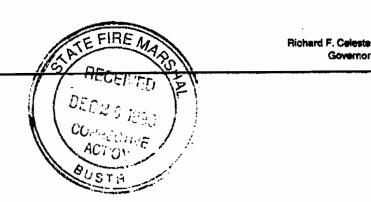
Project Name: ERIGHUN STREET Project Marber: 91-005

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SITE PEATURES	POINTS	
Basements or subsurface foundations within 100 feet. of the UST system	4 Points	<b>0</b>
Starn sever within 50 feet of the UST system	4 Points	<u> </u>
Sanitary system within 50 fast of the UST system	4 Points	d
Septic system leach field within 50 feet of the UST system	2 Foint;	. <u></u>
Water line main within 50 feat of the 1757 system	1 <b>Po</b> ágoz	<u>_</u>
Natural gas line wain within 50 feat of the UST system	1 Point	<del>k</del>
leodrock area prome to dissolution along joints of fractures (i.e., cavos and sinkholes) within 100 feet of the UST system	1 Point	   <sup>Q</sup>
Faults or known fractures within 100 feet of the TEST system S	   1 Point	<b>0</b>
Buried telephone/ elevasion cable main within 50 feet of the UST system	1 Point	<u>1</u>
Buried electrical cable main within 50 feat of the CST system	1 Point	
τοr:	al foints :	=7



P.O. Box 1049, 1800 WaterMark Dr. Columbus, Ohio 43266-0149 (614) 644-3020 Fax (614) .44-2329



Governor

December 21, 1990

Srinivas Krishnan PEI Associates 11499 Chester Rd Cincinnati,OH 45246

FAX & 513-782-4807

Dear Sir:

This letter is in response to your phone calls of Dec 19 & 20, 1990 in which you requested permission to backfill an excavation. This excavation is located on the property known as the Old Brighton Garage site in Cincinnati, Ohio.

From the analyses provided to this office by FAX on 20 December, it appears that concentrations of residual contaminants in the area of the excavation are at a level which would allow backfilling of the excavation to take place.

Permission to fill the excavation with clean earth does in no way relieve the presently responsible party from further site investigation or remediation if necessary, nor does it constitute a concurrence with any conclusion presented in the reports as currently submitted to the BUSTR Office of the State Fire Marshall.

Review of the Risk Assussment has been tasked to the Technical Support Unit of the Division of Emergency and Remedial Response. Due to their work schedule, the review date will be sometime near the third week in January 1991.

Questions should be directed to either Hallie Serazin, DERR-TSU or to Harley Bowers at 614-644-2091.

Sincerely,

les M Bowere

Harley Bowers, DERR

cc: Sue Nitecki, DERR Vern Ord, BUSTR

# 318476 -00

ENVIRONMENTAL RISK ASSESSMENT OF OLD BRIGHTON GARAGE PROPERTY CINCINNATI, OHIO VOLUME 1

Submitted by:

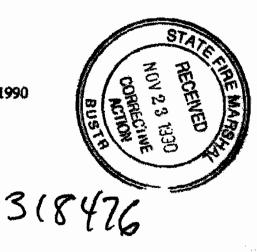
PEI ASSOCIATES, INC. 11499 Chester Road Cincinnati, Ohio 45246

PN 62034

Submitted to:

City of Cincinnati Room 320, City Hall 801 Plum Street Cincinnati, Ohio 45202

November 12, 1990



#### EXECUTIVE SUMMARY

This document presents an assessment of the potential on-site and offsite public health risks associated with the property formerly occupied by the Brighton Garage Facility located on Winchell Avenue in Cincinnati, Ohio. The property was formerly the site of a bus and trolley garage that included several underground fuel and oil storage tanks. The building was demolished in 1984 and all underground tanks were reportedly removed.

The environmental investigation of the site began in 1988 and included several soil gas surveys as well as the collection of numerous soil and groundwater samples. Elevated levels of certain chemical compounds presumably attributable to leakage or spillage from underground tanks were identified by analyses for TPH. Elevated levels of lead were also identified in certain locations. The areas containing the highest concentrations of TPH and lead were excavated and the soil was hauled off-site for proper disposal. During the course of these excavation activities, several additional underground tanks were located and removed. All underground storage tanks are believed to have been removed from the site. Residual TPH levels on the property range up to 1300 ppm.

As part of this risk assessment study, additional soil samples were collected to identify and evaluate the hazardous components of the residual TPH levels and to characterize the lead. Soil samples were analyzed for volatile organic compounds utilizing EPA Method 8240, SW846. Several samples were also analyzed for leachable lead used the Toxicity Characteristic Leaching Procedure (TCLP). The chemicals identified at the site include carbon disulfide, n-hexane, n-heptane, toluene, acetone, methylene chloride, trichloroethylene and tetrachloroethylene. No leachable lead was detected in the samples.

A risk assessment was performed to quantify the potential risks associated with the chemicals identified at the site. The risk assessment included a site characterization, the selection of indicator chemicals, an exposure assessment, and a risk characterization. Off-site risks to the public are believed to be the major receptor due to potential ingestion/inhalation of the volatile materials emanating from the facility. On-site risks to construction workers were also evaluated. The assessment focused on trichloroethylene (TCE) and tetrachloroethylene (PCE) which are the only potential carcinogens (B2 carcinogens) identified at the site. The noncarcinogenic (Class D) chemicals identified at the site were also evaluated to determine the potential risks attributable to them.

Direct contact with contaminated soil or inhalation of volatilized components were determined not to be of concern. The tank areas and areas with the highest TPH concentrations have been excavated. An office/ warehouse will be built resulting in a cover of either asphalt or concrete on most of the property. The building will not have a besement and there will be no residents living in the facility.

There is no current potential for human exposure to groundwater either on- and off-site. Ingestion of contaminated groundwater is not considered to be of concern since no drinking water wells are being used or will be used within a mile radius of the property. Further, the surrounding properties have been served by City water for over twenty years and the proposed office/warehouse will be served by City water.

Target Levels were established for acetone, carbon disulfide and toluene. The levels of these compounds were found to be below the calculated target levels for both soil and water. Since reference doses have not been established for n-heptane, n-hexane and methylene chloride, target levels could not be calculated for these compounds. However, the levels of heptane and hexane were below the levels at which the toxic effects on test species have been observed.

The levels of TCE and PCE on the site are below the threshold limit values (TLVs) and the short term exposure limit (STEL) by several orders of magnitude. While the carcinogenic risl levels of these chemicals slightly exceed the standard of  $1 \times 10^{-6}$  set by Ohio EPA, the hazard indices for the worst- case condition is believed to be less than one. Furthermore, exposure to these chemicals is unlikely since the areas with the highest concentrations have been excavated and since the site is expected to be paved with asphalt or concrete. By limiting access to the site during construction and providing protective gear to the construction workers, the potential for direct contact with contaminated soil or inhalation of volatilized components will be minimal.

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# SECTION 1 INTRODUCTION

This report evaluates the potential on-site and off-site public health risks associated with the property formerly occupied by the Brighton Garage facility located on Winchell Avenue in Cincinnati, Ohio. The risk assessment utilizes information compiled as part of an ongoing environmental investigation that began in 1988 and has included the excavation, removal, and proper disposal of a significant quantity of contaminated soil and construction debris.

The environmental investigations conducted at the site to date car. be divided into three stages:

Stage 1	Pre-acquisition Phase I environmental audit conducted by PEI Associates that included soil gas surveys of the property and the collection of soil and ground-water samples. (1988 - 1989)	
Stage 2	Further soil and groundwater sampling conducted as part of a Phase II Site Assessment. Soils containing elevated levels of total petroleum hydrocarbons were also excavated and disposed during this stage of the investigation. (1989-1990)	
Stage 3	Additional soil samples were collected and analyzed using	,

EPA Method 8240 and Toxicity Characteristic Leaching Procedure (TCLP) test (1990)

The chemical constituents identified on the site has been attributed primarily to leaking underground storage tanks that contained gasoline, diesel fuel and/or used oil. Most of these tanks were removed when the building on the property was demolished in 1984. However, excavation activities conducted during the environmental investigation located two additional tanks which were subsequently removed and properly disposed.

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#### 2.2 Historic Land Use

Aerial photographs maintained in the offices of the Hamilton County Soil Conservation Service confirmed that the property was used by the City of Cincinnati for public vehicles prior to 1938. Street cars and, later, buses were stored, maintained, and dispatched for service in the Brighton and Queensgate areas of the City of Cincinnati from this facility.

A large garage-type building occupied the property east of Winchell Avenue. Offices occupied the northeast portion of the building between Harrison Avenue and Koebel Street. The site reportedly contained three 12,000 gallon fuel tanks, one 5,000 gallon fuel tank containing gasoline and diesel, and two 500 gallon used oil tanks. The approximate location of these tanks was identified from the demolition specifications issued by the City of Cincinnati Engineering Division on January 31, 1984. A vehicle parking area was located west of Winchell Avenue.

In 1977, operations at the facility were transferred to a new facility by Queen City Metro and the building became vacant. It was demolished in 1934 and the demolition specifications required the underground tanks to be removed and the pits to be backfilled with bank run gravel. In addition, interior basement walls were to be removed and concrete floors and bottoms of pits broken up into pieces no larger than one foot square to allow percolation of water.

There was no evidence in any of the aerial photographs of any dumping occurred or the property or in the surrounding area.

## 2.3 Previous Environmental Investigations

The environmental investigation of the site began in September, 1988 and was conducted in three stages. The investigation included soil gas surveys as well as soil and groundwater sampling. A significant amount of contaminated soil was removed from the site during the course of the investigation. A description of the activities conducted during each stage of the environmental investigation is discussed in this section. A detailed discussion of the soil and groundwate: sampling results is presented in Section 3.

#### 2.3.1 Stage 1 - Phase I Environmental Audit

A Phase I environmental audit of the property was conducted by PEI Associates on behalf of a prospective buyer of the property. The audit was conducted in two steps. The first step assessed the most of the property east of Winchell Avenue. This assessment included a soil gas survey of the property and subsequent soil and groundwater sampling. The results of this audit were presented in a report entitled "Report on Phase I Environmental Survey of Old Brighton Garage Property, Cincinnati, Ohio," dated September 26, 1988 (Appendix A), and supplemented by letter reports dated October 6, 1988 covering the soil gas survey (Appendix B), and dated November 28, 1988 covering the soil and groundwater sampling at the site (Appendix C).

The second step of the Phase I environmental audit involved the investigation of three small parcels of land adjoining the property previously audited. These parcels were located immediately to the north, south, and west across Winchell avenue, respectively. A soil gas survey was conducted on each of these parcels and the results are presented in the document entitled "Report on Phase 1 Environmental Survey of Winchell Avenue Property Cincinnati, Ohio," dated April 14, 1989 (Appendix D).

#### 2.3.2 Stage 2 - Phase If Site Assessment and Remedial Activities

Prior to completion of the Phase I audit by PEI Associates, Westinghouse Environmental Services began a site investigation on the property on behalf of the owner, the City of Cincinnati. Soil and groundwater samples were collected during the Phase II site assessment. During the course of this investigation, the soil and Sebris from two areas of the property were excavated and removed. An additional 5,000 gallon underground storage tank was also discovered and removed. The results of this investigation are contained in a report entitled "Old Brighton Garage Phase II Environmental Site Assessment," dated July 20, 1990 (Appendix E).

In August, 1990, Petro Environmental Technologies conducted additional excavation activities in the area north of the main excavation. Soil and debris was excavated from an area measuring approximately 185 ft. by 65 ft. and another underground tank was discovered and removed. Soil samples were collected from the area excavated and from two test pits dug on the north side of the property. The results of these activities are presented in an undated report set forth in Appendix F.

### 2.3.3 Stage 3 - Soil Sampling and Analysis Using Method 8240 and TCLP

On October 2, 1990, PEI Associates drilled 6 soil borings on the property. The purpose of this sampling effort was to identify the organic constituents in the soil that contributed to the high TPH levels previously detected and evaluate the leachability of the lead. Based on conversations with representatives of the Department of Solid and Hazardous Waste, Risk Assessment Division at the Ohio Environmental Protection Agency, each of these samples were analyzed for volatile organic constituents under EPA Method 8240, SW846. In addition, 2 samples for analyzed for leachable lead utilizing the Toxicity Characteristic Leaching Procedure (TCLP). A total of 9 samples from different "hot spot" locations and depths were collected and analyzed.

# SECTION 3 HAZARD IDENTIFICATION

Hazard identification characterizes the potential dangers or threats to human health and the environment posed by the detected chemical constituents in light of the site specific circumstances. This section will discuss the nature and magnitude of the chemical constituents identified on the property and the efforts used to reduce the potential hazards associated with those constituents.

3.1 Stage 1 - Phase I Environmental Audit

The environmental survey conducted in September, 1988 found no visible evidence of environmental risk or impairment on the property or in the immediate vicinity. However, since the removal of the underground tanks and any associated soil contamination could not be confirmed, a soil gas survey was conducted on October 3, 1988. The concentration of organic vapors found during this survey is shown in Figure 3. The results are summarized below:

- The highest organic vapor concentrations were found in the south and southwest portions of the property in the vicinity of several former underground storage tanks.
- A concentration of over 10,000 pm was found in one location near Winchell Avenue. Around this location, readings of 1700 and 2000 ppm were found. These locations were subsequently excavated.
- Organic vapor concentrations of 1000 ppm and 1300 ppm were encountered at two adjacent locations at the extreme southern end of the property in an area believed to have been the backfilled UST pits. Concentrations ranging from 30 ppm to 350 ppm were found in an area surrounding these locations. These locations were subsequently excavated.

- 11 -

YOUNG & BERTKE SHEET METAL PRODUCTS PARKING YOUNG & BERTKE SHEET METAL PRODUCTS KOEBEL STREET Figure 3. Location and concentration (ppm) of soil gas samples (10/3/88). 9. 9. 120300 00 F00 F00 Ŕ 8. 치· 음· τ. ş. PATTERSON STREET 8 ş. <u>8</u>. 8. 8. 8. VACANT **X**• 2. WINCHELL AVENUE 8. ę. 8. 8. <u>8</u>+ Ę. 8. <u>ğ</u>. 8. z. SOIL GAS CONCENTRATION (ppm) ₿ I 8. 2. ANNIN . FEET 8 STICLER JANITORIAL SUPPLIES . LEGEND NOSIERIA 0 SAMPLE LOCATION Z

- 12 -

 The organic vapor concentrations for the remainder of the property were generally less than 100 ppm.

To further assess the extent of contamination at the site, soil and ground water sampling was conducted between November 7 and 10, 1988. Two soil borings (designated Hole A and Hole B) were installed near the southwest boundary of the property adjacent to the location where the previous soil gas survey indicated a total hydrocarbon concentration of 10,000 ppm. Table 1 describes the results of the chemical analysis of the samples. These results are summarized below:

- Gasoline and diesel fuel were found in all of the samples. The concentration of gasoline ranged from 5 to 120 ppm. The concentration of diesel ranged from 20 to 2700 ppm. This area was subsequently excavated
- A small amount of lubricating oil was found in the soil collected from Hole A. No lubricating oil was present in the soil sample collected in Hole B.
- A small amount of xylene was present in all but one of the soil samples. Benzene was also present in one of the soil samples.
- The ground water sample did not contain a floating layer of petroleum product. However, a small amount of gasoline and diesel fuel were found dissolved in the ground water.

Subsequently, another soil gas survey was conducted on three small parcels of land bordering the property previously audited. The location and results of the soil gas survey are shown in Figure 4. The results are summarized below:

Parcel 1 - Organic vapor concentrations did not exceed 40 ppm.
 Consequently, no significant environmental risk was indicated.

	Sample Number: Location: Sample Type: Depth (JL): Date Collected: Units:	MW-A MW-A Water - (ug/U)	A-2 A Soli 15-4 (ppm)	A-5 A Soil 10-11.5 (ppm)	B-2 B Saŭ 2.5-4 (ppzn)	8-5 8 504 10-11_5 (ppm)
Petroleum Pr	aducta					
Gasolin	5	50	3	5	120	41
Direct	-	480	110	<b>Z</b> 0	2700	590
Lube O	ii	ND	120	10	ND	ND
Volatile <sup>*</sup>	winds (ug/ Kg)					
Benzen	F	ND	ND	1	ND	0.06
Ethylbu	- 1120119	ND	ND	3	ND	ND
Toluery		ND	ND	2	ND	ND
Xylenes	-	ND	ND	0.3	1.6	0.7

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Detection Limits:	Soila (ppm)	₩ater (µg/L)
Benzene	0.05	5
Tohere	0.1	1
Ethylbenzene	0.1	1
Xylenes	0.3	3
Lube oil	200	500

Table 1. Analytical Results of Soil and Croundwater Sampling During Phase I Audi (PEI Associates - November 28, 1988)

- 14 -

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- Parcel 2 Organic vapor concentrations did not exceed 250 ppm. The slightly elevated organic vapor concentrations were attributed to residuals from vehicles formerly parked on the property and did not appear to be attributable to the migration of contamination from any leaking underground storage tanks.
- Parcel 3 Organic vapor concentrations ranged from 10 to 300 ppm. This parcel encompassed an area where organic vapor concentrations had been previously detected between 1300 and 2000 ppm. The area had been excavated and the soil allowed to aerate.
- South of Parcel 3 Organic vapor concentrations between 5 and 1000 ppm were found near the the Young & Bertke building.
- 3.2 Stage 2 Phase II Site Assessment and Remedial Activities

Prior to initiating the Phase II site assessment, the large area shown in Figure 5 was excavated to a depth of approximately 15 feet. This area encompassed the locations of the elevated TPH readings previously detected as well as the locations of Hole A, Hole B, and the groundwater monitoring well that were sampled during the Phase I audit. During the course of the excavation, an additional 5,000 gallon underground storage tank was located and removed. Upon completion of the excavation, field screening of the soils on the sides and bottom of the pit indicated that no significant volatile organic compounds were present.

During the Phase II assessment, attempts were also made to further examination of the property using metal detectors. These examinations have been inconclusive because of the amount of rebar reinforced concrete and debris buried on the property. However, all of the areas where underground tanks were located have been excavated and examined. The former locations of the underground tanks is based on the demolition specifications issued by the City of Cincinnati Engineering Division on January 31, 1984. Therefore, no further tanks are believed to be located on the property.

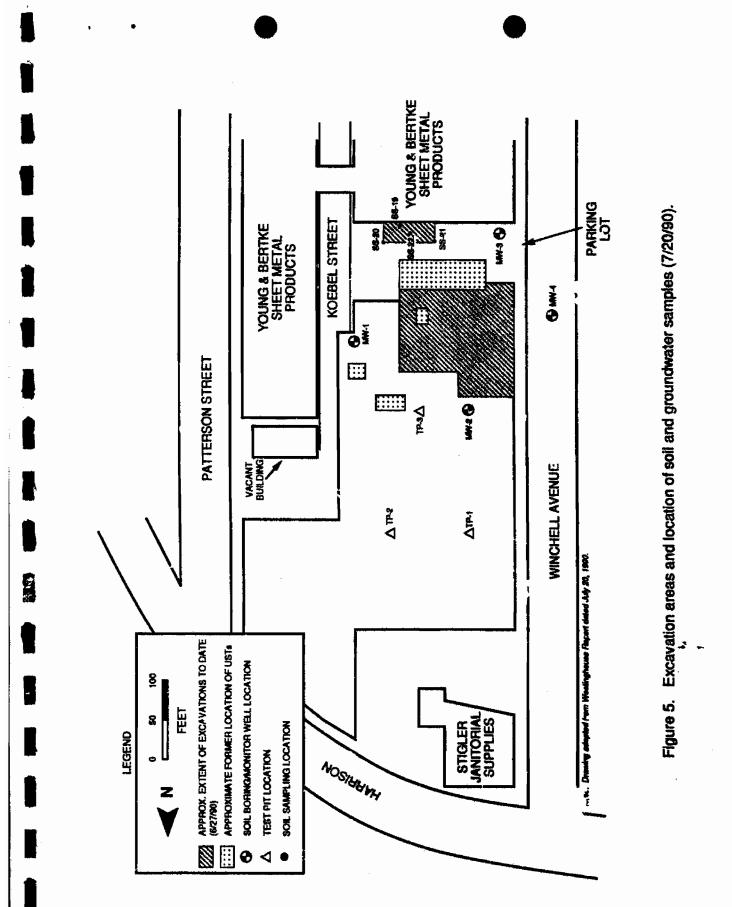
An additional 19 soil samples and 4 groundwater samples were collected from the property. Four soil borings were drilled around the perimeter of the large excavation area and two samples were select. from each boring for laboratory analysis. The borings were then converted to monitoring wells and sampled. Soils samples were also collected from the excavated pit located on the southeast end of the property adjacent to Young & Bertke and from three test pits in the area north of the main excavation area. The purpose of these test pits was to determine the lateral extent of soil contamination at the site. The location of the soil and groundwater samples is shown in Figure 5. The analytical results from the soil and groundwater sampling are presented in Tables  $\angle$ , 3, and 4. The results are summarized below:

- The concentration of TPH in one soil sample northeast of the pit was 8700 ppm. The concentration of TPH in the remainder of the soil samples ranged from non-detect to 1300 ppm.
- None of the samples contained benzene or xylene and only one ple contained ethylbenzene (2 ppb). Six complex contained toluene ranging from 2 ppb to 44 ppb.
- Total lead concentrations ranged from 8 ppm to 210 ppm.

No significant amounts of chemical compounds were detected in the groundwater monitoring wells.

- None of the priority pollutant metals detected in the groundwater exceeded their respective Maximum Contaminant Levels (MCL)
- The total concentration of BTEX in the groundwater did not exceed 6 ppb.
- No TPH was detected in three of the four wells. The fourth well (MW-3) contained 1.1 ppm TPH.

Because of the elevated levels of lead and TPH detected in the soil samples north of the main pit, additional soil excavation and removal activities were initiated. A second pit shown in Figure 6 was excavated. The



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Detaptive interver. Location:	B-1	8-1 1-7	1-70 19-7	19-2 19-2	22	2.20	6-21 1-1	i 2			Max. Conc.
Depth (ft.)	46	16-18	9	81-91	Ĵ,	8-10	16-18	4	16-18	Detection	for
Sample Type:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Limits	<b>EP Toxicity</b>
Data Collected:	4/26/90	4/26/90	4/26/90	4/26/90	4/26/90	4/26/90	4/26/90	4/27/90	4/27/90		(mg/L)
Total RCRA Metals (mg/Kg)											
Arsenic	1	ı	I	ł	:	2.4	ł	1	1	0.5	5.0
Barium	1	ł	ł	1	1	R	1	ł	;	0.5	107.0
Cadmium	1	1	:	1	1	Q	1	3	ı	6.5	0.1
Chromium	1	ł	ı	I	ł	6.7	ſ	;	:	1	5.0
Lead	17	7.8 (4)	210	6,6 (3)	8.6 (4)	3.1 (4)	÷	2	6.6	2.5	5.0
Mercury	1	ł	1	;	1	ĝ	ſ	;	1	0.25	0.2
Selenium	ł	I	ı	1	ł	CN N	1	I	;	0.5	1.0
Silver	1	ł	ł	ł	1	QN	f	1	ł	0.5 U	5.0
Volatile Compounds (µg/Kg)											
Benzene	Ð	Q	QN	QN	ĝ	(I) <b>QN</b>	Q	QN	Q	6	1
G Ethylbenzene	Q	Q	Q	6	Ð	(2) QN	QN	QN	Q	2	1
Totuene	e	6	ŝ	\$	2	<b>4</b> 0 (1)	0 Ž	Q	QN	3	1
Xylents	Q	Q	QN	QN	Q	(2) CN	â	N	Q	3	ı
Total Petroleum Hydrocarbons (mg/Kg)	CIN ())	210 (6)	(9) (6)	110 (6)	36 (5)	780 (7)	Ŷ	QN	ĝ	10	ł
। 9 € 6 € € 6 € 6	Not analyzed None detected - Detec Detection limit 5 µg/k Detection limit 0.8 mg Detection limit 1 mg/l Detection limit 25 mg/ Detection limit 20 mg/ Detection limit 100 mg	Not analyzed None detocted - Detoction limit 10 Detoction limit 5 µg/Kg Detoction limit 0.8 mg/Kg Detoction limit 1 mg/Kg Detoction limit 25 mg/Kg Detection limit 100 mg/Kg	an limit i0 Kase as								

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 Table 2
 Analytical Results of Soil Sampling During Phase II Site Assessment

 (Westinghouse Environmental Services Report - July 20, 1990)

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Sample Number: Location: Sample Type: Data Collected:	S-1 MW-1 Water 5/11/90	S-2 MW-2 Water 5/11/90	5-3 MW-3 Water 5/11/90	S-4 MW-4 Water 5/11/90	Detection Limits 1/12/04	Maximum Contaminant Levels (MCLs)
Fotal Priority Pollutant Metals (mg, L)						
Arsenic		•	0.04	0.01	0.005	30
Antimony			ND	ND	0.2	
Beryllium			ND	ND	0.005	
Cadmium		-	ND	ND	0.01	5
Chromium		-	0.06	0.09	0.02	100
Copper			0.29	0.03	0.01	—
Lead	0.14	0.07	4.8	ND	0.05	5
Mercury			ND	ND	0.005	2
Nickle		••	0.17	0.05	0.04	
Selenium		-	ND	ND	0.005	50
Silver	-		ND	ND	0.01	
Thallium			ND	ND	0.1	
Zinc			0.41	ND	0.01	
Volatile Compounds (µg/Kg)						
Benzene	ND	ND	1	ND	1	5
Ethylbenzene	ND	ND	1	ND	1	700
Taluene	ND	ND	2	ND	1	2000
Xylenes	ND	ND	2	ND	1	10000
Total Petroleum Hydrocarbons (mg/Kg)	ND	ND	1100*	ND	25	

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-	Not analyzed
	No standards set
ND	None detected - Detection limit 10
٠	Detection limit 100 µg/L
44	MCLs based on drinking water standards and
	Health Advisory Levels

Table 3. Analytical Results of Groundwater Sampling During Phase II Site Assessment (Westinghouse Environmental Services Report - July 20, 1990)

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													•
	Sample Number.	5 <b>2</b> -13	R-8	<b>35-</b> 21	25-22	I-I'II	TP1-2	172-1	TP2.2	1-641	2-611		
	Loutions	Euc. Di	Eac. 1%	Exc. Pit	Eve. Pt	<b>1</b> 7-1	Ţ	<b>T</b> P-2	77.7	СШ.	Ē	Mar Conc	-
	Depth (it.)	8	ŝ	ł	6-7	0-2	10-12	24	11-R	\$	10-12	for	
	Sample Type:	105 201	Soft	Sel	19 18	Ē	Ţ	(10) (2)	(105	Ę.	3	EP Tauloty	
	Living Collected:	2/22/90	04/12/12	2/27/90	06/12/2	06/51/9	6/15/30	6/15/40	6/15/90	06/51/9	6/15/90	(1/100)	
T <sub>e</sub>	Total Metals (erg/Kg)												
	Lour:	494	Y'HS	14.Ê	72	I	I	I	1	ŀ	I	5.0	-
Vol	Vojetije Carapounda (ug./10g)												
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	Setury D.	9	ĝ	ĝ	Ê	,	t	•	ŀ	ı	ı	ľ	
-	Tohese	2	₽	ð	ę	1	ţ	ı	1	1	,	ı	
21 -	Xy lense	Ŷ	£	£	Ŷ	I	:	1	•	:	ſ	۲	
Tota	Total Petroleum Hydroartoors (og/Kg)	<b>8</b>	220	ŧ	<b>9</b>	ŝ	ę	30	ç	8	8	t	
	•	Not so that	1										
	Ŷ	None detected	iteration - Detection	- Detection Bart 10									

Table 4. Analytical Results of Soil Sampling During Phase II Site Assessment -

Is defined under RCRA ( 40 CFR \$561 24) Meditation concentration for BPT paid by

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(Westinghouse Environmental Services Report - July 20, 1990)

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soil on the north side of the pit was excavated until TPH levels of less than 100 ppm were detected. However, excavation on the east, south, and west side of the pit was restricted by the property boundaries and by the concrete walls from the foundation of the former garage. In addition, two test pits were excavated north of the second large pit to confirm the results of the previous sampling activities conducted in this area.

Soil samples were collected around the perimeter of the second excavation area and from each test pit. The location of the samples is shown in Figure 6. The analytical results of the sampling is shown in Table 5. The results are summarized below:

- The levels of TPH in the walls of the excavation ranged for nondetect to 410 ppm.
- Soil samples collected on the floor of the pit contained nondetectable quantities of TPH.
- The concentration of TPH in Test Pits #1 and #2 were 54 ppm and non-detectable, respectively. These results contradict previous sampling in the area and indicate no significant contamination.

3.3 Stage 3 - Soil Sampling and Analysis Using Method 8240 and TCLP

In order to identify the potential hazardous components of the TPH levels in the soil, six additional soil borings were installed on the property and a total of nine soil samples were collected. The location of the soil borings is shown in Figure 7. All of the samples were analyzed for volatile organics using EPA Method 8240. The samples were also analyzed for heptane, pentane, hexane, and 1-pentene. Two of the samples were analyzed for leachable lead using TCLP. The chemicals identified at the site were then evaluated for their associated toxicity.

The analytical results of the soil sampling are presented in Appendix G. The specific chemicals identified at the site and their respective hazard classification are listed below:

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YOUNG & BERTKE SHEET METAL PRODUCTS PARKING LOT YOUNG & BERTKE SHEET METAL PRODUCTS KOEBEL STREET Figure 6. Excavation areas and location of soll samples (8/9/90). PATTERSON STREET 2002 VACANT WINCHELL AVENUE €21-002 1991 ♦ 21-001 Note: Drawing animpted from Meatinghouse Papert dated July 20, 1999. APPROX. EXTENT OF EXCAVATIONS TO DATE (\$27/790) APPROXIMATE FORMER LOCATION OF USTs SOIL BORINGMONITOR WELL LOCATION ŝ FEET 8 STIGLER JANITORIAL SUPPLIES ſ LEGEND TEST PIT LOCATION NOSIBISMY Z :: 0

- 23 -

2	1-001 East Root	NEW O	HOP I	500-11 200-11	Siv wad	13-001 5W Web	NW WA	W. Floor	12-004 E Wal		NE Pue	21-009	NO-IE NBL
Culture Cultur	•∿	•	•	÷	÷Ð	•	9	2	5	1	ŧ	8	Ð
Search Type	5	3	n ș	Po5	Sol	Ţ	Soul	ilon Bolt	13	Sal	ß	J	line?
Deta Collected:	06/6/8	06/6/9	06/6/1	D#/6/8	96/6/9	06/01/0	8/10/90	06/01/8	04/01/9	8/13/10	06/11/9	06/01/9	0/01/Q
لروابها فمعمومه وموارق													
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	ŝ	Đ	£	ę	ĝ	Đ	Ŷ	Q	£	ę	Ċ,	Ę	Ŷ
Tciene	Ş	ŝ	22	QN	Q	Ģ	0.05	Ŷ	Q	ę	Ŷ	ę	Ŷ
x,	2	£	Ŗ	Q	ŪN.	0.046	0. NB	ŝ	£	Q	GN	ĝ	Đ
Total Pendesan Hydrocarkare (mg/Eg)		Ŷ	Q	DIE	22	01F	8	ON N	ŝ	£	Q	æ	ę

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ND Nore detected

Table 5. Analytical Results of Soll Sampling During Phase II Site Assessment (Petro Environmental Technologies Report - August, 1990)

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<u>Class</u>	Chemical
D	Acetone
	Carbon disulfide
	n-Heptane
	n-Hexane
	Methylene chloride
	Toluene
B2	Trichloroethylene

Tetrachloroethylene

These chemicals have been used in the estimation of potential health risks that may be associated with potential exposure to the chemicals. This approach was adopted so that estimated exposure concentrations and concomitant potential health risks would be adequately representative of site conditions.

Lead was not detected in the sampling and laboratory TCLP analyses for inorganic constituents in the affected soil/sediment media at the site. Therefore, lead will be excluded from further consideration in the assessment of potential health risks that may be associated with the site.

All samples were subjected to quality assurance and quality control as described in Appendix G. The data was validated from surrogate spike, matrix spike recovery, and matrix spike duplicate recovery data.

# SECTION 7 CONCLUSIONS

In this public health evaluation, the potential risks to human health associated with chemicals present at the Brighton Car Barn were evaluated. Potential pathways to the chemicals identified at the site under both currentuse and future use conditions were evaluated. Examination of the laboratory data, literature reviews, calculations to determine exposure and risk at the site, and location of the site in relation to drinking water wells indicate that no risks to the public are likely to be associated under current conditions.

There is a potential for a construction worker to be exposed to the contaminants at the site. However, exposure can be prevented by taking appropriate measures in ensuring that the workers are provided with a protective gear and limiting access to the site. Some of the conclusions that can be made are:

- All of the areas where the highest TPH and lead concentrations have been identified have been excavated and the soil has been disposed off-site. Residual levels of TPH on the property range up to 1300 ppm. Further reduction in the TPH levels is limited by the amount of location concrete foundations and debris buried on the site.
- Nor 2 of the hazardous constituents that appear to be the cause of the elevated TPH readings appear to pose any significant risk to human health or the environment. The potential hazardous constituents identified on the site include acetone, carbon disulfide, toluene, n-heptane, n-hexane, methylene chloride, tetrachloroethylene, and trichloroethylene.
- The levels of acetone, carbon disulfide, and toluene are below the target levels at the site for both soil and water. Therefore there is no risk associated with either of these three chemicals.



January 16, 1991

Mr. Mark C. Vollman Assistant City Solicitor Department of Law City of Cincinnati Room 214 City Hall 801 Plum Street Cincinnati, Ohio 45202

Re: Environmental Assessment Old Brighton Garage Site Winchell Avenue PN 62034

Dear Mr. Voliman:

The purpose of this letter is to summarize the results of the environmental investigations conducted at the old Brighton Garage site and describe the steps necessary to resolve the outstanding environmental issues. Of particular concern is the disposition of the stockpiled soil on the ... and the impact of backfilling the excavated areas. It is my professional judgement that, regardless of any future action taken by the Ohio State Fire Marshall or the Ohio Environmental Protection Agency (EPA), removal of the soil stockpiled on the site will be necessary to complete the remediation of the site. Further, backfilling the excavated areas has been approved and will neither restrict nor complicate further environmental investigations of the site. Both actions may be commenced immediately.

The environmental investigation of the Old Brighton Garage site began in 1988. During the course of the investigation, several soil gas surveys were conducted and numerous soil and groundwater samples were collected on and adjacent to the property. The investigations indicated that elevated levels of certain organic and inorganic chemical compounds were present. The source of these compounds was determined to be leakage or spillage from underground tanks formerly used to store gasoline, diesel, and used oil.

> Regional Office 11499 Chester Rd. • Cincinnati, Ohio 45246 • 513-782-4700

#318476-00

#### Mr. Mark C. Voliman

January 16, 1991

The principal chemical compounds identified during the initial environmental investigations were total petroleum hydrocarbons (TPH) and lead. All of the areas containing the highest concentrations of TPH and lead were excavated and most of the contaminated soil was hauled off-site for disposal. However, a large quantity of soil is currently stockpiled on the site.

According to the demolition specifications prepared by the City of Cincinnati, all underground tanks were to have been removed from the property when the building was demolished in 1984. However, during the course of the excavation activities, several additional tanks were located and removed. Based on the extensive investigations conducted to date, all underground storage tanks are believed to have been removed from the site.

Residual TPH levels on the property range up to 1300 parts per million (ppm). The Ohio State Fire Marshall generally requires soil to be cleaned up to 100 ppm. Since further soil excavation or the use of other remedial techniques (e.g. bioremediation) is restricted by the concrete foundation walls of the former building and by debris buried on the site, a risk assessment was conducted to evaluate the potential on-site and off-site environmental and public health risks associated with the property.

The risk assessment attempted to quantify the potential risks associated with the chemical compounds identified at the site. The risk assessment included additional soil sampling as well as a site characterization, the selection of indicator chemicals, an exposure assessment, and a risk characterization. The assessment focused on trichloroethylene (TCE) and tetrachloroethylene (PCE) which were the only potential carcinogens (B2 carcinogens) identified at the site. The noncarcinogenic (Class D) chemicals identified at the site were also evaluated to determine the potential risks attributable to them.

The risk assessment report concluded that there were no significant onsite and off-site environmental or public health risks associated with the property. More specifically, the conclusions of the report were as follows:

- Direct contact with contaminated soil or inhalation of volatilized components were determined not to be of concern. The tank areas and areas with the highest TPH concentrations have been excavated. An office/ warehouse will be built resulting in a cover of either asphalt or concrete on most of the property. The building will not have a basement and there will be no residents living in the facility.
- There is no current potential for human exposure to groundwater either on- and off-site. Ingestion of contaminated groundwater is not considered to be of concern since no drinking water wells are being used or will be used within a mile radius of the property.

Further, the surrounding properties have been served by City water for over twenty year, and the proposed office/warehouse will be served by City water.

The levels of acetone, carbon disulfide and toluene were found to be below the calculated target levels for both soil and water. Since reference doses have not been established for n-heptane, n-hexane and methylene chloride, target levels could not be calculated for these compounds. However, the levels of heptane and hexane were below the levels at which the toxic effects on test species have been observed.

• The levels of TCE and PCE on the site are below their threshold limit values and the short term exposure limits by several orders of magnitude. While the carcinogenic risk levels of these chemicals slightly exceed the guidelines set by Ohio EPA, the hazard indices for the worst- case condition is believed to be less than one. Furthermore, exposure to these chemicals is unlikely since the areas with the highest concentrations have been excavated and since the site is expected to be paved with asphalt or concrete.

The risk assessment report was submitted to the Ohio State Fire Marshall on November 27, 1990. The Fire Marshall immediately forwarded the report to Ohio EPA for comment and approval. The Fire Marshall utilizes Ohio EPA to evaluate risk assessments and regularly adopts its conclusions.

Numerous discussions were subsequently held with representatives of Ohio EPA who are responsible for reviewing and approving the conclusions presented in the report. The background of the site, sampling results, and risk assessment conclusions were discussed with these people and, in no case, did any EPA representative question either the scope of the investigation or the cc alons of the report. Among those contacted were Ms. Sandy Leibfritz from the Risk Assessment Division, and Mr. Harley Bowerson and Ms. Hallie Sarazin from the Office of Emergency Response. Each of these people will be reviewingthe Brighton Risk Assessment Report for Ohio EPA.

A formal response to the risk assessment report from the Ohio Fire Marshall and Ohio EPA is expected in approximately two weeks. However, regardless of the response, several actions must take place on the property. These include:

 Removal of the excavated soil stockpiled on the site. Because of the unknown character of this soil, refilling the holes with the soil is neither environmentally advisable nor likely to be acceptable to 
 ^hio EPA. Ohio EPA's letter of December 21, 1990, clearly states that the holes may be backfilled with "clean earth."

# Mr. Mark C. Vollm

Backfilling the excavations on the property. Ohio EPA's letter of December 21, 1990 authorized the City of Cincinnati to fill the excavated areas on the property wit's clean fill. The agency also acknowledges that the residual contaminants in the area are at acceptable levels. As is typically the case, Ohio EPA does not definitively state that no further action will be required. However, our private discussions with the author of the letter as well as with others at the agency indicate that further sampling or re-excavation of the areas to be filled will not be required. Further, it is our professional experience that Ohio EPA does not typically issue such letters unless they are reasonably certain that no further remedial action will be required in an area.

As indicated above, the discussions conducted to date with representatives of Ohio EPA indicate that the report will be approved as presented. If approved, the stockpiled soil must be removed and the excavated areas backfilled with clean fill prior to commencement of any construction activities. If the risk assessment is not approved, the City of Cincinnati will be required to conduct additional testing and/or perform additional excavation or other remedial activities before construction activities may commence. In either case, removal of the stockpiled soil and backfilling the excavated areas will probably be necessary to effectively comply with these requirements.

Based on these facts, it is my professional judgement that removal of the excavated soil and backfilling the excavated areas are necessary to advance the environmental assessment and cleanup of the site. Completion of these activities will not restrict further environmental investigations at the site or exacerbate any additional remedial actions required by the Ohio State Fire Marshall or Ohio EPA.

If you have any questions about this letter, please give me a call.

Sincerely,

Robert L. Hearn Manager Environmental Audit Group

# APPENDIX B

# LETTER PEPORT ON SOIL GAS SURVEY OF OLD BRIGHTON GARAGE PROPERTY CINCINNATI, OHIO OTTOBER 6, 1988

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October 6, 1988

# PEI ASSOCIATES, INC.

11499 CHESTER ROAD CINCINNATI, OHIO 45246 (513) 782-4700 TELECOPIER (513) 782-4807

Mr. A. J. Lestingi George E. Fern Company 1100 Gest Street Cincinnati, Ohio 45203

#### Re: Environmental Audit of Old Brighton Garage Property

Dear Mr. Lestingi:

As we previously discussed, PEI performed a soil gas survey on the property located at 2150 Winchell Avenue on Monday, October 3, 1988. This soil gas survey was conducted as part of an environmental audit of the property to determine if there was any evidence of the presence of underground storage tanks and/or contamination resulting from release of petroleum products into the soil from earlier activities at the site. As indicated in our report dated September 28, 1988, city of Cincinnati records indicate that all of the underground tanks were to be removed when the buildings were demolished in 1984. Interviews with people who witnessed the demolition have verified that at least some of the tanks were in fact removed. However, from information available, it appears that the tanks, if and when removed, were at least 20 years old. Tanks of that age and type were generally constructed of steel with little or no protection from corrosion. Moreover, the tanks probably did not have any spill or overfill protection devices. Consequently, we believe there is a reasonable probability that some type of release may have occurred from one or more of the underground tanks while they were in service. In addition, if any of the tanks were not removed, releases may be continuing.

The organic vapor analyzer (OVA) used to conduct the soil gas survey on the property measured total organic vapors in the soil. The equipment cannot identify specific organic constituents in the soil or distinguish, for example, between petroleum products released from the tanks and methane generated by decaying organic material or released from sewer lines.

The survey was performed by drilling holes into the soil approximately thirty  $(30)^7$  inches deep and one (1) inch in diameter. A total of fifty-one (51) holes were drilled at the site and analyzed.

The OVA was calibrated to methane as prescribed by standard operating procedures and the ambient (background) air was measured. The equipment measures organic vapors in parts per million (ppm). Ambient air measured with the OVA was 18 ppm.



CHESTER TOWERS

BRANCH OFFICES



DALLAS, TEXAS COLUMBUS, OHIO DENVER, COLORADO DURHAM, NORTH CAROLINA KANSAS CITY, KANSAS The concentration of organic vapors at each sampling location is shown in the attached figure. The highest readings measured with the OVA were found in the south and southwest portions of the property in the vicinity of the former underground storage tanks. An OVA reading of over 10,000 ppm was found in one location near Winchell Avenue. Around this location, readings of 1700 and 2000 ppm were found. These locations appear to be downgradient from the former location of some of the underground tanks. Organic vapor concentrations of 1000 ppm and 1300 ppm were also encountered at two adjacent locations at the extreme southern end of the property in an area believed to be the backfilled UST pits. Concentrations ranging between 30 ppm and 350 ppm were found in an area surrounding these locations. The organic vapor concentrations for the remainder of the property were generally less than 100 ppm. At the location adjacent to Stigler Janitorial Supplies where the yellow, dried material noted in our previous report is located, OVA readings of 25 ppm were detected.

According to the representatives of Cincinnati's health, fire, and sewer departments, the city has not set any organic vapor concentration guidelines for determining whether additional investigations and/or remedial actions should be conducted. Generally we recommend additional investigation at locations where concentrations of more than 500 ppm are present. As noted earlier, the organic vapor survey cannot readily distinguish between different organic constituents in the soil and, consequently, the source(s) of the high OVA readings in the south and southwest portion of the property cannot be identified from the vapor analyzer results.

The soil gas survey provided no evidence that any of the underground tanks were still on the property. All of the tanks appear to have been removed. However, the evidence is sufficient to suggest that some type of release of organic constituents has occurred either on the site or migrated onto the site from some other property. The magnitude or nature of the release cannot be determined from the results of the soil gas survey. Additional soil and ground-water sampling and analysis in the areas where the high organic vapor concentrations were encountered is necessary to accurately identify the source of those high readings.

Therefore, it is recommended that soil and ground-water samples be collected around the two general locations where the high organic vapor concentrations were measured.

To adequately determine the extent of contamination, we believe that it will be necessary to install four (4) soil borings to a depth of 20 feet. Soil samples will be collected at 2.5-foot intervals in each borehole. Each sample will be screened using the OVA and two samples from each borehole will be submitted for chemical analysis. Two 2-inch diameter monitoring wells should also be installed at the time of soil sampling. Upon completion, each well will be sampled for chemical analysis and to determine the presence of a floating product. All eight soil samples and the two ground-water samples will be analyzed for total petroleum hydrocarbons (both high and low boiling point fractions), benzene, toluene, and xylene. This type of chemical analysis should allow differentiation of the type (i.e., diesel, gasoline) of hydrocarbons present.

It is difficult to quantify the environmental risk or potential liability associated with the property based upon the data gathered to date. The potential cost of cleaning up any existing contamination on the site also cannot be estimated. Most of the property appears to be relatively clean. If contamination does exist on the site, it appears to be restricted to a relatively small area in the southern part or the property. However, it mull also have migrated offsite. Cleanup costs could significantly increase if contamination has migrated offsite. It is for this reason that we believe additional soil and ground-water sampling is necessary.

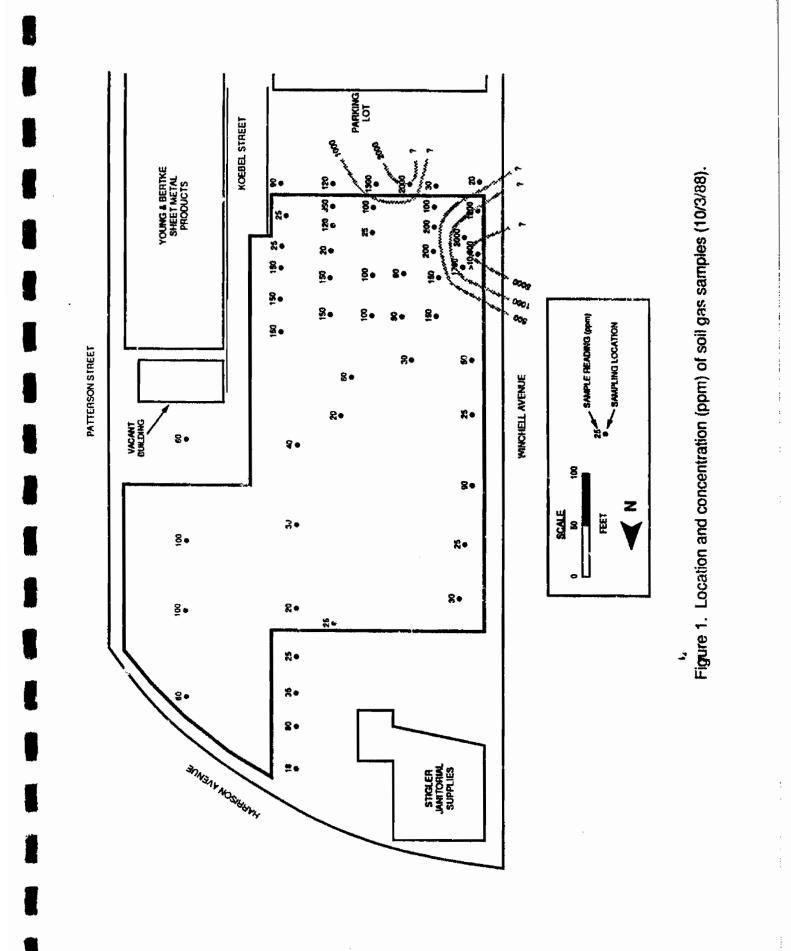
If you wish to discuss this matter further or you have any questions about this report, please give me a call.

Sincerely,

PEI ASSOCIATES, INC.

Robert L. Hearn, Manager Environmental Audit Group

RLH/ch



# PEI ASSOCIATES, INC.

11499 CHESTER ROAD CINCIMNATI, OHID 45246 (513) 782-4700 TELECOPIER (513) 782-4807

November 28, 1988

Mr. A.J. Lestingi George E. Fern Co. 1100 Gest Street Cincinnati, Ohio 45203

> Re: Results of Soil and Ground-Water Sampling at Old Brighton Garage Property, Winchell and Harrison Ave. PN 8725

Dear Mr. Lestingi:

PEI collected soil and ground water samples from the site of the Old Brighton Garage between Monday, November 7, 1988 and Thursday, November 10, 1988. Two soil borings (designated Hole A and Hole B) were installed to a depth of 16.5 feet (the depth at which ground water was encountered) and soil samples were collected at 2.5 foot intervals in each borehole. A two-inch diameter monitoring well (adjacent to Hole A at the location where the soil gas survey indicated a total hydrocarbon concentration of 10,000 ppm, ) was also installed and one ground water sample was collected. Each soil samples was screened using an organic vapor analyzer (OVA)and the two samples from each hole exhibiting the highest OVA readings were selected for further analysis. The soil samples and ground water samples were analyzed for the petroleum products of gasoline, diesel, and lubricating oil, and for the constituents of benzene, xylene, toluene, and ethyl benzene.

The attached table describes the results of the chemical analysis of the samples. These results are summarized below:

• Gasoline and diesel fuel were found in all of the samples. The concentration of gasoline ranged from 5 to 120 ppm. The concentration of diese' ranged from 20 to 2700 ppm. Generally, the concentrations of these petroleum products were higher in Hole B than in Hole A.

BRANCH OFFICES DALLAS. TEXAS CHESTER TOWERS DENVER, COLORADO



DALLAS. TEXAS COLUMBUS, OHIO DENVER, COLORADO DURHAM, NORTH CARGLINA KAMSAS CITY, KANSAS

- A small amount of lubricating oil was found in the soil collected from Hole A. No lubricating oil was present in the soil sample collected in Hole B.
- A small amount of xylene was present in all but one of the soil samples. Benzene was also present in one of the soil samples.
- The ground water sample did not contain a floating layer of petroleum product. However, gasoline and diesel fuel were found dissolved in the ground water.

We have presumed that the contamination encountered on the site was the result of releases from the underground storage tanks formerly on the property. In such cases, the Ohio Fire Marshall will have jurisdiction over the site. Generally, it has been our experience that the Ohio Fire Marshall will require the site to be cleaned up to non-detection limits if <u>any</u> contamination is present unless, through a risk assessment, the owner can demonstrate that the contamination will not pose a threat to human health or the environmental. A risk assessment would be a relatively costly (approximately \$10,000) and time consuming (at least 6 month) project. Therefore, removal and disposal of the contaminated soil is recommended. This will require excavation of the contaminated soil, removal to a hazardous waste landfill (or to some other suitable disposal facility), and backfilling with clean soil.

The Fire Marshall will require a plan to be prepared outlining the nature and extent of the remedial action to be taken at the property. Since there is no way of knowing the full extent of contamination, the plan will have to address the means for determining how much soil will be removed and the anticipated level of clean up. This may entail additional soil and ground-water sampling.

The cost of removing and disposing of the contaminated soil also cannot be estimated at this time. The sampling efforts conducted to date have been designed primarily to identify the nature of the contamination. The location and extent of contamination also cannot be determined without further soil and ground-water sampling.

If you have any questions concerning this report, please let me know.

Sincerely,

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Robert L. Hearn Manager Environmental Audit Group

Results of Soil and Ground-Water Sampling at Old Brighton Garage Property

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Lube Oil	QN	120 ppm	10 ppm	QN	QN
Diesel	480 μg/l	110 ppm	20 ppm	2700 ppm	590 ppm
Gasoline	50 µg/1	5 ppm	5 ppm	120 ppm	41 ppm
Xylene (X)	QN	QN	0.3 ppm	1.8 ppm	0.7  ppm
Ethyl Benzene (E)	QN	QN	QN	QN	ON
Toluene (T)	QN	QN	QN	QN	QN
Benzene (B)	DN	ΠŊ	QN	an	maa 80.
Depth		2.5' - 4.0'	10.0' - 11.5'	2.5' - 4.0'	10.0' - 11.5'
Media	Water	Soil	Soil	Soil	Soil
Sample No	MW-A Water	A-2	A-5	B-2	B-5

ND - Not detected

Detection Limits (soils:) B = .05 ppm T = .10 ppm E = .10 ppm X = .30 ppm Lube Oil = 200 ppm

Detection Limits (water) B = 5 μg/l T = 1 μg/l E = 1 μg/l X = 3 μg/l Lube Oil = 500 μg/l

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Site 31



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Ohio Department of Commerce Division of State Fire Marshal Barran of Underground Storage Tank Regulations 6006 Thissing Road + P.O. Box 687 Reynoldsbury, Oli 43068-9509

> (614) 752-7938 FAX (614) 752-7942 www.com.state.ah.as

Boh 1411 Governor

Gary C. Suhadoliark Decetor

May 8, 2002

DEANA AI TSRULER ADP INC 7 ADP BLVD ROSLLAND NJ 97068 SITE: ADPINC 10K DIFSELUST CLOSURE 500 W 7TH ST CINCINNATIOH HAMD.TON COUNTY RELEASE #31001673-N00002

#### RE NO FURTHUR ACTION STATES REGARDING CLOSURE REQUIREMENTS

Drie Ms. Allshelmin

The Boreau of Underground Storage Task Regulations (BUSTR) has reviewed all information submitted for this release. Based on this information, BUSTR requires no further action (NEA) involving UST closure under Ohio Administrative Code (OAC) 1301,7-9-12, effective March 1999.

