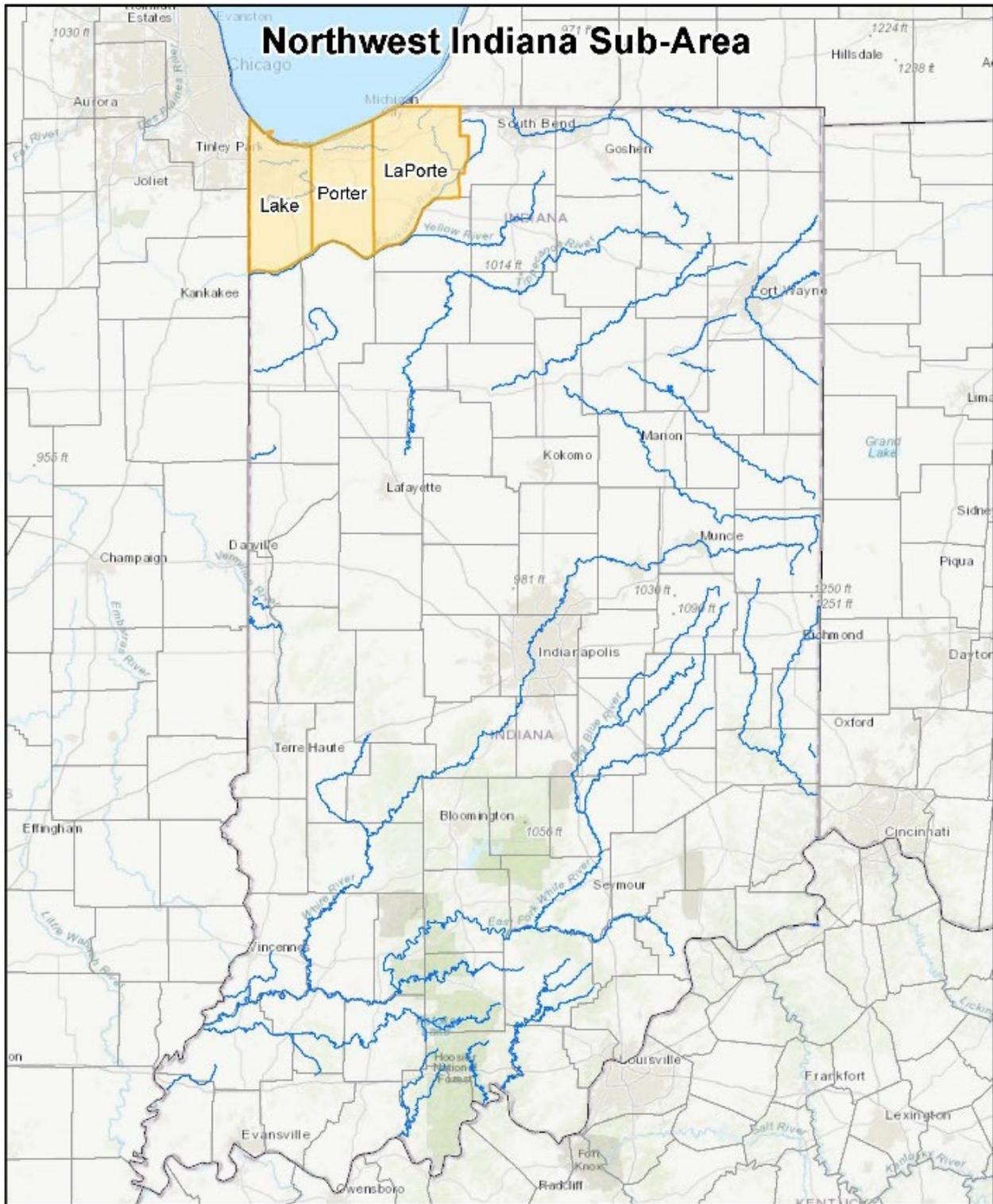




EPA REGION 5 INLAND ZONE
SUB-AREA CONTINGENCY PLAN



Inland Zone Sub-Area Contingency Plan (SACP) for Northwest Indiana 2022



Letter of Review

Northwest Indiana Inland Zone Sub-Area Contingency Plan (SACP)

This SACP has been prepared by the United States Environmental Protection Agency (EPA) under the direction of the Federal On-Scene Coordinator (OSC) with collaboration from stakeholders of the Northwest Indiana Inland Zone Sub-Area.

This SACP has been prepared for the use of all agencies engaged in responding to environmental emergencies and contains useful tools for responders, providing practical and accessible information about who and what they need to know for an effective response

This SACP is not intended to serve as a prescriptive plan for response but as a mechanism to ensure responders have access to essential sub-area specific information and to promote interagency coordination for an effective response.

This SACP includes links to documents and information on non-EPA sites. Links to non-EPA sites and documents do not imply any official EPA endorsement of, or responsibility for, the opinions, ideas, data or products presented at those locations, or guarantee the validity of the information provided.

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Superfund & Emergency Management Division
Region 5

Record of Change

Change Number	SACP Section	Description of Change	Approval (Initials)	Date

Regulatory Crosswalk

Clean Water Act (CWA) Section 311

Citation	Regulation	SACP
311.(j)(4)(C)(i)	when implemented in conjunction with the National Contingency Plan, be adequate to remove a worst case discharge, and to mitigate or prevent a substantial threat of such a discharge, from a vessel, offshore facility, or onshore facility operating in or near the area;	Section 4.3, Section 5, Appendices B, E, and F
311.(j)(4)(C)(ii)	describe the area covered by the plan, including the areas of special economic or environmental importance that might be damaged by a discharge;	Section 1.2 and Section 2
311.(j)(4)(C)(iii)	describe in detail the responsibilities of an owner or operator and of Federal, State, and local agencies in removing a discharge, and in mitigating or preventing a substantial threat of a discharge;	Section 1, Section 5, Appendices B and E
311.(j)(4)(C)(iv)	list the equipment (including firefighting equipment), dispersants or other mitigating substances and devices, and personnel available to an owner or operator and Federal, State, and local agencies, to ensure an effective and immediate removal of a discharge, and to ensure mitigation or prevention of a substantial threat of a discharge;	Section 3.3, Appendix F
311.(j)(4)(C)(v)	compile a list of local scientists, both inside and outside Federal Government service, with expertise in the environmental effects of spills of the types of oil typically transported in the area, who may be contacted to provide information or, where appropriate, participate in meetings of the scientific support team convened in response to a spill, and describe the procedures to be followed for obtaining an expedited decision regarding the use of dispersants;	Section 5.5
311.(j)(4)(C)(vi)	describe in detail how the plan is integrated into other Area Contingency Plans and vessel, offshore facility, and onshore facility response plans approved under this subsection, and into operating procedures of the National Response Unit;	Section 2.2
311.(j)(4)(C)(vii)	include any other information the President requires; and	NA
311.(j)(4)(C)(viii)	be updated periodically by the Area Committee.	Section 2.3

National Contingency Plan (NCP) Part 300

Citation	Regulation	Location
300.210(c)(3)(i)	A description of the area covered by the plan, including the areas of special economic or environmental importance that might be damaged by a discharge;	Section 2
300.210(c)(3)(ii)	A description in detail of the responsibilities of an owner or operator and of federal, state, and local agencies in removing a discharge, and in mitigating or preventing a substantial threat of a discharge;	Section 1, Section 5, Appendices B, E
300.210(c)(3)(iii)	A list of equipment (including firefighting equipment), dispersants, or other mitigating substances and devices, and personnel available to an owner or operator and federal, state, and local agencies, to ensure an effective and immediate removal of a discharge, and to ensure mitigation or prevention of a substantial threat of a discharge (this may be provided in an appendix or by reference to other relevant emergency plans (e.g., state or LEPC plans), which may include such equipment lists);	Section 3.3, Appendix F
300.210(c)(3)(iv)	A description of procedures to be followed for obtaining an expedited decision regarding the use of dispersants;	See Region 5's RCP/ACP
300.210(c)(3)(v)	A detailed description of how the plan is integrated into other ACPs and tank vessel, offshore facility, and onshore facility response plans approved by the President, and into operating procedures of the NSFCC*	Section 2.2 *NSFCC NA to EPA

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NORTHWEST INDIANA INLAND ZONE SUB-AREA CONTINGENCY PLAN

Section 1 Introduction

This inland zone sub-area contingency plan (SACP) describes the strategy for a coordinated federal, tribal, state, and local response to a discharge or substantial threat of discharge of oil, or a release or substantial threat of release of hazardous substance(s) within the boundaries of the Northwest Indiana Inland Zone Sub-Area described in Section 1.2 and Section 2 below.

This SACP been developed to expand upon the Environmental Protection Agency's (EPA) Region 5 and United States Coast Guard's (USCG) District 9 joint Regional Contingency Plan and Area Contingency Plan ("Region 5's RCP/ACP") by providing more detailed information for response actions related to a specific geographic area. The Area Committee (AC) responsible for Region 5's RCP/ACP has incorporated by reference and appended this SACP to Region 5's RCP/ACP.

This SACP includes:

1. A description of the area covered by the plan, including areas of special economic or environmental importance that might be damaged by a discharge. (*See Section 1.2 and 2 below and Appendices B, C, and E attached*);
2. An expansion of the description contained in Region 5's RCP/ACP of the responsibilities of owners, operators and federal, state and local agencies in removing a discharge and descriptions on how to mitigate or prevent a substantial threat of discharge to ensure optimum communication and coordination during a response (*See Section 5.2 below and Appendix B attached*);
3. An expansion of the list of resources (personnel, equipment and supplies) provided in Region 5's RCP/ACP available for response to discharges (*See Section 3.3 below and Appendices B and E*)
4. A list of local scientists, both inside and outside federal government service, with expertise in the environmental effects of spills of the types of oil typically transported in the area. This list may be used to provide information or participate in meetings of the scientific support team. (*See Section 3.5 below*); and
5. An expansion of the description of how the plan is integrated with other plans detailed in Region 5's RCP/ACP (*See Section 2.2 below*).
6. A Communications Plan describing protocol to facilitate the exchange of information between federal, tribal, state, and local agencies, private organizations, and the public during a response to a discharge of oil or a release hazardous substance(s) (*See Appendix J*).

1.1 Legal Authority

The Oil Pollution Act of 1990 (OPA) amendment to the Clean Water Act (CWA) established planning entities and requirements for the National Response System to specifically address worst case discharges (WCD) of oil during preparedness and response. An ACP is statutorily required for the active interaction of response personnel before, during, and after spills. Within the ACP boundaries, sub-areas may be defined where there are unique circumstances that may require tailored response strategies.

1.2 Response Jurisdiction

Executive Order 12777 establishes the EPA as the lead federal agency when a release or threatened release, or discharge or threatened discharge, occurs in the inland zone, and the USCG the lead when a release or threatened release, or discharge or threatened discharge, occurs in the coastal zone, unless otherwise agreed upon by the EPA and the USCG representatives (inland and coastal zones are defined in the National Contingency Plan (NCP)).

Region 5's RCP/ACP sets forth the response jurisdiction for the entire RCP/ACP geographic area. To view an interactive map of response jurisdiction boundaries, visit rrt5.org and choose the "[Interactive Mapping](#)" tab. Jurisdictional boundaries are available as a GIS layer within the mapping viewers.

The RCP portion of Region 5's RCP/ACP covers both USCG and EPA jurisdiction, while the ACP portion covers only EPA jurisdiction. USCG has created ACPs within their jurisdiction which are separate from Region 5's RCP/ACP. For more information on USCG ACPs and how they relate to this SACP see Section 2.2.4 below.

This SACP covers EPA's Inland Zone jurisdiction for Northwest Indiana. The coastal zone sub-area plan for USCG's Coastal Zone jurisdiction can be found on rrt5.org under the "Sub-Areas" tab. The EPA and USCG jurisdictional areas for Lake, LaPorte and Porter Counties are depicted graphically in Appendix A of this SACP along with written descriptions taken out of the EPA/USCG RCP/ACPs.

1.3 Scope

EPA Region 5 has selected inland zone sub-areas within the Region to augment planning efforts at the local level. The Northwest Indiana SACP has been selected as such an area and its geographic extent includes Lake, Laporte and Porter Counties. Figures of the Counties can be found on page III and in Appendix A.

The plan applies to and is in effect for:

- (1) Discharges of oil into or upon the navigable waters, on the adjoining shorelines to the navigable waters, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (Section 311(b)(3) of the Clean Water Act); and
- (2) Releases into the environment of hazardous substances and pollutants or contaminants that may present an imminent and substantial danger to public health or welfare in the Sub-Area.

This SACP shall be used as a framework for response mechanisms and a tool to evaluate shortfalls and weakness in the response structure before an incident.

Section 2 Coverage and Content

This sub-area plan applies to the Northwest Indiana (NWI) Sub-Area, which is depicted below as well as in Appendix A. The NWI Sub-Area consists of Lake, Porter and LaPorte Counties.

2.1 Areas of Special Economic Interest and Environmental Importance

Mitigation and cleanup of spills requires knowledge of resources at risk. Because many source locations and pollution paths are possible, strict prioritization of protection strategies is difficult. However, identification of resources potentially at risk before an incident and discussion of their relative importance by the appropriate trustees are useful processes, both technically and from communications and human standpoints.

The following subsections highlight areas of special economic interest and environmental importance in the Northwest Indiana Planning Area. A broad summary of economic interest and environmental importance can be found in the County Fact Sheets (Appendix C). A detailed overview of prominent economic interest and environmental importance for user selected areas can be viewed using Region 5 interactive mapping projects through the Inland Sensitivity Atlas and the Indiana Stakeholder Viewer. The Atlas and Viewer require the user to create a free account through response.ega.gov. Once access is granted the user can view certain critical infrastructure and environmentally sensitive area. Additional features include sources of discharge and hazardous substances that are discussed in Section 4.0.

2.1.1 Critical Infrastructure

Utilities (such as drinking water intakes, water and wastewater treatment plants, and major electrical power plants and transmission lines), transportation infrastructure locations, corridors and facilities, and other infrastructure elements may require specific protection measures, special notification or access protocols, or have other unique attributes that may affect a response. Other examples may be recreational or commercially-significant areas.

Critical infrastructure can be identified using online tools available on rrt5.org under “[Interactive Mapping](#)”. The County Fact Sheets located in Appendix C and Incident Action Plan (IAP) found in Appendix B include information on critical infrastructure for the NWI Inland Zone Sub-Area. A subset of critical infrastructure taken from these sources is tabulated below to provide a summary of locations that may experience significant impacts or require a potentially large-scale response in the event of a discharge of oil or release of hazardous substances.

Subset of Critical Infrastructure

Infrastructure	Unit	Lake	LaPorte	Porter
Petroleum Pipelines	Miles	389.30	158.21	119.31
Railroad	Miles	331.31	195.13	131.85
Bulk Storage Facility	#	13	0	3
Water Intakes	#	28	4	0
Power Plants	#	12	2	5

Source: [Indiana Government Viewer](#) (3/2021)

Indiana is known as the Crossroads of the Nation, with NWI traversed by several major interstates, Class I Railroads, Commuter Rail (Southshore Line & Amtrak), Oil & Gas Pipelines, and a major international shipping port, the Port of Indiana Burns Harbor. This infrastructure serves

several functions within the NWI Sub-Area that would be potentially impacted during a discharge of oil or release of hazardous substances.

Major roadway transportation routes within the NWI Sub-Area include Interstate Highways 65, 80, 90 (Indiana Toll Road) and 94 (Borman) and State Road 912 (Cline Avenue). The Indiana Department of Transportation (IDOT) provides traffic data for the state's highway system through their online Traffic Count Database System (TCDS). From 2015 to 2020, the annual average daily traffic (AADT) for the NWI Sub-Area was approximately 78,000. Lake County has the highest AADT during this period at approximately 159,000. AADT is the total volume of vehicle traffic of a highway for a year divided by 365 days. IDOT's TCDS also provides the percentage of AADT that is attributed to business and commercial vehicles (Federal Highway Administration [FHWA] Class 4 and above). Business and commercial vehicles included in the FHWA Class 4 and above are single unit trucks, multiple unit trucks, long tandem trucks (greater than 100 feet in length). From 2015 to 2020, business and commercial vehicles made up 12% of the AADT across the NWI Sub-Area. Lake County again has the highest percentage of business and commercial vehicles during this period at 15% of the AADT.

The Port of Indiana Burns Harbor is located on the shore of Lake Michigan near the intersection of U.S. Highway 12 and Indiana State Road 249. The port is connected to several modes of transportation, including Class I railroads and direct highway access to I-80, I-90, I-94, I-65, and I-57. The majority of goods passing through the port are related to the steel industry prevalent within the area. The port can also handle the loading and storage of a variety of other commodities such as grain, chemicals, fertilizers, limestone, coal, coke, salt, and heavy-lift cargo. The Port of Indiana Burns Harbor handles international ships via the St. Lawrence Seaway which connects the Great Lakes to the Atlantic Ocean. According to the USCG's 2018 Sector Lake Michigan Area Contingency Plan, foreign flagged tank ships with oil storage capacities as large as 149,000 barrels (bbls) (6,258,000 gallons) visit Burns Harbor. The port supports Great Lakes bulk carriers up to 1,000 feet in length and ocean vessels capable of transiting the locks on the Great Lakes/St. Lawrence Seaway system.

Manufacturing is a large part of the economy in Northwest Indiana and is supported by steel mills, oil refineries, and FRP Facilities. Northwest Indiana is one of the state's most heavily populated and industrialized areas. The manufacturing industry is further discussed in Section 2.1.4 Economic Interest Locations.

Lake Michigan provides drinking water to people in Indiana in communities surrounding Lake Michigan. Over half a million people are served by Public Water Supply systems that receive water from Lake Michigan. Communities located further inland typically receive water from rivers, lakes, and underlying aquifers. Discharges of oil and releases of hazardous substances can threaten both surface water and groundwater sources.

2.1.2 Environmentally Sensitive Areas

Region 5's RCP/ACP explains that Environmentally and Economically Sensitive Areas are identified in the Inland Sensitivity Atlas (ISA), a set of Geographic Information System (GIS) products intended to provide contingency planners and spill responders in Region 5 with the most accurate and relevant information possible for spill preparedness and response.

While Region 5's RCP/ACP does include information on environmentally sensitive areas, this plan attempts to identify those specific to this defined sub-area.

To the best of EPA’s knowledge, these environmentally sensitive areas and endangered species are provided in County Fact Sheets (found in Appendix C), Habitat and Species Fact Sheets (found in Appendix D), and guidance on how responders should incorporate the needs of these areas into response strategies are provided in the IAP found in Appendix B.

The appendices generally contain broad information on sensitive species such as the area (e.g. 73,256.72 acres) and the species (e.g. aquatic/riparian birds). A list of federally threatened and endangered species along with the county and habitat those species inhabit has been compiled using the information provided in the appendices. The exact location of these species is not publicly available to prevent potential poaching or harming of these species. If a release affects a habitat in a county listed in the table below the responder is encouraged to contact USFWS for a detailed assessment.

Federally listed threatened and endangered species found in NWI Sub-Area

Species	Federal Status	Counties	Habitat
Indiana Bat (<i>Myotis sodalis</i>)	Endangered	Lake, LaPorte, Porter	Hibernation occurs in caves and mines, with swarming in surrounding wooded areas. Summer roosting and foraging habitat occurs in wooded stream corridors and in bottomland and upland forests and woods.
Northern long-eared bat (<i>Myotis septentrionalis</i>)	Threatened	Lake, LaPorte, Porter	Hibernates in caves and mines. Swarms in surrounding wooded areas in autumn. Roosts and forages in upland forests and woods.
Karner blue butterfly (<i>Lycaeides melissa samuelis</i>)	Endangered	Lake, Porter	Pine barrens and oak savannas on sandy soils and containing wild lupines (<i>Lupinus perennis</i>), the only known food plant of larvae.
Piping plover (<i>Charadrius melodus</i>)	Endangered	Lake, LaPorte	Sandy beaches, bare alluvial, and dredge spoil islands along Lake Michigan.
Rufa red knot (<i>Calidris canutus rufa</i>)	Threatened	Lake	Sandy beaches, bare alluvial, dredge spoil islands, and open bay-fronts along Lake Michigan.
Rusty patched bumble bee (<i>Bombus affinis</i>)	Endangered	Lake	Prairies, woodlands, marshes, agricultural landscapes, and residential parks and gardens.
Eastern Massasauga (<i>Sistrurus catenatus</i>)	Threatened	LaPorte, Porter	Wetlands and adjacent uplands
Pitcher's thistle (<i>Cirsium pitcheri</i>)	Threatened	Lake, Porter	Lakeshores; stabilized dunes and blowout areas; Found on open sand dunes adjacent to Lake Michigan.
Mitchell's satyr butterfly (<i>Neonympha mitchellii</i>)	Endangered	LaPorte	Fens
Mead’s milkweed (<i>Asclepias meadii</i>)	Threatened	Lake	Prairies

Source: [Indiana Government Viewer](#) (3/2021)

To provide additional information to planners and responders EPA contacted the United States Fish and Wildlife Service (USFWS) for their input on environmentally sensitive areas and species

within the NWI Sub-Area. The USFWS identified turtles, egrets, and herons as species that could experience significant impacts and may require specialized response strategies during a discharge of oil or release of hazardous substances within the sub-area. While there are not existing Species Fact Sheets for these species, information on appropriate spill response strategies is available by reaching out to USFWS.

According to the Northwest Indiana Regional Planning Commission (NIRPC), the Northwest Indiana Sub Area contains important diverse areas of rare, endangered, and threatened species and habitat:

1. Grand Calumet Area of Concern (AOC): Portions of Gary, Hammond, East Chicago, and Whiting in Northern Lake County. It covers the Grand Calumet River, Marquette Lagoons, Indiana Harbor Ship Canal, Wolf Lake and Nearshore Lake Michigan. This area is highly industrialized and an important economic zone. Sediment caps have been installed in areas of the Grand Calumet River. Response strategies that may damage sediment caps should be avoided in these areas.
2. Indiana Dunes in Lake, Porter, and LaPorte Counties: This ecosystem starts at Marquette Park in Gary, Indiana and extends to the Michigan state line in Michigan City. The area contains Indiana Dunes State Park and Indiana Dunes National Park.
3. Moraine Forest in Lake, Porter, and LaPorte Counties: This region extends from southwest Valparaiso, Indiana and extends to the Michigan state line. Included in this region is Sunset Hill County Park, Moraine Natural Preserve, and Moraine Wildlife Rehabilitation Center, Red Mill County Park and Ambler Flatwood Nature Preserve.
4. Hobart Marsh and Deep River in Lake County: 750 acres of permanently protected land including Lake George in Hobart, Indiana.
5. Founder and Cedar Creek Watersheds in Lake County: This includes tracks of woodlands including Lemon Lake County Park, Cedar Lake and Marsh, and Lake Dalecarlia.
6. Kingsbury Fish and Wildlife Area in LaPorte County: 7,280 acres of grassland, marsh, shrub/scrub, and farm fields.
7. Kankakee Marsh – Grand Kankakee County Park and Kankakee Fish and Wildlife Refuge in Lake and Porter County.
8. Little Calumet River in Lake and Porter County

The 2001 Inter-agency Memorandum of Agreement (MOU) should be followed in planning, responding, and providing post-response follow-up to an oil discharge with listed species or critical habitats. This MOU signed by USCG, EPA, the Department of the Interior (DOI) Office of Environmental Policy and Compliance, USFWS, and the National Oceanic and Atmospheric Administration's (NOAA's) - National Marine Fisheries Service (NMFS) and National Ocean Service (NOS) describes response activities under the Federal Water Pollution Control Act's National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act. Additional details on the MOU can be found online in the [Federal Register](#).

2.1.3 Culturally Sensitive Areas

While Region 5's RCP/ACP includes information on culturally sensitive areas, this plan attempts to identify historic landmarks, archeological sites, tribal lands, and other features that may require

special protective measures or interaction with trustees or tribal authorities specific to the Northwest Indiana Inland Zone Sub-Area.

To the best of EPA’s knowledge, these culturally sensitive areas are provided in County Fact Sheets found in Appendix C and guidance on how responders should incorporate special protective measures or interaction with trustees or tribal authorities are provided in the IAP found in Appendix B.

Historic places determined to be of significance on a national, state, and/or local level are listed in the National Register of Historic Places. States, tribes, and other federal agencies submit nominations to the National Park Service (NPS) for listing in the National Register. There are currently 167 sites within the NWI Sub-Area listed on the National Register of Historic Places. National Historic Landmarks are a subset of the National Register of Historic Places that are considered significant at a national level. One National Historic Landmark is present in the NWI Sub-Area, the Joseph Bailly Homestead and Cemetery in Porter County.

The Department of Natural Resources’ (DNR) Indiana Division of Historic Preservation and Archaeology (DHPA) is Indiana’s official repository of sites determined to be significant to Indiana’s heritage. The DHPA is the staff of the State Historic Preservation Office (SHPO) and administers both the National Register and State Register of Historic Places in Indiana in their on-line State Historic Architectural and Archaeological Research Database and Structures Map (SHAARD) database at <https://secure.in.gov/apps/dnr/shaard/welcome.html>.

The SHAARD database includes buildings, sites, districts, structures, and objects that are significant in national, state or local history. In addition, both registers include resources related to architecture, archaeology, engineering, or culture. The quantity of places within the NWI Sub-Area are too numerous and widespread to list and therefore a tabulated quantity is provided below to provide situational awareness.

Culturally Sensitive Areas in NWI Sub-Area

Designation	Lake	LaPorte	Porter
National or State Historic Places ¹	90	39	38
National Historic Landmarks ²	0	0	1

¹ Source: <https://secure.in.gov/apps/dnr/shaard/welcome.html> (1/2021)

² Source: <https://www.nps.gov/subjects/nationalhistoriclandmarks/list-of-nhls-by-state.htm> (2/2021)

Archaeological site locations and information is restricted from public access. For planning purposes if a discharge or spill occurs in an area suspected to be an archaeological site or an archaeological site may be impacted by a discharge or spill, the SHPO should be notified.

2.1.4 Economic Interest Locations

The economy of the NWI Sub-Area is largely supported by its natural resources and transportation infrastructure. Manufacturing is the region’s largest economic industry, and steel mills and oil refineries are especially prominent. Indiana continues to be a top steel manufacturer nation-wide since the 1970s, accounting for approximately one quarter of all steel manufacturing in the United States.

Land and water-based transportation infrastructure are an integral aspect of the manufacturing economy of the NWI Sub-Area. This infrastructure includes the Indiana Toll Road I-90, Borman Expressway I-80/I-94 and I-65, Class I Railroads, and the deep-water Port of Indiana – Burns Harbor. Annually around 100 ships, 400 barges, 300,000 trucks, 12,000 railcars, and 200 laker vessels go through the Port of Indiana – Burns Harbor carrying a variety of commodities. Discharges of oil and releases of hazardous substances could impact vital transportation infrastructure and cause harmful disruptions to the sub-area’s economy.

Natural resources also form the foundation of recreational-based industries important to the NWI Sub-Area economy. There are 194 managed lands in Lake County, 45 in LaPorte County, and 48 in Porter County. Lake County credits their county parks as one of their most important county resources, which includes the 1,362-acre Deep River County Park and historical areas, Gibson Woods Nature Preserve’s unique and globally rare dune and swale ecosystem, and the 1,952-acre Grand Kankakee Marsh County Park located on the historic Kankakee River. In 2020 Indiana Dunes National Park was the most popular tourist destination in the State of Indiana. Prior to Indiana Dunes becoming a National Park in 2019, dunes tourism produced an economic impact in Porter County of \$476.4 million, which is anticipated to increase dramatically. Discharges of oil and releases of hazardous substances could potentially damage natural resources, causing harmful disruptions to the sub-area’s economy.

2.1.5 Natural Disaster Impact Areas

Locations that may be susceptible to natural disaster impact (e.g., flooding, straight line winds, tornados, etc.) in the Northwest Indiana Inland Zone Sub-Area have been considered.

References or links to available related disaster response plans at the federal, state, and local levels are provided in Appendix E.

Indiana Toll Road I-90, Borman Expressway I-80/I-94 and I-65 are Interstates with high truck volumes. Weather related accidents and hazmat incidents can occur due to heavy rain, freezing rain, snow, fog, and other weather-related conditions.

Unique to sub-areas near the Great Lakes, lake-effect snowfall can produce large amount of snow in short periods of time. Prevailing northwest winter winds pass over the warmer waters of Lake Michigan producing localized and intense snowfall.

An assessment of natural disasters for counties in the Northwest Indiana Planning area was performed by reviewing FEMA disaster declarations since 2000. The President may authorize disaster declarations through the Stafford Act to provide supplemental federal assistance for emergency services (Emergency Declarations) or a severe natural event (Major Disaster Declarations). Nine Disaster Declarations and four Emergency Declaration have been declared in the NWI Sub-Area. Disaster declarations have most commonly resulted from severe storms and flooding. These declarations indicate severe weather events can and do occur in the NWI Sub-Area at irregular frequencies.

2000 to Present FEMA Disaster Declarations

County	Dates	Type	Declaration	Declaration Type
Lake, Porter, LaPorte	January 31, 2020 – and continuing	Biological	DR-4515-IN	Disaster Declaration
Lake, Porter, LaPorte	January 20, 2020 – and continuing	Biological	EM-3456-IN	Emergency Declaration

County	Dates	Type	Declaration	Declaration Type
Lake, Porter, LaPorte	February 14, 2018 - March 4, 2018	Severe Storms and Flooding	DR-4363-IN	Disaster Declaration
Lake	January 5, 2014 - January 9, 2014	Severe Winter Storm and Snowstorm	DR-4173-IN	Disaster Declaration
Lake, LaPorte	March 8, 2009 – March 14, 2009	Severe Storms	DR-1832-IN	Disaster Declaration
Lake, Porter, LaPorte	September 12, 2008 - October 6, 2008	Severe Storms and Flooding	DR-1795-IN	Disaster Declaration
Lake, LaPorte	January 7, 2008 - March 14, 2008	Severe Storms and Flooding	DR-1740-IN	Disaster Declaration
Lake	August 15, 2007 - August 27, 2007	Severe Storms and Flooding	DR-1732-IN	Disaster Declaration
Lake, Porter, LaPorte	February 12, 2007 - February 14, 2007	Snow	EM-3274-IN	Emergency Declaration
Lake	September 12, 2006 - September 14, 2006	Severe Storms and Flooding	DR-1662-IN	Disaster Declaration
Lake, Porter, LaPorte	August 29, 2005 – October 1, 2005	Hurricane	EM-3238-IN	Emergency Declaration
Lake, Porter, LaPorte	January 1, 2005 - February 11, 2005	Severe Winter Storms and Flooding	DR-1573-IN	Disaster Declaration
Lake, Porter, LaPorte	December 11, 2000 – December 31, 2000	Snow	EM-3162-IN	Emergency Declaration

Source: <https://www.fema.gov/disasters/state-tribal-government/> (5/2022)

In 2018, Lake County was among 11 counties in Indiana that were affected by a natural disaster due to Kankakee River flooding which reached levels of 13.8 feet. The flooding was caused by multiple episodes of heavy rain. In late February, heavy rainfall was experienced throughout east central Illinois and northwest Indiana, ranging from four to six and a half inches. While infrequent, severe weather events such as blizzards, severe rainfall, and flooding occur throughout the sub-area.

Other historical weather events of note include the Blizzard of 1978 and an ice and snowstorm in 1998. The Blizzard of 1978 impacted the northern part of NWI Sub-Area, with snowfall recorded as high as 3 feet. In early March of 1998, a snowstorm in Northwest Indiana closed sections of the Borman Expressway I-80/I-94 and I-65, confining motorists inside of their vehicles for over 24 hours. This snowstorm also caused power outages for approximately 135,000 homes and business.

While a tornado has not been recorded in the NWI Sub-Area since 1965, tornados occur more frequently in southern Indiana. According to NOAA's National Weather Service (NWS), a total of 69 tornadoes with 622 related fatalities have been recorded since 1876 for the state of Indiana (https://www.weather.gov/lmk/violent_tornadoes_indiana). In the past ten years, only one tornado has been recorded in Indiana. On March 2, 2012, an F4 tornado touched down in southeast Indiana and resulted in 11 fatalities. This tornado was part of a larger tornado outbreak of more than 70 tornadoes that caused 41 fatalities. The outbreak caused an estimated \$3.5 billion in damages for the entire Southeast United States. While tornados occur less frequently, the potential damage can be substantial.

Future disasters may involve the continued erosion of the Lake Michigan shoreline due to the recent rise in Lake levels. In 2019, various news outlets covered erosion threatening private and public property. Several power plants and water infrastructure that border Lake Michigan could

be affected. Damage to infrastructure such as locks, dams, bridges, and buildings could result from increased shoreline erosion and inundation.

The Great Lakes water levels are monitored, modeled, and forecasted by several federal agencies. The National Oceanic and Atmospheric Administration (NOAA) operates a water level monitoring network of over 50 stations throughout the Great Lakes. A monthly Great Lakes water level forecast is jointly prepared and issued by U.S. Army Corps of Engineers (USACE) and Environment and Climate Change Canada's Great Lakes-St. Lawrence Regulation Office. These resources can be accessed on NOAA's Great Lakes Environmental Research Laboratory's (GLERL) website: <https://www.glerl.noaa.gov/>.

2.2 Identifying and Integrating with Other Plans

In addition to the description provided in Region 5's RCP/ACP, this SACP attempts to identify and define its relationship to other contingency plans that are within, adjacent to, or overlapping the area defined in Section 1.2 and Section 2 of this SACP. References and links to these plans are provided in Appendix E.

2.2.1 Private Sector Response Plans

Private sector response plans related to the Northwest Indiana Inland Zone Sub-Area have been made available to EPA are listed in Appendix E.

2.2.2 Local Response Plans

Many counties and cities in the defined sub-area are required by the State to maintain emergency operations plans that detail area response procedures, agency roles, resources, and training for public response agencies. These include plans developed by the local emergency planning committees (LEPCs) under the Emergency Planning and Community Right-to-Know Act (EPCRA). In accordance with Indiana Code 10-14-3, local jurisdictions are required to develop and keep a current emergency operations plan.

Local response plans, including Lake, LaPorte, and Porter Hazard Mitigation Plans, related to the Northwest Indiana Inland Zone Sub-Area that have been made available to EPA are listed in Appendix E.

2.2.3 State Response/Emergency Management Plan

Region 5's RCP/ACP provides information on state agencies that could be involved in a response. This SACP expands upon the general discussion for state agencies and involvement within the Northwest Indiana Inland Zone Sub-Area.

The Indiana Comprehensive Emergency Management Plan (CEMP) is the comprehensive, all-hazard plan that coordinates the emergency management activities of mitigation, preparedness, response, and recovery within the State of Indiana. The Indiana CEMP is a policy document developed and maintained by the Indiana. The Indiana CEMP coordinates the activities, personnel, and resources of state agencies in mitigating against, preparing for, responding to, and recovering from a variety of natural and technological disasters and emergencies to which the state is vulnerable.

State and/or Emergency Management response plans related to the Northwest Indiana Inland Zone Sub-Area that have been made available to EPA are listed in Appendix E.

2.2.4 United States Coast Guard Plans

The USCG has ACPs within Region 5 that are separate documents which are compatible with and may be used in conjunction with Region 5's RCP/ACP and this SACP for discharges or releases that impact both the inland and coastal zones. The following USCG ACP overlaps, coincides, or is adjacent to the Northwest Indiana Inland Zone Sub-Area: Lake Michigan ACP. This USCG ACP is listed in Appendix E and can also be found on rrt5.org.

2.2.5 Adjacent EPA Inland Zone Sub-Area Plans

The following inland zone sub-areas are adjacent to the Northwest Indiana Inland Zone Sub-Area are listed in Appendix E:

- Greater Chicago Inland Zone Sub-Area
- Southern Lower West Michigan Inland Zone Sub-Area

2.2.6 Tribal Response Plans

Region 5's RCP/ACP provides a general discussion of tribal response. This SACP expands upon the general discussion for tribes located within the Northwest Indiana Inland Zone Sub-Area. These plans can be found in Appendix E, and additional information can also be found in the Tribal Fact Sheets included in Appendix I.

2.2.7 Other Response Plans

Other response plans related to the Northwest Indiana Inland Zone Sub-Area that have been made available to EPA are listed in Appendix E.

The National Park Service (NPS) Spill Response Team has developed a Park Preparation Plan for the Indiana Dunes National Park. The plan provides an initial guide to federal, state, and local responders when an oil discharge or release of hazardous substances impacts or threatens to impact the Indiana Dunes National Park. Information pertaining to this plan can be accessed by contacting the National Parks Service Indiana Dunes contact provided in section 5.5 Response Expertise.

2.3 Review and Revisions

Section 311(j)(4)(C)(viii) of the CWA requires that the Area Committee update the ACP, and subsequently any sub-area plans, periodically. Technological advances, jurisdictional and organizational changes, infrastructure changes, and other factors may lead to a perceived need to modify or update the SACP. This SACP will follow a management and maintenance process to keep the information within as current as possible and to incorporate improvements as necessary.

It has been determined that the Northwest Indiana SACP will be reviewed and updated, as needed, once every three years. Response equipment, notification contacts, sensitive area listings, and worst case discharge scenarios may be updated more frequently. In addition, to limit updates, EPA has asked all outside stakeholders (e.g., local, state, tribal, industry, etc.) to provide their own server space for links to outside plans and documents.

Version control, date stamping, and a table of changes will be utilized for updated documents.

Section 3 Essential Plan Elements

3.1 Figures and Mapping Projects

Figures and mapping tools are central to plan development and utilization. While figures are provided herein and in Appendix A, the use of GIS programs are vital for planning and response. EPA Region 5 utilizes both regional and individual state mapping projects found on the rrt5.org website for planning and response purposes.

During an emergency response, federal and state On-Scene Coordinators (OSCs) can use regional and state mapping projects to gain situational awareness of downstream/downwind vulnerabilities, as well as upstream/upwind potential responsible parties. For contingency planning, the state mapping projects can introduce facilities to the communities which may be impacted during a hazardous substance release and/or petroleum discharge. These state mapping projects can also be used during exercises of facility response plans by providing participants access to response layers such as: endangered/protected species and habitats; sanitary and storm sewer systems; facility discharge and permit discharge points; water supplies; other pollution sources (facilities, oil wells, pipelines, rail lines, etc.); and vulnerable populations (schools, nursing homes, daycare facilities, hospitals, etc.).

The Indiana Mapping Project can be accessed on the rrt5.org website by selecting the “[Interactive Mapping](#)” tab. The “Government Viewer” contains sensitive information that is only available to government agencies while the “Stakeholder Viewer” is available to all appropriate stakeholders upon registration.

3.2 Contacts and Notifications

Contact and notification information and lists are vital to contingency plans. Lists of this type are not intended to supplant existing notification protocols, such as those outlined in Region 5’s RCP/ACP or internal to an agency, company, or organization, but to reinforce and supplement them by adding information specific to inland zone sub-areas.

To the best of EPA’s knowledge, all appropriate contact and notification information and lists for the Northwest Indiana Inland Zone Sub-Area are provided in the IAP found in Appendix B as well as in the County Fact Sheets found in Appendix C.

3.3 Resources

Region 5’s RCP/ACP contains general information on resources (e.g., personnel, equipment and supplies) available for a response. This SACP attempts to expand upon the personnel, equipment, and supplies available for a response in the Northwest Indiana Inland Zone Sub-Area.

General capabilities of agencies that may be involved in a response within the Northwest Indiana Zone Sub-Area are provided in the IAP found in Appendix B. Response resources for agencies (e.g., federal, state, local, tribal, etc.) and facilities (along with their Oil Spill Removal Organization (OSRO)), may also be included in response plans listed in Appendix E. Tribal resources that may be available for a response are included in Tribal Fact Sheets in Appendix I.

Response equipment and capabilities for EPA Region 5 are detailed in the Region 5 Equipment Catalog and Response Capabilities Catalog found in Appendix F. In addition, outside response resources that may be available are listed in Appendix F.

3.4 Mutual Aid Agreements

Mutual aid agreements may exist at the federal, state, and local levels. While formal federal and state mutual aid agreements are contained in Region 5's RCP/ACP, local mutual aid agreements and informal aid agreements are not.

Mutual aid agreements, both formal and informal, may be available for use or assistance in the event of a discharge or release in the Northwest Indiana Inland Zone Sub-Area. These may include co-ops, facility owned response equipment, or other equipment or resource aid in an area. Area-specific considerations for the availability of assistance during a discharge or release have been assessed and are discussed below. It is important to note that these agreements should not be relied upon in the event of a discharge or release (unless a formal agreement is in place) and is based on availability and ability to assist.

The Greater Chicago Inland Zone Sub-Area, adjacent to the Northwest Indiana sub-area, has several Mutual Aid Box Alarm System (MABAS) divisions that provide Hazardous Material (HazMat) team related mutual aid for city and county fire departments (<http://www.mabas-il.org>). Resources from the MABAS divisions may potentially be available during releases of oil or discharges of hazardous substances.

Section 4 Hazard Analysis

Potential major sources of discharges of oil and releases of hazardous substances within the defined sub-area, such as fixed facilities or transportation routes with high volumes of oil or hazardous substances in transit, have been considered.

These include:

- Aboveground Storage Tanks (AST) facilities, including those that require Facility Response Plans (FRPs)
- Pipelines
- Railroads
- Highways
- Hazardous Materials (Hazmat) facilities

For each potential source identified an effort has been made to include or reference the following information in this plan:

- Source location
- Operator, with contact and access information
- Types and quantities of materials that may be discharged from a vessel, onshore facility, or offshore facility operating in or near the defined area
- Special considerations for responders, including hazards
- Response capabilities of the operator

To the best of EPA's knowledge, potential sources of discharges and releases in the Northwest Indiana Inland Zone Sub-Area are provided in the County Fact Sheets found in Appendix C and within industry response plans listed in Appendix E. Potential major sources of discharge are provided in Section 4.3 below.

4.1 Historical Discharges

A review of historical discharges is extremely beneficial as it allows for consideration of reoccurrence and lessons learned from an actual response. A review of National Response Center (NRC) reports was conducted for counties in the Northwest Indiana Inland Zone Sub-Area from 2000 to 2019. The results of this review are provided in the table below. The NRC is the designated federal point of contact for reporting all oil, chemical, radiological, biological and etiological discharges into the environment, anywhere in the United States and its territories. In some cases, a release of a certain quantity of “extremely hazardous substances” needs to be reported to the NRC by law. Discharges of oil are also encouraged and required by law in some cases. Due to redundant reports, erroneous coding, and other minor issues with the NRC database the following numbers are considered approximate.

2010 to 2019 National Response Center Reporting in Northwest Indiana

Material Type	La Porte	Lake	Porter	Total
Hazardous Substances ¹	28	219	82	329
Oil ²	85	381	141	607
Other ³	29	111	62	202
Radiological	0	2	0	2
Total	142	713	285	1140

Source: <https://webeoc.epa.gov/> (8/2020); removed duplicates, non-responses, and drills

1 – Includes mostly EPCRA Section 302 and CERCLA hazardous substances

2 – Includes any oil (i.e. gasoline, diesel, unknown, mineral, etc.)

3 – Ranges from food waste, coal dust, heavy metal waste, unknown material, wastewater, etc.

4 – Anything listed as “unknown”, may include oil and hazardous material

These data provided in the above table indicate the most common release reported to the NRC is oil followed by hazardous substances. Historical discharges of note are described below.

1955 Standard Oil Refinery Release

From August 27 to September 4, 1995, the Standard Oil Refinery located in Whiting, Indiana released approximately 1.25 million barrels of crude oil and refined products. An explosion occurred in a processing tank that ignited fires that burned 47 acres and destroyed 67 storage tanks over eight days. Burning oil and naphtha flowed from the refinery into Whiting streets and sewers, and the Indiana Harbor Ship Canal. Nearly 1,500 Whiting residents in neighborhoods bordering the refinery were evacuated. The explosion ultimately damaged around 200 houses, displacing some 700 residents.

2014 BP Whiting Oil Release

On March 24, 2014, the BP refinery located in Whiting, Indiana released up to 39 barrels or 1,638 gallons of crude oil into Lake Michigan. BP believes an upset at a crude distillation unit may have sent crude oil into the refinery's cooling water outfall and then into the lake. The U.S. Coast Guard unit identified that an area of approximately 5,000 square feet were covered in crude oil, including 2,700 feet of shoreline. The closest drinking water intake was not impacted and was located about 8 miles northwest of the spill. Spill assessment and cleanup were coordinated by EPA, U.S. Coast Guard, the Indiana Department of Environmental Management, and BP.

2017 U. S. Steel Hexavalent Chromium Release

On April 11-12, 2017, the U. S. Steel Corporation Gary Works Midwest Plant located in Portage, Indiana, released approximately 298 pounds of hexavalent chromium into the Burns Waterway approximately 100 yards from Lake Michigan. The release occurred due to a failed expansion joint on a wastewater pipe. In response to the release, the Indiana American Water utility stopped taking water from an intake adjacent to Burns Waterway in Lake Michigan as a precaution. The National Parks Service closed all beaches within three miles of the spill including Cowles Bog Beach, West Beach, and the Portage Lakefront and Riverwalk beach.

2019 ArcelorMittal Cyanide Release

On August 11, 2019, the ArcelorMittal steel factory located in Portage, Indiana released concentrated cyanide and ammonia into the East Arm of the Little Calumet River approximately 3 miles upstream of Lake Michigan. The release occurred due to a blast furnace failure. More than 570 pounds of total cyanide and 5,200 pounds of ammonia were released during the spill. The public was not notified for several days after the release. The spill killed approximately 3,000 fish. In response to the spill, the Little Calumet River was closed between Highway 149 and Highway 249 and beaches at Indiana Dunes National Park, Ogden Dunes, and the Portage Lakefront and Riverwalk were closed. Additionally, the National Park Service also warned against eating fish caught in the area.

4.2 Most Probable Discharge Scenarios

A review of most probable discharge scenarios is also beneficial as it allows for consideration of resource availability and any logistical challenges that may arise in response to a discharge in the Northwest Indiana Inland Zone Sub-Area.

2010 to 2019 NRC Reporting Incident Cause by Substance¹

Incident Cause	Hazardous Substances ¹	Oil ²	Other ³	Radiological ⁴	Total
Criminal Intent	5	0	1	0	6
Derailment	4	0	6	0	10
Dumping	21	30	12	0	63
Equipment Failure	108	130	36	0	274
Explosion	0	2	2	0	4
Flood	2	0	0	0	2
Natural Phenomenon	11	15	2	0	28
Operator Error	31	47	6	0	84
Other	44	70	43	0	157
Over Pressuring	1	0	0	0	1
Suicide	1	0	0	0	1
Suspicious Activity	1	0	2	0	3
Transport Accident	5	5	6	0	16
Trespasser	0	0	2	0	2
Unknown	95	289	84	2	470
Vessel Sinking	0	19	0	0	19
Total	329	607	202	2	1140

Source: <https://webeoc.epa.gov/> (8/2020); removed duplicates, non-responses, and drills

1 – Includes mostly EPCRA Section 302 and CERCLA hazardous substances

2 – Includes any oil (i.e. gasoline, diesel, unknown, mineral, etc.)

3 – Ranges from food waste, coal dust, heavy metal waste, unknown material, wastewater, etc.

4 – Anything listed as “unknown”, may include oil and hazardous material

An assessment of most probable discharge scenarios for counties in the Northwest Indiana Planning area was performed by reviewing NRC reporting incidents from 2000 to 2019. The most common substance released was oil followed by hazardous substances. The most common incident causes reported were equipment failure and unknown. An unknown incident cause was reported when a release was not associated with a specific generator, and thus the cause was not identified.

4.3 Worst Case Discharge

When implemented in conjunction with the NCP, the ACP must be adequate to remove a WCD, and to mitigate or prevent a substantial threat of such discharge from a vessel, offshore facility, or onshore facility operating in or near the area. A WCD means: 1) in the case of a vessel, a discharge in adverse weather conditions of its entire cargo, and 2) in the case of an offshore facility or onshore facility, the largest foreseeable discharge in adverse weather conditions.

For this SACP, WCDs in the Northwest Indiana Inland Zone Sub-Area for on-shore facilities are identified in the FRPs approved by EPA which are listed in Appendix E. For facilities that submit response plans to the United States Department of Transportation (DOT) for review and approval (e.g., pipelines and railroads), WCDs specific to the Northwest Indiana Inland Zone Sub-Area have been considered.

A detailed discussion of the WCD scenarios for each of the facilities identified below, as well as a determination of the Northwest Indiana Inland Zone Sub-Area Plan’s adequacy to prevent or mitigate a WCD are memorialized in Appendix G which has been redacted for security purposes.

Vessel

The WCD scenario for a tank vessel could be a bulk carrier ship rupturing nearshore thereby releasing all of its contents into Lake Michigan and subsequently to nearby lakefront. Per USCG, tank ships with oil storage capacities as large as 149,000 bbls (6,258,000 gals). A WCD scenario for a tank vessel in the circumstances previously described would generally be covered under USCG jurisdiction.

Roadway Transportation

Major roadway transportation routes within the NWI Sub-Area include Interstate Highways 65, 80, 90 (Indiana Toll Road) and 94 (Borman) and SR 192 (Cline Avenue). An analysis of IDOT’s traffic count maps provided in section 2.1.1 indicated Lake county has the most traffic, both commuter and commercial.

