



## 5.16 Hazardous Waste Site Impacts

### 5.16.1 Introduction

During the early development of transportation projects, the proposed rights-of-way undergo an investigation for the presence of hazardous waste. If found, attempts are made to have the sites cleaned up prior to the purchase of the property. Although it is desirable, hazardous materials cannot always be taken care of prior to the construction of a transportation project. It may be necessary to deal with known and/or unknown hazardous waste sites on purchased right-of-way during the construction phase.

Hazardous waste sites are defined in this analysis as properties that may require additional clean up of contaminated soils and/or the removal of hazardous materials. Early identification of these sites are important because additional work may be required to remediate these sites prior to any construction. This additional work can increase the cost of construction substantially, depending on the amount of contamination at these sites. Refer to Section 5.24, *Water Quality Impacts* for contaminated stream impacts.

Since the publication of the DEIS, the following changes have been made to this section:

- Impact calculations have been updated to reflect the selection of variations, route shifts and other changes, as described in Section 5.1.3.
- The UST, LUST, RCRA, and Superfund sites information has been updated with new data from IDEM.

### 5.16.2 Methodology

The data used to identify the hazardous waste sites and UST/LUST sites within the working alignment came from Geographical Information System (GIS) layers.

Fourteen separate databases were used to identify possible hazardous waste sites in this analysis (1) RCRIS, (2) CERCLIS, (3) Superfund, (4) TRI, (5) Voluntary Remediation Program sites, (6) Active Landfills, (7) Active Permitted Solid Waste sites, (8) Abandoned/Inactive Landfills and Open Dumps, (9) Industrial Waste sites, (10) Brownfield sites, (11) State Cleanup Program sites, (12) Commissioner's Bulletin sites, (13) UST sites, and (14) LUST sites.

1. **RCRIS** stands for Resource Conservation and Recovery Information System and is provided by the Indiana Department of Environmental Management (IDEM). RCRIS is a national computerized management information system in support of the Resource Conservation and Recovery Act (RCRA). RCRA requires that generators, transporters, treaters, storers, and disposers of hazardous waste materials provide information concerning their activities to state environmental agencies. This database is used primarily to track handler permits or closure status, compliance with federal and state regulations, and cleanup activities.
2. **CERCLIS** stands for Comprehensive Environmental Response, Compensation, and Liability Information System and is provided by the USEPA. CERCLIS is a national computerized management information system that automates entry, updating, and retrieval of data for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund). It also tracks site and non-site specific Superfund data. It contains information on hazardous waste site assessment and remediation.
3. **Superfund** data were collected by the Federal Cleanup, Superfund, and NRDA section within the IDEM Office of Land Quality (OLQ). This database contains information that represents what had been recorded,



processed, and archived by IDEM personnel at a time previous to this project. It contains information on hazardous waste site assessment and remediation.

4. **TRI** stands for Toxic Release Inventory Facilities and is compiled by the USEPA. This database contains data on annual estimated releases of over 300 toxic chemicals to air, water, and land by manufacturing companies. Industrial facilities provide the information, which includes: the location of the facility where the chemicals are manufactured, processed, or otherwise used; amounts of chemicals stored on-site; estimated quantities of chemicals released; on-site source reduction and recycling practices; and estimated amounts of chemicals transferred to treatment, recycling, or waste facilities. The TRI data for chemical releases to land are limited to releases within the boundary of a facility. Releases to land include: landfills; land treatment/application farming; and surface impoundments, such as topographic depressions, man-made excavations, or diked areas. Air releases are identified as either point source releases or as non-point (*i.e.*, fugitive) releases, such as those occurring from vents, ducts, pipes, or any confined air stream. Surface water releases include discharges into rivers, lakes, streams, and other bodies of water. In addition, the database covers releases to underground injection wells (where chemicals are injected into the groundwater) and off-site transfers of chemicals to either publicly owned treatment works (POTWs) or any other disposal, treatment, storage, or recycling facility.
5. The **Voluntary Remediation Program (VRP)** established by the state legislature in 1993, provides a mechanism for site owners, operators, and purchasers to voluntarily enter into an agreement with IDEM to cleanup contaminated property. Most site owners or operators, or prospective owners or operators, who wish to cleanup property contaminated with petroleum or hazardous waste or hazardous constituents, are potentially eligible to participate in the VRP.
6. The **Active-landfills** database was provided by IDEM and consists of landfills monitored by IDEM on a quarterly basis. Only the sites that have been recorded, processed, and archived by IDEM personnel previous to this project were identified in the database.
7. The **Active Permitted Solid Waste** site database was provided by IDEM and consists of locations of active permitted solid waste sites within the State of Indiana. Only the sites that have been recorded, processed, and archived by IDEM personnel previous to this project were identified in the database.
8. The **Abandoned and Inactive Landfills and Open Dump** site database was provided by IDEM and consists of the location of abandoned and inactive landfills and open dumps recorded on file at IDEM. The database contains information that represents only what was recorded, processed, and archived by IDEM personnel previous to this project.
9. The **Industrial Waste** sites database consists of known sites with industrial waste. This information was provided by IDEM. Industrial Waste Compliance personnel located the entrance to facilities that generate and/or manage hazardous waste, non-hazardous industrial waste, and solid waste and recorded them using geographical positioning systems. The majority of sites are large quantity generators (LQGs). Treatment, Storage, and Disposal facilities (TSDs) are also being located. Occasionally, a Small Quantity Generator (SQG) or Conditionally Exempt Small Quantity Generator (CESQG) may be located if it has significant environmental issues.
10. **Brownfield** sites are defined as industrial or commercial properties that are abandoned, inactive, or under-utilized, on which expansion or redevelopment is complicated due to the actual or perceived environmental contamination. This information was provided by IDEM. Redevelopment of Brownfield properties benefits communities by rejuvenating vacant buildings, increasing the tax base, and reducing blight.