Thank you for your cooperation. If you have any questions, please contact our office at (6:4) 752-7938.

Nincerel Kelly J Conceptive Action Supervisor

Sise File
 David Nuteri, RS, Hamilton County Health District
 Mike Peterman, Cincinnati File Department

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Site 50



Ohio Department of Commerce

George V. Volnovich, Governor

Nancy Chiles Dix, Director

Division of State Fire Marshal Bureau of Underground Storage Tank Regulations 8450 Poe Avenue - Suite 104 - Dayton, OH 45414-2646 (513) 454-7500 - FAX (513) 454-7503

AUG 1 1 1993

Mr. Michael B. Gunn RE: Office of Environmental Management Mm. 24, City Hall 801 Plup Street Cincinnati, Objo 45202 City of Cincinnati Sanitation Dept. 400 John St. Cincinnati, CM Incident #3130169-00

Dear Mr. Gunn:

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The Bureau of Underground Storage Tank Regulations [BUSTR; has reviewed all submitted data for incident #3130159-00 located at 400 John St., Cincinnati, Obio. Based or this information, BUSTR requires no further action involving corrective actions for this incident, and no further remediation is required under our regulatory framework.

If you feel that you are entitled to appropriate reimburgement you whould contact the Petrolsum Underground Storage Tank Release Compensation Board (PUSTRCB) at P.O. Elx 2040, Columbus, Ohio 43216, (614) 752-8963. FUSTRCB is an assurance fund and as such is a separate entity apart from the Department of Commerce.

Thank you for your cooperation with EUSTR in helping to protect hoelth and the environment of the State of Ohio. If you have any questions please contact me at (614) 752-7941.

Sincerely,

Raymond Row, Manager Corrective Actions Section

RR:BJT:VO:cmh

cc: File #3130269-00

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Official File Capy

# City of Cincinnati



Office of Environmental Management

July 9, 1993

Mr. Verne Ord Bureau of Underground Storage Tank Regulations Suite 104 6450 Por: Avenue Dayton, Ohio 45414



Dear Mr. Ord:

r,

Your last memo, in response to your review of our UST closure reports for 400 John Street (Incident #3130169-00) and 4747 Spring Grove Avenue (Incident #3122721-00), indicated the closures were deficient.

To correct this deficiency the City of Cincinnati asked BHE to collect soil samples from the cavities to determine the lovel of petroleum contamination. Please see the attached reports entitled UST Closure Report Addendum for the findings. We believe the waste soil returned to the cavity during closure would not have been a solid waste regulated by OEPA's Division of Solid and infections Waste Management and therefore, request a "no further action" status.

Should you have any questions, please contact Bonnie Phillips on line 1-352-5310 or me on line 1-352-4549.

Sincerely,

Michael B. Gunn 1 Assistant to the City Manager

88155

Attachment

cc: John Hamner, Public Works Bonnie Phillips, OEM

Equal Opportunity Uniployer

#### INTRODUCTION

In July 1992, one underground storage tank (UST) was permanently closed and removed from the City of Cincinnati (City) Sanitation Department facility located at 400 John Street, Cincinnati, Ohio. The 2,000-gallon UST was used to dispense gasoline for Sanitation Department vehicles. The site is located in a commercial section of Cincinnati, Ohio (see Figure 1).

The UST closure activities and collection and analysis of cavity soil samples were discussed in the December 9, 1992, Sanitation Department, 400 John Street, UST Closure Report prepared by Bruck Hartman Environmental, Inc. (BHE). After review of the UST closure report, the State of Ohio, Bureau of Underground Storage Tank Regulations (BUSTR) notified the City that the closure of the UST system did not meet the state closure criteria.

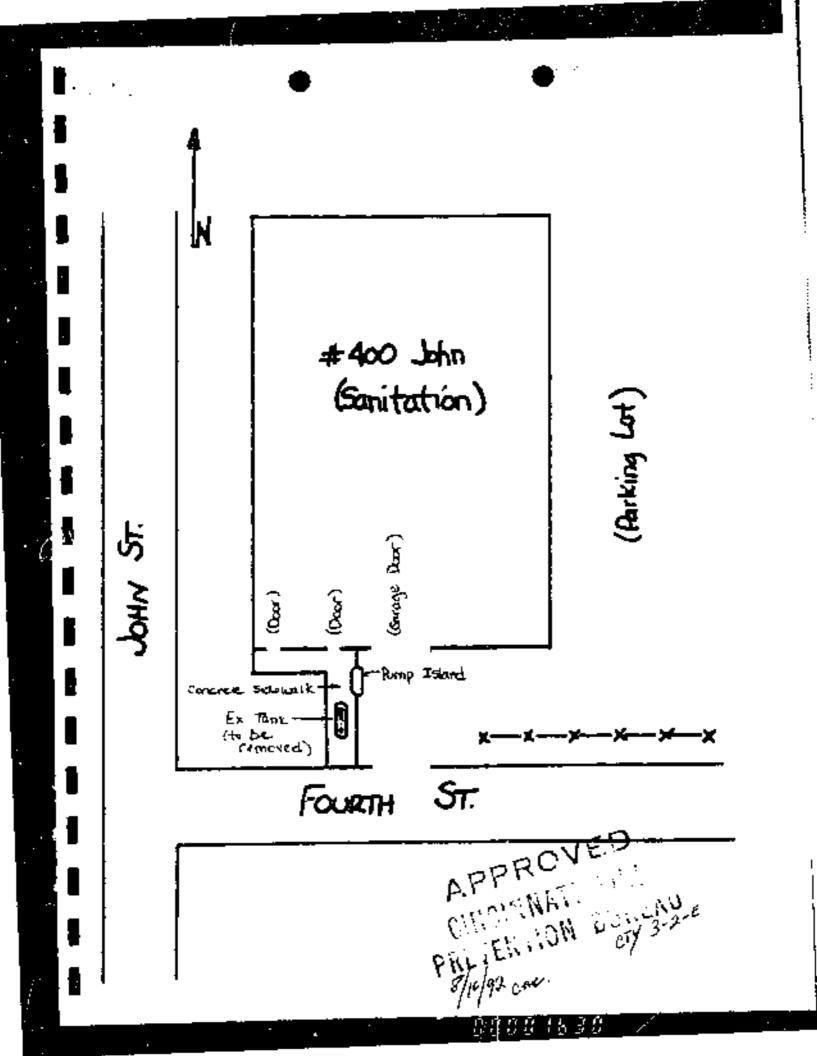
The closure activity deficiency was that the waste soil generated during the UST removal was not analyzed to determine if the waste soil contained perroleum contamination prior to being returned to the cavity. BUSTR stated in the February 11, 1993, response to the Ciry that all soil excavated during a UST closure must be handled according to the Ohio Environmental Protection Agency (OEPA) Perroleum Contaminered Soil Folicy.

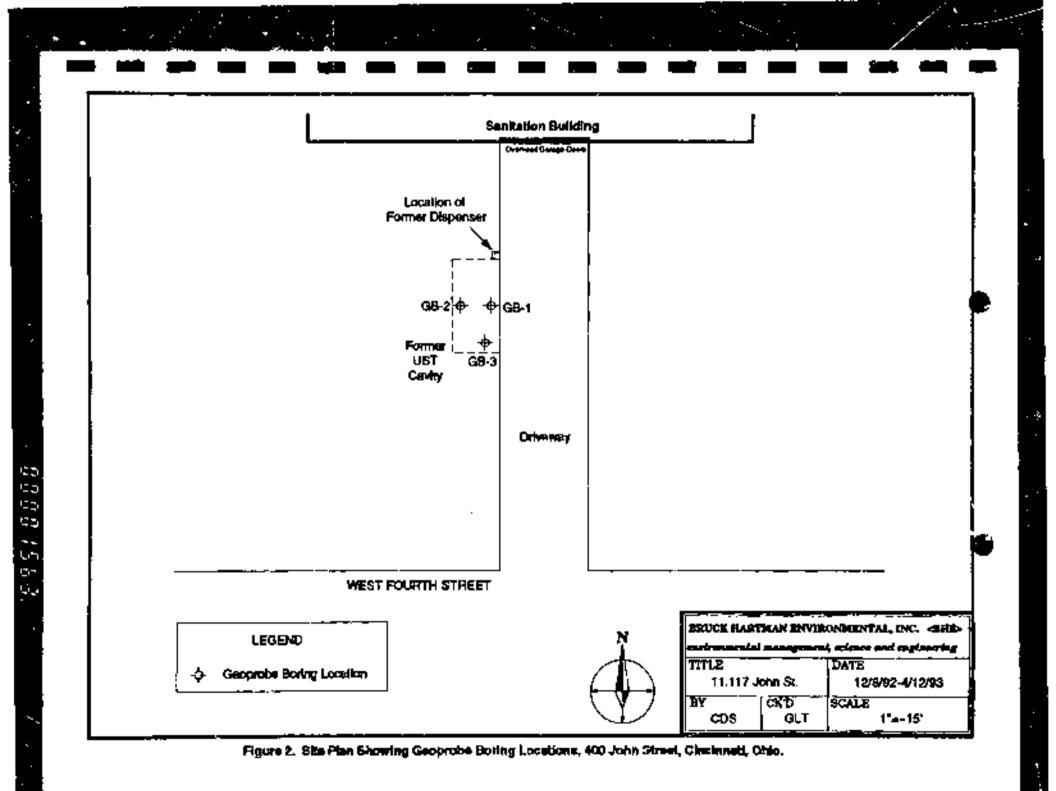
The OEPA Division of Solid and Infectious Waste Management (DSIWM) has recently defined the required handling of petroleum-contaminated soils relating to petroleum UST sites. Soil excavated during UST closure activities may or may not be classified as a solid waste requiring proper handling depending on certain conditions such as: 1) an appropriate regulatory agency (e.g., BUSTR and/or OEPA) has required the petroleum-contaminated soil be removed off site, 2) the landowner or person responsible for conducting the excavation of the petroleum-contaminated soil may not constitute a solid waste if an appropriate regulatory authority has not required the soil to be removed off site and the person responsible for the excavation does not required the soil from the site.

In the event soil excavated during the removal of a BUSTR-regulated UST system: 1) shows petroleum contamination (from subsequent analysis of the excavated soil) at levels equal to or below the Site Feature Scoring System categorical action levels [as defined in Ohio Administrative Code (O.A.C.) Rule 1301:7-9-13], 2) is not required by BUSTR to be removed off site, or 3) the landowner chooses to keep the soil on site, the excavated soil is not regulated by OEPA DSIWM. Therefore, the DSJWM will not require the disposal of excavated soil at a licensed landfill or restrict the use or placement of the soil, provided the petroleum contamination is below specific site parameter levels.

A Site Feature Scoring System was presented in the December 9, 1992, UST Closure Report, Soil and groundwater analytical results are compared to categorical action levels to determine sitespecific cleanup target levels for petroleum constituents. The Site Feature Scoring System shows

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Fearure Scoring System had been prepared and preasured in the December 9, 1992, UST Closure Report.

The Site Feature Scoring System considers the relative location of a UST system to the closest drinking water supply well or intake (currently in use), the average depth to groundwater, the predominant type of substratum, and any natural and/or manmade conduits or receptors. The 400 John Street site UST system was not located in a sensitive area as defined by O.A.C. Rule 1301:7-9-09 and the depth to groundwater is not known. The predominant soil type of the site is a clay. Natural/manmade conduits noclude a storm sewer and a water line main located within fifty feet of the former UST system. Based on these parameters, the total site score was 70; the site soil and groundwater action levels are listed in Category 3 of the Action Level Table (see Appendix A).

## CONCLUSIONS

No between, toluene, ethylbeniene, and total xylenes concentrations greater tise the method detection levels were detected in the three composite soil samples collected from GB-i through GB-3. The TPH concentrations detected in the three composite soil samples ranged from 110 ppm (GB-1) to 190 ppm (GB-3). The BTEX and TPH concentrations are below the action levels determined by the BUSTR Site Feature Scoring System. Hased on this information, the waste soil returned to the cavity during the closure activity would not have been a solid waste regulated by OEPA DSIWM. A "No Further Action" status is requested for this site.

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Site 52



# **Ohio Department of Commerce**

Division of State Fire Marshal Bureau of Underground Storage Tank Regulations PO Box 687 Revolushing, OH = 430x8-9009 (614) 752-7938 FAX (614) 752-7942

Bob Tell Governat

Gary C. Subadatpik Director

www.com.state.ch.us

February 2, 1999

BONNIE PHILLIPS CITY OF CINCINNATI 805 CENTRAL AVE STE 610 CINCINNATS OH 45202-1947

\$50

SITE FORMER SANITATION DISTRICT FUELING STATION 351 JOHN ST CINCENNATI OH HAMILTON COUNTY INCIDENT #5180086-00

## RE NO FURTHER ACTION STATUS REGARDING CORRECTIVE ACTION REQUIREMENTS

Cear Ms. Phillips.

The Bareau of Underground Storage Tank Regulations (BUSTR) has reviewed all information submitted for this incident monter. Based on this information, BUSTR requires no further action involving corrective actions under Ohio Administrative Code 1301-7-9-13

Thank you for your cooperation. If you have any questions, please contact our office at (614) 752-7938.

Sincerely. Keih J. Gali Environmental 50pervisor

KJG 5jú

Site File
 Make Petermän, Cincionate Fire Department
 Mohammad Alam, Cincinnate City Health Distinct.

EXISTEN DETENT :	
FACILITY NAME:	NO NO
(1) ABASEN FOR LISTING LIPLATE	
(2) Written report received	received from owner/operator. received from owner/operator. from 305TR feeld extanostion/inspection. ator/contractor assignment. inerdamt number - explain change in restarks section (5). aber for addigeonal suspected facility/location.
(2) NEW SITE LISTING DATA	
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July 28, 1998

Mal Bonnle Phillips Office of Environmental Management Centennial II, Sulta 610 805 Central Avenue Cinclenati, Ohio 45202

RE Risk Characterization for the Construction Worker Former Sanitation District Maintenance Fueling Station Circonneti, Obio BUSTR Facility No. 310693 BUSTR ID No. 3180066-00

#### Oear Ms. Phillips.

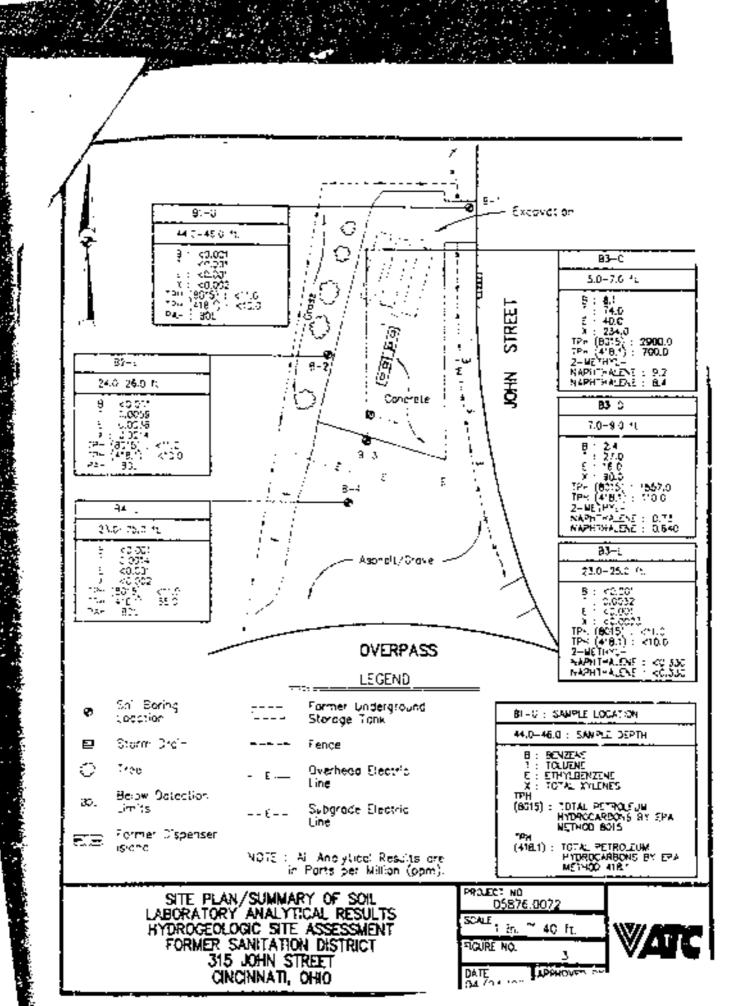
ATC Associates includes completed a site/scenario-specific risk assessment for the abovereferenced site. The purpose of this report is to evaluate the potential risk posed to the construction worker at this site. The fisk calculations were requested by SUSTR in their tetter dated July 14, 1998.

During UST closure and hydrogeologic site assessment activities conducted during February and March, 1998, elevated concentrations of BTEX and TPH were detected approximately 16 feet below grade in the former tank davity and from five to nine feet beneath the former dispenser. Given that construction activities are planned at the site in conjunction with the relocation of F1. Washington Way, a worker at the site may be exposed to residual contaminants of concern (COCs) in soli through direct dermal contact and accidental ingestion this ATC's understanding that the entire site will be graded to six feet below the present surface elevation potentially releasing volatiles and surficial dust perticulates into the air as well. Therefore, incidental contact to COCs through inhalation of volatiles and particulates was considered given that COCs in solition be exposed to the surface.

It is reasonable to essume that the construction worker is the only population at risk from contamination at this site. The highest concentrations of ETEX, TPH and Naphthalene detected in samples B3-C and B3-D were considered to be the area of concern. A table summarizing the concentrations of the COCs is provided in Attachment A. In order to properly assess the reasonable maximum exposure (RME) for this population. It is necessary to develop practical exposure factors. In particular, exposure frequency, time, and duration must be just field for a RME. They are as follows.

Exposure time (E7) = 8-hour work day, reasonable work day for a provailing wage worker;

City of Cincinnati - 351 John Street, Cincinnati, Ohio BUSTR ID No. 3150048-00 p. 1/4 7/28/98





(112) Cona Road Circinnal: Ohio 45241 512 771 2112 Fax 513 782 6908

30 April 1998

Ms. Bonnie Phillips Office of divironmental Management Centennial II, Suite 610 205 Central Avenue Cincintiati, Ohio 45202

LER 30 1656 REFENSION

RE: UST Closure and Hydrogeologic Site Assessment Former Sanitation District Maintenance Fueling Station 351 John Street Cincinnati, Ohio ATC Project Nos P5876 0043 and 0072

Dear Ms. Phillips.

ATC Associates Inc. (ATC) has completed UST Closure and Hydrogeologic Site Assessment (HSA) activities associated with the above-referenced site in Hamilton County, Ohio in accordance with Proposal Nos. P972.0569 dated October 14, 1997 (UST Closure) and P9872 0095 dated February 27, 1998 (HSA). The objective of these activities was to provide oversight and sampling for the UST Closure, involving the removal of three (3) USTs from the subject site. Additional HSA work consisted of the advancement of four (4) test borings, associated soil sampling/analysis, and data compilation/evaluation. This report summarizes and documents the findings of these activities.

### BACKGROUND INFORMATION/INTRODUCTION

The subject site was formerly used by City of Cincinnati employees as a fueling station. The site location is shown on the Topographic Map presented as Figure 1. The former USTs provided gasoline and diesel fuel for city vehicles only, and did not dispense fuels for totail sale. A total of three (3) USTs were removed from the property on February 11 and 12, 1998. UST removal and soil excavation was conducted by Petro Environmental of Cincinnati. Ohio. Based upon laboratory data gathered from the UST Closure, it was apparent that further assessment was necessary to delineate vertical and horizontal soil and possible groundwater impact around the former UST cavity. A site plan depicting former UST locations, UST closure sampling locations and soil analytical results is presented as Figure 2.

The scope of the HSA activities included the advancement of four test borings around the former UST cavity, soil sampling and analysis. Soil screening and sampling were performed in general

ATC Project Nov 05876.0043 and a 2 - UST Closure and Hydrogeniogic Site Assessmen. Former Sociation District Maintenance Fueling Station, 351 John Spreet, Chickmail, Ohio 30 April 1998 Page 2

accordance with the State of Ohio Environmental Protection Agency's Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring Programs Document of June 1993. A site plan depicting boring locations and soil analytical results is presented as Figure 5

### DATA ACQUISITION/FIELD ACTIVITIES

### UST Closure Assessment

A completed copy of the Bureau of Underground Storage Tank Regulations (BUSTR) Closure Checklist/Closure Form for this site is included in Attachment A Based on UST Closure assessment activities, the site was ranked according to the BUSTR Site Feature Scoring System (SFSS) chart as Category 2. A copy of the completed SFSS chart for the site is also included in Attachment A. The pointis received for the work are included as Attachment B. Pertinent site information regarding UST Closure assessment activities porsuant to Ohio Administrative Code (OAC) 1301 7:9-12 (K & L - Clorure Assessment and Closure Report requirements) is included on the ATC Associates Inc. UST Closure Checklist in Attachment C. A site plan depicting former UST locations. UST closure sampling locations and soil analytical results is presented as Figure 2.

### Closure Soit Sampling and Analyses

UST Closure assessment soil samples were obtained from the locations denoted on Figure 2. Hydrogeologic site assessment soil samples were obtained from the locations denoted on Figure 3. Soil samples were collected in duplicate: one portion of sample was placed in pre-cleaned glass gars with terfon-lined lids, and one portion of sample was placed in a polyethylene bag. The jamed sample portions were placed on blue ice in a cooler immediately after collection (for potentia) laboratory analysis), and the bagged sample was used for field streeming purposes. Latex gloves were worn by ATC's representative and changed between samples to prevent possible cross-contamination.

Soil samples were field screened with a HNU, Model DL-10) PID with an 11.7 eV lamp, which measures total photoionizable vapors in parts per million (ppm). The PID was calibrated prior to use to read in parts per million as benzene using an isobutylene standard. Maximum headspace PID measurements were recorded for each sample. Field screening results from the UST Closure sampling (ranging from 0.5 to 247 ppm) are shown on the ATC Associates Inc. UST Closure Checklist in Attachment C. Field screening results from the site assessment sampling (ranging from 0.0 to 280 ppm) are shown on the borings logs in Attachment D.

A total of seven (7) soil samples from the UST Closure were submitted to CAS Laboratory in Circinnati, Ohio utilizing chain-of-custody controls. Soil samples were analyzed for benzene, toluene, ethylbenzene, xylenes, by Method 8020 and total petroleum hydrocarbons (TPH) by Methods 8015 and 418.1, and polynuclear aromatic hydrocarbons (PAH) by Method 8100/8270, as required by Ohio Administrative Code (OAC) 1301: 7-9-13(D)(3)(d). Soil samples selected

ATC Project Not. 05876.0043 and 2 - 2 - UST Closure and Hydrogradogic Site Assessmen. Former Sanitarian District Maintenance Fireboy Station, 351 John Street, Cincennad, Ohio.

30 April 1998 Page 3

for analysis were those that showed the maximum evidence of impact, based upon PID measurement and/or physical observations.

### Hydrogeologic Assessment

### Test Boring Installation

Four lest borings were advanced to depths ranging from 25 to 46 feet below surface grade (bsg) on March 5<sup>th</sup> and 6<sup>th</sup>, 1998. Boring B1 was advanced topographically up-gradient of the former UST civity, boring B2 was advanced cross-gradient and borings B3 and B4 were advanced down-gradient of the former UST civity. The test borings were advanced and soil samples continuously collected by means of a truck mounted Diedrich D-120 drill rig utilizing hollow stem augers (HSA) and split-splixin samplers. No water was encountered in the first boring (B1), advanced to a depth of 46 feet bsg. Subsequent borings were not drilled as deeply, since water had not been encountered at a depth in excess of 45 feet bsg (the depth required to be explored in accordance with OAC 1301 (7-9-13(4)(3)(e)). Soil encountered during drilling activities consisted predominantly of tan and gray mottled silty clay with sand and gravel from surface grade down to the total depth of exploration of 46 feet bsg. Bedrock was not encountered in any of the four borings. Detailed soil descriptions are shown on the boring logs included in Attachment D

Undisturbed soil samples were collected continuously by a weighted split spoon sampler, approximately two-inches in outside diameter (OD), attached to the lower-most section of a steel rod string. Soil contained within the 2-foot long steel split-spoon was inspected, removed and described by an ATC geologist, and placed in appropriate sampling containers. The split-spoon was then scrubbed clean with an Alconox/distilled water solution and rinsed with distilled water between samples. The hollow stem augers and rod strings were cleaned between each boring to prevent possible cross-contamination between samples.

### Soit Sampling and Analysis

Suit samples were collected in duplicate, with one portion of sample in two to three pre-cleaned glass jars with Tefton-lined jars, and one portion of sample in a scaled plastic bag for field screening. The jarred sample splits were placed on ice in a cooler immediately after collection (for potential laboratory analysis). Latex gloves were worn by ATC's representative and changed between samples to prevent possible cross-contamination. Samples were field screened with a photoionization detector (PID) with a 11.7 eV lamp, which measures total photoionizable vapors in parts per million (ppm). The PID was calibrated prior to use to read ppm as benzene using an isobutylene standard. Maximum headspace PID measurements were recorded for each sample.

One to three soil samples from each boring (the sample with the highest PID reading and from the bottom of the boring, or from the bottom of the boring if no elevated PID readings were detected) were submitted to ATC Associates Inc. Laboratory in Indianapolis, Indiana utilizing

#### ATC Project Nov. 05876-0043 and 0072 - UST Closure and Hydrogenlogic Sue Assessment Former Sanitation District Maintenance Fueling Station, 351 Julin Street, Oncinaati, Ohio-

chain-of-custody controls. Soil samples were analyzed for benzene, tolucne, ethylbenzene, sylenes, by Method 8020 and total petroleum hydrocarbons (TPH) by Methods 8015 and 418.1, and polynuclear aromatic hydrocarbons (PAH) by Method 8100/8270, as required hy Obio Administrative Code (OAC) 1301: 7-9-13(D)(3)(d).

### Groundwater Sampling and Analysis

No groundwater was encountered during UST closure or test horing advancement, therefore no groundwater sampling or analysis was conducted.

### Analytical Results

### UST Closure

Soil sample laboratory analytical results from the UST Closure assessment indicated detectable amounts of BTEX constituents. TPH and napihalene (PAH) from underneath the former USTs, dispenser island and in several stockpile samples. Concentrations of BTEX and TPH exceeded the Category 2 action levels for the site in both the closure and stockpile samples, thus the stockpile was removed from the site and disposed of at the Petro Cell landfill. Disposal Documentation is included in Attachment E. PAH action levels are not specified in the SFSS action levels table. Summaries of UST Closure soil sample analytical data are presented on Figure 2 and Table 1.

### Hydrogeningic Assessment

Soil sample laboratory analytical results from the site assessment indicated detectable amounts of BTEX constituents. TPH, napthatene and 2-methyl naphatene (PAHs) from several samples. Concentrations of BTEX and TPH exceeded Category 2 action levels in two samples, both taken from boring B-3. This boring was located approximately 20 feet south (presumed downgradient) of the former dispenser locations. The two samples that exceeded action levels were taken from the 5 to 7 foot interval (B3-C) and 7 to 9 foot interval (B3-D). The third sample taken from boring B3 was from the 23 to 25 foot interval (B3-L), and was found to contain toluene at a concentration of 0.0032 ppm, below the toluene Category 2 action level of 1.0 ppm. All other BTEX, TPH and PAH concentrations from sample 73-L were below taboratory detection limits. Summaries of site assessment soil sample analytical data are presented in Figure 3 and Table 1. Complete soil sample laboratory reports and associated chain-of-custody forms are provided in Attachment F.

# CONCLUSIONS AND RECOMMENDATIONS

Laboratory analysis of soil samples collected during the UST Closure Assessment indicated subsurface impact associated with the former USTs and dispensers, as well as impact to the stockpiled backfill material. The UST sample was collected from an approximate depth of 16 feet bsg. The dispenser sample was collected from a depth of 3 feet bsg. All stockpiled material (approximately 1.150 cubic yards) was hauled off-site for recycling.

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ATC Project Nos. 05076.0043 and 0072 - UST Closure and Hydrogenlagic Site Assessment Former Sanitation District Maintenance Fueling Station, 351 John Street, Cincinnati, Okio 30 April 1998 Page 5

Laboratory analysis of soil samples collected during the Hydrogeologic Site Assessment indicated subsurface impact near the former dispenser island location (boring B3). This impact appeared to be confined to the upper 9 feet of soil. A sample collected from the bottom of this brying (23 to 25 feet bsg) contained a totuene concentration below the Category 2 action level. No groundwater was encountered down to a total explored depth of 46 feet bsg.

Seil hydrocarbon impact appears limited to two areas on site: 16 feet bsg in the former UST cavity and the relatively shallow soils near the vicinity of the former dispenser island location. Planned use for this property is the construction of a narmaliseum starsholds. As part of the construction activities, the approximate upper 6 feet of soil will be removed from the site. The entire area will be paved for the foreseeable future, thus limiting the potential for leaching and exposure pathways. The sole receptors for the contaminants of concern will be construction workers exposed to the soils disturbed during construction activities. The concentrations of contaminants of concern present are well below the Risk Based Screening Levels outlined in the attached ASIM Risk Assessment Document Table X2.1 for ingestion / dermal contact / inhalation for a commercial/industrial scenario (ASTM E 1739-95, "Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites"). In addition, the exposure duration for a construction worker will be much less than for a commercial/industrial worker. Thus, the RBSLs are very conservative for a construction worker. Further, no groundwater was encountered in the first 46 feet bsg, the analytical results indicate that leaching has not been occurring (i.e. sample B3-L compared to B3-D), and the site will be paved providing an institutional control.

Based on the findings of these investigations and the above-referenced future use of the property, there does not appear to be a significant risk posed by the residual hydrocarbons. Further investigation and remediation at this site does not appear warranted at this time.

We have enjoyed working with you on this project, and trust that you have been pleased with our services. Please call one of the undersigned at if you have any questions concerning this report.

Sincerely, ATE ASSOCIATES INC.

Liam P. McEvoy ( Senior Staff Geologist

Attachments (8)

Ihor Melnyk, P.E. Senior Project Engineer



11121 Carveri Cincinnati, i 45 513 771 2 Fax 513 782 6

July 28, 1998

Ms. Connie Phillips Office of Environmental Management Centonnial II Suite 610 805 Central Avenue Circonnati, Ohio 46202

RE. Risk Characterization for the Construction Worker Former Sanitation District Maintenance Fueling Station Cincinnati, Ohio BUSTR Facility No. 310693 BUSTR ID No. 1180086-00

Dear Ms. Phillips:

ATC Associates Inc. has completed a site/scenario-specific risk assessment for the abovereferenced site. The purpose of this report is to evaluate the potential risk posed to the construction worker at this site. The nsk calculations were requested by BUSTR in their letter dated July 14, 1998.

During UST closure and hydrogeologic site assessment activities conducted during February and March, 1998, elevated concentrations of BTEX and TPH were detected approximately 16 feet below grade in the former tank cavity and from five to nine feet beneath the former dispenser. Given that construction activities are planned at the site in conjunction with the relocation of F1. Washington Way, a worker at the site may be exposed to residual contaminants of concern (COCs) in soil through direct dermal contact and accidental ingestion. It is ATC's understanding that the entire site will be graded to six feet below the present surface elevation potentially releasing volailles and surficial dust particulates into the air as well. Therefore, incidental contact to COCs through inhibition of volatites and particulates was considered given that CCCs in soil will be exposed to the surface

It is reasonable to assume that the construction worker is the only population at risk from contamination at this site. The highest concentrations of BTEX, TPH and Naphthalene diffected in samples B3-C and B3-D were considered to be the area of concern. A table summarizing the concentrations of the COCs is provided in Attachment A. In order to properly assess the reasonable maximum exposure (RME) for this population, it is necessary to develop practical exposure factors. In particular, exposure frequency, time, and duration must be justified for a RME. They are as follows.

Exposure time (ET) = 8-hour work day; reasonable work day for a prevailing wage worker.

Exposure frequency (EF) = 40 days/year (five days a week for two months), represents uncertainty and variability in construction work events for a property this size and scope of work (i.e., construction of exit ramp off highway);

Exposure duration (ED) = 0.2 years, represents potential time the same part-time worker may work on this job;

Skin surface area (SA) = 3,200 cm<sup>-7</sup>, represente area of lower legs, forearm ; and hands,

.

The equation used to evaluate risk from darmal contact is as follows:

Darmal contact

 $Risk = \frac{SA \bullet DA_{event} \bullet EF \bullet ED \bullet CF}{BW \bullet AT} \bullet CSF$ 

and (if ET > 1\*);

 $DA_{event} = (C_{soil} * CF) * AF * ABS$  where,

DA<sub>grad</sub> = dermal absorbed dose (mg/cm<sup>2</sup> - evant), C<sub>sol</sub> = Concentration in sol (8.1 mg/kg\_benzene concentration), CF = Conversion factor (1.0E-98 kg/mg), AF = Adherence factor (0.5 mg/cm<sup>2</sup>), ABS = Absorption Factor (0.5 unitless), CSF = Carcinogenic Stope Factor (mg/kg-day).

Substituting the site-specific parameters into the equation yields.

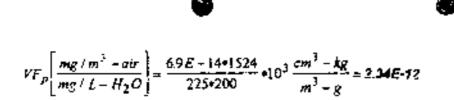
 $DA_{event} = (8.1 * 1.0 E - 06) * 0.5 * 0.5 = 2.0E-06$ 

Therefore, the carcinogenic risk due to dermal contact with surficial soil is given by:

 $Risk = \frac{3,200 \cdot 2.0E - 6 \cdot 40 \cdot 0.2}{70 \cdot 25,550} \cdot 0.029 = 8.4E \cdot 16$ 

Substituting the above-referenced exposure factors for the construction worker into the BUSTR RAGD equation for ingestion of soil and inhalation of volatiles and particulates, it is possible to avaluate the carcinogenic risk from these pathways. The equations are as follows:

City of Cincinneti - 3e1 John Street, Cincinneti, Ohio BUSTP ID No. 2180088-00 p. 2/4 7/28/98



Therefore, the carcinogenic risk due to inhalation of volatiles in the ambient air from surficial soil is given by:

$$Risk = \frac{8.1 + 7.29E}{70 + 25,550} + 0.029 = 5.09E - 11$$

The total carcinogenic risk and non-carcinogenic health hezard posed to the construction worker has been calculated to be 9.43E-10 and 1.45E-02, respectively. These values are well below the corresponding regulatory thresholds of 1.0E-08 and 1.6+00. Given that calculated values suggest that no elevated carcinogenic and non-carcinogenic risks would be posed to the current or future construction worker, it is ATC's recommendation that this site receive 'NFA' status. A summary of individual non-carcinogenic hezard indices, by chemical and pathway is provided in Attachment 8.

If there are any questions regarding this report, do not hesitate to call ther Melnyk of ATC at (513), 771-2112.

Sincerely,

ATC ASSOCIATES INC.

Adrian M. Ögzler Hydrogeologist/Risk Assessor

Shor Melmvik

Project Manager

Attachments (2)

Site 54



# Ohio Department of Commerce

Division of State Fire Marshall Buzeau of Upderground Storage Tank Regulations 8895 East Main Street, P.O. Box 687 Reynoldsburg, OH 43068 (614) 752-7936 FAX (614) 752-7942

George V.Voinovich Governor

> Donna Owens Director

June 26, 1996

CHERYL STAKEUN THIRD STREET ENTERPRISES S14 WEST THIRD ST CINCINNATI OH: 45262

SITE. THIRD STREET ENTERPRISES 514 WEST THIRD SY CINCINNATI OH HAMILTON COUNTY NCIDENT #3141221-0+

8E: NO FURTHER ACTION STATUS REGARDING CLOSURE REQUIREMENTS.

Dear Ms. Stakelin:

The Bureau of Underground Storage Tank Regulations (BUSTR) has reviewed all information submitted for this incident number. Based on this information, BUSTR requires no further action involving closure under Ohio Administrative Code rule 1301:7-9-12.

If you feel that you are entitled to reimbursement you should contact the Petroleum Underground Storage Task Release Compensation Poard (PUSTRC8) at P.O. Box 163188, Columbus, Ohio 43216, (614) 752-8963 or (800) 224-4659 PUSTRCB administers Objo's assurance fund and is a separate entity apart from BUSTR.

Thank you for your cooperation. If you have any questions, please contact Brian J. Tarver at (614) 752-7938.

Siggerein

Kevin W. Hodnert Corrective Action Supervisor

KH:DIT:cab

xc: Site File Gury Brehm, Cincinnati Fire Department Mohammad Alam, Cincinnati City Health District



3141221 THIRD ST. ENTERPRISE, INC. 514 W. JRD ST. CENCINNATE, OH 45202

### UST SYSTEM INFORMATION

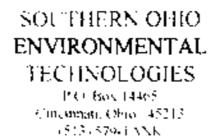
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Removal/Abandonmens Date: 6 22				STATUS			
TANK NO.	AGE	CAPACITY	MATERIAL	PRODUCT	TANK	PIPE -	DISP
1		6003	Steel	Guardine	Nerrowal	Lenne	Remarks
2		(302	1			1	(
3		20.00	1				[
4		8000		Dress	1		
5		9000	V	Dugal	V	v	$\overline{v}$
6							

Laboratory analytical results (highest results)

Beazene	1 ug/kg	SFSS Category 1 2 (G) + (CIRCLE ONE)
Toluene	ug/kg	Overexcavaboo: Yes / No) BUSTR Approval: Yes / No
E-bengene	2_ug/kg	Other analytes or comments:
Xylene	ug/kg	<u> </u>
трн	2-21 - 32 ng/kg	
Site Manage		
STATUS:	NFA	Classification LTF 1 (5) Site Coordinator, $\angle Q \angle \angle$
	Bastory/	Date: <u>6 10 56</u>
Approved By:		Date: 118 2 4 1995
Entry By:	,	Date: 1990
Effective Date Jud	oc 1: 1994	

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# CLOSING REPORT 07/20/94

### **UST SYSTEM OWNER, OPERATOR, AND FACILITY DATA**

). D.S.T. OWNER NAME

THIRD STREET ENTERPRISE, INC. \$14 WEST THIRD STREET CINCINNATI, OHIO 45202 HAMILTON COUNTY (\$13) \$79-1359

2. U.S.T. OPERATOR NAME

THIRD STREET ENTERPRISE, INC. 314 WEST THIRD STREET CINCINNATI, OHIO – 45202 HAMILTON COUNTY (513) 579-1359

3. U.S.T. FACILITY LOCATION

THIRD SYREET ENTERPRISE, INC. 514 WEST THIRD STREET CINCINNATI, OHIO – 45202 HAMILTON COUNTY (\$13) 579-1359

4 U.S.T. FACILITY OWNER MICHAEL & BANKS 9422 BENT TREE CIR WICHITA, KS 67226 (316) 636-1151

. 1



# UST SYSTEM DATA

5. U.S.T. SYSTEM AGE

TANKS 1,2,3 INSTALLED IN 1974, 20 YEARS OLD TANKS 4,5 INSTALLED IN 1980 14 YEARS OLD Press and

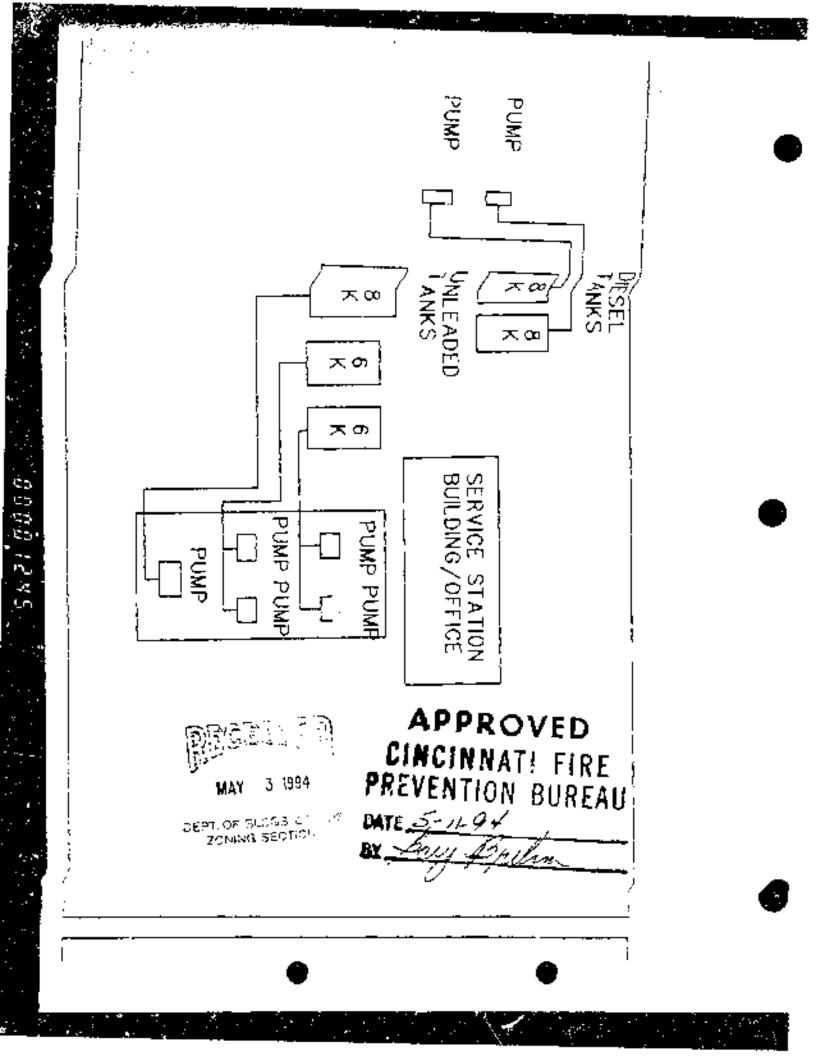
- 6 U S.T. CAPACITY TANKS 1,2 6,000 GALLONS TANKS 3,4,5 8,000 GALLONS
- U.S.T. SYSTEM CONSTRUCTION TANKS 1,2,3,4,5 ALL STEEL CONSTRUCTION.

8 DATE U.S.T. SYSTEM LAST USED 5/1/94 ALL SYSTEMS

- 9 PERSON WHO LAST USED UST SYSTEM THURD STREET ENTERPRISE, CHERYL STAKELIN
- 10 SUBSTANCES STORED IN USE PAST AND PRESENT TANKS 1.2,3 USED TO STORE JASOLINE TANKS 4,5 USED TO SPORE DIESEL
- 11 U.S.T. SYSTEM USE RETAIL SALES OF GASOLINE AND DIESEL FUEL
- 12 U.S.T. SYSTEM STATUS ALL TANKS AND PIPING PERMANENTLY REMOVED

DISPOSAL OF UST SYSTEM
 ALL TANKS WERE REMOVED OPENED AND CLEANED
 ACCORDING TO APPLICABLE STANDARDS.
 CLEANED TANKS WERE REMOVED BY
 DEUTCH & SONS
 THIRD & BAYMILLER
 CINCINNATI, OH 45202
 TANKS WERE DISPOSED OF AS SCRAP METAL

. 5



SUSPECTED RELEASE REPORT \* 5108 \* 315 1739 -00. FY96 DATE: 1130-95 - AL PRESON REPORTING THE BELEASE CONTINUES OF THE TIME . 11/15 am www. Cher: Bunk's TITLE: DUMES PHONE: (513) 579-1359 AGENCY/COMPANY: 2,09 54 Enterprises RELATION TO SITE: MPilbor ACORDSS: 5/4 4 3/9 H. CITY: Cincing ti 87:0H 229: 45202 REMARKS: withersam Illess UST removal by ODOT workers = [2] SUSPECTED RELEASE LOCATION -HOLTIPLE SUSPECTED SOURCRY 123 NO UNDETERMINED COUNTY: Here Hore Hone FACILITY: Actomy 5 - Regions 1. Transport. (ODRZ) FACILITY ID : \_\_\_\_\_\_ ;DORRST: 512 W 3rd CITY: Ciar hant ST: AH 219: 45202 PRONE: { OST OWNER: \_\_\_\_ Touseles Comp. (Ashland Oil ?\_\_\_\_ PHONE: { OST OPERATOR: PHONE: ( REMARKS VIRE DEPT: Cincine & Fire Primating CONTACT: Prove Bichon 280ME. (513) 152- 6244 === () CONDITIONS LEADING TO REPORT OF SUSPECTED RELEASE (Check all that apply) ====== Inventory control results indicate a release may have occurred. Testing, monitoring or sampling results indicate a release may have occurred. - Enusual operating conditions observed (e.g., sudden drop in tank volume). \_\_\_\_ Impacts noticed in erea surrounding tank (e.g., vapors, well contaminated, run-off) \_\_\_\_ Spill or overfill of petroleum in excess of 25 gallons. Soil Groundwater contact lation discovered during not closure related investigation. Closure (or replacement) assessment repults indicate that a release has occurred. OTTER CONDITIONS: art site and showed them to The contractors but they said The architects told them not to stop working. He said they have allowly builted away preces of piping dou'l from the UST system. \*\*\*\*\*\*COMPLETE REVERSE SIDE\*\*\*\*\*\* ----- (10) REFORT DISPOSITION [Indicate actions taken on reverse side] Whether EMERGENCY ACTIONS \_ TES \_ NO BY: FRE DEPA I DORD: \_\_\_\_\_ COLL\_\_\_\_ REPORT/ACTION APPROVED: KLUTEN KETTERS ENTERIO BY: DATS: CINCLE ATATCH. (EFT SES DIS CON ICA ICA (RECORDER, 1 ()) CLASS. () & C D LTF, 1 ICC SAS SAC CAS CAP NEA OTHER: 5

DATE FIRST DETECTED: TIME: EST. QUANTETY:
SUBSTANCE RELEASED/DETECTED: GASOLINE DIESEL FUEL REROJINE USED CIL
OTHER PETRO HAZ SUBST UNKNOWN EST. DURATION:
MEDIA EFFECTED (Check all chat apply): SOIL PAVEMENT BASEMENT SEVENS
GROUNDWATERSURFACE WALTEROTHER:LTF
BLIGIBURY YES NO If do, why?:
and [5] UST INFORMATION
FACILITY REGISTRATION CURRENT?YFR NO UNKNOWN (Attach USTR's for all facilities) NUMBER OF TAXES
NUMBER OF TANKS: RELEASE DETECTION METROD:
-Const Rubstance Age <u>Capacity Material Stored Status</u> <u>Age Capaciti Material Stored Status</u>
PROBABLE LOCATION OF RELEASE: TANK NO PIPE BETNEENAND
PROBABLE CAUSE:
OTHER POTENTIAL SOCS TES AT THIS LOCATION:
I [6] SITE/HAZAZD /NFORMATION
IMPORTANT SITT OR SURROUNDING AREA CHARACTERISTICS:
PROXIMITY TO DELINEING WATER SOURCES:
OTHER FIRE/WATER/HEALTH KALARDS AT THE SITE:
Res [7] INITIAL RESPONSE ACTIONS BY OWNER/OPERATOR - (Theck all that apply)
_ Solampe confirmation/Investigation Initial site investigation
Initial corrective action procedures Site/Assessment/Exposure Assessment
Eres product removal Unknown/undetermined
[8] XIRT ANY GINER AGENCIES NOTIFIED PRIOR TO BESTRY
AGENCY: DATE:
See [9] 305TE ACTIONS TAXEN
- Cilled Gury Brohms office at Cincinnat: F.D. Fire Prevention 4 spoke withis assistant Canol. She suid it sounded like it was an illegal UST-removal and would have
of spoke withis assistant canal. She suich it sounded
I'ke it was an illegal UST-removal and would have
Mike Furley investigate
- Enterement Referral
- Laurement 1
CALLS TO: (FD) LED, LPN, JDE, CEPA/BR, ORPA/DPDW, OSPA/DGW, OTHER

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COST-LEFECTIVE ENVIRONMENTAL MANAGEMENT

July 19, 1999

Mr. Mark Ginty The City of Cincinnati 801 Plum Street Cincinnati, Ohio 45202

Re: Reports for the Banks Property Piping Closure

Dear Mr. Ginty:

BHH: Environmental, Inc. (BHE) is pleased to provide the City of Communat (City) with the enclosed reports for the piping closure recently completed at the Banks Property. We have provided for you two copies of the report.

BHE would like to thank you for the opportunity to assist The City of Cincienatiwith this project. If you have any questions or require modifications to the reports, please call me or Greg Gardner at (513) 326-1500.

Sincercly,

BHE ENVIRONMENTAL, INC.

Sonja J. Fejix Si-Response Manapot, Field Operations

cc. Bonne Phillips

Enclosures

# INTRODUCTION

In April 1999, BHE Environmental. Inc. (BHE), conducted closure oversight and sampling for the excavation and permanent removal of piping that was related to underground storage tanks (USTs) at the Banks Property located at 514 West Third Street, Cincinnati, Ohio (Figure 1). The property is currently owned by the City of Cincinnati, (City) and is a part of the Fort Washington Way Highway Project. Surrounding land usage is commercial. Records indicate that the site was granted no-further-action (NFA) status by the Bureau of Underground Storage Tank Regulations (BUSTR).

Details regarding the previous closure of tanks at this site were unavailable. During a Plase I Environmental Site Assessment conducted by BHE in July of 1998, BHE observed four vent lines and concrete pump islands that could be UST related. It was recommended that these vent lines and concrete areas be excavated to determine if all the tanks and piping had been removed from the site and to determine if any petroleum contamination existed.

A permit was issued by the City of Cincinnati for the removal of piping and excavation activities. No information regarding the size, type and contents of the tanks were available to BHE. The only information available to BHE regarding the location of the tanks was a 1981 Sanborn Fire Josurance Map that noted the location of four USTs at the property.

Excavation and collection and analysis of soil samples were conducted by BHE. Removal of the piping began on April 2, 1999. Activities were suspended at the end of the day on April 2 until May 27, 1999 when an overhead canopy was removed. Mr. Michael Peterman, the City of Cincinnati Fire Inspector was on site during the excavation of the piping.

# FIELD ACTIVITIES

Closure activities occurred on April 2, 1999 and on May 27, 1999. The UST related pipuor was removed from the former pipe trenches by BHE under the supervision of Mt. Greg Gatduet (BUSTR Certified Installer #10-91-1579). A site map showing the layout of the former pump islands, piping trenches and the sampling points can be found in Figure 2. Photographs of the piping removal can be found in the Photograph section of this report.

Mr. Norm B. Obert, P.E. with Parsons Brinekerhoff Obin, Inc. the onsite construction contractor, with the Foir Washington Way Project, marked areas at the site where new bridge piers and

Underground Storage Tank Piping Closure Assessment Report City of Cincinnati Banks Property 514 West Third Street Cincinnati, Ohio 45202

Prepared for: The City of Cincinnati 801 Plum Street Cincinnati, Obio 45202

Prepared by: BHE Environmental, Juc. 11733 Chesterdale Road Cincinnati, Ohio 45246

July 1999

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### INTRODUCTION

In April 1999, BHE Environmental, Inc. (BHE), conducted closure oversight and sompling for the excavation and permanent removal of pipiper that was related to underground storage tanks (USTs) at the Banks Property located at 514 West Third Street, Cincinnati, Obio (Figure 1). The property is currently owned by the City of Cincinnati, (City) and is a part of the Fort Washington Way Highway Project. Surrounding land usage is commercial. Records indicate that the sete was granted no-further-action (NFA) status by the Bureau of Underground Storage Tank. Regulations (BUSTR).