According to the Federal Motor Carrier Safety Administration (FMCSA) there are no designated or restricted routes in the NWI Sub-Area for hazardous materials as of May 17, 2018

(<https://www.fmcsa.dot.gov/regulations/hazardous-materials/national-hazardous-materials-route-registry-state>). The release of hazardous materials is possible on transportation routes

throughout the sub-area. The probability of a WCD via roadway is most likely increased with the amount of traffic and weather conditions. Therefore, the metropolitan areas within Lake county during times of inclement weather will have a higher probability of a WCD.

A WCD from a motor vehicle would most likely occur via a bulk tanker truck. These discharges may occur during loading and unloading or during transit. Tank trucks frequently travel on the interstate system. Typically, a bulk tanker truck containing oil is able to store up to approximately

11,600 gallons. A WCD volume of all 11,600 gallons of a bulk tanker truck's contents could potentially flow into a nearby stream or sensitive habitat. A worst case from a motor vehicle traveling through the NWI Sub-Area is not anticipated to exceed the FRP facility WCD.

FRP Facility

EPA determined that the worst case discharge scenario for the NWI Sub-Area is a discharge from the BP Products North America, Inc. (BP) Whiting Refinery facility located at 2815 Indianapolis Boulevard in Whiting, Indiana. The total storage capacity and WCD amount can be found in Appendix G.

A worst case discharge from the facility would flow downhill to the barge canal, then to Lake Michigan. Spills could also travel radially away from the facility in public streets, gutters, and storm drains. A worst case discharge would flow outwards into Lake Michigan and/or westward and eastward along Lake Michigan's shoreline. Several downstream vulnerable features are within the planning distance including drinking water intakes, marinas, ports, sensitive species, environmentally sensitive areas, managed lands conservation and recreation lands, and historic places.

The downstream vulnerable features were captured using the Indiana Mapping Project government viewer Downstream Vulnerable Populations Reports. These screening reports were conducted using the facility's planning distance and a buffer zone of 0.5 miles. The planning distance was applied along the Lake Michigan shoreline to the west and east of the facility.

Pipelines

A number of petroleum product refineries, marine terminals, and pipeline terminals are located throughout the NWI Sub-Area. Based on the Indiana Mapping Program Government Viewer there are approximately 660 miles of petroleum pipelines in the sub-area. Crude oil and petroleum product pipelines are located in all three counties within the sub-area. The pipelines within this planning area range in size from 3-inches to 36-inches.

EPA requested pipeline information from PHMSA in order to evaluate discharge scenarios. A list of pipelines that cross the major rivers and pipeline stream crossings within the sub-area are provided in Appendix G. Based on PHMSA's response, the pipeline discharge scenarios do not match or exceed the FRP worst case discharge identified above.

Railroad

Based on the Indiana Mapping Program Government Viewer there are over 650 miles of railroads in the NWI Sub-Area, with over 470 of those miles being Class 1 railroads. It is assumed that multiple classifications of hazardous materials and oil may be transported throughout the sub-area. An evaluation of publicly available documents was conducted by EPA and is described in more detailed below.

Several railroads cross navigable waters within the NWI Sub-Area. Derailments over or near navigable water could result in releases of hazardous substances or oil. A worst case discharge as described in the PHMSA's 2015 Fixing America's Surface Transportation (FAST) Act and as clarified by the 2019 Final Rule (49 CFR § 130.5) is the greater of 300,000-gallons or 15% of the total lading of liquid petroleum oil transported within the largest unit consist reasonable expected to transport liquid petroleum oil in a given response zone. Currently operated unit trains have a maximum car count of 120 tank cars with a maximum of 30,000 gallons per car; the

WCD volume is 540,000 gallons. A WCD from a unit train traveling through the sub-area is not anticipated to exceed the FRP facility WCD.

Section 5 Response to Worst Case Discharge

5.1 Roles

Region 5's RCP/ACP includes a list of Federal Agencies that have duties established by statute, executive order, or Presidential directive which may apply to Federal response actions following, or in prevention of a worst case discharge of oil. Some of these agencies also have duties relating to the rehabilitation, restoration, or replacement of natural resources injured or lost as a result of such discharge.

State, tribal, local, private industry, or other federal agencies that may be involved in responding to a WCD in the Northwest Indiana Inland Zone Sub-Area can be found in the initial IAP located in Appendix B.

5.2 Response Organization

Any WCD in the Northwest Indiana be must be managed pursuant to the National Incident Management System (NIMS). NIMS is a structure for management of incidents and is a collection of principles and methods that can be utilized by local, state, federal emergency managers as well as industry. NIMS defines operational systems including the Incident Command System (ICS), Emergency Operations Center (EOC) structures, Multiagency Coordination Groups (MAC Groups), and Joint Information Systems (JIS) that guide how personnel work together during incidents. NIMS applies to all incidents, from traffic accidents to major disasters. The jurisdictions and organizations involved in managing incidents vary in their authorities, management structures, communication capabilities and protocols, and many other factors. NIMS provides a common framework to integrate these diverse capabilities and achieve common goals. This SACP commits to the use of NIMS when applicable and warranted during an incident in the Northwest Indiana Inland Zone Sub-Area.

ICS is a standardized on-scene incident management concept designed specifically to allow responders to adopt an integrated organizational structure equal to the complexity and demands of any single incident or multiple incidents without being hindered by jurisdictional boundaries. In ICS considerable emphasis is placed on developing effective IAPs.

An early operational period IAP has been developed for the Northwest Indiana Inland Zone Sub-Area and can be found in Appendix B. This IAP describes roles and responsibilities for agencies and responders, incident objectives, work analysis matrices, incident organization charts, assignment lists, incident communication plans, emergency contact lists, medical plans, health and safety messages, and unit activities logs.

5.3 Response Strategies

Within the ICS organizational concepts described in the preceding sub-section, EPA's management for response to an Inland Zone WCD will be characterized by the strategic considerations outlined below. When applicable, general response strategies or response strategies specific to the Northwest Indiana are provided below each item.

5.3.1 Command

- Protection of Public Health and Safety
- Protection of Responder Safety
- Communication on response status with the public, media, and other stakeholders
- Protection of cultural and historic resources
- Coordination with Natural Resource Damage Assessment (NRDA) trustees
- Net Environmental Benefit Analysis (NEBA)
- Consultation with states on endpoints

5.3.2 Logistics

- Site control
- Communications
- Connectivity

5.3.3 Operations

- Containment and recovery of oil
- Management and disposal of waste
- Shoreline Cleanup Assessment Technique (SCAT)
- Wildlife recovery and rehabilitation
- Monitoring of all potentially affected environmental media

5.3.4 Planning

- Response end point planning (e.g., NEBA)
- Use of Science
- Documentation (preservation of response record)
- GIS (situation and data management)

5.4 Model Incident Action Plan (IAP)

An early operational IAP has been developed for the Northwest Indiana Inland Zone Sub-Area and can be found in Appendix B. This initial IAP includes roles and responsibilities for agencies and responders, incident objectives, work analysis matrices, incident organization charts, assignment lists, incident communication plans, emergency contact lists, medical plans, health and safety messages, and unit activity logs. It is recommended that leaner versions of these templates be used to fulfill the requirements of NIMS during response to events less severe than a WCD.

5.5 Response Expertise

A list of local scientists, both inside and outside federal government service, with expertise in the environmental effects of spills of the types of oil typically transported for the Northwest Indiana Inland Zone Sub-Area has been compiled.

To the best of EPA's knowledge, the following have been recognized as having response expertise that can be utilized for a response in the Northwest Indiana Inland Zone Sub-Area.

Name	Affiliation	Area of Expertise	Contact Email	Contact Phone
Brian Cooper	EPA	<ul style="list-style-type: none"> • GIS • Data Management 	Cooper.Brian@epa.gov	(312) 353-8651
Dr. Faith Fitzpatrick	United States Geological Survey (USGS)	<ul style="list-style-type: none"> • Fluvial Geomorphology 	fafitzpa@usgs.gov	(608) 821-3818
Dan Sparks	United States Fish and Wildlife Service (USFWS)	<ul style="list-style-type: none"> • Natural Resource Damage Assessment • Wildlife Recovery and Rehabilitation 	Daniel_sparks@fws.gov	812-334-4261; 1219
Dan Plath, Resource Management Division Chief	National Parks Service – Indiana Dunes	<ul style="list-style-type: none"> • Indiana Dunes National Park Resource 	daniel_plath@nps.gov	(219) 395-1751

APPENDIX A

Northwest Indiana Inland Zone Sub-Area Figures

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EPA Figures

List of EPA generated figures.

Northwest Indiana Inland Zone Sub-Area Overview Figure

Northwest Indiana Inland Zone Sub-Area County Specific Figure – Lake County

Northwest Indiana Inland Zone Sub-Area County Specific Figure – Little Calumet River

Northwest Indiana Inland Zone Sub-Area County Specific Figure – LaPorte County

Northwest Indiana Inland Zone Sub-Area County Specific Figure – Porter County

Federal Agency Figures

List of other Federal Agency generated figures, if applicable.

State Agency Figures

List of State Agency generated figures, if applicable.

Tribal Figures

List of Tribal generated figures, if applicable.

Local Agency Figures

List of Local Agency generated figures, if applicable.

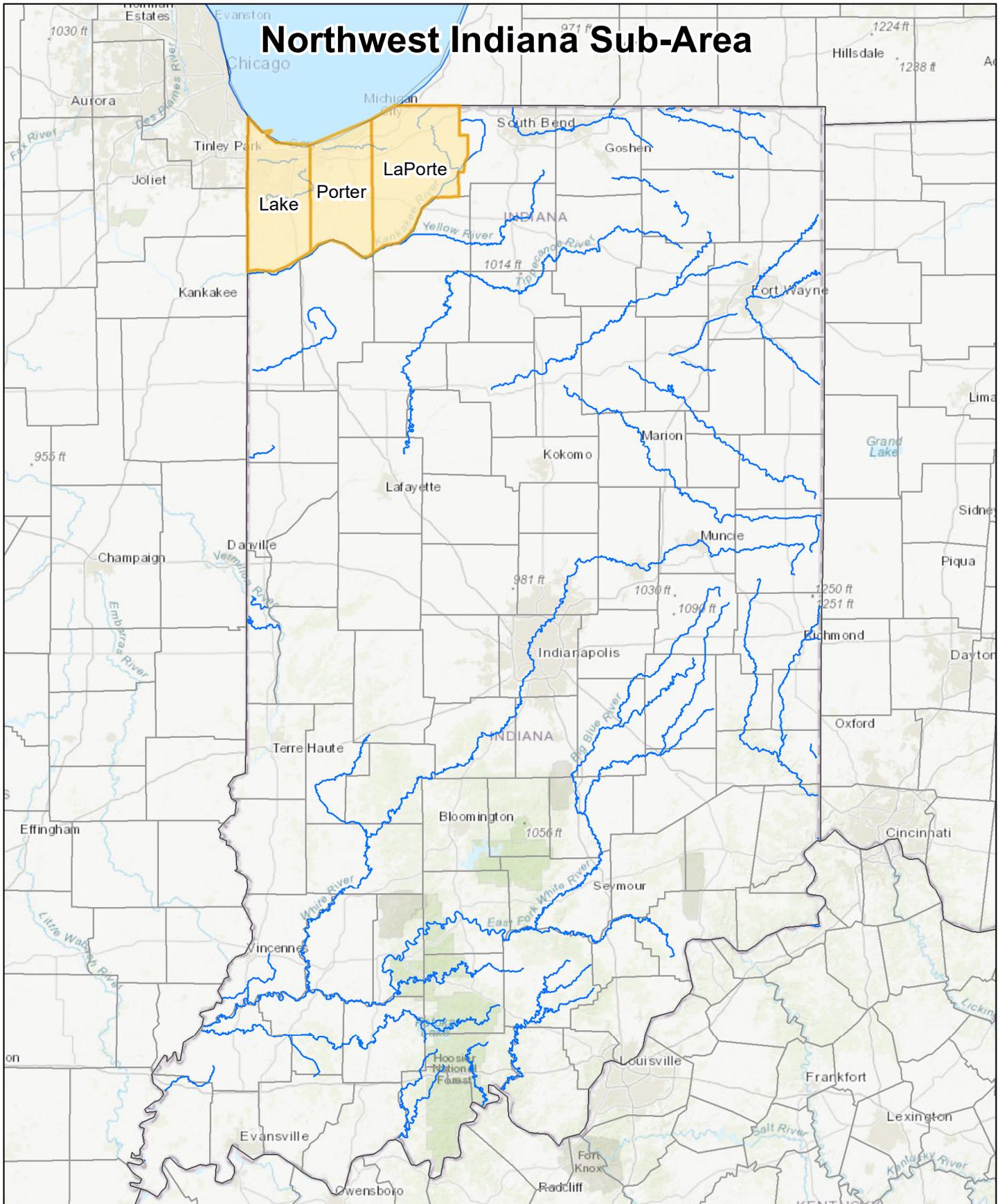
Private Sector Figures

List of Private Sector generated figures, if applicable.

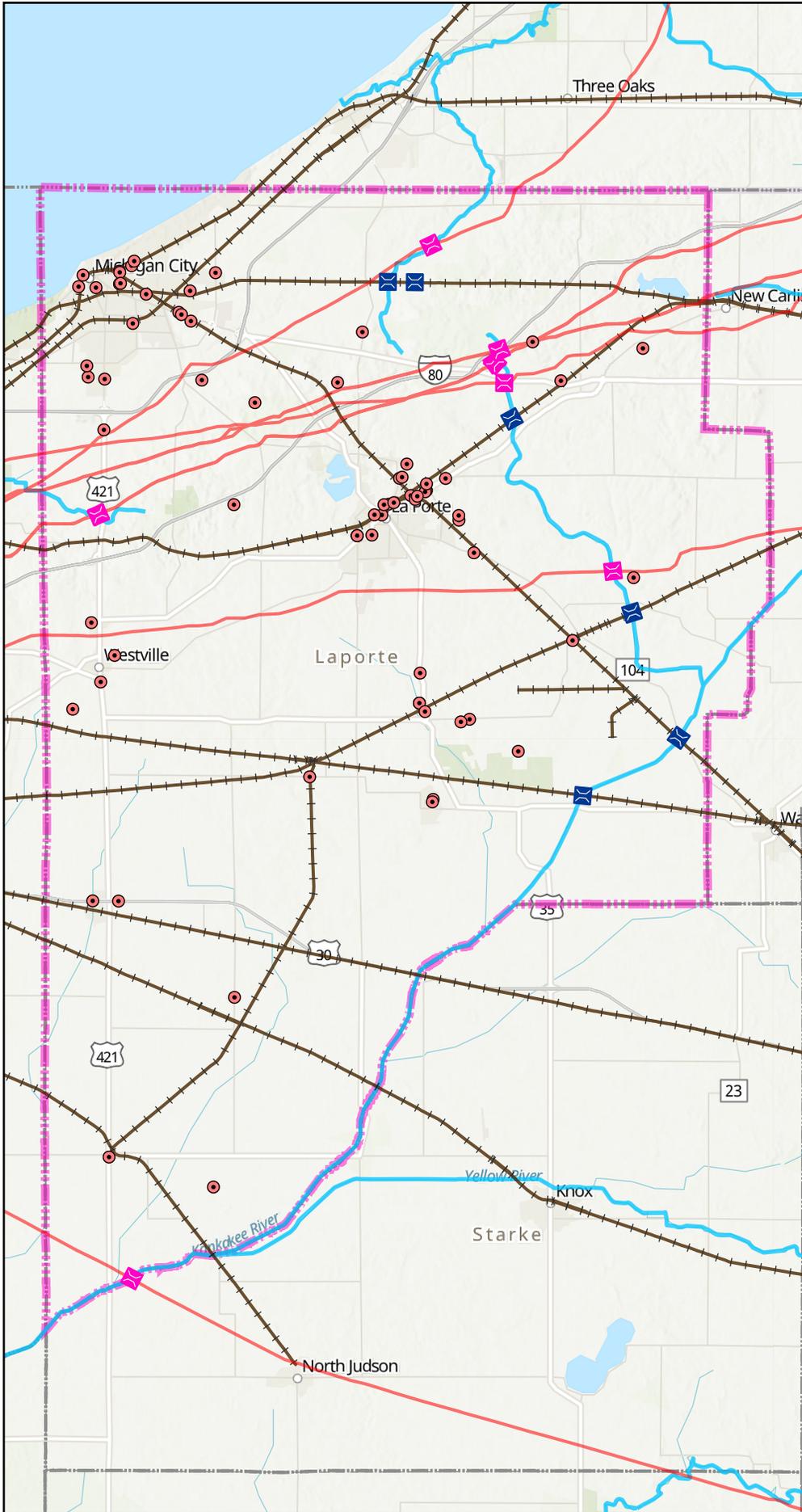
Other Figures

List of other generated figures, if applicable.

Northwest Indiana Sub-Area



NORTHWEST INDIANA SUB-AREA LA PORTE COUNTY



Legend

- ⬡ FRP Facilities
- ▲ Aboveground Storage Tanks
- Hazardous Materials Storage
- ⊠ Railroad Bridges
- ✕ Pipeline River Crossing
- ⊠ Railroad Yards
- Petroleum Pipelines
- RailRoads
- Rivers
- - - County Boundary

FRP Facilities

(N/A)

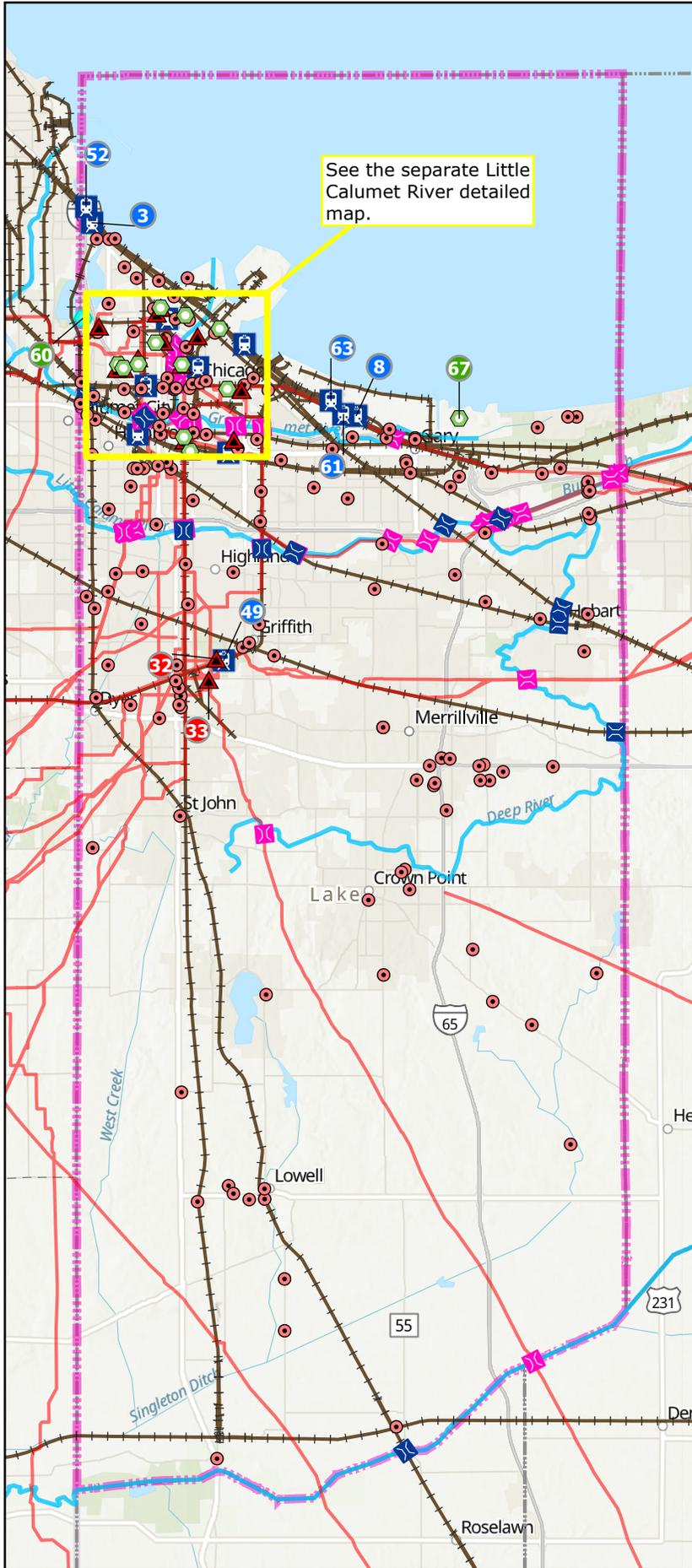
Railroad Yards

(N/A)

Aboveground Storage Tanks

(N/A)

NORTHWEST INDIANA SUB-AREA LAKE COUNTY



Legend

- ◆ FRP Facilities
- ▲ Aboveground Storage Tanks
- Hazardous Materials Storage
- ⊠ Railroad Bridges
- ⊠ Pipeline River Crossing
- ⊠ Railroad Yards
- Petroleum Pipelines
- Railroads
- ~ Rivers
- ⊠ County Boundary

FRP Facilities

ID	NAME
56	PREMCOR HAMMOND DISTRIBUTION CENTER
58	BP AMOCO WHITING REFINERY
59	MARATHON PETROLEUM COMPANY LP
60	WOLF LAKE INDUSTRIAL CTRS HAMMOND DEPOT
61	ARCELORMITAL STEEL, INC-WEST FACILITY
62	EXXONMOBIL OIL CORPORATION
67	USS GARY WORKS
68	CITGO PETROLEUM CORP
69	INDIANA HARBOR BELT RAILROAD
71	ARCELORMITAL STEEL-EAST FACILITY
75	EQUILON ENTERPRISES LLC EAST CHICAGO TERMINAL
80	BUCKEYE EAST CHICAGO TERMINAL
81	SAFETY-KLEEN SYSTEMS

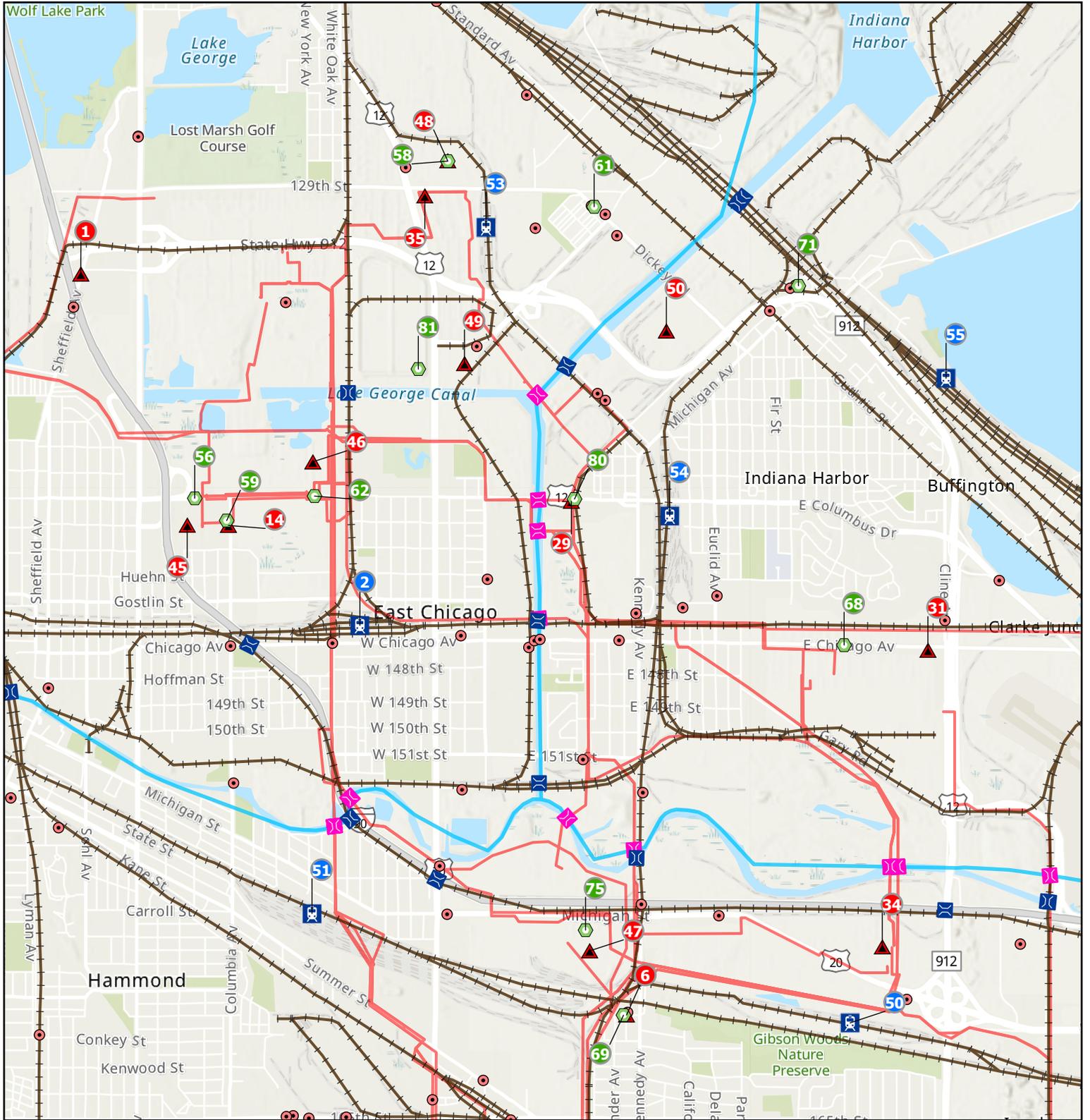
Aboveground Storage Tanks

ID	NAME
1	WOLF LAKE INDUSTRIAL CENTERS - HAMMOND DEPOT
6	INDIANA HARBOR BELT RAILROAD
14	MARATHON - HAMMOND
29	BUCKEYE - EAST CHICAGO TERMINAL
31	CITGO - EAST CHICAGO
32	ENBRIDGE ENERGY - GRIFFITH
33	ENBRIDGE ENERGY - HARTSDALE
34	EXPLORER PIPELINE - HAMMOND
35	US PIPELINE AND LOGISTICS
45	PREMCOR - HAMMOND DISTRIBUTION CENTER
46	EXXONMOBIL - HAMMOND TERMINAL
47	EQUILON ENTERPRISES - EAST CHICAGO TERMINAL
48	BP AMOCO WHITING REFINERY
49	SAFETY-KLEEN SYSTEMS - EAST CHICAGO
50	ARCELORMITAL INDIANA HARBOR, LLC

Railroad Yards

ID	NAME	ID	NAME
2	EAST CHICAGO YARD	52	STATE LINE PWR PLT YARD
3	COLEHOUR YARD	53	WHITING YARD
8	KIRK YARD	54	MICHIGAN AVE YARD
49	GRIFFITH YARD	55	LAKE FRONT YARD
50	GIBSON TRANSFER YARD	61	CURTIS YARD
51	GIBSON YARD	63	KIRK (GRW) YARD

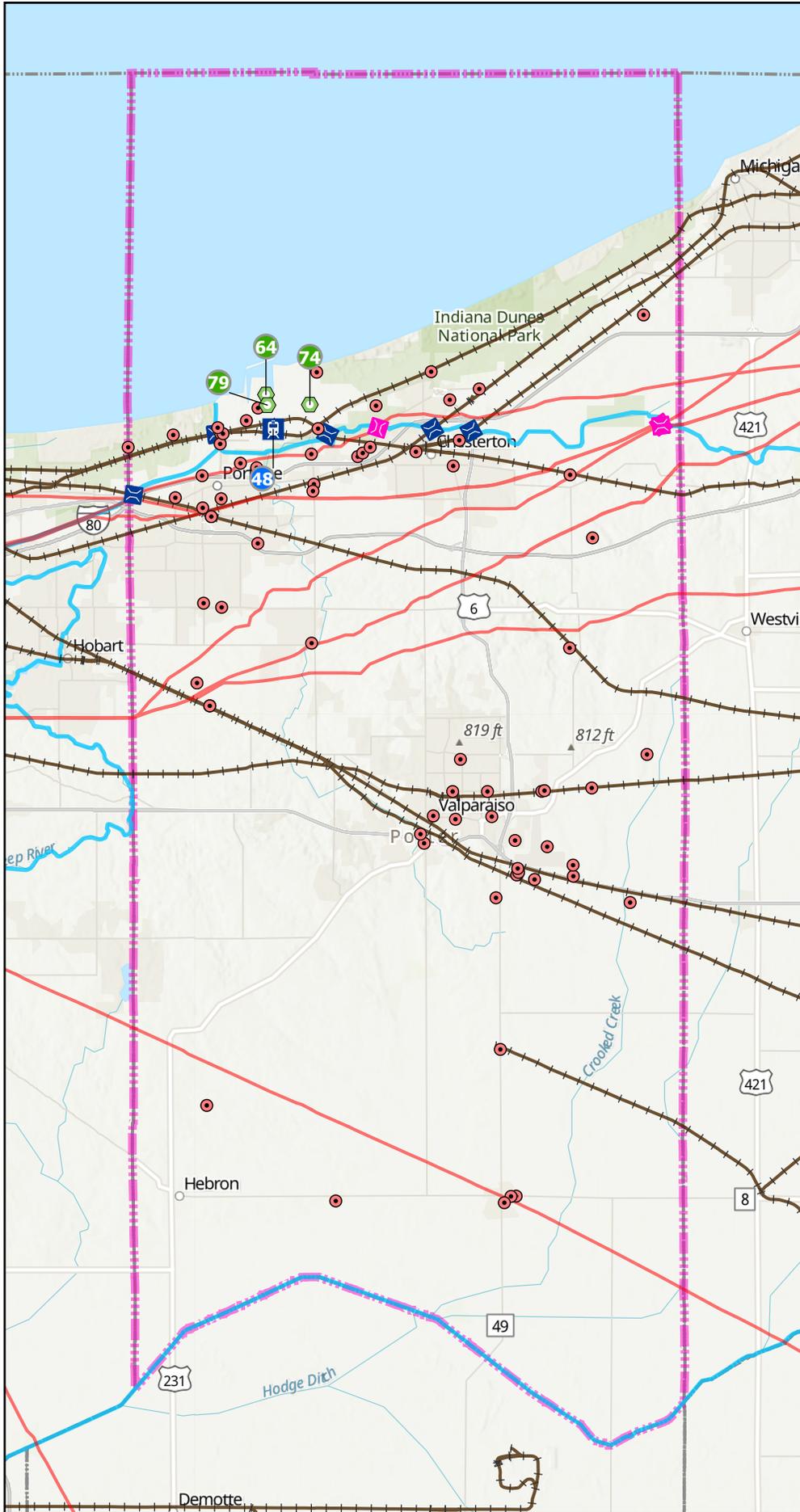
NORTHWEST INDIANA SUB-AREA LITTLE CALUMET RIVER



Legend

- | | | |
|---|---|---|
|  FRP Facilities |  Pipeline River Crossing |  Petroleum Pipelines |
|  Aboveground Storage Tanks |  Railroad Yards |  County Boundary |
|  Hazardous Materials Storage |  Rivers |  Counties_IN |
|  Railroad Bridges |  RailRoads | |

NORTHWEST INDIANA SUB-AREA PORTER COUNTY



Legend

- ⬡ FRP Facilities
- ▲ Aboveground Storage Tanks
- Hazardous Materials Storage
- ⊗ Railroad Bridges
- ✦ Pipeline River Crossing
- ⊠ Railroad Yards
- Petroleum Pipelines
- RailRoads
- ~ Rivers
- - - County Boundary

FRP Facilities

ID	NAME
64	TANCO TERMINALS INC
74	ARCELORMITTAL BURNS HARBOR LLC
79	FRICK SERVICES, INC LIQUID TERMINAL

Railroad Yards

ID	NAME
48	BURNS HARBOR YARD

Aboveground Storage Tanks

(N/A)

APPENDIX B

Northwest Indiana Inland Zone Sub-Area Incident Action Plan

NORTHWEST INDIANA INLAND ZONE SUB-AREA INCIDENT ACTION PLAN (IAP)

Date/Version: June 2022



This Initial Incident Action Plan (IAP) is developed to aid in initiating a timely and effective response to spills of oil and other hazardous materials. It is intended to be used during Operational Period #1 of response only at the discretion of the Incident Commander. It is not intended to supersede the direction of the Incident Commander or eliminate the need for ongoing communication during a response.

IAP Approved by Incident Commander(s)			
ORG	Name		DATE/TIME
		First Local IC (Fire Chief., County EM, etc.)	
		First Responding State or Tribal Official	
		EPA On-Scene Coordinator (OSC)	
		Responsible Party Lead--Representative	

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Northwest Indiana

INITIAL INCIDENT ACTION PLAN

EXECUTIVE SUMMARY

In order to best prepare for oil and hazardous material spills in the Northwest Indiana Inland Zone Sub-Area, an interagency team comprised of representatives from the US Environmental Protection Agency (EPA), local Indian Tribes, county emergency managers, Indiana Department of Environmental Management (IDEM), US Fish and Wildlife Service (USFWS), and other federal, state, local agencies, and private sector, identified the need for a specialized planning document that would: 1) describe the roles that those agencies and others would likely play in an incident, and 2) give responders a mechanism to help organize both in advance and during a response. This planning tool would also help multiple agencies to coordinate their operations and resources and to make effective and efficient use of their personnel, supplies, and time.

To that end, this Incident Action Plan (IAP) document was created. The plan has identified forms likely to be used in a response within the Northwest Indiana Inland Zone Sub-Area and includes potential incident objectives and a detailed emergency contact list. The plan provides an organized approach to identifying and communicating the overall strategic priorities and incident objectives in the context of both operational and support activities.

The IAP is intended to help launch response organization using the Incident Command System (ICS). During an incident, the ICS emphasizes orderly and systematic planning and this document is intended to be the central tool for planning during the Operational Period #1 of response at the discretion of the Incident Commander (IC) or Unified Command (UC). The plan is not intended to supersede the direction or authority of the IC, or to preclude communication or flexibility in response. Incidents vary in their kind, complexity, size, and requirements for detailed or written plans. The level of detail required in an IAP will vary according to the size and complexity of the response. After the Operational Period #1 of an incident, it is expected that this IAP will be succeeded by a response-specific IAP as needed.

The IAP, which is a part of the Northwest Indiana Inland Zone Sub-Area Contingency Plan, has been developed to be consistent with, and support, existing plans and procedures including the EPA Region 5 Regional Contingency Plan/Area Contingency Plan (RCP/ACP), industry response plans, state and tribal response plans, and local response plans.

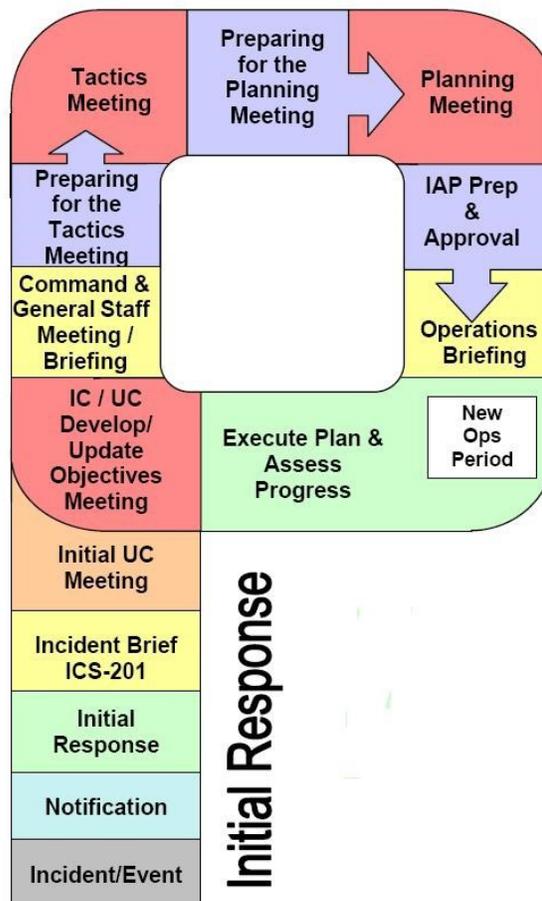
BACKGROUND INCIDENT ACTION PLANNING “P”

Incident Action Planning Process

In the Incident Command System, considerable emphasis is placed on developing effective Incident Action Plans (IAPs). A planning process has been developed as a part of ICS to guide standardized development and implementation of a response organization and its operations. Not all incidents require detailed written plans. Recognizing this, the following planning process provides a series of basic planning steps, which are generally appropriate for use in any incident. The determination of the need for written IAPs and attachments/forms is based on the requirements of the incident, and the judgment of the Incident Commander or Unified Command. The Planning Section Chief (PSC) prepares the IAP with input from the appropriate sections and units of the Incident Management Team. It should be written at the outset of the response and revised continually throughout the response.

The diagram below shows the process and steps involved to develop an IAP. The IAP included in this document is intended to help guide response through the Operational Period #1 cycle of an incident in the Northwest Indiana Inland Zone Sub-Area.

The Planning Cycle and Daily flow of events:



Agency General Spill Roles and Responsibilities

Agencies	General Roles and Responsibilities
Responsible Party/Facility/Industry	<p>The responsible party (RP) should apply the resources called for in its response plan to effectively and immediately remove, minimize, or mitigate threat(s) to public health and welfare and the environment; and ensure the removal efforts are in accordance with applicable regulations, including the NCP.</p> <ul style="list-style-type: none"> - The first response action of the RP is making notification of an incident to appropriate other responders. - The RP conducts whatever response actions are necessary and for which their personnel are trained and equipped. As the priorities of an incident evolve, they often include off-site and environmental concerns. The RP must play a central role in responding to these concerns, in coordination with and under the oversight of state and/or federal agencies. This occurs through the RPs participation in the ICS. - The RP is also liable for restoring or replacing natural resources which may be injured or lost due to the spill and should coordinate with the natural resource trustees (via the Natural Resource Damage Assessment and Restoration (NRDAR) Liaison in the IC) as part of the NRDAR process. - The RP will be represented at the command level of the response organization to represent their interests and to help coordinate assets and response actions. - The RP should conduct inquiries into the cause of an incident. This is often done with the participation or oversight of state or federal agencies such as the Occupational Safety and Health Administration (OSHA) or Department of Transportation (DOT). - If the RP does not respond properly, the On-Scene Coordinator shall take appropriate response actions and should notify the RP of the potential liability for federal response costs incurred by the On-Scene Coordinator pursuant to OPA and CWA and/or CERCLA.
Local Fire, Police, Sheriff, Hazmat Teams, and Health Departments	<p>Local units of government typically have the primary role in protecting the public's safety and property from a spill through police, fire, and local health department response.</p> <ul style="list-style-type: none"> - During the initial stages of an incident, when life and safety issues are paramount, local officials (e.g., Fire/Police/local emergency management) will be "in charge" of the response to an incident until such time that they decide to enter a unified command. - These local agencies will not perform cleanup work but rather will stabilize public safety threats during incidents and then transition incidents over to responsible parties or a unified command representing state, federal, and tribal agencies for cleanup. - As appropriate, these local agencies will continue to participate as members of the ICS until the response is complete.

<p>Pokagon Band of Potawatomi Indians</p>	<p>The tribe will provide support to UC regarding protection of culturally sensitive areas and other tribal resources and interests potentially threatened by the spill and/or response actions. Examples of such support include participation as members of the ICS, stabilization of public safety threats then transition over to responsible parties or a unified command, and potentially be in charge in the initial stages of an incident until they decide to enter in a unified command.</p>
<p>County and State Emergency Management</p>	<p>During the response and recovery stages of an event, the inland zone sub-area County Emergency Management (EMA) Directors will usually be Unified Command participants and will coordinate and connect local resources with RP, tribal, state, and federal resources. County EMAs also coordinate with the state's disaster mitigation, preparedness, response and recovery programs and activities, including the State Emergency Response Commission, which maintains a 24-hour Communication Center and State Emergency Operations Center (SEOC). The SEOC acts as an overall state government lead in crisis/consequence management response and operations to notify, activate, deploy and employ state resources in response to any threat or act of terrorism. The SEOC assists local governments with multi-hazard emergency operations plans and maintains the Emergency Operations Plan. The SEOC acts in support of the IC or Unified Command at the incident. Each county EMA acts as a liaison between federal, state, and local units of government to promote quick access to emergency resources and recovery funding.</p> <p>The Indiana Department of Homeland Security (IDHS) maintains a list county EMAs and has organized groups of counties into IDHS Districts. This plan is in District 5 for Lake, LaPorte and Porter Counties. In the event of an emergency that affects multiple counties, the District Task Force supports and augments local governments or counties with emergency response resources. In the event a spill exceeds the staff & equipment resources of local and county agencies the IDHS</p> <p>IDEM facilitates the state's main emergency spill response and is the primary agency to contact to report spills and other environmental emergencies.</p>
<p>Indiana Department of Environmental Management (IDEM)</p>	<p><u>Authority:</u></p> <p>In 40 CFR 300.115, the National Contingency Plan calls for state participation in Regional Response Teams (RRT). IDEM is designated as Indiana's RRT Region 5 member. The Indiana Comprehensive Emergency Response Plan identifies IDEM as the lead agency for Emergency Support Function 10 – Hazmat (ESF10).</p> <p><u>Response:</u></p> <p>Indiana Code 13-14-10-3 authorizes IDEM to order and provide assistance to abate or remedy an emergency, on private or public property, caused by the discharge or impending discharge of any contaminant into or on the air, land, or waters of Indiana that poses an imminent and substantial danger to public health or the environment.</p> <p>The Indiana Spill Rule 327 Indiana Administrative Code (IAC) 2-6.1 describes immediate spill reporting, containment, and response actions required of responsible parties.</p> <p><u>Personnel:</u></p> <p>OSCs in IDEM's Emergency Response program operate a 24-hour spill reporting line for Indiana; provide technical assistance to local responders and responsible parties; and respond to locations 24 hours a day for spills of petroleum, hazardous substances, extremely hazardous substances, and objectionable substances that are of a quantity, type, duration, and in a location as to damage the waters of Indiana.</p>

<p>Indiana Department of Natural Resources (IN DNR)</p>	<p>The IN DNR has several divisions serving different roles to protect Indiana’s natural, recreational, and historic resources in the event of an oil or hazardous material spill.</p> <p>Conservation Police Officers (CPO) of the Law Enforcement Division are vested with full statewide police authority and are trained as law enforcement professionals. Although CPOs have full police authority in the enforcement of all Indiana Compiled Statutes, their enforcement mission is to focus on those laws and activities associated with natural resource protection and recreational safety. The Law Enforcement division maintains specialty units of boats, snowmobiles, off-road vehicles, and underwater equipment for rescue and recovery or to respond to emergencies.</p> <p>The Historic Preservation & Archaeology Division maintains a database of culturally important sites known as SHARRD (State Historic Architectural and Archaeological Research Database) and staffs the position of the State Historic Preservation Officer (SHPO). The SHPO would need to be contacted to identify if any historically sensitive sites are within the vicinity of a spill.</p> <p>The IN DNR also includes many divisions with detailed local knowledge of wildlife, natural resources, and recreational resources that can provide invaluable information in the event of a spill.</p> <p>As a natural resource trustee, the IN DNR works with U.S. Fish & Wildlife Service (USFWS) and other co-trustees to assess damages to restore natural resources (as circumstances allow) lost or injured due to a spill. Data acquired would be used to determine the extent of damage to natural resources, to develop restoration or replacement strategies, and to develop and submit a claim for damages to the RP to implement the most appropriate recovery actions.</p>
<p>Indiana Department of Health (IDH)</p>	<p>IDH will support local health departments and UC to provide expertise /support to UC on identification of risks and assessment of risk to the public posed by spilled oil or hazardous substances. This includes:</p> <ul style="list-style-type: none"> - helping to determine what levels of contaminants are harmful, - what methods are appropriate to measure contaminants, - communication of risk to the public, and - helping make determinations relating to when public health risk has been effectively mitigated.

Indiana Department of Homeland Security (IDHS)

IDHS coordinates & supports emergency response; it includes the Indiana State Fire Marshall and specialized staff for Hazmat and emergency medical services (EMS). It assists local governments or county EMAs when an incident exceeds their resources via providing specialized services or acting as a liaison with other state or federal agencies. For multi-county or large-scale emergencies, the IDHS has organized counties into ten districts with assigned District Coordinators. The Northwest Indiana Planning Area is in Coordinator District which encompasses Lake, Porter and LaPorte Counties-

The IDHS has specialized units and equipment available for use in critical emergencies and three state districts each assigned with a HAZMAT Specialist and District Manager. District Coordinators are the first line of defense in the event of an emergency. They work with local Emergency Management and Local Emergency Planning Committee directors during disasters doing damage assessments and helping local authorities file paperwork for federal disaster assistance.

The IDHS also has a 24/7 Emergency Operations Center (EOC) to report incidents whether they are expected to be handled at the local level or larger incidents that may require state or federal assistance. Trained EOC staff provide guidance on response services and disseminate information in real-time to other emergency management and HAZMAT specialists via the WebEOC system.

<p>Agency for Toxic Substances and Disease Registry (ATSDR)</p>	<p>ATSDR protects communities from harmful health effects related to exposure to natural and man-made hazardous substances. They do this by responding to environmental health emergencies; investigating emerging environmental health threats; conducting research on the health impacts of hazardous waste sites; and building capabilities of and providing actionable guidance to state and local health partners.</p>
<p>US Army Corps of Engineers (US ACE)</p>	<p>US Army Corps of Engineers (US ACE) staff are not trained or permitted to take part in spill response activity. Locks and dams may be accessed for use by responders, pending Lockmaster approval.</p>
<p>US Coast Guard (USCG)</p>	<p>The USCG may provide support to the UC if requested by the EPA OSC. Examples of such support include acting as first federal official on-scene until arrival of the pre-designated EPA OSC, monitoring of response contractor work at the request of the EPA OSC, and air operational support.</p>
<p>US Department of Agriculture, Animal Plant Health Inspection Service (APHIS), Wildlife Services (WS)</p>	<p>USDA APHIS WS has no intrinsic authorities of its own that directly apply to wildlife issues in a chemical or oil spill event. It does however, because of its other wildlife expertise, have extensive operational and technical capabilities to assist with proper humane capture, handling, hazing, transport, and other issues that typically arise in oil spill situations. The Agency implements sound and integrated surveillance, deterrence and capture techniques and transport as part of regular day to day work activities.</p> <ul style="list-style-type: none"> - In addition, USDA WS is an emergency response agency that operates under the National Response Framework (NRF) and participates in emergency response in all regions of the United States working closely with other federal, state, tribal and local governments, along with the private sector to aid and coordination during all-hazards emergencies, including oil spills. The Agency has the capability to respond to an incident under the Surveillance and Emergency Response System (SERS). SERS, an essential component of the USDA Wildlife Services National Wildlife Disease Program, serves as the primary emergency response contact point within APHIS WS. Incident Response Teams (IRT) are made up of wildlife biologists and specialists that act as first responders. Team members have current medical clearances for personal protective equipment, HAZWOPER training and other specialized training, extensive Incident Command System training and have been deployed to oil spill and other emergency response incidents.

US Environmental Protection Agency (US EPA) Region 5

US Environmental Protection Agency (EPA) Region 5 has the lead federal jurisdiction for response to oil and hazardous materials incidents throughout the inland zone and provides the On-Scene Coordinator (OSC). The OSC is the lead federal official for spill response. The OSC is engaged in directing the work of the RP pursuant to EPA's CERCLA or OPA authority and is responsible for coordination of all the agencies by ensuring that an ICS is established.

The OSC is the point of contact for the coordination of federal efforts with those of the local response community. The OSC will initially operate work in support of local incident command until the response has progressed to a point where federal lead is required.

The OSC shall, to the extent practicable:

- Collect pertinent facts about the discharge or release, such as its source and cause;
- Identify potentially responsible parties; determine the nature, amount, and location of discharged or released materials; the probable direction and time of travel of discharged or released materials; whether the discharge is a worst-case discharge;
- Evaluate the pathways to human and environmental exposure and the potential impact on human health, welfare, and safety and the environment;
- Determine whether the discharge or release poses a substantial threat to the public health or welfare;
- Establish the potential impact on natural resources and property which may be affected and priorities for protecting human health and welfare and the environment;
- Complete and appropriate cost documentation.

The OSC shall ensure that the Natural Resource Trustees are promptly notified of discharges or releases and shall coordinate all response actions with the trustees. The OSC should ensure that all appropriate public and private interests are kept informed and that their concerns are considered throughout a response to the extent practicable.