11. **State Cleanup** sites are those sites that do not qualify for coverage under Superfund but may be addressed by the state. This information was provided by IDEM. Like Superfund, state cleanup sites rely on establishing the liability of a potentially responsible party(s) to assume the costs of, or to conduct, the actual cleanup activities. If no responsible party can be determined, cleanups may be conducted by IDEM and paid for by the Indiana Hazardous Substance Response Trust Fund (IC 13-25-4-1). However, unlike Superfund, state cleanups can target petroleum pollution as well as hazardous waste or hazardous substance contamination.
12. **Commissioner’s Bulletin** sites are state cleanup sites, provided by IDEM, that have been given a high priority by the commissioner of IDEM. These sites also are included in the state cleanup sites database.
13. The **Underground Storage Tank (UST)** program is responsible for registering all regulated USTs. This information was provided by IDEM. It assures that all regulated USTs meet Indiana’s requirements for release detection, spill and overflow prevention, and corrosion protection, and to ensure that tanks not meeting those requirements are properly closed. The UST program assures that these protection systems are operated and maintained properly. Regulated USTs are those USTs that have 10% or more of the tank and piping buried beneath the ground and contain a regulated substance, which includes either petroleum products or hazardous substances.
14. **Leaking Underground Storage Tanks (LUSTs)** are defined as regulated USTs that contain regulated substances including petroleum and hazardous substances, such as those typically found at gasoline stations, fleet fueling facilities, and industrial sites and are suspected or confirmed of having a leak. This information was provided by IDEM.

For more information, see Sections 4.1, *GIS Approach*, and 5.1, *Methodology*. All of the sites that fell within the working alignment were counted and identified. All known hazardous waste sites within 100 feet of the variable width working alignments were identified.

### 5.16.3 Analysis

Table 5.16-1 shows a hazardous waste site impact comparison of the alternatives. According to the GIS, none of the Alternatives will impact any IDEM recorded Active Landfills, Abandoned/Inactive Landfills/Open Dumps, Active Permitted Solid-Waste sites, Industrial Waste sites, Commissioner’s State List Cleanup sites, Voluntary Remediation sites, or recorded CERCLA sites or TRI sites. Under the No Build Alternative, current trends for hazardous waste site impacts are expected to continue. The No Build Alternative will have no impacts on these trends.

#### RCRA, Brownfield, UST, and LUST Sites

The Environmental Protection Agency database identified the following three

Alternatives	Criteria			
	RCRA Sites	Brownfield Sites	UST Sites	LUST Sites
Alternative 1	0	0-1	14-26	3
Alternative 2A	0	0-1	9-17	1
Alternative 2B	0	0-1	9-17	1
Alternative 2C	3	0-1	16-24	6
Alternative 3A	0	0	0	0
Alternative 3B	3	0	7	6
Alternative 3C	3	0	7	6
Alternative 4A	0	0	0	0
Alternative 4B	0	0	0	0
Alternative 4C	3	0	7	5
Alternative 5A	0	0	1	3
Alternative 5B	3	0	8	7



facilities located along the five alternatives as RCRA sites:

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| 1. <b>Morris Machine Company</b>    | Alternatives 2C, 3B, 3C, 4C, and 5B |
| 2. <b>Onkins Amoco Oil</b>          | Alternatives 2C, 3B, 3C, 4C, and 5B |
| 3. <b>Weliever Olds Pontiac GMC</b> | Alternatives 2C, 3B, 3C, 4C, and 5B |

All of the RCRA sites that may be impacted by the alternatives are small quantity generator sites or LUST sites (Appendix S, *Hazardous Materials*).