Details regarding the previous closure of tanks of this site were unavailable. During a Phase I Environmental Site Assessment conducted by BHE in July of 1998, BHE observed four year lines and concrete pump islands that could be UST related - h was recommended that these year lines and concrete areas be excavated to determine if all the tanks and piping had been removed from the site and to determine if any petroleum contamination existed.

A permit was issued by the City of Circinnati for the removal of piping and excavation activities. No information regarding the size, type and contents of the tanks were available to BHE. The only information available to BHE regarding the location of the tanks was a 1981 Sanborn Fire Insurance Map that noted the location of four USTs at the property.

Excavation and collection and analysis of soil samples were conducted by BHE. Removal of the piping began on April 2, 1999. Activities were suspended at the end of the day on April 2 until May 27, 1999 when an overhead canopy was removed. Mr. Michael Peterman, the City of Cincinnati Fire Inspector was on site during the excavation of the piping.

## FIELD ACTIVITIES

Closure activities occurred on April 2, 1999 and on May 27, 1999. The UST related piping was removed from the former pipe trenches by BHE under the supervision of Mr. Greg Gardner (BUSTR Certified Installer #10-91-1579). A site map showing the layout of the former pump islands, piping trenches and the sampling points can be found in Figure 2. Photographs of the piping removal can be found in the Photograph section of this report.

Mr. Norm B. Obert, P.E. with Parson's Brinckerhoff Ohio, Inc. the onsite construction contraction with the Fort Washington Way Project, marked areas at the site where new budge piers and

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Inture unbity bits will be installed. Billi excavated three test pits in these areas to determine if any contaminated soil, piping to tanks remained in the areas. Removal of the vent lines and concrete pump islands was put on hold until the overhead capopy could be removed by the onsite demolition contractor. Excavation activities were continued on May 27, 1999 after the overhead canopy was removed.

There were three concrete pump islands still at the site where nine dispensers were previously located. BHE removed the concrete pads and all the piping related to the tanks and dispensers. This included product lines and vent lines. No tanks were found during excavation of any of the areas. Excavated piping was left ensite and disposed of by the onsite general contractor.

To determine if contamination was present, several soil samples were collected from the pipuptionelies, and from beneath the former dispenser locations. These samples were analyzed by BHEAS's laboratory for TPH (Method 8015), and BTEX (Method 8024).

To quantify the relative level of volattle organic compounds within each sample, field screening was performed on all collected soil samples. First, the samples were placed in new, zippered plastic bags. The samples remained in the scaled bags in a relatively warm area (greater than 70°F) for a minimum of 20 minutes to promote volatilization. The probe of a Foxboro Century Model 128 organic vapor analyzer (OVA) was inserted into the bag and the highest detected meter response was recorded. The OVA was calibrated daily to methane, and zeroed to background at the site each day before use. OVA readings for all samples collected are recorded on Table 1.

## REGULATORY ACTION LEVELS

To establish soil or groundwater action levels, BHE compared the soil results to those in the Olio Petroleum Contaminated Soils (PCS) Policy. This policy states that soils can be considered clean of they are less than 105 ppm TPH.

The City of Cincionati permit number for this site was # 31-033099. A copy of the City of Cincinnati piping removal permit and the City of Cincionati Building Permit is included in Appendix A.

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Location of Sample/Depth	OVA Result
Dispenser #1 - North Pomp Island / 3 foot	10
*Dispenser #2 North Pomp Island / 3 foot	20
Dispenser #3 - North Pump Island / 3 foot	10
Dispenser #1 - Middle Pump Island 7.3 foot	0
Dispenser #2 - Middle Pump Island / 3 foot	10
*Dispenser #3 Middle Pupp Island / 3 foot	
Dispenser#1 - Soath Pump Island / 3 foot	0
*Dispenser #2 - South Pump Island / 3 foot	<u> </u>
Dispenser #3 - South Pump Island / 3 foot	<u> </u>
Piping Trench #173 foot	(I
*Piping Treach #2/3 foot	25
*Stockpile #172 foot	
Stockpile #272 foot	
Test Pn #171 foot	
Test Pit #2 / 1 foot	0
Test Pn #371 foot	

## Table 1 - OVA Field Screening Results

\* Depates samples sent for latoratory analysis

### ANALYTICAL RESULTS

BHE submitted inne soil samples that were collected from the piping trenches and from beneath the former dispensers. Appendix B contains copies of the chain-of-custody forms and laboratory reports for these samples.

The analytical results for benzene, toluene, ethylbenzene and total xylene concentrations were found to be below the incihod of detection limits and below the allowable regulatory limits for PCS in Ohio for the samples submitted from the trenches and former dispenser locations. The TPH levels were found to be at 1 ppm for all samples.

Based on analytical results and site observations, po containinated material was removed from the site. All excavated material was returned to the excavated areas.

## CONCLUSION

Analytical results for the soil samples indicated that no periodeum contamunation was present in the areas of the site that were excavated. Therefore, the soil was used as backfull at the site. No further action is necessary concerning this piping closure.

Prepared by:

Febr Sonja J. Felik

Figures

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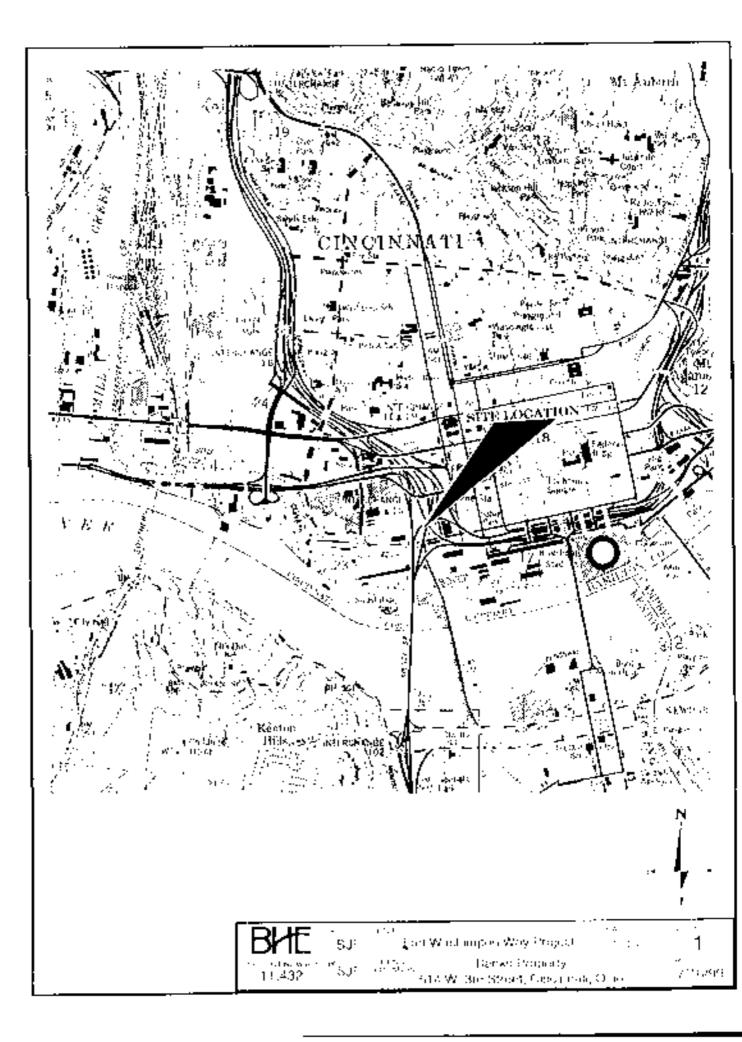
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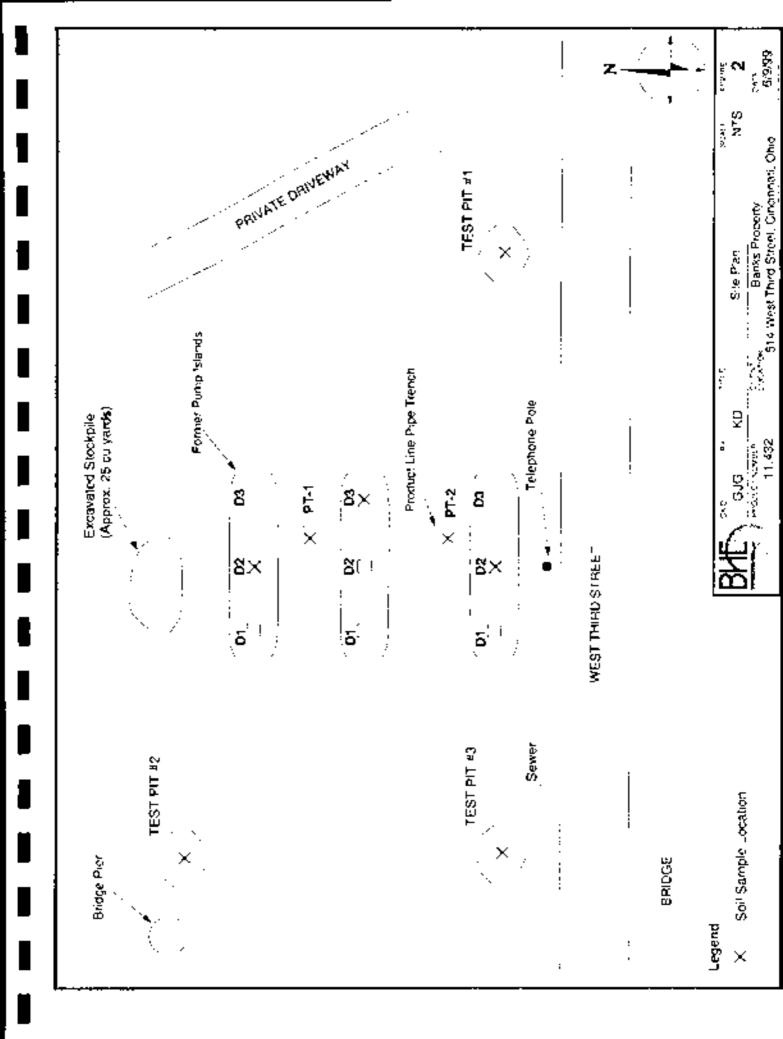
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Photographs

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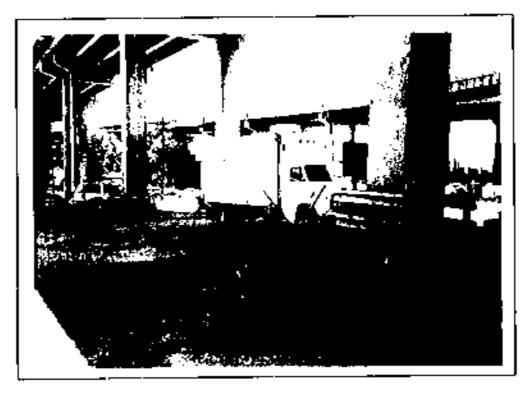
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Photograph 1— Area of Excavation



Photograph 2-> Excavated Pipe

Site 55



Ohio Department of Commerce Division of State Fire Marshol Burrah of Undergrowth Storage Tank Regulations 6606 Tussing Road - P.O Box 687 Reynoldsburg, Ott 43063-9009 (614) 752-7938 FAX (614) 752-7942

www.com.state.oh.us

Bob Taft Governor

Gary C. Subadolnik Director

April (6, 2001

BONNIE PHILLIPS CUTY OF CINCINNATI SUS CENTRAL AVE, SUITE 610 CINCINNALI OH 45202-1947 SITE DAYPON HYDRAULIC CO MARCH 2000 CLOSURE 444 W3RD ST CINCINNATIOH HAMILTON COUNTY RELEASE #31010494-C00001

### 82 NO FURTHER ACTION STATUS REGARDING CLOSURE REQUIREMENTS

Dear Ms. Phillips:

The Bureau of Underground Storage Tank Regulations (BUSTR) has reviewed all information submitted for the information. BUSTR requires no forther action (CFA) divolving UST closure under Oluo Administrative Code (OAC) rule 1301.7-7-12, effective Match 1999.

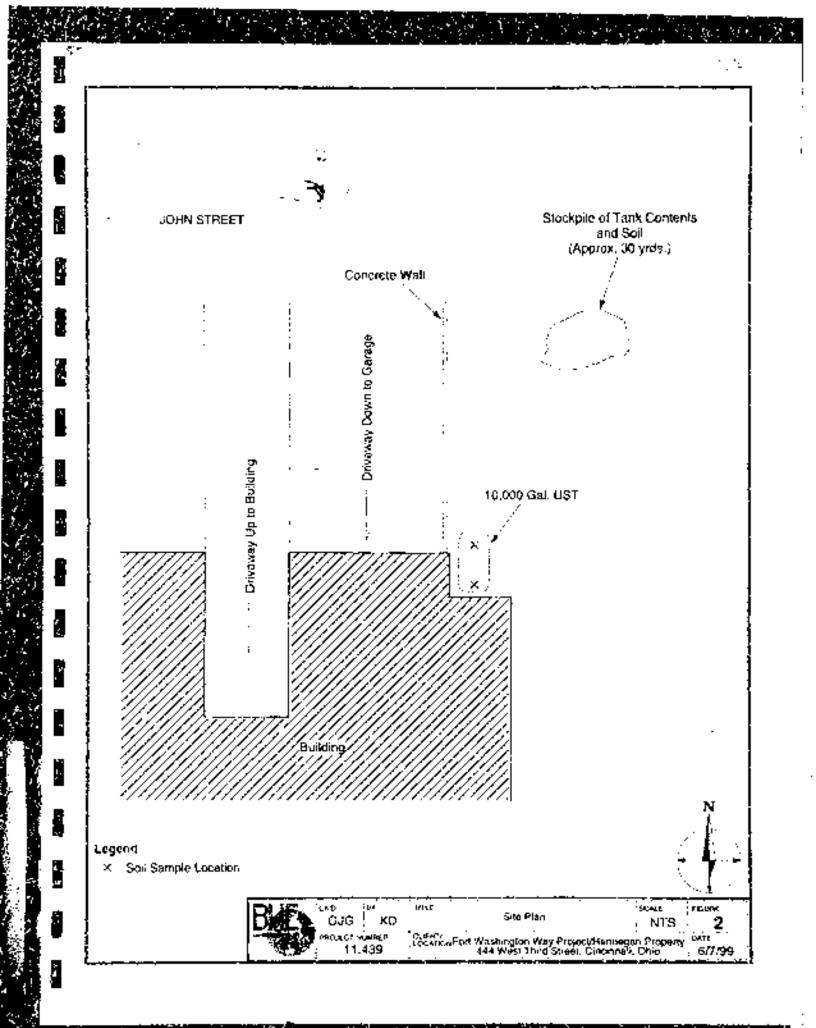
Thank you for your cooperation. If you have any questions, please contact our office at (6)(4) 752-7938.

Sincerciy, Neily J Action Supervisor Converting

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Sate File Christopher R., Eddy, BS, BS, Hamdten County Health District Michael Peterman, Countration Dire Division

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Site 57



# Obio Department of Commerce

Division of State Fire Marchal Boreau of Underground Storage Yank Regulations 6606 Tussing Road • P.O. Box 687 Reynoldsburg, ON 43068-9005 (614) 752-7938 FAX (614) 752-7942 www.cons state of the Bob Taft Governor

Gaty C. Subzdolnik Director

August 15, 2000

HONNIE PHULUPS CHTY OF CINCINNATI 801 PLUM STRM 246 CINCINNATI, OH 45202

SITI:: CINCENATI PUBLIC WORKS 302 CENTRAL AVE CINCENNATI OU HAMILTON COENTY RELEASE #31009978-N00001

#### 

Dear Bornie Phillips.

The Bereau of Underground Storage Tank Regulations (BUSTR) has reviewed all information submitted for this incident number. Based on this information, including the results of the revised closure report received July 12, 2500, BUSTR requires no forther action (NFA) involving corrective actions under Ohio Administrative Code (OAC) rule 1301/7-9-13, effective March 1999.

Transk you for your cooperation. If you have any questions, please contact our office at (614) 752-7938.

Smeetely, Kelly F Concety SuperVisor

Sate Fele
 Mike Peterman, Cincinium Fire Department
 Mohammad Alam, Cincinium City Health District

YES NO	N/A	SAMPLING	YES	NO	N/A	Report
	:	Samples Split Screen/Lab				Owner, operator, facility info.
- P		Field screening methods				Closure form complete
		Field screaning readings				UST contents disposal
		Container/agulpment/preservation				UST waste water
i i		Cocations/number of samples				UST system disposal
i i		Excavation water into				Site map of facility/area
} ·		Leboratory				Copy of permit
		Correct samples submitted	li i			PCS
u <u> </u>		Chain-of-Custody				PCS form
		Analyzed within holding time				Correct number of samples
<u>i</u>		Test methods/detection limits			_	Acco :dole diposal
		Lab reports				

<u>COMMENTS:</u> Site is Orghun. Site New has the support for Fact kinds a they built on the the site will have a city Parkingle in Mi The 650 Benge Approve in all that are eduthe single on here !. Promoved NFA status IT is Not Litely over to have a completed, exposure Pathway

DEFICIENCIES:

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#### INTRODUCTION

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This report documents the permanent removal of six orphan underground storage tanks (USTs) from the nontheast corner of 3<sup>rd</sup> Street and Central Avenue (302 - 304 Central Avenue) in Cincinnati, Ohio (Figure 1). The tanks were located beneath the elevated roadway of the former Fort Washi: gion Way (apparently inside the road right-of-way), and were encountered during excavation to install storm sewer lines associated with the new Fort Washington Way.

The removed USTs included three 4,500-gallon tanks, two 1,000-gallon (anks, and one 250-gallon tanks). The 4,500-gallon USTs all appeared to formerly contain gasoline. The 1,000-gallon tanks appeared to formerly contain gasoline or kerosene. It was assumed that the 250-gallon UST formerly contained used oil. The owner/operator of the tanks is unknown, and there are no known tank registration data for these tanks. No piping or dispensers were associated with the tanks at the time of temoval.

The site is located in on orea containing commercial and industrial properties, and readways. No bodies of surface water are located on the property. The Ohio River is located approximately 1/3 of a mile south of the property.

### FIELD ACTIVITIES

The USTs were removed on October 15, 1999. Photographs documenting closure activities are in Appendix V. The City of Cineminational bas delegated authority from BUSTR for UST removals. A copy of the application for the Delegated Permit for Underground Storage Tanks, submitted to the City of Cinemination Fire Division is contained in Appendix B. Although verbal authorization to remove the tanks was received from the Fire Division, a copy of the permit was not received by BHE. Mr. Eric Rickeri of BHE (Installer No. 10-92-2044) was the ou-site certified installer. Mr. Russ Singleton of the Cinemination Fire Division inspected the removal activities.

Approximately 1.400 galloes of water was pumped from the USTs prior to removal. The fluid was pumped out and disposed by the Grubb Oil Company of Anteha, Ohio. Copies of disposal documentation are in Appendix C. A small amount of sand was in most of the tanks once the fluid was removed. Prior to removal a visual site evaluation did not reveal any petroleum-stained surface soft.

The ranks were removed from the ground, cut open and cleaned. The sand present in the bottom of the tanks was showeled into (5-gallon droms and staged on site pending disposal as petroleumcontanenated soil. Cleaning material (absorbent) was placed into the drums with the sand

1010 A A

The USTs were erushed and rendered useless. The C.J. Mahan Construction Company (the firm conducting the construction activities in the area) staged the crushed tanks with other scrap metal, pending transportation to a local scrap metal recycling facility. Mr. Singleton (Cincinnati Fire Division) approved the transfer of the management of the tanks to the Mahan Construction Company, and stated that documentation of the handling of the tanks would be an acceptable substitute to a scrap yard dispocal ticket or weight ticket. A copy of the letter from BHE documenting proper cleaning of the tanks, and the letter from the Mahan Construction Company stating that the crushed tanks will be submitted for recycling are in Appendix D.

Soil samples were collected from the excavation following BUSTR goodance. A total of twelve soil samples were collected from the cavity bottom, one from onder each end of each tank. Table I summarizes sample collection information including collection locations, sample descriptions, field screening measurements, and documentation of which sample was submitted for laboratory analysis. Groundwater was not encountered in the excavation at any time.

Each sample was collected by hand from the bucket of the excavator, or directly from the excavation, taking care to ensure that samples did not come into contact with the bucket. A new pair of disposable gloves was used to collect each sample. Samples were placed into 125-milliliter (ml) pre-cleaned glass gars having Tetlon-lined lids. Sample jars were immediately placed into a chilled cooler containing ice. To quantify the relative level of volatile organic compounds within each sample, field screening was performed on split soil samples collected in new plastic zipper bags. The samples remained in the scaled bags in a relatively warm area (greater than 70°F) for a minimum of 20 minutes to promote volatilization. The probe of a Foxboro Century-128 organic vapor analyzer (OVA) was inserted into the bag and the highest detected meter response was recorded. The OVA was calibrated daily to 100 ppin methane, and zeroed to background. OVA readings for all samples collected are listed on Table 1. Mr. Eric Rickert of BHE conducted the sampling.

v total of three soil samples collected from the UST cavity were selected for laboratory analysis based  $\sim OV_{cb}$  readings. Sample collection locations are illustrated on Figure 2.

w samples were submitted to the BHE Analytical Services (BHEAS) on site mobile laboratory for dyses of volatile organic compounds (VOCs), including benzene, ethylbenzene, toluene, and total enes (BTEX) and methyl t-butyl ether (MTBE) by Method 8021, and total petroleum hydrocarbons H) by Method 418.1. In addition, sample aliquots were submitted to CT&E Environmental ices (CTE) for analysis of polynuclear aromatics (PNAs) by Method 8270.

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#### REGULATORY ACTION LEVELS

The closure action levels appropriate for this site are listed on Table 2. These action levels are based on satal sod, ground water is drinking water, and depth to groundwater is less than 15 feet.

#### EXCAVATED SOIL

The majority of the soil excavated during tank removal and storm sewer line installation was returned to the UST cavity by the construction contraction. A small volume of soil (<1 yd<sup>2</sup>) of soil excavated from beneath tank #6 was slightly stained and therefore, this soil was the expiled, sampled and analyzed. Six soil samples were collected from the stockpile. Stockpile samples were collected and field screened as discussed above. Field screening results are summarized on Table 1. The stockpile sample having the highest field screening reading was submitted to the BHEAS on site laboratory for immediate analysis of VOCs and TPH+418.1, and to CT&E for PNA analysis. Analytical results are summarized on Table 2. The laboratory report and chain of custody form are in Appendix E.

Since stockpile sample SP-6 contained 0.56 ppm benzo(a)pyrene which is above the action level of 0.550 ppm, the soil pile is considered petroleom contaminated soil (PCS) according to the BUSTR rules. The stockpiled soil was placed in drums and staged on site pending proper disposal. A total of nine drums containing the soil from the stockpile, and the sand and cleaning materials from the tacks were generated during tank removal activities. Petro Environmental Technologies, Inc. transported the drums to the Petro Cell in Washington Court House, Ohio for treatment. The BUSTR Soil Treatment and Disposal Form, analytical resolts from a sample collected from the drums and waste manifest and disposal documentation are contained in Appendix F.

#### CLOSURE SAMPLE ANALYTICAL RESULTS

Analytical results for the soil samples analyzed during closure activities are presented on Table 2. Copies of the Chain-of-Custody Form and Laboratory Reports are enclosed in Appendix 8.

No BUSTR action level was exceeded for any compound in sort samples T5W and T6W collected from the bottom of the UST excitation. Benzo(a)pyrene was quantified slightly above the BUSTR closure action level of 0.55 ppm in sample T4W.

#### REQUEST FOR NO FURTHER ACTION STATUS

The City of Cincinnati owns the property. The owner operator of the USTs is unknown and it is unknown when the tanks were last used. It could be assumed that the tanks were taken out of service about the time that Fort Washington Way was originally constructed.

The tanks were located beneath the elevated roadway of the former Fort Washington Way (apparently inside the road right-of-way), and were encountered during excavation associated with the redesign and replacement of Fort Washington Way. Following completion of construction activities associated with the new Fort Washington Way, the site will be located beneath a higher  $\phi$  access ramp. In addition, a new concrete support pier for the readway has been installed on the property, thereby limiting potential future uses for the site. The City plans to use the property as a parking lot. Based on the location of the site and the use of the site (road right of way, support pier for the roadway, and City parking lot), it is unlikely that the property would ever be transferred to private ownership.

HTEX and other VOCs were not detected above the reporting limit of <0.001 ppm in any sample. The low concentrations of TPH-418.1 and PNAs detected in the samples may be from anthropogenic sources, not related to the former USTs. Although a relationship to the former USTs cannot be entirely eliminated, in a study conducted on background soil samples from New England cities, benzo(a)pyrene was quantified in 57 of 62 soil samples with measured concentrations tanging from 0.040 mg/kg to 13 00 mg/kg (arithmetic mean of 1.323 mg/kg) {*llackground Levels of Polycyclic Aromatic Hedracarbons and Selected Metals in New England Urban Soils*, Journal of Soil Contamination, 3(4), 1994]. Theses samples were collected from a depth of 0 to 6-inches below the surface in areas such 7s along roads, salewalks, parks and open lots, considered to be not directly affected by industrial sites. In addition, samples collected near payment had a significantly higher (approximately threefold higher) concentration of PNAs than samples collected away from payed areas.

Based on the current and limited potential foture land use scenarios, and the fact that only one PNA compound was quantified (only slightly) above the closure action level in one soil sample. The City of Cincinnati respectfully requests that No Further Action (NFA) status he granted to this site.

Prepared by BHE ENVIRONMENTAL, INC.

Tennis Schucker, Ph.D. Project Manager / Geologist December 15, 1999 Revised, June 22, 2009

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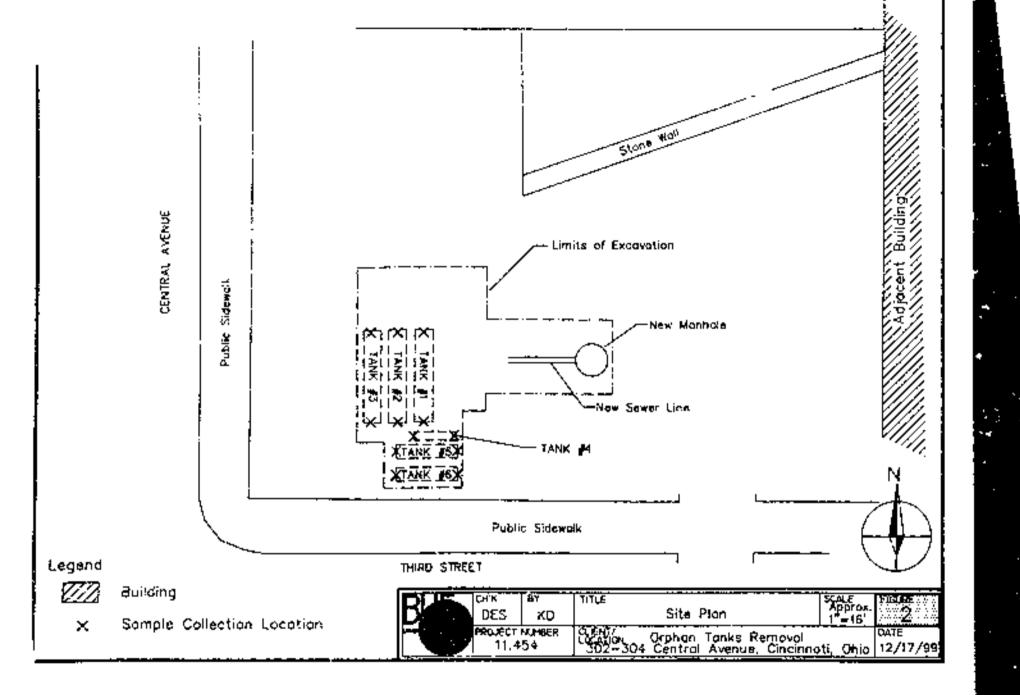
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COST-EFFECTIVE ENVIRONMENTAL MANAGEMENT

10/18/19

BHIT Exactionential removed & stact underground storage that, from the northeast converse f Central Avenue and 3<sup>cd</sup> Storet, Consume h. Ott on October 13, 1997. The tents Were cleaned on October 18, 1999 according to Ohio Fire Machal, Burrau of Underground Sharage Tank Regulation (BUSTR) requirement. The tents are new ready for deposal or recycling.

50 Rubert Micha En A. Richert

Associate Director

renden i Romanne v Parlin Astri, det i se se di Alimini di Statu 324. 1908 - PAR Schulz 1850 - e e esse debrang La companya di Statu e data da catanti di Antonio di Antonio 1951 - Antonio di Antonio Antonio Antonio di Antoni Table 1. Clowine Sample Descriptions and Field Screening Results, 302 - 304 Centrel Avenue, Cincinnett, Ohio Sample collected October 18, 1999.

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Sample ID	Collection Depth (feet)	Sample Description	Field Screening Results	Sample to Lah 7
UST CAVITY BOTTOM SAMPLES	MPLES			
TIN	8	Brown, SAND, some sity clay	0	-
115	8	Brown, SAND, some silly day	-	=
T2N	8	Brown, SAND, some allty cley	-	c
128	æ	Brown, SAND, some slifty clay	-	e
T3N	60	Brown, SAND, some aity clay	0	c
136	8	Brown, SAND, some sifty clay	-	E
148	цэ	Brown, SANO, some sifty clay	0	c
T4W	ц	Brown, SAND, some sitty clay	2	>
TSE	\$	Brown, SAND, some slity clay	-	ㅋ
T5W	\$	Brown, SAMD, some slity clay	4	>
TGE	5	Brown, SAND, some sifty clay	3	>
TGW	5	Brown, SAND, some slity clay	-	<b>د</b>
SOIL STOCKFILE SAMPLES	ES			
SP-1	1	Brown, SAND, some sifty clay	-	e
SP-2		Brown, SAND, some sitty day	-	c
SP.3	-	Brown, SAND, some slity clay	0	۲
SP4	· · ·	Brown, SAND, some slity clay	-	c
SP-5	<b>•</b>	Brown, SAND, some sifty day	6	-
SP-6		Brown, SAND, some silty clay	•	¥

All semples are grab soil semples.

Field Screening conducted using a Foxoboro Century 128 OVA calibrated daily to 100 ppm methane.

Table 2. Closure Semple Analytical Results, 302 - 304 Cantral Avenue, Cinchmetl, Ohlo Samples collected October 15, 1998. Alt results in mg/Kg (parte per million (ppm))

	TANK T	MGL	Ê	400	Action
				(Sali Stockpile)	" Ievel
BTEX-MTBE Compounds					
Benzene	(CO)	60.001	40.001	<b>60.001</b>	5
Tedunen	(DCD)>	<0.001	¢0,001	40.001	58.700
Ethylanzana	40.001	Q.Q	40.00	±0.001	71.100
Total Xvianee	100.05	100.01	¢0.001	100.02	1300,000
Kethyl t-butyl ether	<0.001	€0:001	<0,001	÷0.00	0.550
TPH-416.1	я	71	52	33	Z
PNA Compounds					
Benzo (a) anthracane	0.93	0.48	50°33	0.82	9.50 9
Benzo (a) pyrene	0.69-	4 25	<b>S</b> .0	6:30	
Benzo (b) floranthene	0.67	0.41	\$0 <b>3</b> 3	0.51	£.600
Benzo (k) floranthene	0.53	0.41	\$0, <b>3</b> 3	0.42	300'99
Chreane	0.04	0.47	<0.33	0.70	510.000
Dibenzo (a.h) anthrecene	¢0.55	5	40.55	<0.55	0.000
Indeno (1.2.3-od) ovrané	<0.67	<0.67 <	<b>4</b> ,67	<0.67	5,503
Naphatene	5.5	8.8	<b>40.3</b> 3	¢0,33	1800.000
Other VOCe					_
Carbon tetrachloride	<b>6</b> .6	<b>10</b> ,0	<0.001	8.9	0 <b>.</b> 400
1.1-Dichloroethane	100.01	<0.001	<0.001	<0.001	0.00186
1.1-Olchlomethylene	100.0-	<0.001	<0.001	60.001	0.90233
Tetrachtoroethene (PCE)	<b>€0.001</b>	100'0×	(8) (8)	<0.001	4.530
1.1.1-Trothoroethene	<0.001	¢0.001	40:00	<0.001	10,600
Trichlomethylene (TCE)	40.001	40.001	€0:001	<0,001	0.294
Vinvi chloride	<0.001	8.8 1	<0.001	<0.001	0.0648

 Action levels are tot sanageret soil type where groundweler is critiking water and groundwater is <15 feet below ground surface.</li>

Bold type indicates theil cample exceeds BUSTR action level.

Site 58

Underground Storage Tank Closure Assessment Report The Crosselt Property 205 Central Parkway Cincinnati, Ohio 45202

> Prepared for: The City of Cinclunati 801 Num Street Cincinnati, Ohio 45202

Prepared by: BHE Environmental, Inc. 11733 Chesterdale Road Cincinnati, Ohio 45246

April 1999

Notice: This report has been prepared by 1000 Linemanniantal. Inc., solely, for the benefit of us cherd in accordance with an approved stope of work. [1000 assumes no liability for the enaction we of this report of the information contained in it by a third party. Copyright C 1999 by 1010 how reamental, line

# **UST Owner**

The City of Cincinnati 801 Pium Street Cincinnati, Ohio 45202

# UST Operator:

Crossett Grocers 205 Central Parkway Cincinnati, Ohio 45202

#### UST Facility Location:

The Crossett Property 205 Central Parkway Cincinnati, Ohio 45202

UST Jiacility Owner

The Crossett Property 205 Central Patkway Cincinnati, Obio 45202

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2	Tank Cavity After Tank Removal
opene	lices

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В	BUSTR Notification Form, Soil Disposal/Treatment Notification Form, Closure Checklist, and Site Feature Scoring System Chart

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Chain-of-Custody Forms and Analytical Laboratory Reports  $\mathbf{C}$ 

## INTRODUCTION

In February 1999, BHE Environmental, Inc. (BHE), conducted closure oversight and closure sampling, for the permanent removal of one underground storage tank located at the former Crossett Wholesale Grocers located at 205 Central Parkway, Cincinnati, Ohio (Figure 1). The property is currently in the process of being purchased by the City of Cincinnati, (City) as a part of the Fort Washington Way Highway project. Surrounding land usage is commercial. The UST was of fiberglass construction and was 12,000 gallons in size.

The closure of this tank system was regulated by the Ohio Bureau of Underground Storage Tank Regulations (BUSTR). The tank had been out of service for an unknown tube prior to the time of closure. The tank was installed around 1989 and was used to contain diesel fuel for foeling delivery trocks.

Excavation and collection and analysis of soil samples was conducted by BHE. Removal of the tank began on February 16, 1999 and was completed on February 17, 1999. Mr. Michael Peterman, the City of Cincinnati Fire Inspector was on site during the excavation of the UST system.

# FIELD ACTIVITIES

Closure activities began on February 16, 1999 and were completed on February 17, 1999. The UST was removed from the cavity by BHE under the supervision of Mr. Greg Gardner (BUSTR Certified Installer #10-91-1579). A site map showing the layout of the tanks, and the sampling points can be found in Figure 2. Photographs of the tank removal can be found in the Photograph section of this report.

To obtain access to the tank, BHE excavated soil from over the top of the tank and exposed the top of the tank meluding the vent line and piping. Most of the fuel in the tank had been pumped out of the UST by the previous owners of the tank. BHE drammed all remaining tank contents (2 drams of tank sludge) which were later picked up and disposed of by Klor-Kleen. Prior to the final tank cleaning, the atmosphere in the UST was monitored with an Industrial Selectific Model MC251 Lower Explosive Limit (LEL) meter until the atmosphere was found act to contain an explosive atmosphere. The tank was then removed from the cavity and staged for final cleaning. Prior to final cleaning, the tank was continually vented using an attempressor and a venturi. While

continuing to monitor the maide atmosphere of the UST, a hole was punched in one end of the tank using the trackhoe for clearing.

No serial numbers were identified on the tank. During excavation and removal, the tank appeared to be in good condition with no holes or pitting. As the tank was removed, the soil and backfull material was stockpiled, no contamination was evident during the removal of the tank, hnes and dispenser although a strong septic odor was present in the area of the dispenser.

Two stockpiles were made for backfill and soil as it was removed from the excavation. One stockpile contained approximately 250 cubic yards from the tank cavity. The second stockpile was approximately 20 cubic yards and contained material excavated from beneath the dispenser. The tank was crushed, placed in a roll-off box and removed from the site on February 17, 1999. It was disposed of at the Rumpke Landfill as solid waste. All the vent lines were removed as well as all piping and the dispenser. The concrete was returned to the excavation and the steel piping disposed of with the tank at Rumpke Landfill. Disposal receipts for the tank sludge and the tank can be found in Appendix A.

On February 17, 1999, the tank cavity was backfilled. Clean fill in the form of bankrun and B19 gravel was added to the UST cavity to bring the site to grade. The native soil observed in the tank cavity was silty clay on the sidewalls and bottom with sand in the pipe trench.

As required, samples were collected from the tank cavity, the piping trench, beneath the dispensel and from the two stockpiles. Samples were collected by Mr. Greg Gardner of BHE. These samples were analyzed by BHEAS's laboratory for TPH (Method 418.1), TPH (Method 8015 modified) and BTEX (Method 8020). An aliquot of each soil sample was also submitted for analysis of PAH compounds (Method 8270) by CT&E Environmental Services, Inc. (CTE).

Although no contamination appeared to be present, samples were collected from the two soil stockpiles to determine if offsite disposal was required. After field screening, three soil samples (two from the eavity stockpile and one from the dispenser stockpile) were analyzed by BBEAS's laboratory for TPH (Method 418.1), TPH (Method 8015 modified) and BTEX (Method 8020). Three soil samples were also submitted for analysis of PAH compounds (Method 8270) by CTE

To quantify the relative level of volatile organic compounds within each sample, field screening was performed on all collected soil samples. First, the samples were placed in new, zippered plastic bags. The samples remained in the scaled bags in a relatively warm area (greater than 70°14) for a minimum of 20 minutes to promote volatilization. The probe of a hoxboro Century Model 128 organic vapor analyzer (OVA) was inserted into the bag and the highest detected meter.

response was recorded. The OVA was calibrated daily to methane, and zeroed to background at the site each day before use. OVA readings for all samples collected are recorded on Table 1.

Location of Sample/Depth	OVA Result
Cavity Stockpile Soil Sample #1/1 foot	ND
Cavity Stockpile Soil Sample #2/1 toot	
Cavity Stockpile Soil Sample #3/1 foot	1
Cavity Stockpile Soil Sample #4/ 1 foot	0.5
Cavity Stockpile Soil Sample #5/ 1 foot	ND
Cavity Stockpile Soil Sample #6/ 1 foot	0.5
Cavity Stockpile Soil Sample #7/ 1 foot	ND
Cavity Stockpile Soil Sample #8/ 1 foot	1
*Tank Cavity East - 12 feet	16
Tank Cavity Center - 12 feet	][]
Tank Cavity West - 12 feet	10
* Dispenser Stockpile #1/1 foot	>1000
Dispenser Stockpile #2/1 foot	>1000
* Beneath Dispenser 7 feet	>1000
Pipe Trench @ 20 feet/ 4 foot depth	ND
Pipe Trench @40 feet/ 4 foot depth	מא

# Table 1 - OVA Field Screening Results

Denotes samples sent for laboratory analysis

#### REGULATORY ACTION LEVELS

To establish soil or groundwater action levels, BHE completed the Site Feature Scoring System for the Crossett site. The Site Feature Scoring System considers the relative location of a UST system to the closest drinking water supply well or intake (currently in use), the average depth to groundwater, the predominant type of substratum, and any natural and/or manmade conduits million receptors. Category 2 action levels (as defined in OAC Rule 1301:7-9-13 (E)) are applicable for this site. A copy of the Site Feature Scoring System for this site is located in Appendix B.

The permit number for this site was #09351 A copy of the Delegated BUSTR permit and the City of Cincinnati Building Permit is included in Appendix B. Copies of the Soil Disposal/Treatment Notification Form and the Closure Checklist can also be found in Appendix B.

The regulatory action levels for soils at a Category 2 site are 0.170 ppm benzene, 7 ppm toluone, 10 ppm ethylbenzene, and 47 ppm xylenes. Total Petroleum Hydrocarbon (TPH) regulatory action level for a Category 2 site with a dissel UST is 300 ppm.

# ANALYTICAL RESULTS

Based on regulatory requirements, BHE submitted two soil samples that were collected from the stockpiled soil resulting from the removal of the tank. An additional sample was submitted from those collected from the stockpiled material from beneath the dispenser. One sample each was submitted from the tank cavity, beneath the dispenser and from the piping trench for analysis. Appendix C contains copies of the chain-of-custody forms and laboratory reports for these samples.

The analytical results for benzene, toluene, ethylbenzene and total xylene concentrations were found at varied levels below the method of detection limits and below the allowable regulatory limits for a Calegory 2 site.

Based on analytical results and site observations, no contammated soil was removed for disposal from this site. All material was returned to the cavity as backfill material.

# CONCLUSION

No compounds were quantified above the appropriate BUSTR action levels in the cavity, dispensel or piping trench soil samples submitted for laboratory analysis during this UST closure. Additionally, analytical results from the excavated soil indicated that no contamination was present in the stockpiled soil. Therefore, soils from both stockpiles were returned to the cavity. Since all analytical results are below action levels, no further action is necessary concerning this UST closure.

Prepared by:

Juster mint Police

Date: April 30, 1999

Figures

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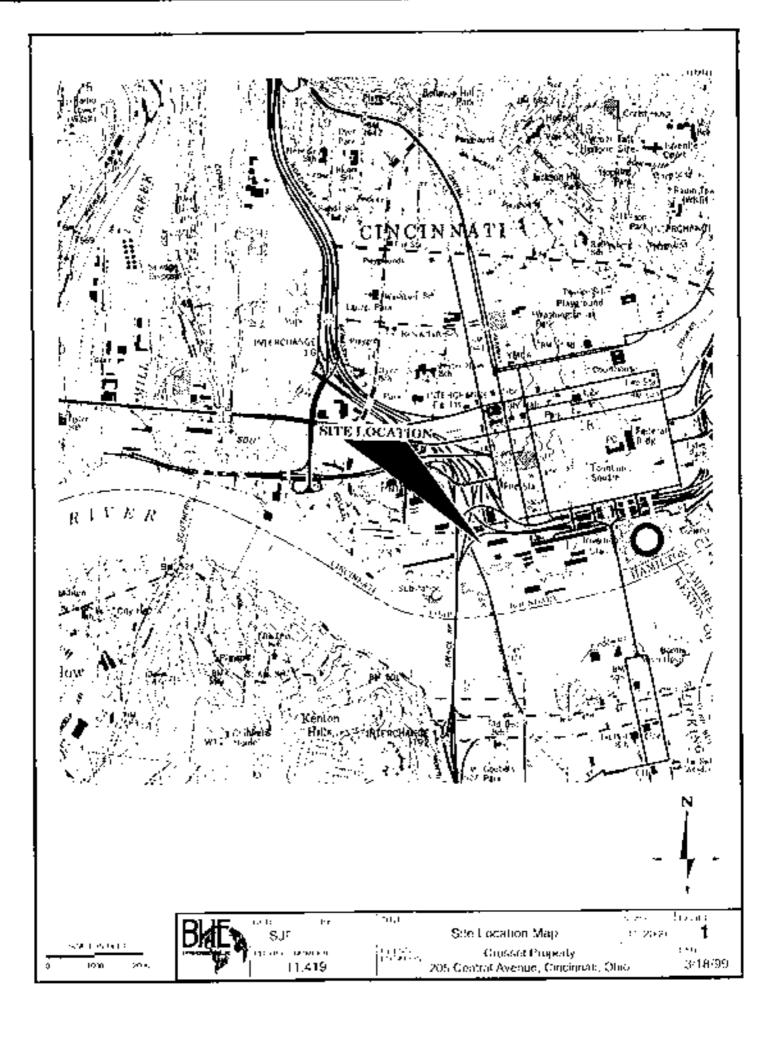
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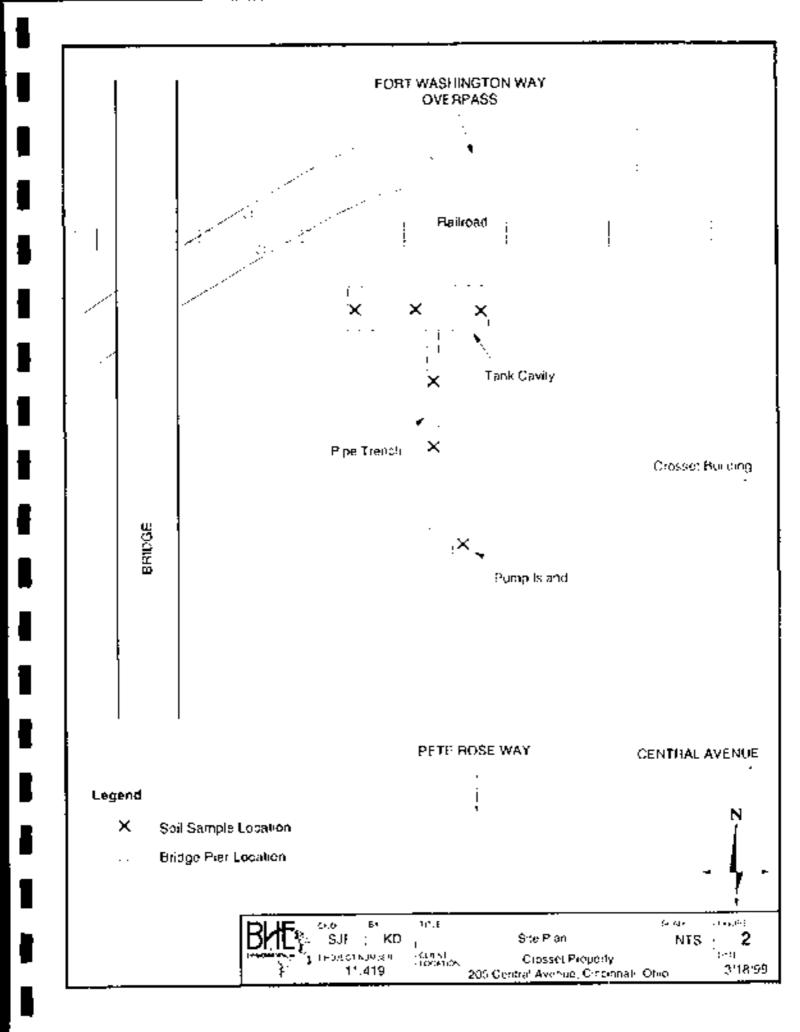
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# Appendix B

BUSTR Permit, Site Feature Scoring System, Soil Disposal/Treatment Form, BUSTR Closure Checklist, City of Cincinnali Building Permit

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# City of Cincinnati



# $-(it) \geq 0$

Department of Safety Division of Fire Concinenti Fire Division Fire Preventigo Bureau 200 W. Pete Rose Way 24TE Floor, Labby H Concinenti, Off 45203 (\$43) 357-7591 Fine (\$13) 357-7579 Fire Advantstration Bailding 100 Central Avenue Cancinevit, Olito \$5202

Robert Wright Fire Chief

Match E, 1999

Mr. Greg Gardner BHI, Invisonmental, Ice (1700 Chesterdale Road Cincinnati, OH, 45746

Ry Period No. 13-021799 205 Central Avenue

Dear Mr. Gardner

This letter shall serve as a period for the removal of one (1) 12,000-gallon diesel underground storage tack and one (1) 550 gallon kerosene abeveground storage tack for City of Cincinnati located at 265 Central Asietize, Cincinnati, Ohio - This period expressione 1, 1999.

It is understood the removal will meet all requirements of the National fore Protection Association #30. Flammable and Combinitible Liquids Code/BUSTR regulations

In accordance with Ordinance No. 412-1979 of the Cincinnati Municipal Code, a fee of \$200.00 is required Ru-Fire Division Permit No. 13-021299 - Your check should be made payable to the City of Cincinnate Treasurer and presented to the Fire Division of the time the permit is approved.

Please notify me at the Fire Prevention Bureau, (513) 357-7591, between the hours of 7.00 a  $m \times 8.00$  a m, three (3) working days in advance to schedule the tank test.

Secrety

Michael 1 Peterman UST/AST Coordinator Safety Department/Free Division Une Prevention Bureau

MLP sk

Equal Opport parts 2.0 pilot

# DEPARTMENT OF COMMERCE, DIVISION OF STATE FIRE MARSHAL BUREAU OF UNDERGROUND STORAGE TANK REGULATIONS P.O. BOX 687 REYNOLDSBURG, OH 43068-0687 09351

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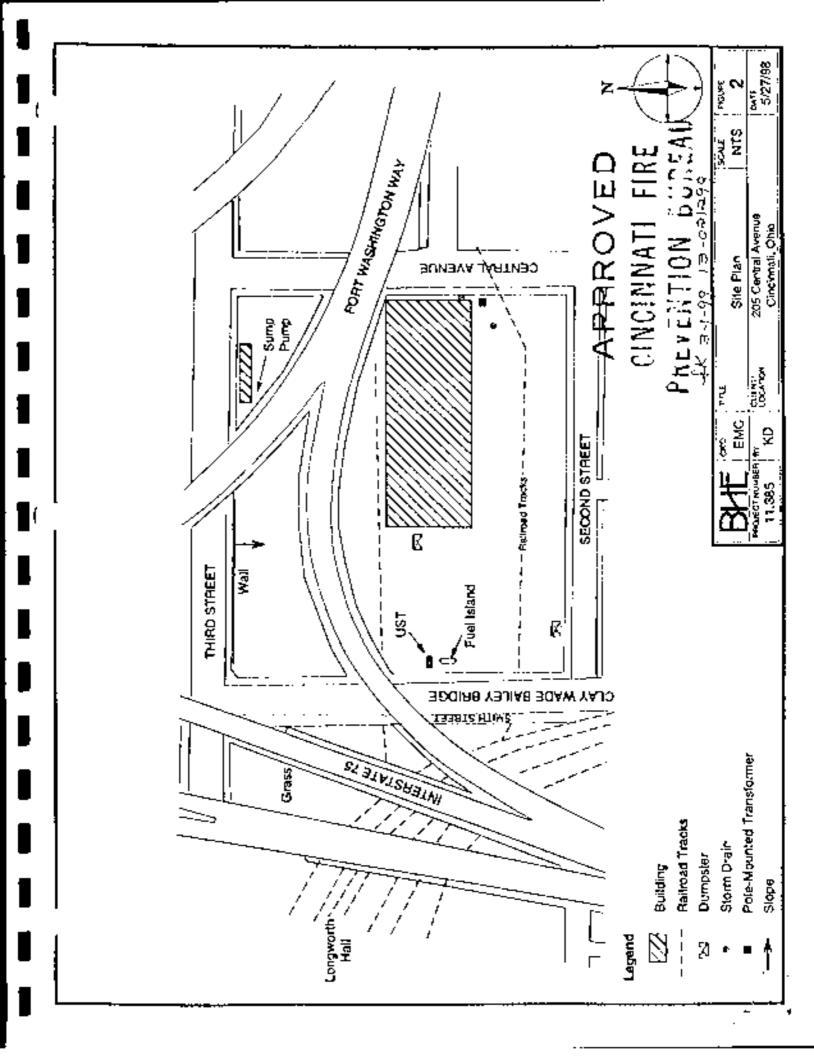
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# DELEGATED PERMIT FOR UNDERGROUND STORAGE TANKS 13-021299 Permit No. 244444

have Date 03/02/99

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801 PLUM STREE	τ.	205 CENTRAL AVENUE
Cincinnati	зык <sup>24</sup> л ОНІО 45202	City Since Zap CINCINNATI OHIO 45202
Ann (Contact Person)	Area Code - Phone (513) 352-5291	Area Code - Phone County NAMILTON
III CONTRACTOR		IV. LOCAL FIRE DEPARTMENT
Constantion's Name BHE_ENVIRONMEN	TAL INC	Fire Department Name CINCINNATI PIRE DIVISION
GREG GARDNER	Area Code - Phone (5)3) 326-1500	Addiess 700 W PETE ROSE WY 5TH FL LOBBY H
Addrem 11733 CHESTERD	ALE ROAD	Cincinnari Ohio 45203
City CINCINNATI	Saute 7ap OHIO 45246	<u></u>
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······································		No. 10-9]-1579
	REG GLADNER	

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# September 1, 1992 Underground Storage Tank Regulations, OAC 1301.7-9-13

P/N-Locetion

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CROSSET

# SITE FEATURE SCORING SYSTEM

	Column A		Column B		Column C		Column D	
Sile Festures	Score 20 If True	Score	Score 15 Il True	Score	Score 10 If True	Score	Score 5 li True	Score
1. Distance of UST	>1000		301-1000	1	<301		Inside of	
system from closest	Feet		Feet		Feet		designated	
drinking water supply							sens <sup>:</sup> live	5
well or intake							area	
corrently in use.						· · ·		
2. Average depth	>50 Feet		31-50 Feet	1	15-30 Feet		<15 Feo1	
to proundwater.				ļ	or unknown	10		
3. Prefeminant sell	Clay or		Silt or Ciayey	1	Silty Sand		Clean Sand	
lype of substratum.	Shale		Sands or		or Fine Sand		or Grave' or	
			Fine	15	or Sandstone		Congiomerate	
			Sandstone	ļ	or unknown			
4 Natura and/or	<8		<b>8-10</b>	1	11-13		>13	
manmade conduits		20						
or receptors."		00					l	

# **'SITE FEATURE WORKSHEET**

TOTAL SCORE 50

	Sub-Total Points	
Buried electrical cable main within filty feet of UST system	1 Point	
Buried telephone television cable main within fifty feet of UST system	1 Point	
Bedrock area prone to dissolution along joints of fractures (le. caves & sinkholes) within one hundred feet of UST system	1 Point	
Faults or known fractures within 100 feet of UST system	1 Point	
Natural gas line within fifty feet of UST system	1 Point	
Water inclination fitty feet of UST system	1 Point	
Sept-c system leach field within filly toot of UST system	2 Points	
Sanitary sewer within fifty feet of UST system	4 Points	-
Storm sewer within fifty feet of UST system	4 Points	Ч
Basements or subsurface foundations within one hundred feet of UST system	4 Points	



# hio Department of Comme

Division of State Fire Marshal Bureau of Underground Storage Tank Regulations 8895 F. Main St. • P.O. Box 687 Reynoldsburg, OH 43068-9009 (614) 752-7938 FAX (614) 752-7942 www.com.state.ph.us Bob Taft Governor

Doug White Director

28

July 07, 2006

ROBERT CASTELLIÑI CROSSET COMPANY 2 PLUM STREET CINCINNATI, OH 45202 SITE: CROSSET CO., INC. 205 CENTRAL AVE CINCINNATI OH HAMILTON COUNTY RELEASE #31000237-N00001

# RE: NO ANSWER TO INFORMATION REQUEST

Dear Mr. Castellini:

On January 16, 1997, March 16, 2006, and November 9, 2005, the Bureau of Underground Storage Tank Regulations (BUSTR) sent you letters requesting information needed to complete your site check requirements pursuant to Ohio Administrative Code (OAC) 1301:7-9-13, effective March 2005, which was due on December 1, 2005. As of this date we have not received the requested information. You must supply this information to BUSTR on or before October 7, 2006.