<p>US Fish & Wildlife Service (USFWS)</p>	<p>The USFWS is responsible for management of lands and waters within the inland zone sub-area, migratory birds, federally-listed threatened and endangered species, inter-jurisdictional fishes, and their habitat. The Refuge District Manager, Assistant District Manager, or Law Enforcement Officer is the initial Refuge point of contact for any spill response.</p> <p>During a response occurring on USFWS lands, USFWS may be involved in the decision-making processes by serving as a Unified Commander.</p> <ul style="list-style-type: none"> - USFWS may provide services through the Incident Command System, as requested by the Incident/Unified Command, within the Wildlife Branch (Operations), Environmental Unit (Planning). - USFWS may also provide responders with information about wildlife and fishery resources in the defined inland zone sub-area, recommendations for preventing/minimizing spill impacts to Refuge resources, assistance to identify response staging and access areas within the Refuge, and participation in Shoreline Cleanup and Assessment Technique (SCAT) teams if requested. - USFWS will also fulfill endangered species consultation responsibilities or assist obtaining other required federal wildlife permits, as necessary. - USFWS may also assist operations supporting or overseeing reconnaissance, transport, recovery, salvage, deterrent, and rehabilitation of wildlife. - The USFWS may also provide assistance in overseeing disinfection of boats and equipment prior to use to prevent the spread of aquatic nuisance species. - The USFWS has law enforcement officers that may assist in evidence collection and public safety. <p>The USFWS will also restore fish and wildlife resources impacted by spills through the Department of the Interior’s Natural Resource Damage Assessment (NRDA) trustee authorities. NRDA actions are completed in coordination with, but separately from, response assistance actions and may include data and sample collection during the spill.</p>
<p>U.S. National Parks Service (NPS)</p>	<p>Identification of culturally sensitive sites near a spill can be accomplished by contacting the appropriate SHPO within the IN DNR, Historic Preservation & Archaeology Division.</p> <p>NPS has responsibility for sites located on Federal lands within the Region. NPS maintains a registry of historically and culturally significant resources, the National Register of Historic Places, which can be accessed via the National Register Information System at http://www.nps.gov/nr/research/.</p> <p>Specific procedures and Federal OSC responsibilities regarding these sites are outlined in the Programmatic Agreement on Protection of Historic Properties During Emergency Response. Further information about the NPS History and Culture program can be found at http://www.nps.gov/history/.</p>

National Response Center
(NRC)

The NRC is the national communications center for handling activities related to response actions. The NRC acts as the single point of contact for all Federal pollution incident reporting. Notice of an oil discharge or release of a hazardous substance in an amount equal to or greater than the reportable quantity must be made immediately in accordance with 40 CFR Part 110 and 40 CFR Part 116, respectively. All notices of discharges or releases received at the NRC will be relayed immediately by telephone to the appropriate pre-designated federal OSC.

Incident Name: _____	2. Operational Period to be covered by IAP (Date/Time) From: <u>DISCOVERY</u> To: <u>OPERATIONAL PERIOD #1</u> _____	IAP COVER SHEET Northwest Indiana
--------------------------------	---	--

INITIAL INCIDENT ACTION PLAN

The items below are included in this Incident Action Plan

- [ICS 202](#) Response Objectives (Select from list as appropriate)
- [ICS 234](#) Work Analysis Matrix (Incident specific objectives from ICS 202, strategies and tactics/tasks)
- [ICS 207](#) Organization Chart
- [ICS 204](#) Assignment List (Fill in operations personnel contact name, incident-specific assignments & resource summary)
- [ICS 205](#) Incident Communications Plan (Phone/Radio Contact list)
- [ICS 206](#) Medical Plan (Medical aid stations, hospitals and emergency procedures)
- [ICS 223](#) Health and Safety Message (General Safety Message and Major Hazards/ Risks)
- [ICS 214](#) Unit Activity Log (Details of unit activity, including team activity or individual activity)

Other Attachments

The following attachments are not included in the IAP template. Please check and include any additional forms or attachments to be added to this IAP.

- [ICS 208 Site Safety and Control Plan\(s\)](#)
(Unless otherwise specified, every organization shall respond in accordance with the safety policies and procedures of their respective organizations)
- [ICS 213 General Message Form](#)
(For issuing approved information releases from the IC to the JPIC. (PIO's))
- [ICS 225 Maps / Charts](#)
(Select and add maps, as necessary)
- [ICS 232 Resources at Risk Summary](#)
(Sensitive areas list of priorities. Refer to Inland Sensitivity Atlas Maps & Figures. Add tables or maps, as necessary)
- [Weather Forecasts / River flow – currents – conditions](#)
- [Insert Additional Attachment - Delete if not needed](#)
- [Insert Additional Attachment - Delete if not needed](#)

General Incident Summary

Incident Information and Incident Status:

(Include Incident location, latitude/longitude, estimated quantity spilled, spill rate etc.)

Prepared By: (Name/Title) _____	Date/Time: _____
Approved by: (Name/Title) _____	Date/Time: _____

Incident Name:

ICS – 202 INCIDENT OBJECTIVES

Northwest Indiana

Objectives

1. Ensure the health and safety of the public and response personnel. (e.g. water intakes, air quality) and resources downstream.
2. Secure the incident scene, restrict river traffic as necessary and secure all evidence.
3. Conduct all the appropriate notifications, including notifications to downstream communities.
4. Establish Incident Command /Unified Command (IC/UC) and establish an Incident Command Post (ICP).
5. Provide and manage necessary communications for all response personnel.
6. Inform and update the affected public, governmental officials and news media on the status and progress of response actions.
7. Conduct response operations to control/stop the source of the spill, contain, recover or exclude released material and minimize response related environmental impacts.
8. Evaluate resources-at-risk and protect downstream sensitive resources and minimize response related environmental impacts.
9. Coordinate response actions and resource information with natural resource trustees and the Natural Resource Damage Assessment and Restoration (NRDAR) process.
10. Implement wildlife deterrence, reconnaissance, recovery, rehabilitation, and release procedures.
11. Additional Objectives - Delete if not necessary
12. Additional Objectives - Delete if not necessary
13. Additional Objectives - Delete if not necessary
14. Additional Objectives - Delete if not necessary
15. Additional Objectives - Delete if not necessary

Incident Name:

ICS – 234 WORK ANALYSIS MATRICES
Northwest Indiana

Objectives <i>Desired Outcome</i>		Recommended Strategies <i>General Plan and Direction</i>	Recommended Tactics or Tasks <i>How, Who, What, Where, When</i>	Status <i>Operational Period # 1</i>
UNIFIED COMMAND	UNIFIED COMMAND	<p>Develop a response structure</p> <p><input type="checkbox"/> Determine viable Responsible Party</p> <p><input type="checkbox"/> Integrate company into the Unified Command</p>	<p><input type="checkbox"/> Determine Responsible Parties (RP)</p> <p><input type="checkbox"/> Determine strategies and tactics with expected time frame with responsible party and their contractor</p> <p><input type="checkbox"/> Hire a response contractor(s) if RP not adequately responding</p> <p><input type="checkbox"/> Open Oil Pollution fund to conduct cleanup and oversight of RPs if needed</p>	_____
		<p>Establish Unified Command and establish Incident Command Post and/or Emergency Operations Centers</p> <p><input type="checkbox"/> Integrate organizations, including into ICS</p> <p><input type="checkbox"/> Develop the IAP</p>	<p><input type="checkbox"/> Develop feasible response alternatives</p> <p><input type="checkbox"/> Open the Oil Spill Liability Trust Fund (OSLTF) for Pollution Removal Fund Authorization (PRFA)</p> <p><input type="checkbox"/> For technical assistance or funding, request help from Federal agencies (US EPA)</p> <p><input type="checkbox"/> For technical assistance, request help from State agencies and/or Tribes</p> <p><input type="checkbox"/> Review data with local, state, tribal, and federal health experts</p>	_____
	SAFETY	<p>Ensure protection of health and safety of the public and response personnel</p> <p><input type="checkbox"/> Establish road, rail, and airspace controls</p> <p><input type="checkbox"/> Establish shore/land perimeter control areas</p> <p><input type="checkbox"/> Temporally shut down public boat launches and tour boats if necessary</p>		_____
		<p><input type="checkbox"/> Develop and implement an all-agency staff safety plan</p> <p><input type="checkbox"/> Written HASP (if hazmat or more than one operational period)</p> <p><input type="checkbox"/> Prepare Boat Safety Check List and Float Plan for boat crews</p>	<p><input type="checkbox"/> Assign a safety officer(s)</p>	_____

Objectives <i>Desired Outcome</i>		Recommended Strategies <i>General Plan and Direction</i>	Recommended Tactics or Tasks <i>How, Who, What, Where, When</i>	Status <i>Operational Period # 1</i>
LIAISON	Provide notification to all impacted communities, states, federal agencies, including downstream notifications	<input type="checkbox"/> Ensure notifications to principal partners, local, state, tribal, federal responders, and land owners such as USFWS and tribes <input type="checkbox"/> Ensure notifications to downstream states, municipalities, drinking water intakes, tribes, and economically sensitive businesses	<input type="checkbox"/> Assign person to track proper notifications <input type="checkbox"/> Contact private and public water supply utilities <input type="checkbox"/> Follow Notification List <input type="checkbox"/> Establish a Natural Resource Damage Assessment & Restoration (NRDAR) Liaison <input type="checkbox"/> Issue Federal Notice of Interest to RPs <input type="checkbox"/> USFWS, Tribal, and State agencies identify the liaison(s) representing the natural resource trustees	_____
	PUBLIC INFORMATION	Coordinate and release information to ICS personnel, media, and other appropriate organizations	<input type="checkbox"/> Establish interagency and JPIC - PIO liaisons <input type="checkbox"/> Develop a multi-agency communications plan <input type="checkbox"/> Provide Information resources to all organization needs <input type="checkbox"/> Provide information resources to ICPs and EOCs (and JPIC) <input type="checkbox"/> Provide timely situation updates to SEOC or local EOCs	<input type="checkbox"/> Local law enforcement, USCG, USFWS law enforcement, Tribal law enforcement or conservation officers, and state conservation officers and wardens temporarily shut down impacted areas, boat ramps, and other sites used by the public <input type="checkbox"/> USCG temporarily shut down river traffic if necessary <input type="checkbox"/> County and state emergency managers, tribes, and local Sheriff provide emergency communications to impacted public <input type="checkbox"/> Assign Public Information Officers to specific locations <input type="checkbox"/> Submit updates and situation reports (SitReps) at requested times <input type="checkbox"/> Provide Governor's briefings <input type="checkbox"/> Reactive: Respond to media inquiries

Objectives <i>Desired Outcome</i>		Recommended Strategies <i>General Plan and Direction</i>	Recommended Tactics or Tasks <i>How, Who, What, Where, When</i>	Status <i>Operational Period # 1</i>
OPERATIONS SECTION	LAW ENFORCEMENT	<p>Secure the incident scene and secure all evidence</p> <ul style="list-style-type: none"> <input type="checkbox"/> Establish river traffic control, river-traffic evacuation, no-boating area <input type="checkbox"/> Secure scene immediately <input type="checkbox"/> Collect evidence <input type="checkbox"/> Prevent or minimize movement of evidence <input type="checkbox"/> Evacuation / Shelter-in-place and warnings of citizens at risk <input type="checkbox"/> Notify and evacuate, if necessary, house boats and house boat owners and occupants 	<ul style="list-style-type: none"> <input type="checkbox"/> USCG / Sheriff lead on major navigable River Traffic management <input type="checkbox"/> Police / Sheriff lead on road and rail traffic control and inland lakes/ivers <input type="checkbox"/> Tribal Public Safety/Conservation Officers lead on Tribal lands <input type="checkbox"/> Collect photo evidence and document the scene <input type="checkbox"/> Coordinate with USFWS law enforcement, and state conservation officers and wardens to ensure collection and storage of evidence to enforce federal and state wildlife laws 	_____
	LAND-SOURCE OR WATER OPERATIONS	<p>Conduct operations to stop the spill, contain, recover or exclude released material in the inland zone sub-area</p> <ul style="list-style-type: none"> <input type="checkbox"/> Mobilize company responders, local spill COOP, first responders, county emergency government and hazmat teams, state and federal responders and their contractors <input type="checkbox"/> Utilize company and locally stored equipment such as oil spill boom, sorbents, tanker trucks, vacuum units, oil collection equipment or pre-staged response equipment <input type="checkbox"/> Mobilize local personnel and resources <input type="checkbox"/> Activate oil boom collection and recovery plan 	<ul style="list-style-type: none"> <input type="checkbox"/> Contain and stabilize oil-sources <input type="checkbox"/> Establish ignition source controls in hot zone <input type="checkbox"/> Safely collect materials without creating nuisance conditions <input type="checkbox"/> Implement an oil recovery plan <input type="checkbox"/> Establish parameter and hot zone <input type="checkbox"/> Evaluate the control of river level to facilitate spilled product collection and control (note: changing levels can cause larger smear zones) 	_____

Objectives <i>Desired Outcome</i>		Recommended Strategies <i>General Plan and Direction</i>	Recommended Tactics or Tasks <i>How, Who, What, Where, When</i>	Status <i>Operational Period # 1</i>
WILDLIFE	Reconnaissance for impacted fish and wildlife	<input type="checkbox"/> Establish wildlife branch to prevent and respond to oiled wildlife <input type="checkbox"/> Prepare to implement deterrence measures to keep wildlife away from the oil <input type="checkbox"/> Prepare to recover and rehabilitate oiled wildlife	<input type="checkbox"/> Wildlife Branch will implement the following Plans, as necessary: <ul style="list-style-type: none"> - “Wildlife Reconnaissance and Recovery Plan” to guide the finding and capture of oiled animals - “Wildlife Stabilization and Transport Plan” to provide initial veterinary care for recovered oiled wildlife and to transport animals to rehabilitation areas - “Wildlife Rehabilitation Plan” to rehabilitate impacted animals - “Wildlife Hazing” to keep wildlife from oiled areas <input type="checkbox"/> Wildlife Branch or other resource managers will oversee recovery of oiled wildlife and hazing operations <input type="checkbox"/> Wildlife Branch will oversee wildlife care and rehabilitation of oiled wildlife, as necessary <input type="checkbox"/> Wildlife Branch Director will ensure the RP contracts with a licensed wildlife rehabilitation organization to provide rehabilitation and other professional services	_____
	Conduct operations to monitor releases to the environment to support public safety personnel and the residents including commercial and recreational boating, and temporarily moored houseboats	<input type="checkbox"/> Reconnaissance by IC organization staff, (reminder: need safety plan) <input type="checkbox"/> Reconnaissance by compilation of information by others <input type="checkbox"/> Joint reconnaissance with local authorities <input type="checkbox"/> Air- flight reconnaissance and reporting	<input type="checkbox"/> Establish & deploy Reconnaissance Team(s) <input type="checkbox"/> Consider variety of resources for reconnaissance such as local, state, tribal, federal or private air recon, EPA ERT or NOAA, or private resources to provide spill trajectories <input type="checkbox"/> Wildlife Reconnaissance and Recovery Teams provide real time field situational updates on the location of oil and related environmental impacts to the Planning Section Environmental Unit to help direct Shoreline Cleanup Assessment Technique (SCAT)	_____
RECONNAISSANCE & MONITORING	<input type="checkbox"/> Conduct air monitoring and water sampling <input type="checkbox"/> Coordinate monitoring with the Environmental Unit, the NRDAR Liaison, and Wildlife Branch.	<input type="checkbox"/> Conduct perimeter air sampling, water sampling at scene and down river <input type="checkbox"/> Provide environmental monitoring data and information as part of regular IC briefings, which include the Environmental Unit and the NRDAR Liaison and the Wildlife Branch	_____	

Objectives <i>Desired Outcome</i>		Recommended Strategies <i>General Plan and Direction</i>	Recommended Tactics or Tasks <i>How, Who, What, Where, When</i>	Status <i>Operational Period # 1</i>	
PLANNING SECTION	ENVIRONMENTAL	Evaluate resources at risk and protect sensitive resources in the inland zone sub-area.	<input type="checkbox"/> Establish an Environmental Unit to identify and evaluate sensitive resources public health considerations	<input type="checkbox"/> Request assistance from health agencies, USFWS, or State agencies <input type="checkbox"/> Open the Oil Spill Liability Trust Fund (OSLTF) for Pollution Removal Fund Authorization (PRFA) <input type="checkbox"/> Initiate Endangered Species Act Section 7 emergency consultation <input type="checkbox"/> Establish linkage between Planning Section Environmental Unit and the Operations Sections for technical assistance on methods to avoid and minimize response related injury to natural resources and public health	_____
			<input type="checkbox"/> Conduct spill modeling and spill trajectories <input type="checkbox"/> Develop a monitoring plan for water quality	<input type="checkbox"/> Provide assessment information to unified command <input type="checkbox"/> Contact air and water experts on agency call back lists (examples include hydraulic personnel, state water division contacts, biologists) <input type="checkbox"/> Conduct spill trajectory and time of travel to predict downstream impacts	_____
			<input type="checkbox"/> Coordinate with Wildlife Branch to identify and evaluate sensitive resources	<input type="checkbox"/> USFWS, and/or State agencies, as well as Tribes if applicable, will identify and evaluate sensitive natural resources, including seasonal and site-specific conditions <input type="checkbox"/> USFWS, and/or State agencies, as well as Tribes if applicable, will make a preliminary determination of the extent to which planned response actions may affect natural resources and suggest measures to avoid and minimize impacts <input type="checkbox"/> USFWS, and/or State agencies, as well as Tribes if applicable, will recommend and advise implementation of the developed Response Strategies <input type="checkbox"/> Appropriate agencies and personnel will develop: Wildlife Reconnaissance and Recovery Plan; Wildlife Hazing Plan; Wildlife Stabilization and Transport Plan; Wildlife Rehabilitation Plan	_____

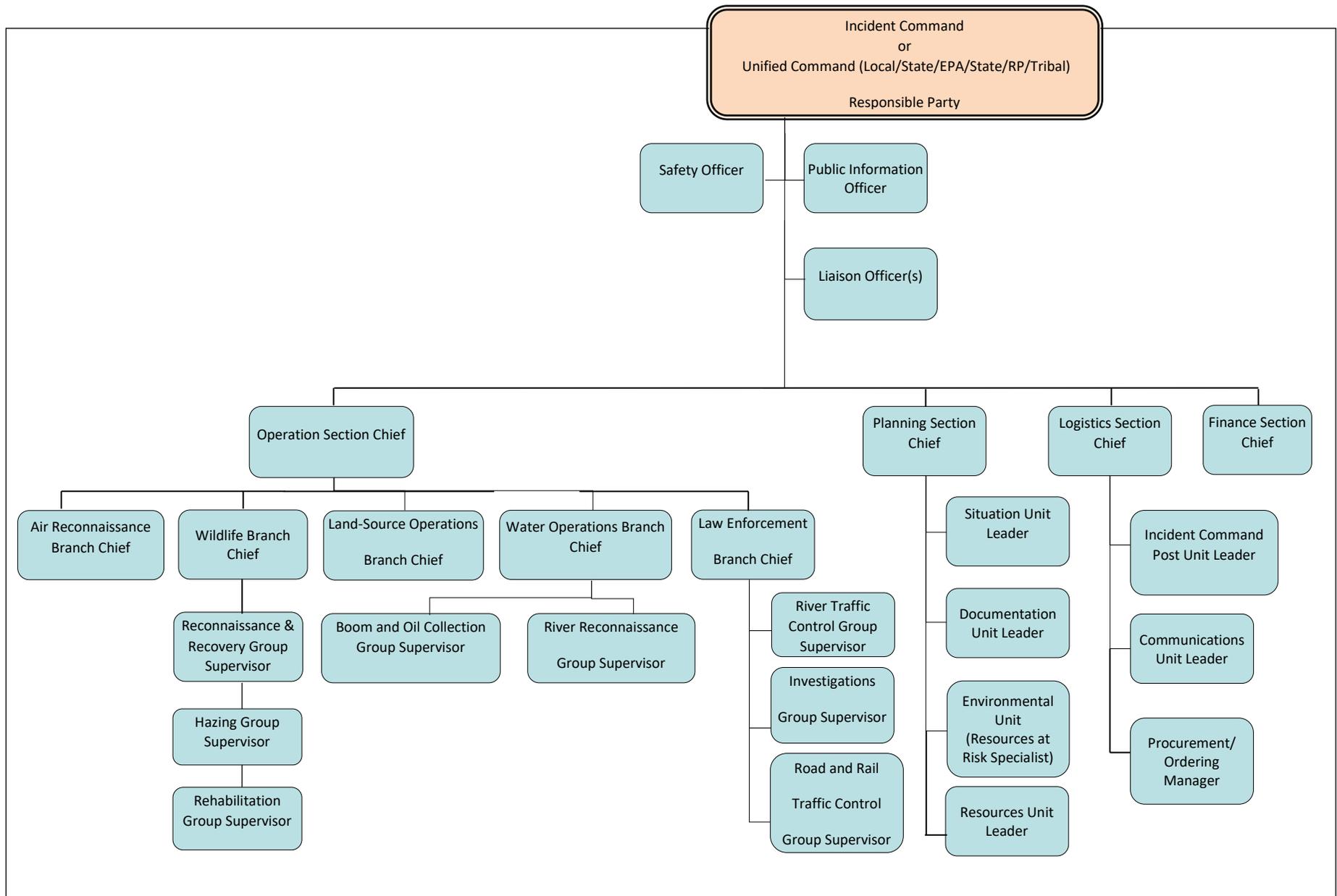
Objectives <i>Desired Outcome</i>		Recommended Strategies <i>General Plan and Direction</i>	Recommended Tactics or Tasks <i>How, Who, What, Where, When</i>	Status <i>Operational Period # 1</i>	
LOGISTICS SECTION	DOCUMENTATION	Ensure proper Documentation of the incident	<input type="checkbox"/> Request the NRDAR Liaison to coordinate the natural resource trustees to make a preliminary determination of the need for emergency restoration <input type="checkbox"/> Coordinate collection, analysis, and results (including photo documentation) of environmental media (soils, sediments, water, etc.) and dead or dying fish and wildlife with natural resource trustee law enforcement via the NRDAR Liaison. Trustees may collect ephemeral data. <input type="checkbox"/> Establish linkage between Planning Section Environmental Unit and the Operations Sections for technical assistance on methods to avoid and minimize response related injury to natural resources and public health, including preventing the introduction of aquatic nuisance species as boats and equipment are mobilized from outside the local area.	_____	
	RESOURCES	Acquisition and delivery of resources such as equipment, materials etc.	<input type="checkbox"/> Establish a documentation unit to properly document response (at command post) <input type="checkbox"/> Data management for ICS	<input type="checkbox"/> Coordinate collection and documentation of evidence with USFWS, and/or State agencies (as applicable) for respective fish and wildlife enforcement actions and potential NRDAR actions <input type="checkbox"/> Collect agency evidence for identified enforcement issues <input type="checkbox"/> Track expenses for cost recovery	_____
			<input type="checkbox"/> Develop a river traffic management plan	<input type="checkbox"/> Assign staff to create maps, track personnel, catalog resources, etc.	_____
	INCIDENT COMMAND POST	Establish incident facilities including the command post, staging areas & other facilities as incident develops	<input type="checkbox"/> Ensure communications and connectivity	<input type="checkbox"/> Internet, telecommunications, common operating picture capability	_____

Objectives <i>Desired Outcome</i>		Recommended Strategies <i>General Plan and Direction</i>	Recommended Tactics or Tasks <i>How, Who, What, Where, When</i>	Status <i>Operational Period # 1</i>
COMMUNICATION	Provide and manage communications	<input type="checkbox"/> Implement and maintain communications with all incident command posts, emergency operations centers and responders	<input type="checkbox"/> Assign a communications coordinator (unit leader), make a phone list, etc. <input type="checkbox"/> Request additional communication resources if needed (e.g., 800 MHz radios)	_____
	PROCUREMENT	Ensure procurement of materials and supplies & administer accounts receivable and payable to contract and non-contract vendors	<input type="checkbox"/> Establish a Procurement unit and Ensure procurement of materials and supplies	<input type="checkbox"/> Ensure separate accounting of all contracts specifically related to the emergency incident and of all purchases within the enactment of the emergency incident management plan. <input type="checkbox"/> Obtain authorization to initiate and finalize purchases <input type="checkbox"/> Interpret and initiate contracts/agreements to minimize costs <input type="checkbox"/> Maintain log of all purchases related to the incident and initiate the Procurement Summary Report

Incident Name:

ICS – 207 INCIDENT ORGANIZATION CHARTS Northwest Indiana

Initial Command Structure for the first operational period.



1. Incident Name: _____	2. Operational Period # 1: _____	ICS – 204 ASSIGNMENT LIST Northwest Indiana
	3. Section: <u>Operations</u>	
	4. Division/Group: <u>Law Enforcement</u>	

5. Agencies Involved in Law Enforcement Group

- Agencies that might play a role in Law Enforcement Group:
- Counties and Emergency Management
 - Tribes
 - Local Fire, Police, Sheriff and Hazmat Teams
 - US Fish and Wildlife Service (USFWS)
 - State Department of Natural Resources
 - State Environmental Agency
 - US Coast Guard (USCG)

Agency General Roles and Responsibilities: Refer to the Roles and Responsibilities Table provided in this Incident Action Plan

6. Recommended Strategies and Tactics

- Establish river traffic control, river-traffic evacuation, no-boating area Sheriff lead on River Traffic management.
- Secure scene immediately: Police / Sheriff lead on road and rail traffic control
- Collect photo evidence and document the scene
- Coordinate with USFWS law enforcement and state conservation officers and wardens to ensure collection and storage of evidence to enforce federal and state wildlife laws

7. Incident-Specific Assignments

Insert Specific Assignments

8. Special Instructions for Division/Group

Insert special instructions

9. Operations Personnel (Add rows as necessary)

Title	Name	Affiliation	Emergency Contact #	Contact #
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Communications: Refer to the Emergency Contact List provided in this Incident Action Plan

10. Resource Summary (Add rows as necessary)

ID	Resource Type	Description/ Location	Quantity	Size	Status	Notes/ Comments
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

11. Additional Information

Insert additional information if necessary

Prepared By: (Name/Title) _____	Date/Time: _____
Approved by: (Name/Title) _____	Date/Time: _____

1. Incident Name: _____	2. Operational Period # 1: _____	ICS – 204 ASSIGNMENT LIST Northwest Indiana
	3. Section: <u>Operations</u>	
	4. Division/Group: <u>Containment</u>	

5. Agencies Involved in Contain Release Group

- Agencies that might play a role in Containment Group:
- Responsible Party/Facility/Industry/Contractors
 - Counties and Emergency Management
 - Local Fire, Police, Sheriff, and Hazmat Teams
 - State Department of Natural Resources
 - State Environmental Agency
 - US Environmental Protection Agency (US EPA) Region 5

Agency General Roles and Responsibilities: Refer to the Roles and Responsibilities Table provided in this Incident Action Plan

6. Recommended Strategies and Tactics

- Mobilize company responders, local spill Co-op, first responders, county emergency government and hazmat teams, state and federal responders and their contractors.
- Utilize company and locally stored equipment such as oil spill boom, sorbents, tanker trucks, vacuum units, oil collection equipment or pre-staged response equipment.
- Mobilize local personnel and resources.
- Activate Spill Response Contractors (if company response too slow or inadequate).
- Activate and implement oil boom collection and recovery plan.
- Contain and stabilize oil sources.
- Evaluate the control of river level to facilitate spilled product collection and control (note: changing levels can cause larger smear zones).

7. Incident-Specific Assignments

Insert Specific Assignments

8. Special Instructions for Division/Group

Insert special instructions

9. Operations Personnel (Add rows as necessary)

Title	Name	Affiliation	Emergency Contact #	Contact #
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Communications: Refer to the Emergency Contact List provided in this Incident Action Plan

10. Resource Summary (Add rows as necessary)

ID	Resource Type	Description/ Location	Quantity	Size	Status	Notes/ Comments
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

11. Additional Information

Insert additional information if necessary

Prepared By: (Name/Title) _____	Date/Time: _____
Approved by: (Name/Title) _____	Date/Time: _____

1. Incident Name: _____	2. Operational Period # 1: _____	ICS – 204 ASSIGNMENT LIST Northwest Indiana
	3. Section: <u>Operations</u>	
	4. Division/Group: <u>Wildlife Branch</u>	

5. Agencies Involved in Wildlife Recovery & Rehabilitation Group

- Agencies that might play a role in the Wildlife Branch:
- Responsible Party/Facility/Industry/Contractors
 - Tribes
 - State Department of Natural Resources
 - State Environmental Agency
 - USDA APHIS Wildlife Services (USDA WS)
 - US Fish and Wildlife Service (USFWS)

Agency General Roles and Responsibilities: Refer to the Roles and Responsibilities Table provided in this Incident Action Plan

6. Recommended Strategies and Tactics

- Establish a Wildlife Branch to respond to threats and reports of oiled wildlife
 - Request assistance from USFWS, MDNR, or MDEQ and/or USDA-WS
 - Conduct wildlife reconnaissance
 - Prepare to deter wildlife away from the incident
 - Prepare to recover and rehabilitate oiled wildlife
 - Determine the potential need for professional and volunteer rehabilitation
- Wildlife Branch will implement the following Plans, as necessary:
- “Wildlife Reconnaissance and Recovery Plan” to guide the finding and capture of oiled animals
 - “Wildlife Stabilization and Transport Plan” to provide initial veterinary care for recovered oiled wildlife and to transport animals to rehabilitation areas
 - “Wildlife Hazing Plan”
 - “Wildlife Rehabilitation Plan”

7. Incident-Specific Assignments

Insert specific assignments

8. Special Instructions for Division/Group

Insert special instructions

9. Operations Personnel (Add more rows as necessary)

Title	Name	Affiliation	Emergency Contact #	Contact #
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Communications: Refer to the Emergency Contact List provided in this Incident Action Plan

10. Resource Summary (Add more rows as necessary)

ID	Resource Type	Description/ Location	Quantity	Size	Status	Notes/ Comments
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

11. Additional Information

Insert additional information if necessary

Prepared By: (Name/Title) _____	Date/Time: _____
Approved by: (Name/Title) _____	Date/Time: _____

1. Incident Name: _____	2. Operational Period # 1: _____	ICS – 204 ASSIGNMENT LIST Northwest Indiana
	3. Section: <u>Operations</u>	
	4. Division/Group: <u>Reconnaissance & Monitoring</u>	

5. Agencies Involved in Reconnaissance and Monitoring Group

- Agencies that might play a role in Reconnaissance and Monitoring Group:
- Responsible Party/Facility/Industry/Contractors
 - Tribes
 - State Department of Natural Resources
 - State Environmental Agency
 - US Fish and Wildlife Service (USFWS)
 - US Environmental Protection Agency (US EPA) Region 5
 - US Coast Guard (USCG)

Agency General Roles and Responsibilities: Refer to the Roles and Responsibilities Table provided in this Incident Action Plan

6. Recommended Strategies and Tactics

- Establish and deploy Reconnaissance Team(s)
- Reconnaissance by IC/UC organization staff, (reminder need safety plan)
- Reconnaissance by compilation of information by others
- Joint reconnaissance with local authorities
- Air-flight reconnaissance and reporting
- Consider variety of resources for reconnaissance such as local, state, federal or private air recon,
- Conduct air monitoring and water sampling. Conduct perimeter air sampling, water sampling at scene and down river
- Conduct monitoring with the Planning Section’s Environmental Unit and the NRDAR Liaison.
- Provide environmental monitoring data and information as part of regular IC briefings, which include the Environmental Unit and the NRDAR Liaison

7. Incident-Specific Assignments

Insert specific assignments

8. Special Instructions for Division/Group

Insert special instructions

9. Operations Personnel (Add more rows as necessary)

Title	Name	Affiliation	Emergency Contact #	Contact #
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Communications: Refer to the Emergency Contact List provided in this Incident Action Plan

10. Resource Summary (Add more rows as necessary)

ID	Resource Type	Description/ Location	Quantity	Size	Status	Notes/ Comments
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

11. Additional Information

Insert additional information if necessary

Prepared By: (Name/Title) _____	Date/Time: _____
--	-------------------------

Approved by:
(Name/Title) _____

Date/Time: _____

1. Incident Name: _____	2. Operational Period # 1: _____	ICS – 204 ASSIGNMENT LIST Northwest Indiana
	3. Section: <u>Planning</u>	
	4. Division/Group: <u>Environmental Unit</u>	

5. Agencies Involved in Environmental Unit

Agencies that might play a role in Planning Section Environmental Unit:

- Responsible Party/Facility/Industry/Contractors
- Tribes
- State Department of Natural Resources
- State Environmental Agency
- US Fish and Wildlife Service (USFWS)
- US Environmental Protection Agency (US EPA) Region 5
- US Coast Guard (USCG)
- National Oceanic and Atmospheric Administration (NOAA)

Agency General Roles and Responsibilities: Refer to the Roles and Responsibilities Table provided in this Incident Action Plan

6. Recommended Strategies and Tactics

- Coordinate with public health agencies as well as site safety officers to identify potential public health impacts and to develop sampling and monitoring plans designed to evaluate threats to public health and worker safety.
- Identify and evaluate sensitive natural resources and cultural resources, including seasonal and site-specific conditions
- Make a preliminary determination of the extent to which planned response actions may affect natural and cultural resources and suggest measures to avoid/minimize impacts
- Make recommendations on implementation of response strategies, and coordinate closely with the Operations Section to avoid and minimize response related injury to natural resources and cultural resources
- Initiate Endangered Species Act Section 7 emergency consultation
- Coordinate with the Wildlife Branch to provide information to assist in the development of the follow plans: Wildlife Reconnaissance, Wildlife Hazing, Wildlife Recovery, Wildlife Transportation, and Wildlife Rehabilitation; and obtaining any necessary wildlife-related permits
- Conduct spill modelling and spill trajectories
- Provide information to Unified Command
- Develop a monitoring plan for water quality
- Contact air and water experts on agency call back lists (e.g., hydraulic personnel, state water contacts, biologists)
- Coordinate natural resource information with NRDAR liaison

7. Incident-Specific Assignments

Insert specific assignments

8. Special Instructions for Unit

Insert special instructions

9. Planning Personnel (Add more rows as necessary)

Title	Name	Affiliation	Emergency Contact #	Contact #
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Communications: Refer to the Emergency Contact List provided in this Incident Action Plan

10. Resource Summary (Add more rows as necessary)

ID	Resource Type	Description/ Location	Quantity	Size	Status	Notes/ Comments
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

11. Additional Information

Insert additional information if necessary

Prepared By:
(Name/Title) _____

Date/Time: _____

Approved by:
(Name/Title) _____

Date/Time: _____

Incident Name: _____	Operational Period# 1		ICS – 205 INCIDENT COMMUNICATION PLAN Northwest Indiana		
	From:	To:			
Position	Name/Affiliation	Phone #	E-Mail	Current Location	
IC or UC	(Add or remove rows as necessary)				
Incident Commander(s)					
Safety Officer					
Information Officer					
Liaison Officer					
Operations	(Add or remove rows as necessary)				
Section Chief					
Land Ops Branch Chief					
Water Ops Branch Chief					
Air Reconnaissance Branch Chief					
Wildlife Branch Chief					
Law Enforcement Branch Chief					
Logistics	(Add or remove rows as necessary)				
Section Chief					
ICP Unit Leader					
Communications Unit Leader					
Procurement/Ordering Manager					
Planning	(Add or remove rows as necessary)				
Section Chief					
Situation Unit Leader					
Documentation Unit Leader					
Environmental Unit Leader					
Resource Unit Leader					
Finance	(Add or remove rows as necessary)				
Section Chief					
Prepared By: (Name/Title) _____			Date/Time: _____		
Approved By: (Name/Title) _____			Date/Time: _____		

NORTHWEST INDIANA EMERGENCY CONTACT LIST

Organization	Name	Emergency #	Phone #	E-Mail	Other (Radio)
Local (Add rows as necessary)					
911					
Lake County					
Lake County LEPC	Jodi Richmond	219-755-3549	219-755-3549		
Lake County Homeland Security Emergency Management Agency Emergency Operations Center	Paul Petrie		219-755-3549	ppetrie@lakecountyin.org	
Lake County Fire Chief Association Hazmat	Bill Missal		219-736-9681	bmissalhazmat@yahoo.com	
East Chicago Fire Department	Damon Carpenter	911	219-391-8472		
Gary City Emergency Operations Center			219-881-1214		
Griffith Fire Department	Roy Schoon	911	219-577-3587	Roy.schoon@griffith.in.gov	
Hammond Fire Department	Jeff Kochis	911	219-853-6416	kochisj@gohammond.com	
Schererville Fire Department	Robert Patterson, Chief	911	219-322-2599	rpatterson@Schererville.org	
Whiting Fire Department	Don Harbin, Chief	911	219-659-1069	Dharbin@whitingindiana.com	
Lake County Sheriff's Department		911	219-755-3400	info@lakecountysheriff.com	
Lake County Health Department			219-755-3655		
Gary Health Department			219-882-5565		
LaPorte County					
LaPorte County LEPC	John Dudek, Larry Butcher	219-326-6808 x 2264	219-575-0003		
LaPorte County Emergency Operations Center			219-362-7210		
LaPorte County Hazmat	Jeff Hamilton		219-575-0003	hazmat@laportecounty.org	
Michigan City Emergency Operations Center			219-873-1499		
LaPorte County Health Department			219-326-6808		
MS4 Coordinator	Rob Beck		317-690-8805	rbeck@idem.in.gov	
Porter County					
Porter County LEPC	Michelle Kodicek		219-477-3000		
Porter County EMA	Lance Bella		219-462-8654	lance.bella@porterco.org	
Porter County Health Department	M Weber		219-406-1822	Mweber.porterco.org	

Porter County Hazmat & Response	Greg Eckhardt		219-405-3823	geckhardt@porterco.org	
Fire Department		911			
Chesterton Fire Department	Eric Camel		219-405-8800	ecamel@chestertonfire.org	
Portage Fire Department	Chris Kender		219-406-8597	ckender@portage-in.com	
Tribal (Add rows as necessary)					
Pokagon Band of Potawatomi Indians	Kyle Boone		269-782-4880	Kyle.boone@pokagonband-nsn.gov	
State (Add rows as necessary)					
IDEM Spill Line		888-233-7745 317-233-7745			
IDEM Emergency Response Program	Aaron Green, Chief		317-308-3049	Agreen2@idem.in.gov	
IDEM NRDA	Beth Admire		317-232-8584	badmire@idem.in.gov	
IDEM Northwest Regional Office, Office of Program Support	Cathy Csatari, Division Director		219-464-0491	ccsatari@idem.IN.gov	
IDEM NE Region Watershed Specialist	Jessica Faust		317-308-3190	jfaust@idem.IN.gov	
IDEM Wetlands Permits	Jay Turner		317-234-6352	Jturner2@idem.IN.gov	
IDNR			317-232-4200		
IDNR Law Enforcement District X (10)	Lt. Shawn Brown		219-879-5710	shbrown@dnr.in.gov	
IDNR State Historic Preservation Office	Chad Slider		317-234-5366	cslider@dnr.in.gov	
Indiana Dept. of Homeland Security (IDHS)			317-232-3986		
Indiana State Dept. of Health	Lee Christianson				
Federal (Add rows as necessary)					
National Response Center	NRC	800-424-8802	800-424-8802		
US Department of the Interior	DOI	215-266-5155	215-266-5155		
US EPA Region 5	EPA	312-353-2318	312-353-2318		
EPA Region 5 OSC	Jacob Hassan		312-886-6864	Hassan.jacob@epa.gov	
US Fish and Wildlife (USFWS)		906-226-6571	1-800-344-9459		
USFWS	Dan Sparks		219-762-7561 x219	Daniel_sparks@fws.gov	
U.S. Coast Guard Sector Lake Michigan	Timothy Weller		414-747-7881	Timothy.w.weller@uscg.mil	
Agency for Toxic Substances & Disease Registry		770-488-7100 404-639-0615			

Dept. of Transportation Crisis Management Center		202-366-1863			
Pipeline & Hazardous Materials Safety Administration (DOT PHMSA)			816-329-3800		
DOT PHMSA Preparedness & ER Division Washington DC	Eddie Murphy			Eddie.murphy@DOT.gov	
Federal Bureau of Investigation (Indianapolis Field Office)			317-639-3301		
US Geological Survey	Tom Ruby		502-493-1933	aruby@usgs.gov	
U.S. Army Corps of Engineers Indiana Harbor	Damian Allen, Facility Manager		312-951-3357	Damian.G.Allen@usace.army. mil	
US Army Corps of Engineers – Chicago District	Michelle Kozak, Emergency Management Chief			Michelle.S.Kozak@usace.army .mil	
National Park Service (NPS) – Indiana Dunes National Park	Dispatch	219- 395-1077			
NPS – Indiana Dunes National Park	Dan Plath, Resource Management Division Chief	(219) 395-1751	219-221-3105	daniel_plath@nps.gov	
Responsible Party (Add rows as necessary)					
Private (Add rows as necessary)					
Industry					
Pipelines					
Amoco Oil Co.		800-548-6482	880-548-6482; 630-836-5000		
BP Pipeline (North America) Inc.	Kristen Hancock	800-548-6482	918-607-4306; 630-836-5000	Kristen.Hancock@bp.com	
Buckeye Partners		800-331-4115	610-904-4113		
CITGO Petroleum Corp. (Terminals)		832-486-4700	337-802-1179		
Countrymark Refining & Logistics		812-838-8500	800-808-3170		
Enbridge Energy, LP	Dan Quick	800-858-8253	219-864-3754		
Enterprise Products Partners		888-883-6308	708-534-6266		
Explorer Pipeline Co.		888-876-0036	918-493-5100		
Kinder Morgan Interstate Gas Transmission, LLC		866-762-8442			

Marathon Pipe Line	Wyatt Kintner	800-537-6644	618-339-9877	wdkintner@marathonpetroleum.com	
Valero Terminal and Distribution Co.		866-423-0898	210-345-5145		
Wolverine Pipe Line Co.		888-337-5004	269-323-2491, ext. 12		
West Shore Pipeline Co.		888-625-7310	610-904-4113		
Railroads					
CSX Transportation	Joe Caccamo	800-232-0144 904-359-3100	513-853-1142 609-276-4197	Joseph_caccamo@csx.com	
Indiana Harbor Belt Railroad	Dan Shirley, Environmental Manager	800-677-1985	219-989-4703	Dan.Shirley@ihbrr.com	
Norfolk Southern	David Schoendorfer	800-453-2530	855-667-3655	David.schoendorfer@nscorp.com	
Canadian National	Mark Allen	800-465-9239 (Police)	888-888-0316	Mark.allen@cn.ca	
Baltimore and Ohio Chicago Terminal Railroad		800-232-0144	904-359-3100		
Chicago, South Shore and South Bend Railroad	Kristen Coslet		219-874-9000; 219-728-2901		
FRP Facilities					
BP Amoco Whiting Refinery	Mike Donohue, Fire Chief	219-473-1212 (Emergency Dispatch)		michael.donohue@bp.com	
Buckeye Terminals LLC	Nicholas Spitz		219-395-0549	nspitz@buckeye.com	
CITGO East Chicago Terminal	Maher Saad, Manager	219-765-2020	219-398-0734 x15	msaad@citgo.com	
Cleveland Cliffs Burns Harbor	Lester Swanson	219-787-3444 (Central Dispatch)	219-921-9517	Lester.swanson@clevelandcliffs.com	
Cleveland Cliffs Steel Indiana Harbor East	Kevin Lurtz, Senior Engineer	219-399-2492 (24h Environmental Engineer)	219-399-3189 (O) 219-552-4517 (M)	Kevin.Lurtz@clevelandcliffs.com	
Cleveland Cliffs	John Pierce		219-787-2028	john.pierce2@clevelandcliffs.com	
Eco Services Operations Corp.	Richard Pieszchala, Maintenance Manager	219-712-6962	219-932-7651	Matt.Witter@eco-services.com (Matt Witter, Plant Manager)	
ExxonMobil Pipeline Company	Beth Musser		815-739-4251	elizabeth.musser@exxonmobil.com	
Frick Services			219-787-8548		

Marathon Petroleum Company LP	Maurice Graham	513-678-5052	219-932-1024	msgraham@marathonpetroleum.com	
Premcor Hammond Distribution Center	Casey McConnell		708-259-4265 (24h)		
Safety-Kleen Systems	Kyle Snider	800-468-1760 (24h internal notification)	219-218-9183	kyle.snider@safety-kleen.com	
Tanco Terminals	Plomer Barnes, Operations Manager	219-916-3485			
US Steel Gary Works	Terry Carter	219-888-4511 (Dispatch)	219-888-7322	tjcarter@uss.com	
Wolf Lake Terminals Inc	Greg Calarie	219-765-5811 (cell)	219-937-4317	greg@wolflakeinc.com	
Non-Governmental Organizations					
Indiana American Water			800-492-8373		
Great Lakes Commission	Tom Crane, Deputy Director		734-396-6062	tcrane@glc.org	
Northwestern Indiana Regional Planning Commission	Kathy Luther		219-763-6060 x127	kluther@nirpc.org	
Oil Spill Removal Organizations					
ERS Inc.		866-489-7062 800-999-2931	317-247-6119		
SET Environmental	JR Bonnot		847-553-5520	jrbonnot@setenv.com	

1. Incident Name: _____

2. Operational Period# 1

From: _____

To: _____

ICS – 206 MEDICAL PLAN

Northwest Indiana

3. First Aid Stations (Add rows as needed)

Name	Location	EMT (On-Site)		Phone	Radio
		Yes	No		
		<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		

4. Transportation (Ground and/or Ambulance Services) (Add rows as needed)

Name	Location	EMT (On-Site)		Phone	Radio
		Yes	No		
		<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		

5. Hospitals (Add rows as needed)

Name	Location	Helipad		Burn Center		Phone	Radio
		Yes	No	Yes	No		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>							
<input type="checkbox"/>							

6. Special Medical Emergency Procedures

Insert special procedures

Prepared By:
(Name/Title) _____

Date/Time: _____

Approved by:
(Name/Title) _____

Date/Time: _____

1. Incident Name:

2. Operational Period# 1

From: _____

To: _____

**ICS – 223 HEALTH AND SAFETY MESSAGE
Northwest Indiana**

3. Potential Hazards

Insert potential hazards

4. General Safety Concerns

Insert general safety concerns

5. Additional Information

Insert additional information if necessary

Prepared By:

(Name/Title) _____

Date/Time: _____

Approved by:

(Name/Title) _____

Date/Time: _____

1. Incident Name: _____	2. Operational Period# 1		ICS – 214 UNIT ACTIVITY LOG Northwest Indiana
	From: _____	To: _____	
3. Unit name: _____	4. Unit Leader: _____		

5. Instructions for completing the form

Field	Field Title	Instructions
1.	Unit Name	For individuals: Enter tactical call sign (e.g. Checkpoint #, County EOC, etc.) or position
2.	Unit Leader	For individuals: Enter your name and call sign
3.	Personnel Assigned	For individuals: Leave blank
4.	Activity Log	Time: Enter the local time 24-hour format

6. Personnel Assigned (Add more rows if necessary)

NAME	ICS POSITION	HOME BASE/ CITY

7. Activity Log (Add more rows if necessary)

TIME	MAJOR EVENTS

Prepared By: (Name/Title) _____	Date/Time: _____
Approved by: (Name/Title) _____	Date/Time: _____

APPENDIX C

Northwest Indiana

Inland Zone Sub-Area County Fact Sheets

County Fact Sheets

The following counties are included in this appendix:

Lake County

LaPorte County

Porter County

County Fact Sheet Reports can be accessed on the rrt5.org website using viewers which are located under the “[Interactive Mapping](#)” tab. The tool uses the EOC Dashboard Viewer for the County Fact Sheets reporting, however, all State Mapping viewers also contain a County Fact Sheet Report option.

County Fact Sheet Reports contain the following categories of information, when applicable, for each designated County.