One Brownfield site that may be impacted by Alternatives 1, 2A, 2B, and 2C is located at the corner of US 41 and CR 350 South in Gibson County, Indiana. It appears to be an old service station (Figure 5.16-1).

From an environmental impact standpoint, the RCRA sites, Brownfield sites, UST sites (Figure 5.16-2), and LUST sites that are located within this project are not as significant as CERCLA and Landfill sites.



Figure 5.16-1: Brownfield site



Figure 5.16-2: Typical UST facility

## CERCLA Sites

There are no known CERCLA facilities identified within 100 feet of the variable width working alignments of the alternatives. Although the following is a list of CERCLA sites that are located within the two-mile wide study band, none of the working alignments are anticipated to directly impact any of these sites. Further investigations on these sites may be required during Tier 2 NEPA studies to identify their exact limits (Appendix S, *Hazardous Materials*).

- |                                       |                                 |
|---------------------------------------|---------------------------------|
| 1. <b>Prestolite Battery Division</b> | Alternatives 1, 2A, 2B, and 2C  |
| 2. <b>Indiana Woodtreating</b>        | Alternatives 3C, 5A and 5B      |
| 3. <b>Lemon Lane Landfill</b>         | Alternatives 3B, 3C, 5A and 5B  |
| 4. <b>Bennett Stone Quarry</b>        | Alternatives 3B, 3C, 5A, and 5B |



**5. Davenport Open Dump**

Alternative 5A

**6. Neal's Landfill**

Alternative 3C

The Prestolite Battery Division (currently known as Huffers Garage) is located approximately 0.5 mile west of US 41 in the City of Vincennes between 2nd and 6th streets (Figure 5.16-3). Confirmation with IDEM indicated that most of the site has been cleaned up, but there are still some issues that must be addressed before it will be taken off of the CERCLA list. This site is currently on the National Priorities List.

Indiana Woodtreating is located at 5700 Rogers Street in Bloomington, Indiana. This site is not on the National Priorities List.

The Lemon Lane Landfill is located at the corner of SR 37 and Vernal Pike Road in Bloomington, Indiana (Figure 5.16-4). The landfill has been capped and consultation with the USEPA representative indicated that the extent of the landfill with contamination is limited to the area with the cap on it shown in the aerial photograph (Appendix S). This site is on the National Priorities List.



Figure 5.16-3: Prestolite Battery Division



Figure 5.16-4: Lemon Lane Landfill

The Bennett Stone Quarry is located approximately 0.5 mile southwest of SR 37 in Bloomington, Indiana (Figure 5.16-5). A removal action plan has been completed on this site and consisted of removal and disposal in an approved facility of 252 capacitors located on the surface along with 14 cubic yards of contaminated soils. The removal also included placement of a clay cap over the main site to prevent surface runoff of contaminants and construction of a security fence around the site. Consultation with the USEPA representative identified that the site was close to completion with the exception of the contamination levels in Stout's Creek. Once this stream is remediated, this site may be removed from the CERCLA list. Appendix S provides a more detailed description of the cleanup activities. This site is on the National Priorities List.



Figure 5.16-5: Bennett Stone Quarry



The Davenport Open Dump site is located at 6965 Beech Grove Road in Martinsville, Indiana. The two-acre site operated from 1960 until January 1986. An inspection by IDEM personnel determined that the site was an unpermitted open dump containing domestic waste, auto parts, and drums of unknown contents. In 1986, IDEM removed the drums from the site. In the summer of 2001, additional drums were discovered and further cleanup efforts were scheduled for the spring of 2002 (Appendix S). An immediate removal action was completed by USEPA during the summer of 2002. IDEM cleaned up the site in 2002. The cleanup of this site is complete. This site is not on the National Priorities List.

The Neal's Landfill site is located just off SR 48 between Oard Road and Vernal Pike west of Bloomington, Indiana. The eighteen-acre site operated from 1949 until 1972. Between approximately 1962 and 1970, Westinghouse Electric Corporation, now doing business as CBS Corporation, dumped waste electrical equipment and parts including electric capacitors containing polychlorinated biphenyls (PCBs), and PCB-contaminated capacitor insulation material, rags, and filter clay at the site. The cleanup process at Neal's Landfill began in 1987. In April 1999, the CBS Corporation removed a total of 41,747 tons (83,495,000 pounds) of contaminated material with greater than 500 parts per million (ppm) PCBs from this site. The cleanup process reduced the size of the site from 18 acres to 10 acres. This site is on the National Priorities List. Although the remediation of Neal's Landfill has been completed and capped, there are still leaks of PCBs from springs that seep around the landfill area into the environment.