Publications that may help you understand the requirements for compliance with BUSTR's rules and regulations may be found on the Internet at <u>www.com.state.oh</u> us/sfm or by calling our office.

Thank you for your cooperation. If you have any questions, please contact me at (614)752-7097.

Sincerely,

Mat

Ralph V. Mertz, III Environmental Specialist

xe: Site File



# Ohio Department of Commerce

Division of State Fire Marshal Bureau of Underground Storage Tank Regulations 8895 E Main St. + P.O. Box 687 Reynoldshurg, OH 43068-9009 (614) 752-7938 FAX (614) 752-7942 www.com.state.oh.us Bob Taft Governor

Doug White Director

November 9, 2005

BRIAN CAMPBELL CROSSET COMPANY 205 CENTRAL AVE CINCINNATI OH 45202 SITE: CROSSET CO., INC. 205 CENTRAL AVE CINCINNATI OH HAMILTON COUNTY REI.EASE #31000237-N00001

# RE: 2005 CORRECTIVE ACTION RULE

Dear Mr. Campbell:

On March 1, 2005, the Bureau of Underground Storage Tank Regulations (BUSTR) new corrective action rules became effective. This rule establishes timelines by which corrective action under Ohio Administrative Code 1301:7-9-13, effective September 1, 1992, must be complete. If corrective actions being conducted under the 1992 corrective action rule were not completed by September 1, 2005, the effected site would be automatically be moved into OAC 1301:7-9-13, effective March 1, 2005. This letter is to notify you that your site has been moved into the 2005 corrective action rule. You are required to conduct a Tier 1 Source Investigation pursuant to OAC 1301:7-9-13(H), effective March 2005, and submit either a Tier 1 Evaluation or Tier 1 Delineation Notification report on or before December 1, 2005.

Please note that many differences exist between the 1992 and 2005 corrective action rules and that care should be taken to insure that all future corrective action activities are conducted according to the 2005 corrective action rule.

Publications that may help you to understand the requirements for compliance with BUSTR's rules and regulations may be found on the Internet at <u>www.com.state.oh.us/sfm</u> or by calling our office.

Thank you for your cooperation. If you have any questions, please contact me at (614) 752-7096.

Sincerely,

Jason Anthony Environmental Specialist

xe: Site File



# Ohio Department of Commerce

Division of State Fire Marshal Bureau of Underground Storage Tank Regulations 8895 E. Main St. P.O. Box 687 Reynoldsburg, OR 43068-9009 (634) 752-7938 FAX (614) 752-7942 www.com.state.ol.us Bob Tafi Governor

Lt. Governor Jennette Bradley Director

March 16, 2004

BRIAN CAMPBELL CROSSET COMPANY 205 CENTRAL AVE CINCINNATI OR 45202 SITE: CROSSET CO INC APRIL 1989 SUSPECTED RELEASE 205 CENTRAL AVE CINCINNATI OH HAMILTON COUNTY INCIDENT #319276-00 RELEASE #31000237-N00001

# RE: NO RESPONSE RECEIVED

Dear Mr. Campbell:

On September 15, 1992 and January 16, 1997, the Bureau of Underground Storage Tank Regulations (BUSTR) sent you letters requesting information needed to complete your site check requirements. As of this date you have not provided the requested information. In addition, BUSTR noted that one 12,000-gallon diesel UST was removed on February 16, 1999. This UST received a "no further action" status on July 9, 1999. BUSTR has documentation stating that historically two diesel UST's were located at this property. Please provide documentation on the status of the additional UST in use on April 21, 1989. To be in compliance with Ohio Administrative Code 1301:7-9-13, effective September 1992, you should supply this information within 60 days of the date of this letter.

On March 31, 1999, a new corrective action rule became effective. A provision of this rule allows owners/operators with releases confirmed prior to March 31, 1999 to elect to conduct corrective action under the 1999 rule. A Fact Sheet explaining this option may be found on our web site.

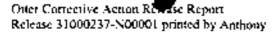
Publications that may help you to understand the requirements for compliance with BUSTR's rules and regulations may be found on the internet at www.com.state.oh us or by calling our office.

Thank you for your cooperation. If you have any questions, please contact me at 614-752-7096.

Sincerely,

Jason Anthony Environmental Specialist

xe: Site File





W000725 CROSSET CO., INC. Private

#### Person Reporting Release

DICK DORSEL CROSSET CO 205 CENTRAL AVE CINCINNATI, 45202 (513)421-5511

#### Release Location

31000237 - CROSSET CO., INC. 205 CENTRAL AVE CINCINNATI, OH 45202 Hamilton

#### Release Information

Release Number, N00001 Date Reported: 4:21/89 Source: Unusual operating conditions Content: Diesel Rules: 1992 Class: D Deed Restriction: No Date of Last Status Change: LTF Code: 1 SUS-CON from regulated UST Status: SUS: a suspected release or source is identified

#### Site Information

Site Area Type: Commercial GW Flow: UNK GW Depth: 12 Sensitive Area: No Wellhead Protection, No Depth to Bedrock: UNK Cleanup Tech:

#### Contamination

Soil Contamination: No Soil Category: Soil Class: Total Gal FPR: Contaminant: Above AL:

GW Contamunation: No Type of GW: Drinking Water Alt DW supplied. No Total Gal GW remediated Contamingnt: Above AL:

#### **Priority Tracking System**

Soil: 2 <2x or Other Water, 2 <10x or Other Free Product, 3 Undetermined Drinking Water, 4 Potential Other: 3 Potential Rating: 14

Printed on 03/16/04 at 1/26 PM

#### Offer Corrective Action Receive Report Site Listing Update



SI letter sent 5/2/89, SI rpt recvd' 5/89, SUS letter sent 9/15/92, NOR letter sent 1/16/97, sent 2nd NOR letter 3/16/04,

\*\* 1-12K diesel UST removed 2/16/99 (NFA issued for Incident #319276-01 on 7/9/99)

\*\* 2 UST's present on-site on 4/21/89. On 2/16/99, 1-12K diesel removed. No other UST removal documentation has been submitted on additional tank. Need to know what happened to additional UST. This information will allow BUSTR to make a determination on whether or not the site check is required.

Jason Anthony 3/16/04

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# Chio Department of Commerce

Division of State Fire Marshal Bureau of Underground Storage Tank Regulations 8895 E. Main St. • P.O. Box 687 Reynoldsburg, OH 43068-9009 (614) 752-7938 FAX (614) 752-7942 www.com.state.ob.us Bob Taft Governor

Li. Governor Jeanette Brudley Director

March 16, 2004

BRIAN CAMPBELL CROSSET COMPANY 205 CENTRAL AVE CINCINNATI OH 45202 SITE: CROSSET CO INC APRIL 1989 SUSPECTED RELÉASE 205 CENTRAL AVE CINCINNATI OH HAMILTON COUNTY INCIDENT #319276-00 RELEASE #31000237-N00001

## RE: NO RESPONSE RECEIVED

Dear Mr. Campbell:

On September 15, 1992 and January 16, 1997, the Bureau of Underground Storage Tank Regulations (BUSTR) sent you letters requesting information needed to complete your site check requirements. As of this date you have not provided the requested information. In addition, BUSTR noted that one 12,000-gallon diesel UST was removed on February 16, 1999. This UST received a "no further action" status on July 9, 1999. BUSTR has documentation stating that historically two diesel UST's were located at this property. Please provide documentation on the status of the additional UST in use on April 21, 1989. To be in compliance with Ohio Administrative Code 1301:7-9-13, effective September 1992, you should supply this information within 60 days of the date of this letter.

On March 31, 1999, a new corrective action rule became effective. A provision of this rule allows owners/operators with releases confirmed prior to March 31, 1999 to elect to conduct corrective action under the 1999 rule. A Fact Sheet explaining this option may be found on our web site.

Publications that may help you to understand the requirements for compliance with BUSTR's rules and regulations may be found on the Internet at <u>www.com.state.oh.us</u> or by calling our office.

Thank you for your cooperation. If you have any questions, please contact me at 614-752-7096.

Sincerely,

Jalon Anthony Environmental Specialist

xc: Site File



# io Department of Commerce

Division of State Fire Marshal Bureau of Underground Storage Tank Regulations 8895 East Main Street P.O. Box 687 Reynoldsburg, OH 43068 (614) 752-7938 FAX (614) 752-7942 George V.Voinovich Governor

> Donna Owens Director

January 16, 1997

BRJAN R CAMPBELL CROSSET COMPANY 205 CENTRAL AVE CINCINNATI OH 45202

SITE: THE CROSSET COMPANY 205 CENTRAL AVE CINCINNATI OH HAMILTON COUNTY INCIDENT #319276-00

RE: SUSPECTED RELEASE INVESTIGATION NOT RECEIVED

Dear Mr. Campbell:

On April 21, 1989, a suspected release at this site was reported to the Bureau of Underground Storage Tank Regulations (BUSTR).

BUSTR has not received the required site check report, which was due on October 6, 1992. This documentation is required by Ohio Administrative Code 1301:7-9-13(D). Please submit the required report to BUSTR within 30 days of the date of this letter.

Thank you for your cooperation. If you have any questions, please contact me at (614) 752-7938.

Sincerely, Brian J. Tarver

Environmental Specialist

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xc: Site File

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George V. Volnovich, Governor

Nancy S. Chiles, Director

Division of State Fire Marshel Bureau of Underground Storage Tank Regulations 8450 Poe Avenue • Suite 104 • Dayton, OH 45414-2648 (513) 454•7500 • FAX (\$13) 454•7503 <u>Buapooted Release Letter</u>

September 15, 1992

The Crosset Company 205 Central Avenue Cincinnati, OH 45202 RE: The Crosset Company 205 Central Avenue Cincinnati, OH 45202 Hamilton County Incident #319276-00

Dear Sir or Madam:

Section 3737.882 of the Ohio Revised Code authorizes the State Fire Marshal to implement the corrective action program for releases of petroleum from underground storage tank systems within the state. Under the program, the owner/operator of the underground storage tank system is responsible for investigating suspected releases of petroleum from the tank system so as to either confirm or disprove that a release of petroleum has actually occurred. This office has been notified of a suspected release at the aforementioned facility.

As the owner and/or operator of the underground storage tank system you are subject to the state and federal regulations governing such systems. Rule \$1301:7-7-28 (K) (1) of the Ohio Administrative Code (OAC) specifically lists testing, monitoring or sampling results indicating a release may have occurred as constituting a suspected release of petroleum from underground storage tank systems. Pursuant to OAC Rule \$1301:7-7-36 (C) (1), you are required to investigate the suspected release at the aforementioned site in a manner consistent with OAC Rule \$1301:7-7-28 (K) so as to either confirm or disprove whether a release has actually occurred.

A. Specifically, in order to comply with OAC Rules \$1301:7-7-28 and \$1301:7-7-36, you need to undertake the following activities:

Banks (614) 466-2932	Consumer . (614) 466		Electrosling (614) 466-4130	Çredit ( (614) 48	 Real Estate (614) 466-4100
Source.	ō Loons/ s Bonks 55-3723	State Fire Morsh (614) 752-8200		curides 644-7381	 ed Funds 86 4433

- On or before September 26, 1992, conduct a tightness test (precision test) of the tanks and piping which comprise the system to determine if a release may have occurred. The precision testing shall be done in accordance with the criteria listed in the National Fire Protection Association (NFIPA) pamphlet No. 329.
- On or before October 6, 1992, conduct an analysis of soil 2. for hydrocarbon and/or core samples chemical contamination in the unsaturated zone under the underground storage tank system, or, if the groundwater is no more than twenty (20) feet from the ground surface, an analysis of groundwater samples for hydrocarbon and/or chemical contamination shall be conducted. Sampling shall be done in accordance with the enclosed "Sampling If any obvious signs of contamination Guidelines". (visual and/or odors) are found during the investigation the local fire official and State Fire Marshal, Bureau of Underground Storage Tank Regulations shall be immediately notified and corrective actions shall be initiated in accordance with OAC \$1301:7-7-36.
- 3. Within three days of your receiving the results of the tightness tests and sample analysis, submit copies of the results to the State Fire Marshal, Bureau of Underground Storage Tank Regulations.
- B. As an alternative to the requirements described in items 1 through 3 above, the owner/operator may elect to remove and replace, or close the underground storage tank system. In this case the owner/operator shall follow the enclosed "Closure Site Assessment Requirements" and, perform such activities under the following deadlines and conditions:
  - On or before October 15, 1992, the underground storage tank system shall be removed and sampling shall be conducted.
  - 2. If any obvious signs of contamination (visual and/or odors) are present during closure, the local Fire Official and the State Fire Marshal, Bureau of Underground Storage Tank Regulations shall be notified immediately, and corrective actions shall be initiated in accordance with OAC \$1301:7-7-36.
  - 3. Within three days of receipt of written sample results the owner/operator shall submit the Closure Assessment report and all associated sample results to the State Fire Marshal and local Fire Official.

Depending on the closure deadline indicated, the owner/operator may have a short time period in which to obtain the written removal/abandonment permit. If the permit is to be obtained from the State Fire Marshal, the owner/operator must contact the State Fire Marshal's Bureau of Underground Storage Tank Regulations. Arrangements can then be made to expedite the permitting process in order to help the owner/operator comply with the deadline line given.

C. When soil and groundwater samples are to be collected the owner/operator shall follow the protocols described in the enclosed Sampling Guidelines or Closure Site Assessment Guidelines. At a minimum these guidelines shall be followed in order for the sample results to be considered valid.

To assist you in understanding your responsibilities, enclosed are appropriate statutes and rules related to petroleum UST suspected release investigations and corrective actions. Please note that failure to comply with the requirements of OAC Rules §1301:7-7-28 and §1301:7-7-36 could subject you to civil penalties under Section 3737.882 (C) of the Ohio Revised Code and the criminal penalties under Section 3737.99 (I) of the Ohio Revised Code.

To assist our office in expediting a review of your correspondence, reference the incident number (319276-00) and place it in the upper right hand corner of all of your correspondence. Thank you for your cooperation, and if you have any questions regarding this matter, please contact me at (513) 454-7509.

Sincerely,

Verne Ord Site Coordinator Bureau of Underground Storage Tank Regulations Southwest Field Office

V0:cah

Enclosures

cc: File #319276-00

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Richard F. Celeste, Governor

Linda K. Page, Director

May 2, 1989

Hr. Richard Dorsel Vice President of Operations The Grosset Company 205 Central Avenue Cincinnati, Obio 45202 RE: The Crosset Company 205 Central Avenue Cincionati, Ohio Hamilton County Incident #319276-00

Dear Mr. Dorsel:

The Ohio Revised Code, Section 3737.88, gives the State Fire Marshal the responsibility for implementation of the underground storage tank program and corrective action for releases from underground tank systems. This office has been notified of a confirmed release from an underground storage tank system at the aforementioned facility.

As the underground storage tank owner/operator, you are subject to state and federal regulations governing the investigation and clean-up of releases from underground storage tank (UST) systems. The Initial Corrective Actions, as listed in the Ohio Administrative Code(OAC) 1301:7-7-36 (C)(2), include: stopping any further release from the UST system; mitigating all fire, explosion, and safety hatards; and the removal of all visibly contaminated soll and any associated groundwater from the excavation zone. In addition, you must conduct an investigation to determine the possible presence of free product and initiate removal of any free product as soon as practicable. Once these activities have been conducted, a report shall be submitted to the State Fire Marshal within twenty (20) days of the discovery or confirmation of the release. In addition to the aforementioned activities, a site investigation shall be performed which includes all of the elements as listed in OAC 1301:7-7-36 (C)(3) and (4).

If residual contamination remains following Initial Corrective Actions and the Site Investigation the owner/operator will be required to perform a Site Assessment in accordance with OAC 1301:7-7-36 (E). The Site Assessment will define the vertical and horizontal extent of soil and groundwater contamination on site and off site. In addition, a Corrective Action Plan would then be required to be prepared by the owner/operator which describes in detail how the soil and groundwater will be cleaned up. Other activities not specifically described herein may be required by the State Fire Marshal.

Enclosed is a copy of the "Corrective Action Guidance for Petroleum Releases" along with GAC 1301:7-7-36 and portions of 1301:7-7-28. These have been provided to assist underground storage tank owners/operators in conducting the corrective action activities required by the State Fire Marshal. Please take special note Mr. Richard Dorsel Hay 2, 1989 Page ∰2

of the deadline requirements for compliance with your responsibilities as specified in OAC 1301:7-7-36. The initial Corrective Action and Site Investigation reports are required to be submitted to the State Fire Marshal within twenty (20) days of the discovery of the release. A Free Product Removal report (see OAC 1301:7-7-36 (D)) must be submitted within thirty (30) days of the discovery of the release. The deadline for the Site Assessment and Corrective Action Plan will be determined by the State Fire Marshal.

When soil and groundwater samples are to be collected and enalyzed pursuant to OAC 1301:7-7-36 certain protocols are to be followed. These protocols include those described in the enclosed "State Fire Marshol Corrective Action Sampling Guidelines". At a minimum these guidelines must be followed in order for sample results to be considered valid.

To assist our office in expediting a review of your correspondence please reference the incident number (319276-00) and place it in the uppor right hand corner of all your correspondence. Thank you for your cooperation and, if you have any questions regarding this matter, please call us at (614) 752-8200.

Sincere Kally (A

Site Cordinator Bureau of Underground Storage Tank Regulations

KG:pm Enclosures

cc: file
 Al Zirkelbach, Cincinnati Fire Division

SUSPECTED RELEASE REPORT

REPORT 113/191217161-100-191010101 DATE: 1131/87 ----- [1] PERSON REPORTING THE RELEA TIME: 2 SULF U.R.I. CATTORY PHONE: (575) 4-1-557 NAME : TITLE: 🖉 RELATION TO SITE: 2 AGENCY/COHPANY : ST. ADDRESS 205 ZIP: 45202 REHARKS : 7 action - [2] SUSPECTED RELEASE LOCATION -USTR 10# 3/-2 FACILITY: COUNTY: As any ADDRESS : CITY: ST: ZIP: PHONE: ( UST OWNER: PHONE: REMARKS: brech PHONE: (513) 352-3.77 FIRE DEPT: 2 - (3) CONDITIONS LEADING TO REPORT OF SUSPECTED RELEASE (Check all that apply) -Inventory control results indicate a release may have occurred. Testing, monitoring or sampling results indicate a release may have occurred. Unusual operating conditions observed (e.g., sudden drop in tank volume). Impacts noticed in area surrounding tank (e.g., vapors, well contaminated, run-off). Soil contaminated, or soil exceeds 100 ppm total hydrocarbons using G.C. or O.V.A. Spill or overfill of petroleum in excess of 25 gallons. Spill or overfill of petroleum less than 25 gallons when containment is not possible. Spill or overfill of petroleum below ground, or soaking into ground after spill. Spill or overfill of petroleum to surface water when petroleum creates sheen on water. OTHER CONDITIONS: (4) SUSPECTED SUBSTANCE BELEASED. CASOLINE DIESEL FUEL **XEROSENE** USED OIL HYDRO LIFT PROBLEM FLAC OTHER PETRO HAZ SUBSTANCE UNKNOWN ANALAAACOMPLETE REVERSE SIDE -[11] BEFORT DISPOSITION (Indicate actions taken on reverse side)-EMERGENCY ACTION? \_\_ YES / NOL BY: FM OEPA ( TAKEN BY: DATE: 4/24-89TIME: 4 REPORT/ACTION APPROVED: COORD: DATE: 4125189 ENTERED BY: Shompson DATE: 4 umaton LOCGED BY 1 CIRCLE STATUS: RPT SUS DIS CON ICA ICR PRIORITY: 1000 4 <u>CLASS</u>: A B C/D NON-LTF ICC SAS SAC CAS CAP NFA

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INITIAL RESPONSE REPORT TO THE OHIO FIRE MARSHAL'S OFFICE

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IN RESPONSE TO INCIDENT # 319276-00

THE CROSSET COMPANY 205 CENTRAL AVENUE CINCINNATI, OHIO

PREPARED BY: Payne Riemer Group, Inc. Cincinnati, Ohio

PROJECT No. 0192.04

May 10, 1989



Payne Riemer Group, Inc.



## Payne Riemer Group, Inc.

**Feveremental Consultants** 

8240 North Erzek Drive Saite 980 Cincultury, Ofne 65276 513, 791-4411 - Fax 513 791-4491

May 10, 1989

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Bureau of Underground Storage Tank Regulations Division of State Fire Marshal Ohio Department of Commerce 7510 E. Main Street Reynoldsburg, Ohio 43068-3395

Attention: Mr. Kelly J. Gill Site Coordinator

Reference: The Crosset Company 205 Central Avenue Cincinnati, Hamilton County, Ohio Incident #319276-00

### Centlemen:

Payne Riemer Group, Inc., on behalf of The Crosset Company, is submitting this Initial Response Report to the Ohio State Fire Marshal's office. This report outlines the progress of our environmental investigation of the underground storage tanks (USTs) at The Crosset Company's facility in Cincinnati.

The two USTs at this facility are 20+ years old. Both tanks have been used to store diesel fuel for the past 10 to 15 years. One tank was used for gasoline storage prior to that time. The confirmed pressure test failure of these two UST systems was reported to the State Fire Marshal's office on April 21, 19B9, by Mr. Dick Dorsel of The Crosset Company. The tanks were pumped dry on April 26, 1989. A drilling program to investigate the condition of the surrounding natural soils and the backfill in the tank cavity has been conducted. A sample of sediment from the only area suspected to contain released product has been sent to an analytical laboratory for analysis.

We are now preparing a bid document to obtain a contractor to remove the two UST systems and to replace them with a state-of-the-art UST system. The timing of this work will be coordinated with the State Fire Marshal's office, in order that a representative of your office may be present during the tank removal phase of the project.

019204.RPT/PC4 051089 Mr. Kelly J. Gill • Byreau of Undergroun torage Tank Relations The Crosset Company Cincinnati, Ohio May 10, 1989 Page 10

Please do not hesitate to contact us should you have any questions or comments concerning this report.

Sincerely,

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Payne Riemer Group, Inc.

Lee J. Otte. PhD. Project Manager

3. Payrolde John L. Payne, P.E. Principal.

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Enclosure

cc: Mr. Al Zirkelbach, Cincinnati Fire Division Mr. Dick Dorsel, The Crosset Company

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Payne Riemer Group, Inc.

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## List of Appendices

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Appendix No. 1 - Boring Logs Appendix No. II - UST Pressure Test Results



Payne Riemer Group, Inc.

### 1.0 INTRODUCTION

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The Crosset Company, located at 205 Central Avenue in Cincinnati, Ohio (Figure 1), is a fresh produce shipping and receiving company. Payne Riemer Group, Inc., also of Cincinnati, was contracted by Mr. Roger Schorr of Cincinnati, to conduct an environmental audit of the 205 Central Avenue property. This audit was part of a property transfer agreement between Mr. Schorr, who represents the buyers, and the Crosset Company shareholders, representing the sellers.

The facility has an onsite truck fueling operation. This operation consists of two fuel pumps located on the western side of the property (Figure 1). The pumps draw fuel from two 8,000 gallon, 20+ year old underground storage tanks (UST) that are buried about 50 feet northwest of the pumps (Figure 2). The tanks are registered with the Ohio State Fire Marshal's office. The pumps are calibrated periodically by the City of Cincinnati. The tanks are used to fuel trucks operated by the Crosset Company. Approximately 1,200 gallons of fuel are used each day. Both tanks now hold diesel fuel, although until about 10 to 15 years ago, one tank held gasoline. The tanks are both approximately 21 feet long, eight feet in diameter, lie parallel to each other, and are buried in an excavated area that is backfilled with sand. The tanks are not covered with a concrete pad, except for a strip of concrete that extends over the fillport of each tank, which are located at the center of the length of the tanks. The natural sediments around and under the tanks consist of a fine-grained sandy mud that contains occasional thin seams of muddy sand.

Preliminary work, including a pressure test on each tank and pipe line system and a drilling program around the UST area, indicates that the tanks do have a leak but that the release appears to be minor and confined to the tank backfill. This report presents the results of this work.

#### 2.0 PROCEDURES

The integrity of the two underground storage tanks was checked as part of the environmental audit. Payne Riemer Group used three methods of investigation to determine the integrity of these tanks:

019204.RPT/PC4 051069 A monthly fuel inventory is maintained by the Crosset Company's truck maintenance shop personnel. Inventory records for the past five years were reviewed during the week of March 27, 1989. The records were not adequate, however, to be used as an indicator of the integrity of the tanks and fuel lines.

A drilling program was undertaken on April 11, 1989, by which Payne Riemer Group determined the presence or absence of soil and/or groundwater contamination around and under the UST area.

A pressure testing program was conducted on April 19, 1989, by Petro Environmental Technologies of Cincinnati, during which the tanks and fuel lines were checked for potential leakage.

The results of the drilling program and the pressure testing program are presented below.

### 3.0 DRILLING PROGRAM

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Five soil borings were made around the tanks on April 11, 1989 (Figure 2). These borings were strategically placed to evaluate the composition and potential contamination of the natural soils around and under the area where the USTs are buried and the fill material within the excavated area where the USTs are located.

Three of the borings (8-1, B-2 and B-3) were made with steam-cleaned hollow stem augers that were advanced with a truck-mounted drill rig. Soil samples from these borings were obtained with a split-spoon sampler. The sampler was washed in Alconox laboratory-grade detergent, rinsed twice in potable water, and once in distilled water between each interval. Boring B-1 was sampled continuously to establish the exact sedimentological setting of the soils that are around and under the USTs and because this location is believed to be the downgradient direction for local groundwater flow. Borings B-2 and B-3 were not sampled continuously, but were sampled at key depths, as identified in

019204.RPT/PC4 051089 boring B-]. The remaining two borings (HA-1 and HA-2) were completed with a clean hand-operated soil auger.

The soil samples from each boring were placed in clean jars for field and potential laboratory analysis. The boring logs are included in Appendix I. Boring B-1 through 8-3 were filled with grout after completion. Hand auger holes HA-1 and HA-2 were backfilled with the soil excavated from the holes.

The aerial layout and a cross-sectional view of the UST system are shown in Figures 2 and 3. The underground piping locations are approximate. The boring locations for 8-1, 8-2 and 8-3 were designed to determine the impact of the tanks on the soil and groundwater away from the tank cavity. B-1 was installed in the postulated downgradient direction during normal to wet periods. Borings B-2 and B-3 were located such that conditions around the entire tank area could be evaluated.

Boring HA-1 was located to ascertain the soil conditions on the fringe of the tank cavity. Boring HA-2 was installed between the two tanks, within the tank cavity backfill, to examine the nature of the fill material.

The following discussion summarizes what was found in each boring:

<u>B-1</u> Moist brown sandy fill material was found from ground surface to a depth of 7 feet at this location. The lower foot of this fill was stained and exhibited a faint sewage-like odor. The fill is underlain with natural riverine overbank deposits. Between 7 to 12 feet below ground surface is moist, brown clayey silt that was natural in appearance and odor. This clayey silt contains numerous seams of wet silty fine sand from approximately 12 feet below ground surface to the bottom of the boring, a depth of 23 feet. No visual or olfactory evidence of petroleum products was apparent in any of the natural sediments. The sand seams in the lower 12 feet of the auger hole were wet. Standing water in the hole was measured at approximately 17 feet below ground surface after the boring was completed.

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- B-2 The upper 6 feet of sediment at this location consists of sandy fill, the lower portion of which was wet, stained gray, and smelled faintly of sewage. Below the fill, moist clayey silts were noted to a depth of 12 feet. Clayey silts with wet sand seams were logged from 12 feet to the bottom of the boring, a depth of 25 feet. The sand seams in the lower 12 feet of the auger hole were wet.
- <u>B-3</u> The upper 4 feet of sediment at this location consisted of sand and gravel parking lot fill. This fill exhibited a slight fuel odor that was possibly related to the truck fueling operation in the area. Three feet of gray, black and brown silty sand fill that did not smell of fuel was beneath this material. Approximately 15 feet of clayey silts beneath the fill did not exhibit evidence of petroleum contamination, to a depth of 22 feet. The sand seams in the lower 12 feet of the auger hole were wet. Standing water in the hole was measured at approximately 20 feet below ground surface after the boring was completed.
- <u>HA-1</u> The upper 4 feet of sediment at this location consisted of brown sandy fill. This fill was underlain by 1.5 feet of black fill that contained abundant cinders, coal, and wood. The clayey silt beneath this black fill smelled slightly of sewage and was stained black in patches to a depth of 7 feet. The lowermost 3 feet of clayey silt in this boring, from 7 to 10 feet below ground surface, appeared natural in color and odor. The sediment in this boring was dry. No standing water was observed in the boring.
- <u>HA-2</u> This boring was made through the tank cavity fill sediment. The gray-brown sandy backfill in the tank cavity smelled faintly of fuel at a depth of 1 foot. The fuel odor increased in the gray clayey silt backfill that was found from 3 to 5 feet below ground surface, and was even stronger in the sandy backfill that was encountered from 5 to 8 feet below ground surface. Standing water was observed in the soil auger hole at a depth of approximately 6.5 feet. No free product was observed in the excavated fill material.

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Sediment samples from each sampling interval from borings 8-1, 8-2, and 8-3, and from strategic depths from borings HA-1 and HA-2 were placed in jars. Head space organic (HSO) measurements were obtained for the jarred soil samples to determine the absence or presence of volatile fuel components in the soil. This was accomplished by placing a portion of each sampled interval in a clean mason jar and measuring the concentration of organic vapors in the air space (head space) over the sample with an HNU photoionization detector.

The fill and sediment samples collected from the three hollow stem auger borings essentially showed no signs of contamination from diesel fuel or gasoline. Except for the top four feet of fill in boring B-3, located at the edge of the facility parking lot, none of the examined material produced any odors of petroleum products. None of the samples from these three borings produced NSO values greater than 1.5 ppm. None of the samples were discolored, mottled, or showed any other physical sign of alteration from contamination by petroleum fuels. The bottom foot of the fill material in several of the holes was slightly discolored and had a faint odor of sewage. This material probably has no association with the UST system and most likely reflects some past nonCrosset-associated usage of this property.

Boring HA-1, placed immediately outside of the UST fill area also was clean, relative to petroleum fuel contamination, showing the same basic characteristics seen in the hollow stem auger borings. Samples from this boring also did not produce HSO values greater than 1.5 ppm.

The discolored and diese) fuel-smelling fill in boring HA-2 indicates that a release has taken place in the UST area. HSO readings from fill material samples between 6 and 8 feet below ground surface exceeded 100 ppm on the HNU meter from HA-2. The source of this release, however, has not been determined. The location for boring HA-2 is within five feet of the UST fill ports. The stain pattern around the fill port area indicates that some fuel had spilled onto the ground in the vicinity of boring HA-2 during tank fueling operations. The fuel in the ground that produced the discoloration and odors in HA-2 could have resulted from sloppy filling procedures.

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### 4.0 THE PRESSURE TESTING PROGRAM

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Payne Riemer Group subcontracted the pressure testing program to Petro Environmental Technologies (PET) of Cincinnati. Eric Mather of PET conducted the tank tests on April 19, 1989, using a Heath Petro Tite Leak Detection System. Both tank and fuel line systems failed the test (Appendix II). The detectable product loss in the west.tank system was measured at 0.428 gallons per hour (gph) and at 0.497 ghp in the east tank system.

#### 5.0 REGULATORY COMPLIANCE

The official results of the pressure tank tests were presented to the Crosset Company on Thursday, April 20, 1989. Mr. Richard Dorsel, of the Crosset Company, notified the Ohio State Fire Marshal's office and Mr. Al Zirkelbach, the Cincinnati Fire Department's UST official, by telephone of the test results on Friday, April 21, 1989.

A sample of the fuel-bearing fill from the tank cavity has been sent to EMS Laboratories, Inc. of Indianapolis, Indiana for analysis.

The two USTs were pumped dry by Ashland Oil Company on Wednesday, April 26, 1989 and the onsite fueling operation was ceased on the same date.

#### 6.0 CONCLUSIONS

The information obtained from the onsite drilling program indicates that no release to the surrounding and underlying natural soils or groundwater system has taken place. The small amount of fuel-bearing fill found near the fillport area of the tanks does not pose an immediate threat to the environment.

The Crosset Company is now in the process of determining the best plan of action for removing the tanks and obtaining a new fueling operation. The tanks, fuel lines, and any associated fuel-contaminated material will be removed as soon as practical by the Crosset Company.

019204.RPT/PC4 051089 Several factors strongly suggest that whatever contamination is associated with the USTs is small in scale and is confined to the tank fill area.

The Crosset Company personnel who regularly check the USTs report that they have never found more than 0.25 to 0.5 inches of water in the tanks. This lack of water suggests that no major leak exists in the bottom two thirds of the tanks. This implication is strengthened when one considers the fact that we found standing water in the tank fill area at a depth of six feet below ground surface. The top of each UST is four feet below ground surface. The tanks are eight feet in diameter. The bottom six feet of each tank, therefore, are below water. If a leak was present in the bottom portion of the tank, a significant amount of water should be present in the tanks.

Boring HA-2, located within two feet of the edge of the tank cavity and excavated to a depth of 10 feet, was dry and showed no sign of fuel contamination. These features, located so close to the tank cavity, where some fuel material is present and water was found at six feet, strongly suggests that nothing is escaping from the tank fill material.

Water was found at depths of 17 to 20 feet below ground surface in the hollow stem auger boreholes, located 10 to 20 feet away from the tank cavity area. Water in the tank cavity was at six feet below ground surface. This combination of water table depths, as well as what was found in boring HA-2, strongly suggests that the tank cavity area is acting as a "bath tub" and is holding water above the normal water table. This perched system, held in by the relatively impermeable clay-rich riverine sediments around and under it, is helping to contain any released material.

No evidence of any contamination from the USTs was found in the fill, sediment, or groundwater encountered in any of the four borings made outside of, but within 20 feet of the tank fill area.

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This information is sufficient to show that whatever fuel has been released, whether from a leaking tank or sloppy filling procedures, is small in amount and is confined to the tank fill area.

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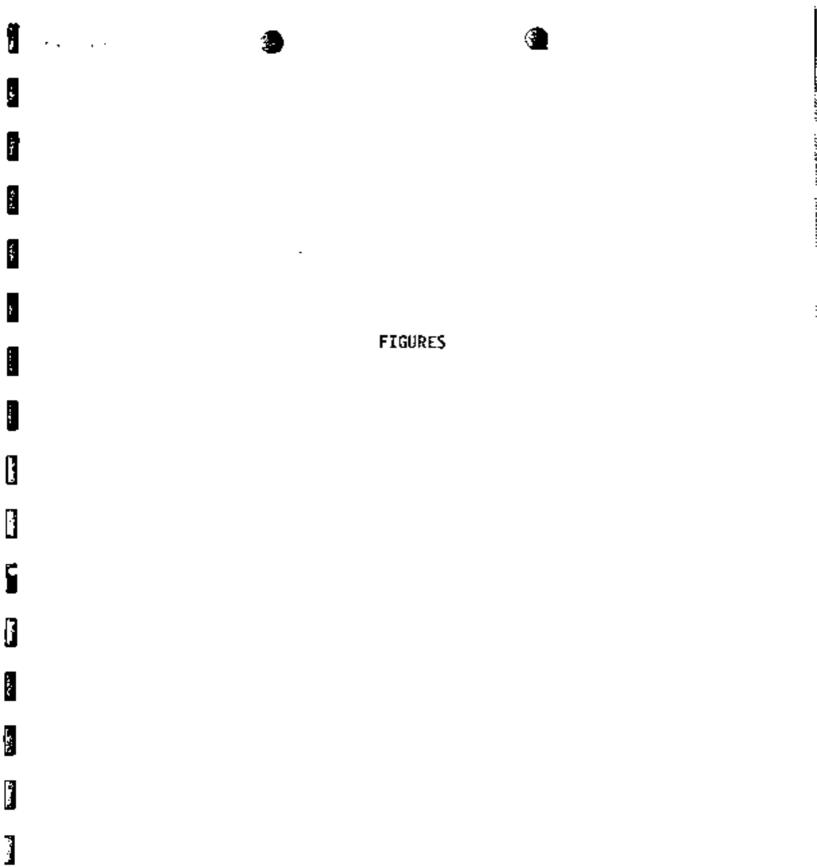
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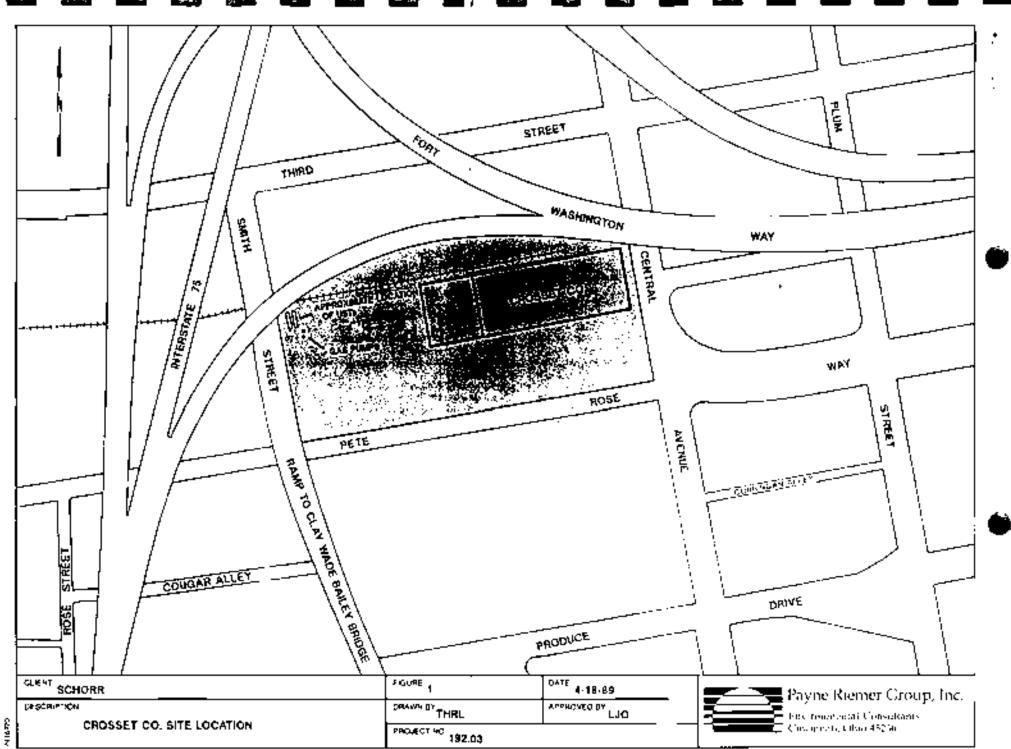
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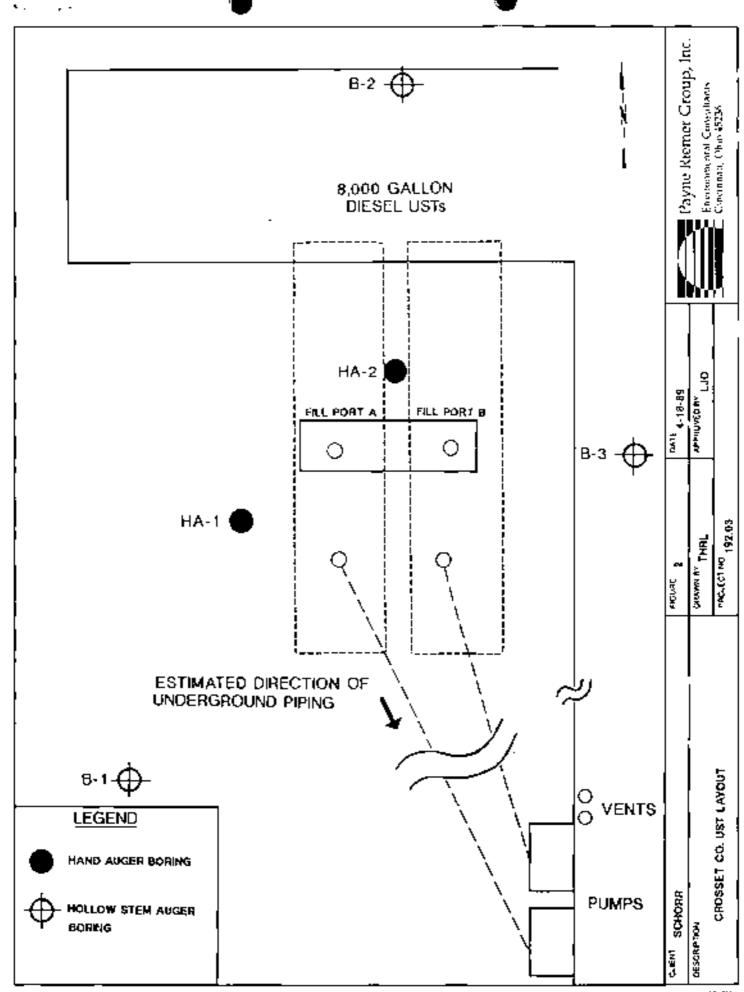


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Payne Riemer Group, Inc.





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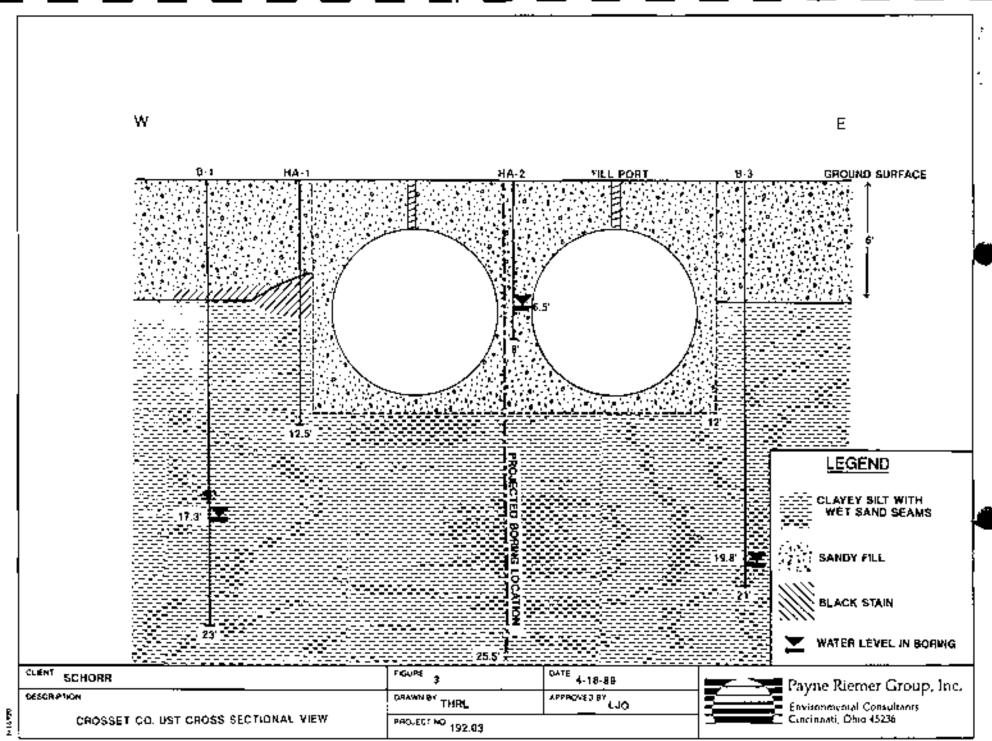
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## APPENDIX II

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## UST PRESSURE TEST RESULTS



Payne Riemer Group, Inc.



Petro Environmental Technologies

April 20, 1989

Payne Riemer Group 8260 N. Creek Drive Cincinnati, Ohio 45236

Attention: Lee Otte

Regarding: Test Results of Tank Integrity Assessment Crosset Company, Cincinnati, Ohio

Dear Lee,

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Please find enclosed copies of results of tank integrity tests for the Crosset Company. I apologize for the tardiness in getting these results to you, but we had not completed the tests at the close of the business day yesterday. As you can see the results indicate a product loss in both tanks in excess of both the state and federal limits (0.10 gph). The product loss in the tanks was 0.428 gph in the west tank and 0.497 gpb in the east tank.

It will therefore be necessary for either you our the property owner to contact the state fire marshal and the City of Cincinnati's fire official to report this possible release. Per regulations, the possible release must be reported within 24 hours to these regulators. The telephone number of the Ohio Fire Marshal, UST Release Report is (614) 752-7939. The number for the City of Cincinnati, Specialist Zirkelbach office is 352-2370.

If we can be of any further assistance please feel free to contact us. We look forward to working with you again in the near future.

Sincerely,

Petro Environmental Technologies

Enchette

Bric C. Mather

Enclosure

Emoreoneu Br		olumbus OH 433			14) 644-2924		
Emergency Re 2/3/2019		-tion - initi		ution inclue	nt Keps		1183
Spill id Number:	9701-31-0070	SY		District	9W		
Reported By:	DAVID WEBER			Reported:	01/07/199	7 15	39
TRie:				Discovered;	01/07/199	7 13	:15
Telephone:	(513) 595-8428	BIL		Occurred:	01/07/199	7 13	15
Affiliation:	COMPANY			Chronic:	N		
County:	HAMILTON			Chy/Township:	CINCINN	ATI	
Did Spiller Report ?	Y			Complaint ?			
Received By:	LAUCK, GREG			Priority:	4		
Local EPC ?	Y D	id you tell the l	Spiller to	Call the N.R.C ?	N		
Businesa:	Y			SARA Report:	Y		
Suspected Spiller:	RUMPKE WAST	EINC					
Mailing Address:	10795 HUGHES	RD					
	CINCINNATI, OF	45251					
Telephone:	(000) 000-0000	ext:					
Location:	205 CENTRAL A	VE PARKING L	.07				
Source:	TRANSPORTAT	ION - TRUCK -	OTHER				
Cause:	DA/ CUT OR BR	REAK		Reason:	BREAKO	R BRO	KEN
Waterways Affected:	N/A			edia Affected 1:	LAND OR	LAND	SURFACE
Media Allected 2:				edia Affected 3:			
	_	Product(s)	) Spiller	ſ			
roduct		Amount	UOM	RQ	Size	Тура	EHS
IYDRAULIC OIL		30.0	GAL	25,0	S	H	N
	C	ther Agenci	ca Noti	fied			
gency		Person		-	Cat	9	Time

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TRASH TRUCK LINE LEAK TO ASPHALT, NO WATERWAYS/SEWERS, CLEANUP IN PROGRESS, ALMOST COMPLETE

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Site 64

	Division Of 1215 front SE Co				14 644-29		a da Alan
Emergency Re							PIR)
12/15/2009							
Spill Id Number;	9911-31-3873			District:	SW		
Reported By:	TAMMY JETT			Reported:	11/02/19		4:54
Title:	ENV SCIENTIST			Discovered:			3:55
Telephone:	(513) 287-2208	exi:		Occurred:	11/02/19	999 0	317
Affiliation:	COMPANY			Chronic:	N		
County:	HAMILTON			City/Township:	CINCIN	NATI	
Did Spiller Report ?	Y			Complaint ?	N		
Received By:	LAUCK, GREG			Priority:	2		
Local EPC ?		ki you teli the S	piller to	Call the N.R.C ?	Y		
Business:	Y			SARA Report:	Y		
Suspected Spiller.	CGAE	· · ·					
Malling Address:	N/A				С		
Telephone:	(000) 000-0000	ort:					
Location:	655 MEHRING W	VAY				·	
Source:	FIXED FACILITY	- PUSLIC - TRA	NSFORM	MER/CAPACITO	RS/ECT		
Cause:	DA / CUT OR 8R	EAK		Reason:	MOTHE	R NATU	RE
Waterways Affected: Media Affected 2:	OHIO RIVER VIA	STORM SEWE		edia Affected 1: edia Affected 3:		CE WAT	ERISTO
		Product(s)	Spilled				
Product	•	Amount	UQM	RQ	Size	Туре	EHS
TRANSFORMER OIL		300.0	GAL	25.0	5	н	N
	0	ther Agencie	s Notif	ied			
Agency		Person			Di	<b></b>	Time
RTK		BEATTIE			00/00	10000	

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STRUCK BY LIGHTNING. STORM TO OHIO RIVER MAY HAVE BEEN AFFECTED. CALL BACK NUMBER I EFT GOES TO VOICE MAIL OSC KOLLAR RESPONDING.