County Description & Contacts	Managed Lands	CERCLIS
State Description & Contacts	Specially Designated Areas	TSCA
Major Cities/Towns	Other Environmentally Sensitive Areas	EPLAN/Tier 2
Railroads - ISA	Tribal Lands	Hazardous Materials Storage
Non-Class 1 Railroads - FRA	Sensitive Species	Above Ground Storage Tanks
Marinas	Water Infrastructure	Oil and Natural Gas Pipelines
Boat Access	Archaeological Sites	Petroleum Pipelines
Navigation Locks & Dams	Response Strategies	Mines and Mineral Resources
Non-Navigation Dams	Wastewater Treatment Plants	Rivers and Streams
Hospitals	RMP	Lakes and Ponds
Urgent Care Facilities	TRI	Watersheds
Historic Places	FRP	Subwatersheds
Water Intakes	RCRA	

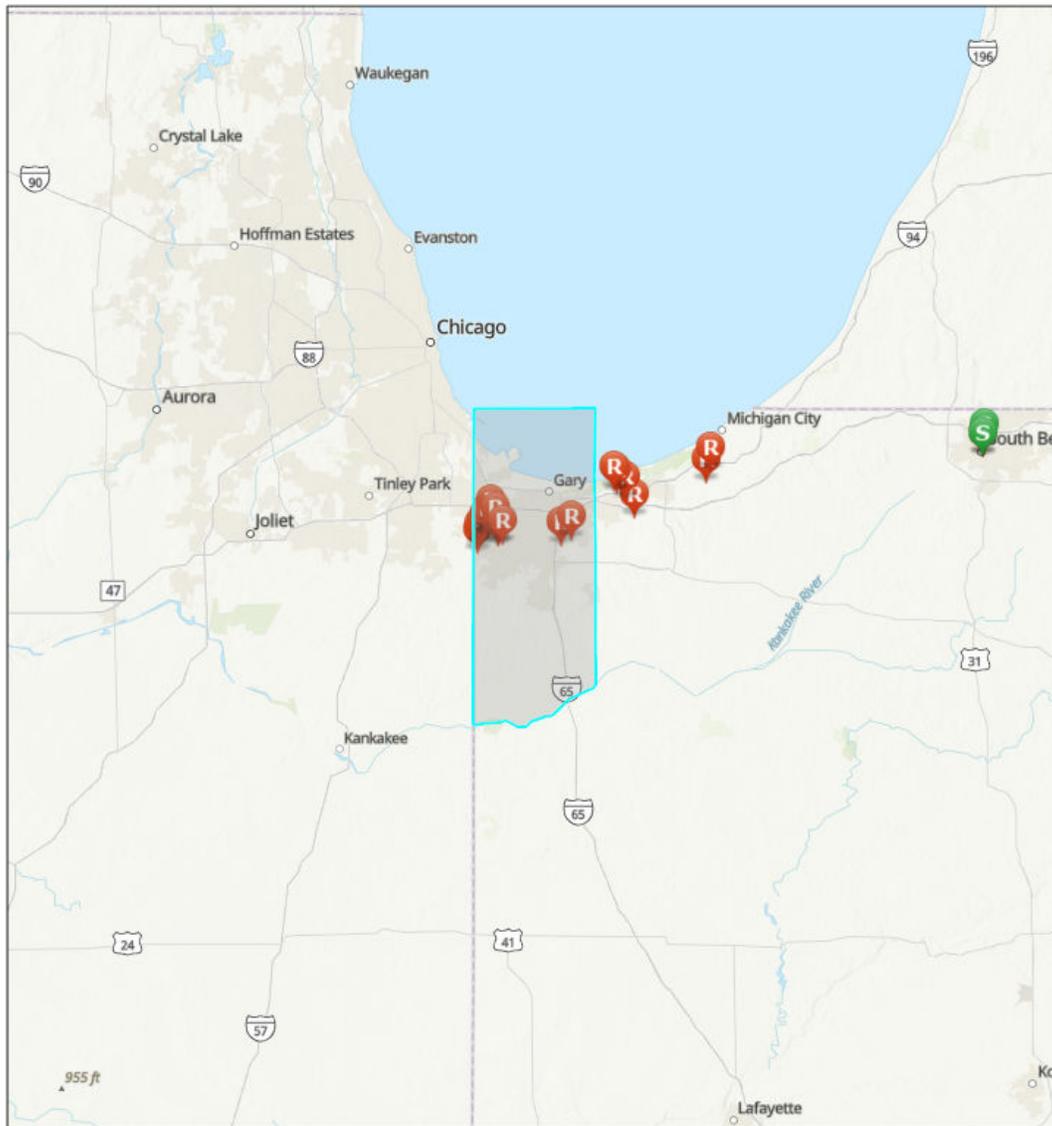
Please note that information included in these reports may be incomplete or no longer accurate due to outdated information in the ISA.

EPA Lake County Indiana Fact Sheet Report

Area of Interest (AOI) Information

Area : 400,994.08 acres

Jul 1 2021 14:57:02 Central Daylight Time



GRP Response Strategy Survey



Response Data Sheet



Staging Area Only Data Sheet

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatasysteisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community. Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Upper Mississippi River Basin Association, Great Lakes Commission, USEPA

Summary

Name	Count	Area(acres)	Length(mi)
Local EOC	2	N/A	N/A
Public Health Departments	2	N/A	N/A
County Contacts	1	400,994.08	N/A
State Contacts	1	400,994.08	N/A
Major Cities and Towns	21	N/A	N/A
Tribal Lands	0	0	N/A
Tribal Lands (Cont'd)	0	0	N/A
Hospitals	16	N/A	N/A
Hospitals (Cont'd)	16	N/A	N/A
Urgent Care Facilities	9	N/A	N/A
Water Intakes	28	N/A	N/A
Water Intakes (Cont'd)	28	N/A	N/A
Wastewater Treatment Facilities	32	N/A	N/A
Special Designated Areas	11	1,042.87	N/A
Special Designated Areas (Cont'd)	11	1,042.87	N/A
Managed Lands	194	14,013.18	N/A
Managed Lands (Cont'd)	194	14,013.18	N/A
Other Environmentally Sensitive Areas	1	8,223.90	N/A
Other Environmentally Sensitive Areas (Cont'd)	1	8,223.90	N/A
Historic Places	44	N/A	N/A
Archaeological Sites	0	0	N/A
Threatened and Endangered Species	0	0	N/A
Aboveground Storage Tanks	24	N/A	N/A
Aboveground Storage Tanks (Cont'd)	24	N/A	N/A
Hazardous Materials Storage	167	N/A	N/A
Hazardous Materials Storage (Cont'd)	167	N/A	N/A
Facility Response Plan (FRP) Facilities	13	N/A	N/A
Risk Management Plan (RMP) Facilities	32	N/A	N/A
Railroads	226	N/A	331.31
Petroleum Pipelines	119	N/A	485.35
Oil and Natural Gas Pipelines	0	N/A	0
Marinas	8	N/A	N/A
Boat Access	16	N/A	N/A
Navigational Locks and Dams	1	N/A	N/A
Non-navigational Dams	11	N/A	N/A
Rivers and Streams	25	N/A	149.36
Lakes and Ponds	210	4,010.56	N/A

Response Strategies	4	N/A	N/A
Response Strategies (Cont'd)	4	N/A	N/A
Response Strategies (Cont'd)	4	N/A	N/A

Local EOC

#	Name	Address	City	Phone	Has Generator	Directions	Count
1	GARY CITY EMERGENCY OPERATIONS CENTER	555 POLK STREET	GARY	219-881-1214	<i>No Data</i>	LOCATED ON THE NORTH SIDE OF WEST 6TH AVENUE. NORTH OF THE POLK STREET INTERSECTION.	1
2	LAKE COUNTY HOMELAND SECURITY EMERGENCY MANAGEMENT AGENCY EMERGENCY OPERATIONS CENTER	2900 WEST 93RD AVENUE	CROWN POINT	219-755-3549	Y	<i>No Data</i>	1

Public Health Departments

#	Name	Address	City	Phone	Website	Count
1	LAKE COUNTY HEALTH DEPARTMENT	2293 NORTH MAIN STREET	CROWN POINT	219-755-3655	<i>No Data</i>	1
2	GARY HEALTH DEPARTMENT	1145 WEST 5TH AVENUE	GARY	219-882-5565	<i>No Data</i>	1

County Contacts

#	County	Point of Contact	Emergency Management Phone	LEPC Chair	LEPC Phone	Local Health Department Phone	Area(acres)
1	Lake, Indiana	Jodi E Richmond	219-755-3549	Jodi Richmond	219-755-3549	219-755-3655	400,994.08

State Contacts

#	State Emergency Management Phone	24-hr Emergency Management Phone	State Health Department Phone	Homeland Security	Area(acres)
1	317-232-3986	888-233-7745	317-233-1325	317-232-3986	400,994.08

Major Cities and Towns

#	Name	Population	Elevation (Feet)	Count
1	Lake Dalecarlia	1355	712	1
2	Crown Point	27317	732	1
3	Hammond	80830	600	1
4	Hobart	29059	623	1
5	East Chicago	29698	591	1
6	Gary	80294	600	1
7	Lake Station	12572	620	1
8	Cedar Lake	11560	709	1
9	Lowell	9276	669	1
10	Merrillville	35246	656	1
11	Munster	23603	610	1
12	New Chicago	2035	636	1
13	Saint John	14850	725	1
14	Schererville	29243	669	1
15	Schneider	277	633	1
16	Dyer	16390	640	1
17	Griffith	16893	630	1
18	Highland	23727	623	1
19	Whiting	4997	587	1
20	Winfield	4383	709	1
21	Shelby	539	640	1

Hospitals

#	Name	Address	City	Phone	Type	Status	Count
1	NEURO BEHAVIORAL HOSPITAL	9330 BROADWAY	CROWN POINT	(574) 277-2630	PSYCHIATRIC	OPEN	1
2	COMMUNITY HOSPITAL	901 MACARTHUR BLVD	MUNSTER	(219) 836-1600	GENERAL ACUTE CARE	OPEN	1
3	METHODIST HOSPITALS INC	600 GRANT ST	GARY	(219) 886-4642	GENERAL ACUTE CARE	OPEN	1
4	ST MARY MEDICAL CENTER INC	1500 S LAKE PARK AVE	HOBART	(219) 942-0551	GENERAL ACUTE CARE	OPEN	1
5	FRANCISCAN PHYSICIANS HOSPITAL LLC	701 SUPERIOR AVE	MUNSTER	(219) 922-4200	GENERAL ACUTE CARE	OPEN	1
6	FRANCISCAN ST MARGARET HEALTH - DYER	24 JOLIET ST	DYER	(219) 865-2141	GENERAL ACUTE CARE	OPEN	1
7	ST CATHERINE HOSPITAL INC	4321 FIR ST	EAST CHICAGO	(219) 392-7004	GENERAL ACUTE CARE	OPEN	1
8	VIBRA HOSPITAL OF NORTHWEST INDIANA	9509 GEORGIA ST	CROWN POINT	(219) 472-2200	LONG TERM CARE	OPEN	1
9	FRANCISCAN ST MARGARET HEALTH - HAMMOND	5454 HOHMAN AVE	HAMMOND	(219) 932-2300	GENERAL ACUTE CARE	OPEN	1
10	HIND GENERAL HOSPITAL LLC	101 W 61ST AVE	HOBART	(219) 947-3030	GENERAL ACUTE CARE	CLOSED	1
11	PINNACLE HOSPITAL	9301 CONNECTICUT DR	CROWN POINT	(219) 756-2100	GENERAL ACUTE CARE	OPEN	1
12	KINDRED HOSPITAL NORTHWEST INDIANA	5454 HOHMAN AVE, 5TH FL	HAMMOND	(219) 852-5305	LONG TERM CARE	OPEN	1
13	REGENCY HOSPITAL OF NORTHWEST INDIANA	4321 FIR ST, 4TH FL	EAST CHICAGO	(219) 392-7790	LONG TERM CARE	OPEN	1
14	METHODIST HOSPITAL-SOUTHLAKE	8701 BROADWAY	MERRILLVILLE	(219) 738-5500	GENERAL ACUTE CARE	OPEN	1
15	FRANCISCAN ST ANTHONY HEALTH - CROWN POINT	1201 S MAIN ST	CROWN POINT	(219) 757-6100	GENERAL ACUTE CARE	OPEN	1
16	REGIONAL MENTAL HEALTH CENTER	8555 TAFT ST	MERRILLVILLE	(219) 769-4005	PSYCHIATRIC	OPEN	1

Hospitals (Cont'd)

#	Name	City	Trauma Level	Helipad	Number of Beds	Owner	Count
1	NEURO BEHAVIORAL HOSPITAL	CROWN POINT	NOT AVAILABLE	N	70	NOT AVAILABLE	1
2	COMMUNITY HOSPITAL	MUNSTER	NOT AVAILABLE	Y	458	NON-PROFIT	1
3	METHODIST HOSPITALS INC	GARY	LEVEL III	Y	536	NON-PROFIT	1
4	ST MARY MEDICAL CENTER INC	HOBART	NOT AVAILABLE	Y	215	NON-PROFIT	1
5	FRANCISCAN PHYSICIANS HOSPITAL LLC	MUNSTER	NOT AVAILABLE	Y	63	NON-PROFIT	1
6	FRANCISCAN ST MARGARET HEALTH - DYER	DYER	NOT AVAILABLE	Y	198	NON-PROFIT	1
7	ST CATHERINE HOSPITAL INC	EAST CHICAGO	NOT AVAILABLE	N	220	NON-PROFIT	1
8	VIBRA HOSPITAL OF NORTHWESTERN INDIANA	CROWN POINT	NOT AVAILABLE	N	40	PROPRIETARY	1
9	FRANCISCAN ST MARGARET HEALTH - HAMMOND	HAMMOND	NOT AVAILABLE	Y	215	NON-PROFIT	1
10	HIND GENERAL HOSPITAL LLC	HOBART	NOT AVAILABLE	Y	8	PROPRIETARY	1
11	PINNACLE HOSPITAL	CROWN POINT	NOT AVAILABLE	N	18	PROPRIETARY	1
12	KINDRED HOSPITAL NORTHWEST INDIANA	HAMMOND	NOT AVAILABLE	Y	215	PROPRIETARY	1
13	REGENCY HOSPITAL OF NORTHWEST INDIANA	EAST CHICAGO	NOT AVAILABLE	N	220	PROPRIETARY	1
14	METHODIST HOSPITAL-SOUTHLAKE	MERRILLVILLE	NOT AVAILABLE	Y	-999	NOT AVAILABLE	1
15	FRANCISCAN ST ANTHONY HEALTH - CROWN POINT	CROWN POINT	LEVEL III	Y	183	NON-PROFIT	1
16	REGIONAL MENTAL HEALTH CENTER	MERRILLVILLE	NOT AVAILABLE	N	16	PROPRIETARY	1

Urgent Care Facilities

#	Name	Address	Address2	City	Phone	Directions	Count
1	IMMEDIATE CARE CENTER	5521 WEST LINCOLN HIGHWAY	SUITE 1 A	SCHERERVILLE	219-769-8284	LOCATED IN THE SOUTHWEST CORNER OF THE INTERSECTION OF WEST LINCOLN HIGHWAY AND BURR STREET	1
2	FIRST ATTENDING URGENT CARE CENTER	1217 UNITED STATES HIGHWAY 41	<i>No Data</i>	SCHERERVILLE	219-322-6767	LOCATED ON THE SOUTHEAST CORNER OF 65TH AVENUE AND UNITED STATES HIGHWAY 41	1
3	CONCENTRA URGENT CARE - HAMMOND	6423 COLUMBIA AVENUE	<i>No Data</i>	HAMMOND	219-937-3632	LOCATED ON THE EAST SIDE OF S COLUMBIA AVE BETWEEN E 164TH PL AND E KENWOOD ST	1
4	FIRST MED OCCUPATIONAL MEDICINE AND URGENT CARE	751 EAST 81ST PLACE	<i>No Data</i>	MERRILLVILLE	219-769-4400	LOCATED ON THE WEST SIDE OF GEORGIA ST BETWEEN E 81 ST PL AND E 82ND AVE	1
5	THE HAMMOND CLINIC - FAMILY WELLNESS CENTER	9800 VALPARAISO DRIVE	<i>No Data</i>	MUNSTER	219-836-5800	LOCATED ON THE WEST SIDE OF VALPARAISO DR, BETWEEN PROGRESS AVE AND SUPERIOR AVE	1
6	THE HAMMOND CLINIC - SAINT JOHN CENTER	11355 WEST 97TH LANE	<i>No Data</i>	SAINT JOHN	219-836-5800	LOCATED ON THE WEST SIDE OF PHEASANT LN BETWEEN W 97TH LN AND HUNTERS RUN	1
7	THE HAMMOND CLINIC - MUNSTER	7905 CALUMET AVENUE	<i>No Data</i>	MUNSTER	219-836-5800	LOCATED ON THE EAST SIDE OF CALUMET AVE BETWEEN RIVER DR AND BROADMOOR AVE	1
8	FIRST MEDICAL OCCUPATIONAL MEDICINE AND URGENT CARE	4519 WEST 5TH AVENUE	<i>No Data</i>	GARY	219-944-1400	SOUTH SIDE OF W 5TH AVENUE BETWEEN CLARK RD AND BIGGER STREET	1

9	SOUTHEASTER N MEDICAL CENTER	4020 SOUTH CALUMET AVENUE	<i>No Data</i>	HAMMOND	219-933-4888	WEST SIDE OF CALUMET AVE APPROX 0.18 MILES NORTH OF THE INTERSECTION WITH E 141ST STREET	1
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Water Intakes

#	Name	Address	City	Emergency Phone	Phone	Waterbody	Count
1	US Steel Corporation	1 N Broadway	Gary	219-888-4511	219-888-3369	Lake Michigan	5
2	ArcelorMittal - Indiana Harbor	3001 Dickey Rd.	East Chicago	219-755-3400	219-399-1686	Indiana Harbor Canal	4
3	US Aggregates, Inc. - Lowell Quarry	9331 W 205th Ave.	Lowell	317-767-4694	317-874-4928	Quarry Pit	2
4	Hammond Water Works	925 Casino Center Dr.	Hammond	219-853-6439; 219-808-3177	219-853-6439	Lake Michigan	2
5	BP Products North America, Inc.	BP WWTP Front Street Entrance	Whiting	219-473-3500	219-473-7700	Lake Michigan	2
6	ArcelorMittal - Indiana Harbor	3210 Watling St.	East Chicago	219-755-3400	219-399-1686	Lake Michigan	2
7	Indiana-American Water Co. - Borman Park WTP	650 Madison St.	Gary	219-384-9509	219-384-9509	Lake Michigan	1
8	Unilever	1200 Calumet Ave.	Hammond	219-659-3200	219-473-7428	Lake Michigan	1
9	BP Products North America, Inc.	Indiana Harbor Ship Canal	Hammond	219-473-3500	219-473-7700	Indiana Harbor Canal	1
10	East Chicago Water Department	3330 Aldis Ave.	East Chicago	219-391-8487	219-391-8487	Lake Michigan	1
11	D.H. Mitchell Generating Station	N Clark Rd.	Gary	219-741-0070 (cell)	219-741-0070 (cell)	Lake Michigan	1
12	ExxonMobil - Hammond Terminal	1527 141st St.	Hammond	281-732-8653	219-933-6051	Lake George Canal	1
13	US Gypsum Co.	301 Riley Rd.	East Chicago	219-218-5816; 219-712-9406	219-392-4602	Indiana Harbor Canal	1
14	Lake County Parks and Recreation Dept.	N CR 1000 W	Demotte	219-712-4315 (cell)	219-769-7275	Kankakee River	1
15	Carmeuse Lime, Inc.	1 Carmeuse Ln	Gary	219-755-3400	219-949-1450	Lake Michigan	1
16	Cargill, Inc.	1100 Indianapolis Blvd	Hammond	219-659-2000	219-659-2000	Lake Michigan	1
17	Cargill, Inc.	1100 Indianapolis Blvd	Hammond	219-659-2000	219-659-2000	Wolf Lake	1

Water Intakes (Cont'd)

#	Name	Waterbody	Water Use	Intake Info	Location	Comments	Count
1	US Aggregates, Inc. - Lowell Quarry	Quarry Pit	Industrial	3	Southside of 205th Ave, 2 miles east of US highway 41	2500 GPM	2
2	ArcelorMittal - Indiana Harbor	Indiana Harbor Canal	Industrial	4	N/A	80000 GPM	1
3	ArcelorMittal - Indiana Harbor	Indiana Harbor Canal	Industrial	4	N/A	150000 GPM	1
4	Indiana-American Water Co. - Borman Park WTP	Lake Michigan	Public Water Supply	1	N/A	69440 GPM	1
5	US Steel Corporation	Lake Michigan	Industrial	5	N/A	295500 GPM	1
6	ArcelorMittal - Indiana Harbor	Indiana Harbor Canal	Industrial	4	N/A	120000 GPM	1
7	US Steel Corporation	Lake Michigan	Industrial	5	N/A	200000 GPM	1
8	Unilever	Lake Michigan	Industrial	1	N/A	12500 GPM	1
9	BP Products North America, Inc.	Indiana Harbor Canal	Power Generation	1	From Indianapolis Blvd head west on 129th street, cross railroad tracks, turn left onto BP Gate entry to J&L, sign in at Control Room straight ahead past Cline Ave overpass. Head south from control room to firewater pump house on Indiana Harbor Canal	12500 GPM	1
10	East Chicago Water Department	Lake Michigan	Public Water Supply	1	N/A	19444 GPM; facility moving to new address in late 2011. Re-inquire the Water Depot after Jan 1, 2012	1
11	Hammond Water Works	Lake Michigan	Public Water Supply	2	N/A	26389 GPM; intakes @ 60"-20' depth, 42" - 25' depth	1
12	D.H. Mitchell Generating Station	Lake Michigan	Power Generation	1	N end of Clark Rd, near Lake Michigan	456000 GPM	1
13	ExxonMobil - Hammond Terminal	Lake George Canal	Power Generation	1	N/A	2000 GPM	1
14	US Gypsum Co.	Indiana Harbor Canal	Other	1	1000 ft southwest from Canal St on North Bank	1000 GPM; Fire protection	1
15	ArcelorMittal - Indiana Harbor	Indiana Harbor Canal	Industrial	4	N/A	86000 GPM	1

16	BP Products North America, Inc.	Lake Michigan	Industrial	2	Near Whiting Park, located off of Front Street in Whiting IN at east shoreline of property extending approximately 2500' into Lake Michigan	96150 GPM	1
17	Lake County Parks and Recreation Dept.	Kankakee River	Miscellaneous	4	Near where W 1500 N becomes N 1000 W	9000 GPM	1
18	ArcelorMittal - Indiana Harbor	Lake Michigan	Industrial	2	N/A	301000 GPM	1
19	Carmeuse Lime, Inc.	Lake Michigan	Industrial	1	Located at the end of Clark Rd/Carmeuse Ln	25 GPM	1
20	US Steel Corporation	Lake Michigan	Industrial	5	N/A	81000 GPM	1
21	Cargill, Inc.	Lake Michigan	Industrial	1	N/A	20000 GPM	1
22	US Steel Corporation	Lake Michigan	Industrial	5	N/A	258400 GPM	1
23	Hammond Water Works	Lake Michigan	Public Water Supply	2	N/A	26389 GPM; intakes @ 60"-20' depth, 42" - 25' depth	1
24	US Steel Corporation	Lake Michigan	Industrial	5	N/A	42000 GPM	1
25	ArcelorMittal - Indiana Harbor	Lake Michigan	Industrial	2	N/A	94000 GPM	1
26	Cargill, Inc.	Wolf Lake	Industrial	1	N/A	13500 GPM	1
27	BP Products North America, Inc.	Lake Michigan	Industrial	2	Near Whiting Park, located off of Front Street in Whiting IN at east shoreline of property extending approximately 2500' into Lake Michigan	109600 GPM	1

Wastewater Treatment Facilities

#	Name	Address	City	Waterbody	Count
1	SCHERERVILLE WWTP	550 KAESER BLVD	SCHERERVILLE	LITTLE CALUMET R VIA SCHERERVILLE D	2
2	HIGHLAND MUNICIPAL STP	3333 RIDGE ROAD	HIGHLAND	<i>No Data</i>	2
3	GARY SANITARY DISTRICT	3600 W 3RD AVE	GARY	GRAND CALUMET R & LITTLE CALUMET R	2
4	LAKE GEORGE PLATEAU SUBD	706 FRONT STREET	HOBART	<i>No Data</i>	2
5	HAMMOND WASTEWATER FACILITY	5143 COLUMBIA AVE	HAMMOND	GRAND CALUMET R TO LAKE MICHIGAN	2
6	LOWELL WWTP	7500 BELSHAW RD	LOWELL	CEDAR CR TO KANKAKEE RIVER	2
7	EAST CHICAGO SANITARY DISTRICT	5201 INDIANAPOLIS BLVD	EAST CHICAGO	GRAND CALUMET R TO LAKE MICHIGAN	2
8	DEEP RIVER WATER PARK WWTP	9001 E US 30	CROWN POINT	DEEP R TO LITTLE CALUMET RIVER	2
9	SCHNEIDER WWTP	22800 PARRISH AVE	SCHNEIDER	KANKAKEE R VIA BROWN DITCH	2
10	MERRILLVILLE CONSERVANCY DIST.	6250 BROADWAY	MERRILLVILLE	SRVD BY GARY	2
11	DYER WASTEWATER TREATMENT PLANT	518 EDMOND DR	DYER	DAM/LITTLE CALUMET/HART DIT/PLUM CR	2
12	LAKE DALECARLIA REGIONAL WASTE	15901 BRIARGATE PL	LOWELL	CEDAR CR TO KANKAKEE RIVER	2
13	HOBART MUNICIPAL STP	706 FRONT STREET	HOBART	DEEP R TO LITTLE CALUMET RIVER	2
14	CROWN POINT WWTP	1321 MERRILLVILLE RD	CROWN POINT	LM/CLMT-BRNS/DEEP R/MAIN BEAVER DAM	2
15	ST JOHN MUNICIPAL STP	11065 W 93RD ST	ST JOHN	<i>No Data</i>	2
16	HOBART WASTEWATER TREATMENT PLANT	706 FRONT ST	HOBART	LM/CALUMET RIVER/DEEP RIVER	2

Special Designated Areas

#	Name	Agency	Address	City	Emergency Phone	Phone	Area(acres)
1	Hoosier Prairie State Nature Preserve	Indiana DNR Nature Preserves	W Evergreen Ln.	Griffith	219-755-3400	317-232-4052	345.58
2	Dupont East Chicago Natural Area	The Nature Conservancy	I-90 W	Hammond	219-755-3400	317-951-8818	171.96
3	Ivanhoe Dune And Swale	The Nature Conservancy	Hobart St.	Gary	219-755-3400	317-951-8818	101.29
4	Deep River	Indiana Natural Resources Commission	N/A	N/A	317-232-8248	317-232-4699	100.24
5	Kankakee River	Indiana Natural Resources Commission	N/A	N/A	317-232-8248	317-232-4699	99.34
6	Greiner Nature Preserve	Shirley Heinze Environmental Fund	W Old Ridge Rd.	Hobart	219-755-3400	219-242-8558	77.42
7	Portage-Burns Waterway	Indiana Natural Resources Commission	N/A	N/A	317-232-8248	317-232-4699	55.13
8	Seidner Dune and Swale	Shirley Heinze Environmental Fund	I-90 W	East Chicago	219-755-3400	219-242-8558	45.10
9	Cressmoor Prairie	Shirley Heinze Environmental Fund	N Lake Park Ave.	Hobart	219-755-3400	219-242-8558	38.03
10	Cline Avenue	Save The Dunes Council	Cline Ave.	Hammond	219-755-3400	219-879-3937	8.73
11	Coulter (John Merle)	Shirley Heinze Land Trust	County Line Rd	Portage	219-755-3400; 219-326-7700	219-242-8558	0.06

Special Designated Areas (Cont'd)

#	Name	City	Category	Waterbody	Location	Comments	Area(acres)
1	Hoosier Prairie State Nature Preserve	Griffith	State Nature Preserve	unnamed ponds	Main and Kennedy	Open	345.58
2	Dupont East Chicago Natural Area	Hammond	Private Conservation Land	Grand Calumet River	Gary Ave and Cline Ave	Restricted	171.96
3	Ivanhoe Dune And Swale	Gary	Private Conservation Land	None	Hobart and 4th	Restricted	101.29
4	Deep River	N/A	Outstanding Resource Waters	Deep River	One mi. S of US 30 to Little Calumet River	<i>No Data</i>	100.24
5	Kankakee River	N/A	Outstanding Resource Waters	Kankakee River	Upstream boundary of Kingsbury Fish and Wildlife Area through LaSalle State Fish and Wildlife Area to Indiana/Illinois line	State Heritage Program site	99.34
6	Greiner Nature Preserve	Hobart	Private Nature Preserve	None	W Old Ridge and Montgomery; surrounds Ridgeview Elementary School	Open	77.42
7	Portage-Burns Waterway	N/A	Outstanding Resource Waters	Portage-Burns Waterway	One mi. S of US 30 to Little Calumet River	<i>No Data</i>	55.13
8	Seidner Dune and Swale	East Chicago	Private Nature Preserve	Grand Calumet River	I-90 and Kennedy Ave	Open	45.10
9	Cressmoor Prairie	Hobart	Private Nature Preserve	None	N Lake Park Ave and Hidden Lake Dr	Open	38.03
10	Cline Avenue	Hammond	Private Nature Preserve	None	S of I-90	Closed	8.73
11	Coulter (John Merle)	Portage	Nature Preserve	None	N/A	Closed	0.06

Managed Lands

#	Name	Agency	Address	City	Emergency Phone	Contact Phone	Area(acres)
1	Indiana Dunes National Park	National Park Service	1100 N Mineral Springs Rd.	Porter	219-755-3400; 219-326-7700	219-395-1882	1,946.77
2	Grand Kankakee Marsh	Lake County Parks and Recreation	21690 Range Line Rd.	Hebron	219-755-3400	219-769-7275	1,853.98
3	Lasalle State Fish And Wildlife Area	Indiana DNR Fish and Wildlife	4752 W 1050N	Lake Village	219-755-3400	219-992-3019	887.56
4	Oak Ridge Prairie	Lake County Parks and Recreation	301 S Colfax St.	Griffith	219-755-3400	219-769-7275	769.46
5	Deep River County Park	Lake County Parks and Recreation	9410 Old Lincoln Hwy	Hobart	219-755-3400	219-769-7275	756.75
6	Deep River Waterpark	Lake County Parks and Recreation	9001 E US Hwy 30	Hobart	219-755-3400	219-769-7275	422.12
7	Hobart Marsh	Indiana DNR Nature Preserves	S Liverpool Rd.	Gary	219-755-3400	317-232-4052	363.55
8	Hoosier Prairie Nature Preserve	Indiana DNR Nature Preserves	135 E Main St	Schereville	219-755-3400	317-232-4052	352.43
9	Hoosier Prairie State Nature Preserve	Indiana DNR Nature Preserves	W Evergreen Ln.	Griffith	219-755-3400	317-232-4052	345.58
10	Hobart Prairie Grove	National Park Service	S Liverpool Rd.	Hobart	219-755-3400	219-926-7561	316.76
11	Stony Run County Park	Lake County Parks and Recreation	Stony Run Rd.	Leroy	219-755-3400	219-769-7275	297.91
12	Lemon Lake County Park	Lake County Parks and Recreation	6322 W 133rd Ave.	Crown Point	219-755-3400	219-769-7275	296.80
13	Wicker Memorial Park	North Township Park and Recreation Board	8554 Indianapolis Blvd.	Highland	219-755-3400	219-838-3420; 219-838-9809; 219-923-3830	296.76
14	Cedar Lake Marsh Fish and Wildlife Area	Indiana DNR Fish and Wildlife	Lauerman St.	Fremont	219-755-3400	317-232-4200	296.50
15	Pine Station Nature Preserve	Indiana DNR Nature Preserves	N Clark Rd.	Gary	219-755-3400	317-232-4052	258.24
16	Lost Marsh Golf Course and Enviro. Rec. Center	Hammond Port Authority	901 E 129th St.	Hammond	219-755-3400	219-659-7678	240.77
17	Deep River Headwaters Fish And Wildlife Area	Lake County Parks and Recreation	Route 8	Schererville	219-755-3400	219-769-7275	239.54
18	Gibson Woods Nature Preserve	Lake County Parks and Recreation	6201 Parrish Ave.	Hammond	219-755-3400	219-769-7275	228.21
19	Marquette Park	Gary Department of Public Parks	1 North Grand Blvd	Gary	219-755-3400	219-938-7362	178.49

20	Centennial Park	Munster Park and Recreation Department	1005 S Centennial Dr.	Munster	219-755-3400	219-836-7275	178.15
21	Oak Knoll Golf Course	Oak Knoll Golf Course	11200 Whitcomb St.	Crown Point	219-755-3400	812-342-2000	170.08
22	Doak Fish And Wildlife Area	Indiana DNR Fish and Wildlife	137th & Montgomery	Winfield	219-755-3400	317-232-4200	162.98
23	Calumet Prairie Nature Preserve	Indiana DNR Nature Preserves	1250 Ripley St	Lake Station	219-755-3400	317-232-4052	152.67
24	Turkey Creek Golf Course	Lake County Parks and Recreation	6400 Harrison St.	Merrillville	219-755-3400	219-769-7275	124.25
25	Gaylord Butterfly Tract Nature Preserve	Indiana DNR Nature Preserves	W Division Rd.	Griffith	219-755-3400	317-232-4052	116.54
26	Lake Etta County Park	Lake County Parks and Recreation	4801 W 29th Ave.	Gary	219-755-3400	219-769-7275	98.21
27	Hidden Lake Park	Ross Township Trustee	6355 Broadway Rd.	Merrillville	219-755-3400	219-980-0732	96.82
28	McCloskey's Burr Oak Savanna Nature Preserve	Indiana DNR Nature Preserves	W 49th Ave.	Hobart	219-755-3400	317-232-4052	94.88
29	Burr Oak Woods (E)	Shirley Heinze Environmental Fund	Woodlawn Ln.	Hobart	219-755-3400	219-242-8558	84.95
30	Lake County Fairgrounds	Lake Co. Board of Commissioners	Lake St.	Crown Point	219-755-3400	219-755-3200	83.84
31	Three Rivers County Park	Lake County Parks and Recreation	2800 Colorado St	Lake Station	219-755-3400	219-769-7275	76.92
32	Thomas Sporre Wildlife Refuge	Indiana DNR Fish and Wildlife	E US Hwy 231	Crown Point	219-755-3400	317-232-4200	71.29
33	Mac Jay Lake (Hobart Izaak Walton League)	The Izaak Walton League	4700 W 49th Ave.	Hobart	219-755-3400	219-947-1526	63.06
34	Clark and Pine Nature Preserve	Indiana DNR Nature Preserves	N Clark Rd.	Gary	219-755-3400	317-232-4052	60.04
35	Tolleston Ridges (Hwy 912)	Lake County Parks and Recreation	State Hwy 912	Hammond	219-755-3400	219-769-7275	59.68
36	Edward C. Dowling Park	Hammond Parks and Recreation	175th & Parrish Ave.	Hammond	219-755-3400	219-853-6378	59.27
37	Rohrman Park	Schererville Parks and Recreation Board	6750 Rohrman Rd.	Schererville	219-755-3400	219-865-5530	54.40
38	Centennial Plaza and Trail	Hammond Parks and Recreation	N/A	Hammond	219-755-3400	219-853-6378	48.83
39	Burr Oak Woods (W)	Shirley Heinze Environmental Fund	Mississippi St.	Hobart	219-755-3400	219-242-8558	48.81
40	Brunswick Park	Gary Department of Public Parks	700 Clark St.	Gary	219-755-3400	219-886-7099	41.24

41	Munster Community Park	Munster Park and Recreation Department	8601 Calumet	Munster	219-755-3400	219-836-7275	40.85
42	Sportsplex	Crown Point Parks Dept.	801 W 113th Ave.	Crown Point	219-755-3400	219-661-2271	39.35
43	Tolleston Ridges (Michigan St.)	Lake County Parks and Recreation	Michigan St.	Hammond	219-755-3400	219-769-7275	38.94
44	Riverview Community Park	East Gary Park Board	Ripley St. & Hobart St.	Lake Station	219-755-3400	219-886-7099	38.03
45	Sauerman Woods	Crown Point Parks Dept.	1000 E South St.	Crown Point	219-755-3400	219-661-2271	37.95
46	Hillman Park	Hobart Park and Recreation Department	2555 W Old Ridge Rd.	Hobart	219-755-3400	219-942-2987	37.80
47	Riverside Park	Hammond Parks and Recreation	1245 Riverside Dr	Hammond	219-755-3400	219-853-6378	37.64
48	25th Avenue Park	Gary Department of Public Parks	Taft St. & W 25th Ave.	Gary	219-755-3400	219-886-7099	35.85
49	Wihala Beach	Lake County Parks and Recreation	Park Rd.	Whiting	219-755-3400	219-769-7275	34.30
50	Ivanhoe South	Shirley Heinze Environmental Fund	W 7th Ave.	Gary	219-755-3400	219-242-8558	34.09
51	Biesecker Prairie Nature Preserve	Indiana DNR Nature Preserves	US Hwy 41 & State Rd. 231	St. John	219-755-3400	317-232-4052	33.51
52	Homestead Park	Highland Parks and Recreation	8000 Parrish & 8003 5th St.	Highland	219-755-3400	219-838-0114	33.02
53	Pheasant Hills Park	Dyer Parks and Recreation	Hart St. at Park Manor Dr.	Dyer	219-755-3400	219-865-2505	32.66
54	Hobart Heritage Prairie	Indiana DNR Nature Preserves	Bruns St.	Hobart	219-755-3400	317-232-4052	30.58
55	Jeorse Park Beach	East Chicago Park Board	3301 Aldis Ave	East Chicago	219-755-3400	219-391-8474	28.76
56	McCloskey Savanna - Shef Unit	Shirley Heinze Environmental Fund	W 49th Ave.	Hobart	219-755-3400	219-242-8558	28.50
57	Grand Lake Recreation Area	East Gary Park Board	Marquette Rd.	Lake Station	219-755-3400	219-886-7099	27.05
58	Roxanna Marsh	Indiana DNR Nature Preserves	Roxanna Dr.	East Chicago	219-755-3400	317-232-4052	26.01
59	Whiting Park	Whiting Park Board	1500 Park Rd	Whiting	219-755-3400	219-659-0860	25.57
60	Frank H. Hammond Park	Munster Park and Recreation Department	1101 Fran-lin Pkwy.	Munster	219-755-3400	219-836-7275	25.03
61	Harrison Park	Hammond Parks and Recreation	Waltham Ave. & Hohman Avenue	Hammond	219-755-3400	219-853-6378	24.77
62	Hobart Little League Park (Locke Soccer Fields)	Hobart Little League, Inc.	2395 W. Old Ridge Rd	Hobart	219-755-3400	219-545-9011	24.59

63	Fred Rose Lakeshore Park	Hobart Park and Recreation Department	400 Lakeshore Dr	Hobart	219-755-3400	219-942-2987	24.50
64	MacArthur Golf Course	East Chicago Park Board	140th St. & Indianapolis Blvd.	East Chicago	219-755-3400	219-391-8474	24.44
65	West Lakes Park	Munster Park and Recreation Department	Margo Ln.	Munster	219-755-3400	219-836-7275	24.34
66	Northgate Park	Dyer Parks and Recreation	Calumet Ave. at Harrison Place	Dyer	219-755-3400	219-865-2505	24.01
67	Pulaski Park	Hammond Parks and Recreation	139th St. & Sheffield Ave.	Hammond	219-755-3400	219-853-6378	22.63
68	Burr Oak Woods (NW)	Shirley Heinze Environmental Fund	Mississippi St.	Hobart	219-755-3400	219-242-8558	21.77
69	Stephen Park	Schererville Parks and Recreation Board	2231 Lincolnwood Ave	Schererville	219-755-3400	219-865-5530	19.86
70	Kosciusko Park	East Chicago Park Board	151st & Indianapolis Blvd.	East Chicago	219-755-3400	219-391-8474	19.79
71	Veteran's Memorial Park	Hobart Park and Recreation Department	5899 E 73rd Ave.	Hobart	219-755-3400	219-942-2987	19.61
72	South Park	Griffith Parks and Recreation Department	S Griffith Blvd.	Griffith	219-755-3400	219-922-3078	19.07
73	Sharp Athletic Complex	Highland Parks and Recreation	8071 Kennedy Ave.	Highland	219-755-3400	219-838-0114	19.00
74	Hatcher Park	Gary Department of Public Parks	2025 E 21st Ave	Gary	219-755-3400	219-883-9305	18.83
75	Liverpool Nature Preserve	Indiana DNR Nature Preserves	Englehart St.	Lake Station	219-755-3400	317-232-4052	18.32
76	Riverfront Park (Hobart Soccer/Rugby Field)	Hobart Park and Recreation Department	112 E Old Ridge Rd.	Hobart	219-755-3400	219-942-2987	18.19
77	Meadows Park	Highland Parks and Recreation	6400 Southmoor	Highland	219-755-3400	219-838-0114	17.48
78	Tolleston Park	Gary Department of Public Parks	1500 Rutledge St.	Gary	219-755-3400	219-944-0618	17.21
79	Wolf Lake Memorial Park	Hammond Parks and Recreation	121st St. & Calumet Ave.	Hammond	219-755-3400	219-853-6378	16.63
80	Hessville Park	Hammond Parks and Recreation	173rd St. & Kennedy Ave.	Hammond	219-755-3400	219-853-6378	15.36
81	Optimist Park	Hammond Park Board	1245 Riverside Dr	Hammond	219-755-3400	219-853-6378	15.21
82	Beaver Dam Wetland Conservation Area	Indiana DNR Fish and Wildlife	W 101st Ave.	Schererville	219-755-3400	317-232-4200	14.98
83	Grove Park	Munster Park and Recreation Department	8201 Tapper Ave.	Munster	219-755-3400	219-836-6900	14.33
84	Memorial Park	Hammond Parks and Recreation	Highland St.	Hammond	219-755-3400	219-853-6378	13.97

85	Martin Luther King Jr Park	Hammond Parks And Recreation	59 Columbia Ave	Hammond	219-755-3400	219-853-6378	13.95
86	Tod Park	East Chicago Park Board	533 W 140th St	East Chicago	219-755-3400	219-391-8474	13.21
87	Marktown Park	East Chicago Park Board	Broad St. & Pine Ave.	East Chicago	219-755-3400	219-391-8474	13.01
88	Central Park	Griffith Parks and Recreation Department	600 N Broad St	Griffith	219-755-3400	219-922-3078	12.85
89	Prairie West Park	St. John Park Board	93rd Ave. & W Oakridge Dr.	St. John	219-755-3400	219-365-6465	12.76
90	EJ Block Stadium and Indian Park Little League	East Chicago Park Board	1601 E 144th St	East Chicago	219-755-3400	219-391-8474	12.57
91	Cheever Park	Griffith Parks and Recreation Department	699 N Elmer	Griffith	219-755-3400	219-922-3078	12.26
92	Edison Park	Gary Department of Public Parks	200 Burr St.	Gary	219-755-3400	219-886-7099	12.02
93	Ironwood Park	Gary Department of Public Parks	2400 Tennessee St.	Gary	219-755-3400	219-886-7099	11.95
94	Lincoln Center Park	Highland Parks and Recreation	2450 Lincoln St.	Highland	219-755-3400	219-838-0114	11.38
95	Goss Softball Complex	Hobart Girls Softball League Inc.	501 S Hobart Rd.	Hobart	219-755-3400	219-942-0298	11.28
96	Rosenbalm Park	Merrillville Parks and Rec. Dept.	7406 W 74th Ave	Merrillville	219-755-3400	219-769-5711	11.05
97	Shirley Heinze Land Trust - Cubberly Tract	Shirley Heinze Land Trust	E 35th Ave.	Lake Station	219-755-3400	219-242-8558	10.92
98	Hobart Marsh	Save The Dunes Council	S Liverpool Rd.	Hobart	219-755-3400	219-879-3564	10.87
99	Beech Park	Munster Park and Recreation Department	8101 Beech	Munster	219-755-3400	219-836-7275	10.82
100	Heritage Park	Munster Park and Recreation Department	1154 Ridge Rd.	Munster	219-755-3400	219-836-6920	10.57
101	Sun Meadows Park	St. John Park Board	Snowberry Ln.	St. John	219-755-3400	219-365-6465	10.56
102	Sheppard Park	Highland Parks and Recreation	9217 Liable Rd.	Highland	219-755-3400	219-838-0114	10.52
103	Plum Creek	Schererville Parks and Recreation Board	300 Plum Creek	Schererville	219-755-3400	219-865-5530	10.44
104	Jerry Pavese Park	Hobart Park and Recreation Department	500 S Lake Park Ave.	Hobart	219-755-3400	219-942-2987	10.24
105	White Oak Park	Munster Park and Recreation Department	9750 White Oak Ave.	Munster	219-755-3400	219-836-7275	10.12
106	Seberger Park	Gary Department of Public Parks	2500 W Bell St	Gary	219-755-3400	219-886-7099	10.06
107	Roosevelt Park	Gary Department of Public Parks	2200 Harrison St.	Gary	219-755-3400	219-886-7099	9.83

108	Riley Park	East Chicago Park Board	Chicago Ave. & Grasselli Ave.	East Chicago	219-755-3400	219-391-8474	9.40
109	Borman Square Park	Gary Department of Public Parks	700 Madison St.	Gary	219-755-3400	219-886-7099	9.24
110	Russ Keller Park	Crown Point Parks Dept.	W 97th St.	Crown Point	219-755-3400	219-661-2271	9.21
111	Columbus Park	Lake Station Parks and Rec. Dept.	2900 Benton St	Lake Station	219-755-3400	219-962-7508	8.93
112	Jerry Ross Park	Crown Point Parks Dept.	W North St. & N West St.	Crown Point	219-755-3400	219-661-2271	8.65
113	Buffington Park	Gary Department of Public Parks	6th Ave. & Delaware	Gary	219-755-3400	219-886-7099	8.57
114	Markley Park	Highland Parks and Recreation	9401 Saric Ct.	Highland	219-755-3400	219-838-0114	7.95
115	Peter G Redar Memorial Park	Schererville Parks and Recreation Board	Austin & Gregory St.	Schererville	219-755-3400	219-865-5530	7.87
116	Hermit Park	Hammond Parks and Recreation	Dearborn Ave.	Hammond	219-755-3400	219-853-6378	7.58
117	Miller Dune	Shirley Heinze Environmental Fund	Forest Ave.	Gary	219-755-3400	219-242-8558	7.12
118	Orchard (Highland)	Highland Parks and Recreation	8720 Orchard Dr.	Highland	219-755-3400	219-838-0114	7.12
119	Ambridge Mann Park	Gary Department of Public Parks	1200 Allen St.	Gary	219-755-3400	219-886-7099	7.08
120	Beidron Park	Schererville Parks and Recreation Board	1925 S Park Ave.	Schererville	219-755-3400	219-865-5530	6.92
121	Bieker Woods Park	Munster Park Board	1050 Ridge Rd	Munster	219-755-3400	219-836-6920	6.75
122	Foxwood South Park	Schererville Parks and Recreation Board	7500 Starling Dr.	Schererville	219-755-3400	219-865-5530	6.47
123	Stewart Park	Munster Park and Recreation Department	1600 Fran-Lin Pkwy.	Munster	219-755-3400	219-836-7275	6.47
124	Amoco Park	Hammond Parks and Recreation	129th St. & White Oak Ave.	Hammond	219-755-3400	219-853-6378	6.35
125	Main Square Park	Highland Parks and Recreation	3001 Ridge Rd.	Highland	219-755-3400	219-838-0114	5.94
126	Hobart Lakefront	Hobart Park and Recreation Department	Old Ridge Rd.	Hobart	219-755-3400	219-942-1940	5.78
127	Briar Creek Park	Munster Park and Recreation Department	10299 Fox Run	Munster	219-755-3400	219-836-7275	5.74
128	Brantwood Park	Highland Parks and Recreation	2030 Lincoln St.	Highland	219-755-3400	219-838-0114	5.23
129	Hobart City Ball Park	Hobart Park and Recreation Department	400 E 8th St.	Hobart	219-755-3400	219-942-2987	5.07
130	Solon Robinson Park	Crown Point Parks Dept.	Hickory Ave.	Crown Point	219-755-3400	219-661-2271	4.76

131	Thomas Street Park	Crown Point Parks Dept.	Thomas St.	Crown Point	219-755-3400	219-661-2271	4.73
132	Washington Park (Gary)	Gary Park Board	1400 Pennsylvania St	Gary	219-755-3400	219-886-7099	4.53
133	Twin Oaks Park	New Chicago Park Board	Tyler Ave. & N Lake Park Ave.	New Chicago	219-755-3400	219-962-5386	4.53
134	Jackson	Gary Department of Public Parks	300 Jackson St.	Gary	219-755-3400	219-886-7099	4.53
135	Green Acres Park	Ross Township Trustee	74th Ave.	Hobart	219-755-3400	219-769-2111	4.49
136	Pittman Square Park	Gary Department of Public Parks	303 E 51st Ave	Gary	219-755-3400	219-886-7099	4.45
137	Gateway Park	Gary Department of Public Parks	400 Massachusetts St.	Gary	219-755-3400	219-886-7099	4.33
138	Collins Park	Crown Point Parks Dept.	Merrillville Rd.	Crown Point	219-755-3400	219-661-2271	4.29
139	Gibson (Lost) Park	Hammond Parks and Recreation	California Ave. & Kenwood	Hammond	219-755-3400	219-853-6378	4.28
140	Little Turtle Park	Highland Parks and Recreation	3201 LaPorte St.	Highland	219-755-3400	219-838-0114	4.27
141	Nunez Park	East Chicago Park Board	136 Elm St.	East Chicago	219-755-3400	219-391-8474	4.24
142	Edison Park	Hammond Parks and Recreation	Madison Ave. & Mulberry St.	Hammond	219-755-3400	219-853-6378	4.23
143	Erlenbach Park	Crown Point Parks Dept.	Van Buren St.	Crown Point	219-755-3400	219-661-2271	4.16
144	Phrommer Park	Hammond Parks and Recreation	167th & Grand Ave.	Hammond	219-755-3400	219-853-6378	4.15
145	Bluebird Park	Munster Park and Recreation Department	1900 Holly Ln.	Munster	219-755-3400	219-836-7275	4.13
146	Sunnyside Park (East Chicago)	East Chicago Park Board	141 Grace St.	East Chicago	219-755-3400	219-391-8474	4.10
147	Howe Park	Gary Department of Public Parks	3901 Vermont St.	Gary	219-755-3400	219-886-7099	4.05
148	Callahan Park	East Chicago Park Board	138th & Alder	East Chicago	219-755-3400	219-391-8474	3.90
149	Edgewood Estates Park	St. John Park Board	14122 W 90th Ave.	St. John	219-755-3400	219-365-6465	3.83
150	Forest Hills Park	Merrillville Parks and Rec. Dept.	78 Indian Trail	Merrillville	219-755-3400	219-980-5911	3.77
151	Green Meadows Park	Dyer Parks and Recreation	215th St. & Greenwood Ave.	Dyer	219-755-3400	219-865-2505	3.71
152	Woodland Park	Griffith Parks and Recreation Department	W Pine St.	Griffith	219-755-3400	219-922-3078	3.65
153	Elmer Miller Park	Dyer Parks and Recreation	222 Schulte St.	Dyer	219-755-3400	219-865-2505	3.60
154	John Stefek Park	Merrillville Parks and Rec. Dept.	70th & Harrison	Merrillville	219-755-3400	219-769-5711	3.41
155	Liberty Park	Lowell Park Board	129 W Main St	Lowell	219-755-3400	219-696-0838	3.18
156	Burlwood Park	Munster Park and Recreation Department	Burlwood	Munster	219-755-3400	219-836-7275	3.04