## Active and/or Abandoned Landfill Sites

There were no active and/or abandoned landfills located within 100 feet of the working alignments of the alternatives. The following is a list of Active and/or Abandoned Landfill sites identified by IDEM that are located within the two-mile wide study bands. None of the working alignments are anticipated to directly impact any of these sites. Further investigations of these sites may be required during the Tier 2 NEPA studies to identify their exact limits.

- |  |                                     |
|--|-------------------------------------|
| 1. <b>Cinergy Ellerman and Adams</b>     | Alternatives 1, 2A, 2B, and 2C      |
| 2. <b>Jamax Transfer Station</b>         | Alternatives 1, 2A, 2B, and 2C      |
| 3. <b>Thais Landfill</b>                 | Alternative 1                       |
| 4. <b>Sceptor RWS 1</b>                  | Alternatives 2A, 2B, and 2C         |
| 5. <b>Vincennes Site</b>                 | Alternatives 2A, 2B, and 2C         |
| 6. <b>EW Stout Ash</b>                   | Alternatives 2C, 3B, 3C, 4C, and 5B |
| 7. <b>Indianapolis Power and Light</b>   | Alternatives 2C, 3B, 3C, 4C, and 5B |
| 8. <b>Dillman Road Landfill</b>          | Alternatives 3C, 5A, and 5B         |
| 9. <b>Bloomington Transfer Station</b>   | Alternatives 5A, and 5B             |
| 10. <b>Martinsville Transfer Station</b> | Alternative 5A                      |
| 11. <b>Moore Open Dump</b>               | Alternative 5A                      |
| 12. <b>Davenport Open Dump</b>           | Alternative 5A                      |



#### 5.16.4 Mitigation

If contaminated materials cannot be avoided then, if applicable, remediation or removal efforts will be undertaken. INDOT will work closely with the appropriate agencies to ensure compliance with all applicable regulations.

#### 5.16.5 Summary

The Remediation Branch of IDEM is aware of all the facilities and sites referenced by INDOT in this FEIS, but also points out that additional unknown contaminated properties may be present along any of the potential alternatives. Once the final corridor is chosen, the IDEM OLQ will work with INDOT to further identify cleanup needs at the potentially impacted facilities and will look for other potential contamination locations. None of the known sites listed along the Preferred Alternative 3C are anticipated to cause major problems if site remediation is required. In addition, OLQ will help INDOT assess conditions for sites within the two-mile wide study band of the chosen corridor.

Avoidance of hazardous waste sites by INDOT for proposed construction projects is handled on a case-by-case basis. Just because a site is contaminated does not necessarily mean that it must be missed. Economic considerations are often the guiding principle for whether a contaminated site “must be missed.” INDOT has in the past, and continues to remediate sites such as LUSTs and mildly contaminated Brownfield sites, as long as groundwater contamination is not involved. However, INDOT avoids sites involving significant cleanup costs such as RCRA and CERCLA sites. Likewise, if possible, INDOT avoids the functioning elements of wastewater treatment plants.

Alternatives 1-5 will not impact any IDEM recorded Active Landfills, Abandoned/Inactive Landfills/Open Dumps, Active Permitted Solid Waste sites, Industrial Waste sites, Commissioner’s State List Cleanup sites, Voluntary Remediation sites, EPA recorded CERCLA sites, or TRI sites. The results of this analysis show that Alternative 1 may have the fewest number of hazardous waste sites. These results also show that Alternative 5 may have the greatest number of hazardous waste sites. The No Build Alternative will have no impacts on hazardous waste sites.

Preferred Alternative 3C has the potential to impact seven UST sites, six LUST sites and three RCRA sites. The three RCRA sites that could be impacted by Preferred Alternative 3C are identified as Morris Machine Company, Onkins Amoco Oil, and Weliever Olds Pontiac GMC. There are no CERCLA sites that will be directly impacted by Preferred Alternative 3C. However, there are four CERCLA sites located within one mile of Preferred Alternative 3C. The four CERCLA sites within one mile of Preferred Alternative 3C are identified as Indiana Woodtreating, Lemon Lane Landfill, Bennett Stone Quarry, and Neal’s Landfill. Close coordination with the USEPA and/or IDEM in areas near these CERCLA sites will be required to avoid any further disturbance of these sites.

Because the exact location of Preferred Alternative 3C in Tier 1 is not known, the exact impacts to RCRA, UST, and LUST sites will not be identified until the Tier 2 NEPA studies define specific alignments. If impacts to RCRA, UST, and/or LUST sites are identified in the Tier 2 NEPA studies, appropriate coordination with EPA and/or IDEM will be required.



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