11/16/99 D810HR\$ PATRICK SMITH INDICATED THAT APPROX ONLY 150 GALS OF OIL RELEASED FROM TRANSFORMER. OIL WAS RELEASED AND CONTAINED IN A CONCRETE SUMP, NO OFF SITE IMPACTS NOTED BY OEPA OR MSD. ALL OIL WAS RECOVERED.

ac-17-2009 - 29:03am	From-SHID E	PA-ER		614 644 3250	T-137	0 355 /n-n - r
	- Transferrer		CONCULT DO	neolist (35)		P.006/006 F
リックコント		t Columbus C				
				(6)4) 644		
Emergency ]				fice investig	ation Rep	ort (DOIR)
Spill id Number:				: 1769 - KOLLAR		
Spill Status:				• • • • • • •		
	Date	Time			•	
Reported:	11/02/1999	04:54	Reported B	Y: TAMMY JETT		
Discoverod:		03:55		e: ENV SCIENTIS	T	
	11/02/1999	317	Affiliatio	n: COMPANY		
			Telephon	e: (613) 287-2208	Extension	on:
		Spill	Location Inform	nation		
County:	HAMILTON			e: , N		
	<b>CINCINNATI</b>		Longitud	e:		
Location:	655 MEHRIN	IG WAY	-			
Waterway:	OHIO RIVER	VIA STORM	A SEWER		•	
Length:	0					
Land Area:					-	
-	-	Ε	ntity informati	рп		
Name/Company:	CG&E					
Address:						
City:	N/A		Stat	e: OH	Zip Code:	0
	(000) 000-00	00	Ð	t:	•	
SPCC Plan Reg:			PCC Plan in Effec	it: N		
		 Ent	ity Representa	tives		
		F	roducts Spills	d		
Produc	<b>x</b>	•		Amount	NOM	Туре
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			ac - Tromar Orm	ENCAPACITORS		
	MOTHERN					
			NATURAL EVENT			
MCOIS ACHICIGO.						
		_				
			Other Conlact:	5		

Referrals

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Spill Jd Number: 9911-31-3873

OSC: 1769 - KOLLAR, KURT

Status: FINAL

Activity Date: 11/02/1009

Phone Followup: YES

OSC KOLLAR WAS PAGED BY DUTY OFFICER CONCERNING THIS REPORT. THE OSC CONTACTED TAMMY JET OF CG&E. JETT REPORTED THAT THE MATERIAL WAS NON-PCB OIL AND THAT THE ORIGINAL REPORT OVER ESTIMATED THE RELEASE. JETT REPORTED THAT ALL BUT 140 GALLONS OF MATERIAL WAS RECOVERED AND THE REMAINING MATERIAL WAS CONTAINED IN THE CONTAINMENT AREA. JETT REPORTED THAT THE DRAIN FROM THE CONTAINMENT BASIN WAS PLUGGED BUT NEEDED TO VERIFY THE INFORMATION. JETT WOULD CONTACT THE OSC TO CONFIRM THE REPORT

THE OSC ALSO CONTACTED JIM WEIST, HAMILTON COUNTY METRO SEWER DISTRICT. WIEST WAS AWARE OF THE INCIDENT AND REPORTED THAT IF MATERIAL WAS RELEASE FROM THE STATION THAT IT WOULD HAVE BEEN OBSERVED IN THEIR LINES TO WHICH HE REPORTED NOTHING WAS PRESENT. JETT LATER CONTACTED THE OSC AND CONFIRMED THAT NO MATERIAL WAS RELEASED. NO FURTHER WORK IS ANTICIPATED BY OHIO EPA/ER.

STATUS, FINAL

Site 66



# **Ohio Department of Commerce**

Division of State Fire Marshal Bareau of Underground Storage Tank Regulations P.O. Box 687 Reynoldsburg, OH 43068-5009 (614) 752-7938 FAX (614) 752-7912 George V. Volnovich Governor

> Donne Ownes Director

October 22, 1998

DICK MARTIN FILLTOP BASIC RESOURCES INC 511 WEST WATER ST CINCINNATIOH 45504 SITE: PELTOP BASIC RESOURCES INC 11 WEST WATER ST CINCININATION HAMILTON COUNTY INCIDENT #3181338-00

### RE: NO FURTHER ACTION STATUS REGARDING CLOSURE REQUIREMENTS

Dear Mr. Martin:

The Bureau of Underground Storage Tank Regulations (BUSTR) has reviewed all information submitted for this incident number. Based on this information, BUSTR requires no further action involving closure under Ohio Administrative Code 1301-7-9-12,

Thank you for your cooperation. If you have any questions, please contact our office at (614) 752-7938.

Sincerely, Kelly J. Gill

Corrective/Action Supervisor

KJG:lmg

xc: Site File Mike Peterman, CINCINNATI FIRE DEPARTMENT

2004 Dia Basic Resource, Inc. 212 West Water Street Cincinnati, Obio

### 4.0 CLOSURE ASSESSMENT RESULTS

### 4.1 DISPENSERS, PRODUCT LINE, AND DIESEL FILELTANK PIT

Soil samples from the dispenser totations and diesel fuel tank pit were analyzed in accordance with OAC Rule 1301:7-9-13 for BTEX by EPA Method 8020, TPH by EPA Method 418.1, and PAHs by EPA Method 8100. Table 4 presents the closure assessment results, along with the corresponding action levels for a Category 2 site. A copy of the laboratory analytical report is included in Appendix F.

loncentrations of BTEX and TPH in the samples collected from the beneath the dispenser location (323.07-06) and the sample collected from beneath the dieset fuel UST (323.07-01) do not exceed the Category 2 action levels.

### 4.2 EXCAVATED FILL AND NATIVE SOIL

Grab samples of the excavated soil and backfill material from the tank pit were analyzed to determine whether these materials would be regulated as petroleure-contaminated soil under OAC Role 1301:7-9-16. Excavated fill and soil having BTEX and TPH concentrations below Category 1 action levels are not regulated under this rule. Excavated fill and soil having BTEX and TPH concentrations below the Category 2 actic – level may be returned to the original excavation with no further treatment required. Table 5 presents the waste characterization results for the tank pit along with the regulatory thresholds.

The concentration of TPH in the sample collected from the stockpile exceeds the Category 2 action levels. A copy of the laboratory analytical report is included in Appendix F.

## Table 2: Site Feature Scoring System Rationale Hilltop Basic Resources 511 West Water Street, Cincinnati, Ohio

	Site Feature	Rationale	Score
ŗ	Distance of UST system from closest drinking water supply well or adake currently in use.	Site is in a geographic senartive area (FR1, T4, Section 17)	5
2.	Average depth to ground- water.	31-59 (est	15
ā.	Predominant soil type of substrature.	Pre-forminantly clayey sands (observed during UST closure).	15
4	Natural and/or maninade con-fuits or receptors	See Item 4 worksheer (Appendix C).	10
		Total Score	45

### Table 3. Headspace Analysis Results May 22, 1998 Hilltop Basic Resources 511 West Water Street, Cincinnati, Ohio

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Sample Number	Sample Location	Sample Depth, ft	Total Organic Vapor Concentration, ppm
323.10-14	Bottom	12	26.0
323.10-2	Bottom	12	12.0
323.10-3	Sution	12	2.0
323.10-4	Bottom	32	4.0
323.10-5	Disgenser	3	22.0
323.10-5ª	Dispenser	3	38.0
323.10-7	Ste: kpile	NAb	20.0
323,10-8	Stockpile	NAb	32.0
323.10-9-	Stockpile	NA <sup>b</sup>	103.0
323.10-10	Stockaile	NA <sup>b</sup>	20.0
323.40-ti	Stockpale	NA <sup>b</sup>	26.0
323.10-12	Stockpile	NA <sup>5</sup>	54.0

\* Sample submitted for analysis

<sup>b</sup> Not applicable: sample taken from stockpile

### Table 4. Closure Assessment Results for Dispensers, Product Line and Tank Pit Hilltop Basic Fesources 511 West Water Street, Cincinnati, Ohio

Parameter	Category 2 Action Level, ppm	Concentration. ppm 323.10-01 323.10-06		
Benzene	0.170	ND <sup>a</sup>	ND	
Toluene	7	ND	ND	
Ethylbenzene	10	0.025	ND	
Xylenes (sciol)	47	0.052	ND	
Total petroleum hydrocarbons (418.1)	612	514	-125	
Potynuclear atomatic Sydrocaroons (8100)	ML <sup>b</sup>	ND	ለወ	

\* ND=Selow laboratory detection limits

b NL = No established action level

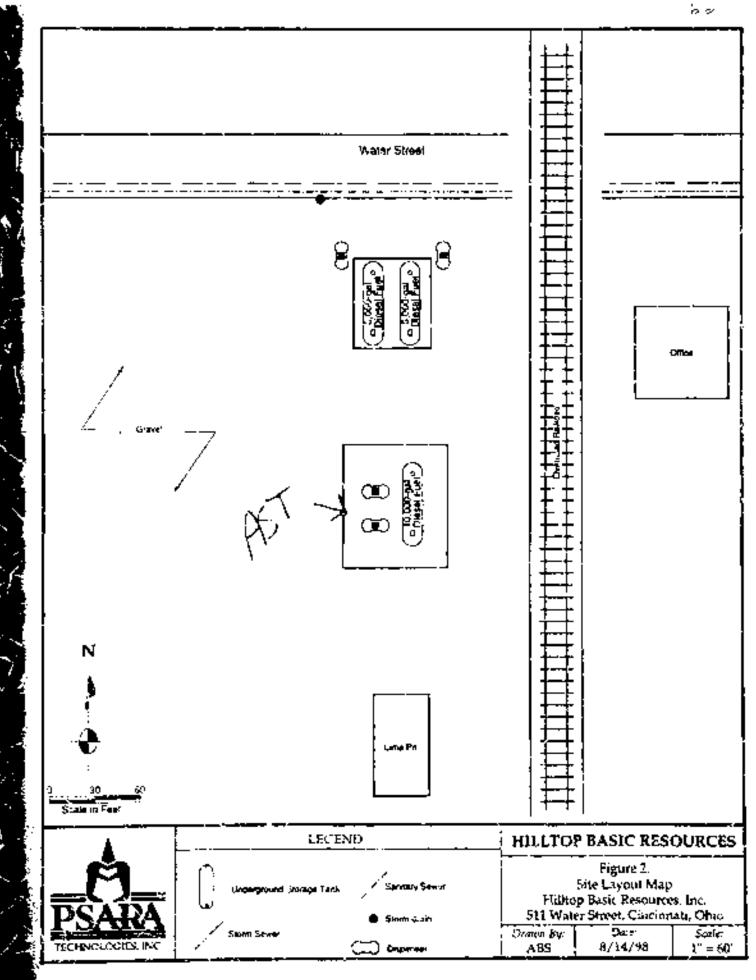
### Table 5. Waste Characterization Results for Dispensers, Product Line, and Tank Pit May 22, 1998 Hilltop Basic Resources 511 Water Street, Cincinnati, Ohio

Parameter	Category 2 <sup>4</sup> Action Level, ppre	Category 1 <sup>b</sup> Action Level, ppm	Concentration, ppp. 323.10-9
Benzene	0.375	0.006	NÐ
Toluene	-	4	ND
Ethylbenzene	10	6	0.012
Xytenes (totab	47	23	0.67
Total petroleum hydrocarbons (418.11	ь12	350	4250

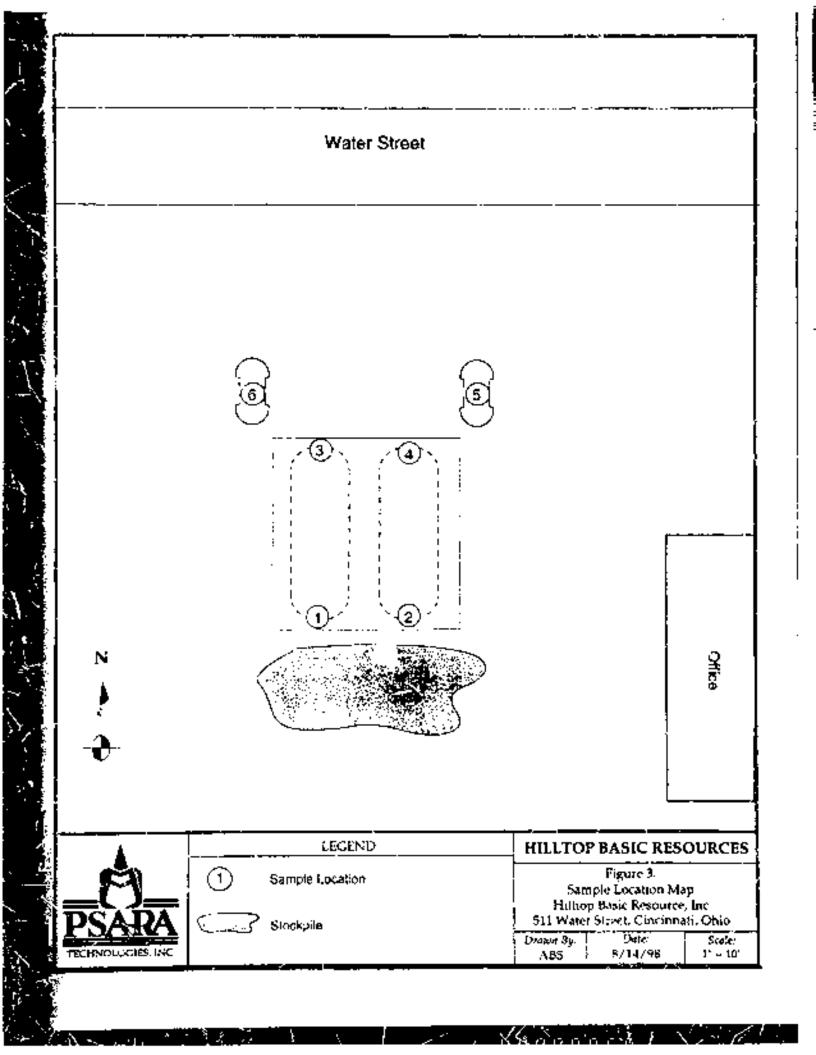
<sup>a</sup> Excavated soft and fill below these action levels may used for any lawfor purpose as the owner or operator may decide.

<sup>b</sup> Recovated soil and ful below those action levels may be deepended off-site as clean fill.





S. S. B. B. Caker 5×7



Site 71

PHILLIP J. SHEPHERD SECRETING

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BIERE ION C. JOACS GLASSING

#### COMMONWLALD OF KENTUCKY NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DIPARTMENT FOR ENVIRONMENTAL PROTECTION

Εβαλκή διο Οργιζέ Ραθς 14 Νειών Βοαδ Εβαλικτώρτη Κελιμοσκή 40601

January 27, 1994

RUSK HEATING & AIR CONDITIONING 666 W THIRD STREET COVINGTON KY 41011 ATTN MARK FIEGER

RE: Rusk Heating & Air Conditioning-UST Removal 666 W. Third Street Covington-Kenton County UST 10 #8362-059 Tank(s): One (1) 6000 Callon Gasoline One (1) 500 Gallon Gasoline

Dear Mr. Fieger:

The Division of Waste Management personnel have reviewed the information contained in the Closure Assessment Report signed June 30, 1992 and subsequent data submitted on behalf of Rusk Reating & Air Conditioning. This data indicates that no concentrations of hydrocarbon constituents for which you analyzed remain within the tank pit area above acceptable method detection limit.

From your analyses, the Division agrees that this site has satisfied the requirements of Kentucky Revised Statute 224.60-105 and Kentucky Administrative Regulation 401 KAR 42:070. The Division has based this determination on information submitted by Rusk Heating & Air Conditioning and Kenneth P. Reed and Associates and reserves all rights to require additional monitoring or testing and to take whatever action is necessary to protect public health and the environment if the Division determines there is a need for further investigation.

Sincerely,

Dovie Mills, Manager Underground Storage Tank Branch Division of Waste Management

DM/LRM/jeb

c: Debby Lucas Angel, Florence Regional Office Tracking PSTEAFC Limia Mitchell File (2) REPORT

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UNDERGROUND TANK REMOVALS (Sampling And Analysis)

FOR

RUSK HEATING AND AIR CONDITIONING 666 West 3rd. Street Covington, KY 41011

January 10, 1990

#### INTRODUCTION

Pursuant to a request from Mr. Mark Fieger of Rusk Reating and Air Conditioning, Covington, KY, soll sampling and analysis was performed on three (3) underground storage tanks (UST) upon removal. Two (2) tanks were located at 666 West 3rd Street, Covington and a third tank at 21 West 19th Street, Covington. All three tanks contained gasoline. The purpose of the sampling procedure and subsequent analysis was to determine if any product (gasoline) had leaked or released into the soil during the life of the tanks.

On January 2, 1990 one (1) 6000 gallon tank from the 3rd Street location was uncovered, emptied and removed from the original UST excavation pit. No obvious visible leaks, releases or stains were noted. The location of the fill pipe and pump island was approximately over the excavated area (10' x 20').

Samples were taken as per Kentucky's UST collection methods found in \* Appendix A. One composite sample was taken of each wall and floor. Each composite sample was composed of 4 grab samples as per Kentucky's UST collection methods found in Figure 2. (See Sketch)

On January 3, 1990 one (1) 5000 gallon gasoline tank from the 19th Street location was uncovered, emptied and removed from the original UST excavation pit. Likewise a 500 gallon gasoline tank was removed from the 3rd Street location. Again, the fill pipes and pump islands were located approximately over the excavated areas, approximately 10' x 20' for the 5000 gallon tank and 6'x 8' for the 500 gallon tank.

Due to the relatively small size of the 500 gallon excavation pit (6ft. x 8ft. x 8ft.), only two (2) grabs were taken for each composite of the walls and floor. Likewise the 5000 gallon excavation pit was sampled by 2 grabs from equal areas of the walls and floor. The pit was inaccessible and had to be sampled partially by hand and partially by back-hoe bucket. (See Sketch)

<sup>\* &</sup>lt;u>Kentucky Underground Storage Tank (UST) Collection of Soil</u> <u>Samples, for Laboratory Analysis</u> document

### SAMPLING MATERIALS

Samples of soil or fill material were collected using a steel trowel and glass jars with teflon lined lids. Grabs were composited in the glass jars in the field with portions of these composites collected in 40 ml "headspace" glass vials. Samples were immediately put on ice for subsequent transport to the lab.

DATE	SAMPLE LOCATION	TIME
01-02-90 Tank 1 (5000 gallon) 3rd Street	Walls - North, South, East, West & Floor (4 grabs per composite)	9:00-9:30a,m,
01-03-90 Tank 2 (5000 gallon) 19th Street	Walls - North, South, East, West & Floor {2 grabs per composite	1:45-2:00p.m.
01-03-90 Tank 3 (500 gallon) 3rd Street	Walls - North, South, East, West & Floor (2 grabs per composite)	2:30-3:00p.m.

#### DATA

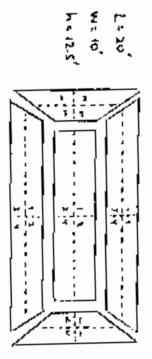
Soil or fill material (sand) samples were tested for the presence of benzene, tolwene, ethyl benzene and xylene (BTEX). Test methods used were from EPA document SW846 (Method 8020). The results for the listed parameters are as follows:

TANK #1	BTEX	TANK ∦2	BTEX
(6000 gal.)	(mg/kg)	(5000 gal.)	(mg/kg)
North Wall	<1.0	North Wall	<1.0
South Wall	<1.0	South Wall	<1.0
East Wall	<1.0	East Wall	<1.0
West Wall	<1.0	West Wall	<1.0
Floor	<1.0	Floor	<1.0

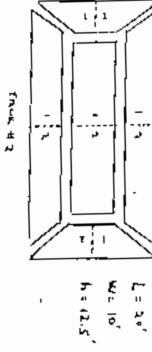
TANK #3	BTEX
(500 gal.)	(mg/kg)
North Wall	<1.0
South Wall	<1.0
East Wall	<1.0
West Wall	<1.0
Floor	<1.0

#### CONCLUSION

The results indicate that no significant product (gasoline) leak or release has taken place in any of the UST systems. Some contamination of an unknown material from an unknown source was noted in the fill material of the excavated pit from tank #2.

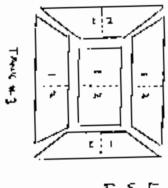




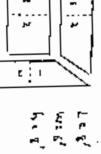


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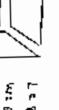




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Date:       1/3/90       Facility I.D. #:       9 3 6 2 0 5 9       Date Received:         County:       KENTEN       Pending Number:       JAN 15 199         Site Name:       KENTEN       Pending Number:       JAN 15 199         Tank Removal       Confirmed Release       Suspected Release (fumes, odors)       Emergency       Follow-up         Tank Removal       Confirmed Release       Source:       Media Affected:       Nedia Affected:         No totification       Split Samples?       Source:       Media Affected:       Soil       Pining Ing         Notable Odor       Visible Soil Contamination       Initial Response to Release       Soil       Pining Ing       Free Product Recovery         Condition of Excavated Soil       Covered by Plastic       Removal       Recover Contents of Tank         Tank Requested?       Site Check Requested?       Potentially-Responsible Party Kn	Underground Storage Tan	k Program Inspection Report
County:       KENTEN       Pending Number:       IAN 15 1930         Site Name:       Ausk HERRING & ARK CONDITION, Site Location:       BLG W: 3 cd STREET IN         Type of Inspection       Type of Inspection         Tank Removal       Confirmed Release       Suspected Release (fumes, odors)       Emergency       Follow-up         30-day Notification       Split Samples?       Media Affected:       Date:       Media Affected:         No Notification       Split Samples?       Source:       Media Affected:         No Notification       Site State       Split Overfill       Surface Water       Air         Innown       Intial Response to Release       Split/Overfill       Surface Water       Split/Overfill         Storage of Excavated Soil       Remove Contents of Tank       Tank Removal       Repair Piping       Free Product Recovery       Excavation         Tank Test Requested?       Site Check Requested?       Potentially-Responsible Parties with Phone Number and Addresses:       Potentially-Responsible Partis with Phone Number and Addresses: <t< td=""><td></td><td>362059 Date Received:</td></t<>		362059 Date Received:
Type of Inspection         Tank Removal       Confirmed Release         Jo-day Notification       Split Samples?         Media Affected:         No Notification         Split Samples?         WEAVE operator.         Condition of Tanks:         (J/s): signed operator.         Condition of Tanks:         Condition of Excavation:         Initial Response to Release         Condition of Excavation:         Initial Response to Release         Condition of Excavation:         Initial Response to Release         Notable Odor         Visible Soil Contamination         Condition of Excavated Soil         Report colspan="2">Remove Contents of Tank         Storage of Excavated Soil         Storage of Excavated Soil         Contentially-Responsible Party Known?         List Responsible or Potentially-Responsible Party Known?         List Responsible or Potentially-Responsible Party Known?         Notable Odor         Notable Sketch         N <td></td> <td></td>		
Type of Inspection         Tank Removal       Confirmed Release         Jo-day Notification       Split Samples?         Media Affected:         No Notification         Split Samples?         WEAVE operator.         Condition of Tanks:         (J/s): signed operator.         Condition of Tanks:         Condition of Excavation:         Initial Response to Release         Condition of Excavation:         Initial Response to Release         Condition of Excavation:         Initial Response to Release         Notable Odor         Visible Soil Contamination         Condition of Excavated Soil         Report colspan="2">Remove Contents of Tank         Storage of Excavated Soil         Storage of Excavated Soil         Contentially-Responsible Party Known?         List Responsible or Potentially-Responsible Party Known?         List Responsible or Potentially-Responsible Party Known?         Notable Odor         Notable Sketch         N <td>Site Name: RUSK HEATING + AIR CUNDITIN</td> <td>"Site Location: 666 W. 3rd STREET IN</td>	Site Name: RUSK HEATING + AIR CUNDITIN	"Site Location: 666 W. 3rd STREET IN
Tank Removal       Confirmed Release         30-day Notification       Split Samples?       Date:		
30-day Notification       Split Samples?       Date:	Tank Removal Confirmed Release Suspected Re	lease (fumes, odors) Emergency Follow-up
Jordey Notification       Split Samples?         No Notification       Marring guedation         Condition of Tanks:       Issue of a second and a second an	Tank Removal	
Tank Test Requested?       Site Check Requested?       Potentially-Responsible Party Known?         List Responsible or Potentially-Responsible Parties with Phone Number and Addresses:         Draw Site Sketch       Inspection Summary 6000 gol. Tanke removed. V         M       Inspector. Image: Ima	Less than 30-day Notification Split Samples? No Notification 1/3/90: 6000-gel. > PERFECT Condition of Tanks: 1/5/90: 550-gel. > Already mored off-site. Condition of Excavation: Notable Odor Visible Soil Contamination Free Product Contaminated Water Storage of Excavated Soil	Source: Media Affected: Tank Leak Soil Groundwater Spill/Overfill Surface Water Air Initial Response to Release Remove Contents of Tank Tank Removal Repair Piping Free Product Recovery
List Responsible or Potentially-Responsible Parties with Phone Number and Addresses: Draw Site Sketch N N N N N N N N N N N N N		
N N N N N N N N N N N N N N	List Responsible or Potentially-Responsible Parties with Pho	
	$ \begin{array}{c}                                     $	fine shape: In violation for improper close procedure (no plastic underneath soil. Told mark Freger, controller, about this.
Facility Representative: Date: Date:	Inspector: 1/osph Mr. Forgars	Date: 1/8/90
	Facility Representative:	Date:

Site 74

JAMES E. BICKFORD

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PAUL E. PATTON GOVERNME

#### COMMOMWEACHE OF KENTUCKY NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION FRANCIOST CODE PAGE 14 HELLY RD FRANCIOST KY 40601

January 31, 1996

# JOHN & ROSEMARY CRONIN 2714 MAIN CHASE DRIVE CRESTVIEW HILLS KY 41017

RE: Williams Volkswagen - Subaru 670 West Fourth Street Covington -- Kenton County

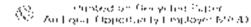
> UST ID # 6605-059 CAR Received Date: 10/26/89 Tank(s): #1 - 500 gallon waste oil: #2 - 1,000 gallon motor oil; #3 - 500 gallon gasoline

Dear Tank Owner/Operator:

The Division of Waste Management personnel have reviewed the information submitted regarding the assessment of the underground storage tank area for the above referenced site. The data submitted indicates that the site has been adequately assessed in accordance with 401 KAR Chapter 42 (as in effect before April 18, 1994) and 40 CFR Part 280.

From the information submitted, the Division agrees that this site has satisfied the closure requirements of Kentucky Revised Statutes 224.60-105 and the requirements of 401 KAR Chapter 42 (as in effect prior to April 18, 1994). Therefore, no further action is required. The Division has based this determination on all the information submitted. The Division reserves the right to require additional monitoring or testing and to take whatever action is necessary to protect human health, safety, and the environment if the Division determines there is a need for further investigation.

Payment of any outstanding underground storage tank fees is still required pursuant to KRS 224.60-150. Failure to pay any said outstanding fees may compromise the ability of the facility to qualify for financial assistance from the Petroleum Storage Tank Environmental Assurance Fund Commission. If outstanding fees are due, you will be contacted by the Underground Storage Tank Branch.



Page 2 Jacoary 31, 1996

If you have any questions regarding this matter, please contact Rob Daniell of the Underground Storage Tank Branch at (800) 928-6716, or (502) 564-6716.

For information concerning financial assistance contact the Petroleum Storage Tank Environmental Assurance Fund Commission at 911 Leawood Drive, Frankfort, Kentucky 40601, or call 1-800-928-7782.

Sincerely,

Boyle Mills, Manager

Division of Waste Management Department for Environmental Protection

DM/pjn

 c: Debby Angel, Florence Regional Office PSTEAFC
 R. File (1)
 Admin. (1)

# Environmental and Public Protection Cabinet Kentucky Department for Environmental Protection Division of Waste Management

Activity: CIN20080001 Inspection				
Lead Investigator:	Dickerson, Bing			
Agency Interest/Permit ID	: 49119			
Agency Interest Name:	River Center Collision			
Agency Interest Address:	670 W 4th St	Program:	Hazardous Waste	
	Covington, KY 41011	County:	Kenton	
Type of Agency Interest:	Type of Agency Interest:         SERV-Repair & Maintenance (811)			
Agency Interest Contact:	Title:	1	Phone:	
Purpose: Inspection				
Inspection Type: HW CEI Conditionally Exen				
Inspection Date: 12/11/200	8 <b>Start Time:</b> 11:30 AM	End Tim	e: 12:15 PM	
Latitude: 39.08666700	Longitude: -84.52083300			
Coordinate Collection Met				

**Incident ID(s):** 

#### **General Comments:**

The inspector met with Scott Yust, parts manager. The facility is the auto body repair facility for Performance Automotive d/b/a River Center Lexus, and is registered as a CESQG of Hazardous Waste (HW) since 1996. At this time, the facility generates no HW. Waste determinations are made by generator knowledge, and/or information from Material Safety Data Sheets (MSDS) and testing. Waste solvents are recycled in a Becca recycling System which recovers the solvent for reuse and produces a "cookie" of dried non-hazardous paint waste. The facility uses the PPS system paint gun that utilize a disposal bladder with built-in filter. When dry these are disposed of as non-hazardous. Paint booth filters are purchased from Environmental Filtration Systems in rolls. When the filters become clogged, they are picked up by Environmental Filtration for recycling. The business generates no waste oil, antifreeze, or other vehicle fluids. Non-hazardous paint booth filters, paint bladders, and regular trash are placed in a dumpster provided by CSI, Inc. for disposal at a contained landfill. Dirty employee uniforms and shop rags/towels are laundered by CINTAS for reuse.

No violations observed.

#### **Person(s) Interviewed:**

Name	Organization
Scott Yust, parts manager	River Center Collision

# AIOO49119

Requirement	Status	Results or Comments
Has the generator made adequate hazardous waste determination for wastes generated?. [401 KAR 31:010 Section 5(7)(a)]	ns C	Waste determinations are made by generator knowledge, and/or information from Material Safety Data Sheets (MSDS) and testing.
Is hazardous waste generated on-site either treated or disposed in an approved on-site facility, or directly delivered to an off-si storage, treatment, or disposal facility?. [401 KAR 31:010 Sect 5(7)(c)]	te	At this time, the facility generates no HW. Waste solvents are recycled in a Becca recycling System which recovers the solvent for reuse and produces a "cookie" of dried non-hazardous paint waste. The facility uses the PPS system paint gun that utilize a disposal bladder with built-in filter. When dry these are disposed of as non-hazardous. Paint booth filters are purchased from Environmental Filtration Systems in rolls. When the filters become clogged, they are picked up by Environmental Filtration for recycling. The business generates no waste oil, antifreeze, or other vehicle fluids. Non-hazardous paint booth filters, paint bladders, and regular trash are placed in a dumpster provided by CSI, Inc. for disposal at a contained landfill. Dirty employee uniforms and shop rags/towels are laundered by CINTAS for reuse.
Does the generator limit hazardous waste generation to no more than 100 kilograms per calendar month?. [401 KAR 31:010 Section 5(1)]	e C	At this time, the facility generates no HW. No HW disposed.
Is the total amount of hazardous waste accumulated on-site lim to no more than 1000 kilograms?. [401 KAR 31:010 Section 5(7)(b)]	ited C	At this time, the facility generates no HW. No HW accumulated at the facility.
Investigator: Title:		Date:

N - Not Applicable			
E - Not Evaluated			
V - Out of Compliance-NOV			
X C - No Violations observed			
I - No Violations obs-but impending viol	trends obs		
D - Out of Compliance-Violations Documented			
O - Out of Comp-LOW non-recurrent Ad	m. or O&M		
Received By:	Title:	Dat	e:

**Delivery Method:** 

# FOPPE THELEN GROUP, INC.



**Environmental Engineers and Geologists** 

October 25, 1989

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MS. Loni Terry Department for Environmental Protection Division of Waste Management Underground Storage Tank Section 18 Reilly Road Frankfort, Kentucky 40501

RE: Removal Assessment Report 10# 5505-059

Dear Lorit

I have enclosed a Removal Assessment Report for the Cronin Volkswagor/Subaru dealership in Covington, Kentucky. The tanks were removed September 19, 1989.

If you have any cuestions please call me.

Sincerely,

FORRE THELEN GROUP, INC.

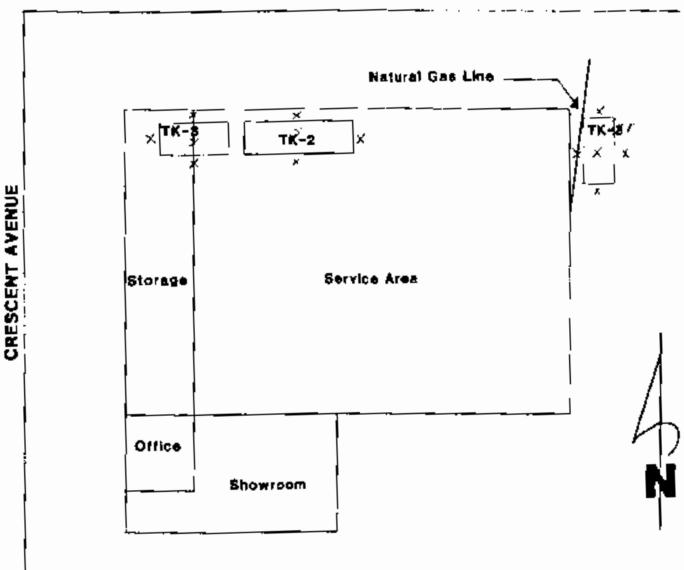
Lawrence I. Joppon

láwrence E. Foppe, P.E. President

ed: John Cromin

18F/510

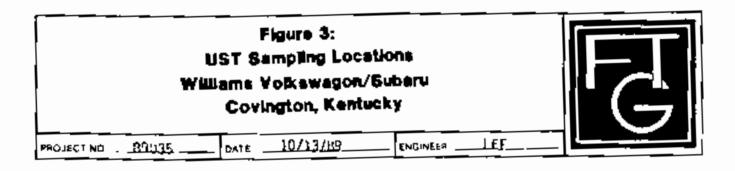
		(	DEP4058/08/89
	Removal As	sessment Report	
FOR RETURN TANKS COMPLE IN FORM KY		GE TANK SECTION	STATE USE ONLY Date Received
		STRUCTIONS	
Plea	se complete this form wit	hin thirty (30) days of rer	noval of tanks.
			-1 2 2
Facility Name: <u>/</u> /	VILLIAMS VOLKSWAGED.	Subaro Owner:	Shn + Rosenney CRONIN
Location:	O W. Fourth St	n I.D. Number	: 55# 286-18-6458
	EOVINGTON Ky	floii Phone Num	ber: ( <u>307) 733-5295</u>
	Tar	nkInformation	
Number of Tanks Rem Name of Contractor w	noved: <u>3</u> who Removed Tank(s): X_		te: X 9/14/09 INC HENRY JERCENS CO.
	Tank #_3 Tank 2	Tank 3 / T	ank 4 Tank 5
Size of Tanks: Contents: W Age: (years)	500 G [1000 G ASTE OIL MOTOR OIL 27 27	500 6. GASOLINÉ 23	
Coi	ndition of Tanks (give des	cription, note if corrode	d or pitted)
TANKS LUE	LE ORANGE COLO	red and seg	NWE to
Conste	EE ORANGE COLO 5 BUT NO F	Hing Through	TANK
A	UN EIGNS OF	laakase ar H	o ( e \$ .
	anks(Attach copies of invoices		
	Condition of Exc	avation Upon Removal	·
Water In E		Free Produ	ict 🗖
	dan <b>D</b>		
Notable O		visible soli	Contamination
Final Destination of So (Attach copies of invo	pil: <u>Not Appe</u> ices or receipts.)	<u>CHBLE</u> Amount of S	oil Removed: <u>NA</u>



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THIRD STREET

# SAMPLE ANALYSIS SUMMARY FOR BTEX

CUETOMER: FORRE THELEN GROUP.	182.	PROJECT:	69005
DATE RECEIVED: 00-20-89		DATE ANALYZED:	09-26-89
ANALYZEL FY: WUM		METHOD: 5240	
SAMPLE ID: CRN-TR1-BOT 5	ł	MATRIX: SOIL	

FARAMETER	RESULT	UNITE	% RECOVERY
BENZENE	· 2	L&/4.6	
TOLUENE	z	JE20.0	
ETRYL BENZENE	· Ξ	U3/1(6	
TOTAL XYLENE	2	05.475	
D4-1,C+DID⊖LORD	DETHARE		110.00
OB-TOLUENE			85.72
4-BROMOFLUOROBE	N2ENE		108.70

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1 ŀį. ĥ 24 Ŀr REPORT APPROVED BY rec WILLIAM J. MAFLE, CAB MANAGER 10-2:69

DATE AMPROVED

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## Belmonte Park Laboratories

The Stewart Company

# SAMPLE ANALYSIS SUMMARY FOR PTEX

L

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CUSTOMER: FORRE THELEN GROUP,	INC. PROJECT: 27055
DATE RECEIVED: 09-20-89	DATE AVALYZED: 09-DE-SP
ANALYZEC BY: WJM	METHOD: B240
EAMPLE ID: CRN-TAL-SIDE S	MATRIX: SOIL

PARAMETER	RESULT	UNITS	W REDDUERY
BENZENE	· 2	UG/K5	
TOLUENE	2	UB7#6	
ETHYL BENJEWE	2	U\$716	
TOTAL XYLENE	< 2	U3785	
D4-1,S-DJCHLOR	JE THANE		99.4%
D6-TOUDENÉ			92.5%
4-BROMOF_COROBS	ENZENE		95.7%

4 REPORT APPROVED BY AVAILAN J. MAPLE, LAS MANAGER 11-2-89 DATE APPROVED

:

CHERRIC CONTRACTORS



**Belmonte Park Laboratorles** 

The Science Company

# SAMPLE ANALYSIS SUMMARY FOR BIEX

EUCTOMER: FORME THELEN GROUP,	IND. FROJECT: 05005
DATE RECEIVED: 09-D0-89	DATE ANALYDED: 09-18-89
ANALYZED EY: WJM	METHOD: 8240
SAMPLE ID: CRN-THE-BOTTOM CRN-THE-BOTTOM	MATRIN: SDIL

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NOTE : SAMPLE COMPOSITE OF TWO SAMPLES

PARAMETER	RESJUT	UKITS	2 RECOVERY
BENZENE	2	UG/h6	
TOLUENE	· 2	JG-21.3	
ETHML BENZENE	2	UG21(8	
TOTAL XYLENE	· 2	UG ZEG	
D4-1,2-DICHLORO	ETHANE		92.6%
D8-TD_UENE			ēç. 5%
4-BROMOFLUQROBE	NZENE		102.15

WILLIAM 3. MAPLE. LAE MAN MANAGER 10-2-89

REPORT APPROVED BY

DATE APPROVED

PHYLANOX: REALING AND A CONTROL AND A CONTRO



# Belmonte Park Laboratories

The Scence Company.

# SAMPLE ANALYSIS SUMMARY FOR STEN

CUSTOMER: ROPPE THELEN GROUP,	INC. PROJECT: BROTE
DATE RECEIVED: 09-D0-B9	DATE ANALYZED: OR-IS-E-
ANALYZED BY: WUM	METHOD: BZ40
SAMPLE ID: DRN-THD-Side CAN-THD-Side	MATAIX: SOLL

NOTE : SAMPLE COMPOSITE OF TWO SAMPLES

DATE APPROVED

:

PARAMETER	RESULT	201115	: RECOVERY
RENJENE	: 5	UG./115	
TOLUÉNE	2	CG A C	
ETRYL BENZENE	Ŧ	UG /ng	
TOTAL OYLENE	. 2	U3706	
14-1.1-010400RD	ET HANE		101.32
DS-TOLUENE			50,1%
4-BROMDFLUGROBE	NZENE		:07.9%

Willie & Theyle REPORT AFFROVED BY WILLIAM J. WAFLE, LAB MANAGER 10-2-89

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Снолть Стальных к. «Янальных и стальства». Помогая Стальных к. «Янальных и стальства». Помогая приходся и стальных при исследать по стальных приходовальной исследся бласть и стальства и стальных при и помогая приходся и стальных при исследать при исследать сталь и приходовальных приходовальства. Приходовальных при и сталь и сталь помогая приходся и стальных при исследать приходовальных приходовальной исследся и стальках и исследся и сталь и исследать и стальках приходовальных приходовальной приходовальной исследся и приходовальной исследся и стальках исследать и стальках приходовальных приходовальных приходовальных исследся и приходовальной исследся и стальках и прихода и стальках приходовальных приходовальных исследся и приходовальной исследся и стальках приходовальной и приходовальных приходовальных приходовальных приходовальных приходовальной исследся и стальках приходовальной и приходовальных приходовальных приходовальных приходовальных исследся и приходовальной приходовальной приходовальной приходовальной и приходовальной приходовальной и приходовальной приходовальной приходовальной приходовальной приходовальной приходовальной приходова и приходовальной приходовальной приходовальной приходовальной приходовальной приходовальной приходовальной приходовальной приходов и приходовальной и приходовальной приходовально и приходовальной 


Belmonte Park Laboratories

The Service Company.

Site 76



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ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

OEPANTMENT KOR ENV KONMENTIGE PROTECTION DIVISION OF WASTE MANAGEMENT UNDERSECOND STORAGE TANK BRANCH 81 C. MICHAEL DAVENPORT BLVD FRANKFORT, KENTUCKY 40601-1190 www.kentucky.gov LAJUANA S. WILCHI-R SECRETARY

September 15, 2006

SPEEDWAY SUPERAMERICA LLC ATTN: DANNY COFFEY P O BOX 1500 SPRINGFIELD, OH-45501

FIL

 RE: ALP: 38766 UST #: 7160059 Speedway SuperAmerica LLC 9541 613 W 4th St Covington, Kenton County Incident # None UST Gasoline and Diesel Piping Only Removal Date: June 7, 2006

Dear Mr. Coffey:

The Division of Waste Management has reviewed the information received on July 14, 2006, the Classification Guide signed and certified on June 28, 2006, the information contained in the Piping Only Closure Assessment Report signed on July 11, 2006 and any additional closure information received to date. These data indicate that no concentrations of hydrocarbon constituents for which you analyzed remain within the site above soil cleanup levels in Class III Soil Table 1 of 401 KAR 42:070 and 080.

From your analyses, the Division agrees that this site has satisfied the requirements of Kentucky Revised Statutes 224.60-105 and Kentucky Administrative Regulation 401 KAR 42:070 and 42:080. Therefore, no further action is required, at this time, in response to a Piping Only Closure Assessment request by the Division.

The Division has based this determination on information submitted by Gill Cumbee/Geoscience Consultants Inc. and reserves all rights to require additional monitoring or testing and to take whatever action is necessary to protect public health and the environment if the Division determines there is need for further investigation.

NOTE: Proper disposal of all tank contents and liquid and solid wastes generated during this underground storage tank piping only closure is the responsibility of the owner and the owner's contractor/consultant. The disposal of these wastes for this site has been verified by Gill Cumbee, P.G. registration #229. Disposal of these wastes has not been verified again by the Division.



Page 2 September 15, 2006 ALP: 38766 UST #: 7160059

3 - -

NOTE: All monitoring wells shall be properly abandoned in accordance with 401 KAR 6:310 within thirty (30) days from the date of determination that the monitoring well(s) are unsuitable for use as monitoring wells or within thirty (30) days of receiving a no further action letter from the Cabinet. If you have monitoring wells that are required for another investigation that is ongoing, then you may contact the Underground Storage Tank Branch to apply for a variance to this monitoring well abandonment requirement.

Payment of any outstanding underground storage tank fees is still required pursuant to KRS 224.60-150. Failure to pay any said outstanding fees may compromise the eligibility of the facility to receive reimbursement from the Petroleum Storage Tank Environmental Assurance Fund. If outstanding fees are due, the Underground Storage Tank Branch will contact you.

If you have any questions regarding this matter, please contact Ene Brown of the Underground Storage Tank Branch at 800-928-7782 or 502-564-5981, ext, 254.

Sincerely,

Tuss Taylor, AE II Section Supervisor Underground Storage Tank Branch Division of Waste Management

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e: Pile

ATTN: GILL CUMBEE GEOSCIENCE CONSULTANTS INC 475 CONNECTOR ROAD PO BOX 759 GEORGETOWN KY 40324 Site 77



PAUL E. PATTON GOM INOR

COMMONWEAU PLOF KENTUCKY NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION DIVISION OF WAS15 MANAGEMENT. 14 REALLY RD. FRANKLORT KY 40501-1190

February 21, 1997

ATTN: GREG SCHRAND WACO OIL CO. 219 GARRARD ST COVINGTON KY 41011

> RIC-Fifth Street Shell 619 W. Fifth St. Covington- Kenton County

ID#: 4740-059 ERT#: B1924 UST System(s) Removal Date: October 2, 1996 Tank(s): three (3) 10,000 gallon gasoline-tanks #1, 2, 3

Dear Mr. Schrand:

The Division of Waste Management personnel have reviewed the Classification Guide signed and certified on December 18, 1996 and information contained in the Closure Assessment Report signed December 16, 1996 on behalf of Fifth Street Shell. This data indicates that no concentrations of hydrocarbon constituents for which you analyzed remain at the sampling area within the site above soil cleanup levels specified in Class III, Table I of 401 KAR 42:070 and 080.

From your analyses, the Division agrees that this site has satisfied the requirements of Kentucky Revised Statutes 224.60-105 and Kentucky Administrative Regulation 401 KAR 42.070 and 42:080. Therefore, no further action is required, at this time, in response to a Closure Assessment request by the Division.

The Division has based this determination on information submitted by Petro Eav. Tech/ Ceder Creek. Engineering, Inc. and reserves all rights to require additional monitoring or testing and to take whatever action is necessary to protect public health and the environment if the Division determines there is a need for further investigation.

Payment of any outstanding underground storage tank fees is still required pursuant to KRS 224.60-150. Failure to pay any said outstanding fees may compromise the ability of the facility to qualify for financial assurance from the Office of Petroleum Storage Tank Environmental Assurance Fund. It outstanding fees are due, you will be contacted by the Underground Storage Tank Branch.



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Site 78

PHILLIP J. SHEPHERD STOREMARY



SREAETON C. JONES GOVERNOW

#### COMMORWEALTH OF KENTUCKY NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION FRANKFORT OFFICE PARK 14 ROLLY ROAD

FRANKCORE KENTUCKY 40631

December 14, 1994

MR ROBERT MARSHALL 555 PIKE STREET COVINGTON, XY 41011

RE: Marshall Dodge - UST Removal 555 Pike Street Covington - Xenton County UST ID # 2227-059 Tank(s): One (1) 550 gallon waste oil

Dear Mr. Marshall:

The Division of Waste Management personnel have reviewed the information contained in the Closure Assessment Report signed April 9, 1952 and subsequent data submitted on behalf of Marshall Bodge. This data indicates that no concentrations of hydrocarbon constituents for which you analyzed remain within the tank pit area above existing background levels and acceptable method detection limit.

From your analyses, the Division agrees that this site has satisfied the requirements of Kontucky Revised Statute 224.60-105 and Kontucky Administrative Regulation 401 KAR 42:070. The Division has based this determination on information submitted by Carter Technical Consultants, Inc. and Mike Roether and Son Construction, Inc. and reserves all rights to require additional monitoring or testing and to take whatever action is necessary to protect public health and the environment if the Division determines there is a need for further investigation.

The concentrations of lead in the background sample has been referred to the Superfund Branch for further investigation and resolution. Any questions concerning this matter should be directed to the Superfund Branch.

For information on possible reimbursoment of permanent closure costs, contact the Petroleum Storage Tank Environmental Assurance Fund Commission at (502)564-5981 or 1-800-928-7782.

Sincerely, ls, Manager

UnKerground Storage Tank Branch Division of Waste Management

DM/TA/cy

c: Debby Lucas Angel, Florence Regional Office Tracking PSTEAFC Tammy Arthur File (2)

Printed on Recycled Paper 🖗 An Luval Opportunity Employer M/L/D

### PAUL R. MARKGRAF

Anoshey of Law Fenancial Building 100 Crimer Annue Fort Mitchell, Kenturny 41017



ADMITTED IN CONTINUES KENTANG

Transmose 606/344 5510 Factor Jr 606/344-9911

June 27, 1997

Ms. Kathy Bailey Administrative Section Underground Storage Branch Department of Environmental Protection 14 Reilly Road Frankfort, KY 40601

## Re: UST ID NO, 9363-059 Location: 540 & 542 Pike St., Covington, KY

Dear Ms. Bailey

As we have previously discussed, the property at 540 and 542 Pike Street in Covington, Kenton County, Kentocky is owned by Robert G. Marshall and Blanche M. Marshall. Your letter of May 28, 1997 indicates that Ashland Petroleum Company registered this site in 1986 listing eight (8) tanks on the site. Unfortunately that mformation is incorrect.

Mr & Mrs. Marsball purchased this property on January 7, 1985 from Gertrode Spaulding Hopkins and John Hopkins. Tenclose a photocopy of this deed of transfer for your information. Mr & Mrs. Hopkins purchased this property in two parcels. The first section was purchased from the Fistate of George W. Lewis and Clana Shader Lewis on February 6, 1952 as shown in Deed book 403, Page 285. The second portion was purchased from Mr. & Mrs. John Todd on May 21, 1969 as shown in Deed book 561. Page 650 of the Kenton County Clerk's records at Covington, Kenucky. Additionally, the records of Kenton County show the ownership of this real estate has never been in the name of Ashland Oil Company.

If memory serves me correctly, a Tressler Comet Oil Station used to occupy the corner of Pike Street and Willow Run. When Mr & Mrs. Marshall purchased this property, this building was torn down to make way for the new Dodge dealership. The underground storage tanks, which did not number more than three, were dug up, cut into pieces and hauled away. This was done by Beckman Construction Company of Covington, Kentucky. I have checked with Beckman Construction and they have no detailed records concerning the removal of these tanks.

In any event, these tanks were removed prior to December 22, 1988. My files contain a copy of the construction contract with the architect involved which I reviewed in November, 1986. Construction was begun and finished in the Spring of 1987.



Therefore, I enclose the registration forms for the tanks which were removed from this property while Mr. & Mrs. Marshall oweed it. I have only filled in information regarding three tanks as the physical size of this property could not accommodate eight tanks as claimed by Ashland Oil.

Additionally, I enclose Marshall Dodge, Inc. check number 018717 in the amount of \$540.00 to cover the additional cost for registering the USTs at 500 Pike Street, Covington, Kentucky (Site #1017-059) as requested in your letter dated May 28, 1997. If you have any questions, please do not heatate to contact me

Sincerely, ( Have & Clarke

Paul R. Markgraf

Enclosure PRM/as Boley troop

## AFFIDAYIT

1, Blanche M. Marshall, hereby state under oath

That my husband, Robert G. Marshall, and I purchased the property at 540-550.
 Pike Street in Covington, Kenton County, Kentucky on January 7, 1985 from Gertrude.
 Spaulding Hopkins and John Hopkins.

2. A small service station was located on this property at the time of our purchase

3. That the property at 540-550 Pike Street was used to construct the current Marshall Dodge automobile facility in late 1986 and early 1987. Marshall Dodge, Inc. was fully operational at 550 Pike Street no later than June 1, 1987.

4 That, to the best of my knowledge, Ashland Oil Company has never owned this property or operated this property in the calendar year 1986.

Further, affiant sayeth naught

In Inauskall\_

Commonwealth of Kentucky 3 SCT County of Kenton

Sworn to and subscribed before me, a notary public, on this 27 day of 27 day of 27 by Blanche M. Marshall, to be true as she verily believes

My commission expires, 1-30.01

State Kentacky My Commission Expires Jan 30, 20/04



April 14, 1992

Jeff Rueben Underground Storage Tank Branch KY-NREPC, Division of Waste Management Frankfort Office Park 18 Reilly Road Frankfort, KY 40601

RECEIVED APR 3 0 1992 U.S. T

RE: Closure Assessment Report Marshal Dodge 550 Pike Street Covington, KY 41035

Dear Mr. Rueben:

CARTEC Technical Consultants. Inc. has been retained to provide a careful knowledgeable assessment of the nature and the extent of contaminated soils associated with the removal of one (1) 550 gallon waste oil underground storage tank (UST). CARTEC assessed the excavation area, guided remediation measures. collected soil samples, provided laboratory analysis, and prepared a closure assessment report.

All removal work was performed by Mike Roether & Sons Construction Inc. on 10/10/91.

The flammable vapors present in the tank's atmosphere were monitored with a Combustible Hydrocarbon (LEL) meter. The UST's were purged with a Educator-Type forced air mover until the lower explosive limit of the atmosphere inside the tank fell below 10%. The UST's were cut open and cleaned of all product. sludges, etc., by Richard M. Roether Construction. All sludges were placed in 1 (one) drum and disposed of at Custom Coating Corp., an EPA approved Mazardows Waste Broker. The UST's were disposed of at American Compressed Steel.

On 11/1/91 Cartec took a background sample because it was believed the area at one time was a dump site, which would have had an impact on the lead readings.

On 3/27/92 Mike Roether & Sons Construction Inc. augured with a bobcat at Marshal Dodge to collect samples for the south wall, east wall, west wall and floor. Split spoon sampling aided in allowing composite samples to be collected. The south wall was composited for the south wall, the east wall was composited for the east wall and so on.

MARSHAL DODGE CLOSURE ASSESSMENT REPORT

APR 3 0 1892

Composited soil samples were collected for each wall and the floor. All of the samples collected associated with the waste oil UST were submitted to Cardinal Laboratories and analyzed for Total Petroleum Hydrocarbons (TPH) EFA Method SW-846-9071 and Total Lead EFA Method SW-846-7420. Each of the samples were placed in a 500 ml pars with teflon lined lids. Samples were kept on ice and transported/handled to Cardinal Labs according to EFA chain-ofcustody procedures by Mike Roether & Sons Construction Inc..

None of the waste oil constituents tested for were present in any of the samples analyzed.

If you have any questions concerning this closure report, please contact CARTEC Technical Consultants immediately.