157	Lakeside Park	Highland Parks and Recreation	3046 97th Place	Highland	219-755-3400	219-838-0114	2.91
158	Warrick Park	Lake Station Parks and Rec. Dept.	2742 Warren St	Lake Station	219-755-3400	219-962-7508	2.55
159	Sheffield Estates Park	Dyer Parks and Recreation	Rosemary Ct. & Gardenia Dr.	Dyer	219-755-3400	219-865-2505	2.54
160	Sandy Ridge Park	Dyer Parks and Recreation	2330 Rolling Hills Dr.	Dyer	219-755-3400	219-865-2505	2.49
161	Carolina Park	Gary Department of Public Parks	1400 Carolina St.	Gary	219-755-3400	219-886-7099	2.46
162	McAfee Park	Hobart Park and Recreation Department	2630-2636 Drexel Dr.	Hobart	219-755-3400	219-942-2987	2.36
163	Pennsy Park	Hobart Park and Recreation Department	925 Lillian St.	Hobart	219-755-3400	219-942-2987	2.22
164	Schillton Hills Park	St. John Park Board	Franklin Dr.	St. John	219-755-3400	219-365-6465	2.13
165	German Methodist Cemetery	The Nature Conservancy	Wicker Ave.	Cedar Lake	219-755-3400	317-951-8818	2.11
166	Bowtie Park	Crown Point Parks Dept.	9400 Arthur St	Crown Point	219-755-3400	219-661-2271	2.07
167	Northwood Park	Highland Parks and Recreation	2432 81st St.	Highland	219-755-3400	219-838-0114	1.93
168	Edward Valve Park	East Chicago Park Board	143rd & Homerlee Ave.	East Chicago	219-755-3400	219-391-8474	1.86
169	Timber Lane Park	St. John Park Board	90th Ave.	St. John	219-755-3400	219-365-6465	1.80
170	Indi-Ilili Park	Hammond Parks And Recreation	Indi-Ilili Pkwy. & Stateline Ave.	Hammond	219-755-3400	219-853-6378	1.79
171	Cotton Wood Park	Dyer Parks and Recreation	724 Cottonwood Dr.	Dyer	219-755-3400	219-865-2505	1.65
172	Kaiser Park	Crown Point Parks Dept.	S Main St.	Crown Point	219-755-3400	219-661-2271	1.56
173	Willow Tree Park	Crown Point Parks Dept.	McKinley St.	Crown Point	219-755-3400	219-661-2271	1.46
174	Sunnyside Park	Munster Park and Recreation Department	7800 Hohman Ave.	Munster	219-755-3400	219-836-7275	1.24
175	High Meadow Park	Crown Point Parks Dept.	High Meadow Dr.	Crown Point	219-755-3400	219-661-2271	1.19
176	Orchard Park	Munster Park and Recreation Department	8807 White Oak Ave	Munster	219-755-3400	219-836-7275	1.17
177	Lancer Park	St. John Park Board	8900 Schaeffer Dr.	St. John	219-755-3400	219-365-6465	1.07
178	Meadows Outlet Park	Highland Parks and Recreation	2020 37th Place	Highland	219-755-3400	219-838-0114	1.06
179	Lakeside Outlet	Highland Parks and Recreation	10144 4th St.	Highland	219-755-3400	219-838-0114	1.03
180	Circle Park	Munster Park and Recreation Department	1700 Inner Circle	Munster	219-755-3400	219-836-7275	0.94

181	Joel Mock Park	Lake Station Parks and Rec. Dept.	Union & Central Ave.	Lake Station	219-755-3400	219-962-7508	0.92
182	Jaycee Park	Highland Parks and Recreation	3040 101st St.	Highland	219-755-3400	219-838-0114	0.84
183	Lincoln Park (IN)	Dyer Parks and Recreation	Church St. & Kellman St.	Dyer	219-755-3400	219-865-2505	0.83
184	Kiwanis Park	Munster Park and Recreation Department	Timrick Dr.	Munster	219-755-3400	219-836-7275	0.80
185	Evergreen	Munster Park and Recreation Department	209 Timrick Dr.	Munster	219-755-3400	219-836-7275	0.78
186	New Chicago Centennial	New Chicago Park Board	Cleveland Ave. & Indiana St.	New Chicago	219-755-3400	219-962-5386	0.70
187	Petit Park	Highland Parks and Recreation	9040 Cottage Grove Ave.	Highland	219-755-3400	219-838-0114	0.66
188	Cedar Lake Public Access Site	Indiana DNR Fish and Wildlife	Lake Shore Dr.	Cedar Lake	219-755-3400	317-232-4200	0.61
189	Sunset (Dyer) Park	Dyer Parks and Recreation	137 Lilac Dr.	Dyer	219-755-3400	219-865-2505	0.58
190	Rotary Park	Munster Park and Recreation Department	1051 Ridge Rd.	Munster	219-755-3400	219-836-6920	0.26
191	Coulter (John Merle) Nature Preserve	Shirley Heinze Land Trust	County Line Rd	Portage	219-755-3400; 219-326-7700	219-242-8558	0.06
192	Heritage Estates Park	Dyer Parks and Recreation	1204 Cedar Ln.	Dyer	219-755-3400	219-865-2505	0.04
193	Kankakee River Basin	Indiana DNR Division of Water	E 1200 N	De Motte	219-474-5661	317-232-4160	0.03

Managed Lands (Cont'd)

#	Name	City	Category	Waterbody	Location	Comments	Area(acres)
1	Indiana Dunes National Park	Porter	National Park	Lake Michigan	N/A	Open	1,946.77
2	Grand Kankakee Marsh	Hebron	Park	Kankakee River	Range Line Rd and 217th Ave	Open	1,853.98
3	Lasalle State Fish And Wildlife Area	Lake Village	Wildlife Management Area	Kankakee River	SR 10, 3 miles W of US Hwy 41, then 1 mile N to Area 3-A parking lot at LaSalle FWA	Open With Restrictions	887.56
4	Oak Ridge Prairie	Griffith	Regional Park	Turkey Pond	N/A	Open	769.46
5	Deep River County Park	Hobart	County Park	Deep River	N/A	Open	756.75
6	Deep River Waterpark	Hobart	Park	Deep River	N/A	Open	422.12
7	Hobart Marsh	Gary	State Nature Preserve	None	Liverpool and W 57th	Restricted	363.55
8	Hoosier Prairie Nature Preserve	Schereville	State Nature Preserve	unnamed ponds	SW of Beiriger School on W Evergreen Ln.; Central Ave. & W 61st Ave.	Restricted; jointly managed by National Park Service; Also dedicated as a National Natural Landmark	352.43
9	Hoosier Prairie State Nature Preserve	Griffith	State Nature Preserve	unnamed ponds	Main and Kennedy	Open	345.58
10	Hobart Prairie Grove	Hobart	National Park	Lake George; Deep River	S Liverpool and E 53rd	Open	316.76
11	Stony Run County Park	Leroy	County Park	None	142nd and Union Street	Open	297.91
12	Lemon Lake County Park	Crown Point	Regional Park	Lemon Lake	N/A	Open	296.80
13	Wicker Memorial Park	Highland	Park	Plum Creek	N/A	Open	296.76
14	Cedar Lake Marsh Fish and Wildlife Area	Fremont	Fish Management Area	Cedar Lake	Between Huseman St and Truman St	Open With Restrictions	296.50
15	Pine Station Nature Preserve	Gary	State Nature Preserve	Grand Calumet River	North of Birch Ave.	Restricted	258.24
16	Lost Marsh Golf Course and Enviro. Rec. Center	Hammond	Recreation Area	Lake George; Wolf Lake	N/A	Open	240.77
17	Deep River Headwaters Fish And Wildlife Area	Schererville	Wildlife Management Area	unknown body of water	Between Hanley St and Bell St	Open With Restrictions	239.54
18	Gibson Woods Nature Preserve	Hammond	Nature Preserve	None	N/A	Open	228.21
19	Marquette Park	Gary	Regional Park	Lake Michigan; Calumet Lagoon	N/A	Open	178.49
20	Centennial Park	Munster	Park	Clayhole Lake	N/A	Open	178.15
21	Oak Knoll Golf Course	Crown Point	Recreation Area	None	Whitcomb and W 113th	Open	170.08

22	Doak Fish And Wildlife Area	Winfield	Fish Management Area	East Branch Stony Run	S of Winfield Elementary	Open With Restrictions	162.98
23	Calumet Prairie Nature Preserve	Lake Station	State Nature Preserve	None	S of I-90: SR 51/Ripley St Exit (Exit 21)	Restricted	152.67
24	Turkey Creek Golf Course	Merrillville	Recreation Area	Turkey Creek	N/A	Open	124.25
25	Gaylord Butterfly Tract Nature Preserve	Griffith	State Nature Preserve	None	Division between Central and Cline	Restricted	116.54
26	Lake Etta County Park	Gary	County Park	Little Calumet River	Exit 80/94 at Burr Street. Travel S to 29th Avenue, then E on 29th Avenue to Lake Etta	Open	98.21
27	Hidden Lake Park	Merrillville	Regional Park	Turkey Creek	N/A	Open	96.82
28	McCloskey's Burr Oak Savanna Nature Preserve	Hobart	State Nature Preserve	None	W 49th between S Liverpool and I-65	Restricted	94.88
29	Burr Oak Woods (E)	Hobart	Forest	None	Woodlawn and W 3rd St	Restricted	84.95
30	Lake County Fairgrounds	Crown Point	Recreation Area	Fancher Lake	Between W Greenwood and 121st Ave	Open	83.84
31	Three Rivers County Park	Lake Station	County Park	unnamed pond	N/A	Open	76.92
32	Thomas Sporre Wildlife Refuge	Crown Point	Wildlife Management Area	None	West of Arizona St	Open With Restrictions	71.29
33	Mac Jay Lake (Hobart Izaak Walton League)	Hobart	Private Nature Preserve	Mac Joy Lake	W 49th and Mississippi St	Restricted	63.06
34	Clark and Pine Nature Preserve	Gary	State Nature Preserve	None	N of I-90W, N of Industrial Hwy and N Clark intersection; SE of Industrial and Chicago Ave intersection	Closed	60.04
35	Tolleston Ridges (Hwy 912)	Hammond	Nature Preserve	Grand Calumet River	State Hwy 912 and I-90	Closed	59.68
36	Edward C. Dowling Park	Hammond	Regional Park	unnamed pond	Lies 1-2 blocks S of Lee L Caldwell Elementary School	Open	59.27
37	Rohrman Park	Schererville	Park	None	N/A	Open	54.40
38	Centennial Plaza and Trail	Hammond	Trail	Little Calumet River	Trail running from Douglas St to Wicker Park Golf Course	Open	48.83
39	Burr Oak Woods (W)	Hobart	Forest	None	Mississippi and 43rd Ave. Just east of James Whitcomb Riley Elem. School	Restricted	48.81
40	Brunswick Park	Gary	Regional Park	None	N/A	Open	41.24

41	Munster Community Park	Munster	Regional Park	None	N/A	Open	40.85
42	Sportsplex	Crown Point	Park	None	N/A	Open	39.35
43	Tolleston Ridges (Michigan St.)	Hammond	Nature Preserve	None	S of Michigan St, West of SR 912	Restricted	38.94
44	Riverview Community Park	Lake Station	Regional Park	Deep River	Hobart St continues into park	Open	38.03
45	Sauerman Woods	Crown Point	Park	None	N/A	Open	37.95
46	Hillman Park	Hobart	Regional Park	None	N/A	Open	37.80
47	Riverside Park	Hammond	Park	Little Calumet River	On the Little Calumet River; SE of the I-80 ramp at Calumet Ave (Exit 1)	Open	37.64
48	25th Avenue Park	Gary	Regional Park	None	SE corner of Taft St and W 25th Avenue	Open	35.85
49	Wihala Beach	Whiting	County Park	Lake Michigan	Park Rd and White Oak Ave	Open	34.30
50	Ivanhoe South	Gary	Miscellaneous Land	None	7th and Colfax St	Restricted	34.09
51	Biesecker Prairie Nature Preserve	St. John	State Nature Preserve	None	Near the railroad tracks on southwest side of town	Restricted	33.51
52	Homestead Park	Highland	Regional Park	Little Calumet River	Two entrances	Open	33.02
53	Pheasant Hills Park	Dyer	Regional Park	Pleasant Hills Comm Park Pond	Located E of Hart Street next to the Pheasant Hills Subdivision	Open	32.66
54	Hobart Heritage Prairie	Hobart	State Nature Preserve	None	Bruns St and W 37th Ave	Restricted	30.58
55	Jeorse Park Beach	East Chicago	Regional Park	Lake Michigan	Aldis Ave. and Aldis St.; on Lake Michigan	Open	28.76
56	McCloskey Savanna - Shef Unit	Hobart	Miscellaneous Land	None	N side of 49th, between Willow St and Liverpool Rd	Restricted	28.50
57	Grand Lake Recreation Area	Lake Station	Park	None	West of Newton St	Open	27.05
58	Roxanna Marsh	East Chicago	State Nature Preserve	Grand Calumet River	Between Indianapolis Blvd and I-90	Open; Marino Solorio (219-391-8205) is the planning and economic development director, also a potential contact	26.01
59	Whiting Park	Whiting	Park	Lake Michigan	On Lake Michigan, S of Whihala Beach County Park	Open	25.57
60	Frank H. Hammond Park	Munster	Regional Park	None	N/A	Open	25.03
61	Harrison Park	Hammond	Regional Park	unnamed pond	West of Eggers School	Open	24.77

62	Hobart Little League Park (Locke Soccer Fields)	Hobart	Recreation Area	None	Field of Dreams Rd is off W Old Ridge Rd, between N Lasalle St and W Hansen Blvd	Open	24.59
63	Fred Rose Lakeshore Park	Hobart	Regional Park	Lake George	8th and S Ash. On Lake George. Close proximity to Hobart High School	Open	24.50
64	MacArthur Golf Course	East Chicago	Recreation Area	unnamed pond	Next to Central High School	Open	24.44
65	West Lakes Park	Munster	Park	None	Margo Ln and Superior Ave, South of 45th St	Open	24.34
66	Northgate Park	Dyer	Regional Park	None	Located in Northgate subdivision	Open	24.01
67	Pulaski Park	Hammond	Park	None	Surrounded by Grover, 139th, Sheffield, and 137th	Open	22.63
68	Burr Oak Woods (NW)	Hobart	Forest	None	Mississippi and 43rd Ave. Just east of James Whitcomb Riley Elem. School	Restricted	21.77
69	Stephen Park	Schererville	Park	None	N/A	Open	19.86
70	Kosciusko Park	East Chicago	Regional Park	None	By the railroad tracks	Open	19.79
71	Veteran's Memorial Park	Hobart	Park	None	N/A	Open	19.61
72	South Park	Griffith	Park	None	W Ave D and S Griffith Rd intersection	Open	19.07
73	Sharp Athletic Complex	Highland	Recreation Area	None	N/A	Open	19.00
74	Hatcher Park	Gary	Regional Park	None	N/A	Open	18.83
75	Liverpool Nature Preserve	Lake Station	State Nature Preserve	None	Englehart and Arizona St	Restricted	18.32
76	Riverfront Park (Hobart Soccer/Rugby Field)	Hobart	Park	Deep River	N/A	Open	18.19
77	Meadows Park	Highland	Regional Park	None	N/A	Open	17.48
78	Tolleston Park	Gary	Park	None	N/A	Open	17.21
79	Wolf Lake Memorial Park	Hammond	Park	Wolf Lake	On Wolf Lake; W of GR Clark Athletic Field	Open	16.63
80	Hessville Park	Hammond	Regional Park	None	One block W of Lee L Caldwell Elementary School	Open	15.36
81	Optimist Park	Hammond	Park	Little Calumet River	On the Little Calumet River; SE of the I-80 ramp at Calumet Ave (Exit 1)	No Data	15.21

82	Beaver Dam Wetland Conservation Area	Schererville	Wetland Conservation Area	unnamed stream	West of Clark Rd	Open With Restrictions	14.98
83	Grove Park	Munster	Regional Park	None	N/A	Open	14.33
84	Memorial Park	Hammond	Regional Park	None	Between Ray Ave and Willard Rd	Open	13.97
85	Martin Luther King Jr Park	Hammond	Regional Park	None	Surrounded by S Columbia, Lyons, Highland, and Rhode; East of Hammond High School	Open	13.95
86	Tod Park	East Chicago	Park	None	N/A	Open	13.21
87	Marktown Park	East Chicago	Regional Park	None	S of 129th St	Open	13.01
88	Central Park	Griffith	Regional Park	None	Near St. Mary School	Open	12.85
89	Prairie West Park	St. John	Park	Prairie West Park Pond	About 2 blocks W of Joan Evang Elementary School.	Open	12.76
90	EJ Block Stadium and Indian Park Little League	East Chicago	Park	None	Next to Washington Elementary School	Open	12.57
91	Cheever Park	Griffith	Regional Park	None	Next to Wadsworth Elementary School	Open	12.26
92	Edison Park	Gary	Regional Park	None	N/A	Open	12.02
93	Ironwood Park	Gary	Regional Park	None	N/A	Open	11.95
94	Lincoln Center Park	Highland	Regional Park	Cady Marsh Ditch	N/A	Open	11.38
95	Goss Softball Complex	Hobart	Recreation Area	None	N/A	Open	11.28
96	Rosenbalm Park	Merrillville	Regional Park	None	N/A	Open	11.05
97	Shirley Heinze Land Trust - Cubberly Tract	Lake Station	Nature Preserve	None	35th and Florida St; SE of Gary Technical Vocational School	Restricted	10.92
98	Hobart Marsh	Hobart	Private Nature Preserve	None	Liverpool, S of W 49th Ave, near the train tracks	Restricted	10.87
99	Beech Park	Munster	Regional Park	Little Calumet River	N/A	Open	10.82
100	Heritage Park	Munster	Regional Park	None	N/A	Open	10.57
101	Sun Meadows Park	St. John	Park	unnamed pond	Snowberry and Schilton	Open	10.56
102	Sheppard Park	Highland	Park	Cady Marsh Ditch	N/A	Open	10.52
103	Plum Creek	Schererville	Regional Park	None	N/A	Fee	10.44
104	Jerry Pavese Park	Hobart	Regional Park	Lake George	N/A	Open	10.24
105	White Oak Park	Munster	Park	Hart Ditch	N/A	Open	10.12
106	Seberger Park	Gary	Park	None	N/A	Open	10.06

107	Roosevelt Park	Gary	Park	None	N/A	Open	9.83
108	Riley Park	East Chicago	Park	None	East of Kennedy Ave	Open	9.40
109	Borman Square Park	Gary	Regional Park	None	N/A	Open	9.24
110	Russ Keller Park	Crown Point	Park	None	W 97th and Merrillville Rd	Open	9.21
111	Columbus Park	Lake Station	Regional Park	None	Surrounded by Liverpool Rd, Benton St, E 29th St, and Clay St	Open	8.93
112	Jerry Ross Park	Crown Point	Regional Park	None	Just N of Crown Point High School	Open	8.65
113	Buffington Park	Gary	Regional Park	None	Between Connecticut and Delaware, 6th and 7th	Open	8.57
114	Markley Park	Highland	Regional Park	None	N/A	Open	7.95
115	Peter G Redar Memorial Park	Schererville	Park	None	Surrounded by Park St, S Park Ave, Gregory St, and Austin Ave	Open	7.87
116	Hermit Park	Hammond	Regional Park	None	Dearborn Ave, between 141st and 142nd St	Open	7.58
117	Miller Dune	Gary	Forest	None	Forest and Rush St	Restricted	7.12
118	Orchard (Highland)	Highland	Regional Park	None	N/A	Open	7.12
119	Ambridge Mann Park	Gary	Regional Park	Grand Calumet River	N/A	Open	7.08
120	Beidron Park	Schererville	Regional Park	None	N/A	Open	6.92
121	Bieker Woods Park	Munster	Regional Park	None	N/A	Open	6.75
122	Foxwood South Park	Schererville	Regional Park	unnamed wetland	N/A	Open	6.47
123	Stewart Park	Munster	Park	Hart Ditch	N/A	Open	6.47
124	Amoco Park	Hammond	Regional Park	None	Surrounded by 129th, White Oak, 128th, and New York	Open	6.35
125	Main Square Park	Highland	Regional Park	None	N/A	Open	5.94
126	Hobart Lakefront	Hobart	Regional Park	Deep River	W of Main St.	Open	5.78
127	Briar Creek Park	Munster	Regional Park	Hart Ditch	E of the end of Boxwood Dr, which is in a subdivision off Calumet Ave, N of 205th St	Open	5.74
128	Brantwood Park	Highland	Regional Park	Cady Marsh Ditch	N/A	Open	5.23
129	Hobart City Ball Park	Hobart	Park	None	N/A	Open	5.07

130	Solon Robinson Park	Crown Point	Park	None	Hickory Ave is off S East St, between Wells St and E South St.	Open	4.76
131	Thomas Street Park	Crown Point	Park	None	Between Thomas St and Indiana St at Anderson St	Open	4.73
132	Washington Park (Gary)	Gary	Park	None	N/A	Open	4.53
133	Twin Oaks Park	New Chicago	Park	None	S of Riverland Dr and Huntinton St intersection	Open	4.53
134	Jackson	Gary	Regional Park	Little wildcat Creek, E Fork	N/A	Open	4.53
135	Green Acres Park	Hobart	Regional Park	None	S of S Colorado St and E 73rd Ave intersection	Open	4.49
136	Pittman Square Park	Gary	Regional Park	None	N/A	Open	4.45
137	Gateway Park	Gary	Regional Park	None	N/A	Open	4.33
138	Collins Park	Crown Point	Regional Park	None	Merrillville Rd, between W 94th Pl and W 96th Ave	Open	4.29
139	Gibson (Lost) Park	Hammond	Regional Park	None	Surrounded by California Ave, Kenwood St, Parkway St, and Delaware Ave	Open	4.28
140	Little Turtle Park	Highland	Regional Park	None	N/A	Open	4.27
141	Nunez Park	East Chicago	Regional Park	None	N/A	Open	4.24
142	Edison Park	Hammond	Regional Park	None	Surrounded by Madison Ave, Jackson Ave, Spruce St, and Mulberry St	Open	4.23
143	Erlenbach Park	Crown Point	Regional Park	None	Van Buren and W 96th Pl	Open	4.16
144	Phrommer Park	Hammond	Regional Park	None	About 2 blocks SW of Miller School and one block N of Morton High School.	Open	4.15
145	Bluebird Park	Munster	Regional Park	None	N/A	Open	4.13
146	Sunnyside Park (East Chicago)	East Chicago	Park	None	N/A	Open	4.10
147	Howe Park	Gary	Regional Park	None	N/A	Open	4.05
148	Callahan Park	East Chicago	Regional Park	None	Surrounded by Alder, 138th, Butternut, and Broadway	Open	3.90
149	Edgewood Estates Park	St. John	Regional Park	unknown waterbody	N/A	Open	3.83
150	Forest Hills Park	Merrillville	Regional Park	Deep River	N/A	Open	3.77

151	Green Meadows Park	Dyer	Regional Park	None	Located at the corner of Greenwood Avenue and 215th street in the Calumet Farms subdivision	Open	3.71
152	Woodland Park	Griffith	Park	None	W Pine St, between Heather Ct and Rueth Rd	Open	3.65
153	Elmer Miller Park	Dyer	Regional Park	Plum Creek	N/A	Open	3.60
154	John Stefek Park	Merrillville	Regional Park	None	NW of Homer Iddings School	Open	3.41
155	Liberty Park	Lowell	Regional Park	Cedar Creek	Off Main st, between N Liberty St and Halstead St	Open	3.18
156	Burlwood Park	Munster	Regional Park	None	Burlwood, off of Main St between White Oak Ave and Prairie Ave	Open	3.04
157	Lakeside Park	Highland	Regional Park	None	N/A	Open	2.91
158	Warrick Park	Lake Station	Regional Park	None	27th between Warren and Warrick	Open	2.55
159	Sheffield Estates Park	Dyer	Park	None	Located in Sheffield Estates subdivision	Open	2.54
160	Sandy Ridge Park	Dyer	Park	None	N/A	Open	2.49
161	Carolina Park	Gary	Regional Park	None	N/A	Open	2.46
162	McAfee Park	Hobart	Regional Park	None	N/A	Open	2.36
163	Pennsy Park	Hobart	Regional Park	None	N/A	Open	2.22
164	Schillton Hills Park	St. John	Park	None	Franklin and James	Open	2.13
165	German Methodist Cemetery	Cedar Lake	Private Nature Preserve	None	N of 151st Ave	Closed	2.11
166	Bowtie Park	Crown Point	Regional Park	None	Hayes St., between W 93rd Pl. and W 94th Pl.	Open	2.07
167	Northwood Park	Highland	Regional Park	None	N/A	Open	1.93
168	Edward Valve Park	East Chicago	Regional Park	None	About 3 blocks W of St Marys School.	Open	1.86
169	Timber Lane Park	St. John	Park	None	90th Ave., between Olcott Ave. and Patterson St.	Open	1.80
170	Indi-Illi Park	Hammond	Regional Park	None	Indy Illi Pkwy., between State Line Rd. and Hohman Ave.	Open	1.79
171	Cotton Wood Park	Dyer	Park	None	N/A	Open	1.65

172	Kaiser Park	Crown Point	Regional Park	None	N side of Eisenhower Elementary School	Open	1.56
173	Willow Tree Park	Crown Point	Park	None	MnKinley and Arthur	Open	1.46
174	Sunnyside Park	Munster	Park	None	N/A	Open	1.24
175	High Meadow Park	Crown Point	Regional Park	None	At Greenbriar Ct and High Meadow Dr	Open	1.19
176	Orchard Park	Munster	Regional Park	Schoon Ditch	Fisher St and White Oak Ave, where Fisher jogs past White Oak Ave	Open	1.17
177	Lancer Park	St. John	Regional Park	None	N/A	Open	1.07
178	Meadows Outlet Park	Highland	Regional Park	Cady Marsh Ditch	N/A	Open	1.06
179	Lakeside Outlet	Highland	Recreation Area	None	N/A	Open	1.03
180	Circle Park	Munster	Regional Park	None	N/A	Open	0.94
181	Joel Mock Park	Lake Station	Regional Park	None	Across Central Ave from Carl J Polk Elementary School	Open	0.92
182	Jaycee Park	Highland	Regional Park	None	N/A	Open	0.84
183	Lincoln Park (IN)	Dyer	Regional Park	None	E Side of Church St.	Open	0.83
184	Kiwanis Park	Munster	Regional Park	None	Timrick and Meadow, N of Fisher St	Open	0.80
185	Evergreen	Munster	Regional Park	None	N/A	Open	0.78
186	New Chicago Centennial	New Chicago	Regional Park	None	S of River Forest High School	Open	0.70
187	Petit Park	Highland	Regional Park	None	N/A	Open	0.66
188	Cedar Lake Public Access Site	Cedar Lake	Recreation Area	Cedar Lake	Lake Shore and Cline	Open	0.61
189	Sunset (Dyer) Park	Dyer	Park	None	Lilac Drive & Capri Lane	Open	0.58
190	Rotary Park	Munster	Regional Park	None	N/A	Open	0.26
191	Coulter (John Merle) Nature Preserve	Portage	Nature Preserve	None	N/A	Closed	0.06
192	Heritage Estates Park	Dyer	Regional Park	None	N/A	Open	0.04
193	Kankakee River Basin	De Motte	Miscellaneous Land	Kankakee River	E 1200 N between N 200 E and West Ave	Restricted	0.03

Other Environmentally Sensitive Areas

#	Name	Agency	Address	City	Emergency Phone	Contact Phone	Area(acres)
1	Grand Calumet River AOC	Environmental Protection Agency	N/A	Gary, E Chicago, Hammond	219-660-0001	312-353-6318	8,223.90

Other Environmentally Sensitive Areas (Cont'd)

#	Name	City	Category	Waterbody	Location	Comments	Area(acres)
1	Grand Calumet River AOC	Gary, E Chicago, Hammond	Area of Concern	Grand Calumet River, Lake Michigan	Grand Calumet River originates on east side of Gary, IN. AOC extends to NW side of East Chicago, on teh IN/IL border	Email: isom.kristen@epa.gov	8,223.90

Historic Places

#	Name	Address	City	Emergency Phone	Contact Phone	Comments	Count
1	Gary Land Company Building	4th Ave. and Pennsylvania St.	Gary	219-660-0001	317-232-1646	N/A	1
2	Hobart Carnegie Library	706 E. 4th St.	Hobart	219-660-0001	317-232-1646	N/A	1
3	Lassen Hotel	7808 W. 138th Pl.	Cedar Lake	219-660-0001	317-232-1646	N/A	1
4	Miller Town Hall	See COMMENTS	Gary	219-660-0001	317-232-1646	STREET: Jct Miller Ave, Old Hobart Rd, & Gr& Blvd	1
5	Whiting Memorial Community House	1938 Clark St.	Whiting	219-660-0001	317-232-1646	N/A	1
6	Wood, John, Old Mill	E of Merrillville on IN 330	Merrillville	219-660-0001	317-232-1646	N/A	1
7	Lake County Courthouse	Public Sq.	Crown Point	219-660-0001	317-232-1646	N/A	1
8	Halsted, Melvin A., House	201 E. Main St.	Lowell	219-660-0001	317-232-1646	N/A	1
9	Knights of Columbus Building	333 W. 5th Ave.	Gary	219-660-0001	317-232-1646	N/A	1
10	Pennsylvania Railroad Station	1001 Lillian St.	Hobart	219-660-0001	317-232-1646	N/A	1
11	State Bank of Hammond Building	5444-5446 Calumet Ave.	Hammond	219-660-0001	317-232-1646	N/A	1
12	Hoosier Theater Building	1329--1335 119th St	Whiting	219-660-0001	317-232-1646	N/A	1
13	Lake County Sheriff's House and Jail	232 S. Main St.	Crown Point	219-660-0001	317-232-1646	N/A	1
14	Gary Public Schools Memorial Auditorium	700--734 Massachusetts St.	Gary	219-660-0001	317-232-1646	N/A	1
15	Emerson, Ralph Waldo, School	716 E. 7th Ave.	Gary	219-660-0001	317-232-1646	N/A	1
16	Dell Plain, Morse, House and Garden	7109 Knickerbocker Pkwy.	Hammond	219-660-0001	317-232-1646	N/A	1
17	Ross, John, Farm	3815 East SR 231	Leroy	219-660-0001	317-232-1646	N/A	1
18	First Unitarian Church of Hobart	497 Main St.	Hobart	219-660-0001	317-232-1646	N/A	1
19	Monon Park Dancing Pavillion	13701 Lauerman St.	Cedar Lake	219-660-0001	317-232-1646	N/A	1
20	Clark, Wellington A., House	227 S. Court St.	Crown Point	219-660-0001	317-232-1646	N/A	1
21	Griffith Grand Trunk Depot	201 S. Broad St.	Griffith	219-660-0001	317-232-1646	N/A	1

22	Bailey, Louis J., Branch Library-- Gary International Institute	1501 W. Madison St.	Gary	219-660-0001	317-232-1646	N/A	1
23	Lake County Sanatorium Nurses Home	2323 N. Main St. & 425 W. 93rd Ave.	Crown Point	219-660-0001	317-232-1646	N/A	1
24	Kingsbury--Doak Farmhouse	4411 E 153rd Ave.	Hebron	219-660-0001	317-232-1646	N/A	1
25	Indiana Harbor Public Library	3605 Grand Ave.	East Chicago	219-660-0001	317-232-1646	N/A	1
26	Wolf, George John, House	7220 Forest Ave.	Hammond	219-660-0001	317-232-1646	N/A	1
27	Rumsey, J. Claude, House	709 Michigan Ave.	Lowell	219-660-0001	317-232-1646	N/A	1
28	American Sheet and Tin Mill Apartment Building	633 W. 4th Ave.	Gary	219-660-0001	317-232-1646	N/A	1
29	Nichols, Charles E., House	231 W Commercial Ave	Lowell	219-660-0001	317-232-1646	N/A	1
30	Northern States Life Insurance Company	5935 Hohman Ave	Hammond	219-660-0001	317-232-1646	N/A	1
31	Allman, Walter, House	102 S E St	Crown Point	219-660-0001	317-232-1646	N/A	1
32	Ibach House	1908 Ridge Rd	Munster	219-660-0001	317-232-1646	N/A	1
33	Morgan-- Skinner--Boyd Homestead	111 E 73rd Ave	Merrillville	219-660-0001	317-232-1646	N/A	1
34	Brannon, James, House	260 Burnham St	Lowell	219-660-0001	317-232-1646	N/A	1
35	Southmoor Apartment Hotel	5946 Hohman Ave	Hammond	219-660-0001	317-232-1646	N/A	1
36	Maack, Albert, House	498 Court St.	Crown Point	219-660-0001	317-232-1646	N/A	1
37	Polk Street Concrete Cottage Historic District	604-614 Polk St.	Gary	219-660-0001	317-232-1646	N/A	1
38	Griffith E.J. and E. Interlocking Tower	201 S. Broad St.	Griffith	219-660-0001	317-232-1646	N/A	1
39	Sablotny, Barney, House	501 W. 47th St.	Gary	219-660-0001	317-232-1646	N/A	1
40	<i>No Data</i>	425 W. 93rd Ave.	Crown Point	219-660-0001	317-232-1646	N/A	1
41	Keilman, Francis P. House	9260 Patterson St.	St. John	219-660-0001	317-232-1646	N/A	1
42	Crawford-- Winslow House	357 Main St.	Crown Point	219-660-0001	317-232-1646	N/A	1
43	St. Augustine's Episcopal Church	2425 W. 19th Ave.	Gary	219-660-0001	317-232-1646	N/A	1
44	Whitaker, William, Landscape and House	472 S. Main	Crown Point	219-660-0001	317-232-1646	N/A	1

Aboveground Storage Tanks

#	Name	Address	City	Emergency Phone	Contact Phone	Waterbody	Count
1	Premcor Pipeline Company	1020 141st St	Hammond	219-660-0001	<i>No Data</i>	None	1
2	Marathon Petroleum Company Limited Partnership	4206 Columbia Ave	Hammond	219-660-0001	219-932-1024	None	1
3	Wolf Lake Terminals Incorporated	3200 Sheffield Ave	Hammond	312-772-8022	219-937-4460	Wolf Lake	1
4	Gary Works	One North Broadway	Gary	219-660-0001	219-888-2000	Lake Michigan	1
5	Carb Rite Company Incorporated	23810 Highland St	Schneider	219-660-0001	412-344-9900	Kankakee River	1
6	Metal Management Indiana Incorporated	3601 Canal St	East Chicago	219-660-0001	<i>No Data</i>	Lake Michigan	1
7	Exxon Mobil Oil Corporation	1527 141st St	Hammond	219-660-0001	219-933-6051	None	1
8	South Shore Slag LLC	1 N Buchanan St	Gary	219-660-0001	219-881-6544	Lake Michigan	1
9	Gary Railway Company	1 N Buchanan St	Gary	219-660-0001	219-888-7910	Lake Michigan	1
10	Flying J Travel Plaza	1401 Ripley St	Lake Station	219-660-0001	219-962-6555	Little Calumet River	1
11	Flying J Travel Plaza	3231 E 181st Ave	Hebron	219-660-0001	219-696-6446	Singleton Ditch	1
12	BP Amoco Oil Company Whiting Refinery	2815 Indianapolis Blvd	Whiting	219-660-0001	219-473-7700	Lake Michigan	1
13	ArcelorMittal Indiana Harbor	3210 Watling St	East Chicago	219-313-2495	219-399-1000	Lake Michigan	1
14	Beaver Oil Company LLC	1040 Michigan St	Gary	219-660-0001	219-881-9234	Little Calumet River	1
15	Elgin Joliet & Eastern Railway Company	1 N Buchanan St	Gary	219-660-0001	219-883-4374	Lake Michigan	1
16	Buckeye Terminals LLC Hammond	2400 Michigan St	Hammond	1-800-331-4115	219-989-8600	None	1
17	Buckeye Terminals LLC	400 E Columbus Dr	East Chicago	219-660-0001	219-397-6666	None	1
18	MULTISERV	3001 Dickey Rd	Whiting	219-660-0001	<i>No Data</i>	Lake Michigan	1
19	CITGO - East Chicago	2500 E Chicago Ave	East Chicago	800-471-9191	219-398-0734 x13	Lake Michigan	1
20	Travel Centers of America - Lake Station	1201 Ripley St	Lake Station	TA Environmental Dept Spill Hotline- 440-617-1202	219-962-6552	Little Calumet River	1
21	Enbridge Energy - Griffith	1500 W Main St.	Griffith	800-858-5253	219-922-7035	None	1
22	Indiana Harbor Belt Railroad	2721 161st St.	Hammond	708-832-2082	219-989-4903	Calumet River	1

23	Enbridge Energy - Hartsdale	131 W Division St.	Schererville	800-858-5253	219-922-7035	None	1
24	Explorer Pipeline - Hammond	3737 Michigan St.	Hammond	888-876-0036	219-989-8251	none	1

Aboveground Storage Tanks (Cont'd)

#	Name	City	Products	Oil Volume	Oil Tanks	Comments	Count
1	Premcor Pipeline Company	Hammond	Fuel Oil # 2, Gasoline, Fuel Oil # 2-D, Jet Fuel	2147483647	16	Total volume = 5473645059 gallons. Potential error due to unit conversion.	1
2	Marathon Petroleum Company Limited Partnership	Hammond	MPC Fuel Oil/Diesel/Kerosene (All Grades), MPC Gasoline (All Grades)	2147483647	67	Total volume = 42251404739 gallons. Potential error due to unit conversion.; EPA-FRP-#0500034	1
3	Wolf Lake Terminals Incorporated	Hammond	Fuel Oil # 2, Motor Oil, Bio-Diesel, Mineral Oil	29215502	129	N/A	1
4	Gary Works	Gary	Refined Petroleum Oil, Fuel Oil # 2-D, Mineral Oil	1426186	32	N/A	1
5	Carb Rite Company Incorporated	Schneider	Diesel Fuel	7056	2	N/A	1
6	Metal Management Indiana Incorporated	East Chicago	Fuel Oil # 2-D	141443	1	N/A	1
7	Exxon Mobil Oil Corporation	Hammond	Fuel Oil # 2, Bio-Diesel, Gasoline, Diesel Fuel	2147483647	18	Total volume = 12278243795 gallons. Potential error due to unit conversion.	1
8	South Shore Slag LLC	Gary	Diesel Fuel	2306646	22	N/A	1
9	Gary Railway Company	Gary	Fuel Oil # 2-D, Diesel Fuel	1102753	9	N/A	1
10	Flying J Travel Plaza	Lake Station	Fisherbrand Vacuum Pump Oil, Fuel Oil # 2-D, Diesel Fuel	6225410	9	N/A	1
11	Flying J Travel Plaza	Hebron	Fuel Oil # 2, Fuel Oil # 2-D	2323113	6	N/A	1
12	BP Amoco Oil Company Whiting Refinery	Whiting	Benzene, Kerosene, Distillate (Petroleum), Petroleum, Hexane	2147483647	56	Total volume = 68492730678 gallons. Potential error due to unit conversion.; Breakout tanks. FRP1130-09	1
13	ArcelorMittal Indiana Harbor	East Chicago	Fuel Oil # 2, Petroleum	818822	212	N/A	1
14	Beaver Oil Company LLC	Gary	Fuel Oil and Waste Oil Grades 2,4 & 6	3374828	22	No more than 20 drums of sulfuric acid.; 2,500 gallons on road diesel.	1
15	Elgin Joliet & Eastern Railway Company	Gary	Fuel Oil # 1, Fuel Oil # 2-D	42390125	30	N/A	1

16	Buckeye Terminals LLC Hammond	Hammond	Petroleum, Fuel Oil # 2-D, Jet Fuel	2147483647	38	Total volume = 14389559485 gallons. Potential error due to unit conversion.	1
17	Buckeye Terminals LLC	East Chicago	Kerosene, Bio-Diesel, Fuel Oil # 2-D, Diesel Fuel	2147483647	17	Total volume = 6315524433 gallons. Potential error due to unit conversion.	1
18	MULTISERV	Whiting	Fuel Oil # 2	202429149	3	N/A	1
19	CITGO - East Chicago	East Chicago	Jet Fuel, Diesel and Gasoline	173529000	53	PHMSA Regulated	1
20	Travel Centers of America - Lake Station	Lake Station	Fuel Oil # 2-D	123180	5	Lake County Sheriff- 219-660-0001	1
21	Enbridge Energy - Griffith	Griffith	Crude Oil	119364000	11	N/A	1
22	Indiana Harbor Belt Railroad	Hammond	Diesel fuel, used oil	2147483647	38	Total volume = 14389559485 gallons. Potential error due to unit conversion.	1
23	Enbridge Energy - Hartsdale	Schererville	Crude Oil	59682000	10	N/A	1
24	Explorer Pipeline - Hammond	Hammond	Diesel fuel, gasoline, jet fuel	2147483647	62	Total volume = 43080073055 gallons. Potential error due to unit conversion.; Breakout tanks	1

Hazardous Materials Storage

#	Name	Address	City	Emergency Phone	Emergency Contact	Local Contact	Count
1	ArcelorMittal Indiana Harbor	3210 Watling St	East Chicago	219-313-2495	Sheriff Dispatch	Jodi Richmond, 219-755-3549	2
2	Cma Recycling Corp., Ltd.	415 E 151st St	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
3	Safety-Kleen Systems - E Chicago	601 Riley Rd	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
4	Dietrich Industries, Inc.	1435 E 165th St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
5	Dawn Food Products - Crown Point	1300 E Summit St	Crown Point	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
6	AT&T - Cedar Lake	7112 W 134th Ave	Cedar Lake	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
7	Verizon Wireless - I 65 & Rt 6	330-400 LIVERPOOL RD	Hobart	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
8	Swift Transportation - Gary	6500 W Industrial Hwy	Gary	219-977-2021	Don Van Vleet	Kevin Doolin; 219-755-3512/219-755-3333	1
9	Sam's Club #8174	3134 E 79th Ave	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
10	AT&T Indiana Telephone - Saint John	11081 W 93rd Ave	Saint John	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
11	Lake County Cooperative	10401 W 181st Ave	Lowell	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
12	Verizon Wireless - Gary	2750 Colorado St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
13	Whiting Clean Energy, Inc.	2155 Standard Ave	Whiting	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
14	Verizon Wireless - Rt 41 & Rt 30	1216 Birch Dr	Schererville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
15	Ceres Solutions - Shelby	1211 W 234th Ave	Shelby	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
16	Verizon Wireless - Hammond	518 Fayette St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
17	Pepsi Beverages Co. - Munster	9300 Calumet Ave	Munster	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
18	Verizon Wireless - Merrillville	3314 E 84th Pl	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
19	AT&T Indiana Telephone - East Chicago 1	717 E Chicago Ave	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
20	Home Depot 2036	1624 E 165th St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
21	Northern Indiana Public Service Co. Dean H Mitchell Generating Station	1 N Clark Rd	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
22	Edward C. Levy Co., Inc.	3001 Dickey Rd	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1

23	Sprint - Hammond	5 Brunswick St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
24	Verizon Wireless - Lowell	402 Oakley Ave	Lowell	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
25	Bp Amoco Oil - Whiting Refinery	2815 Indianapolis Blvd	Whiting	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
26	Indiana Bell Telephone Co. D/B/A Sbc Ameritech - East Chicago	3210 Watling St	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
27	Rhodia - Hammond	2000 Michigan St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
28	Qwest - Schneider Regen	23513 Parrish Ave	Schneider	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
29	AT&T Indiana Telephone - Lowell 1	300 E Main St	Lowell	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
30	Gcr Tire Centers - Gary 3271	6801 Melton Rd	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
31	Verizon Wireless - East Hammond	7029 W 25th Ave	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
32	Unilever HPC	1200 S Calumet Ave	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
33	AT&T Indiana Telephone - Hammond 1	422 Fayette St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
34	Rsc Equipment Rental #219	300 W Chicago Ave	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
35	AT&T - Merrillville	8703 Virginia St	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
36	Hammond Water Filtration Plant	925 Casino Ctr Dr	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
37	Indiana Bell Telephone - Whiting Co.	1861 Indianapolis Blvd	Whiting	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
38	Cargill - Hammond	1100 Indianapolis Blvd	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
39	Blue Beacon Truck Wash of Lake Station	1535 Ripley St	Lake Station	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
40	Hammond Lead Products, Inc.	2308 165th St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
41	Verizon Wireless - Highland	3738 Ridge Rd	Highland	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
42	Avery Dennison - Chererville	650 W 67th Pl	Schererville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
43	Pleasant View Dairy Corp.	2625 Highway Ave	Highland	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
44	Nipsco Roxanna Station	5535 Indianapolis Blvd	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
45	AT&T Indiana Telephone - Gary 1	1 N Broadway	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
46	Verizon Wireless - Lake Station	1401 Ripley St	Lake Station	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1

47	AT&T - Gary	7602 Indian Boundary	Gary	574-237-8274	Henry Paschen	Kevin Doolin; 219-755-3512/219-755-3333	1
48	AT&T Indiana Telephone - Gary 2	7501 B Taft St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
49	Indiana American Water - Borman Park Filtration Plant	650 Madison St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
50	National Processing Co.	4506 Cline Ave	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
51	Costco Wholesale #370	1310 E 79th Ave	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
52	Arcelormittal Indiana Harbor, LLC	3001 Dickey Rd	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
53	Electric Coating Technologies, LLC	4407 Railroad Ave	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
54	Halstab Division Hammond Group, Inc.	3100 Michigan St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
55	AT&T - Whiting	Conrail Tracks & 117th St	Whiting	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
56	Henry Pratt Co.	403 Conkey St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
57	Level 3 Communications Crpnincs	12928 Grant St	Crown Point	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
58	Frontier Communications - Hobart	624 W 3rd St	Hobart	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
59	State Line Energy	103rd St & Lake Michigan	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
60	Praxair - Kennedy Ave.	4400 Kennedy Ave	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
61	Verizon Wireless - North Hmnd Whiting	2741 Calumet Ave	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
62	Aetna Substation	1000 Idaho St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
63	Verizon Wireless - Munster	8835 White Oak Ave	Munster	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
64	Nisource Columbia Avenue Substation	Columbia Ave & Chicago Ave	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
65	Travel Centers of America - Lake Station	1201 Ripley St	Lake Station	TA Environmental Dept Spill Hotline- 440-617-1202	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
66	AT&T Indiana Telephone - Lowell 2	23131 Colfax St	Lowell	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
67	American Chemical Service, Inc.	420 S Colfax Ave	Griffith	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1

68	Verizon Wireless - Ch12 II281	3830 W 4th Ave	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
69	Linde Gas - Hammond	3930 Michigan St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
70	AT&T Indiana Telephone - Crown Point	611 W 61st St	Crown Point	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
71	Verizon Wireless - Hammond	1247 169th Ave	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
72	Kemira Water Solution, Inc.	3761 Canal St	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
73	AT&T - Schererville	1350 Lincoln Hwy	Schererville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
74	AT&T Indiana Telephone - Hammond 2	7220 Kennedy Ave	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
75	Mason Corp.	1049 US Hwy 41	Schererville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
76	Verizon Wireless - Griffith	242 S Lindberg Ave	Griffith	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
77	Industrial Steel Construction, Inc.	86 N Bridge St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
78	AT&T Indiana Telephone - Gary 3	1514 Clark Rd	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
79	MCI Hmdfin	Chicago Ave & White Oak Ave	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
80	Hanson Cold Storage - Hobart	2201 Northwind Pkwy	Hobart	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
81	Praxair - Dickey Rd.	2551 Dickey Rd	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
82	Schneider National - Gary	7101 W 17th Ave	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
83	Lasalle Steel Co. Fluid Power Division	1045 E Main St	Griffith	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
84	Ameritech - Crown Point	302 S East St	Crown Point	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
85	Home Depot 1937	960 US Hwy 41	Schererville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
86	Keil Chemical	3000 Sheffield Ave	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
87	Pactiv Corp. - Griffith	300 W Main St	Griffith	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
88	Con-Way Freight - Xgh	201 Blaine St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
89	AT&T Indiana Telephone - Gary 4	725 Madison St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
90	Home Depot - Merrillville	2851 E US Hwy 30	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
91	AT&T - White Oak	10024 White Oak Ave	Munster	574-237-8274	Henry Paschen	Kevin Doolin; 219-755-3512/219-755-3333	1