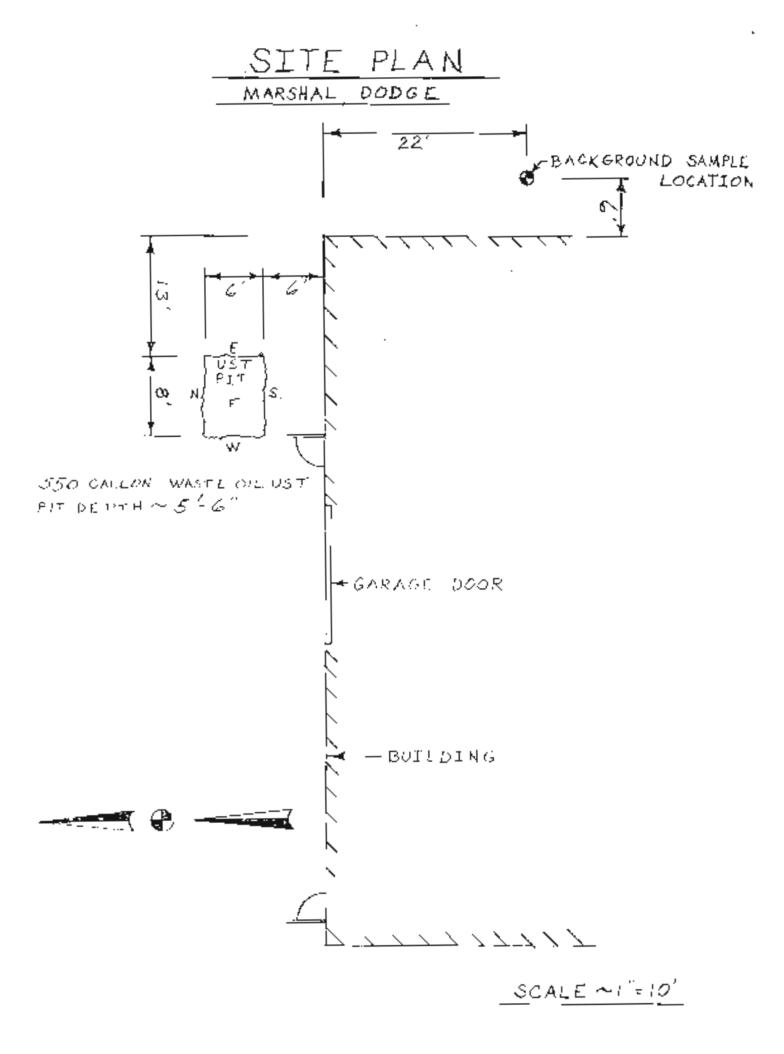
Respectfully,

Robert B. Ligger

Robert B. Lipps

attachments:

Ciosure Assessment Report Site Plan Lab Results Sludge Receipts Cut & Clean Tank Receipts Scrap Tank Receipts Pictures





# CARDINAL LABORATORIES

# ANALYTICAL SERVICES & CONSULTANTS

WATER - PETROLI UM + SOIC - INDUSTRIAL PROCESS + INAZARDOUS & TOXIC WASTES.

NOVEMBER 7, 1991

MR, ELD, FOUTZ CARIEC TECHNICAL CONSULTANTS 218 BUTTLEMICK PIKE COVINGION, KY 41017

CARDINAL FROLED: 1.L.: 93094271 DATE RECEIVED: 11-01-21 COLLETION WEDGED: 6RAS NATRIX: SUCH

PROJECT NAMES MARSHALL CODGE PROJECT NUMBUR: 91-112 PURCHASE URCER NUMBER: SAMPLE FUUL: BACKSRICUND DATE SAMELES IT 01/91 / TIME: CODUNCTION ROX/US

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COLOURDAD F. R. SURPAN

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CONCLUSIONS, ACTION TAKEN OR REQUIRED.

Site 79

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JAMES E. BICKFORD State Set

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PAUL E. PARTON Generation

#### COMMONWEALTH OF KENTREKY NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION FRANCEST OF COMPANY 14 Repty BU FRANCION KY 40601

February 1, 1996

KY TRANSPORTATION CABINET 419 ANN STREET FRANKFORT KY 40622

RE: Encisa Construction 1-75 & Pike Street Covington - Kenton County

> UST ID # 2843-059 CAR Received Date: November 30, 1993 Tank (s) #1 - 550 gallon gas

Dear Tank Owner:

The Division of Waste Management personnel have reviewed the information submitted regarding the assessment of the underground storage tank area for the above referenced site. The data submitted indicates that the site has been adequately assessed in accordance with 401 KAR Chapter 42 (as in effect before April 18, 1994) and 40 CFR Part 280.

From the information submitted, the division agrees that this site has satisfied the closure requirements of Kentucky Revised Statutes 224.60-105 and the requirements of 401 KAR Chapter 42 (as in effect prior to April 18, 1994). Therefore, no further action is required. The Division has based this determination on all the information submitted. The Division reserves the right to require additional monitoring or testing and to take whatever action is necessary to protect human health, safety, and the environment if the Division determines there is a need for further investigation.

Payment of any outstanding underground storage tank fees is still required pursuant to KRS 224.60-150. Failure to pay any said outstanding fees may compromise the ability of the facility to qualify for financial assistance from the Petroleum Storage Tank Environmental Assurance Fund Commission. If outstanding fees are due, you will be contacted by the Underground Storage Tank Branch.

If you have any questions regarding this matter, please contact Rob Daniell of the Underground Storage. Tank Branch at (800) 928-6716, or (502) 564-6716. page 2 January 31, 1996

> For information concerning financial assistance contact the Petroleum Storage Tank Environmental Assurance Fund Commission at 911 Leawood Drive, Frankfort, Kentucky 40601, or call 1-800-928-7782.

Sincerely, Dayle Mills, Mariager

Enderground Storage Tank Branch Division of Waste Management Department for Environmental Protection

DM/py

 c: Debby Lucas Angel, Florence Regional Office PSTEAFC
 R. File (1)
 Admin. (1)

NFA

PAUL E. PATTON Generation

JAMES E. BICKLORD Sections



COMMONWEAUTH OF KENTOCKY NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION FRANCIORE OFFICE PARK 14 BRILLY RD FRANCIONE KY 40601

January 31, 1996

KY TRANSPORTATION CABINET 419 ANN STREET FRANKFORT KY 40622

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Sincerely,

- -Doyle Milk, Manager

(Underground Storage Tank Branch Division of Waste Management Department for Environmental Protection

DM/py

 c: Debby Lucas Angel, Florence Regional Office PSTEAFC
 R. File (1)
 Admin. (1) JAMES E. BICKFORD Secondary

744



PAUL E PATTON GENERATION

## COMMONWPALTH OF KENTUCKY NATURAL RESOLACES AND ENVIRONMENTAL PROTECTION CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FRANKORT OFFICE PAIR. 14 ROLLY RO FRANKFORT XY 40601

April 18, 2001

Mr W. Petrick Stallard Stites and Harbison 400 West Market Street Louisville, Ky. 40202-3352

county Kenter
FACILITY Carrier Brewery
0 * _ <u>KR 19 B B B F</u>
SECTION
SENT BY SHE GRANCH SF

Re: Bavarian Brewery Closure in Place of a Exempt Underground Storage Tank RR# B1062

Dear Mr. Stallard:

The Kentucky Division of Waste Management (KDWM) has determine that you are in compliance in the closure in place of a 4000 gallon gasoline underground storage tank (UST) located at 1115 Main Street, in Covington, Ky. Since this tank was last used in 1964, it is exempt from 401 KAR Chapter 42, the regulated underground storage tank program.

The documentation you provided in the Phase II Environmental Site Assessment (ESA) submitted in May 1996 indicates that the 4000-gallon tank was fulled with grout. The confirmation sample results taken around the UST in the ESA indicated some contamination of benzene. Based on the groundwater monitoring results for the past four years, this site has met the requirements for closure under groundwater Table II.

This work has met the KDWM's requirements for closure of an exempt tank pursuant to KRS 224.01-405. This closure extends to the known effects from this tank and the requirements set forth by the KDWM. Further action may be required if effects of any release to the environment are discovered at a later date.

The KDWM thanks you for your cooperation in the closure of this heating oil tank. If you have any questions concerning this malter please contact me at the address above or by phone at (502)564-6716 extension 241 or by e-mail at Steven, Fields@mail.state.ky.us.

Sincerely:

Steven W. Fields, Supervisor Petroleum Cleanup Section Superfund Branch Division of Waste Management

cc: Florence Regional Office Fazi Sherkat √Central File Mr. Eric Weaver Corportate Center 611 Lunken Park Drive Ciocinnali, 01145226



Printad on Recycled Paper
 5.2 An Engal Copportunity Employer M/F/D



GEOTECHNICAL, ENVIRONMENTAL AND TESTING ENGINEERS

June 13, 2000

W.O. #70985.009 eww/rds

Mr. W. Patrick Stallard Stites and Harbison 400 West Market Street Suite 1800 Louisville, Kentucky 40202-3352 CORPORATE CENTER 611 LUNKEN PARK DRIVE CINCINNATI, OHIO 45226 (513) 321-5836 FAX (513) 321-6294

## Re: Summary of Groundwater Analytical Results Former Bavarian Brewery 1115 Main Street Covington, Kentucky

Dear Mr. Stallard:

Per your request, H. C. Nutting Company (HCN) is pleased to submit this summary of groundwater analytical results for the referenced site. Included in the Table are the date the wells were sampled, the analytical results for benzene, toluenc, ethyl benzene and xylene from monitor wells MW-1, MW-2, MW-3 and MW-4, as well the Table II Action Levels. As indicated in this table, all analytical results are well below the Table II Action Levels.

If you have any questions please fee, free to contact us,

Respectfully submitted. R. C. NUTTING COMPANY

✓Eric W. Weaver, P. G. Senior Geologist/?

Kevin P/Reid, P.G., C.P.G.

Attachment

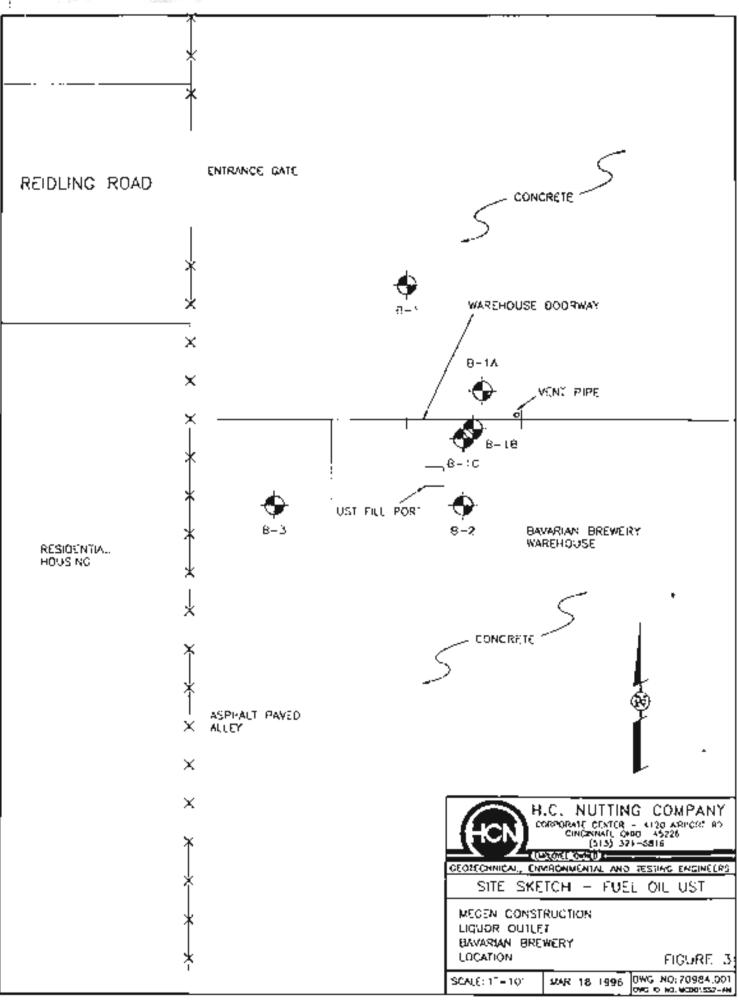
Senior Geologist/Business Development

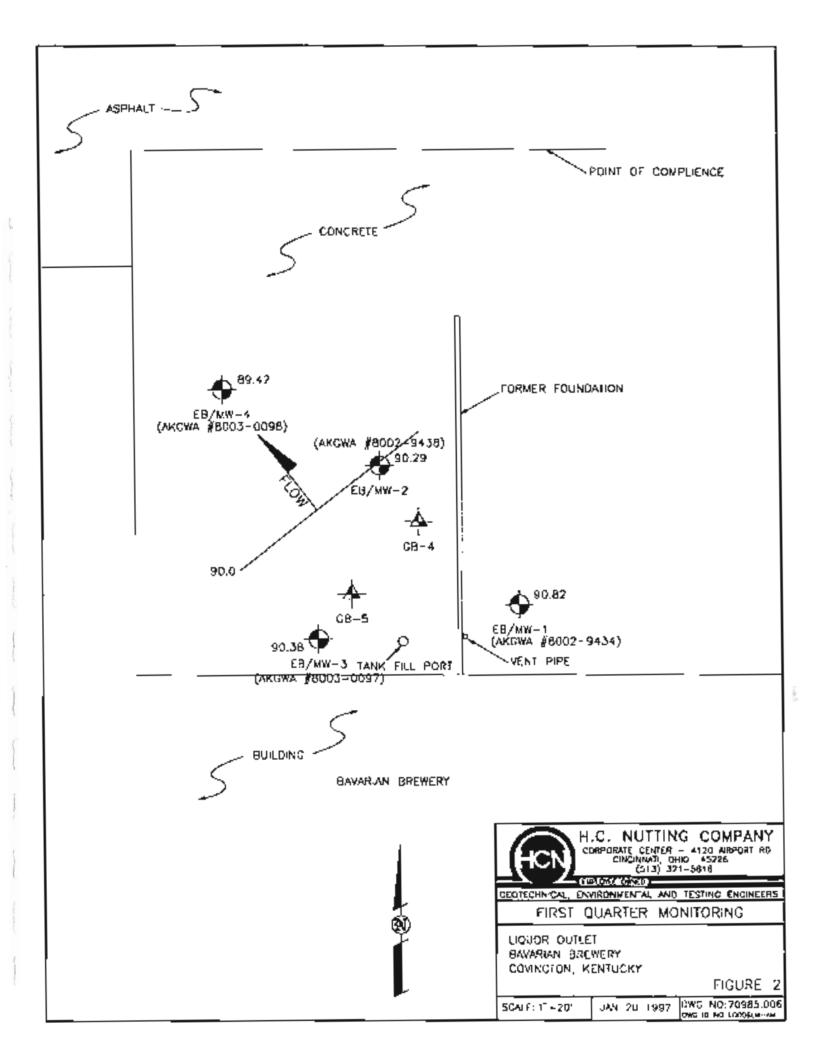
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TABLE 1 Summary of Analytical Test Results - Water BTEX Former Bavarian Browery 1115 Main Street Covington, Kentucky									
Sample Location	Date	Bonzene	Toluane	Ethyl Benzone j	Xylene				
MW-1	5 20 96	< 0.0:05	<1.0	<07	<10				
	12-10-95	<0.005	<10	<0.7	<10				
	3-7-97	<0,005	<1.C	<0.7	<10				
	6-13-97	<0.005	<1.0	<0.7	<10				
1	9-26-97	<0.005	<10	<0.7	<10				
	12-3-98	NA I	NA	NA NA	NA				
	3 4 99	NA I	NA	NA	NA				
	6-3-99	NA	NA	NA	NA				
	9-2-99	NA	NA	NA I	NA				
MW-2	5-20-96	.055	<1.0	< 0.7	<10				
	12-10-96	.058	<1 0	<c 7<="" td=""><td>&lt;10</td></c>	<10				
	3-7-97	.062	<1.0	<0.7	<10				
	5-13-97	014	<1.0	<d.7< td=""><td>&lt;10</td></d.7<>	<10				
	9-25-97	.D <b>8</b> 8	<1.0	<07	<10				
	12-3-98	.156	<1.0	<0.7	<10				
	3-4-99	.157	<1.0	<0.7	< 10				
i	6-3-99	.091	<1.0	<0.7	<10				
	9-2-99	.104	<1,0	<0.7	<10				
MW-3	5-20-96	.024	<1.0	<0.7	<10				
· †	12-10-95	013	<10	<0,7	<10				
	3-7-97	<0.005	<1.0	<0.7	<10				
	6-13-97	<0.005	<1.0	-0.7	<10				
	9-26-97	<0.005	<1.0	<0.7	< 10				
	12-3-98	.050	<1.0	< 0.7	<10				
1	3-4-99	<0.005	<1.0	<07	<10				
	6-3-99	<0.005	<1.0	<0.7	<10				
	9-2-99	<0.005	<1.0	<0.7	<10				
MW-4	5-20-96	.007	<1.0	<u> &lt;0.7</u>	<10				
	12-10-96	<0.005	<10	<0. <i>1</i>	<19				
	3-7-97	<0.005	<1.0	<07	< 10				
1	6-13-97	<0.005	<1.0	<0.7	< 10				
	9-25-97	<0.005	<1.Q	<0.7	430				
	12-3-98	NA	NA	NA.	NA				
	3-4-99	NA	ŇA	NA	NA				
	6-3-99	196.	NA	NA	NA				
	9-2-99	NA	NA	NA	NA				
Table II		· · · · · · · · · · · · ·							
ction Levels		0.4	94	2.4	15				
Notes	Mannor Wells monutoring peri		vere-not same	and during the se	econd quarte				







Site 80

PHILLIP J. SHEPHEAD SECRETARY



BREAETON C. JONES GOVERNON

COMMONWEALTH OF KENTLICKY NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION FRANKFORT OFFICE PARK 18 Re LLY ROAD FRANKFORT, KENTUCKY 4060:

June 17, 1992

Sun Refining & Marketing Company 1901 Market Street Philadelphia PA 19103-1699 ATTN: William A. DeLaughter

RE: Sunoco #0263-0344
542 West 12th Street
Covington -- Kenton County
ID #4341-059
Tank(B): One (1) 4,000-Gallon Kerosone

Dear Mr. DeLaughter:

The Division of Waste Management personnel have reviewed the information contained in the Closure Assessment Report dated October 18, 1990 and Subsequent data submitted on behalf of the Sun Refining & Marketing Company. This data indicates that no concentrations of hydrocarbon constituents for which you analyzed remain within the tank pit area above acceptable method detection limit.

From your analyses, the Division agroes that this site has satisfied the requirements of Kentucky Revised Statute 224.60-105 (224.814) and Rentucky Administrative Regulation 401 KAR 42:070. The Division has based this determination on information submitted by the Sun Refinlay & Marketing Company and reserves all rights to require additional monitoring or testing and to take whatever action is necessary to protect public health and the environment if the Division determines there is a need for further investigation.

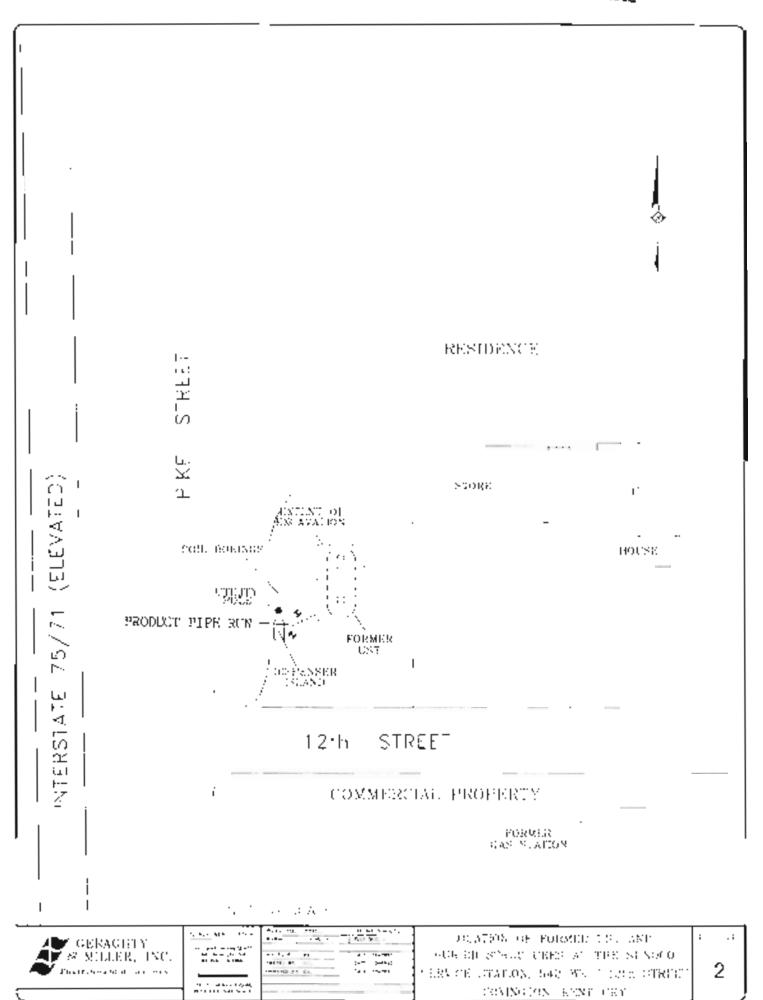
Sincerely,

Dogle Mills, Hanager Underground Storage Tank Branch Division of Waste Management

DH/JR/pjn



APR 2 3 1992



March 25, 1975

Mr. Joseph A. McKenna The Tresler 911 Company 4059 River Road Cincinnati, Ohio 45254

> RE: KY Speed Conter 542 Pike Street Covington, Kentucky File # 40-3F-75

Dear Mr. McKenna:

Pursuant to the authority vested in this office by Chapter 227 of the Kentucky devised Statutes, approval is hereby granted for the installation of one (1) 4,000 gallon underground tank, providing:

- Tank shall be completely surrounded by a minimum of six (6) inches of clean sand.
- Tank vents shall extend a minimum of twelve (12) feet above grade and discharge vortically.

Our approval of the above location does not constitute approval of local authorities having jurisdiction.

Please advise this office in writing before the tank is covered so that a representative of our office can be present at the time the system is tested.

Very truly yours,

about m. Ellip

Gilbert M. Ellis Chief Deputy State Fire Marshal

GMF: d]b

cc: Mr. Willie Berry, Inspector Chief James Ruth

APR 2 3 1992

## TABLE 1

## RESULTS OF LABORATORY ANALYSIS OF SOIL SAMPLES VACANT SUNOCO SERVICE STATION 542 WEST 12TH STREET COVINGTON, KENTUCKY MARCH, 1992

ANALYTE	UNITS	SB-1-D	SB-2-A
Depth Interval		8-10 ft.	2-4 ft.
Benzene	ug/kg	<2	<2
Toluene	ug/kg	<2	<2
Ethylbenzene	ug/kg	<2	<2
Xylenes	ug/kg	<2	<2
Total Petroleum Hydrocarbons	mg/kg	< 10	<10

<2 indicates compound not present above stated detection level.

oh146.01\table.1

Site 81



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## COMMONWEALTH OF KENTUCKY NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION

March 30, 1999

FRANCEONT OLIVICS PARK 14 RELLY RO FRANKFORT KY 40503

JESSIE LANE JACK LANE 413 WEST 11<sup>78</sup> STREET COVINGTON KY 42141

RE: JESS AND SONS 535 WEST 12<sup>TH</sup> STREET COVINGTON - KENTON COUNTY ERT # NONE

> ID# 3979-059 UST System(s) Removal Date: November 3, 1998 Tank(s): One (1) 10000 gallon gasoline, Tank #1 One (1) 5000 gallon gasoline, Tank #2 One (1) 5000 gallon gasoline, Tank #3 One (1) 5000 gallon gasoline, Tank #4 One (1) 550 gallon waste oil, Tank #5 One (1) 2000 gallon gasoline, Tank #6

Dear Mr. Lane:

The Division of Waste Management personnel have reviewed the information submitted on February 4, 1999 and the Classification Guide signed and certified on January 22, 1999 and the information contained in the Closure Assessment Report signed on January 22, 1999 on behalf of Jess & Sons. This data indicates that no concentrations of hydrocarbon constituents for which you analyzed remain within the site above soil cleanup levels in Class III, Soil Table I of 401 KAR 42:070 and 080.

From your analyses, the Division agrees that this site has satisfied the requirements of Kentucky Revised Statues 224.60-105 and Kentucky Administrative Regulation 401 KAR 42:070 and 42:080. Therefore, no further action is required, at this time, in response to a Closure Assessment request by the Division.

The Division has based this determination on information submitted by Foppe Technical Group, Inc. and reserves all rights to require additional monitoring or testing and to take whatever action is necessary to protect public health and the environment if the Division determines there is need for further investigation.

Note: All monitoring wells shall be properly abandoned in accordance with 401 KAR 6:310 within (30) days from the date of determination that the monitoring well(5) are unsuitable for use as monitoring wells or within thirty(30) days of receiving a no further action letter from the Cabinet.

Payment of any outstanding underground storage tank fees is still required pursuant to KRS 224.60-150. Failure to pay any said outstanding fees may compromise the ability of the facility to qualify for financial assurance from the Office of Petroleum Storage Tank Environmental Assurance Fund. If outstanding fees are due, you will be contacted by the Underground Storage Tank Bratch.



Page 2 March 30, 1999 UST ID # 3979-059

For information on possible reimbursement of permanent closure costs, contact the Office of Petroleum Storage Tanks Environmental Assurance Fund at (502) 564-5981 or 1-800-928-7782.

If you have any questions regarding this matter, please contact Daniel Phelps, PG\_of the Underground Storage Tank Branch at (800) 928-6716, or (502) 564-6716 ext. 267.

Sincerely,

Lajuinda Haight Maybriar, Supervisor Closure Section Underground Storage Tank Branch Division of Waste Management

DP

cc: Debby Lucas Angel, Florence Regional Office OPSTEAF Daniel Phelps, PG File - CLO-NFA Admin - Kathy Bailey Cheryl Yunt

> DANIEL ADAMS, PG FOPPE TECHNICAL GROUP, INC. 11415 CENTURY BOULEVARD CINCINNATI OHIO 45246

		C1 680.25	CUSCERST	* <u></u> *••••••					
SITE ID#:	3979-09			ANY): 1 2 (3) 4 6 N/	· · · · · · · · · · · ·				
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	V. CUUN		GRD WTR 1		{				
PROJ. MO		1005		2.4.99 DATE SENT	3.9.09				
	A6SES6: UST Regulated Tanka Tank	Removed		ument O.E. Screen Lab E. screen 10	Tracked M				
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NOI Date:	3,13,98	Regional Office Ins	spection: 🗆 Yes 💥 No	Date://					
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			Removal Date:	<u>11 N. 3, 1998</u>	5				
<u>.</u>	<u></u>	23.11	ION	~··					
CAR Signe	d Date: <u>(</u> _ ನಿವಿ _	<u> 역역</u> Classifica	tion Guide Signed Date:	1,22,99					
Tank Inform	Tank Information & Excavation Condition Checked: 🗹 ves 🛛 🗅 No								
		): 💇 Gasoline 🗇 Dicsel							
Tank contes	nts present at time of clo	osure: 🗹 Yes 🖸 No - Volume in	Gallons: <u>570- Ar</u>	Disposal Location: <u>f</u> erm	A-FISENV				
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		Charlen Systems, 1			205334845				
		р. р		on: <u>///4-</u>					
Tank/Piping	g Disposal Location:	PAUR J. JONAS	· ()	Receipt: Ves	5 🗆 No				
Groundwate	•	CL's DElevated Levels Groundwater Encountered	Public Notice Require	d: 🗆 Yes 🛛 🗖 No					
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SECTION Y

## 7.2 Sample Results

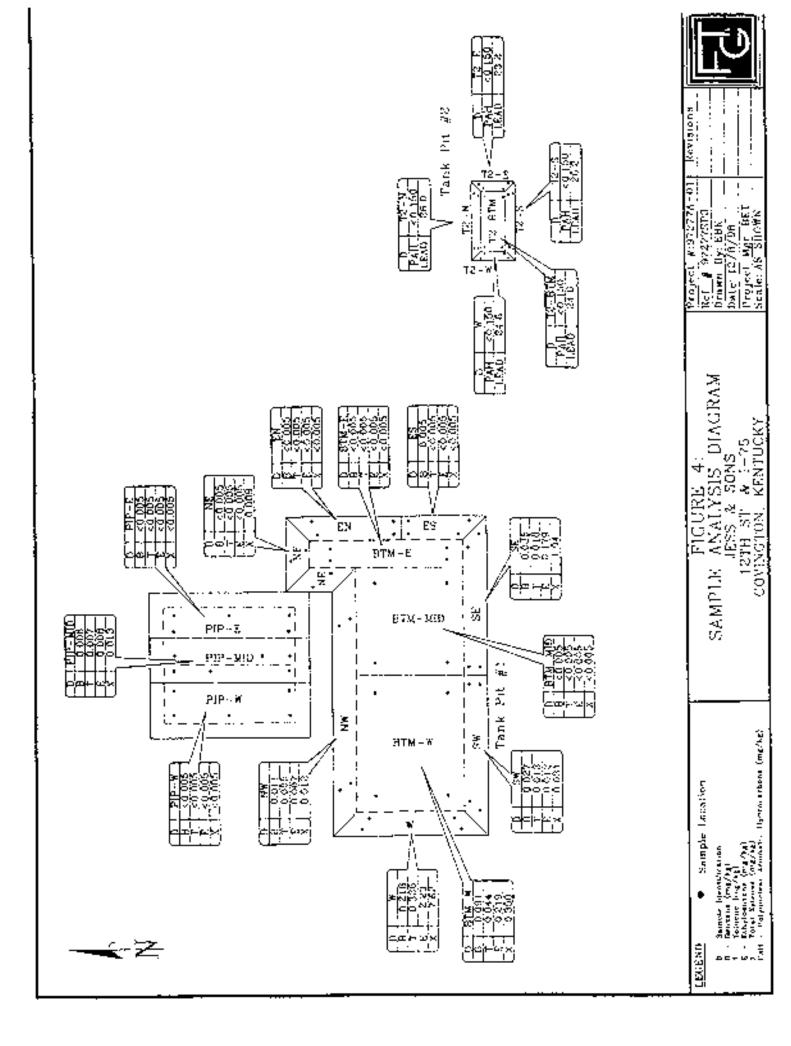
The results of the soil sample analyses are summarized in Tables 6 and 7 and in Figure 4 Copies of Laboratory Analytical Data Sheets are provided in Appendix F.

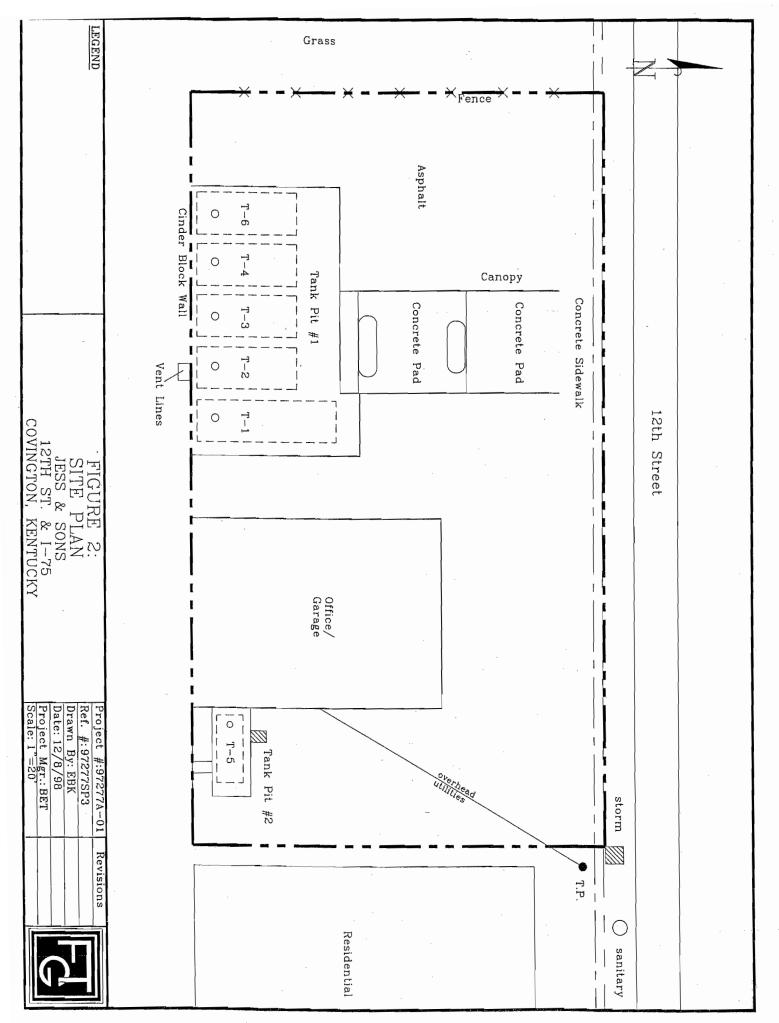
ample ID	Benzenc (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)
втм-е	<0.005	<0.005	<0.005	<0.005
NE	<0.005	<0.005	<0.005	0,009
EN	<0.005	<0.005	<0.005	<0.005
ES	0.005	<0.005	<0.005	<0.005
FILLE	<0.005	<0.005	0.607	C.078
NW	0.011	0.005	0.007	0.012
BTM MID	<0.005	<0.005	<0.005	<0.005
8TM-W	0.091	0.044	0.219	0 3 50
SE	0.035	0.018	0.179	1.94
\$Ŵ	0.027	0 013	0.012	0.031
W	0.218	0.336	2 23	7.62
FILL-W	0.006	<0.005	0.019	0.131
PIP-W	<0.005	<0.905	<0.005	<0.005
PIP-MID	0.006	0 007	0.008	0.013
PIP-E	<0.005	<0.005	<0.005	<0.005
PIP-FILL	<0.005	<0.005	<0.005	<0.005
KDEP Allowable Levels (Class IB Table 1)	20	·	30	50

Project: Jess & Sons , UST Closure Assessment Report Status: Final

Project No: 97277a-01 January 22, 1999

1		,	nd Total Lead L			
Sample ID.	Ch (mg/kg)	B(a)A (mg/kg)	cPAH (mg/kg)	nPAH (ing/kg)	NAP (mg/kg)	Total Lead (ung/Rg)
12-N	<0.150	<0.150	<0.150	<0.150	<0.150	26.0
72-5	<0.130	<0.150	<0.150	<0.150	<0.150	26.2
T2-E	<0.150	<0 150	<0.150	<0.150	<0.150	Z3.2
12-W	<0 150	<0.150	<0.150	<0.150	<0.150	24.6
T2-BTM	<0.150	<0.150	<0.150	<0.150	<0 150	24.6
T2-FU.],	<0.150	<0.150	< 0.150	<0.150	<0.150	397
KDEP Allowable Levels (Class III Table 1)	15	015	0.3	10	5.0	50





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UPS



## **Ohio Department of Commerce**

Division of State Fire Marshal Bureau of Underground Storage Tank Regulations 6606 Tussing Road . P.O. Box 687 Reynoldsburg, OH 43068-9009 (614) 752-7938 FAX (614) 752-7942 www.com.state.oh.us

**Bob** Taft Governor

Gary C. Suhadolnik Director

August 30, 1999

DAVE THEURER UPS DIST PLANT ENGINEERED 11141 CANAL RD CINCINNATI OH 45241

SITE:

UPS 640 W THIRD ST **CINCINNATI OH** HAMILTON COUNTY INCIDENT #3101053-01

#### RE: NO FURTHER ACTION STATUS REGARDING CLOSURE REQUIREMENTS

Dear Mr. Theurer:

The Bureau of Underground Storage Tank Regulations (BUSTR) has reviewed all information submitted for this incident number. Based on this information, BUSTA requires no further action involving closure under Ohio Administrative Code 1301:7-9-12, effective September 1992.

Thank you for your cooperation. If you have any questions, please contact our office at (614) 752-7938.

Sincerely,

Kelly J. Gill

FENANCIAL INSTITUTIONS . INDUSTRIAL COMPLIANCE . LIQUOR CONTROL . REAL ESTATE AND PROFESSIONAL LICENSING . SECURITIES

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to Stepl

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Corrective ! tion Supervisor

FJG:anc

xc: Site File

#### BACKGROUND INFORMATION

United Parcel Service, 640 West Third Street, Cincinnati, Ohio 45202 requested that we remove (2) 550 gailon underground tanks. One was used for waste oil, the other for new engine oil. On March 13, 1990 we excavated to remove the two tanks. The tanks were located on the east side of the building where two sides come together and form an "L". On the above date and during the excavation and removal of the tanks, Mr. Gary Brehm of the Cincinnati Fire Division observed the tanks and their removal. The integrity of the tanks was intack and no visual contamination of the soil was seen. Each tank had a fill pipe, vent pipe and a suction line. All piping was also removed. The concrete/blacktop parking area showed no visible aigns of contamination and no surface water trapped due to a gradual slope away from the tank area.

#### SOIL SAMPLING LOCATION

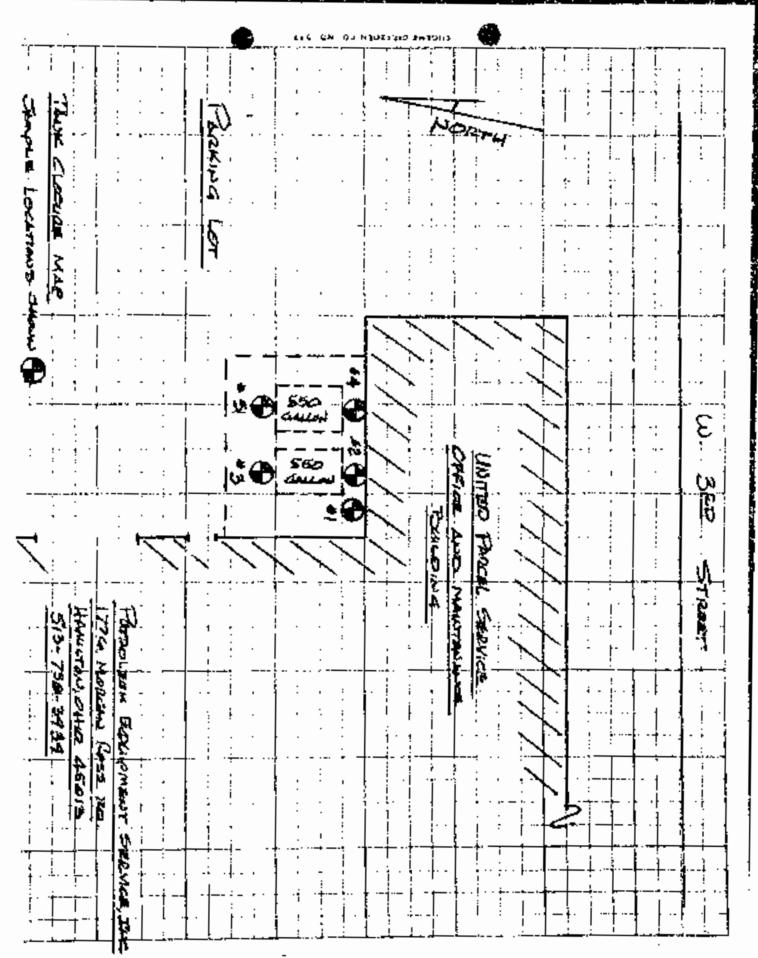
A split spoon sampler was driven to 18° at each spot marked on the enclosed map and checked with the HNU, with the readings of "0". The samples were then placed into tefion lided jars and placed in an ice chest, then transported to Environmental Enterprises, Inc. 10147 Springfield Pike, Cincinnati, Ohio 45015, phone (513) 772-2818 for lab analysis.

#### SAMPLE ANALYTICAL METHODS

After removal, Mr. Monte Gorham of Hazardous Material Services, Inc. Certificate # 90-534, using an MRU mater, calibrated to Benzene, was held over the spots marked on the enclosed map with the readings of "0" at each site. After the Fire Marshal approval and since the tanks contained only engine oils, the only test required was a TPH test.

The samples were tested for Petroleum Hydrocarbons ( TPK ). TPH was analyzed by a Retkin Elmer infrared Spectometer. All analysis were performed according to the standard EPA methods.

The results of the test are on the following page and we have also enclosed a copy of the test.



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	X-XXIII ANALAR INT	PE	5.	INC.	 	S.

# PETROLEUM EQUIPMENT SERVICE, INC.

P.O. BOX 467, MIAMITOWN, OHIO 45041-0467, (513) 738-3939

• SALES

• BERVICE • INSTALL ATION

· CONSTRUCTION

Mr. Gregory Jay White Release Prevention Section Division of State Fire Marshal BUSTR 7510 East Main Street F.O. Box 525 Reynoldsburg, Ohio 43068-3395

Re: United Parcel Service 640 West Third Street Cincinnati, Ohio 45202 Hamilton County Site # 3101053

Doar Mr. White:

Attached is your letter dated May 29, 1990 requesting that we needed the BTEK sample and results for the UNITED PARCEL SERVICE, at 640 West Third Street, Cincinnati, Ohio 45202, Hamilton County Site & 3101053. Enclosed are those tests and results and also the change of custody record.

I have also enclosed a copy of the original letters and tests that your first review was based on incase they have been misplaced during the BTEX tests we have now sent to you.

Thank you for your help and we hope to hear from you soon

Sincerely,

Petroleum Equipment Service, Inc.

Hickin Spite (B

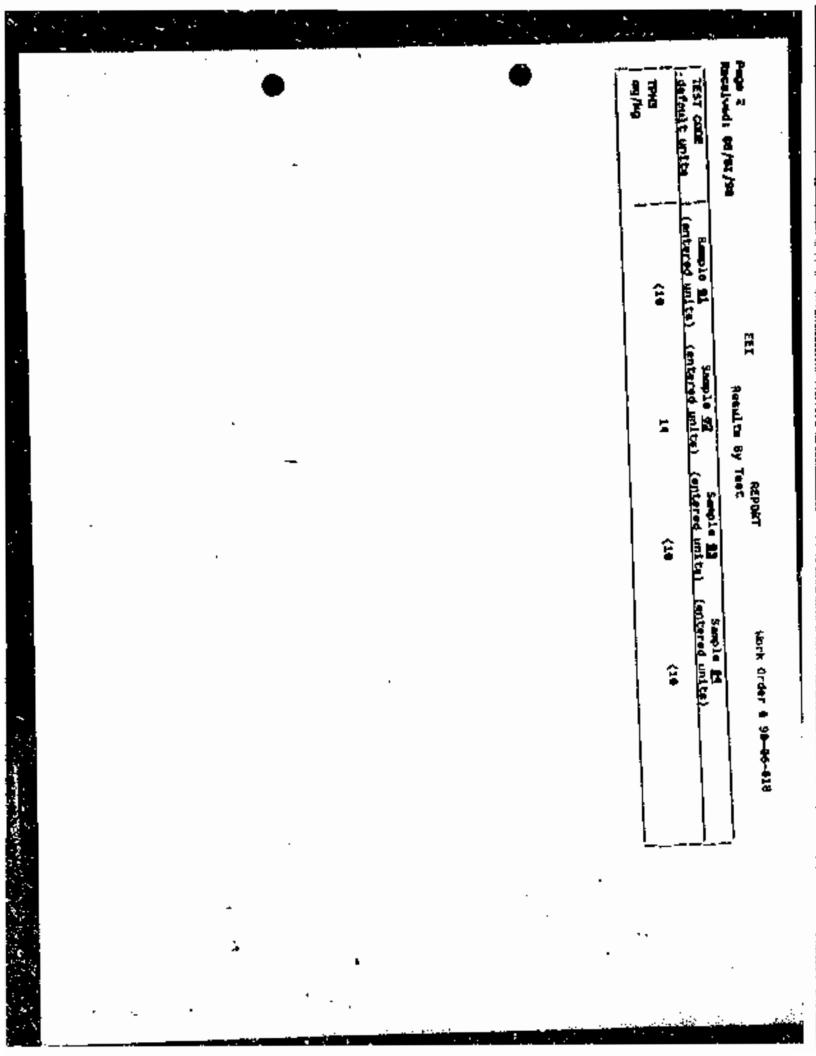
Cirki L. Spirtoff

Office Manager



SERVICING THE OIL INDUSTRY LOCATED AT STATE ROUTE 128, ROSS, OHIO 45061

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•	SAMPLE         DENTIFICATION         SET13           41         1         1         1           92         2         1         1           93         3         1         1           94         4         1         1	TAKEN CUSTINER TAKEN CUSTINER Taken SELIVERER TYPE SOLL P.O. 1 NORS INVOICE UNDER APPARATE SAVER	CLIERT MESSIL SAMPLES 1 CURPANY <u>MAZARODUS MATERIALS SERVICES.</u> FACILITY	ATTEN BORTE SURVEY	REPORT HAZARDOVS MATERIALS SERVICES TO P.O. 80X 247 R052.0HD0 45863	Page 1 Ancelved: 06/01/20	
	TEST CODES and NAMES used on this report <u>PICK UP CHARGE</u> <u>PETROLEUM HYDROCARBONS</u>		Enclosed are the results of sociiled someles submitted for analysis. If you have any questions plaase use "LAB A" for faster identification. ONTO EPA CERTIFICATION: CHENICAL AQS	ATTEN <u>Having Coller</u> Phone: <u>(513) 772-2010</u> Contact <u>Jeq</u>	PREPARED Environmental Enterprises BY 10147 Springfield Pike Cincingeti, Ohio 45215 CENTITED BY	I REPORT Work Order 1 98-85-418 96/87/99 49:43:22	



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**Ohio Department of Commerce** 

Division of State Fire Marshal Bureau of Underground Starsge Tank Argulations 6606 Tussing Read • P.O. Box 687 Reynoldchurg, OH 43068 9009 (614) 752-7918 FAX (614, 752-7942 www.com.st\_is.oh.ut Bob Taft Governor

Gary C. Sahadotoik Director

August 30, 1999

DAVE THEURER UPS DIST PLANT ENGINEERED HHAH CANAL RD CINCINNATI OH US241 SITE: UPS

640 W THIRD ST CINCINNATI OH HAMILTON COUNTY INCIDENT #3101053-02

## RE: NO FURTHER ACTION STATUS REGARDING CLOSURE REQUIREMENTS

Dear Mr. Theorer:

The Bureau of Underground Storage Tank Regulations (BUSTR) has reviewed all information submitted for this incident number. Based on this information, BUSTR requires no further action involving closure under Ohio Administrative Code 1301:7-9-12, effective September 1992.

Thank you for your cooperation. If you have any questions, please contact our office at (6)4) 752-7938.

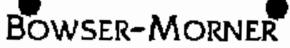
Sincerely, Kelly J. Gill

Corrective action Supervisor

KIG:and

No: Site Fale

Hamiltas 31 In #310/057



4518 Taylorsville Road • P.D. Box 51 • Dayton, Ohio 46401 • 513/238-6805

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## ENGINEERING EPORT

REPORT TO: Reliable Construction 1639 Stanley Avenue Dayton, Ohio 45404 REPORT DATE: May 21, 1991

REPORT NO.: 10817-591-820-R

MAY 2 9 1991

RECENSE CONVENTION

Attention: Mr. Dave Mitchell

REPORT ON: Underground Storage Tank Chosure Site Assessment Onited Facel Service Distribution Center, Third Street, Hamilton Control Charles C

### 1.0 PURPOSE

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This report, prepared for Reliable Construction, describes the **STATE SUE AND** STATE SUCTR underground storage tanks (UST's) at United Parcel Service's Third Street, Cincinguer STATE facility.

## 2.0 BACKGROUND INFORMATION

The site is a United Parcel Service distribution center. Two UST's from two profiles are under investigation. Caviry 1 is in front of the garage area, and Cavity 2 is believed the shipping building.

The UST from Cavity 1 was a 10,000-gallon meet tank. We were informed by the United Parce) Service maintenance department that this UST had been installed in the 1950's and was last used in 1974 to store diesel fuel.

The UST from Cavity 2 was a 560-gallon anel tank. We were informed by the United Parcel Service maintenance department that this UST was installed in 1969 and used to store waste oil.

All Reports Remain The Confidential Property of SCHARE-MODIFIES and He Publication Or Distribution Of Reports May So-Made Without Or Exposes Without Connects, Securit As Anthonized by Connect.

#### 3.0 WORK PERFORMED

On October 11 and Ocuber 12, 1990, a Bowser-Mamer Associates, Inc. environmental scientist, Mr. Phillip A. Thracher, was present during the removal of the USTs. The specific tasks to be accomplished were:

- Survey the site before the UST's were removed.
- Observe the excavation and removal of the USTs.
- Obtain soil samples for laboratory analysis
- Provide a site assessment and final report.

#### 4.0 PRE-REMOVAL SITE SURVEY

No obvious signs of petroleum products were present at the surface.

#### 5.0 USTREMOVAL

5.1 <u>Permits</u>

A permit to remove the UST's was obtained from the State Fire Marshal's Office, and was shown to the Bowser-Momer representative on-site by Mt. Gary Brehm, Fire Specialist from the Cincinnati Fire Division.

#### 5.2 Excavation and Removal of UST's

Jergens Construction removed the USTs on October 11, 1990. A backhoe and a trackhoe were used for the excavation. Mr. Dave Mitchell reported that contaminated sofia were disposed of in the Rumpke Sanitary Landfill, the UST's were disposed of as acrop by Jergens Construction, and no sludge or product was present to dispose of.

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#### 5.3 Eickl Observations

Hydrocarbon odors were detected from the cavity when UST #1 was excavated. Although UST #1 had three holes in its east end, no standing liquid was seen in the UST cavity. UST #1 was strapped to an eight-inch-thick concrete alab in the borrow of the cavity. Beneath the concrete alab, the cavity contained an approximately one-foot layer of placed red brick which appeared to have been an old sidewall or pavement. The material seen in the rest of the cavity excavation consisted of dense brown clay. The excavated soil was stockpilled on plastic absetting pending the laboratory results of a sample that was submitted for analyses for the parameters required by the landfill designated to receive the soil. These laboratory regults are anached.

UST #2, a waste oil storage tank, contained approximately one-and-a-half inches of product. This product was pumped out before the tank was reserved from the cavity. The cavity containing UST #2 was topped by a six-inch layer of asphalt. The rest of the cavity consisted of sand and gravel. No hydrocarbon odors were present when this tank was excavated.

#### 5.4 Soil Materials and Groundwater Observations

No groundwater was seen during the excavation of either UST cavity.

5.5 Free Product

ş

No free perroleum product was seen.

#### 6.0 SAMPLE COLLECTION AND ANALYSIS

6.1 Sample Collection

Sumples were taken eccording to the State Fire Marshal's guidelines.



#### 6.2 Details of Sample Collection

All of the samples were collected with a trawel that was deconsuminated between samples. The samples were scaled in airtight jurs for unapport.

The site plan, showing the sample locations, is arached.

#### 6.3 Sample Screening

The location of each PID sample retrieved and the reading mused for each sample is recorded on the attached sample location plan for each tank. The calibration curve for the PID is attached.

#### 6.4 Chain-of-Custody

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Strict chain-of-custody was achieved by obtaining proper signatures as the samples were taken to the lathing for analysis. Chain-of-custody documentation is strached.

#### 6.5 Name and Affiliation of Person Collecting Samples

Mr. Phillip A. Thrasher, a Bowser-Morner Associates, Inc. environmental sciential, collected all of the samples.

#### 6.6 Name and Affiliation of Third-Purty Observer

Mr. Gary Brehm, Inspector for the State Fire Marshal's Office, was on-site during the removal of the UST's.

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6.7 Name, Address, and Telephone Number of Laboratory

Bowser-Morner, Ltc., 4518 Taylorsville Road, Dayum, Ohio 45401 Telephone: (513) 236-8805.



#### 6.8 Laboratory Analyses

Three soil samples from the cavity that contained the diesel fuel UST were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEK) and TPH. Three soil samples from the cavity that contained the waste oil UST were analyzed for volatile organic compounds (VOC's) and total perroleum hydrocarbons (TPH).

#### 6.9 Laboratory Results

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The results of the laboratory testing are summarized in Tables 1 and 2. The complete laboratory reports are attached.

#### TABLE I

#### LABORATORY RESULTS

#### Results are given in parts per billion (ug/kg) except as norm?

#### UST Cavity #1

Sample No.	Sample Location	<u>Benzene</u>	Tologa	Ethyl- benzene	Xykan	IPH*
1-1A	West Side Bottom	< 2	<2	<2	<2	28
1-4A	East Side Bottom	<2	<2	<2	<2	31
1-3A	North Side Bottom	<2	<2	<2	<2	40

Total petroleum hydrocarbons in parts per trillion (mg/kg)

<u>ពាក់អន្តរ</u>័ន កន



#### TABLE 2

#### LABORATORY RESULTS

Results are given in parts per billion (ug/kg) except as noted\*

#### UST Cavity #2

Sample Location	Voladle Organic Compounds	<u>TPH</u>
North Side Bottom	BDL**	25
Quater	HIX.	54
East End Bortom	BDL	18
	Nanh Side Botom Center	Sample Location <u>Compounds</u> North Side BDL** Bottorn Center HIM.