92	Northern Indiana Public Service Co. Southlake Complex	801 E 86th Ave	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
93	AT&T Indiana Telephone - East Chicago 2	3001 Dicky Rd	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
94	Avery Dennison Graphic Design	270 Westmeadow Pl	Lowell	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
95	Resco Products, Inc.	5501 N Kennedy Ave	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
96	Comcast of Illinois Indiana Michigan, Inc.	820 S True St	Griffith	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
97	United Transportation Group, Inc.	1150 E 145th St	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
98	Frontier Communications - Lake Station	3670 Central Ave	Lake Station	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
99	AT&T - Crown Point	8200 E 129th Ave	Crown Point	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
100	Dyer Waste Water Treatment Plant	518 EDMOND DR	Dyer	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
101	Community Hospital	901 MacArthur Blvd	Munster	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
102	At & T Indiana Telephone	9616 Gordon Dr	Highland	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
103	At & T Indiana Telephone	433 Lake St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
104	Illiana Transit Warehouse Corporation	1334 FIELDS ST	Dyer	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
105	Metal Management Indiana Incorporated	3601 Canal St	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
106	Lowe's Home Centers Incorporated 1569	1520 E 79th Ave	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
107	First Transit Incorporated	2237 Summer St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
108	Pine Regen Facility	N Clark Rd	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
109	Praxair Distribution Incorporated	166 S Hobart Rd	Hobart	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
110	Speedway 1426	6325 E US Hwy 30	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
111	Lowe's Home Centers Incorporated 1601	637 US Hwy 41	Schererville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
112	Cellular One	3757 E 82ND CT	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
113	Trugreen	9171 Louisiana St	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1

114	Speedway 1433	7405 Calumet Ave	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
115	Verizon Wireless Miller Beach	7200 INDIAN BOUNDARY AVE	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
116	Praxair Incorporated	Clark St & Dean Mitchell Rd	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
117	Verizon Wireless	10409 W 157th St	Lowell	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
118	Metal Management	425 W 152nd St	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
119	Lear Corporation	1401 E 165TH ST	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
120	Home City Ice Company	668 Madison St	Crown Point	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
121	Hammond Sewage Treatment	5143 COLUMBIA AVE	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
122	Gary Railway Company	1 N Buchanan St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
123	Flying J Travel Plaza	1401 Ripley St	Lake Station	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
124	Dyer Water Pumping Station	1021 Calumet Ave	Dyer	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
125	Lowell Town Water Treatment Plant	20011 Colfax St	Lowell	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
126	Scp Pool Corporation	2657 E 84th Pl	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
127	Lake County Farm Bureau Cooperative	5315 E 141st Ave	Crown Point	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
128	Wolf Lake Terminals Incorporated	3200 Sheffield Ave	Hammond	312-772-8022	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
129	General Electric Company Ge Appliances Division	475 Superior Ave	Munster	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
130	Indiana Bell Telephone Company Incorporated	19 Industrial Rd	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
131	Comcast of Illinois Indiana Michigan Incorporated	1104 Main St	Griffith	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
132	Steel City Gas City Truck & Auto Plaza	3001 Grant St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
133	Metal Management Indiana Incorporated	1011 S Lake St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
134	Dawn Food Products	215 45th St	Munster	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
135	Fritz Enterprises Incorporated	1 N Clark Rd	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1

136	At & T Indiana Telephone	4025 Cleveland St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
137	Lang Ice Company	710 EXCHANGE AVE	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
138	Gas City Road Pantry	700 E 81St Ave	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
139	Beaver Oil Company LLC	1040 Michigan St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
140	Amsted Rail Company Incorporated	4831 Hohman Ave	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
141	Prochemco Incorporated	2319 Ripley St	Lake Station	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
142	Speedway 1427	10061 Sheffield Ave	Dyer	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
143	Patten Industries Incorporated	6400 INDIANAPOLIS BLVD	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
144	Elgin Joliet & Eastern Railway Company	1 N Buchanan St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
145	Northern Indiana Public Service Company	1500 165th St	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
146	Thatcher Engineering Corporation	7100 Industrial Hwy	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
147	Progress Rail Service Corporation	175 W CHICAGO AVE	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
148	At & T Corporation	801 E 86th Ave Bsmt	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
149	Lasalle Steel Company	1412 150th St	Crown Point	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
150	Us Steel Corporation Gary Works	1 N Broadway	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
151	Multiserv	3001 DICKEY RD	Whiting	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
152	Roadsafe Traffic Systems	811 N Industrial Dr	Crown Point	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
153	Rieter Automotive Incorporated	101 W Oakley Ave	Lowell	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
154	Indiana Harbor Belt Railroad	2721 161ST ST	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
155	Grace Davison	5215 Kennedy Ave	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
156	Us Steel East Chicago Tin Operations	101 E 129th St	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
157	Us Postal Service Gary Vehicle Maintenance Facility	1499 Martin Luther King Dr	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
158	Eckart America	650 W 67th Ave Ste 200	Schererville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1

159	Comcast of Illinois Indiana Michigan Incorporated	16 W 84TH DR	Merrillville	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
160	Ashland Hardware Systems	790 W Commercial Ave	Lowell	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
161	Level 3 Communications Garyinii	911 Adams St	Gary	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
162	Verizon Wireless	402 E Chicago Ave	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
163	Ico Polymers North America Incorporated	4404 Euclid Ave	East Chicago	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
164	Cabelas	7700 Cabela Dr	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
165	North Hammond Whiting	2741 CALUMET AVE	Hammond	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1
166	Aristo Incorporated	4410 W 37th Ave	Hobart	219-660-0001	Sheriff Dispatch	Jodi Richmond, 219-755-3549	1

Hazardous Materials Storage (Cont'd)

#	Name	City	Contact Phone	Materials/CAS	Count
1	Verizon Wireless - Hammond	Hammond	847-619-5433	None, 7664939	2
2	Cma Recycling Corp., Ltd.	East Chicago	219-391-7075	7647010	1
3	Safety-Kleen Systems - E Chicago	East Chicago	219-391-6100	7664417, 7664939, 7722841	1
4	Dietrich Industries, Inc.	Hammond	219-931-3741 2328	7664939	1
5	Dawn Food Products - Crown Point	Crown Point	219-662-3296 137	7664417, 7664939	1
6	AT&T - Cedar Lake	Cedar Lake	574-237-8274	7664939	1
7	Verizon Wireless - I 65 & Rt 6	Hobart	847-619-5433	7664939	1
8	Swift Transportation - Gary	Gary	219-977-2021	7664939	1
9	Sam's Club #8174	Merrillville	971-678-8111	7664939	1
10	AT&T Indiana Telephone - Saint John	Saint John	770-922-6035	7664939	1
11	Lake County Cooperative	Lowell	219-756-8302	7664417, 1912249	1
12	Verizon Wireless - Gary	Gary	847-619-5433	7664939	1
13	Whiting Clean Energy, Inc.	Whiting	219-473-0653 223	7664417, 7664939	1
14	Verizon Wireless - Rt 41 & Rt 30	Schererville	800-852-2671	7664939	1
15	Ceres Solutions - Shelby	Shelby	765-362-6700	7664417	1
16	Pepsi Beverages Co. - Munster	Munster	219-836-1800	None, 7664417, 7664939	1
17	Verizon Wireless - Merrillville	Merrillville	847-619-5433	7664939	1
18	ArcelorMittal Indiana Harbor	East Chicago	219-399-1000	10026138, 7664939, 7647010, 7782505, 999106	1
19	AT&T Indiana Telephone - East Chicago 1	East Chicago	574-237-8274	7664939	1
20	Home Depot 2036	Hammond	770-433-8211 82714	7664939	1
21	Northern Indiana Public Service Co. Dean H Mitchell Generating Station	Gary	219-787-7298	7664939, 302012	1
22	Edward C. Levy Co., Inc.	East Chicago	219-391-3135	7664939	1
23	Sprint - Hammond	Hammond	913-269-8146	7664939	1
24	Verizon Wireless - Lowell	Lowell	847-619-5433	7664939	1
25	Bp Amoco Oil - Whiting Refinery	Whiting	630-821-2365	999147, 7664939, 108918, 7647010, 108054, 1314621, 7446119, 7664417, 7783064, 7446095	1
26	Indiana Bell Telephone Co. D/B/A Sbc Ameritech - East Chicago	East Chicago	574-237-8274	7664939	1

27	Rhodia - Hammond	Hammond	219-932-7651 247	7664939, 999011, 1314621, None, 7446119, 7783064, 7446095	1
28	Qwest - Schneider Regen	Schneider	866-864-2255	7664939	1
29	AT&T Indiana Telephone - Lowell 1	Lowell	574-237-8274	7664939	1
30	Gcr Tire Centers - Gary 3271	Gary	219-939-9000	None, 584849, 91087	1
31	Verizon Wireless - East Hammond	Gary	847-619-5433	7664939	1
32	Unilever HPC	Hammond	219-659-3200	7664939, 7727379	1
33	AT&T Indiana Telephone - Hammond 1	Hammond	574-237-8274	7664939	1
34	Rsc Equipment Rental #219	East Chicago	816-401-0769	7664939	1
35	AT&T - Merrillville	Merrillville	800-566-9347	7664939	1
36	Hammond Water Filtration Plant	Hammond	219-853-6439	7440440, 10043013, 16961834, 7646857, 7664382, 7782505, 7664417	1
37	Indiana Bell Telephone - Whiting Co.	Whiting	574-237-8274	7664939	1
38	Cargill - Hammond	Hammond	219-659-2000	7664939, 75569, 7647010, 10025873, 7722841, 7664417	1
39	Blue Beacon Truck Wash of Lake Station	Lake Station	219-962-6041	7664393	1
40	Hammond Lead Products, Inc.	Hammond	219-845-0031	1306190	1
41	Verizon Wireless - Highland	Highland	847-619-5433	None, 7664939	1
42	Avery Dennison - Cherrerville	Schererville	626-304-2000	7664939	1
43	Pleasant View Dairy Corp.	Highland	219-838-0155	7664417	1
44	Nipsco Roxanna Station	East Chicago	219-647-4854	7664939	1
45	AT&T Indiana Telephone - Gary 1	Gary	770-922-6035	7664939	1
46	Verizon Wireless - Lake Station	Lake Station	547-619-5433	7664939	1
47	AT&T - Gary	Gary	574-237-8274	7664939	1
48	AT&T Indiana Telephone - Gary 2	Gary	800-566-9347	7664939	1
49	Indiana American Water - Borman Park Filtration Plant	Gary	219-512-4949	7664417, 7782505	1
50	National Processing Co.	East Chicago	219-391-6012	7647010	1
51	Costco Wholesale #370	Merrillville	425-313-8100	7664939	1
52	Arcelormittal Indiana Harbor, LLC	East Chicago	219-391-2345	7664939, 7723140, 7647010	1
53	Electric Coating Technologies, LLC	East Chicago	219-378-1930 111	7664939, 7697372	1

54	Halstab Division Hammond Group, Inc.	Hammond	219-845-0031	7664939	1
55	AT&T - Whiting	Whiting	770-922-6035	7664939	1
56	Henry Pratt Co.	Hammond	219-844-5162	7664939, 999013	1
57	Level 3 Communications Crpnincs	Crown Point	847-954-8368	7664939	1
58	Frontier Communications - Hobart	Hobart	203-614-5600	7664939	1
59	State Line Energy	Hammond	219-405-5907	7664939, 302012	1
60	Praxair - Kennedy Ave.	East Chicago	219-398-3700	7664939	1
61	Verizon Wireless - North Hmnd Whiting	Hammond	847-619-5433	7664939	1
62	Aetna Substation	Gary	219-647-4854	7664939	1
63	Verizon Wireless - Munster	Munster	847-619-5433	7664939	1
64	Nisource Columbia Avenue Substation	Hammond	219-647-4854	7664939	1
65	Travel Centers of America - Lake Station	Lake Station	219-962-6552	7664393	1
66	AT&T Indiana Telephone - Lowell 2	Lowell	770-922-6035	7664939	1
67	American Chemical Service, Inc.	Griffith	219-924-4370	None, 7664939, 7722841, 7726956	1
68	Verizon Wireless - Ch12 II281	Gary	847-619-5433	7664939	1
69	Linde Gas - Hammond	Hammond	219-405-3574	7664417, 7782505	1
70	AT&T Indiana Telephone - Crown Point	Crown Point	800-566-9347	7664939	1
71	Kemira Water Solution, Inc.	East Chicago	219-256-9482	7782505, 7647010	1
72	AT&T - Schererville	Schererville	574-237-8274	7664939	1
73	AT&T Indiana Telephone - Hammond 2	Hammond	800-566-9347	7664939	1
74	Mason Corp.	Schererville	219-865-8040	7664939, 7782505, 7647010	1
75	Verizon Wireless - Griffith	Griffith	847-619-5433	7664939	1
76	Industrial Steel Construction, Inc.	Gary	219-885-7600 441	None	1
77	AT&T Indiana Telephone - Gary 3	Gary	800-566-9347	7664939	1
78	MCI Hmdfin	Hammond	800-444-0902	None, 7664939	1
79	Hanson Cold Storage - Hobart	Hobart	269-982-1390	7664417, 7664939	1
80	Praxair - Dickey Rd.	East Chicago	219-398-3777	7664417, 7664939	1
81	Schneider National - Gary	Gary	800-558-6767	7664939	1
82	Lasalle Steel Co. Fluid Power Division	Griffith	219-853-6233	7664939	1
83	Ameritech - Crown Point	Crown Point	770-922-6035	7664939	1
84	Home Depot 1937	Schererville	770-433-8211 82714	7664939	1

85	Keil Chemical	Hammond	219-852-4884	107153, 7782505, 7647010	1
86	Pactiv Corp. - Griffith	Griffith	847-482-2000	7664939	1
87	Con-Way Freight - Xgh	Gary	735-757-1657	7664939	1
88	AT&T Indiana Telephone - Gary 4	Gary	574-237-8274	7664939	1
89	Home Depot - Merrillville	Merrillville	770-433-8211 82714	7664939	1
90	AT&T - White Oak	Munster	800-566-9347	7664939	1
91	Northern Indiana Public Service Co. Southlake Complex	Merrillville	219-647-4482	7664939	1
92	AT&T Indiana Telephone - East Chicago 2	East Chicago	574-237-8274	7664939	1
93	Avery Dennison Graphic Design	Lowell	626-304-2000	7664939	1
94	Resco Products, Inc.	Hammond	219-730-2925	108952, 50000	1
95	Comcast of Illiniois Indiana Michigan, Inc.	Griffith	866-372-4216	7664939	1
96	United Transportation Group, Inc.	East Chicago	219-801-1587	7664393, 7664939, 7697372, 7647010, 999125	1
97	Frontier Communications - Lake Station	Lake Station	203-614-5600	7664939	1
98	AT&T - Crown Point	Crown Point	574-237-8274	7664939	1
99	Dyer Waste Water Treatment Plant	Dyer	219-865-4225	7446095, 7782505	1
100	Community Hospital	Munster	317-355-1411	7782447	1
101	At & T Indiana Telephone	Highland	219-942-7805	7664939	1
102	At & T Indiana Telephone	Gary	219-762-2571	7664939	1
103	Illiana Transit Warehouse Corporation	Dyer	219-937-4719	74908, 50000, 7664939, 7697372, 2807309, 108918, 108952, 2057490, 67561, 999013, 29911282, 7722841	1
104	Metal Management Indiana Incorporated	East Chicago	219-378-7426	7664939	1
105	Lowes Home Centers Incorporated 1569	Merrillville	219-756-8316	7664939	1
106	First Transit Incorporated	Hammond	708-924-4017	7664939	1
107	Pine Regen Facility	Gary	N/A	7664939	1
108	Praxair Distribution Incorporated	Hobart	219-942-2195	7782505	1
109	Speedway 1426	Merrillville	219-945-1660	8008206	1
110	Lowes Home Centers Incorporated 1601	Schererville	219-864-1296	7664939	1
111	Cellular One	Merrillville	708-849-2300	7664939	1
112	Trugreen	Merrillville	219-472-1843	57136, 1317653	1
113	Speedway 1433	Hammond	219-931-1686	8008206	1

114	Verizon Wireless Miller Beach	Gary	800-483-3000	7664939	1
115	Praxair Incorporated	Gary	219-398-3700	7664939	1
116	Verizon Wireless	Lowell	219-322-5406	7664939	1
117	Metal Management	East Chicago	219-378-7426	7664939	1
118	Lear Corporation	Hammond	219-852-0014	7439921, 7664939	1
119	Home City Ice Company	Crown Point	773-622-9400	7664417	1
120	Hammond Sewage Treatment	Hammond	219-865-4224	7446095, 7782505	1
121	Gary Railway Company	Gary	219-888-7910	None	1
122	Flying J Travel Plaza	Lake Station	219-962-6555	7664939	1
123	Dyer Water Pumping Station	Dyer	(219) 865 - 4222	7782505	1
124	Lowell Town Water Treatment Plant	Lowell	219-696-5050	7664939, 7782505	1
125	Scp Pool Corporation	Merrillville	219-947-7107	7647010	1
126	Lake County Farm Bureau Cooperative	Crown Point	219-663-0018	13071799	1
127	Wolf Lake Terminals Incorporated	Hammond	219-937-4460	108054	1
128	General Electric Company Ge Appliances Division	Munster	866-530-7025	7664939	1
129	Indiana Bell Telephone Company Incorporated	Hammond	317-577-8383	7664939	1
130	Comcast of Illinois Indiana Michigan Incorporated	Griffith	866-372-4216	7664939	1
131	Steel City Gas City Truck & Auto Plaza	Gary	219-985-2965	68334305, 8008206	1
132	Metal Management Indiana Incorporated	Gary	219-378-7426	7664939	1
133	Dawn Food Products	Munster	517-789-4400	7664939	1
134	ArcelorMittal Indiana Harbor	East Chicago	219-399-1000	None, 7664939, 7782505, 108918	1
135	Fritz Enterprises Incorporated	Gary	219-787-7298	7664939	1
136	At & T Indiana Telephone	Gary	219-942-7805	7664939	1
137	Lang Ice Company	East Chicago	219-853-1914	7664417	1
138	Gas City Road Pantry	Merrillville	N/A	8008206	1
139	Beaver Oil Company LLC	Gary	219-881-9234	7664939	1
140	Amsted Rail Company Incorporated	Hammond	312-645-1700	7782505	1
141	Prochemco Incorporated	Lake Station	219-962-8554	7664417, 7664939	1
142	Speedway 1427	Dyer	219-365-9380	8008206	1
143	Patten Industries Incorporated	Hammond	815-726-4248	7664939	1
144	Elgin Joliet & Eastern Railway Company	Gary	708-754-0861	8006619, 94114586, 999036, 68476302	1

145	Northern Indiana Public Service Company	Hammond	219-647-5990	7664939	1
146	Thatcher Engineering Corporation	Gary	219-949-2084	7664939	1
147	Progress Rail Service Corporation	East Chicago	708-728-0132	7664939	1
148	At & T Corporation	Merrillville	317-579-1950	7664939	1
149	Lasalle Steel Company	Crown Point	219-853-6780	7664939	1
150	Us Steel Corporation Gary Works	Gary	219-888-2000	108918, None, 7664939, 7647010	1
151	Multiserv	Whiting	773-777-3535	999101, 7664939, 7647010	1
152	Roadsafe Traffic Systems	Crown Point	815-372-2300	7664939	1
153	Rieter Automotive Incorporated	Lowell	219-696-5100	108054, 50000, 7664939	1
154	Indiana Harbor Belt Railroad	Hammond	219-989-4703	7664939	1
155	Grace Davison	East Chicago	219-398-2040	50000, 7664939	1
156	Us Steel East Chicago Tin Operations	East Chicago	219-391-2045	108918, None, 7664939, 7647010	1
157	Us Postal Service Gary Vehicle Maintenance Facility	Gary	800-275-8777	7664939	1
158	Eckart America	Schererville	219-322-6348	7664939	1
159	Comcast of Illinois Indiana Michigan Incorporated	Merrillville	800-934-6489	7664939	1
160	Ashland Hardware Systems	Lowell	219-696-5950	7664939	1
161	Level 3 Communications Garyinii	Gary	312-895-2900	7664939	1
162	Verizon Wireless	East Chicago	708-933-9690	7664939	1
163	Ico Polymers North America Incorporated	East Chicago	219-392-3375	7664939	1
164	Cabelas	Hammond	219-845-9040	7664939	1
165	North Hammond Whiting	Hammond	847-619-5433	7664939	1
166	Aristo Incorporated	Hobart	219-962-1032	None	1

Facility Response Plan (FRP) Facilities

#	Name	Address	City	Facility Registry Service Report	Count
1	BUCKEYE TERMINALS, LLC	400 EAST COLUMBUS DRIVE	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110064078251	1
2	ARCELORMITTAL USA LLC	3001 DICKEY RD.	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000397794	1
3	WOLF LAKE TERMINALS INC	3200 SHEFFIELD AVE	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110003105899	1
4	SOLVAY USA INC	2000 MICHIGAN ST	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000592109	1
5	ARCELORMITTAL USA LLC	3210 WATLING MAIL CODE 2-990	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110066942526	1
6	USS GARY WORKS	1 N BROADWAY	GARY	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000398374	1
7	MARATHON PETROLEUM COMPANY LP	4206 COLUMBIA AVE	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110041026029	1
8	SAFETY-KLEEN SYSTEMS	601 RILEY RD	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000397883	1
9	EXXONMOBIL PIPELINE COMPANY	1527 141ST STREET	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000863165	1
10	BP AMOCO WHITING REFINERY	2815 INDIANAPOLIS BOULEVARD	WHITING	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000398338	1
11	BUCKEYE TERMINALS LLC	2400 MICHIGAN STREET	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110032892680	1
12	PREMCOR HAMMOND DISTRIBUTION CENTER	1020 141ST STREET	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000493680	1

13	CITGO EAST CHICAGO TERMINAL	2500 E CHICAGO AVE	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000397767	1
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Risk Management Plan (RMP) Facilities

#	Name	Address	City	Facility Registry Service Report	Count
1	PRAXAIR INC	2551 DICKEY ROAD	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110002321381	2
2	PETROGAS GRIFFITH TERMINAL	1800 W. AVENUE H	GRIFFITH	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000560697	1
3	BUCKEYE TERMINALS, LLC- HARTSDALE STATION	45 DIVISION	SCHERERVILLE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110002075021	1
4	SANIATRY DISTRICT OF HAMMOND	5143 COLUMBIA AVENUE	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110020660578	1
5	USS-PVS TECH., INC.	1 NORTH BUCHANAN STREET	GARY	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110002455272	1
6	CARGILL TEXTURIZING SOLUTIONS	1100 INDIANAPOLIS BLVD	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000397963	1
7	HANSON LOGISTICS - HOBART DIVISION	2201 NORTHWIND PARKWAY	HOBART	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110033023083	1
8	GATX - GENERAL AMERICAN TRANSPORTATION CORP.	4245 RAILROAD AVENUE	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000542208	1
9	BUCKEYE TERMINALS LLC EAST CH	3823 INDIANAPOLIS BOULEVARD	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110054628104	1
10	ACS TECHNICAL PRODUCTS, INC.	420 S. COLFAX AVE.	GRIFFITH	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000397909	1
11	PRAXAIR INC	4400 KENNEDY AVENUE	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000397838	1
12	EAST CHICAGO WATER WORKS	3330 ALDIS AVE.	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000536117	1

13	MASON CORPORATION	1049 US 41	SCHERERVILLE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000592190	1
14	DOVER CHEMICAL HAMMOND WORKS	3000 SHEFFIELD AVE	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000397945	1
15	GARY SANITARY DISTRICT	3600 W 3RD AVE	GARY	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110009284540	1
16	BP AMOCO WHITING REFINERY	2815 INDIANAPOLIS BOULEVARD	WHITING	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000398338	1
17	KEMIRA WATER SOLUTIONS INCORPORATED	3761 CANAL ST	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110035800871	1
18	WHITING CLEAN ENERGY INC	2155 STANDARD AVENUE	WHITING	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110003139023	1
19	NORTH HAYDEN	10401 W 181ST AVE	LOWELL	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000539855	1
20	USS GARY WORKS	1 N BROADWAY	GARY	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000398374	1
21	ANDERSON DEVELOPMENT CO	3400 WEST 4TH AVR	GARY	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110015785453	1
22	BUCKEYE TERMINALS, LLC	400 EAST COLUMBUS DRIVE	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000744623	1
23	HAMMOND WATER WORKS DEPARTMENT-TREATMENT PLANT #1	925 CASINO DR	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110022311498	1
24	INDIANA AMERICAN WATER CO	650 MADISON ST	GARY	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000542066	1
25	VAN DRUNEN FARMS CROWN POINT	1300 E SUMMIT ST	CROWN POINT	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110012083422	1

26	SHELBY, IN 170 SATELLITE	1211 234TH AVE	LOWELL	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000557987	1
27	SOLVAY USA INC	2000 MICHIGAN ST	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000592109	1
28	TRANSFLO TERMINAL SERVICES, INC.	1401 WEST 145TH STREET	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110002354595	1
29	ARCELORMITTAL USA LLC	3210 WATLING MAIL CODE 2-990	EAST CHICAGO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110066942526	1
30	INEOS OLIGOMERS	2357 STANDARD AVE	WHITING	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000398329	1
31	LINDE - HAMMOND	3930 MICHIGAN AVE	HAMMOND	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000727447	1

Railroads

#	Railroad	Emergency Phone	Contact Phone	Class	Length(mi)
1	Norfolk Southern	800-453-2530	855-667-3655	1	102.89
2	Canadian National	800-465-9239 (Police)	888-888-5909	1	84.85
3	CSX Transportation	800-232-0144	904-359-3100	1	69.42
4	Indiana Harbor Belt Railroad	<i>No Data</i>	219-989-4703	<i>No Data</i>	18.49
5	Chicago, South Shore, and South Bend Railroad	219-873-6232	219-874-9000	<i>No Data</i>	16.67
6	N/A	N/A	N/A	<i>No Data</i>	12.12
7	Chicago, Ft. Wayne & Eastern Railroad	800-979-4958	260-267-9346	<i>No Data</i>	8.85
8	N/A	800-453-2530	855-667-3655	<i>No Data</i>	4.78
9	N/A	800-232-0144	904-359-3100	<i>No Data</i>	4.36
10	Indiana Harbor Belt Railroad	<i>No Data</i>	219-989-4703	1	3.22
11	Baltimore and Ohio Chicago Terminal Railroad	800-232-0144	904-359-3100	1	3.17
12	N/A	800-465-9239 (Police)	888-888-5909	<i>No Data</i>	1.76
13	Baltimore and Ohio Chicago Terminal Railroad	800-232-0144	904-359-3100	<i>No Data</i>	0.43
14	N/A	800-453-2530	855-667-3655	1	0.31

#	Name	System	Emergency Phone	Contact Phone	Length(mi)
1	Amoco Oil Co.	P1100 WHITING-INDIANAPOLIS	800-548-6482	800-548-6482	34.63
2	Buckeye Partners, LP	JU163XX	800-331-4115	610-904-4113	25.68
3	Buckeye Partners, LP	XX160EH	800-331-4115	610-904-4113	24.86
4	Buckeye Partners, LP	EO185XX	800-331-4115	610-904-4113	21.08
5	Buckeye Partners, LP	XF001KZ	800-331-4115	610-904-4113	15.71
6	Amoco Oil Co.	P1000 WHITING-RIVER ROUGE	800-548-6482	880-548-6482; 630-836-5000	15.67
7	Marathon Pipe Line, LLC	GRIFFITH - HAMMOND 12IN PRODUCTS	800-537-6644	219-934-8530	14.60
8	Marathon Pipe Line, LLC	WABASH 12IN PRODUCTS	800-537-6644	219-934-8530	14.19
9	Wolverine Pipe Line Co.	KENNEDY AVE. TO VICKSBURG	888-337-5004	269-323-2491	14.06
10	Buckeye Partners, LP	IJ162JU	800-331-4115	610-904-4113	14.03
11	Wolverine Pipe Line Co.	TERRE HAUTE JUNCTION - WALTON TRAPS	888-337-5004	269-323-2491	13.97
12	Enbridge Energy, LP	LAKEHEAD	800-858-5253	715-395-3619	13.83
13	Wolverine Pipeline Co.	Joliet Stn. to Kennedy Ave.	888-337-5004	269-323-2491, ext. 12	13.16
14	Amoco Oil Co.	P0800 Whiting - Dubuque	800-548-6482	800-548-6482	12.71
15	Enterprise Products Operating, LLC	Teppco Northern Region	888-883-6308	888-806-8152	12.68
16	Buckeye Partners, LP	HD150WH	800-331-4115	610-904-4113	12.36
17	Marathon Pipe Line, LLC	GRIFFITH - NORTH MUSKEGON 10IN PRODUCTS	800-537-6644	219-934-8530	12.16
18	Amoco Oil Co.	P0900 White Oak - Chicago O'Hare	800-548-6482	800-548-6482	12.05
19	BP Pipeline (North America), Inc.	P3101 Manhattan to Whiting 1	800-548-6482	216-390-0314	11.89
20	BP Pipeline (North America), Inc.	MANHATTAN TO WHITING	800-548-6482	216-390-0314	11.59
21	Buckeye Partners, LP	KG155HD	800-331-4115	610-904-4113	11.27
22	Buckeye Partners, LP	HD156KG	800-331-4115	610-904-4113	11.27
23	Buckeye Partners, LP	XX162IJ	800-331-4115	610-904-4113	10.96
24	BP Pipeline (North America), Inc.	MANHATTAN-WHITING_2	800-548-6482	216-390-0314	10.35
25	Marathon Pipe Line, LLC	Wabash 12in. Products	800-537-6644	219-934-8530	10.05
26	Buckeye Partners, LP	EC010XF	800-331-4115	610-904-4113	9.80
27	Buckeye Partners, LP	JU162EU	800-331-4115	610-904-4113	5.41
28	Wolverine Pipe Line Co.	CLARK/MARATHON TO KENNEDY AVE.	888-337-5004	269-323-2491	5.24
29	Buckeye Partners, LP	EU163JU	800-331-4115	610-904-4113	4.70
30	CITGO Petroleum Corp. (Terminals)	TERMINAL TRASFER PIPELINE SYSTEM	832-486-4700	337-802-1179	4.69
31	Wolverine Pipe Line Co.	KENNEDY AVE. TO WHITE OAK	888-337-5004	269-323-2491	4.61

32	Explorer Pipeline Co.	HAMMOND TO EAST CHICAGO	888-876-0036	918-493-5100	4.45
33	Explorer Pipeline Co.	Wood River to Hammond	888-876-0036	918-493-5100	4.13
34	Explorer Pipeline Co.	HAMMOND TO HARBOR CANAL	888-876-0036	918-493-5100	3.32
35	West Shore Pipeline Co	HM999A2	888-625-7310	847-439-0270	3.15
36	West Shore Pipeline Co	EH999HM	888-625-7310	847-439-0270	3.01
37	Buckeye Partners, LP	HD999A1	800-331-4115	610-904-4113	2.67
38	Enbridge Energy, LP	Lakehead	800-858-5253	715-395-3619	2.66
39	BP Pipeline (North America), Inc.	P3102 GRIFFITH - WHITING 2	1-888-271-8880	216-390-0314	2.56
40	West Shore Pipeline Co	EV999A1	888-625-7310	847-439-0270	2.52
41	Explorer Pipeline Co.	GRIFFITH TO EAST SHORE (LOTTAVILLE)	888-876-0036	918-493-5100	2.49
42	West Shore Pipeline Co.	MADISON TO EAST CHICAGO	888-625-7310	847-439-0270	2.23
43	BP Pipeline (North America), Inc.	P23A0 Diamondback Diulent Return System	800-548-6482	216-390-0314	2.05
44	Explorer Pipeline Co.	HAMMOND TO WEST SHORE	888-876-0036	918-493-5100	1.90
45	West Shore Pipeline Co.	HM250EB	888-625-7310	610-904-4113	1.89
46	West Shore Pipeline Co.	EV230XX	888-625-7310	610-904-4113	1.87
47	Wolverine Pipe Line Co.	CITGO TO KENNEDY AVE.	888-337-5004	269-323-2491	1.83
48	West Shore Pipeline Co	HM999A1	888-625-7310	847-439-0270	1.59
49	Valero Terminaling And Distribution Company	CHICAGO PRODUCTS	219-660-0001	210-345-5145	1.59
50	BP Pipeline (North America), Inc.	P6001 WHITING DELIVERY 1	800-548-6482	216-390-0314	1.56
51	BP Pipeline (North America), Inc.	MANHATTAN-WHITING_2	800-548-6482	216-390-0314	1.51
52	Valero Terminaling and Distribution Co.	Chicago Products	866-423-0898	210-345-5145	1.48
53	Wolverine Pipe Line Co.	SHELL TO KENNEDY AVE.	888-337-5004	269-323-2491	1.38
54	Explorer Pipeline Co.	HAMMOND TO CITGO	888-876-0036	918-493-5100	1.36
55	West Shore Pipeline Co	HM999A4	888-625-7310	847-439-0270	1.34
56	Wolverine Pipeline Co.	Lockport to Kennedy Ave.	888-337-5004	269-323-2491, ext. 12	1.27
57	Explorer Pipeline Co.	HAMMOND TO KENNEDY	888-876-0036	918-493-5100	1.25
58	Buckeye Partners, LP	HD164IJ	800-331-4115	610-904-4113	1.22
59	Explorer Pipeline Co.	EAST CHICAGO TO WHITE OAK	888-876-0036	918-493-5100	1.19
60	Wolverine Pipe Line Co.	16" BP WHITING TO COLUMBIA AVE. AGMS	888-337-5004	269-323-2491	0.98
61	Buckeye Partners, LP	EH999A4	800-331-4115	610-904-4113	0.97
62	BP Pipeline (North America), Inc.	MANHATTAN-WHITING	800-548-6482	216-390-0314	0.91
63	BP Pipeline (North America), Inc.	P9300 EXPLORER CONNECTION - WHITING	800-548-6482	216-390-0314	0.88

64	Buckeye Partners, LP	HC168HD	800-331-4115	610-904-4113	0.82
65	Buckeye Partners, LP	HD167HC	800-331-4115	610-904-4113	0.80
66	West Shore Pipeline Co	HM999A3	888-625-7310	847-439-0270	0.75
67	Explorer Pipeline Co.	4" LINE TO WELL 2586	888-876-0036	918-493-5100	0.72
68	Explorer Pipeline Co.	EAST CHICAGO TO CLARK	888-876-0036	918-493-5100	0.71
69	Buckeye Partners, LP	KG999B1	800-331-4115	610-904-4113	0.58
70	Explorer Pipeline Co.	HAMMOND TO CITGO SPARE	888-876-0036	918-493-5100	0.55
71	Explorer Pipeline Co.	HAMMOND TO EAST CHICAGO SPARE	888-876-0036	918-493-5100	0.55
72	Explorer Pipeline Co.	HAMMOND TO CONOCO (PHILLIPS) SPARE	888-876-0036	918-493-5100	0.52
73	Buckeye Partners, LP	EC999B1	800-331-4115	610-904-4113	0.46
74	Enterprise Products Operating, LLC	TEPPCO LOOP LINE	800-530-1050	713-381-6500	0.45
75	Explorer Pipeline Co.	EAST CHICAGO TO BADGER (MOBIL)	888-876-0036	918-493-5100	0.43
76	Buckeye Partners, LP	EU999A1	800-331-4115	610-904-4113	0.43
77	Buckeye Partners, LP	KG999EG	800-331-4115	610-904-4113	0.43
78	West Shore Pipeline Co	EV999A2	888-625-7310	847-439-0270	0.42
79	Buckeye Partners, LP	EG999KG	800-331-4115	610-904-4113	0.42
80	BP Pipeline (North America), Inc.	P3200 Whiting-Decatur Xylene	800-548-6482	216-390-0314	0.37
81	Buckeye Partners, LP	EH999A2	800-331-4115	610-904-4113	0.33
82	Buckeye Partners, LP	EH999A1	800-331-4115	610-904-4113	0.33
83	Explorer Pipeline Co.	GRIFFITH TO BUCKEYE HARTSDALE(TECUMSEH)	888-876-0036	918-493-5100	0.32
84	Buckeye Partners, LP	EU999A2	800-331-4115	610-904-4113	0.27
85	Explorer Pipeline Co.	HAMMOND TO WOLVERINE	888-876-0036	918-493-5100	0.24
86	BP Pipeline (North America), Inc.	EXPLORER_CONNECTION	800-548-6482	216-390-0314	0.21
87	Buckeye Partners, LP	EG999A3	800-331-4115	610-904-4113	0.20
88	Buckeye Partners, LP	EG999A4	800-331-4115	610-904-4113	0.20
89	Buckeye Partners, LP	EH999A7	800-331-4115	610-904-4113	0.18
90	Marathon Pipe Line, LLC	CAPOC	800-537-6644	502-448-8363	0.17
91	Buckeye Partners, LP	EC999B4	800-331-4115	610-904-4113	0.16
92	Buckeye Partners, LP	EC999B3	800-331-4115	610-904-4113	0.16
93	Buckeye Partners, LP	EH999A5	800-331-4115	610-904-4113	0.15
94	Buckeye Partners, LP	EG999A2	800-331-4115	610-904-4113	0.15
95	Buckeye Partners, LP	EG999A1	800-331-4115	610-904-4113	0.15
96	Buckeye Partners, LP	EG999B1	800-331-4115	610-904-4113	0.15
97	Buckeye Partners, LP	EH999A6	800-331-4115	610-904-4113	0.09
98	Buckeye Partners, LP	XX163KK	800-331-4115	610-904-4113	< 0.01
99	Buckeye Partners, LP	KK162XX	800-331-4115	610-904-4113	< 0.01

100	West Shore Pipeline Co.	XX230NJ	888-625-7310	610-904-4113	< 0.01
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Marinas

#	Name	Address	City	Emergency Phone	Contact Phone	Waterbody	Count
1	City of Whiting Transient Dock	1561 Park Rd	Whiting	219-660-0001	(219) 659-7704	Lake Michigan	1
2	North Point Resort	13245 Grimm St	Cedar Lake	219-660-0001	(219) 374-7216	Cedar Lake	1
3	Lake Shore Marina	13832 Lake Shore Dr.	Cedar Lake	219-755-3300	N/A	Cedar Lake	1
4	Pine Crest Inc., dba Pine Crest Marina	14415 Lauerman St.	Cedar Lake	219-660-0001	(219) 374-5771	Cedar Lake	1
5	East Chicago Marina	3301 Aldis Ave.	East Chicago	219-660-0001; 219-391-8374	(219) 391-8482 Mon-Fri 8a-4p	Lake Michigan	1
6	Indiana Harbor Yacht Club	3400 Aldis Ave.	East Chicago	219-755-3300	219-680-0386	Lake Michigan	1
7	Hammond Marina	701 Casino Center Dr.	Hammond	219-512-2011	(219) 659-7678	Lake Michigan	1
8	Illiana Yacht Club	2012 4th Ave.	Whiting	219-755-3300	(219) 659-9602	Wolf Lake	1

Boat Access

#	Name	Operator	Waterbody	Latitude	Longitude	Count
1	Kankakee River (Lake County Park Dept)	Lake County Parks and Recreation	Kankakee River	41.2195	-87.2741	1
2	Riverview Park	Lake Station Parks and Recreation	Deep River	41.5665	-87.2375	1
3	Bicentennial Park	Lake Station Parks and Recreation	Deep River	41.571	-87.2404	1
4	Deep River County Park	Lake County Parks and Recreation	Deep River	41.4908	-87.2355	1
5	Stateline Road	N/A	Kankakee River	41.16699821	-87.52615461	1
6	Cedar Lake	LaSalle Fish and Wildlife Area	Cedar Lake	41.38420277	-87.43114128	1
7	Fancher Lake	Lake County Parks and Recreation	Fancher Lake	41.4002	-87.3704	1
8	Pastrick Marina	East Chicago Port Authority	Lake Michigan	41.6551	-87.4368	1
9	Shelby Public Access	IN DNR	Kankakee River	41.18313251	-87.34035451	1
10	Wilhala Beach Co. Pk.	Lake County Parks and Recreation	Lake Michigan	41.6844	-87.4903	1
11	Wolf Lake Memorial Park	City of Hammond	Wolf Lake	41.67004945	-87.510694	1
12	Hammond Marina	City of Hammond Parks and Recreation	Lake Michigan	41.6953	-87.5099	1
13	Lake Etta County Park Canoe Launch	Lake County Parks and Recreation	Little Calumet River	41.5607717	-87.39687194	1
14	Cedar Lake	LaSalle Fish & Wildlife Area	Cedar Lake	41.38418219	-87.43108953	1
15	Lake George (Festival Park)	City of Hobart Parks and Recreation	Lake George	41.5352685	-87.25862677	1
16	Riggle Lake (Lake Co. Park Dept)	Lake County Parks and Recreation	Riggle Lake	41.51629707	-87.39284809	1

Navigational Locks and Dams

#	Name	Address	City	Emergency Phone	Contact Phone	Waterbody	Count
1	Indiana Harbor Canal	3500 Indianapolis Blvd	East Chicago	219-660-0001	219-398-9377	Lake George Branch Of Indiana Harbor Canal	1

Non-navigational Dams

#	Name	Latitude	Longitude	Count
1	Lake George Dam	41.5347000007	-87.2577999998	1
2	Lake Of The Four Seasons (Lower) C	41.3934000004	-87.2242999999	1
3	Hobart Deep River Dam (in-channel)	41.5646000002	-87.2934999997	1
4	Lake Dalecarlia Dam (West)	41.3256000001	-87.4062999999	1
5	Spring Run Ditch Dam	41.3149999995	-87.3651000001	1
6	Lakewood Estates Dam	41.3179000001	-87.3910999997	1
7	Doubletree Lake Estates Dam (West)	41.4274000004	-87.2386999996	1
8	Doubletree Lake Estates Dam (North)	41.4317000005	-87.2367000002	1
9	Hooseline & Molchan Lake Dam	41.4246999994	-87.2534999996	1
10	Lake Hills Dam	41.4613000005	-87.4555000002	1
11	Lake Dalecarlia Dam (East)	41.3263000008	-87.4047999997	1

Rivers and Streams

#	Name	Feature	Length(mi)
1	Deep River	Stream	23.89
2	<i>No Data</i>	Stream	20.80
3	West Creek	Stream	19.35
4	<i>No Data</i>	Canal	17.23
5	Little Calumet River	Stream	13.44
6	Kankakee River	Stream	12.58
7	Portage-Burns Waterway	Stream	11.48
8	Cedar Creek	Stream	11.38
9	Plum Creek	Canal	3.73
10	Calumet River	Stream	3.28
11	Plum Creek	Stream	2.59
12	Deep River	Stream Intermittent	2.55
13	Singleton Ditch	Canal	2.23
14	West Creek	Stream Intermittent	1.97
15	Cedar Creek	Stream Intermittent	1.68
16	East Branch Stony Run	Stream	0.92
17	Little Calumet River	Stream Intermittent	0.26

Lakes and Ponds

#	Name	Description	Area(acres)
1	<i>No Data</i>	Lake/Pond: Hydrographic Category = Perennial	2,696.57
2	Cedar Lake	Lake/Pond: Hydrographic Category = Perennial	755.07
3	Holiday, Lake	Lake/Pond: Hydrographic Category = Perennial	160.41
4	<i>No Data</i>	Lake/Pond: Hydrographic Category = Intermittent	77.06
5	George, Lake	Lake/Pond: Hydrographic Category = Perennial	66.58
6	Redwing Lake	Lake/Pond: Hydrographic Category = Perennial	47.16
7	Wolf Lake	Lake/Pond: Hydrographic Category = Perennial	43.34
8	Grand Boulevard Lake	Lake/Pond: Hydrographic Category = Perennial	41.57
9	Golf Lake	Lake/Pond: Hydrographic Category = Perennial	28.61
10	Mac Joy Lake	Lake/Pond: Hydrographic Category = Perennial	21.75
11	Hermit Lake	Lake/Pond: Hydrographic Category = Perennial	19.93
12	Bel-Aire, Lake	Lake/Pond: Hydrographic Category = Perennial	18.13
13	Robinson Lake	Lake/Pond: Hydrographic Category = Perennial	9.95
14	Bingo Lake	Lake/Pond: Hydrographic Category = Perennial	8.47
15	Fancher Lake	Lake/Pond: Hydrographic Category = Perennial	6.83
16	Trouthaven Lake	Lake/Pond: Hydrographic Category = Perennial	5.20
17	Fisher Pond	Lake/Pond: Hydrographic Category = Perennial	3.92

Response Strategies

#	Name	City	Latitude	Longitude	Contact	Contact Phone	Count
1	Buffington East	Gary	41.64150000034 9296	-87.4205000003 5404	Majestic Star Casino & Hotel	219-977-7777	1
2	Buffington West	East Chicago	41.64900000009 682	-87.4313999996 163	City of East Chicago Parks Dept.	219-391-8474	1
3	BP Whiting WCD	Whiting	41.65967399998 856	-87.4528240003 9225	BP Products NA	219-473-5465	1
4	Ogden Dunes	Miller	41.62490606670 7624	-87.2237234665 4878	Porter Co. Emergency Mgmt.	<i>No Data</i>	1

Response Strategies (Cont'd)

#	Name	Waterbody	River Mile	Boat Access	Land Access	Owner	Count
1	Buffington East	Lake Michigan	N/A	NO	YES	public and private	1
2	Buffington West	Lake Michigan	N/A	NO	YES	public and private	1
3	BP Whiting WCD	Lake Michigan	N/A	NO	YES	private	1
4	Ogden Dunes	Lake Michigan	N/A	YES	YES	public and private	1

Response Strategies (Cont'd)

#	Name	Strategy	Boom Length (Feet)	Shoreline Type	Location	Comments	Count
1	Buffington East	Exclusion	1000	Sand or mud flats	Shoreline just W of Buffington Harbor, next to casino and hotel property. Access by boat from East Chicago Marina, 1 mi. W at 3301 Aldis Ave., E Chicago, IN 219-391-8482.	Prevent spilled product from reaching beach used by endangered species. Anchor boom on riprap at E end, on beach on W end. Boom placement guided by spill trajectory and weather.	1
2	Buffington West	Exclusion	1000	Sand or mud flats	Shoreline E of Jeorse Park and casino. Access by boat from East Chicago Marina, just N of casino at 3301 Aldis Ave., E Chicago, IN 219-391-8482.	Prevent spilled product from reaching beach used by endangered species. Boom from riprap jetty at W end along shore to beach anchor point. Boom placement guided by spill trajectory and weather. Ample staging at marina, park, and casino parking lots.	1
3	BP Whiting WCD	Exclusion	250	Urban, riprap, or other developed	Barge dock and canal next to largest tank connected to maritime portion of facility. Staging along canal or Safety Kleen docks. Boat access from Hammond Marina, 3 mi. NW.	Place boom across canal, landward of the EJ&E bridge, to prevent spilled product from reaching coastal zone.	1
4	Ogden Dunes	Exclusion	2000+	Sand or mud flats	Indiana National Lakeshore West N of Portage, IN. Boat and shore access from Marquette Park in Gary. Boat access also from Burns Ditch Marina.	Boom to prevent spilled product from reaching protected shoreline and endangered species. Anchor with both shore and offshore anchors. Location will depend on spill trajectory, presence of species, weather, and location of spill source.	1

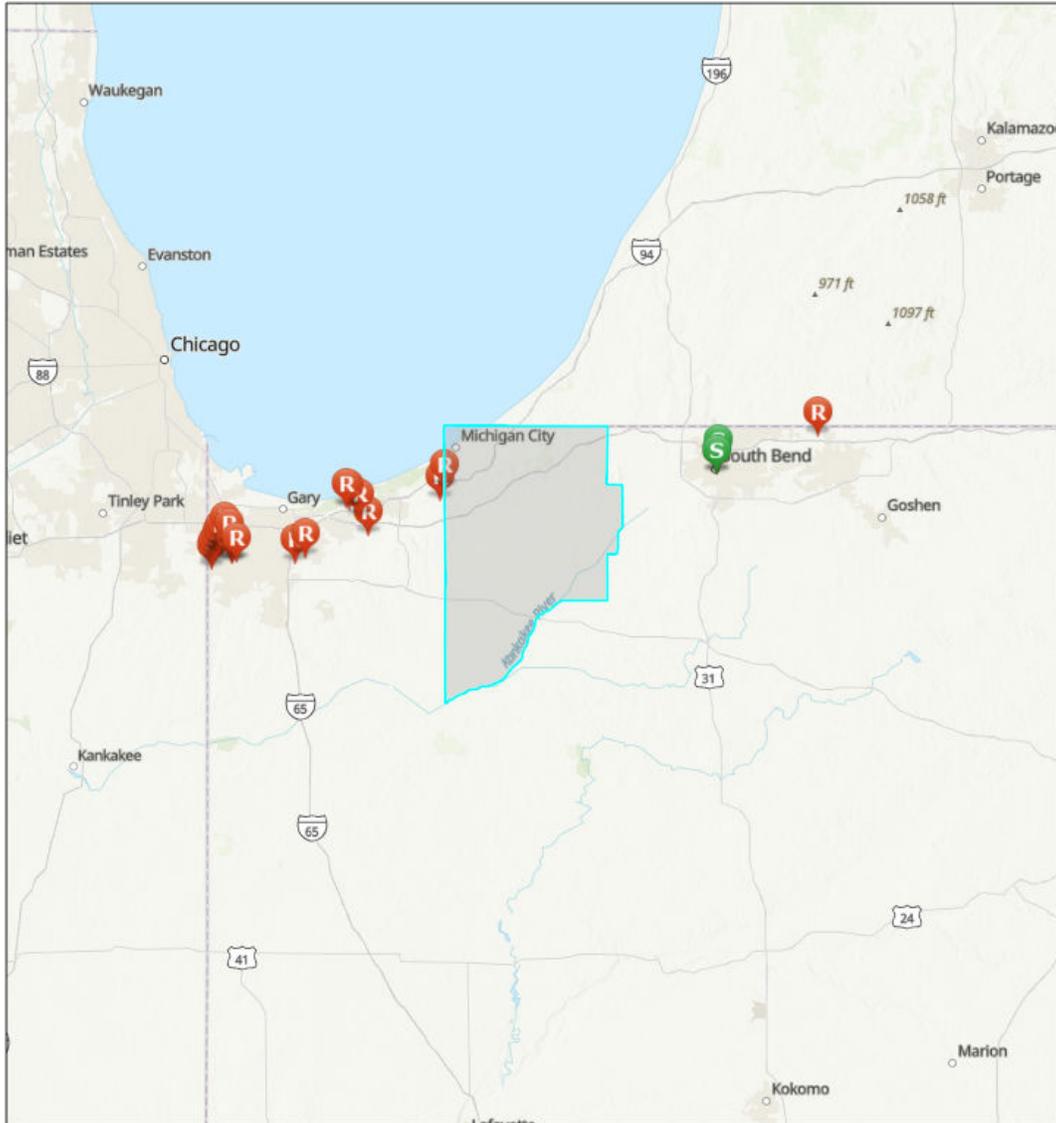


LaPorte County Indiana Fact Sheet Report

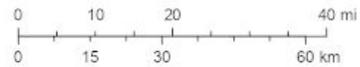
Area of Interest (AOI) Information

Area : 392,486 acres

Jul 1 2021 15:23:16 Central Daylight Time



1:1,540,778



GRP Response Strategy Survey



Response Data Sheet



Staging Area Only Data Sheet

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatasysteisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community. Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Upper Mississippi River Basin Association, Great Lakes Commission, USEPA