\*Total percoleum hydrocarbons in parts per million (mg/kg)

\*\*Below Detection Limit

#### 7.0 CONCLUSIONS

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C. Martin Martin

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Field observations and laboratory testing indicate that excavation has removed nearly all of the soil that contained perroleum products at the site. The levels of benzene, toluene, ethylbenzene, and xylene (BTEX) and volatile organic compounds (VOC't) were all below the detection limits of the laboratory equipment. It has been our experience that the State Fire Marshal's Office has approved closure at these low levels of total perroleum hydrocarbons.

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Thank you for selecting Bowser-Morner Associates, Inc. for this project. Your business is appreciated, and we look forward to working with you again soon. In the meantime, if you have any questions or if we can help you in any way, please let me know.

Sincerely,

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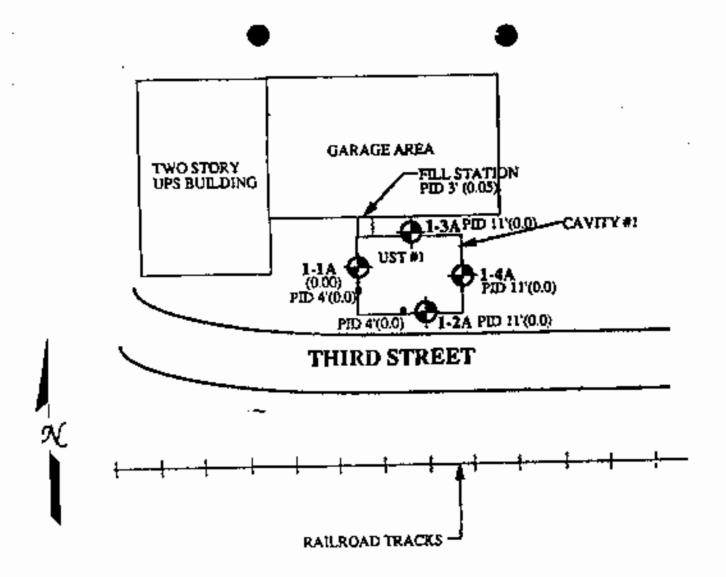
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Bowser-Morner Associates, Inc.

Phillip A, Thrasher Environmental Sciendal

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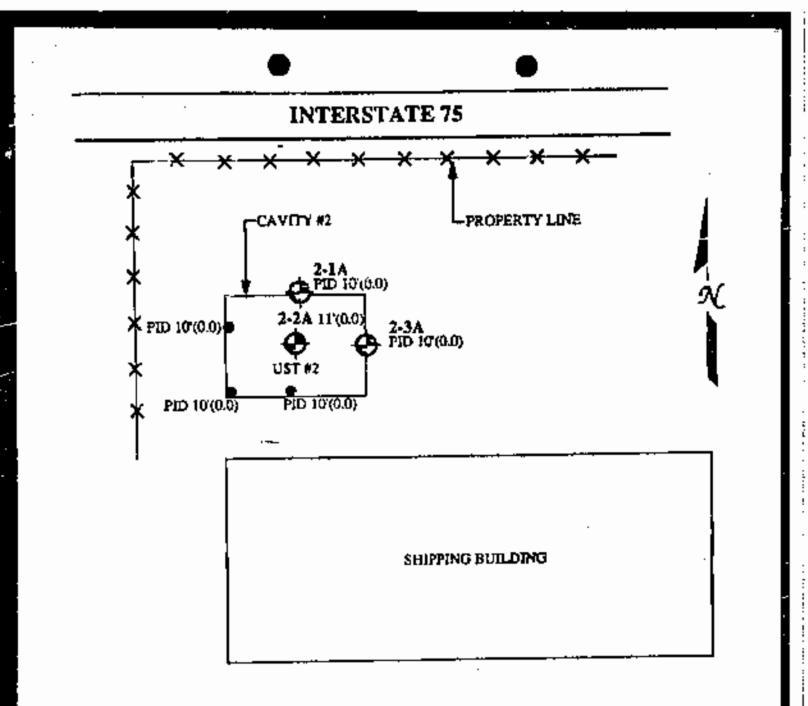




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## SAMPLE LOCATION PLAN

RELIABLE CONSTRUCTION SERVICES 1639 STANLEY AVENUE DAYTON, OHIO UPS CINCINNATI 10817 10-17-90



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#### SAMPLE LOCATION PLAN RELIABLE CONSTRUCTION SERVICES 1639 STANLEY AVENUE DAYTON, OHIO UPS CINCINNATI 10817 10-17-90

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**Ohio Department of Commerce** 

Division of State Fire Marshal Bureau of Underground Storage Tank Regulations 6606 Tussing Road • P.O. Box 687 Reynoldsburg, OH 43068-9009 (614) 752-7938 FAX (614) 752-7942 www.com.state.oh.us Bob Taft Governor

Gary C. Suhadolnik Director

August 30, 1999

DAVE THEURER UPS DIST PLANT ENGINEERED 11141 CANAL RD CINCINNATI OH 45241

SITE: UPS

500 GEST ST CINCINNATI OH HAMILTON COUNTY INCIDENT #3190689-00

#### RE: NO FURTHER ACTION STATUS REGARDING CLOSURE REQUIREMENTS

Dear Mr. Theurer:

The Buress of Underground Storage Tank Regulations (BUSTR) has reviewed all information submitted for this incident number. Based on this information, BUSTR requires no further action involving closure under Ohio Administrative Code 1301:7-9-12, effective September 1992.

Thank you for your cooperation. If you have any questions, please contact our office at (614) 752-7938.

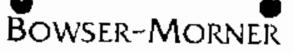
Sincerely,

Kelly J. Gill

Corrective Action Supervisor

KJG:anc

xc: Site File



4518 Taylorsville Road + P.O. Box 51 + Daylon, Ohio 45401 + 513/236-8805

## UNDERGROUND STORAGE TANK CLOSURE ASSESSMENT REPORT

RPPORT TO Reliable Construction Services 1639 Stanley Aven a P.O. Box 143 Dayton, Ohio 45-04

REPORT DATE: March 4, 1991 REPORT NO.: 10950-591-518

24

Attention: Mr. Dave Muchely

PREVENTION Underground Storage Tank Closure Site Assessment, United Parcel Service Cincinnati Distribution Facility, 500 Gest Street, Hamilton County, Columnati, Ohio

#### SUMMARY

Four underground storage (arks (UST's) were removed from the United Precess Service site at 500 Ges Street in Circumon. Ohio on 30 mary 18, and 21, and February 22, 1981 – The UST's were removed according to the State Fire Marshal's regulations. The surrounding soils were tested to compay with the requirements of the State Fire Marshal The observations and loboratory test (esplits indicate that the site has been elemedrup to ough the ternov, coll spits that contained petroleum products.

2.0 PURPOSE

This report, prepared for Reliable Communition Services, describes the removal of read underground storage tanks (UST's) or or, above location and provides a UST closure systemeted.

#### 3.0 BACKGROUND INFORMATION

An office and parcel-soring facility is on the site. The USFs under investigation were four 10,000-gallon steel tanks that had been used to store gasoline and diesel facility.

 <sup>4.</sup> Полно история и селото на селото селото и на М.А. МОКАТА и селото и статист и селото Полковани и ПО Версий Абар Ка Маркий — селото селото селото селото селото селото селото селото селото Собрание Собрание.

Reliable Construction Services Report No. 10950(391(118) March (1-1991) Page 2

The UST's had been in service recently. An entirely new UST system is being installed at that same location

#### 4.0 WORK PFREORMED

On January 18, 21, and 31 and February 25, 1991, a Bowser-Morner Associates, Inc. representative was at the site. The specific tasks to be accomplished were:

- Evaluate the site for signs or perinleum releases before the removie of 0 ± USUs.
- Observe the excavation and reitioval of the UST's.
- Obtain soil samples for laboratory analysis
- Provide a closure assessment and report

#### 5.0 PRE-RUMOVAL SITE EVALUATION

No obvious signs of petroleum releases were apparent at the ground surface.

#### $(0) \in \underline{\chi}$ SUR<u>FMOV</u>AL:

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A period to tensive the UST's, No. 89-091909, was obtained from the Coy of Cincinnan here Department by Reliable Construction Services

#### 6.2. Vycavation and Removal of UST's

Reliable Construction Services removed one of the UST's on January 18, one on January 21, and two im February 22. A targe excavator was used for the excavation. The two UST's on the east side of the cavity, were removed first and a new UST was installed before the two UST's on the west side were removed. After the two UST's on the west

-888882170



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side were removed, a new UST was installed on that side of the cavity. The piping and associated equipment, which were directly above the tanks, were also removed.

#### 6.3 Eackl Observations

The UST's were all in good condition with only minor rust and corcosion. No holes or signs of leaks were seen. The piping and associated equipment were also in good condition. Although petroleum product constituents were found in some soils near the fill ports and beneath the pump islands, the US is and piping did not appear to have leaked any predict.

The UST cavity was enlarged as the excavation progressed to make common the new larger UST's. The final dimensions of the new cavity were approximately 60 x 30 x 36. Several locations were excavated deeper to remove soil that contained periodeom products and then backfilled with new 60. The excavation extended benefits the locations of the piping raps and pamp islands. Underground antipies bound the new cavity on three sides

#### 6.4 So<u>si Marenals and Groundwater Ob</u>servations

The cavity was excavated in allovial said and gravel. Some fill materials were noted on the upper few feet of the cavity in pasces and all og underground utilities.

No groundwater was seen in the cavity. No groundwater was encountered in an exploratory soil burning drilled to a depth of 58 tees on the site.

6.5 Tree Product:

No free petrole im product was seen.

6.6 Disposation Waste Materials

Mr. Dave Mitchell of Reliable Construction Services reported that all of the excevated softs were disposed of in BFCs Bigfort Lonofolise Morrow. Obio: The liquids and studge

. . . . . . . . .



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#### 7.6 Name, Address, and Telephone Number of Laboratory

Bowser-Morner, Inc., 4518 Taylorsville Road, Dayton, Ohio 45401 Telephone: (513) 236-8805

#### 7.7 Laboratory Analyses

Four soil samples were selected from locations where soils containing petroleum products were removed and/or on the basis of the PID readings. The samples were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by U.S. EPA Method 8020 and total petroleum hydrocarbons (TPH) by U.S. EPA Method 418.1.

#### 7.8 Laboratory Results

The results of the laboratory testing are listed in Table 1. The laboratory reports are attached.

#### TABLE 1

#### LABORATORY RESULTS

#### Results are given in ug/kg (parts per billion) except as noted\*

Location	Benzene	Toluene	Lthylbenzene	Xylene	<u>1'PH</u> *
Northeast Bottom	< 2	< 2	< 2	< 2	21
Southeast Bottom	< 2	< 2	< 2	27	12
Northwest Bottom	< 2	< 2	< 2	< 2	24
Southwest Bottom	< 2	< 2	< 2	< 2	16

\*Total petroleum hydrocarbons in mg/kg (parts per million)



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Thank you for selecting Bowser-Morner Associates, Inc. for this project. Your business is appreciated, and we look forward to working with you again soon. In the meantime, if you have any questions or if we can help you in any way, please let me know.

Sincerely,

Bowser-Morner Associates, Inc.

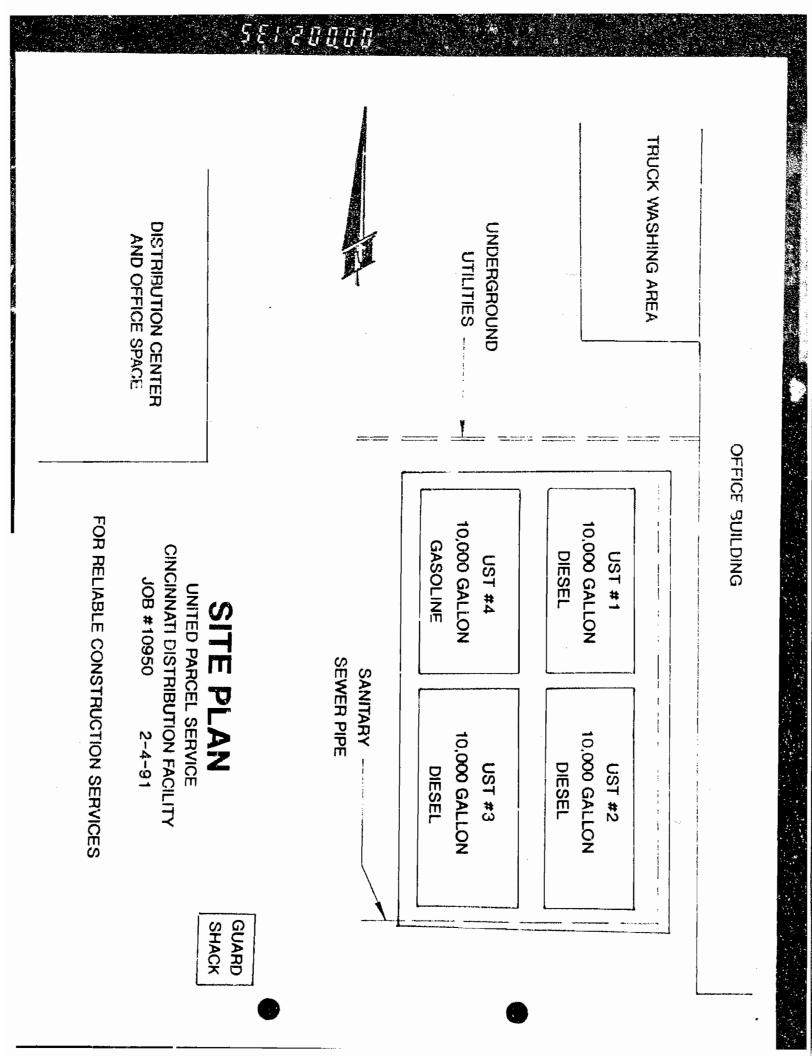
100

/Jeffrey D. Floyd Hydrogeologist Project Manager

JDF/mwt 3-Client 2-File

1.2.2. Sol . 1





**APPENDIX E – PHOTOGRAPHIC JOURNAL** 



Site 1 - Along Central Parkway Parkway; UST Location Right of Building



Site 2 - Duke Energy Substation



Site 2 - Duke Energy Substation. View from Buck Street



Site 3 - Back of Building



Site 3 - Sunset Janitorial Supplies. View from Winchell Avenue



Site 4 - Back of Warehouse



Site 4 - Front of Warehouse. View from Winchell Avenue



Site 9 - Warehouse. View from York Street Facing West



Site 9 - Warehouse. View from York Street, Facing East



Site 14 - Center for Chemical Addiction



Site 14 - Front Lawn



Site 17 - Apartment Complex



Site 29 - Old Filling Station Location. Currently  $8^{th}$  Street



Site 31 - ADP Inc



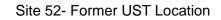
Site 49 - ARTIMIS. Old filling Station Location



Site 50 - Parking Lot. Former UST Location



Site 51- Old Filling Station Location







Site 53 - Old Filling Station. View from West 3<sup>rd</sup> Street



Site 53 - Suspected UST Fill Ports







Site 55 - View From John Street







Site 58 - Former UST Location



Site 60 - Building on Former MGP Location



Site 60 - Former MGP Location



Site 64 - Former MGP Location



Site 65 - Valley Asphalt ASTs



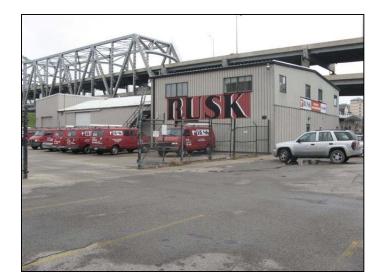
Site 66 - Hilltop AST



Site 66 - Hilltop Basic Resources, Former Coal Tar Refinery Location



Site 71 - Rusk AST



Site 71 - Rusk Heating and Air. View from West  $3^{rd}$  Street



Site 72 - Old Filling Station Location



Site 73 - Former Machine Shop







Site 74 - River City Motors



Site 75 - BP Oil Company



Site 76 - Speedway Station



Site 77 - Shell Station



Site 78 - AST



Site 78 - Old Filling Station Location



Site 79 - Automotive Repair



Site 80 - Former UST Location, Facing West 12'th Street

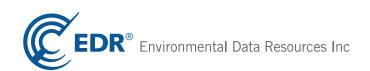


Site 81 - Old Filling Station Location

APPENDIX F – ENVIRONMENTAL DATA RESOURCES AREA STUDY REPORT (Executive Summary And Records Searched Summary) BSB Cincinatti, OH 45202

Inquiry Number: 02663392.1r December 24, 2009

# EDR DataMap<sup>™</sup> Area Study



440 Wheelers Farms Road Milford, CT 06461 Toll Free: 800.352.0050 www.edrnet.com *Thank you for your business.* Please contact EDR at 1-800-352-0050 with any questions or comments.

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## **EXECUTIVE SUMMARY**

#### TARGET PROPERTY INFORMATION

#### ADDRESS

CINCINATTI, OH 45202 CINCINATTI, OH 45202

#### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following databases:

#### FEDERAL RECORDS

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
Delisted NPL	National Priority List Deletions
NPL LIENS	
	Comprehensive Environmental Response, Compensation, and Liability Information System
LIENS 2	
CORRACTS	
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	_ Sites with Institutional Controls
DOT OPS	
US CDL	Clandestine Drug Labs
US BROWNFIELDS	A Listing of Brownfields Sites
DOD	Department of Defense Sites
	Formerly Used Defense Sites
	. Land Use Control Information System
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	
UMTRA	
ODI	Open Dump Inventory
	Torres Martinez Reservation Illegal Dump Site Locations
MINES	
	. Section 7 Tracking Systems
	Integrated Compliance Information System
PADS	PCB Activity Database System
RADINFO	Radiation Information Database
RAATS	RCRA Administrative Action Tracking System
	PCB Transformer Registration Database
	National Clandestine Laboratory Register
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing

#### STATE AND LOCAL RECORDS

OH SHWS	This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal
	NPL list.
OH TOWNGAS	_ DERR Towngas Database

## **EXECUTIVE SUMMARY**

#### TRIBAL RECORDS

INDIAN RESERV	Indian Reservations
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land
INDIAN UST	Underground Storage Tanks on Indian Land
INDIAN VCP	Voluntary Cleanup Priority Listing

#### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in *bold italics* are in multiple databases.

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

#### FEDERAL RECORDS

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 06/23/2009 has revealed that there is

1 CERC-NFRAP site within the searched area.

Site	Address	Map ID	Page
KELLY KOETT INSTRUMENT COMPANY	930 YORK STREET	13	100

RCRA-TSDF: 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.

A review of the RCRA-TSDF list, as provided by EDR, and dated 11/12/2008 has revealed that there is 1 RCRA-TSDF site within the searched area.

Site	Address	Map ID	Page
POWELL WM CO	2503 SPRING GROVE AVENU	5	15

RCRA-LQG: 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.

A review of the RCRA-LQG list, as provided by EDR, and dated 11/12/2008 has revealed that there are 2 RCRA-LQG sites within the searched area.

Site	Address	Map ID	Page
POWELL WM CO	2503 SPRING GROVE AVENU	5	15
HARRISON TERMINAL *	1220 HARRISON AVE	8	46

RCRA-SQG: 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.

A review of the RCRA-SQG list, as provided by EDR, and dated 11/12/2008 has revealed that there are 20 RCRA-SQG sites within the searched area.

Site	Address	Map ID	Page
SIDNEY PRINTINGL WORKS INC	2611 COLERAIN AVE	4	9
UNITED SIGNS INC	1030 STRAIGHT ST	4	12
JOHN S SWIFT CO INC	2524 SPRING GROVE AVE	5	24
KAO BRANDS CO	2535 SPRING GROVE AVE	5	30
MOELLERING INDUSTRIES	1213 YORK ST	11	53
PHILLIPS SUPPLY CO	1 CROSLEY FIELD LN	11	56
SOUTHWEST OH REGIONAL TRANSIT	1401 BANK ST	11	63

Site	Address	Map ID	Page
MODERN DISPLAYS	2160 KINDEL AVE	12	90
PORTER-GUERTIN CO	2150 COLERAIN AVENUE	12	91
BERMAN PRINTING CO	1635 WESTERN AVE	16	106
BERMAN PRINTING COMPANY	1441 WESTERN AVE	18	120
BUDGET RENT A CAR OF CINCINNAT	1017 HOPKINS	19	124
FOXMEYER DRUG CO	925 FREEMAN AVE	20	131
KEY TRUCK SALES	1001 GEST ST	20	134
CHEVRON STATION 123495 *	811 W 8TH AND LINN	22	145
FULLER FORD	900 W 8TH ST	22	151
ALLRIGHT PARKING	605 PLUM ST #6903	23	157
SQUERI FOODS SERVICE INC	49 CENTRAL AVE B	25	163
CINCINNATI GOLD & SILVER REFIN	316 W FOURTH ST	25	179
UNITED PARCEL SERVICE	500 GEST STREET	27	190

RCRA-CESQG: 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.

A review of the RCRA-CESQG list, as provided by EDR, and dated 11/12/2008 has revealed that there are 18 RCRA-CESQG sites within the searched area.

Site	Address	Map ID	Page
BP OIL CO SITE 09138	2139 SPRING GROVE AVE	11	82
DESIGNER CUSTOMS & AUTO SHOP	2147 SPRING GROVE AVE	11	83
CONTRACT SWEEPERS	2143 KINDEL AVE	12	88
YOUNG AND BERTKE CO	2145 PATTERSON ST	12	94
GOLD MEDAL PRODUCTS CO	1825 FREEMAN AVE	13	98
THE CINCINNATI ENQUIRER	1531 WESTERN AVE	17	108
PAINTYME INC	1420 DENMAN ST	18	117
SUNOCO SERVICE STATION	901 W EIGHTH ST	22	154
GOODMAN IB MFG CO INC	314 JOHN ST	25	170
INTERSTATE BRANDS CORPORATION	747 W FIFTH ST	26	188
NATIONAL UNDERWRITER CO	505 GEST ST	27	196
HORIZON ENVIRONMENTAL GROUP	700 W PETE ROSE WAY	30	204
BP FACILITY #22277	610 WEST 4TH ST	36	231
RIDGEVIEW LINCOLN MERCURY, INC	633 W. THIRD STREET	36	244
STOP-N-GO	542 WEST 12TH STREET	39	260
A. F. RIEDINGER & SONS	502 W. 12TH STREET	39	263
MARSHALL DODGE, INC. +++	555 PIKE STREET	39	271
KROGER CO-STORE 277	2156 DIXIE HWY	43	308

RCRA-NonGen: 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.

A review of the RCRA-NonGen list, as provided by EDR, and dated 11/12/2008 has revealed that there

are 24 RCRA-NonGen sites within the searched area.

Site	Address	Map ID	Page
PRIDE CAST METALS	2737 COLERAIN AVE	2	6
KS DESIGNS INC	2449 W MCMICKEN AVE	6	39
CSX TRANSPORTATION INC	2261 BUCK STREET	7	40
GOLD MEDAL PRODUCTS CO	2001 DALTON AVE	11	58
GOLD MEDAL PRODUCTS CO	ONE CLOPAY SQUARE	11	59
CSXI	2149 WESTERN AVE	11	77
YELLOW CAB CO	1110 KENNER ST	18	111
GREYHOUND LINES INC	1130 KENNER ST	18	115
CINCINNATI ENQUIRER THE	312 ELM ST	25	174
LINGER PHOTOENGRAVING INC *	337 W FIFTH ST	25	182
CINCINNATI CITY OF RIVERFRONT	201 E 2ND ST	29	199
VALLEY ASPHALT CORP PLANT 19	612 W MEHRING WAY	30	201
APEX ENVIRONMENTAL RESOURCES	700 W PETE ROSE WAY	30	206
CINCINNATI COMMERCIAL WAREHOUS	49 CENTRAL AVE	31	207
CCL CUSTOM MFG INC	49 CENTRAL AVE	31	209
PERMAKIL INC.	204 CRESCENT AVENUE	34	212
FIFTH STREET SHELL	610 W 5TH ST	36	226
SUPERAMERICA #5541	613 W 4TH ST	36	241
BP OIL CO. GULF PRODUCTS	598 THIRD & PHILADELPHI	36	243
AGFA DIV BAYER CORP	666 FIFTH STREET	37	254
RIVER CENTRAL MOTORS, INC.	670 W FOURTH ST	37	255
A-1 ELECTRIC MOTORS, INC.	662 PIKE ST	40	278
CHEVRON USA INCORPORATIVE #488	1849 DIXIE HIGHWAY	42	290
SPEEDWAY 9521	1845 DIXIE HIGHWAY	42	299

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 08/31/2009 has revealed that there are 10 ERNS sites within the searched area.

Site	Address	Map ID	Page
2535 SPRING GROVE AVE	2535 SPRING GROVE AVE	5	29
1401 BANK ST	1401 BANK ST	11	62
1401 BANK ST	1401 BANK ST	11	62
2149 WESTERN AVE.	2149 WESTERN AVE.	11	80
640 RICHMOND STREET	640 RICHMOND STREET	21	144
49 CENTRAL AVE	49 CENTRAL AVE	31	209
613 4TH ST	613 4TH ST	36	234
613 WEST 4TH ST	613 WEST 4TH ST	36	234
613 4TH ST	613 4TH ST	36	234
SUPER AMERICA STA NO. 5521 184	SUPER AMERICA STA NO. 5	42	299

HMIRS: The Hazardous Materials Incident Report System contains hazardous material spill incidents reported to the Department of Transportation. The source of this database is the U.S. EPA.

A review of the HMIRS list, as provided by EDR, and dated 10/05/2009 has revealed that there is 1 HMIRS site within the searched area.

Site	Address	Map ID	Page
Not reported	2149 WESTERN AVE	11	78

TRIS: The Toxic Chemical Release Inventory System identifies facilities that release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313. The source of this database is the U.S. EPA.

A review of the TRIS list, as provided by EDR, and dated 12/31/2007 has revealed that there are 2 TRIS sites within the searched area.

Site	Address	Map ID	Page
<b>KAO BRANDS CO</b>	<b>2535 SPRING GROVE AVE</b>	<b>5</b>	<b>27</b>
PORTER-GUERTIN CO	2150 COLERAIN AVE	12	91

TSCA: The Toxic Substances Control Act 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. The United States Environmental Protection Agency has no current plan to update and/or re-issue this database.

A review of the TSCA list, as provided by EDR, and dated 12/31/2002 has revealed that there are 2 TSCA sites within the searched area.

Site	Address	Map ID	Page
THE ANDREW JERGENS COMPANY - C	2535 SPRING GROVE AVENU	5	26
ANDREW JERGENS CO - CINCINNATI	2535 SPRING GROVE AVE	5	28

FTTS: 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) over the previous five years. To maintain currency, EDR contacts the Agency on a quarterly basis.

A review of the FTTS list, as provided by EDR, and dated 04/09/2009 has revealed that there are 7 FTTS sites within the searched area.

Site	Address	Map ID	Page
WILLIAM POWELL COMPANY	2503 SPRING GROVE AVENU	5	22
JERGENS COMPANY, ANDREW	2535 SPRING GROVE AVE.	5	28
ANDREW JERGENS COMPANY	2535 SPRING GROVE AVE.	5	28
ANDREWS JERGENS COMPANY	2535 SPRING GROVE AVENU	5	38
CSX SEA-LAND	2149 WESTERN AVE	11	80
CONTINENTAL BAKING CO	640 RICHMOND ST	21	144
RIVERFRONT STADIUM	201 EAST PETE ROSE WAY	29	201

HIST FTTS: 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.

A review of the HIST FTTS list, as provided by EDR, and dated 10/19/2006 has revealed that there are 4 HIST FTTS sites within the searched area.

Site	Address	Map ID	Page
ANDREW JERGENS COMPANY	2535 SPRING GROVE AVE.	5	28
CSX SEA-LAND	2149 WESTERN AVE	11	80
CONTINENTAL BAKING CO	640 RICHMOND ST	21	144
RIVERFRONT STADIUM	201 EAST PETE ROSE WAY	29	201

MLTS: The Material Licensing Tracking System is maintained by the Nuclear Regulatory Commission and contains a list fo approximately 8,100 sites which possess or use radioactive materials and are subject to NRC licensing requirements.

A review of the MLTS list, as provided by EDR, and dated 09/25/2009 has revealed that there are 3 MLTS sites within the searched area.

Site	Address	Map ID	Page
WILLIAM POWELL COMPANY THE)	2503-31 SPRING GROVE AV	5	23
<i>KAO BRANDS CO</i>	<b>2535 SPRING GROVE AVE</b>	<b>5</b>	<b>27</b>
DAMES MOORE	644 LINN ST	24	162

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 10/19/2009 has revealed that there are 95 FINDS sites within the searched area.

Site	Address	Map ID	Page
KLUENER PACKING CO	2842 MASSACHUSETTS AVE	1	5
PRIDE CAST METALS	2735 COLERAIN AVE	2	5
PRIDE CAST METALS	2737 COLERAIN AVE	2	6
CONWAY CLUTCH CO	2745 COLERAIN AVE	2	7
SIDNEY PRINTINGL WORKS INC	2611 COLERAIN AVE	4	9
UNITED SIGNS INC	1030 STRAIGHT ST	4	12
ANDREW JERGENS CO	1241 DRAPER ST	5	14
POWELL WM CO	2503 SPRING GROVE AVENU	5	15
WILLIAM POWELL VALVE CO	2525 SPRING GROVE AVE	5	23
JOHN S SWIFT CO INC	2524 SPRING GROVE AVE	5	24

Site	Address	Map ID	Page
INWOOD AUTOMOTIVE PRODUCTS CO.	2530 SPRING GROVE AVENU	5	26
KAO BRANDS CO	2535 SPRING GROVE AVE	5	30
KS DESIGNS INC	2449 W MCMICKEN AVE	6	39
CSX TRANSPORTATION INC	2261 BUCK STREET	7	40
CHEM PACK INC	2261 SPRING GROVE AVE	7	44
HARRISON TERMINAL *	1220 HARRISON AVE	8	46
REYNOLDS ALUMINUM RECYCLING CO	2225 BUCK ST	8	50
MOELLERING INDUSTRIES INC	1213 W YORK ST	11	52
PHILLIPS SUPPLY CO	1 CROSLEY FIELD LN	11	56
GOLD MEDAL PRODUCTS CO	2001 DALTON AVE	11	58
GOLD MEDAL PRODUCTS CO	ONE CLOPAY SQUARE	11	59
SOUTHWEST OH REGIONAL TRANSIT	1401 BANK ST	11	63
CSX SEA-LAND	2149 WESTERN AVE	11	80
BP OIL CO SITE 09138	2139 SPRING GROVE AVE	11	82
DESIGNER CUSTOMS & AUTO SHOP	2147 SPRING GROVE AVE	11	83
CONTRACT SWEEPERS	2143 KINDEL AVE	12	88
KAISER FOODS	2155 KINDEL AVE	12	89
MODERN DISPLAYS	2160 KINDEL AVE	12	90
PORTER-GUERTIN CO	2150 COLERAIN AVENUE	12	91
YOUNG AND BERTKE CO	2145 PATTERSON ST	12	94
NATIONAL FLAG CO	1819 FREEMAN AVE	13	97
GOLD MEDAL PRODUCTS CO	1825 FREEMAN AVE	13	<i>98</i>
VALLEY NATIONAL GASES INC	1151 FINDLAY ST	14	103
GEORGE W HAYS ELEMENTARY SCHOO	940 POPLAR ST	15	103
SANDS ELEMENTARY SCHOOL	940 POPLAR ST	15	104
AMERITECH *	1036 W LIBERTY ST	16	105
BERMAN PRINTING CO	1635 WESTERN AVE	16	106
THE CINCINNATI ENQUIRER	1531 WESTERN AVE	17	108
YELLOW CAB CO	1110 KENNER ST	18	111
GREYHOUND LINES INC	1130 KENNER ST	18	115
PAINTYME INC	1420 DENMAN ST	18	117
BERMAN PRINTING COMPANY	1441 WESTERN AVE	18	120
SITE STORE 82	1205 WESTERN AVE	19	122
BUDGET RENT A CAR OF CINCINNAT	1017 HOPKINS	19	124
FOXMEYER DRUG CO	925 FREEMAN AVE	20	131
KEY TRUCK SALES	1001 GEST ST	20	134
RIM AND WHEEL SERVICE INC	1014 GEST STREET	20	137
CONTINENTAL BAKING CO	640 RICHMOND ST	21	144
CHEVRON STATION 123495 *	811 W 8TH AND LINN	22	145
FULLER FORD	900 W 8TH ST	22	151
PROVIDENT BANK CENTRAL PROCESS	801 LINN ST	22	154
SUNOCO SERVICE STATION	901 W EIGHTH ST	22	154
BORGERS QUEENSGATE *	811 W EIGHTH AND LINN S	22	156
ALLRIGHT PARKING	605 PLUM ST #6903	23	159
STOWE ADULT CENTER	635 W SEVENTH ST	23	159
SQUERI FOODS SERVICE INC	49 CENTRAL AVE B	25	163
GOODMAN IB MFG CO INC	314 JOHN ST	25	170
T-MOBILE CINCINNATI MSC *	312 ELM STREET	25	173
DUKE ASSOCIATES S AND L DATA B	312 PLUM ST	25	173
CINCINNATI ENQUIRER THE	312 ELM ST	25	174
CINTI SANITATION DEPT	351 JOHN ST	25	177
CINCINNATI GOLD & SILVER REFIN	316 W FOURTH ST	25	179
CONTEMPORARY GALLERIES	221 W FOURTH ST	25	181
ARMSTRONG STATIONERY *	205 WEST FOURTH STREET	25	181
LINGER PHOTOENGRAVING INC *	337 W FIFTH ST	25	182
INTERSTATE BRAND CORP.	747 W. 5TH STREET	26	187

Site	Address	<u>Map I</u> D	Page
INTERSTATE BRANDS CORPORATION	747 W FIFTH ST	26	188
UNITED PARCEL SERVICE	500 GEST STREET	27	190
NATIONAL UNDERWRITER CO	505 GEST ST	27	196
CINCINNATI CITY OF RIVERFRONT	201 E 2ND ST	29	199
VALLEY ASPHALT CORP PLANT 19	612 W MEHRING WAY	30	201
B & O WAREHOUSE	621 PETE ROSE WAY	30	204
HORIZON ENVIRONMENTAL GROUP	700 W PETE ROSE WAY	30	204
APEX ENVIRONMENTAL RESOURCES	700 W PETE ROSE WAY	30	206
CCL CUSTOM MFG INC	49 CENTRAL AVE	31	209
PERMAKIL INC.	204 CRESCENT AVENUE	34	212
JOHNSON OIL COMPANY, INC	670 WEST THIRD ST.	35	220
FIFTH STREET SHELL	610 W 5TH ST	36	226
AMERISTOP EXPRESS #815	5TH & PHILADELPHIA, COV	36	227
BP FACILITY #22277	610 WEST 4TH ST	36	231
BP OIL COMPANY	4TH & PHILADELPHIA	36	233
SUPERAMERICA #5541	613 W 4TH ST	36	241
BP OIL CO. GULF PRODUCTS	598 THIRD & PHILADELPHI	36	243
RIDGEVIEW LINCOLN MERCURY, INC	633 W. THIRD STREET	36	244
AGFA DIV BAYER CORP	666 FIFTH STREET	37	254
RIVER CENTRAL MOTORS, INC.	670 W FOURTH ST	37	255
STOP-N-GO	542 WEST 12TH STREET	39	260
A. F. RIEDINGER & SONS	502 W. 12TH STREET	39	263
MARSHALL DODGE, INC. +++	555 PIKE STREET	39	271
A-1 ELECTRIC MOTORS, INC.	662 PIKE ST	40	278
FT WRIGHT MARATHON	1820 DIXIE HIGHWAY	41	280
AMERISTOP EXPRESS #812	1804 DIXIE HIGHWAY	41	284
CHEVRON USA INCORPORATIVE #488	1849 DIXIE HIGHWAY	42	290
SPEEDWAY 9521	1845 DIXIE HIGHWAY	42	299
KROGER CO-STORE 277	2156 DIXIE HWY	43	308

### STATE AND LOCAL RECORDS

KY SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Protection's Uncontrolled Site Branch List.

A review of the KY SHWS list, as provided by EDR, has revealed that there are 4 KY SHWS sites within the searched area.

Site	Address	Map ID	Page
WILLOW RUN DRIVE THRU Facility Status: Closed	918 WILLOW RUN RD	38	259
9TH & 7TH WILLOW RUN Facility Status: Closed	9TH / WILLOW RUN	38	260
BAVARIAN BREWERY Facility Status: Closed	1115 MAIN ST	39	267
<b>ROGER KUCHLE GARAGE INC</b> Facility Status: Active	1817 DIXIE HWY	41	279

OH DERR: The DERR database is an index of sites for which Ohio EPA maintains files. It includes sites with known or suspected contamination, but a site's inclusion in the database does not mean that it is now or has ever been contaminated.

A review of the OH DERR list, as provided by EDR, and dated 11/24/2009 has revealed that there are 3 OH DERR sites within the searched area.

Site	Address	Map ID	Page
CSXT CINCINNATI BUCK ST Activity: VAP	2261 BUCK ST	7	44
HARRISON TERMINAL * Activity: COF	1220 HARRISON AVE	8	46
KELLY KOETT INSTRUMENT CO	930 YORK ST	13	100

OH LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Commerce Division of State Fire Marshal's List of Reported Petroleum Underground Storage Tank Release Incidents.

A review of the OH LUST list, as provided by EDR, and dated 11/23/2009 has revealed that there are 44 OH LUST sites within the searched area.

Site	Address	Map ID	Page
KLUENER FOOD DISTRIBUTING CO FR Status: Active FR Status: NFA: N FR Status: Active FR Status: NCR: N *Additional key fields are available in Facility Status: Active FR Status: NF Facility Status: Active FR Status: NC *Additional key fields are available in	Io Further Action No closure report received letter sent <i>the Map Findings section</i> A: No Further Action R: No closure report received letter sent	1	4
CINCINNATI ABRASIVES FR Status: Inactive FR Status: NFA: Facility Status: Inactive FR Status: N		2	8
GRIMMES AUTO SERV FR Status: Inactive FR Status: NFA: Facility Status: Inactive FR Status: N		3	9
BJ ROWEKAMPS FR Status: Inactive FR Status: NFA: Facility Status: Inactive FR Status: N		4	11
FORMER WM POWELL CO PROPERT FR Status: Inactive FR Status: NFA: Facility Status: Inactive FR Status: N	No Further Action	5	23
THE ANDREW JERGENS CO. FR Status: Active FR Status: RPT: a Facility Status: Active FR Status: RP		5	29
HARRISON TERMINAL * FR Status: Inactive FR Status: NFA: Facility Status: Inactive FR Status: N		8	46
SUNSET JANITORIAL SUPPLY CO FR Status: Inactive FR Status: NFA: Facility Status: Inactive FR Status: N		10	51
GOLD METAL PRODUCTS FR Status: Inactive FR Status: NFA: Facility Status: Inactive FR Status: N		11	52

Site	Address	Map ID	Page
Facility Status: Active FR Sta Facility Status: Active FR Sta	•	11	65
BP OIL CO. #28352 FR Status: Active FR Status: Facility Status: Active FR Sta		11	73
CSX INTERMODAL FR Status: Inactive FR Statu Facility Status: Inactive FR S	2149 WESTERN AVE is: NFA: No Further Action Status: NFA: No Further Action	11	78
	2118 WINCHELL AVE NCR: No closure report received letter sent atus: NCR: No closure report received letter sent	12	85
THE CINCINNATI ENQUIRER FR Status: Inactive FR Statu Facility Status: Inactive FR S	<b>1531 WESTERN AVE</b> us: NFA: No Further Action Status: NFA: No Further Action	17	108
GREYHOUND LINES INC FR Status: Active FR Status: FR Status: Active FR Status: Facility Status: Active FR Sta Facility Status: Active FR Sta	: NFA: No Further Action atus: NFA: No Further Action	18	115
SITE OIL CO. OF MISSOURI # FR Status: Active FR Status: Facility Status: Active FR Sta	: TR2: Tier 2	19	122
BUDGET RENT A CAR OF CII FR Status: Inactive FR Statu Facility Status: Inactive FR S		19	124
	1105 HOPKINS ST : NCR: No closure report received letter sent atus: NCR: No closure report received letter sent	19	128
	1301 WESTERN AVE : NCR: No closure report received letter sent atus: NCR: No closure report received letter sent	19	130
FOX MEYER CORP. FR Status: Inactive FR Statu Facility Status: Inactive FR S	925 FREEMAN AVE is: NFA: No Further Action Status: NFA: No Further Action	20	130
OFFENBERGER SERV STA FR Status: Inactive FR Statu Facility Status: Inactive FR S	1000 GEST ST is: NFA: No Further Action Status: NFA: No Further Action	20	136
GEO. E. FERN CO. FR Status: Inactive FR Statu Facility Status: Inactive FR S	1100 GEST ST is: NFA: No Further Action Status: NFA: No Further Action	20	139
GRANT & KIRBY BLDG FR Status: Inactive FR Statu Facility Status: Inactive FR S	1105 GEST ST is: NFA: No Further Action Status: NFA: No Further Action	20	139
CITYRAMA II FR Status: Inactive FR Statu Facility Status: Inactive FR S	MOUND ST AT 9TH ST is: NFA: No Further Action Status: NFA: No Further Action	21	140

Site	Address	Map ID	Page
FORMER STANDARD OIL FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status		21	141
INTERSTATE BRANDS CORP. FR Status: Inactive FR Status: NI FR Status: Inactive FR Status: NI *Additional key fields are available Facility Status: Inactive FR Status Facility Status: Inactive FR Status *Additional key fields are available	FA: No Further Action e in the Map Findings section s: NFA: No Further Action s: NFA: No Further Action	21	141
CHEVRON STATION 123495 * FR Status: Inactive FR Status: NI FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status Facility Status: Inactive FR Status	FA: No Further Action s: NFA: No Further Action	22	145
SUNOCO #0043-9208 FR Status: Active FR Status: TR2 FR Status: Active FR Status: DIS Facility Status: Active FR Status: Facility Status: Active FR Status:	: a release is disproved TR2: Tier 2	22	148
FORMER VICTORIA STATION FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status		22	150
ADP, INC. FR Status: Inactive FR Status: NI FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status Facility Status: Inactive FR Status	FA: No Further Action s: NFA: No Further Action	23	160
CINCINNATI ECONOMIC DEVELOI FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status	FA: No Further Action	23	161
THIRD STREET ENTERPRISES IN FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status	FA: No Further Action	25	164
DAYTON HYDRAULIC CO. FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status		25	168
	205 CENTRAL AVE S: a suspected release or source is identified SUS: a suspected release or source is identified	25	169
CINCINNATI PUBLIC WORKS FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status		25	172
SANITATION FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status		25	177
CITY OF CINCINNATI FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status		25	177
DAVID WRIGHT FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status		25	179

Site	Address	Map ID	Page
WCPO-TV FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status		25	184
INTERSTATE BRANDS CORP. FR Status: Active FR Status: NFA Facility Status: Active FR Status:		26	186
UNITED PARCEL SERVICE FR Status: Inactive FR Status: NI FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status Facility Status: Inactive FR Status	FA: No Further Action s: NFA: No Further Action	27	190
UNITED PARCEL SERVICE FR Status: Inactive FR Status: NI FR Status: Inactive FR Status: NI *Additional key fields are available Facility Status: Inactive FR Status Facility Status: Inactive FR Status *Additional key fields are available	FA: No Further Action e in the Map Findings section s: NFA: No Further Action s: NFA: No Further Action	28	198
<b>CINERGY FIELD</b> FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status		29	198
OHIO RIVER CO FR Status: Inactive FR Status: NI Facility Status: Inactive FR Status		32	211

OH UNREG LTANKS: A suspected or confirmed release of petroleum from a non-regulated UST.

A review of the OH UNREG LTANKS list, as provided by EDR, and dated 08/25/1999 has revealed that there is 1 OH UNREG LTANKS site within the searched area.

Site	Address	Map ID	Page
OLD GREYHOUND GARAGE (UST 6) Facility Status: RPT	1130 KENNER ST (E OF GA	18	115

KY SB193: The inventory indicates facilities that have performed permanent closure activities at a regulated underground storage tank facility and have known soil and/or groundwater contamination.

A review of the KY SB193 list, as provided by EDR, has revealed that there are 4 KY SB193 sites within the searched area.

Address	Map ID	Page
204 CRESCENT	34	212
613 W 4TH ST	36	234
1849 DIXIE HIGHWAY	42	290
1845 DIXIE HWY	42	306
	204 CRESCENT 613 W 4TH ST <b>1849 DIXIE HIGHWAY</b>	204 CRESCENT         34           613 W 4TH ST         36           1849 DIXIE HIGHWAY         42

OH UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Commerce Division of State Fire Marshal's Facility File.

A review of the OH UST list, as provided by EDR, and dated 09/17/2009 has revealed that there are 47 OH UST sites within the searched area.

Site	Address	Map ID	Page
KLUENER FOOD DISTRIBUTING CO I	2842 MASSACHUSETTS AVE	1	3
CINCINNATI ABRASIVES	1068 MARSHALL AVE	2	8
GRIMMES AUTO SERV	2760 CENTRAL PKWY	3	8
BJ ROWEKAMPS	2624 COLERAIN AVE	4	11
SPRING GROVE AVE TRUST	2530 SPRING GROVE AVE	5	25
THE ANDREW JERGENS CO.	2535 SPRING GROVE AVE	5	29
HARRISON TERMINAL	1220 HARRISON AVE	8	49
SUNSET JANITORIAL SUPPLY CO	1151 HARRISON AVE	10	51
GOLD METAL PRODUCTS	1901 DALTON AVE	11	52
MOELLERING INDUSTRIES	1213 YORK ST	11	55
METRO S.O.R.T.A.	1401 BANK ST	11	65
BP OIL CO. #28352	2139 SPRING GROVE AVE	11	73
PARSEC, INC.	2149 WESTERN AVE	11	78
CSX INTERMODAL	2149 WESTERN AVE	11	79
YOUNG & BERTKE	2118 WINCHELL AVE	12	86
AMERITECH L10076	1036 W LIBERTY ST	16	104
CINCINNATI ENQUIRER	1531 WESTERN AVE	17	107
GREYHOUND LINES, INC. #2506	1130 KENNER ST	18	112
SITE OIL CO. OF MISSOURI #82	1205 WESTERN AVE	19	122
BUDGET RENT A CAR	1017 HOPKINS ST	19	126
BRIGHTON SPRING SERVICE	1045 HOPKINS ST	19	127
BRINKS INCORPORATED	1105 HOPKINS ST	19	128
UNION TERMINAL	1301 WESTERN AVE	19	129
FOX MEYER CORP.	925 FREEMAN AVE	20	132
KEY GMC TRUCK SALES	1001 GEST ST	20	133
OFFENBERGER SERV STA	1000 GEST ST	20	136
GEO. E. FERN CO.	1100 GEST ST	20	137
GRANT & KIRBY BLDG	1105 GEST ST	20	140
FORMER STANDARD OIL	906 MOUND ST	21	140
INTERSTATE BRANDS CORP.	640 RICHMOND ST	21	141
CHEVRON STATION 123495 *	811 W 8TH AND LINN	22	145
SUNOCO #0043-9208	901 W 8TH ST	22	148
FORMER VICTORIA STATION	939 W 8TH ST	22	151
DESMOND PONTIAC	950 W 8TH	22	154
ADP, INC.	500 W 7TH ST	23	160
CINCINNATI ECONOMIC DEVELOPMEN	325 W 7TH ST	23	162
THIRD STREET ENTERPRISES INC.	514 W 3RD ST	25	165
ARTEMUS REGIONAL TRANSPORT	512 W 3RD	25	167
CROSSET CO., INC.	205 CENTRAL AVE	25	168
CITY OF CINCINNATI	300 PLUM ST	25	172
SANITATION	351 JOHN ST	25	176
CITY OF CINCINNATI	400 JOHN ST	25	178
DAVID WRIGHT	311 ELM ST	25	178
WCPO-TV	500 CENTRAL AVE	25	185
INTERSTATE BRANDS CORP.	747 WEST 5TH ST	26	186
UNITED PARCEL SERVICE	500 GEST STREET	27	1 <b>90</b>
OHIO RIVER CO	725 MEHRING WAY	32	211

KY UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Protection's Owner/Facility Report of All Tanks Regardless of Status list.

A review of the KY UST list, as provided by EDR, and dated 09/17/2009 has revealed that there are 21 KY UST sites within the searched area.

Site	Address	Map ID	Page
RAYMOND L & HILDA E HARDEBECK	204 CRESCENT	34	213
RUSK HEATING & AIR COND INC	666 W 3RD ST	35	216
JOHNSON OIL CO INC	670 W 3RD ST	35	217
ROAD RANGER	610 W 5TH ST	36	221
610 WEST 4TH COVINGTON LLC	610 W 4TH ST	36	227
SPEEDWAY SUPERAMERICA LLC 9541	613 W 4TH ST	36	234
RIDGEVIEW LINCOLN MERCURY, INC	633 W. THIRD STREET	36	244
BP OIL 24334 BORON	598 W 3RD ST	36	248
RIVER CENTRAL MOTORS, INC.	670 W FOURTH ST	37	255
STOP N GO	542 W 12TH ST	39	262
SHIPMAN INDUSTRIES INC	530 RIEDLIN AVE	39	266
US 25 - KENTON CO	PIKE ST UNDER I 75 BRID	39	267
MARSHALL DODGE INC	540 & 542 PIKE ST	39	269
MARSHALL DODGE, INC. +++	555 PIKE STREET	39	271
EXPRESS TIRE & AUTO SERVICE	500 PIKE ST	39	274
FORT WRIGHT MARATHON	1820 DIXIE HWY	41	280
AMERISTOP EXPRESS #812	1804 DIXIE HIGHWAY	41	284
DIXIE HWY - KENTON CO	KYLES LN & DIXIE HWY	41	288
CHEVRON 0048811	1849 DIXIE HWY	42	291
SPEEDWAY SUPERAMERICA LLC 9521	1845 DIXIE HWY	42	302
HIGHLAND CEMETERY	2167 DIXIE HWY	43	307

OH ARCHIVE UST: Underground storage tank records that have been removed from the Underground Storage Tank database.

A review of the OH ARCHIVE UST list, as provided by EDR, and dated 09/17/2009 has revealed that there are 2 OH ARCHIVE UST sites within the searched area.

Site	Address	Map ID	Page
AMERITECH L10076	1036 W LIBERTY ST	16	105
THE CINCINNATI ENQUIRER	1531 WESTERN AVE	<b>17</b>	<b>108</b>

OH SPILLS: The Spills Database comes from the Ohio EPA.

A review of the OH SPILLS list, as provided by EDR, and dated 11/16/2009 has revealed that there are 37 OH SPILLS sites within the searched area.

Site	Address	Map ID	Page
KLUENER FOOD DISTRIBUTING CO I	2842 MASSACHUSETTS AVE	1	4
UNKNOWN	MASSACHUSETTS / HEYWOOD	4	14
KAO BRANDS CO	2535 SPRING GROVE AVE	5	27
ANDREW JERGNS CO	2535 SPRINGGROVE AVE	5	28
KAO BRANDS CO	2535 SPRING GROVE AVE	5	30
UNK	2501 W MCMICKEN	6	40

Site	Address	Map ID	Page
COLLINS	1220 HARRISON AVE	8	46
HARRISON TERMINAL *	1220 HARRISON AVE	8	46
UNK	2230 BUCK ST	8	50
UNK	606 KLOTTER ST	9	50
QUEEN CITY METRO BUS CO	1401 BANK ST @ BUS STAT	11	61
CSX TRANSPORTATION	BANKS ST / SPRING GRO	11	62
SOUTHWEST OHIO REGIONAL TRANSI	1401 BANK ST	11	62
UNK	ST BERNARD-SPRING GROVE	11	72
CSX	2149 WESTERN AVE	11	81
ARISTECH CHEMICA CORP	2154 WINCHELL ST	12	97
BOC GASSES	WELDCO AT 1151 FINDLAY	14	102
DUKE ENERGY PF	FINDLAY / DALTON	14	103
BRINKS INC	1105 HOPKINS ST	19	129
FOXMEYER	925 FREEMAN AVE. / GE	20	130
PITT OHIO EXPRESS	FREEMAN / GEST ST	20	133
MSD	1066 GEST ST	20	137
MARTEN TRANSPORT PF	911 W 8TH ST	22	150
CENTRAL INSULATION SYSTEMS	628 CENTRAL PKWY	23	157
EXECUTIVE STRUCTORS	222 CENTRAL PARKWAY	25	167
RUMPKE WASTE INC	205 CENTRAL AVE PARKING	25	168
TERMINEX	318 W 3RD ST	25	169
MSD	3RD ST / PLUM ST	25	172
CINERGY	312 PLUM ST	25	174
INTERSTATE BRANDS	747 W 5TH ST	26	185
BUTTERNUT BREAD CO	747 W FIFTH ST	26	188
UNK	750 W THIRD ST (NEAR)	28	197
CINERGY FIELD	201 PETE ROSE WAY	29	198
VALLEY ASHPALT	612 W MEHRING WAY	30	203
VALEY ASPHALT	610 AUGUSTA	30	203
UNK	700 WEST PETE ROSE WAY	30	204
CINCINNATI COMMERCIAL WAREHOUS	49 CENTRAL AVE	31	207

OH VCP: Ohio EPA, Voluntary Action Program Sites.

A review of the OH VCP list, as provided by EDR, and dated 11/16/2009 has revealed that there is 1 OH VCP site within the searched area.

Site	Address	Map ID	Page
CSXT CINCINNATI BUCK ST	2261 BUCK ST	7	44

KY DRYCLEANERS: A listing of drycleaner facility locations.

A review of the KY DRYCLEANERS list, as provided by EDR, and dated 10/07/2009 has revealed that there are 2 KY DRYCLEANERS sites within the searched area.

Site	Address	Map ID	Page
A F RIEDINGER & SONS	502 W 12TH ST	39	265
SWIFT CLEANERS	2194 DIXIE HWY	43	306

OH BROWNFIELDS: A statewide brownfields inventory. A brownfield is an abandoned, idled or under-used industrial or commercial property where expansion or redevelopment is complicated by known or potential releases of hazardous substances and/or petroleum.

A review of the OH BROWNFIELDS list, as provided by EDR, and dated 10/06/2009 has revealed that there is 1 OH BROWNFIELDS site within the searched area.

Site	Address	Map ID	Page
HARRISON TERMINAL BUILDING, FO	1220 HARRISON AVENUE	8	45

### KY AIRS: A listing of permitted Airs facilities.

A review of the KY AIRS list, as provided by EDR, and dated 09/30/2009 has revealed that there are 10 KY AIRS sites within the searched area.

Site	Address	Map ID	Page
JOHNSON OIL CO INC	670 W 3RD ST	35	217
610 WEST 4TH COVINGTON LLC	610 W 4TH ST	36	227
SPEEDWAY SUPERAMERICA LLC 9541	613 W 4TH ST	36	234
RIVER CENTRAL MOTORS, INC.	670 W FOURTH ST	37	255
A F RIEDINGER & SONS	502 W 12TH ST	39	265
ROGER KUCHLE GARAGE INC	1817 DIXIE HWY	41	279
FORT WRIGHT MARATHON	1820 DIXIE HWY	41	280
AMERISTOP EXPRESS #812	1804 DIXIE HIGHWAY	41	284
SPEEDWAY SUPERAMERICA LLC 9521	1845 DIXIE HWY	42	302
SWIFT CLEANERS	2194 DIXIE HWY	43	306

OH USD: Urban Setting Designation Sites.

A review of the OH USD list, as provided by EDR, and dated 11/16/2009 has revealed that there is 1 OH USD site within the searched area.

Site	Address	Map ID	Page
CSXT CINCINNATI BUCK ST	2261 BUCK ST	7	44

KY PSTEAF: The Underground Storage Tank Branch (USTB) has ranked all PSTEAF reimbursable facilities requiring corrective action, in accordance with 401 KAR 42:290. Directive letters will be issued on the basis of facility ranking and available PSTEAF funding in sequential order as ranked. For example, Rank 2 facilities will be issued directives before Rank 3 facilities.

A review of the KY PSTEAF list, as provided by EDR, has revealed that there are 2 KY PSTEAF sites within the searched area.

Site	Address	Map ID	Page
RAYMOND L & HILDA E HARDEBECK	204 CRESCENT	34	213
SPEEDWAY SUPERAMERICA LLC 9521	1845 DIXIE HWY	42	302

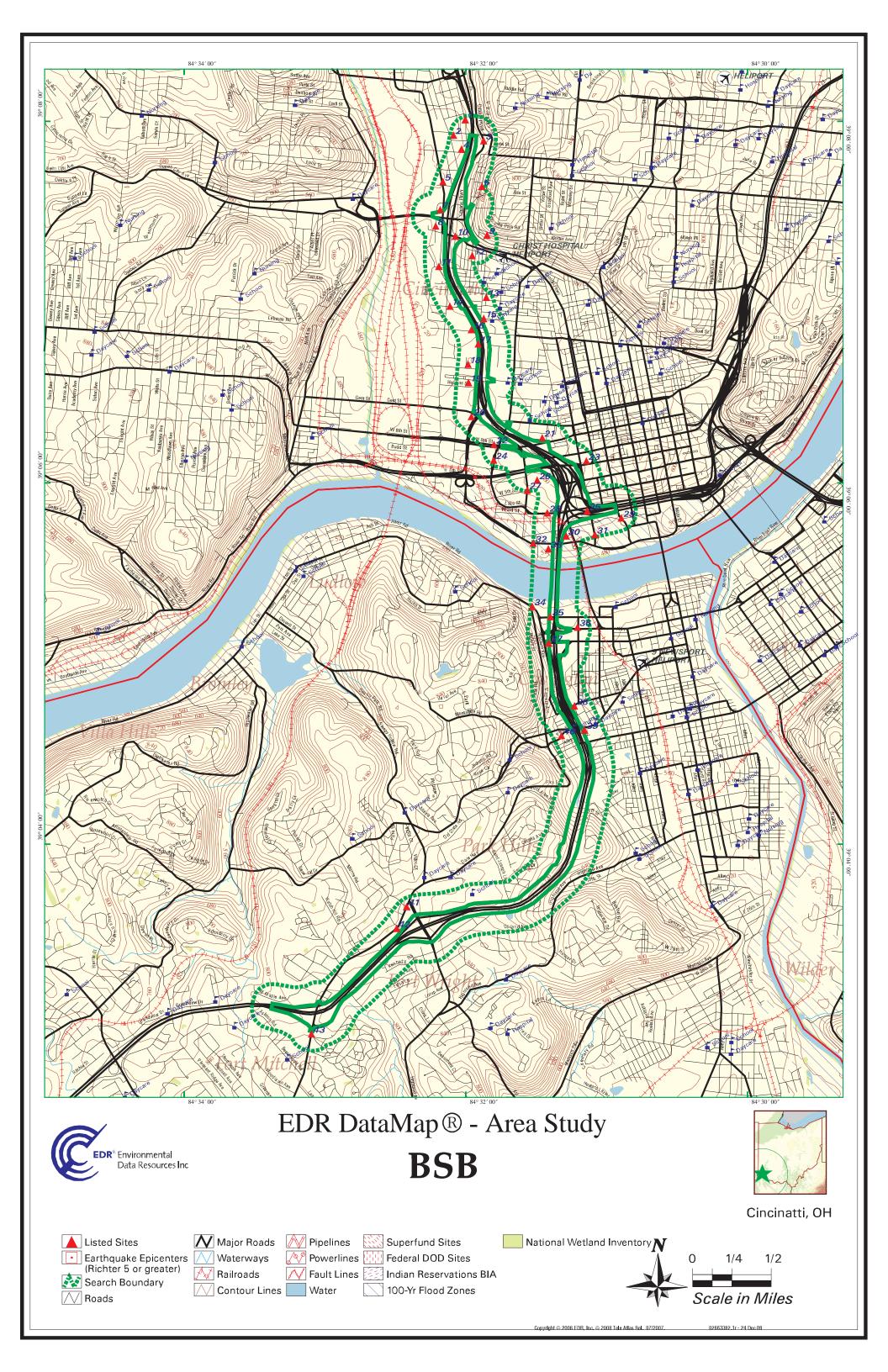
### EDR PROPRIETARY RECORDS

Manufactured Gas Plants: 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.

A review of the Manufactured Gas Plants list, as provided by EDR, has revealed that there are 2 Manufactured Gas Plants sites within the searched area.

Site	Address	Map ID	Page
THE CINCINNATI GASLIGHT AND CO	MEHRING WAY	33	211
THE CINCINNATI GASLIGHT AND CO	W. PETE ROSE WAY/W 2ND	37	254

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.



To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental 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.

### FEDERAL RECORDS

NPL: National Priority List

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: 10/01/2009 Date Data Arrived at EDR: 10/14/2009 Date Made Active in Reports: 11/09/2009 Number of Days to Update: 26 Source: EPA Telephone: N/A Last EDR Contact: 11/13/2009 Next Scheduled EDR Contact: 01/25/2010 Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC) Telephone: 202-564-7333

EPA Region 1 Telephone 617-918-1143

EPA Region 3 Telephone 215-814-5418

EPA Region 4 Telephone 404-562-8033

EPA Region 5 Telephone 312-886-6686

EPA Region 10 Telephone 206-553-8665 EPA Region 6 Telephone: 214-655-6659

EPA Region 7 Telephone: 913-551-7247

EPA Region 8 Telephone: 303-312-6774

EPA Region 9 Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

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 the requirements for listing.

Date of Government Version: 10/01/2009 Date Data Arrived at EDR: 10/14/2009 Date Made Active in Reports: 11/09/2009 Number of Days to Update: 26 Source: EPA Telephone: N/A Last EDR Contact: 11/13/2009 Next Scheduled EDR Contact: 01/25/2010 Data Release Frequency: Quarterly

### DELISTED NPL: National Priority List Deletions

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: 10/01/2009 Date Data Arrived at EDR: 10/14/2009 Date Made Active in Reports: 11/09/2009 Number of Days to Update: 26 Source: EPA Telephone: N/A Last EDR Contact: 11/13/2009 Next Scheduled EDR Contact: 01/25/2010 Data Release Frequency: Quarterly

#### NPL LIENS: Federal Superfund Liens

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
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/17/2009
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System CERCLIS 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 06/30/2009 Date Data Arrived at EDR: 08/11/2009 Date Made Active in Reports: 09/21/2009 Number of Days to Update: 41 Source: EPA Telephone: 703-412-9810 Last EDR Contact: 11/23/2009 Next Scheduled EDR Contact: 01/11/2010 Data Release Frequency: Quarterly

### CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

Date of Government Version: 06/23/2009 Date Data Arrived at EDR: 09/02/2009 Date Made Active in Reports: 09/21/2009 Number of Days to Update: 19 Source: EPA Telephone: 703-412-9810 Last EDR Contact: 11/24/2009 Next Scheduled EDR Contact: 03/15/2010 Data Release Frequency: Quarterly

#### LIENS 2: CERCLA Lien Information

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: 11/03/2009SourceDate Data Arrived at EDR: 11/05/2009TelephDate Made Active in Reports: 12/16/2009Last EDRNumber of Days to Update: 41Next S

Source: Environmental Protection Agency Telephone: 202-564-6023 Last EDR Contact: 11/02/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Varies

### CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/15/2009
Date Data Arrived at EDR: 09/22/2009
Date Made Active in Reports: 11/09/2009
Number of Days to Update: 48

Source: EPA Telephone: 800-424-9346 Last EDR Contact: 11/16/2009 Next Scheduled EDR Contact: 03/01/2010 Data Release Frequency: Quarterly

### RCRA-TSDF: RCRA - Transporters, Storage and Disposal

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: 11/12/2008 Date Data Arrived at EDR: 11/18/2008 Date Made Active in Reports: 03/16/2009 Number of Days to Update: 118 Source: Environmental Protection Agency Telephone: 312-886-6186 Last EDR Contact: 12/17/2009 Next Scheduled EDR Contact: 01/18/2010 Data Release Frequency: Quarterly

### RCRA-LQG: RCRA - Large Quantity Generators

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: 11/12/2008 Date Data Arrived at EDR: 11/18/2008 Date Made Active in Reports: 03/16/2009 Number of Days to Update: 118 Source: Environmental Protection Agency Telephone: 312-886-6186 Last EDR Contact: 12/17/2009 Next Scheduled EDR Contact: 01/18/2010 Data Release Frequency: Quarterly

### RCRA-SQG: RCRA - Small Quantity Generators

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: 11/12/2008 Date Data Arrived at EDR: 11/18/2008 Date Made Active in Reports: 03/16/2009 Number of Days to Update: 118 Source: Environmental Protection Agency Telephone: 312-886-6186 Last EDR Contact: 12/17/2009 Next Scheduled EDR Contact: 01/18/2010 Data Release Frequency: Quarterly

#### RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

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: 11/12/2008 Date Data Arrived at EDR: 11/18/2008 Date Made Active in Reports: 03/16/2009 Number of Days to Update: 118 Source: Environmental Protection Agency Telephone: 312-886-6186 Last EDR Contact: 12/17/2009 Next Scheduled EDR Contact: 01/18/2010 Data Release Frequency: Varies

#### RCRA-NonGen: RCRA - Non Generators

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: 11/12/2008 Date Data Arrived at EDR: 11/18/2008 Date Made Active in Reports: 03/16/2009 Number of Days to Update: 118 Source: Environmental Protection Agency Telephone: 312-886-6186 Last EDR Contact: 12/17/2009 Next Scheduled EDR Contact: 01/18/2010 Data Release Frequency: Varies

#### US ENG CONTROLS: Engineering Controls Sites List 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: 10/01/2009 Source: Environmental Protection Agency Date Data Arrived at EDR: 10/09/2009 Telephone: 703-603-0695 Date Made Active in Reports: 11/09/2009 Last EDR Contact: 12/10/2009 Number of Days to Update: 31 Next Scheduled EDR Contact: 03/29/2010 Data Release Frequency: Varies US INST CONTROL: Sites with Institutional Controls 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: 10/01/2009 Source: Environmental Protection Agency Date Data Arrived at EDR: 10/09/2009 Telephone: 703-603-0695 Date Made Active in Reports: 11/09/2009 Last EDR Contact: 12/10/2009 Number of Days to Update: 31 Next Scheduled EDR Contact: 03/29/2010 Data Release Frequency: Varies ERNS: Emergency Response Notification System Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances. Source: National Response Center, United States Coast Guard Date of Government Version: 08/31/2009 Date Data Arrived at EDR: 09/17/2009 Telephone: 202-267-2180 Date Made Active in Reports: 11/09/2009 Last EDR Contact: 10/06/2009 Number of Days to Update: 53 Next Scheduled EDR Contact: 01/18/2010 Data Release Frequency: Annually HMIRS: Hazardous Materials Information Reporting System Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT. Date of Government Version: 10/05/2009 Source: U.S. Department of Transportation Date Data Arrived at EDR: 10/05/2009 Telephone: 202-366-4555 Date Made Active in Reports: 11/09/2009 Last EDR Contact: 10/05/2009 Number of Days to Update: 35 Next Scheduled EDR Contact: 01/11/2010 Data Release Frequency: Annually DOT OPS: Incident and Accident Data Department of Transporation, Office of Pipeline Safety Incident and Accident data. Date of Government Version: 10/13/2009 Source: Department of Transporation, Office of Pipeline Safety Date Data Arrived at EDR: 11/10/2009 Telephone: 202-366-4595 Date Made Active in Reports: 12/16/2009 Last EDR Contact: 11/10/2009

#### US CDL: Clandestine Drug Labs

Number of Days to Update: 36

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.

Next Scheduled EDR Contact: 02/22/2010 Data Release Frequency: Varies

Date of Government Version: 03/01/2009 Date Data Arrived at EDR: 06/22/2009 Date Made Active in Reports: 09/21/2009 Number of Days to Update: 91 Source: Drug Enforcement Administration Telephone: 202-307-1000 Last EDR Contact: 12/14/2009 Next Scheduled EDR Contact: 03/22/2010 Data Release Frequency: Quarterly

### US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 10/01/2009 Date Data Arrived at EDR: 11/04/2009 Date Made Active in Reports: 12/16/2009 Number of Days to Update: 42 Source: Environmental Protection Agency Telephone: 202-566-2777 Last EDR Contact: 11/04/2009 Next Scheduled EDR Contact: 01/11/2010 Data Release Frequency: Semi-Annually

### DOD: Department of Defense Sites

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 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007 Number of Days to Update: 62 Source: USGS Telephone: 703-692-8801 Last EDR Contact: 10/23/2009 Next Scheduled EDR Contact: 02/01/2010 Data Release Frequency: Semi-Annually

#### FUDS: Formerly Used Defense Sites

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: 12/31/2008 Date Data Arrived at EDR: 09/30/2009 Date Made Active in Reports: 12/01/2009 Number of Days to Update: 62 Source: U.S. Army Corps of Engineers Telephone: 202-528-4285 Last EDR Contact: 12/18/2009 Next Scheduled EDR Contact: 03/29/2010 Data Release Frequency: Varies

#### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005 Date Data Arrived at EDR: 12/11/2006 Date Made Active in Reports: 01/11/2007 Number of Days to Update: 31 Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 11/20/2009 Next Scheduled EDR Contact: 03/08/2010 Data Release Frequency: Varies

### CONSENT: Superfund (CERCLA) Consent Decrees

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: 08/03/2009 Date Data Arrived at EDR: 10/27/2009 Date Made Active in Reports: 11/09/2009 Number of Days to Update: 13	Source: Department of Justice, Consent Decree Library Telephone: Varies Last EDR Contact: 10/06/2009 Next Scheduled EDR Contact: 01/18/2010 Data Release Frequency: Varies
ROI	D: Records Of Decision Record of Decision. ROD documents mandate and health information to aid in the cleanup.	e a permanent remedy at an NPL (Superfund) site containing technical
	Date of Government Version: 09/01/2009 Date Data Arrived at EDR: 09/22/2009 Date Made Active in Reports: 10/22/2009 Number of Days to Update: 30	Source: EPA Telephone: 703-416-0223 Last EDR Contact: 12/15/2009 Next Scheduled EDR Contact: 03/29/2010 Data Release Frequency: Annually
UM	shut down, large piles of the sand-like materia the ore. Levels of human exposure to radioad	s for federal government use in national defense programs. When the mills al (mill tailings) remain after uranium has been extracted from ctive materials from the piles are low; however, in some cases tailings he potential health hazards of the tailings were recognized.
	Date of Government Version: 01/05/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 05/08/2009 Number of Days to Update: 1	Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 12/23/2009 Next Scheduled EDR Contact: 03/15/2010 Data Release Frequency: Varies
ODI	: Open Dump Inventory An open dump is defined as a disposal facility Subtitle D Criteria.	that does not comply with one or more of the Part 257 or Part 258
	Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004 Number of Days to Update: 39	Source: Environmental Protection Agency Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned
DEE	BRIS REGION 9: Torres Martinez Reservation A listing of illegal dump sites location on the T County and northern Imperial County, Califorr	orres Martinez Indian Reservation located in eastern Riverside
	Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009 Number of Days to Update: 137	Source: EPA, Region 9 Telephone: 415-972-3336 Last EDR Contact: 12/18/2009 Next Scheduled EDR Contact: 03/22/2010 Data Release Frequency: Varies
MIN	ES: Mines Master Index File Contains all mine identification numbers issue violation information.	ed for mines active or opened since 1971. The data also includes
	Date of Government Version: 08/07/2009 Date Data Arrived at EDR: 09/18/2009 Date Made Active in Reports: 11/09/2009 Number of Days to Update: 52	Source: Department of Labor, Mine Safety and Health Administration Telephone: 303-231-5959 Last EDR Contact: 12/08/2009 Next Scheduled EDR Contact: 03/22/2010 Data Release Frequency: Semi-Annually

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: 12/31/2007 Date Data Arrived at EDR: 04/09/2009 Date Made Active in Reports: 06/17/2009 Number of Days to Update: 69 Source: EPA Telephone: 202-566-0250 Last EDR Contact: 12/01/2009 Next Scheduled EDR Contact: 03/15/2010 Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

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: 12/31/2002 Date Data Arrived at EDR: 04/14/2006 Date Made Active in Reports: 05/30/2006 Number of Days to Update: 46 Source: EPA Telephone: 202-260-5521 Last EDR Contact: 10/07/2009 Next Scheduled EDR Contact: 01/11/2010 Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) 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	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 12/14/2009
Number of Days to Update: 25	Next Scheduled EDR Contact: 03/15/2010
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009 Number of Days to Update: 25 Source: EPA Telephone: 202-566-1667 Last EDR Contact: 12/14/2009 Next Scheduled EDR Contact: 03/15/2010 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

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 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007 Number of Days to Update: 40 Source: Environmental Protection Agency Telephone: 202-564-2501 Last EDR Contact: 12/17/2007 Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement 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 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007 Number of Days to Update: 40 Source: Environmental Protection Agency Telephone: 202-564-2501 Last EDR Contact: 12/17/2008 Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

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: 12/31/2007 Date Data Arrived at EDR: 05/19/2009 Date Made Active in Reports: 09/21/2009 Number of Days to Update: 125 Source: EPA Telephone: 202-564-4203 Last EDR Contact: 11/02/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Annually

### ICIS: Integrated Compliance Information System

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: 08/21/2009 Date Data Arrived at EDR: 08/27/2009 Date Made Active in Reports: 10/22/2009 Number of Days to Update: 56 Source: Environmental Protection Agency Telephone: 202-564-5088 Last EDR Contact: 12/23/2009 Next Scheduled EDR Contact: 04/12/2010 Data Release Frequency: Quarterly

### PADS: PCB Activity Database System

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: 09/01/2009 Date Data Arrived at EDR: 10/21/2009 Date Made Active in Reports: 12/01/2009 Number of Days to Update: 41 Source: EPA Telephone: 202-566-0500 Last EDR Contact: 10/21/2009 Next Scheduled EDR Contact: 02/01/2010 Data Release Frequency: Annually

#### MLTS: Material Licensing Tracking System

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: 09/25/2009 Date Data Arrived at EDR: 10/23/2009 Date Made Active in Reports: 12/16/2009 Number of Days to Update: 54 Source: Nuclear Regulatory Commission Telephone: 301-415-7169 Last EDR Contact: 12/14/2009 Next Scheduled EDR Contact: 03/29/2010 Data Release Frequency: Quarterly

#### RADINFO: Radiation Information Database

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: 10/15/2009	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/16/2009	Telephone: 202-343-9775
Date Made Active in Reports: 12/01/2009	Last EDR Contact: 10/16/2009
Number of Days to Update: 46	Next Scheduled EDR Contact: 01/25/2010
	Data Release Frequency: Quarterly

#### FINDS: Facility Index System/Facility Registry System

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: 10/19/2009 Date Data Arrived at EDR: 10/22/2009 Date Made Active in Reports: 12/01/2009 Number of Days to Update: 40 Source: EPA Telephone: (312) 353-2000 Last EDR Contact: 12/10/2009 Next Scheduled EDR Contact: 03/29/2010 Data Release Frequency: Quarterly

### RAATS: RCRA Administrative Action Tracking System

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 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995 Number of Days to Update: 35 Source: EPA Telephone: 202-564-4104 Last EDR Contact: 06/02/2008 Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

### BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2007	Source: EPA/NTIS
Date Data Arrived at EDR: 02/19/2009	Telephone: 800-424-9346
Date Made Active in Reports: 05/22/2009	Last EDR Contact: 11/20/2009
Number of Days to Update: 92	Next Scheduled EDR Contact: 03/05/2010
	Data Release Frequency: Biennially

### PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 01/01/2008	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/18/2009	Telephone: 202-566-0517
Date Made Active in Reports: 05/29/2009	Last EDR Contact: 11/13/2009
Number of Days to Update: 100	Next Scheduled EDR Contact: 02/15/2010
	Data Release Frequency: Varies

#### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

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: 09/09/2009 Date Data Arrived at EDR: 09/09/2009 Date Made Active in Reports: 10/22/2009 Number of Days to Update: 43 Source: Environmental Protection Agency Telephone: 615-532-8599 Last EDR Contact: 11/09/2009 Next Scheduled EDR Contact: 02/08/2010 Data Release Frequency: Varies

#### US HIST CDL: National Clandestine Laboratory Register

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: 09/01/2007 Date Data Arrived at EDR: 11/19/2008 Date Made Active in Reports: 03/30/2009 Number of Days to Update: 131 Source: Drug Enforcement Administration Telephone: 202-307-1000 Last EDR Contact: 03/23/2009 Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned

### STATE AND LOCAL RECORDS

OH SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list. State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: Ohio EPA Telephone: 614-644-2924 Last EDR Contact: 11/16/2009 Next Scheduled EDR Contact: 03/01/2010 Data Release Frequency: N/A

### KY SHWS: State Leads List

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: Department of Environmental Protection Telephone: 502-564-6716 Last EDR Contact: 12/04/2009 Next Scheduled EDR Contact: 03/22/2010 Data Release Frequency: N/A

#### OH TOWNGAS: DERR Towngas Database

The database includes 82 very old sites (circa 1895) which produced gas from coal for street lighting. Most visual evidence of these sites has disappeared, however the potential for buried coal tar remains. The database is no longer in active use.

Date of Government Version: 07/28/1992Source: Ohio EPADate Data Arrived at EDR: 02/21/2003Telephone: 614-644-37Date Made Active in Reports: 03/05/2003Last EDR Contact: 02/12Number of Days to Update: 12Next Scheduled EDR Contact: 02/12

Source: Ohio EPA Telephone: 614-644-3749 Last EDR Contact: 02/12/2003 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

#### OH DERR: Division of Emergency & Remedial Response's Database

The DERR listings contains sites from all of Ohio that are in the Division of Emergency and Remedial Response (DERR) database, which is an index of sites for which our district offices maintain files. The database is NOT a record of contaminated sites or sites suspected of contamination. Not all sites in the database are contaminated, and a site's absence from the database does not imply that it is uncontaminated.

Date of Government Version: 11/24/2009	Source: Ohio EPA, Div. of Emergency and Remedial Response
Date Data Arrived at EDR: 11/25/2009	Telephone: 614-644-3538
Date Made Active in Reports: 12/21/2009	Last EDR Contact: 11/23/2009
Number of Days to Update: 26	Next Scheduled EDR Contact: 03/08/2010
	Data Release Frequency: Semi-Annually

#### OH SWF/LF: Licensed Solid Waste Facilities 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: 10/19/2009 Source: Ohio Environmental Protection Agency Date Data Arrived at EDR: 10/21/2009 Telephone: 614-644-2621 Date Made Active in Reports: 11/10/2009 Last EDR Contact: 10/19/2009 Number of Days to Update: 20 Next Scheduled EDR Contact: 02/01/2010 Data Release Frequency: Annually KY SWF/LF: Solid Waste Facilities List 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: 09/10/2009 Source: Department of Environmental Protection Date Data Arrived at EDR: 09/10/2009 Telephone: 502-564-6716 Date Made Active in Reports: 09/29/2009 Last EDR Contact: 11/09/2009 Next Scheduled EDR Contact: 02/22/2010 Number of Days to Update: 19 Data Release Frequency: Semi-Annually OH UIC: Underground Injection Wells Listing A listing of underground injection well locations. Date of Government Version: 12/08/2009 Source: Ohio EPA Date Data Arrived at EDR: 12/09/2009 Telephone: 614-644-2752 Date Made Active in Reports: 12/21/2009 Last EDR Contact: 11/30/2009 Next Scheduled EDR Contact: 03/01/2010 Number of Days to Update: 12 Data Release Frequency: Varies OH HIST LF: Old Solid Waste Landfill A list of about 1200 old abandoned dumps or landfills. This database was developed from Ohio EPA staff notebooks and other information dating from the mid-1970s Date of Government Version: 01/01/1980 Source: Ohio EPA Date Data Arrived at EDR: 07/01/2003 Telephone: 614-644-3749 Date Made Active in Reports: 07/17/2003 Last EDR Contact: 06/26/2003 Number of Days to Update: 16 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned KY HIST LF: Historical Landfills This solid waste facility listing contains detail information that is not included in the landfill listing. A listing with detail information is no longer available by the Department of Environmental Protection. Date of Government Version: 05/01/2003 Source: Department of Environmental Protection Date Data Arrived at EDR: 03/30/2006 Telephone: 502-564-6716 Date Made Active in Reports: 05/01/2006 Last EDR Contact: 02/23/2009 Number of Days to Update: 32 Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: No Update Planned OH LUST: Leaking Underground Storage Tank File 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: 11/23/2009 Source: Department of Commerce Date Data Arrived at EDR: 11/24/2009 Telephone: 614-752-7924

Last EDR Contact: 11/24/2009

Data Release Frequency: Quarterly

Next Scheduled EDR Contact: 03/08/2010

Date Made Active in Reports: 12/21/2009

Number of Days to Update: 27

OH UNREG LTANKS: Ohio Leaking UST File A suspected or confirmed release of petroleum from a non-regulated UST.		
Date of Government Version: 08/25/1999 Date Data Arrived at EDR: 08/19/2003 Date Made Active in Reports: 08/26/2003 Number of Days to Update: 7	Source: Department of Commerce Telephone: 614-752-7938 Last EDR Contact: 08/01/2003 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned	
KY SB193: SB193 Branch Site Inventory List The inventory indicates facilities that have performed permanent closure activities at a regulated underground storage tank facility and have known soil and/or groundwater contamination.		
Date of Government Version: 09/05/2006 Date Data Arrived at EDR: 09/13/2006 Date Made Active in Reports: 10/18/2006 Number of Days to Update: 35	Source: Department of Environmental Protection Telephone: 502-564-5981 Last EDR Contact: 10/16/2009 Next Scheduled EDR Contact: 02/01/2010 Data Release Frequency: No Update Planned	
OH UST: Underground Storage Tank Tank File 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: 09/17/2009 Date Data Arrived at EDR: 09/18/2009 Date Made Active in Reports: 10/01/2009 Number of Days to Update: 13	Source: Department of Commerce Telephone: 614-752-7938 Last EDR Contact: 12/18/2009 Next Scheduled EDR Contact: 03/08/2010 Data Release Frequency: Quarterly	
KY UST: Underground Storage Tank Database 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: 10/07/2009 Date Data Arrived at EDR: 10/16/2009 Date Made Active in Reports: 11/04/2009 Number of Days to Update: 19	Source: Department of Environmental Protection Telephone: 502-564-5981 Last EDR Contact: 12/07/2009 Next Scheduled EDR Contact: 03/22/2010 Data Release Frequency: Quarterly	
OH ARCHIVE UST: Archived Underground Storage Tank Sites Underground storage tank records that have been removed from the Underground Storage Tank database.		
Date of Government Version: 09/17/2009 Date Data Arrived at EDR: 09/18/2009 Date Made Active in Reports: 10/06/2009 Number of Days to Update: 18	Source: Department of Commerce, Division of State Fire Marshal Telephone: 614-752-7938 Last EDR Contact: 12/18/2009 Next Scheduled EDR Contact: 03/08/2010 Data Release Eroquency: Quarterly	

OH SPILLS: Emergency Response Database

Incidents reported to the Emergency Response Unit. The focus of the ER program is to minimize the impact on the environment from accidental releases, spills, and unauthorized discharges from any fixed or mobile sources. Incidents involving petroleum products, hazardous materials, hazardous waste, abandoned drums, or other materials which may pose as a pollution threat to the state?s water, land, or air should be reported immediately. Not all incidents included in the database are actual SPILLS, they can simply be reported incidents.

Data Release Frequency: Quarterly

Date of Government Version: 11/16/2009Source: Ohio EPADate Data Arrived at EDR: 11/18/2009Telephone: 614-644-2084Date Made Active in Reports: 12/21/2009Last EDR Contact: 11/16/2009Number of Days to Update: 33Next Scheduled EDR Contact: 03/01/2010Data Release Frequency: Varies

OH ENG CONTROLS: Sites with Engineering Cont A database that tracks properties with engineer	
Date of Government Version: 11/16/2009 Date Data Arrived at EDR: 11/16/2009 Date Made Active in Reports: 12/21/2009 Number of Days to Update: 35	Source: Ohio EPA Telephone: 614-644-2306 Last EDR Contact: 11/16/2009 Next Scheduled EDR Contact: 03/01/2010 Data Release Frequency: Semi-Annually
KY ENG CONTROLS: Engineering Controls Site Li A listing of sites that use engineering controls.	5
Date of Government Version: 10/15/2009 Date Data Arrived at EDR: 10/16/2009 Date Made Active in Reports: 11/04/2009 Number of Days to Update: 19	Source: Department of Environmental Protection Telephone: 502-564-6716 Last EDR Contact: 12/04/2009 Next Scheduled EDR Contact: 03/22/2010 Data Release Frequency: Varies
OH INST CONTROL: Sites with Institutional Engine A database that tracks properties with institution	•
Date of Government Version: 11/16/2009 Date Data Arrived at EDR: 11/16/2009 Date Made Active in Reports: 12/21/2009 Number of Days to Update: 35	Source: Ohio Environmental Protection Agency Telephone: 614-644-2306 Last EDR Contact: 11/16/2009 Next Scheduled EDR Contact: 03/01/2010 Data Release Frequency: Semi-Annually
KY INST CONTROL: State Superfund Database A list of closed sites in the State Superfund Da uses Contained or Managed as a Closure Opt	atabase. Institutional controls would be in place at any site that ion.
Date of Government Version: 10/13/2009 Date Data Arrived at EDR: 10/13/2009 Date Made Active in Reports: 11/04/2009 Number of Days to Update: 22	Source: Department of Environmental Protection Telephone: 502-564-6716 Last EDR Contact: 12/04/2009 Next Scheduled EDR Contact: 03/22/2010 Data Release Frequency: Varies
OH VCP: Voluntary Action Program Sites Site involved in the Voluntary Action Program.	
Date of Government Version: 11/16/2009 Date Data Arrived at EDR: 11/16/2009 Date Made Active in Reports: 12/21/2009 Number of Days to Update: 35	Source: Ohio EPA, Voluntary Action Program Telephone: 614-728-1298 Last EDR Contact: 11/16/2009 Next Scheduled EDR Contact: 03/01/2010 Data Release Frequency: Semi-Annually
KY VCP: Voluntary Cleanup Program Sites Sites that have been accepted into the Volunta	ary Cleanup Program or have submitted an application.
Date of Government Version: 10/13/2009 Date Data Arrived at EDR: 10/13/2009 Date Made Active in Reports: 11/04/2009 Number of Days to Update: 22	Source: Department of Environmental Protection Telephone: 502-564-6716 Last EDR Contact: 12/04/2009 Next Scheduled EDR Contact: 03/22/2010 Data Release Frequency: Varies
OH DRYCLEANERS: Drycleaner Facility Listing A listing of drycleaner facility locations.	
Date of Government Version: 10/07/2009 Date Data Arrived at EDR: 10/09/2009 Date Made Active in Reports: 10/23/2009 Number of Days to Update: 14	Source: Ohio EPA Telephone: 614-644-3469 Last EDR Contact: 10/05/2009 Next Scheduled EDR Contact: 01/18/2010 Data Release Frequency: Varies

KY DRYCLEANERS: Drycleaner Listing A listing of drycleaner facility locations.		
Date of Government Version: 09/16/2009 Date Data Arrived at EDR: 09/16/2009 Date Made Active in Reports: 09/29/2009 Number of Days to Update: 13	Source: Department of Environmental Protection Telephone: 502-573-3382 Last EDR Contact: 12/07/2009 Next Scheduled EDR Contact: 03/22/2010 Data Release Frequency: Varies	
	d is an abandoned, idled or under-used industrial or commercial complicated by known or potential releases of hazardous substances	
Date of Government Version: 10/06/2009 Date Data Arrived at EDR: 10/06/2009 Date Made Active in Reports: 10/23/2009 Number of Days to Update: 17	Source: Ohio EPA Telephone: 614-644-3748 Last EDR Contact: 12/21/2009 Next Scheduled EDR Contact: 04/05/2010 Data Release Frequency: Varies	
KY BROWNFIELDS: Kentucky Brownfield Inventory The Kentucky Brownfield Program has created an inventory of brownfield sites in order to market the properties to those interested in brownfield redevelopment. The Kentucky Brownfield Program is working to promote the redevelopment of these sites by helping to remove barriers that prevent reuse, providing useful information to communities, developers and the public and encouraging a climate that fosters redevelopment of contaminated sites.		
Date of Government Version: 11/20/2009 Date Data Arrived at EDR: 11/20/2009 Date Made Active in Reports: 12/01/2009 Number of Days to Update: 11	Source: Division of Compliance Assistance Telephone: 502-564-0323 Last EDR Contact: 10/26/2009 Next Scheduled EDR Contact: 02/08/2010 Data Release Frequency: Varies	
OH CDL: Clandestine Drug Lab Locations A list of clandestine drug lab sites with environi based on the "product" type.	mental impact. This list is extracted from the SPILLS database	
Date of Government Version: 09/09/2009 Date Data Arrived at EDR: 09/10/2009 Date Made Active in Reports: 09/21/2009 Number of Days to Update: 11	Source: Ohio EPA Telephone: 614-644-2080 Last EDR Contact: 11/16/2009 Next Scheduled EDR Contact: 03/01/2010 Data Release Frequency: Varies	
KY CDL: Clandestine Drub Lab Location Listing Clandestine drug lab site locations.		
Date of Government Version: 10/13/2009 Date Data Arrived at EDR: 10/13/2009 Date Made Active in Reports: 11/04/2009 Number of Days to Update: 22	Source: Department of Environmental Protection Telephone: 502-564-6716 Last EDR Contact: 12/04/2009 Next Scheduled EDR Contact: 03/22/2010 Data Release Frequency: Varies	
OH NPDES: NPDES General Permit List General information regarding NPDES (Nation:	al Pollutant Discharge Elimination System) permits.	
Date of Government Version: 11/02/2009 Date Data Arrived at EDR: 11/18/2009 Date Made Active in Reports: 12/21/2009 Number of Days to Update: 33	Source: Ohio EPA Telephone: 614-644-2031 Last EDR Contact: 11/18/2009 Next Scheduled EDR Contact: 03/01/2010 Data Release Frequency: Semi-Annually	

#### KY NPDES: Permitted Facility Listing A listing of permitted wastewater facilities. Date of Government Version: 09/23/2009 Source: Department of Environmental Protection Date Data Arrived at EDR: 09/25/2009 Telephone: 502-564-3410 Date Made Active in Reports: 10/14/2009 Last EDR Contact: 11/16/2009 Next Scheduled EDR Contact: 03/01/2010 Number of Days to Update: 19 Data Release Frequency: Varies OH AIRS: Title V Permits Listing A listing of Title V Permits issued by the Division of Air Pollution Control. It is a federal operating permit program adopted and implemented by the state. The basic program elements typically specify that major sources will submit an operating application to the specified state environmental regulatory agency according to a schedule. Source: Ohio EPA Date of Government Version: 09/30/2009 Date Data Arrived at EDR: 10/01/2009 Telephone: 614-644-2270 Last EDR Contact: 09/30/2009 Date Made Active in Reports: 10/23/2009 Next Scheduled EDR Contact: 01/11/2010 Number of Days to Update: 22 Data Release Frequency: Varies KY AIRS: Permitted Airs Facility Listing A listing of permitted Airs facilities. Date of Government Version: 09/16/2009

Date Made Active in Reports: 09/29/2009 Number of Days to Update: 13

Date Data Arrived at EDR: 09/16/2009

Source: Department of Environmental Protection Telephone: 502-573-3382 Last EDR Contact: 12/07/2009 Next Scheduled EDR Contact: 03/22/2010 Data Release Frequency: Varies

### OH USD: Urban Setting Designation Sites

A USD may be requested for properties participating in the VAP when there is no current or future use of the ground water by local residents for drinking, showering, bathing or cooking. In these areas, an approved USD would lower the cost of cleanup and promote economic redevelopment while still protecting public health and safety. If these USDs were to be approved, the ground water cleanup or response requirements for the areas could be lessened. The Ohio EPA director may approve a USD request based on a demonstration that the USD requirements are met and an evaluation of existing and future uses of ground water in the area. The Ohio EPA director's decision on approval or denial of the request is needed before cleanup requirements for the site can be determined.

Date of Government Version: 11/16/2009 Date Data Arrived at EDR: 11/16/2009 Date Made Active in Reports: 12/21/2009 Number of Days to Update: 35 Source: Ohio EPA Telephone: 614-644-3749 Last EDR Contact: 11/16/2009 Next Scheduled EDR Contact: 03/01/2010 Data Release Frequency: Varies

### OH HIST ENG CONTROLS: Operation & Maintenance Agreements Database

Volunteers that complete a voluntary action that relies on the ongoing operation and maintenance (O&M) of an engineered control to make the site protective (e.g" cap systems and ground water treatment systems) must enter into a legally binding agreement with the Ohio EPA before the director issues a covenant not to sue. This O&M Agreement must describe how the remedy is constructed and how itwill be monitored, maintained and repaired. It also lays out inspection opportunities for the agency. Companies must document that they have the financial capability to operate any remedy relied on, before the agency will agree to enter into the O&M Agreement. The statute requires that the agency be notified of any change in ownership. This database is no longer updated or maintained by the state agency.

Date of Government Version: 05/10/2005 Date Data Arrived at EDR: 04/04/2006 Date Made Active in Reports: 05/04/2006 Number of Days to Update: 30 Source: Ohio EPA Telephone: 614-644-2306 Last EDR Contact: 06/02/2008 Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

#### OH HIST USD: Urban Setting Designations Database

A USD may be requested for properties participating in the VAP when there is no current or future use of the ground water by local residents for drinking, showering, bathing or cooking. In these areas, an approved USD would lower the cost of cleanup and promote economic redevelopment while still protecting public health and safety. If these USDs were to be approved, the ground water cleanup or response requirements for the areas could be lessened. The Ohio EPA director may approve a USD request based on a demonstration that the USD requirements are met and an evaluation of existing and future uses of ground water in the area. The Ohio EPA director's decision on approval or denial of the request is needed before cleanup requirements for the site can be determined. This database is no longer updated or maintained by the state agency.

Date of Government Version: 05/10/2005	Source: Ohio EPA
Date Data Arrived at EDR: 04/25/2006	Telephone: 614-644-3749
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 06/02/2008
Number of Days to Update: 16	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

### OH HIST INST CONTROLS: Institutional Controls Database

"Institutional control" is a restriction that is recorded in the same manner as a deed which limits access to or use of the property such that exposure to hazardous substances or petroleum are effectively and reliably eliminated or mitigated. Examples of institutional controls include land and water use restrictions. This database is no longer updated or maintained by the state agency.

Date of Government Version: 05/10/2005	Source: Ohio EPA
Date Data Arrived at EDR: 04/06/2006	Telephone: 614-644-2306
Date Made Active in Reports: 05/04/2006	Last EDR Contact: 06/02/2008
Number of Days to Update: 28	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

#### KY LEAD: Environmental Lead Program Report Tracking Database Lead Report Tracking Database

Date of Government Version: 12/12/2008 Date Data Arrived at EDR: 02/27/2009 Date Made Active in Reports: 04/22/2009 Number of Days to Update: 54

Source: Department of Public Health Telephone: 502-564-4537 Last EDR Contact: 11/30/2009 Next Scheduled EDR Contact: 03/01/2010 Data Release Frequency: Varies

### KY PSTEAF: Facility Ranking List

The Underground Storage Tank Branch (USTB) has ranked all PSTEAF reimbursable facilities requiring corrective action, in accordance with 401 KAR 42:290. Directive letters will be issued on the basis of facility ranking and available PSTEAF funding in sequential order as ranked. For example, Rank 2 facilities will be issued directives before Rank 3 facilities.

Date of Government Version: 10/01/2009	Source: Department of Environmental Protection
Date Data Arrived at EDR: 10/21/2009	Telephone: 502-564-5981
Date Made Active in Reports: 11/04/2009	Last EDR Contact: 10/21/2009
Number of Days to Update: 14	Next Scheduled EDR Contact: 02/01/2010
	Data Release Frequency: Quarterly

OH COAL ASH: Coal Ash Disposal Site Listing A listing of coal ash disposal site locations.

> Date of Government Version: 01/23/2009 Date Data Arrived at EDR: 06/26/2009 Date Made Active in Reports: 07/06/2009 Number of Days to Update: 10

Source: Ohio EPA Telephone: 614-644-2134 Last EDR Contact: 10/19/2009 Next Scheduled EDR Contact: 02/01/2010 Data Release Frequency: Varies

### OH CRO: Cessation of Regulated Operations Facility Listing

"Cessation of Regulated Operations" means the discontinuation or termination of regulated operations or the finalizing of any transaction or proceeding through which those operations are discontinued. "Regulated Operations" means the production, use, storage or handling of regulated substances.

Source: Ohio EPA Telephone: 614-644-3065

Last EDR Contact: 11/25/2009

Data Release Frequency: Varies

Date of Government Version: 07/27/2009 Date Data Arrived at EDR: 09/03/2009 Date Made Active in Reports: 09/21/2009 Number of Days to Update: 18

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations

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: 12/31/2005 Date Data Arrived at EDR: 12/08/2006 Date Made Active in Reports: 01/11/2007 Number of Days to Update: 34 Source: USGS Telephone: 202-208-3710 Last EDR Contact: 10/23/2009 Next Scheduled EDR Contact: 02/01/2010 Data Release Frequency: Semi-Annually

Next Scheduled EDR Contact: 03/01/2010

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands Location of open dumps on Indian land.

Date of Government Version: 12/31/1998	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 11/09/2009
Number of Days to Update: 52	Next Scheduled EDR Contact: 02/22/2010
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/12/2009 Date Data Arrived at EDR: 11/12/2009 Date Made Active in Reports: 12/16/2009 Number of Days to Update: 34 Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 10/30/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 12/07/2009
Date Data Arrived at EDR: 12/09/2009
Date Made Active in Reports: 12/16/2009
Number of Days to Update: 7

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 10/30/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Semi-Annually

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 12/01/2009 Date Data Arrived at EDR: 12/01/2009 Date Made Active in Reports: 12/16/2009 Number of Days to Update: 15 Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 10/30/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/10/2009	Source: EPA Region 10
Date Data Arrived at EDR: 11/12/2009	Telephone: 206-553-2857
Date Made Active in Reports: 12/16/2009	Last EDR Contact: 10/30/2009
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/15/2010
	Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage T LUSTs on Indian land in Iowa, Kansas, and Ne		
Date of Government Version: 03/24/2009 Date Data Arrived at EDR: 05/20/2009 Date Made Active in Reports: 06/17/2009 Number of Days to Update: 28	Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 11/04/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Varies	
INDIAN LUST R9: Leaking Underground Storage T LUSTs on Indian land in Arizona, California, N		
Date of Government Version: 11/24/2009 Date Data Arrived at EDR: 11/25/2009 Date Made Active in Reports: 12/16/2009 Number of Days to Update: 21	Source: Environmental Protection Agency Telephone: 415-972-3372 Last EDR Contact: 10/30/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Quarterly	
INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land A listing of leaking underground storage tank locations on Indian Land.		
Date of Government Version: 02/19/2009 Date Data Arrived at EDR: 02/19/2009 Date Made Active in Reports: 03/16/2009 Number of Days to Update: 25	Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/30/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Varies	
INDIAN UST R9: Underground Storage Tanks on Indian Land 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: 11/12/2009 Date Data Arrived at EDR: 11/20/2009 Date Made Active in Reports: 12/16/2009 Number of Days to Update: 26	Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 10/30/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Quarterly	
INDIAN UST R8: Underground Storage Tanks on Indian Land 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: 12/01/2009 Date Data Arrived at EDR: 12/01/2009 Date Made Active in Reports: 12/16/2009 Number of Days to Update: 15	Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 10/30/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Quarterly	
INDIAN UST R10: Underground Storage Tanks on Indian Land 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: 11/10/2009 Date Data Arrived at EDR: 11/12/2009 Date Made Active in Reports: 12/16/2009 Number of Days to Update: 34	Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/30/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Quarterly	
INDIAN UST R4: Underground Storage Tanks on Indian Land The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian Iand in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)		

Date of Government Version: 12/07/2009 Date Data Arrived at EDR: 12/09/2009 Date Made Active in Reports: 12/16/2009 Number of Days to Update: 7 Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 10/30/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Semi-Annually

INDIAN UST R6: Underground Storage Tanks on Indian Land

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: 11/12/2009 Date Data Arrived at EDR: 11/12/2009 Date Made Active in Reports: 12/16/2009 Number of Days to Update: 34 Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 10/30/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

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: 11/05/2009	Source: EPA Region 5
Date Data Arrived at EDR: 11/05/2009	Telephone: 312-886-6136
Date Made Active in Reports: 12/16/2009	Last EDR Contact: 10/22/2009
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Varies

### INDIAN UST R7: Underground Storage Tanks on Indian Land

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: 04/01/2008 Date Data Arrived at EDR: 12/30/2008 Date Made Active in Reports: 03/16/2009 Number of Days to Update: 76 Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 11/04/2009 Next Scheduled EDR Contact: 02/15/2010 Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

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: 02/19/2009	Source: EPA, Region 1
Date Data Arrived at EDR: 02/19/2009	Telephone: 617-918-1313
Date Made Active in Reports: 03/16/2009	Last EDR Contact: 10/30/2009
Number of Days to Update: 25	Next Scheduled EDR Contact: 02/15/2010
	Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 04/02/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008 Number of Days to Update: 27 Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 10/05/2009 Next Scheduled EDR Contact: 01/18/2010 Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008 Number of Days to Update: 27

#### EDR PROPRIETARY RECORDS

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009 Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

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: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

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

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/11/2009
Number of Days to Update: 16

Source: Department of Environmental Protection Telephone: 860-424-3375 Last EDR Contact: 11/24/2009 Next Scheduled EDR Contact: 03/08/2010 Data Release Frequency: Annually

NJ MANIFEST: Manifest Information Hazardous waste manifest information.

> Date of Government Version: 12/31/2008 Date Data Arrived at EDR: 05/05/2009 Date Made Active in Reports: 05/22/2009 Number of Days to Update: 17

Source: Department of Environmental Protection Telephone: N/A Last EDR Contact: 10/20/2009 Next Scheduled EDR Contact: 02/01/2010 Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

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

Date of Government Version: 10/27/2009	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/10/2009	Telephone: 518-402-8651
Date Made Active in Reports: 12/09/2009	Last EDR Contact: 11/10/2009
Number of Days to Update: 29	Next Scheduled EDR Contact: 02/22/2010
	Data Release Frequency: Annually

PA MANIFEST: Manifest Information Hazardous waste manifest information.	
Date of Government Version: 12/31/2008 Date Data Arrived at EDR: 12/01/2009 Date Made Active in Reports: 12/14/2009	Source: Department of Environmental Protection Telephone: N/A Last EDR Contact: 11/23/2009 Next Scheduled EDR Contact: 03/08/2010
Number of Days to Update: 13	Data Release Frequency: Annually
RI MANIFEST: Manifest information Hazardous waste manifest information	
Date of Government Version: 06/01/2009 Date Data Arrived at EDR: 06/12/2009	Source: Department of Environmental Management Telephone: 401-222-2797
Date Made Active in Reports: 06/29/2009	Last EDR Contact: 11/30/2009
Number of Days to Update: 17	Next Scheduled EDR Contact: 03/15/2010 Data Release Frequency: Annually
VT MANIFEST: Hazardous Waste Manifest Data Hazardous waste manifest information.	
Date of Government Version: 03/31/2009 Date Data Arrived at EDR: 04/09/2009	Source: Department of Environmental Conservation Telephone: 802-241-3443
Date Made Active in Reports: 05/20/2009	Last EDR Contact: 10/23/2009
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/08/2010 Data Release Frequency: Annually
WI MANIFEST: Manifest Information Hazardous waste manifest information.	
Date of Government Version: 12/31/2008 Date Data Arrived at EDR: 07/17/2009	Source: Department of Natural Resources Telephone: N/A
Date Made Active in Reports: 08/10/2009 Number of Days to Update: 24	Last EDR Contact: 12/21/2009 Next Scheduled EDR Contact: 04/05/2010
	Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

#### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals. Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical

database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools Source: National Center for Education Statistics Telephone: 202-502-7300 The National Center for Education Statistics' primary database on private school locations in the United States. Daycare Centers: Licensed Child Day Care Facilities Source: Department of Job & Family Services Telephone: 614-466-6282

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

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.

State Wetlands Data: Wetlands Inventory Source: Department of Natural Resources Telephone: 614-265-1044

### STREET AND ADDRESS INFORMATION

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