Summary

Name	Count	Area(acres)	Length(mi)
Local EOC	2	N/A	N/A
Public Health Departments	1	N/A	N/A
County Contacts	1	392,486.00	N/A
State Contacts	1	392,486.00	N/A
Major Cities and Towns	16	N/A	N/A
Tribal Lands	0	0	N/A
Tribal Lands (Cont'd)	0	0	N/A
Hospitals	3	N/A	N/A
Hospitals (Cont'd)	3	N/A	N/A
Urgent Care Facilities	2	N/A	N/A
Water Intakes	4	N/A	N/A
Water Intakes (Cont'd)	4	N/A	N/A
Wastewater Treatment Facilities	16	N/A	N/A
Special Designated Areas	3	331.56	N/A
Special Designated Areas (Cont'd)	3	331.56	N/A
Managed Lands	45	11,545.94	N/A
Managed Lands (Cont'd)	45	11,545.94	N/A
Other Environmentally Sensitive Areas	1	46.42	N/A
Other Environmentally Sensitive Areas (Cont'd)	1	46.42	N/A
Historic Places	19	N/A	N/A
Archaeological Sites	0	0	N/A
Threatened and Endangered Species	0	0	N/A
Aboveground Storage Tanks	3	N/A	N/A
Aboveground Storage Tanks (Cont'd)	3	N/A	N/A
Hazardous Materials Storage	78	N/A	N/A
Hazardous Materials Storage (Cont'd)	78	N/A	N/A
Facility Response Plan (FRP) Facilities	0	N/A	N/A
Risk Management Plan (RMP) Facilities	15	N/A	N/A
Railroads	43	N/A	195.13
Petroleum Pipelines	11	N/A	182.89
Oil and Natural Gas Pipelines	104	N/A	594.42
Marinas	8	N/A	N/A
Boat Access	12	N/A	N/A
Navigational Locks and Dams	0	N/A	N/A
Non-navigational Dams	9	N/A	N/A
Rivers and Streams	23	N/A	107.32
Lakes and Ponds	159	3,482.95	N/A

Response Strategies	1	N/A	N/A
Response Strategies (Cont'd)	1	N/A	N/A
Response Strategies (Cont'd)	1	N/A	N/A

Local EOC

#	Name	Address	City	Phone	Has Generator	Directions	Count
1	MICHIGAN CITY EMERGENCY OPERATIONS CENTER	100 EAST MICHIGAN BOULEVARD	MICHIGAN CITY	219-873-1499	Y	No Data	1
2	LAPORTE COUNTY EMERGENCY MANAGEMENT AGENCY EMERGENCY OPERATIONS CENTER	809 STATE STREET	LAPORTE	219-362-7210	Y	No Data	1

Public Health Departments

#	Name	Address	City	Phone	Website	Count
1	LAPORTE COUNTY HEALTH DEPARTMENT	809 STATE STREET	LAPORTE	219-326-6808	No Data	1

County Contacts

#	County	Point of Contact	Emergency Management Phone	LEPC Chair	LEPC Phone	Local Health Department Phone	Area(acres)
1	LaPorte, Indiana	Larry Butcher	219-326-6808 x 2264	John Dudek	219-575-0003	219-326-6808 x 200	392,486.00

State Contacts

#	State Emergency Management Phone	24-hr Emergency Management Phone	State Health Department Phone	Homeland Security	Area(acres)
1	317-232-3986	888-233-7745	317-233-1325	317-232-3986	392,486.00

Major Cities and Towns

#	Name	Population	Elevation (Feet)	Count
1	Michigan City	31479	627	1
2	Kingsford Heights	1435	725	1
3	La Crosse	551	676	1
4	Michiana Shores	313	610	1
5	Pottawattamie Park	235	620	1
6	Hamlet	800	705	1
7	Kingsbury	242	748	1
8	Trail Creek	2052	627	1
9	Wanatah	1048	732	1
10	Westville	5853	794	1
11	Rolling Prairie	582	827	1
12	Hudson Lake	1297	771	1
13	Hanna	463	705	1
14	Fish Lake	1016	702	1
15	La Porte	22053	810	1
16	Long Beach	1179	620	1

Hospitals

#	Name	City	Count
1	LA PORTE HOSPITAL	LA PORTE	1
2	FRANCISCAN ST ANTHONY HEALTH - MICHIGAN CITY	MICHIGAN CITY	1
3	FRANCISCAN HEALTH MICHIGAN CITY	MICHIGAN CITY	1

Hospitals (Cont'd)

#	Name	City	Trauma Level	Helipad	Number of Beds	Owner	Count
1	LA PORTE HOSPITAL	LA PORTE	NOT AVAILABLE	Y	227	NON-PROFIT	1
2	FRANCISCAN ST ANTHONY HEALTH - MICHIGAN CITY	MICHIGAN CITY	NOT AVAILABLE	Y	150	NON-PROFIT	1
3	FRANCISCAN HEALTH MICHIGAN CITY	MICHIGAN CITY	NOT AVAILABLE	Y	123	NOT AVAILABLE	1

Urgent Care Facilities

#	Name	Address	Address2	City	Phone	Directions	Count
1	URGENT CARE CENTER	1225 EAST COOLSPRING AVENUE	No Data	MICHIGAN CITY	219-873-2919	SOUTH SIDE OF E COOLSPRING AVE BETWEEN S WOODLAND AVE AND MALL CT	1
2	LA PORTE HORIZON MEDICAL CENTER WALK IN CLINIC	311 BOYD BOULEVARD	No Data	LA PORTE	219-325-5434	LOCATED ON THE SOUTHEAST SIDE OF THE INTERSECTION OF EAST LINCOLNWAY AND DARLINGTON STREET.	1

Water Intakes

#	Name	Waterbody	Count
1	Michigan City Department of Water Works	Lake Michigan	2
2	City of LaPorte Wastewater Department	Lily Lake	1
3	Michigan City Generating Station	Trail Creek	1

Water Intakes (Cont'd)

#	Name	Waterbody	Water Use	Intake Info	Location	Comments	Count
1	Michigan City Department of Water Works	Lake Michigan	Public Water Supply	1; 40 ft	East Intake (primary)	12000 GPM	1
2	City of LaPorte Wastewater Department	Lily Lake	Other	1; 10 ft deep	N/A	7000 GPM; provides flood control for the surrounding lakes	1
3	Michigan City Generating Station	Trail Creek	Power Generation	1	N of Wabash St & W 2nd St, north of the railroad tracks	186000 GPM	1
4	Michigan City Department of Water Works	Lake Michigan	Public Water Supply	1; 40 ft	West intake (secondary)	9000 GPM	1

Wastewater Treatment Facilities

#	Name	Address	City	Waterbody	Count
1	MICHIGAN CITY - J. B. GIFFORD WWTP	1100 E 8TH ST	MICHIGAN CITY	TRAIL CR TO LAKE MICHIGAN	2
2	WESTVILLE WWTP	904 W MAIN ST	WESTVILLE	CROOKED CR VIA CRUMPACKER ARM	2
3	KINGSFORD HEIGHTS WWTP	800 LEXINGTON RD	KINGSFORD HEIGHTS	KANKAKEE R VIA PORTER DITCH	2
4	LA PORTE WWTP	2101 BOYD BLVD	LA PORTE	KANKAKEE R VIA TRAVIS DITCH	2
5	LA CROSSE WASTEWATER TREATMENT PLANT	DOMINIC ST & OWEGO ST	LA CROSSE	KANKAKEE R VIA MARSH CREEK VIA TRIB	2
6	POTTAWATAMIE MUNICIPAL STP	103 WARREN DRIVE	POTTAWATAMIE	No Data	2
7	WANATAH MUNICIPAL WWTP	PO BOX 185	WANATAH	KANKAKEE RIVER	2
8	WANATAH WASTEWATER TRMT PLANT	12562 S 1050 W	WANATAH	KANKAKEE R VIA SLOCUM DITCH	2

Special Designated Areas

#	Name	City	Area(acres)
1	Kankakee River	N/A	209.08
2	Ambler Flatwoods	Michigan City	93.85
3	Barker Woods	Michigan City	28.64

Special Designated Areas (Cont'd)

#	Name	City	Category	Waterbody	Location	Comments	Area(acres)
1	Kankakee River	N/A	Outstanding Resource Waters	Kankakee River	Upstream boundary of Kingsbury Fish and Wildlife Area through LaSalle State Fish and Wildlife Area to Indiana/Illinois line	State Heritage Program site	209.08
2	Ambler Flatwoods	Michigan City	State Nature Preserve	Lubke Arm	East of Michigan City; W 900 N, between Meer Rd and N 500 W	Restricted	93.85
3	Barker Woods	Michigan City	Private Nature Preserve	None	Barker and Cleveland	Restricted- By Permission Only	28.64

Managed Lands

#	Name	City	Area(acres)
1	Kingsbury Fish & Wildlife Area	LaPorte	7,176.89
2	Kankakee Fish And Wildlife Area	North Judson	1,504.25
3	Indiana Dunes National Park	Porter	336.01
4	Kankakee River Swampland	Lomax	259.98
5	Fish Lake Wetland Conservation Area	Fish Lake	234.37
6	Dick Blythe Wetland Conservation Area	Hamlet	195.77
7	Rattlesnake Creek Forest Legacy Area	New Carlisle	162.68
8	Washington Park (Michigan City)	Michigan City	160.32
9	Fox Memorial Park	LaPorte	142.65
10	Red Mill County Park	LaPorte	128.79
11	Michigan City Municipal Golf Course South	Michigan City	125.00
12	Galena Marsh Wetland Conservation Area	Springville	123.90
13	Trail Creek Public Fishing Area	Trail Creek	104.76
14	Ambler Flatwoods Nature Preserve	Michigan City	93.85
15	Luhr Park	LaPorte	86.18
16	Kesling Park	LaPorte	78.03
17	Mill Creek Fen	Mill Creek	74.24
18	Michigan City Municipal Golf Course North	Michigan City	52.71
19	Izaak Walton League Property (Division Rd.)	Michigan City	51.45
20	Tall Timbers Park	Michigan City	45.41
21	Springfield Fen Nature Preserve	Springville	44.77
22	Sebert Forks Riparian Forest	Michigan City	41.69
23	Hildebrand Lake	LA Porte	41.16
24	Yellow Birch Wetland	New Carlisle	40.07
25	Mott's Woods	Michigan City	37.11
26	Trail Creek Fen	Michigan City	36.52
27	Thompson Bog Nature Preserve	New Carlisle	30.31
28	Prairie Meadow	Carmel	26.55
29	Wintergreen Woods	Michigan City	21.44
30	Stockwell Woods	Michigan City	20.18
31	Howell Railroad Prairie Nature Preserve	Wanatah	15.93
32	Gardena Park	Michigan City	13.11
33	Trail Creek Fen (DNR)	Trail Creek	10.08
34	Hog Lake Public Access Site	New Carlisle	6.05
35	Rumely	La Porte	5.36
36	Nelson Park	Trail Creek	4.45
37	Place Trail Marsh Fish and Wildlife Area	North Liberty	3.96
38	Michigan City Fish & Wildlife Headquarters	Michigan City	2.37
39	Jerrigan's Hill Park	Michigan City	2.00
40	Morgan Cemetery	Wanatah	1.94
41	Turkey Foot Wetlands Conservation Area	Hamlet	1.60

42	Robert Peo Public Access Site (Trail Creek)	Michigan City	1.28
43	Kankakee River Meander Land	English Lake	0.49
44	Trail Creek Public Access Site	Michigan City	0.17
45	Spicer Lake Nature Preserve	New Carlisle	0.10

Managed Lands (Cont'd)

#	Name	City	Category	Waterbody	Location	Comments	Area(acres)
1	Kingsbury Fish & Wildlife Area	LaPorte	Wildlife Management Area	Ridge Run; Kingsbury Creek	Off River Rd., two miles S of Hupp Rd. at Kingsbury FWA	Open With Restrictions	7,176.89
2	Kankakee Fish And Wildlife Area	North Judson	Fish Management Area	Kankakee River; Yellow River	Lies .5 mi. W of SR 39/SR 8 junction. N side of SR 8.	Open With Restrictions	1,504.25
3	Indiana Dunes National Park	Porter	National Park	Lake Michigan	N/A	Open	336.01
4	Kankakee River Swampland	Lomax	Wetland Management District	Kankakee River; Old Channel	East of US Hwy 421 and W 2300 S intersection	Open With Restrictions	259.98
5	Fish Lake Wetland Conservation Area	Fish Lake	Wetland Conservation Area	Upper Fish Lake	S 900 E and E 300 S	Open With Restrictions	234.37
6	Dick Blythe Wetland Conservation Area	Hamlet	Wetland Conservation Area	Kankakee River	Between E 700 N and E 1300 S	Open With Restrictions	195.77
7	Rattlesnake Creek Forest Legacy Area	New Carlisle	Forest	Rattlesnake Creek	Bounded by E 900 N, N 700, E, and E 1000 N	Closed	162.68
8	Washington Park (Michigan City)	Michigan City	Park	Lake Michigan; Trail Creek	N/A	Open	160.32
9	Fox Memorial Park	LaPorte	Regional Park	Clear Lake; Lower Lake	Clear Lake and Truesdell Ave	Open	142.65
10	Red Mill County Park	LaPorte	County Park	Round Lake	N/A	Open	128.79
11	Michigan City Municipal Golf Course South	Michigan City	Recreation Area	unnamed ponds	N/A	Open	125.00
12	Galena Marsh Wetland Convservation Area	Springville	Wetland Conservation Area	Galena River	N Wilhelm and W 650 N	Open With Restrictions	123.90
13	Trail Creek Public Fishing Area	Trail Creek	Recreation Area	Trail Creek	Chapala pkwy, off W US Hwy 35, E of Johnson Rd	Open	104.76
14	Ambler Flatwoods Nature Preserve	Michigan City	State Nature Preserve	Lubke Arm	East of Michigan City; W 900 N, between Meer Rd and N 500 W	Restricted	93.85
15	Luhr Park	LaPorte	Regional Park	Kingsbury Creek	N/A	Open	86.18
16	Kesling Park	LaPorte	Recreation Area	None	Private drive off of A St	Open	78.03
17	Mill Creek Fen	Mill Creek	Miscellaneous Land	None	Between N 875 E and S 750 E	Restricted- By Permission Only	74.24
18	Michigan City Municipal Golf Course North	Michigan City	Recreation Area	unnamed ponds	N/A	Open	52.71
19	Izaak Walton League Property (Division Rd.)	Michigan City	Nature Preserve	Walton Lake	On Walton Lake; Division and Shebel Rd.	Restricted	51.45
20	Tall Timbers Park	Michigan City	Park	None	N/A	Open	45.41

21	Springfield Fen Nature Preserve	Springville	State Nature Preserve	None	Wilhelm and W US Hwy 20	Open	44.77
22	Sebert Forks Riparian Forest	Michigan City	State Nature Preserve	None	East of Michigan City; between N 400 W and NW Suburban Dr	Restricted	41.69
23	Hildebrand Lake	LA Porte	Nature Preserve	Hildebrand Lake	W 125 S and S Wozniak Rd	Restricted- By Permission Only	41.16
24	Yellow Birch Wetland	New Carlisle	Wetland Management District	None	Between N 750 E and N 700 E	Restricted	40.07
25	Mott's Woods	Michigan City	Forest	None	N/A	Closed	37.11
26	Trail Creek Fen	Michigan City	Miscellaneous Land	Trail Creek, W Branch	Johnson Rd and Pahs Rd	Restricted	36.52
27	Thompson Bog Nature Preserve	New Carlisle	State Nature Preserve	None	N 700 E and E 900 N	Restricted	30.31
28	Prairie Meadow	Carmel	Regional Park	None	N/A	Open	26.55
29	Wintergreen Woods	Michigan City	Nature Preserve	None	W 925 N, between N 375 W and N 300 W	Restricted	21.44
30	Stockwell Woods	Michigan City	Private Nature Preserve	None	Near Lake Michigan; Hidden Hill Trl is inside subdivision off Lake Shore Dr and Indianapolis Ave	Restricted- By Permission Only	20.18
31	Howell Railroad Prairie Nature Preserve	Wanatah	State Nature Preserve	None	Railroad tracks between County Hwy 1000 and W 1100 S	Restricted	15.93
32	Gardena Park	Michigan City	Regional Park	None	N/A	Open	13.11
33	Trail Creek Fen (DNR)	Trail Creek	Wetland Management District	Trail Creek	Black and US Hwy 20	Open With Restrictions	10.08
34	Hog Lake Public Access Site	New Carlisle	Recreation Area	Hog Lake	2.5 miles N of Rolling Prairie on 700N	Open	6.05
35	Rumely	La Porte	Park	None	Larkin St, between Williams St and Warren St	Open	5.36
36	Nelson Park	Trail Creek	Regional Park	None	Off Whipporwill Ave between Edgemoor and Martin	Open	4.45
37	Place Trail Marsh Fish and Wildlife Area	North Liberty	Conservation Area	Pine Creek	Off Quinn Rd.	Open With Restrictions	3.96
38	Michigan City Fish & Wildlife Headquarters	Michigan City	Wildlife Management Area	Trail Creek	100 W Water St., Michigan City, IN; W of DNR building	Open With Restrictions	2.37
39	Jerrigan's Hill Park	Michigan City	Regional Park	None	N/A	Open	2.00
40	Morgan Cemetery	Wanatah	State Nature Preserve	None	SE of Wanatah	Restricted	1.94

41	Turkey Foot Wetlands Conservation Area	Hamlet	Wetland Management District	None	US Hwy 30 and CR 50. South side of Parcel: W 600 N and N Range Rd.	Open; Managed by Kankakee Fish & Wildlife Area	1.60
42	Robert Peo Public Access Site (Trail Creek)	Michigan City	Recreation Area	Trail Creek	Off Liberty Trail, N of 8th st	Open	1.28
43	Kankakee River Meander Land	English Lake	Miscellaneous Land	Kankakee River	S 650 W, between W 250 S and W Bigler Rd	Restricted	0.49
44	Trail Creek Public Access Site	Michigan City	Recreation Area	Trail Creek	End of the road, at Trail Creek	Open	0.17
45	Spicer Lake Nature Preserve	New Carlisle	Nature Preserve	Spicer Lake	N of the Toll Rd	Open	0.10

Other Environmentally Sensitive Areas

#	Name	City	Area(acres)
1	Fish Creek Fen	Mill Creek	46.42

Other Environmentally Sensitive Areas (Cont'd)

#	Name	City	Category	Waterbody	Location	Comments	Area(acres)
1	Fish Creek Fen	Mill Creek	Important Aquatic Habitat	Fish Creek	E 200 S and S CR 875 E	Fen with high biodiversity	46.42

Historic Places

#	Name	Address	City	Emergency Phone	Contact Phone	Comments	Count
1	Barker, John H., Mansion	631 Washington St.	Michigan City	219-326-7700	317-232-1646	N/A	1
2	Pinehurst Hall	3042 N. U.S. 35	LaPorte	219-326-7700	317-232-1646	N/A	1
3	Orr, William, House	4076 W. Small Rd.	LaPorte	219-326-7700	317-232-1646	N/A	1
4	Morrison, Francis H., House	1217 Michigan Ave.	LaPorte	219-326-7700	317-232-1646	N/A	1
5	Smith, Everel S., House	56 W. Jefferson St.	Westville	219-326-7700	317-232-1646	N/A	1
6	Michigan City Lighthouse	Washington Park	Michigan City	219-326-7700	317-232-1646	N/A	1
7	Ridgeway, Marion, Polygonal Barn	IN 35 N of jct. with Crescent Dr.	LaPorte	219-326-7700	317-232-1646	N/A	1
8	Michigan City Post Office	126 E. 5th St.	Michigan City	219-326-7700	317-232-1646	N/A	1
9	Garrettson--Baine--Bartholomew House	2921 Franklin St.	Michigan City	219-326-7700	317-232-1646	N/A	1
10	First Congregational Church of Michigan City	531 Washington St.	Michigan City	219-326-7700	317-232-1646	N/A	1
11	Barker House	444 Barker St.	Michigan City	219-326-7700	317-232-1646	N/A	1
12	Pinhook Methodist Church and Cemetery	8001 IN 2	LaPorte	219-326-7700	317-232-1646	N/A	1
13	Garwood, John and Cynthia, Farmstead	5600 Small Rd.	La Porte	219-326-7700	317-232-1646	N/A	1
14	Burnham, John and Isabel, House	2602 Lake Shore Dr.	Long Beach	219-326-7700	317-232-1646	N/A	1
15	Hoover--Timme House	2304 Hazeltine Dr.	Long Beach	219-326-7700	317-232-1646	N/A	1
16	Jackson, Lowell E. and Paula G., House	2935 Ridge Rd.	Long Beach	219-326-7700	317-232-1646	N/A	1
17	Jaworowski, George and Adele, House	3501 Lake Shore Dr.	Duneland Beach	219-326-7700	317-232-1646	N/A	1
18	Forrester, James and Lavinia, Farmstead	969 Forrester Rd.	LaPorte	219-326-7700	317-232-1646	N/A	1
19	Scott--Rumley House	211 Rose St.	La Porte	219-326-7700	317-232-1646	N/A	1

Aboveground Storage Tanks

#	Name	City	Count
1	Seneca Petroleum Company	Michigan City	1
2	Northern Indiana Public Service Company Michigan City Generating Station	Michigan City	1
3	Rieth Riley Construction Company Incorporated 362	La Porte	1

Aboveground Storage Tanks (Cont'd)

#	Name	City	Products	Oil Volume	Oil Tanks	Comments	Count
1	Seneca Petroleum Company	Michigan City	Fuel Oil # 2	539811	4	N/A	1
2	Northern Indiana Public Service Company Michigan City Generating Station	Michigan City	Kerosene, Diesel Fuel	417783	3	N/A	1
3	Rieth Riley Construction Company Incorporated 362	La Porte	Petroleum	2724795	2	N/A	1

Hazardous Materials Storage

#	Name	City	Count
1	Accurate Castings Incorporated	La Porte	2
2	New York Blower Co.	La Porte	1
3	Criterion Catalyst & Technologies, Lp	Michigan City	1
4	Sullair Corp. - Michigan Blvd.	Michigan City	1
5	AT&T - La Porte	La Porte	1
6	Pactiv Corp. - Wanatah	Wanatah	1
7	Prairie Packaging - Plant 3	Kingsbury	1
8	Federal-Mogul - Michigan City	Michigan City	1
9	Chicago Faucet Co. - Michigan City	Michigan City	1
10	Harrison Engine Service, Inc.	La Porte	1
11	Verizon Wireless - Freyer	Michigan City	1
12	Co-Alliance - Union Mills Agronomy	Union Mills	1
13	Northern Indiana Public Service Co. Michigan City Generating Station	Michigan City	1
14	Roll Coater - La Porte	La Porte	1
15	Frontier Communications - La Porte	La Porte	1
16	Hearthside Food Solutions - Michigan City	Michigan City	1
17	Michigan City Waste Water Treatment Plant	Michigan City	1
18	Lorens Pool & Supply - La Porte	La Porte	1
19	New Durham Estates	Westville	1
20	United States Aluminate Co., Inc.	Michigan City	1
21	Verizon Wireless - La Porte	La Porte	1
22	Westville Farm Supply	Westville	1
23	Kova Ag Products - La Crosse	La Crosse	1
24	Stillwell Farm Fertilizer, Inc.	La Porte	1
25	Kingsbury Utility - B Wellhouse	Kingsbury	1
26	American Renolit Corp.	La Porte	1
27	Co-Alliance - Rolling Prairie Agronomy	Rolling Prairie	1
28	AT&T - Michigan City	Michigan City	1
29	AT&T - Wanatah	Wanatah	1
30	La Crosse Water Department	La Crosse	1
31	Kingsbury Utility - 5Th Rd.	Kingsbury	1
32	Verizon Wireless - Michigan City	La Porte	1
33	Online Packaging - Michigan City	Michigan City	1
34	Silgan Containers - La Porte	La Porte	1
35	Verizon Wireless - I 80 & Rt 20	Rolling Prairie	1
36	HRR Enterprises - La Porte	La Porte	1
37	Casting Service	La Porte	1
38	Aero Metals, Inc.	La Porte	1
39	Alexander Chemical Corp. - Kingsbury	Kingsbury	1
40	AT&T Indiana Telephone - Michigan City	Michigan City	1
41	Verizon Wireless - Rt 4	Mill Creek	1

42	Crown Castle - 874616	La Porte	1
43	Sullair Corp. - 2Nd St.	Michigan City	1
44	Kingsbury Utility - A2 Well	Kingsbury	1
45	La Porte Water Department	La Porte	1
46	Howmet Corporation La Porte Casting Division	La Porte	1
47	Triplex Plating Incorporated	Michigan City	1
48	James B Gifford Waste Water Treatment Plant	Michigan City	1
49	Seneca Petroleum Company	Michigan City	1
50	Fas Pak Incorporated	Michigan City	1
51	National Products Plant 1	La Porte	1
52	Kingsford Heights Municipal Waste Water Treatment Plant	La Porte	1
53	Tegant Diversified Brands Incorporated	Michigan City	1
54	Lowes Home Centers Incorporated 195	Michigan City	1
55	Finattec, LLC	La Porte	1
56	Worldcom Wbofin	La Porte	1
57	Westville Water Department	Westville	1
58	Fas Pak Incorporated	La Porte	1
59	Waste Management of La Porte Transfer Station Waste Management of In, LLC	La Porte	1
60	Spectrum Recycling Services Incorporated	La Porte	1
61	La Porte Water Department Plant 2	La Porte	1
62	At & T Interstate Division Inc950	La Porte	1
63	Westville Correctional Center	Westville	1
64	Merit Excavating	Wanatah	1
65	Alpha Baking Company	La Porte	1
66	Kingsbury Elevator Incorporated	La Porte	1
67	Ampcor li Incorporated	La Porte	1
68	Howmet Logistic Services Corporation	La Porte	1
69	Rieth Riley Construction Company Incorporated 362	La Porte	1
70	Gas City	Michigan City	1
71	Sba Towers Incorporated	La Porte	1
72	Fas Pak Blending & Packaging Solutions, LLC	La Porte	1
73	Fiberbond Corporation	Michigan City	1
74	New Prairie High School	New Carlisle	1
75	Verizon Wireless	Michigan City	1
76	Verizon Communications Incorporated	La Porte	1
77	Verizon Laporte South In4302001	La Porte	1

Hazardous Materials Storage (Cont'd)

#	Name	City	Contact Phone	Materials/CAS	Count
1	New York Blower Co.	La Porte	219-325-6736	7723140	1
2	Criterion Catalyst & Technologies, Lp	Michigan City	219-874-6211	7664939, 7697372, 7647010, 1336216, 7664417	1
3	Sullair Corp. - Michigan Blvd.	Michigan City	219-879-5451	7664939	1
4	AT&T - La Porte	La Porte	574-237-8274	None, 7664939	1
5	Pactiv Corp. - Wanatah	Wanatah	847-482-2000	7664939	1
6	Prairie Packaging - Plant 3	Kingsbury	773-254-5222	7664393	1
7	Federal-Mogul - Michigan City	Michigan City	219-872-5150	7664939, 7782505, 7697372	1
8	Chicago Faucet Co. - Michigan City	Michigan City	219-879-4466	7664939	1
9	Harrison Engine Service, Inc.	La Porte	219-369-9616	7664939	1
10	Verizon Wireless - Freyer	Michigan City	847-619-5433	7664939	1
11	Co-Alliance - Union Mills Agronomy	Union Mills	765-744-5937	1563662, 7664417, 5664417, 60515	1
12	Northern Indiana Public Service Co. Michigan City Generating Station	Michigan City	219-787-7298	7664939, 302012	1
13	Roll Coater - La Porte	La Porte	317-462-7761	7664393, 7664939, 7697372, 7647010, 999005	1
14	Frontier Communications - La Porte	La Porte	203-614-5600	7664939	1
15	Hearthside Food Solutions - Michigan City	Michigan City	219-873-1880 491	7664417, 7664939	1
16	Michigan City Waste Water Treatment Plant	Michigan City	219-898-3207	7446095, 7782505	1
17	Lorens Pool & Supply - La Porte	La Porte	219-362-1334	7647010	1
18	New Durham Estates	Westville	219-785-2576	7782505	1
19	United States Aluminate Co., Inc.	Michigan City	410-918-2230 123	7664939	1
20	Verizon Wireless - La Porte	La Porte	847-619-5433	7664939	1
21	Westville Farm Supply	Westville	219-608-4049	1910425	1
22	Kova Ag Products - La Crosse	La Crosse	219-754-2262	7664417, 5664417, 1910425	1
23	Stillwell Farm Fertilizer, Inc.	La Porte	219-369-9121	1910425	1
24	Kingsbury Utility - B Wellhouse	Kingsbury	219-393-3576	7782505	1
25	American Renolit Corp.	La Porte	219-324-6886	108952	1
26	Co-Alliance - Rolling Prairie Agronomy	Rolling Prairie	765-945-7236	13071799, 60515, 7664417, 5664417	1
27	AT&T - Michigan City	Michigan City	770-922-6035	7664939	1
28	AT&T - Wanatah	Wanatah	770-922-6035	7664939	1

29	La Crosse Water Department	La Crosse	219-405-6144	7782505	1
30	Kingsbury Utility - 5Th Rd.	Kingsbury	219-363-7609	7782505	1
31	Verizon Wireless - Michigan City	La Porte	847-619-5433	7664939	1
32	Online Packaging - Michigan City	Michigan City	219-872-0925	7782505	1
33	Silgan Containers - La Porte	La Porte	818-710-3700	7664939, 7697372	1
34	Verizon Wireless - I 80 & Rt 20	Rolling Prairie	847-619-5433	7664939	1
35	HRR Enterprises - La Porte	La Porte	219-325-4560	999002, 7664417, 7664939, 999003	1
36	Casting Service	La Porte	219-362-1000	108952, 7446095	1
37	Aero Metals, Inc.	La Porte	336-631-7642	7664939	1
38	Alexander Chemical Corp. - Kingsbury	Kingsbury	630-955-6050	999014, 7664393, 7664939, 7697372, 7647010, 7782505, 999013, None, 7664417, 7446095, 7722841	1
39	AT&T Indiana Telephone - Michigan City	Michigan City	574-237-8274	7664939	1
40	Verizon Wireless - Rt 4	Mill Creek	847-619-5433	7664939	1
41	Crown Castle - 874616	La Porte	800-788-7011	7664939	1
42	Sullair Corp. - 2Nd St.	Michigan City	219-879-5451	7664939	1
43	Kingsbury Utility - A2 Well	Kingsbury	219-393-3576	7782505	1
44	La Porte Water Department	La Porte	219-326-9540	7782505	1
45	Howmet Corporation La Porte Casting Division	La Porte	219-324-0769	7664939, 7647010	1
46	Triplex Plating Incorporated	Michigan City	219-874-3209	None, 7647010, 7697372	1
47	James B Gifford Waste Water Treatment Plant	Michigan City	(219) 874-7799	7446095, 7782505	1
48	Seneca Petroleum Company	Michigan City	219-872-7050	74986	1
49	Accurate Castings Incorporated	La Porte	219-393-3122	7664939	1
50	Fas Pak Incorporated	Michigan City	219-874-7990	999062, 999011, 75218	1
51	National Products Plant 1	La Porte	N/A	7664393, 7664939, 7722841, 7697372	1
52	Kingsford Heights Municipal Waste Water Treatment Plant	La Porte	719-393-3309	7446095, 7782505	1
53	Tegant Diversified Brands Incorporated	Michigan City	518-392-1700	999104	1
54	Lowes Home Centers Incorporated 195	Michigan City	219-872-2900	7664939	1
55	Finatec, LLC	La Porte	574-237-8274	7647010	1
56	Accurate Castings Incorporated	La Porte	219-362-8531	7664939	1
57	Worldcom Wbofin	La Porte	574-237-8274	7664939	1

58	Westville Water Department	Westville	219-785-1880	7782505	1
59	Fas Pak Incorporated	La Porte	219-325-3455	7647010	1
60	Waste Management of La Porte Transfer Station Waste Management of In, LLC	La Porte	219-393-3576	7664939	1
61	Spectrum Recycling Services Incorporated	La Porte	219-324-8165	7664939	1
62	La Porte Water Department Plant 2	La Porte	219-326-9540	7782505	1
63	At & T Interstate Division Inc950	La Porte	574-237-8274	7664939	1
64	Westville Correctional Center	Westville	219-785-2511	8006619, 999064, 7782505, 74986	1
65	Merit Excavating	Wanatah	N/A	999010, 999011	1
66	Alpha Baking Company	La Porte	219-324-7440	7664417	1
67	Kingsbury Elevator Incorporated	La Porte	219-393-5581	999003, 16752775, 20859738	1
68	Ampcor li Incorporated	La Porte	219-362-3126	143339, 7664939	1
69	Howmet Logistic Services Corporation	La Porte	219-325-7209	7664939	1
70	Rieth Riley Construction Company Incorporated 362	La Porte	219-362-6178	8006619	1
71	Gas City	Michigan City	219-879-1385	8008206	1
72	Sba Towers Incorporated	La Porte	419-659-6030	7664939	1
73	Fas Pak Blending & Packaging Solutions, LLC	La Porte	219-393-3576	7647010	1
74	Fiberbond Corporation	Michigan City	219-879-4541	7664417	1
75	New Prairie High School	New Carlisle	574-654-7273	7647010	1
76	Verizon Wireless	Michigan City	219-874-7999	7664939	1
77	Verizon Communications Incorporated	La Porte	219-362-7489	7664939	1
78	Verizon Laporte South In4302001	La Porte	219-362-7489	7664939	1

Risk Management Plan (RMP) Facilities

#	Name	Address	City	Facility Registry Service Report	Count
1	CROP FERTILITY SPECIALISTS @ LACROSSE	6666 W CR 2100 S	LA CROSSE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000562711	1
2	UNION MILLS CO-OP	3551 W 800 S	UNION MILLS	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000554472	1
3	ONLINE PACKAGING, INCORPORATED - MICHIGAN CITY	124 TRIQUAD DRIVE	MICHIGAN CITY	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110012534720	1
4	MIDLAND GROCERY COMPANY	6500 SOUTH US HIGHWAY 421	WESTVILLE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110002444445	1
5	CITY OF LA PORTE - WATER WORKS - LAKE STREET PLANT	1119 LAKE ST	LA PORTE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000576537	1
6	TUHOLSKI FARMS INC.	5702 EAST 100 SOUTH	MILL CREEK	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110023009723	1
7	BARR FARMS, US 35 FACILITY	2077 S. US HWY 35	LAPORTE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110064148355	1
8	PRAIRIE PACKAGING LLC	7277 SOUTH 2ND ROAD PLANT # 3	KINGSBURY	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110054183904	1
9	CITY OF LA PORTE - WATER WORKS - EAST PLANT	2011 E LINCOLNWAY	LA PORTE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000554686	1
10	CITY OF LA PORTE - WASTEWATER TREATMENT PLANT	2101 BOYD BOULEVARD	LA PORTE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000554276	1
11	J.B. GIFFORD WWTP	1100 E. 8TH STREET	MICHIGAN CITY	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110044278518	1
12	ROLLING PRAIRIE AGRONOMY	310 S PRAIRIE ST	ROLLING PRAIRIE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000554695	1

13	FEDERAL MOGUL CORPORATION	402 ROYAL RD.	MICHIGAN CITY	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000398196	1
14	ALEXANDER CHEMICAL CORPORATION	7593 S FIRST RD	LA PORTE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000745855	1
15	MICHIGAN CITY DEPARTMENT OF WATER WORKS-TREATMENT PLANT	111 LAKESHORE DRIVE	MICHIGAN	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110012139961	1

Railroads

#	Railroad	Emergency Phone	Contact Phone	Class	Length(mi)
1	Chicago, South Shore, and South Bend Railroad	219-873-6232	219-874-9000	No Data	47.09
2	Norfolk Southern	800-453-2530	855-667-3655	1	46.28
3	CSX Transportation	800-232-0144	904-359-3100	1	32.23
4	Canadian National	800-465-9239 (Police)	888-888-5909	1	26.08
5	Chesapeake & Indiana Railroad	No Data	765-825-0316	No Data	22.39
6	Chicago, Ft. Wayne & Eastern Railroad	800-979-4958	260-267-9346	No Data	12.11
7	Amtrak	800-331-0008 (Police)	202-906-3000	1	8.95

Petroleum Pipelines

#	Name	System	Emergency Phone	Contact Phone	Length(mi)
1	Enbridge Energy, LP	LAKEHEAD	800-858-5253	715-395-3619	46.98
2	Buckeye Partners, LP	EO185XX	800-331-4115	610-904-4113	22.61
3	Wolverine Pipe Line Co.	KENNEDY AVE. TO VICKSBURG	888-337-5004	269-323-2491	22.21
4	Wolverine Pipe Line Co.	TERRE HAUTE JUNCTION - WALTON TRAPS	888-337-5004	269-323-2491	22.19
5	Amoco Oil Co.	P1000 WHITING-RIVER ROUGE	800-548-6482	880-548-6482; 630-836-5000	21.89
6	Buckeye Partners, LP	WH150MK	800-331-4115	610-904-4113	19.09
7	Marathon Pipe Line, LLC	GRIFFITH - NORTH MUSKEGON 10IN PRODUCTS	800-537-6644	219-934-8530	18.04
8	Buckeye Partners, LP	MK150SB	800-331-4115	610-904-4113	4.76
9	Buckeye Partners, LP	KZ001LK	800-331-4115	610-904-4113	3.14
10	Buckeye Partners, LP	KZNONLK	800-331-4115	610-904-4113	1.98

Oil and Natural Gas Pipelines

#	Name	System	Description	Length(mi)
1	Northern Indiana Public Service Co.	<i>No Data</i>	Natural Gas Pipeline	140.34
2	CITGO Petroleum Corp.	<i>No Data</i>	Refined Petroleum Pipeline	45.07
3	Wolverine Pipe Line Co.	Kennedy Ave. To Vicksburg	Refined Petroleum Pipeline	44.88
4	ANR Pipeline Co.	ANR	Natural Gas Pipeline	44.14
5	Northern Indiana Public Service Co.	N600	Natural Gas Pipeline	29.94
6	Northern Indiana Public Service Co.	N275	Natural Gas Pipeline	28.68
7	Spectra Energy Transmission, LLC	<i>No Data</i>	Natural Gas Pipeline	24.62
8	Buckeye Partners, LP	Norco	Refined Petroleum Pipeline	23.83
9	Enbridge Energy Co., LP	Chicago Region	Crude Petroleum Pipeline	23.74
10	Lakehead Pipe Line Co. Inc.	<i>No Data</i>	Crude Petroleum Pipeline	23.74
11	Vector Pipeline, LP	Vector Pipeline	Natural Gas Pipeline	23.16
12	Buckeye Partners, LP	Wood River	Refined Petroleum Pipeline	22.53
13	Amoco Gas Co.	Whiting_River Rouge	Refined Petroleum Pipeline	22.21
14	Crossroads Pipeline Co.	Cr	Natural Gas Pipeline	21.27
15	Tecumseh Pipe Line Co.	<i>No Data</i>	Crude Petroleum Pipeline	21.27
16	Marathon Pipe Line, LLC	Griffith-North Muskegon 10in Products	Refined Petroleum Pipeline	18.21
17	Dome Pipeline Corp.	<i>No Data</i>	Refined Petroleum Pipeline	12.28
18	Kinder Morgan Interstate Gas Transmission, LLC	Cochin	Refined Petroleum Pipeline	12.28
19	Buckeye Partners, LP	Buckeye	Refined Petroleum Pipeline	3.14
20	Buckeye Pipe Line Co., LP	<i>No Data</i>	Refined Petroleum Pipeline	3.13
21	Northern Indiana Public Service Co.	N275, N600	Natural Gas Pipeline	2.19
22	Northern Indiana Public Service Co.	N600, N275	Natural Gas Pipeline	2.18
23	ANR Pipeline Co.	<i>No Data</i>	Natural Gas Pipeline	1.59

Marinas

#	Name	Address	City	Emergency Phone	Contact Phone	Waterbody	Count
1	Sprague Point Marina	700 E Michigan Blvd	Michigan City	219-326-7700	(219) 879-4300	Lake Michigan	1
2	Fay's Marina	909 Pine Lake Ave	La Porte	219-326-7700	(219) 362-1491	Pine Lake	1
3	Huber's Marina	530 Waverly Rd.	La Porte	219-754-2413	219-324-9842	Pine Lake	1
4	La Porte Yacht, Inc.	812 Pine Lake Ave.	La Porte	219-754-2413	(219) 326-5253	Pine Lake	1
5	B & E Marine, Inc.	31 Lake Shore Dr.	Michigan City	219-326-7700	(219) 879-8301	Trail Creek; Lake Michigan	1
6	Michigan City Yacht Club	12 1/2 On the Lake	Michigan City	219-754-2413	(219) 879-3363	Lake Michigan via Trail Creek	1
7	Trail Creek Marina	700 E Michigan Blvd.	Michigan City	219-326-7700	(219) 879-4300	Trail Creek; Lake Michigan	1
8	Washington Park Marina	200 Heisman Harbor Rd.	Michigan City	219-326-7700	(219) 879-4300	Trail Creek; Lake Michigan	1

Boat Access

#	Name	Operator	Waterbody	Latitude	Longitude	Count
1	Clear Lake	Pigeon River Fish & Wildlife Area	Clear Lake	41.6231	-86.7243	1
2	Upper/Lower Fish Lake	Kingsbury Fish and Wildlife Area	Upper Fish Lake	41.5668	-86.5479	1
3	Hog Lake	IN DNR	Hog Lake	41.708	-86.6293	1
4	Kankakee River	Kankee Fish & Wildlife Area	Kankakee River	41.3175	-86.7459	1
5	Kingsbury F&W Area	Kingsbury Fish and Wildlife Area	Kankakee River	41.4902	-86.5816	1
6	Stone Lake	LaPorte Parks and Recreation	Stone Lake	41.6103	-86.7478	1
7	Tamarack Lake	Kingsbury Fish and Wildlife Area	Tamarack Lake	41.5201	-86.5709	1
8	Teledyne Park	City of LaPorte	Pine Lake	41.6295	-86.7392	1
9	Washington Park	City of Michigan City Parks and Recreation	Lake Michigan	41.7274	-86.9057	1
10	Trail Creek Marina	City of Michigan City Parks and Recreation	Lake Michigan	41.7184	-86.8942	1
11	Winding Creek Cove	City of Michigan City Parks and Recreation	Trail Creek	41.71960502	-86.88009166	1
12	Clear Lake	IN DNR	Clear Lake	41.62313128	-86.72431269	1

Non-navigational Dams

#	Name	Latitude	Longitude	Count
1	Camp Red Mill Lake Dam	41.6016000006	-86.8797000004	1
2	Jack Ragle (in-channel) Dam	41.7004000004	-86.7248	1
3	Wallace Lake Dam	41.7414999995	-86.6501000002	1
4	Lakeside Estates Dam	41.6647999994	-86.8305000002	1
5	La Lumiere Dam	41.7053999994	-86.7112999996	1
6	Michigan City Golf Course Dam	41.7086999994	-86.8394999998	1
7	Seybert Lake Dam	41.6941	-86.7856999999	1
8	Union Mills Dam	41.4924999997	-86.7788000004	1
9	Walton Lake Dam	41.6128000002	-86.8687000005	1

Rivers and Streams

#	Name	Feature	Length(mi)
1	Kankakee River	Stream	32.96
2	Little Kankakee River	Stream	16.40
3	<i>No Data</i>	Stream	14.61
4	East Branch Trail Creek	Stream	8.18
5	Mill Creek	Stream	6.84
6	<i>No Data</i>	Canal	6.78
7	Galena River	Stream	4.32
8	Little Calumet River	Stream	3.98
9	Mill Creek	Canal	3.75
10	Spring Creek	Stream	3.51
11	South Branch Galien River	Stream	2.98
12	Trail Creek	Stream	2.88
13	Kankakee River	Canal	0.08
14	Heinold Ditch	Stream Intermittent	0.05
15	<i>No Data</i>	Stream Intermittent	< 0.01

Lakes and Ponds

#	Name	Description	Area(acres)
1	No Data	Lake/Pond: Hydrographic Category = Perennial	1,915.34
2	Pine Lake	Lake/Pond: Hydrographic Category = Perennial	543.77
3	Clear Lake	Lake/Pond: Hydrographic Category = Perennial	148.57
4	Upper Fish Lake	Lake/Pond: Hydrographic Category = Perennial	133.16
5	Lower Fish Lake	Lake/Pond: Hydrographic Category = Perennial	125.01
6	Fishtrap Lake	Lake/Pond: Hydrographic Category = Perennial	100.54
7	Horseshoe Lake	Lake/Pond: Hydrographic Category = Perennial	67.32
8	Crane Lake	Lake/Pond: Hydrographic Category = Perennial	55.41
9	Hunt Lake	Lake/Pond: Hydrographic Category = Perennial	45.89
10	Finger Lake	Lake/Pond: Hydrographic Category = Perennial	37.43
11	Lower Lake	Lake/Pond: Hydrographic Category = Perennial	36.26
12	Swede Lake	Lake/Pond: Hydrographic Category = Perennial	30.50
13	Orr Lake	Lake/Pond: Hydrographic Category = Perennial	29.25
14	Lily Lake	Lake/Pond: Hydrographic Category = Perennial	27.86
15	Clare Lake	Lake/Pond: Hydrographic Category = Perennial	27.54
16	Hog Lake	Lake/Pond: Hydrographic Category = Perennial	26.57
17	Round Lake	Lake/Pond: Hydrographic Category = Perennial	21.35
18	Walton Lake	Lake/Pond: Hydrographic Category = Perennial	18.95
19	Union Mills Lake	Lake/Pond: Hydrographic Category = Perennial	17.25
20	No Data	Lake/Pond: Hydrographic Category = Intermittent	10.64
21	Ohms Lake	Lake/Pond: Hydrographic Category = Perennial	10.06
22	Tee Lake	Lake/Pond: Hydrographic Category = Perennial	10.01
23	Dingler Lake	Lake/Pond: Hydrographic Category = Perennial	9.35
24	Hildebrand Lake	Lake/Pond: Hydrographic Category = Perennial	8.16
25	Lee, Lake	Lake/Pond: Hydrographic Category = Perennial	7.19
26	Saugany Lake	Lake/Pond: Hydrographic Category = Perennial	5.69
27	Pottawattamie Lake	Lake/Pond: Hydrographic Category = Perennial	5.65

28	Ryden Lakes	Lake/Pond: Hydrographic Category = Perennial	4.19
29	Browdy Lake	Lake/Pond: Hydrographic Category = Perennial	2.61
30	Davidson Lake	Lake/Pond: Hydrographic Category = Perennial	1.44

Response Strategies

#	Name	Count
1	Trail Creek	1

Response Strategies (Cont'd)

#	Name	Count
1	Trail Creek	1

Response Strategies (Cont'd)

#	Name	Strategy	Boom Length (Feet)	Shoreline Type	Location	Comments	Count
1	Trail Creek	Containment & Collection	400	Urban, riprap, or other developed	Trail Creek near Blue Chip Casino and Sprague Pointe Marina. Creek access along E St. or at multiple nearby marina ramps. Land access from mouth upstream to water treatment facility.	Prevent spread of spilled product into protected areas and protected species habitat. Utilize slow current areas as collection pockets. Ample anchor points and shore access.	1

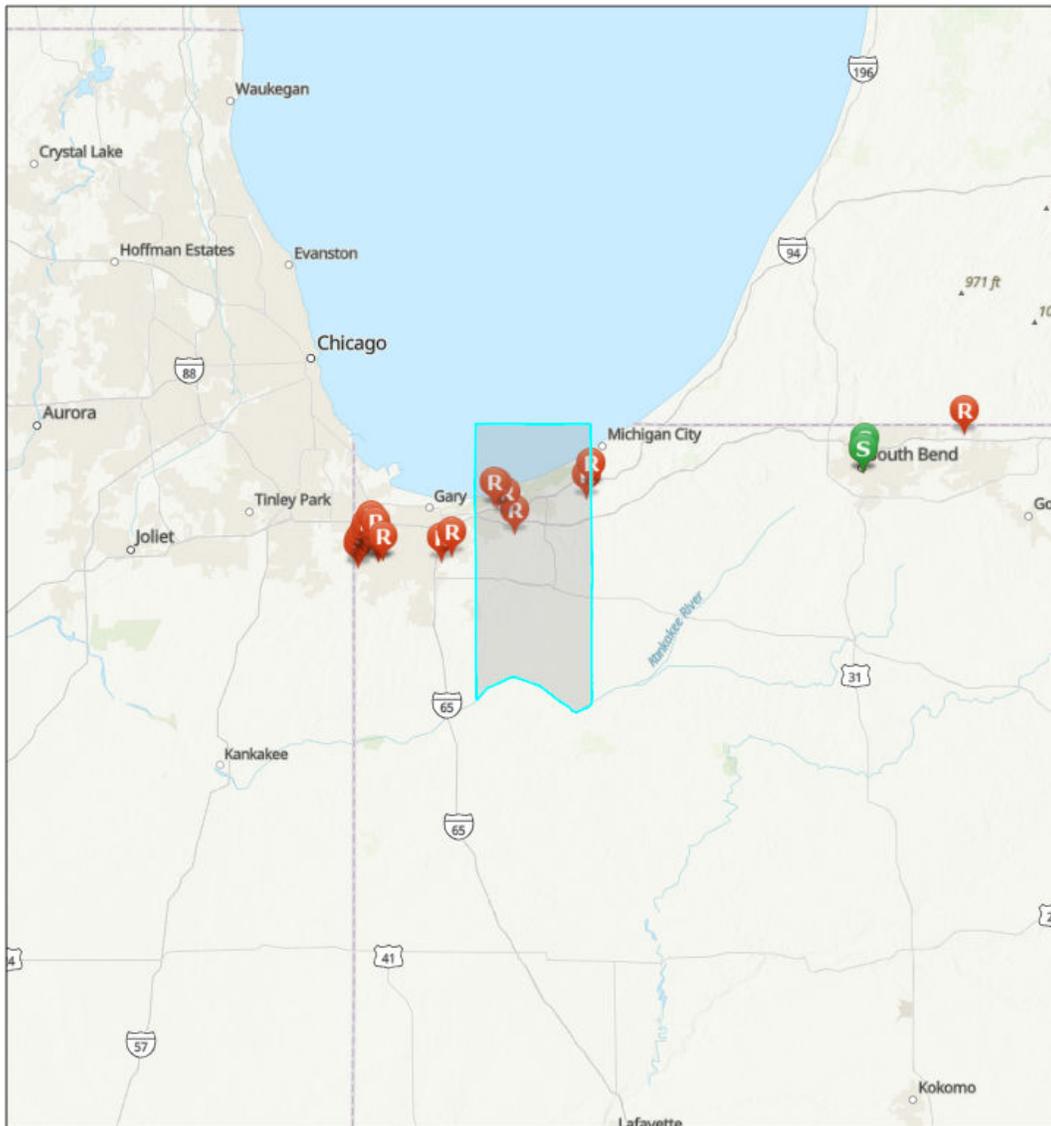


Porter County Indiana Fact Sheet Report

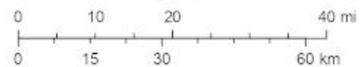
Area of Interest (AOI) Information

Area : 333,951.46 acres

Jul 1 2021 15:12:57 Central Daylight Time



1:1,540,778



GRP Response Strategy Survey



Response Data Sheet



Staging Area Only Data Sheet

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatasysteisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Upper Mississippi River Basin Association, Great Lakes Commission, USEPA

Summary

Name	Count	Area(acres)	Length(mi)
Local EOC	1	N/A	N/A
Public Health Departments	1	N/A	N/A
County Contacts	1	333,951.46	N/A
State Contacts	1	333,951.46	N/A
Major Cities and Towns	15	N/A	N/A
Tribal Lands	0	0	N/A
Tribal Lands (Cont'd)	0	0	N/A
Hospitals	3	N/A	N/A
Hospitals (Cont'd)	3	N/A	N/A
Urgent Care Facilities	3	N/A	N/A
Water Intakes	4	N/A	N/A
Water Intakes (Cont'd)	4	N/A	N/A
Wastewater Treatment Facilities	18	N/A	N/A
Special Designated Areas	6	941.46	N/A
Special Designated Areas (Cont'd)	6	941.46	N/A
Managed Lands	48	13,276.58	N/A
Managed Lands (Cont'd)	48	13,276.58	N/A
Other Environmentally Sensitive Areas	1	112.81	N/A
Other Environmentally Sensitive Areas (Cont'd)	1	112.81	N/A
Historic Places	27	N/A	N/A
Archaeological Sites	0	0	N/A
Threatened and Endangered Species	5	1,669,757.28	N/A
Aboveground Storage Tanks	4	N/A	N/A
Aboveground Storage Tanks (Cont'd)	4	N/A	N/A
Hazardous Materials Storage	74	N/A	N/A
Hazardous Materials Storage (Cont'd)	74	N/A	N/A
Facility Response Plan (FRP) Facilities	3	N/A	N/A
Risk Management Plan (RMP) Facilities	10	N/A	N/A
Railroads	24	N/A	131.85
Petroleum Pipelines	11	N/A	135.63
Oil and Natural Gas Pipelines	100	N/A	546.36
Marinas	7	N/A	N/A
Boat Access	6	N/A	N/A
Navigational Locks and Dams	0	N/A	N/A
Non-navigational Dams	17	N/A	N/A
Rivers and Streams	26	N/A	130.95
Lakes and Ponds	118	1,576.94	N/A

Response Strategies	2	N/A	N/A
Response Strategies (Cont'd)	2	N/A	N/A
Response Strategies (Cont'd)	2	N/A	N/A

Local EOC

#	Name	Address	City	Phone	Has Generator	Directions	Count
1	PORTER COUNTY EMERGENCY OPERATIONS CENTER	1995 SOUTH STATE ROAD 2	VALPARAISO	219-462-8654	Y	No Data	1

Public Health Departments

#	Name	Address	City	Phone	Website	Count
1	PORTER COUNTY HEALTH DEPARTMENT	155 INDIANA AVENUE	VALPARAISO	219-465-3525	No Data	1

County Contacts

#	County	Point of Contact	Emergency Management Phone	LEPC Chair	LEPC Phone	Local Health Department Phone	Area(acres)
1	Porter, Indiana	Lance Bella	219-462-8654	Michelle Kodicek	219-477-3000	219-465-3525	333,951.46

State Contacts

#	State Emergency Management Phone	24-hr Emergency Management Phone	State Health Department Phone	Homeland Security	Area(acres)
1	317-232-3986	888-233-7745	317-233-1325	317-232-3986	333,951.46

Major Cities and Towns

#	Name	Population	Elevation (Feet)	Count
1	Lakes of the Four Seasons	7033	764	1
2	South Haven	5282	653	1
3	Portage	36828	636	1
4	Beverly Shores	613	620	1
5	Burns Harbor	1156	610	1
6	Chesterton	13068	640	1
7	Dune Acres	182	627	1
8	Kouts	1879	682	1
9	Ogden Dunes	1110	610	1
10	Porter	4858	640	1
11	Hebron	3724	709	1
12	Valparaiso	31730	794	1
13	Town of Pines	708	620	1
14	Wheeler	443	666	1
15	Shorewood Forest	2708	722	1

Hospitals

#	Name	City	Count
1	PORTER-PORTAGE HOSPITAL CAMPUS-ER	PORTAGE	1
2	PORTER REGIONAL HOSPITAL	VALPARAISO	1
3	PORTER-STARKE SERVICES INC	VALPARAISO	1

Hospitals (Cont'd)

#	Name	City	Trauma Level	Helipad	Number of Beds	Owner	Count
1	PORTER-PORTAGE HOSPITAL CAMPUS-ER	PORTAGE	NOT AVAILABLE	Y	-999	NOT AVAILABLE	1
2	PORTER REGIONAL HOSPITAL	VALPARAISO	NOT AVAILABLE	Y	301	PROPRIETARY	1
3	PORTER-STARKE SERVICES INC	VALPARAISO	NOT AVAILABLE	N	16	PROPRIETARY	1

Urgent Care Facilities

#	Name	Address	Address2	City	Phone	Directions	Count
1	NORTHSHORE HEALTH CENTERS	3564 SCOTTSDALE STREET	<i>No Data</i>	PORTAGE	219-763-8112	LOCATED 0.13 MILE SOUTH OF THE INTERSECTION OF UNITED STATES ROUTE 6 AND SCOTTSDALE STREET ON THE WEST SIDE OF SCOTTSDALE STREET	1
2	PORTER HEALTH - CHESTERTON MEDICAL CENTER	650 DICKINSON ROAD	CHESTERTON MEDICAL CAMPUS	CHESTERTON	219-926-7755	LOCATED ON THE WEST SIDE OF DICKINSON ROAD, APPROX .2MI SOUTH OF EAST PORTER AVENUE.	1
3	OFF HOUR URGENT CARE MEDICAL SERVICE	1910 CALUMET AVENUE	<i>No Data</i>	VALPARAISO	219-464-8115	WEST SIDE OF CALUMET AVE BETWEEN E GLENDALE BLVD AND RANDLE STREET	1

Water Intakes

#	Name	Waterbody	Count
1	ArcelorMittal Burns Harbor, LLC	Lake Michigan	1
2	Balley Generating Station	Lake Michigan	1
3	Indiana-American Water Co. - Ogden Dunes WTP	Lake Michigan	1
4	US Steel Corporation	Lake Michigan	1

Water Intakes (Cont'd)

#	Name	Waterbody	Water Use	Intake Info	Location	Comments	Count
1	ArcelorMittal Burns Harbor, LLC	Lake Michigan	Industrial	1	N/A	520000 GPM	1
2	Balley Generating Station	Lake Michigan	Power Generation	1	N of the Baily Generating station (located on Baily Generating Sta Rd)	307760 GPM	1
3	Indiana-American Water Co. - Ogden Dunes WTP	Lake Michigan	Public Water Supply	1	N/A	33334 GPM	1
4	US Steel Corporation	Lake Michigan	Industrial	1	N/A	48000 GPM	1

Wastewater Treatment Facilities

#	Name	Address	City	Waterbody	Count
1	HEBRON WASTEWATER TREATMENT PLANT	101 UTILITY DRIVE	HEBRON	COBB CREEK/BREYFOGEL DT/KANKAKEE R	2
2	PORTAGE UTILITY SERVICE FACILITY WWTP	5500 OLD PORTER RD	PORTAGE	BURNS DITCH TO LAKE MICHIGAN	2
3	BURNS HARBOR MUNICIPAL STP	1240 NORTH BOO ROAD	BURNS HARBOR	BURNS DITCH TO LAKE MICHIGAN	2
4	LAKE ELIZA AREA CONSERVANCY DISTRICT	526 W 100 S	VALPARISO	KANKAKEE R VIA WOLF CR - LUDINGTON DITCH	2
5	CHESTERTON WWTP	220 BROADWAY	CHESTERTON	LAKE MICHIGAN/E BR LITTLE CALUMET	2
6	NATURE WORKS CONSERVANCY DIST	85 TOWER RD	VALPARAISO	UNNAMED TRIB TO CLARK DITCH	2
7	KOUTS MUNICIPAL WWTP	905 W SUNSET DR	KOUTS	KANKAKEE R VIA BENKIE DITCH	2
8	ELDEN KUEHL POLLUTION CON FAC	1251 JOLIET RD	VALPARAISO	LT CALUMET R VIA SALT CREEK	2
9	PORTER AVENUE LIFT STATION	NORTH END PORTER AVE	PORTER	LT CALUMET R - SERVD BY CHESTERTON	2

Special Designated Areas

#	Name	City	Area(acres)
1	Moraine	Chesterton	465.29
2	Coffee Creek Watershed	Chesterton	266.05
3	Kankakee River	N/A	99.23
4	Coulter (John Merle)	Portage	87.18
5	Cowles Bog	Chesterton	22.23
6	Deep River	N/A	1.48

Special Designated Areas (Cont'd)

#	Name	City	Category	Waterbody	Location	Comments	Area(acres)
1	Moraine	Chesterton	State Nature Preserve	Carlson Pond	CR 750 N and N 200 E	Open	465.29
2	Coffee Creek Watershed	Chesterton	Private Nature Preserve	Coffee Creek	SR 49 and Voyage Blvd	Open	266.05
3	Kankakee River	N/A	Outstanding Resource Waters	Kankakee River	Upstream boundary of Kingsbury Fish and Wildlife Area through LaSalle State Fish and Wildlife Area to Indiana/Illinois line	State Heritage Program site	99.23
4	Coulter (John Merle)	Portage	Nature Preserve	None	N/A	Closed	87.18
5	Cowles Bog	Chesterton	National Natural Landmark	None	Off US Hwy 12	<i>No Data</i>	22.23
6	Deep River	N/A	Outstanding Resource Waters	Deep River	One mi. S of US 30 to Little Calumet River	<i>No Data</i>	1.48

Managed Lands

#	Name	City	Area(acres)
1	Indiana Dunes National Park	Porter	7,242.35
2	Indiana Dunes State Park	Chesterton	2,193.02
3	Reynold's Creek Gamebird Habitat Area	Michigan City	1,254.19
4	Moraine Nature Preserve	Chesterton	465.29
5	Moraine Natural Area	Chesterton	366.80
6	Imagination Glen Park	Portage	223.61
7	Sunset Hill Farm Park	Valparaiso	222.56
8	Creekside Golf Course	Valparaiso	191.57
9	Salt Creek Fish And Wildlife Area	South Haven	119.56
10	Forest Park Golf Course	Valparaiso	115.38
11	Coulter (John Merle) Nature Preserve	Portage	87.18
12	Rogers-Lakewood Park	Valparaiso	79.17
13	University Of Chicago Woods	Chesterton	77.52
14	River's Edge Forest Legacy Area	Chesterton	77.10
15	Dogwood Park	Chesterton	60.02
16	Woodland Park	Portage	52.86
17	Westside Park	Valparaiso	46.81
18	Suman Fen	Chesterton	40.33
19	Haven Hollow Park	South Haven	38.50
20	Countryside Park	Portage	33.33
21	Prairie-Duneland Trail	Portage	30.84
22	Fairgrounds Park	Valparaiso	27.82
23	Lakeland Park	Burns Harbor	27.13
24	Izaak Walton League Property (Marine Ct.)	Michigan City	25.35
25	Glenrose Park, North	Valparaiso	23.01
26	Hawthorne (Porter)	Porter	19.66
27	Bicentennial Park	Valparaiso	15.35
28	Olson Memorial Park	Portage	15.10
29	Coffee Creek Park	Chesterton	14.43
30	Forest Park	Valparaiso	13.76
31	Kirchoff Park	Valparaiso	12.53
32	Langeluttig Marsh Wetland Conservation Area	Chesterton	11.89
33	Wolfe Park	Portage	10.43
34	Drazer Park	Kouts	6.82
35	Ogden Gardens Park	Valparaiso	5.96
36	Porter Cove Park	Chesterton	4.86
37	Tower Park	Valparaiso	4.67
38	200 East Park	Valparaiso	3.56
39	Will Park	Valparaiso	3.34
40	Perry Park	Portage	2.94
41	Thomas Centennial Park	Chesterton	2.17
42	Jesse-Pifer Park	Valparaiso	1.92

43	Viking Village Park	Portage	1.77
44	Berkley Park	Valparaiso	1.67
45	Aukiki Wetland Conservation Area	Wheatfield	1.36
46	Long Lake Public Access Site	Valparaiso	0.57
47	Community Acres Park	Portage	0.48
48	Grand Kankakee Marsh	Hebron	0.05

Managed Lands (Cont'd)

#	Name	City	Category	Waterbody	Location	Comments	Area(acres)
1	Indiana Dunes National Park	Porter	National Park	Lake Michigan	N/A	Open	7,242.35
2	Indiana Dunes State Park	Chesterton	State Park	Lake Michigan	N/A	Open	2,193.02
3	Reynold's Creek Gamebird Habitat Area	Michigan City	State Park	None	N/A	Restricted Access	1,254.19
4	Moraine Nature Preserve	Chesterton	State Nature Preserve	Carlson Pond	CR 750 N and N 200 E	Open	465.29
5	Moraine Natural Area	Chesterton	State Nature Preserve	Carlson Pond	Contained between N 200 E and N 400 E	Open	366.80
6	Imagination Glen Park	Portage	Park	Salt Creek	N/A	Open	223.61
7	Sunset Hill Farm Park	Valparaiso	Park	None	N/A	Open	222.56
8	Creekside Golf Course	Valparaiso	Recreation Area	Salt Creek	N/A	Open	191.57
9	Salt Creek Fish And Wildlife Area	South Haven	Wildlife Management Area	Salt Creek	Lies .5 miles W of SR 149- on CR 600 W NW of Valparaiso	Open With Restrictions	119.56
10	Forest Park Golf Course	Valparaiso	Recreation Area	unnamed ponds	N/A	Open	115.38
11	Coulter (John Merle) Nature Preserve	Portage	Nature Preserve	None	N/A	Closed	87.18
12	Rogers-Lakewood Park	Valparaiso	Regional Park	Loomis Lake; Spectacle Lake	N/A	Open	79.17
13	University Of Chicago Woods	Chesterton	State Nature Preserve	None	Between N 400 E and Old Suman Rd	Restricted	77.52
14	River's Edge Forest Legacy Area	Chesterton	Reserve	Little Calumet River, E Branch	N 375 E and E 1300 N	Closed	77.10
15	Dogwood Park	Chesterton	Regional Park	None	Off W1100 N between N 50 W and N 125 W	Open	60.02
16	Woodland Park	Portage	Park	None	N/A	Open	52.86
17	Westside Park	Valparaiso	Park	None	SW side of Valparaiso at the S end of Westside Park Avenue, just off of Joliet Road.	Open	46.81
18	Suman Fen	Chesterton	State Nature Preserve	None	E 700 N and N 400 E	Restricted	40.33
19	Haven Hollow Park	South Haven	Regional Park	Salt Creek	In subdivision off Plymouth Rd. Entrance road is Franciscan Dr.	Open	38.50
20	Countryside Park	Portage	Regional Park	Country Side Park Pond	N/A	Open	33.33
21	Prairie-Duneland Trail	Portage	County Park	Robbins Ditch	Runs from Willowcreek Rd., past McCool Rd.	Open	30.84
22	Fairgrounds Park	Valparaiso	Regional Park	None	N/A	Open	27.82

23	Lakeland Park	Burns Harbor	Regional Park	unnamed pond	Off CR 1225 N near Castle St	Open	27.13
24	Izaak Walton League Property (Marine Ct.)	Michigan City	Nature Preserve	Little Calumet River, E Branch	Marine Ct. and SR 249	Restricted	25.35
25	Glenrose Park, North	Valparaiso	Regional Park	None	1/4 mile E of Roosevelt Rd; behind Jefferson School Complex	Open	23.01
26	Hawthorne (Porter)	Porter	Regional Park	None	N/A	Open	19.66
27	Bicentennial Park	Valparaiso	Regional Park	None	Valparaiso's NW quadrant, on Burlington Beach Road, just E of Campbell Street.	Open	15.35
28	Olson Memorial Park	Portage	Regional Park	Willow Creek	N/A	Open	15.10
29	Coffee Creek Park	Chesterton	Regional Park	Coffee Creek	N/A	Open	14.43
30	Forest Park	Valparaiso	Recreation Area	None	West of Campbell St	Open	13.76
31	Kirchoff Park	Valparaiso	Forest	None	E side of Roosevelt Road about 1/4 mile N of Lincolnway on the City's east side	Open	12.53
32	Langeluttig Marsh Wetland Conservation Area	Chesterton	Wetland Conservation Area	Little Calumet River, E Branch	Off of the Little Calumet River East Branch, North of Indian Boundary Rd, South of I-94	Open With Restrictions	11.89
33	Wolfe Park	Portage	Park	None	Danube Ave. off Blake Rd	Open	10.43
34	Drazer Park	Kouts	Regional Park	Pleasant Township Ditch	At the end of Daumer Rd, which is off Main St	Open	6.82
35	Ogden Gardens Park	Valparaiso	Botanical Garden	None	Campbell Street and Harrison Blvd., about 3/4 mile N of Lincolnway	Open	5.96
36	Porter Cove Park	Chesterton	Park	None	In the Porter Cove subdivision off Pearson Dr.	Open	4.86
37	Tower Park	Valparaiso	Park	None	Franklin and Evans Streets, just 1/4 mile W of Calumet Avenue	Open	4.67
38	200 East Park	Valparaiso	Regional Park	None	Between Boca Lago Dr and Silhavy Rd	Open	3.56
39	Will Park	Valparaiso	Park	None	Morgan Blvd, 1/2 block S of Brown Street	Open	3.34
40	Perry Park	Portage	Regional Park	None	Tulip Ave. off Oakwood St.	Open	2.94

41	Thomas Centennial Park	Chesterton	Regional Park	None	Downtown Chesterton	Open	2.17
42	Jesse-Pifer Park	Valparaiso	Regional Park	None	City block bordered by Weston, Elmhurst, and Madison Streets	Open	1.92
43	Viking Village Park	Portage	Park	None	Near Lute and Swanson intersection	Open	1.77
44	Berkley Park	Valparaiso	Regional Park	None	Berkley Dr. and Sheffield Dr.	Open	1.67
45	Aukiki Wetland Conservation Area	Wheatfield	Wetland Conservation Area	Kankakee River	SR 49 and CR 1600	Restricted	1.36
46	Long Lake Public Access Site	Valparaiso	Recreation Area	Long Lake	Cayuga Ln and W Long Lake Rd	Open	0.57
47	Community Acres Park	Portage	Regional Park	None	Hickory St off Sont Ave	Open	0.48
48	Grand Kankakee Marsh	Hebron	Park	Kankakee River	Range Line Rd and 217th Ave	Open	0.05

Other Environmentally Sensitive Areas

#	Name	City	Area(acres)
1	Little Calumet River	N/A	112.81

Other Environmentally Sensitive Areas (Cont'd)

#	Name	City	Category	Waterbody	Location	Comments	Area(acres)
1	Little Calumet River	N/A	Important Aquatic Habitat	Little Calumet River	Co. Rd. 600E to SR 249	Salmonoid Stream with high biological significance	112.81

Historic Places

#	Name	Address	City	Emergency Phone	Contact Phone	Comments	Count
1	New York Central Railroad Passenger Depot	220 Broadway	Chesterton	219-477-3000	317-232-1646	N/A	1
2	Brown, George, Mansion	700 W. Porter Ave.	Chesterton	219-477-3000	317-232-1646	N/A	1
3	Heritage Hall	Campus Mall, S. College Ave.	Valparaiso	219-477-3000	317-232-1646	N/A	1
4	Porter County Jail and Sheriff's House	153 Franklin St.	Valparaiso	219-477-3000	317-232-1646	N/A	1
5	Rose, David Garland, House	156 Garfield St.	Valparaiso	219-477-3000	317-232-1646	N/A	1
6	Weller House	1200 North Rd.	Chesterton	219-477-3000	317-232-1646	N/A	1
7	Loring, Dr. David J., Residence and Clinic	102 Washington St.	Valparaiso	219-477-3000	317-232-1646	N/A	1
8	Gilson, Clinton D., Barn	522 W. 650 S	Hebron	219-477-3000	317-232-1646	N/A	1
9	Porter County Memorial Hall	104 Indiana Ave.	Valparaiso	219-477-3000	317-232-1646	N/A	1
10	Immanuel Lutheran Church	308 N. Washington St.	Valparaiso	219-477-3000	317-232-1646	N/A	1
11	Beverly Shores South Shore Railroad Station	Broadway Ave. and US 12	Beverly Shores	219-477-3000	317-232-1646	N/A	1
12	Coombs, Norris and Harriet, Lustron House	411 Bowser Ave.	Chesterton	219-477-3000	317-232-1646	N/A	1
13	Horner, Imre and Maria, House	2 Merrivale Ave.	Beverly Shores	219-477-3000	317-232-1646	N/A	1
14	Porter Town Hall	303 Franklin St.	Porter	219-477-3000	317-232-1646	N/A	1
15	Bartlett Real Estate Office	500 South Broadway	Beverly Shores	219-477-3000	317-232-1646	N/A	1
16	McCallum, William, House	507 E. Lincolnway	Valparaiso	219-477-3000	317-232-1646	N/A	1
17	Dune Acres Clubhouse	Clubhouse Dr.	Dune Acres	219-477-3000	317-232-1646	N/A	1
18	Young, Martin, House	324 Second St.	Chesterton	219-477-3000	317-232-1646	N/A	1
19	Wolf, Josephus, House	453 W 700 N.	Valparaiso	219-477-3000	317-232-1646	N/A	1
20	Skinner, DeForest, House	208 Washington St	Valparaiso	219-477-3000	317-232-1646	N/A	1
21	Haste-Crumpacker House	208 N Michigan St	Valparaiso	219-477-3000	317-232-1646	N/A	1
22	Valparaiso Downtown Commercial Historic District (Boundary Increase)	NW block of Lincolnway and Napoleon	Valparaiso	219-477-3000	317-232-1646	N/A	1
23	Sigler, Eli, House	104 W Church St	Hebron	219-477-3000	317-232-1646	N/A	1
24	Solomon Enclave	901, 903, 907 E. Lake Front Dr.	Beverly Shores	219-477-3000	317-232-1646	N/A	1

25	Bloch, Conrad and Catherine, House	608 Academy St.	Valparaiso	219-477-3000	317-232-1646	N/A	1
26	Meyer, Dr. John and Gerda, House	360 W. Fairwater Ave.	Beverly Shores	219-477-3000	317-232-1646	N/A	1
27	McGill, Charles S. and Mary, House	505 N. Washington St.	Valparaiso	219-477-3000	317-232-1646	N/A	1

Threatened and Endangered Species

#	Species	Status	Habitat	Area(acres)
1	Indiana bat	Endangered	Hibernation occurs in caves and mines, with swarming in surrounding wooded areas. Summer roosting and foraging habitat occurs in wooded stream corridors and in bottomland and upland forests and woods.	333,951.46
2	Northern long-eared bat	Threatened	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. Roosts and forages in upland forests and woods.	333,951.46
3	Eastern massasauga	Threatened	Wetlands and adjacent uplands	333,951.46
4	Karner blue butterfly	Endangered	Pine barrens and oak savannas on sandy soils and containing wild lupines (<i>Lupinus perennis</i>), the only known food plant of larvae.	333,951.46
5	Pitcher's thistle	Threatened	Lakeshores; stabilized dunes and blowout areas	333,951.46

Aboveground Storage Tanks

#	Name	City	Count
1	Travel Centers of America - Porter	Porter	1
2	Future Environmental Incorporated	Portage	1
3	Frick Services Incorporated	Portage	1
4	Tanco Terminals Incorporated	Portage	1

Aboveground Storage Tanks (Cont'd)

#	Name	City	Products	Oil Volume	Oil Tanks	Comments	Count
1	Travel Centers of America - Porter	Porter	Fuel Oil # 2-D (125,000 gallons), Lube oil (1,550) gallons	126250	5	Porter County Sheriff- 219-477-3000	1
2	Future Environmental Incorporated	Portage	Petroleum	2724795	2	N/A	1
3	Frick Services Incorporated	Portage	Distillate (Petroleum)	1519757	1	N/A	1
4	Tanco Terminals Incorporated	Portage	Fuel Oil # 6, Used Oil	8853111	7	N/A	1

Hazardous Materials Storage

#	Name	City	Count
1	Verizon Wireless - Portage	Portage	2
2	Frontier Communications - Portage	Portage	2
3	Verizon	Wheeler	2
4	Verizon Wireless	Chesterton	2
5	Verizon Wireless - Wheeler	Hobart	1
6	Advanced Waste Services	Portage	1
7	Indiana Pickling & Processing Co.	Portage	1
8	American Iron Oxide - Portage	Portage	1
9	South Haven Sewer Works	Valparaiso	1
10	AT&T - Burns Harbor	Burns Harbor	1
11	Portside Energy Corp.	Portage	1
12	HD Supply Construction Supply, Ltd.	Valparaiso	1
13	Magnetics International, Inc.	Burns Harbor	1
14	Cargill - Hebron	Hebron	1
15	Northern Indiana Public Service Co. Bailly Generating Station	Chesterton	1
16	Walgreens Warehouses	Valparaiso	1
17	Nipsco Central Storeroom Service Center	Valparaiso	1
18	CR England	Burns Harbor	1
19	Arcelormittal Burns Harbor, LLC	Burns Harbor	1
20	AOC, LLC	Valparaiso	1
21	Powder Processing & Technology	Valparaiso	1
22	Worthington Steel Co.	Porter	1
23	Frontier Communications - Chesterton	Chesterton	1
24	Co-Alliance - Malden Agronomy & Grain	Valparaiso	1
25	The Levy Co., Inc.	Burns Harbor	1
26	Level 3 Communications Chtnineu	Chesterton	1
27	Blue Beacon Truck Wash of Porter	Porter	1
28	Merit Steel Co., Inc.	Kouts	1
29	Qwest - Chesterton Regen	Chesterton	1
30	Rexam Beverage Can - Valparaiso	Valparaiso	1
31	Walgreens - 16	Portage	1
32	Precoat Metals - Portage	Portage	1
33	Co-Alliance - Valparaiso Agronomy	Valparaiso	1
34	Pure Air On The Lake, Lp	Chesterton	1
35	Home Depot 2030	Valparaiso	1
36	Verizon Wireless - Kouts	Kouts	1
37	Indiana American Water - Nw Odgen Dunes Wtp	Portage	1
38	AT&T - Portage	Portage	1
39	Urschel Laboratories, Inc.	Valparaiso	1
40	Frontier Communications - Kouts	Kouts	1
41	MCI Brdain	Chesterton	1

42	Coca-Cola Enterprises Bottling Co.	Portage	1
43	Level 3 Communications Vlprinmz	Valparaiso	1
44	Surtec Incorporated	Valparaiso	1
45	Travel Centers of America	Michigan City	1
46	Porter Memorial Hospital	Valparaiso	1
47	Verizon	Portage	1
48	Lowes Home Centers Incorporated 1778	Hobart	1
49	Verizon Wireless	Hebron	1
50	Us Steel Midwest	Portage	1
51	South Haven Water Works Incorporated	Valparaiso	1
52	Verizon	Valparaiso	1
53	Verizon Communications Incorporated In4550072	Wheeler	1
54	Porter Health System	Portage	1
55	Monosol Rx	Portage	1
56	Ugn	Valparaiso	1
57	Praxair Incorporated	Chesterton	1
58	Nlmk Indiana	Portage	1
59	Verizon Wireless East Valparaiso	Valparaiso	1
60	Emerson Power Transmission	Valparaiso	1
61	Cathay Pigments USA, Inc.	Valparaiso	1
62	Comcast of California Colorado Illinois Indiana Michigan, LP	Valparaiso	1
63	Neo Industries Indiana Incorporated	Portage	1
64	Metal Management Indiana Incorporated	Chesterton	1
65	Aldi Incorporated	Valparaiso	1
66	Worldcom Mcfin	Valparaiso	1
67	Veolia Es Technical Solutions, LLC	Valparaiso	1
68	Steel City Express	Chesterton	1
69	Monosol, LLC	Gary	1
70	Wyckoff Hybrids	Valparaiso	1

Hazardous Materials Storage (Cont'd)

#	Name	City	Contact Phone	Materials/CAS	Count
1	Frontier Communications - Portage	Portage	203-614-5600	7664939	2
2	Verizon	Wheeler	219-762-5047	7664939	2
3	Verizon Wireless	Chesterton	219-983-1480	7664939	2
4	Verizon Wireless - Wheeler	Hobart	800-852-2671	7664939	1
5	Advanced Waste Services	Portage	800-824-9792	7664939	1
6	Indiana Pickling & Processing Co.	Portage	219-787-8889	7647010	1
7	American Iron Oxide - Portage	Portage	219-763-2623	7647010	1
8	Verizon Wireless - Portage	Portage	800-852-2671	7664939	1
9	South Haven Sewer Works	Valparaiso	219-759-3215 11	7446095, 7782505	1
10	AT&T - Burns Harbor	Burns Harbor	770-922-6035	7664939	1
11	Portside Energy Corp.	Portage	219-763-7426 224	7664939	1
12	Verizon Wireless - Portage	Portage	847-619-5433	7664939	1
13	HD Supply Construction Supply, Ltd.	Valparaiso	770-852-9000	7664393	1
14	Magnetics International, Inc.	Burns Harbor	219-746-3720	7647010	1
15	Cargill - Hebron	Hebron	219-996-2500	13071799, 1910425	1
16	Northern Indiana Public Service Co. Bailly Generating Station	Chesterton	219-787-7298	7664939, 302012	1
17	Walgreens Warehouses	Valparaiso	847-914-2264	7664939	1
18	Nipsco Central Storeroom Service Center	Valparaiso	219-477-6314	7664939	1
19	CR England	Burns Harbor	219-508-9956	7664939	1
20	Arcelormittal Burns Harbor, LLC	Burns Harbor	219-787-3444	None, 7664939, 7782505, 7647010	1
21	AOC, LLC	Valparaiso	219-465-4353	7664417, 7664939	1
22	Powder Processing & Technology	Valparaiso	219-462-4141 236	1314621, 7647010	1
23	Worthington Steel Co.	Porter	219-929-4000	None, 7664939, 7647010	1
24	Frontier Communications - Chesterton	Chesterton	203-614-5600	7664939	1
25	Co-Alliance - Malden Agronomy & Grain	Valparaiso	317-745-1206	60515, 7664417, 5664417	1
26	The Levy Co., Inc.	Burns Harbor	219-787-6289	7664939	1
27	Level 3 Communications Chtnineu	Chesterton	847-954-8368	7664939	1
28	Blue Beacon Truck Wash of Porter	Porter	219-926-4602	7664393	1
29	Merit Steel Co., Inc.	Kouts	417-358-8131	7664939	1

30	Qwest - Chesterton Regen	Chesterton	866-864-2255	7664939	1
31	Rexam Beverage Can - Valparaiso	Valparaiso	773-399-3000	7664939	1
32	Walgreens - 16	Portage	847-914-2264	7664939	1
33	Precoat Metals - Portage	Portage	314-436-7010	7664393, 50000, 7664939, 7697372	1
34	Co-Alliance - Valparaiso Agronomy	Valparaiso	765-432-6866	60515, 298000, 1910425, 115297, 999017, 75218, 732116, 1563662	1
35	Pure Air On The Lake, Lp	Chesterton	800-523-9374	7664939	1
36	Home Depot 2030	Valparaiso	770-433-8211 82714	7664939	1
37	Verizon Wireless - Kouts	Kouts	847-619-5433	7664939	1
38	Indiana American Water - Nw Odgen Dunes Wtp	Portage	219-512-4949	7664417, 7782505	1
39	AT&T - Portage	Portage	770-922-6035	7664939	1
40	Urschel Laboratories, Inc.	Valparaiso	219-464-4811	7664939	1
41	Frontier Communications - Kouts	Kouts	203-614-5600	7664939	1
42	MCI Brdain	Chesterton	800-444-0902	None, 7664939	1
43	Coca-Cola Enterprises Bottling Co.	Portage	404-676-2121	7664939	1
44	Level 3 Communications Vlpriinz	Valparaiso	847-954-8368	7664939	1
45	Surtec Incorporated	Valparaiso	219-531-0066	7664939, 79118, 106898, 75569, 107120, 75218, 100447, 7664417, 107186, 111444	1
46	Travel Centers of America	Michigan City	219-926-4871	7664393	1
47	Porter Memorial Hospital	Valparaiso	219-983-8300	50000	1
48	Verizon	Portage	203-614-5600	7664939	1
49	Lowes Home Centers Incorporated 1778	Hobart	219-756-8316	7664939	1
50	Verizon Wireless	Hebron	219-531-9029	7664939	1
51	Us Steel Midwest	Portage	219-762-3131	7664939, 7697372, 7647010, 123319, None	1
52	South Haven Water Works Incorporated	Valparaiso	219-759-3215	7446095, 7782505	1
53	Verizon	Valparaiso	219-531-9029	7664939	1
54	Verizon Communications Incorporated In4550072	Wheeler	800-483-3000	7664939	1
55	Porter Health System	Portage	219-983-8300	50000	1
56	Monosol Rx	Portage	219-762-4143	7664939	1
57	Ugn	Valparaiso	847-244-0055	7664939	1
58	Praxair Incorporated	Chesterton	219-923-0222	7664939, 1310732	1
59	Nlmk Indiana	Portage	219-787-8200	7664939	1

60	Verizon Wireless East Valparaiso	Valparaiso	219-531-9029	7664939	1
61	Emerson Power Transmission	Valparaiso	219-531-1858	7664939	1
62	Cathay Pigments USA, Inc.	Valparaiso	219-531-5359	7664417, 7664939, 7647010	1
63	Comcast of California Colorado Illinois Indiana Michigan, LP	Valparaiso	1 (800) 934-6489	7664939	1
64	Neo Industries Indiana Incorporated	Portage	219-762-6075	7664939	1
65	Metal Management Indiana Incorporated	Chesterton	219-926-8726	7664939	1
66	Aldi Incorporated	Valparaiso	833-462-3037	7664417, 7664939	1
67	Worldcom Mclfin	Valparaiso	N/A	7664939	1
68	Veolia Es Technical Solutions, LLC	Valparaiso	630-218-1600	7664939	1
69	Steel City Express	Chesterton	219-926-4871	8008206	1
70	Monosol, LLC	Gary	219-762-3165	7664939	1
71	Wyckoff Hybrids	Valparaiso	219-462-6716	7664417	1

Facility Response Plan (FRP) Facilities

#	Name	Address	City	Facility Registry Service Report	Count
1	FRICK SERVICES, INC LIQUID TERMINAL	570 EAST BOUNDARY RD, PORT OF INDIANA	PORTAGE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110045624437	1
2	ARCELORMITTAL BURNS HARBOR LLC	250 W US 12	BURNS HARBOR	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000607558	1
3	TANCO TERMINALS INC	400 E BOUNDARY RD	PORTAGE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110003135848	1

Risk Management Plan (RMP) Facilities

#	Name	Address	City	Facility Registry Service Report	Count
1	VALPARAISO AGRONOMY	403 E US 30	VALPARAISO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110007566552	2
2	CATHAY PIGMENTS USA INC	4901 EVANS AVE.	VALPARAISO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000398267	1
3	FLINT LAKE TREATMENT PLANT 2	2101 WESLEY ROAD	VALPARAISO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000534351	1
4	FRITZ C. DIETRICH ENVIRONMENTAL CONTROL FACILITY	300 NORTH LEAGUE LANE	PORTER	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000578394	1
5	INDIANA AMERICAN WATER, NORTHWEST, OGDEN DUNES	84 DIANA ROAD	PORTAGE	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000543289	1
6	CARGILL, INC. OF AYLESWORTH	812 S 250 W	HEBRON	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000578367	1
7	AIRPORT TREATMENT PLANT	3800 REDBOW DRIVE	VALPARAISO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000534486	1
8	MALDEN AGRONOMY	399 S SR 49	VALPARAISO	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110000577144	1
9	PRAXAIR - CHESTERTON, IN	391 DUNES HWY	CHESTERTON	https://ofmpub.epa.gov/frs_public2/fii_query_detail_disp_program_facility?p_registry_id=110005969087	1

Railroads

#	Railroad	Emergency Phone	Contact Phone	Class	Length(mi)
1	CSX Transportation	800-232-0144	904-359-3100	1	34.06
2	Norfolk Southern	800-453-2530	855-667-3655	1	33.60
3	Chicago, South Shore, and South Bend Railroad	219-873-6232	219-874-9000	No Data	16.56
4	Chicago, Ft. Wayne & Eastern Railroad	800-979-4958	260-267-9346	No Data	16.50
5	Canadian National	800-465-9239 (Police)	888-888-5909	1	16.10
6	Amtrak	800-331-0008 (Police)	202-906-3000	1	9.21
7	Chesapeake & Indiana Railroad	No Data	765-825-0316	No Data	5.60
8	N/A	800-453-2530	855-667-3655	No Data	0.22

Petroleum Pipelines

#	Name	System	Emergency Phone	Contact Phone	Length(mi)
1	Enbridge Energy, LP	LAKEHEAD	800-858-5253	715-395-3619	22.50
2	Marathon Pipe Line, LLC	GRIFFITH - NORTH MUSKEGON 10IN PRODUCTS	800-537-6644	219-934-8530	17.76
3	Buckeye Partners, LP	EO185XX	800-331-4115	610-904-4113	16.18
4	Amoco Oil Co.	P1000 WHITING-RIVER ROUGE	800-548-6482	880-548-6482; 630-836-5000	15.75
5	Wolverine Pipe Line Co.	TERRE HAUTE JUNCTION - WALTON TRAPS	888-337-5004	269-323-2491	15.47
6	Wolverine Pipe Line Co.	KENNEDY AVE. TO VICKSBURG	888-337-5004	269-323-2491	15.47
7	Buckeye Partners, LP	WH150MK	800-331-4115	610-904-4113	13.09
8	Buckeye Partners, LP	XF001KZ	800-331-4115	610-904-4113	12.28
9	Buckeye Partners, LP	KZ001LK	800-331-4115	610-904-4113	4.40
10	Buckeye Partners, LP	HD150WH	800-331-4115	610-904-4113	2.74

Oil and Natural Gas Pipelines

#	Name	System	Description	Length(mi)
1	Northern Indiana Public Service Co.	<i>No Data</i>	Natural Gas Pipeline	147.23
2	ANR Pipeline Co.	ANR	Natural Gas Pipeline	43.78
3	Northern Indiana Public Service Co.	N600	Natural Gas Pipeline	41.71
4	Northern Indiana Public Service Co.	N275	Natural Gas Pipeline	41.68
5	CITGO Petroleum Corp.	<i>No Data</i>	Refined Petroleum Pipeline	32.25
6	Wolverine Pipe Line Co.	Kennedy Ave. To Vicksburg	Refined Petroleum Pipeline	31.12
7	Marathon Pipe Line, LLC	Griffith-North Muskegon 10in Products	Refined Petroleum Pipeline	18.16
8	Vector Pipeline, LP	Vector Pipeline	Natural Gas Pipeline	17.77
9	Enbridge Energy Co., LP	Chicago Region	Crude Petroleum Pipeline	17.12
10	Buckeye Partners, LP	Buckeye	Refined Petroleum Pipeline	16.66
11	Buckeye Pipe Line Co., LP	<i>No Data</i>	Refined Petroleum Pipeline	16.66
12	Buckeye Partners, LP	Wood River	Refined Petroleum Pipeline	16.11
13	Amoco Gas Co.	Whiting_River Rouge	Refined Petroleum Pipeline	16.08
14	Buckeye Partners, LP	Norco	Refined Petroleum Pipeline	15.79
15	Spectra Energy Transmission, LLC	<i>No Data</i>	Natural Gas Pipeline	15.68
16	Crossroads Pipeline Co.	Cr	Natural Gas Pipeline	15.35
17	Tecumseh Pipe Line Co.	<i>No Data</i>	Crude Petroleum Pipeline	15.35
18	Northern Indiana Public Service Co.	N600, N275	Natural Gas Pipeline	7.58
19	Lakehead Pipe Line Co. Inc.	<i>No Data</i>	Crude Petroleum Pipeline	5.97
20	Northern Indiana Public Service Co.	Cavw	Natural Gas Pipeline	5.15
21	Kinder Morgan Interstate Gas Transmission, LLC	Cochin	Refined Petroleum Pipeline	3.10
22	Dome Pipeline Corp.	<i>No Data</i>	Refined Petroleum Pipeline	3.09
23	Praxair, Inc.	Capoc-Hydrogen	Refined Petroleum Pipeline	1.77
24	Northern Indiana Public Service Co.	N275, N600	Natural Gas Pipeline	1.20

Marinas

#	Name	Address	City	Emergency Phone	Contact Phone	Waterbody	Count
1	Marina Shores at Dune Harbor	5976 Harbor Dr	Portage	219-477-3000	(219) 762-5700	Lake Michigan (Burns Ditch)	1
2	Marquette Yacht Club	1218 Crisman Rd.	Portage	219-762-1155 / 219-771-3387	(219) 762-9961	Portage-Burns Waterway	1
3	Doyne's Marine, Inc.	1340 N Crisman Rd.	Portage	219-477-3000	(219) 762-7622	Little Calumet River, West Branch; Lake Michigan	1
4	Miller Chapter IWLA Marina	1250 N Crisman Rd.	Portage	219-730-9525	219-762-9974	Little Calumet River, East Branch	1
5	Portage Public Marina	1200 Marina Way	Portage	219-477-3000	(219) 763-6833	Lake Michigan; East Arm Little Calumet River	1
6	South Shore Marina (IN)	1700 Marine Dr.	Portage	219-465-1515	(219) 762-2304	Portage-Burns Waterway	1
7	Indiana International Port/Burns Harbor at Portage	6625 S Boundary Rd.	Portage	219-465-1515	219-787-5056	Lake Michigan	1

Boat Access

#	Name	Operator	Waterbody	Latitude	Longitude	Count
1	Dunns Bridge	Porter County Parks and Recreation	Kankakee River	41.22	-86.969	1
2	Long Lake Access	Porter County Conservation Club	Long Lake	41.5245	-87.0511	1
3	Loomis Lake	City of Valparaiso	Loomis Lake	41.5177	-87.0623	1
4	Portage Marina (Burns Waterway)	City of Portage	Lake Michigan	41.6181	-87.1741	1
5	Chustak State Fishing Area	Chustak Public Fishing Area	Salt Creek	41.52157754	-87.13076036	1
6	Long Lake	Porter County Conservation Club	Long Lake	41.52446885	-87.05110789	1

Non-navigational Dams

#	Name	Latitude	Longitude	Count
1	Old Longs Mill Dam	41.5603	-87.0191000002	1
2	Bethlehem Steel Check Dam No. 6	41.6151999999	-87.1482999995	1
3	Roy Nicholson Dam (in-channel)	41.5567000005	-87.0811000001	1
4	Bethlehem Steel Check Dam No. 5 (in-channel)	41.6144999992	-87.1464999998	1
5	Lake Of The Four Seasons (Dam B)	41.3993999995	-87.2152000004	1
6	Lake Louise Dam	41.4614000004	-87.1424000002	1
7	Lake Of The Four Seasons (Dam A)	41.4033000004	-87.2134999996	1
8	Lake Of The Woods Dam	41.4525000006	-87.0568000004	1
9	Bethlehem Steel Check Dam No. 3 (in-channel)	41.6137000006	-87.1454999996	1
10	Norman Olson Lake Dam	41.4481000006	-87.1683	1
11	Rice Lake Dam	41.5965	-86.9862000002	1
12	Bethlehem Steel Check Dam No. 2 (in-channel)	41.6122999992	-87.1454999996	1
13	Linde Dam (in-channel)	41.6131999996	-87.1293000001	1
14	Bethlehem Steel Check Dam No. 4 (in-channel)	41.6152999997	-87.1454999996	1
15	Lake Of The Woods Dam	41.5833000001	-87.1471999995	1
16	Bethlehem Steel Check Dam No. 1 (in-channel)	41.6106000002	-87.1467000004	1
17	Loomis Lake Dam	41.5171000008	-87.0568000004	1

Rivers and Streams

#	Name	Feature	Length(mi)
1	Salt Creek	Stream	21.39
2	<i>No Data</i>	Canal	17.63
3	Heinold Ditch	Stream	16.50
4	Kankakee River	Stream	14.39
5	Little Calumet River	Stream	10.28
6	Coffee Creek	Stream	8.64
7	Ludington Ditch	Stream	6.85
8	<i>No Data</i>	Stream Intermittent	6.42
9	<i>No Data</i>	Stream	4.93
10	Portage-Burns Waterway	Stream	4.11
11	Little Calumet River	Canal	3.39
12	Heinold Ditch	Canal	3.01
13	Heinold Ditch	Stream Intermittent	2.98
14	West Branch Crooked Creek	Stream	2.90
15	Sievers Creek	Stream Intermittent	1.97
16	Sievers Creek	Canal	1.74
17	West Branch Crooked Creek	Stream Intermittent	1.55
18	Little Calumet River	Stream Intermittent	1.16
19	East Branch Stony Run	Stream	1.12

Lakes and Ponds

#	Name	Description	Area(acres)
1	No Data	Lake/Pond: Hydrographic Category = Perennial	877.70
2	Long Lake	Lake/Pond: Hydrographic Category = Perennial	111.48
3	Flint Lake	Lake/Pond: Hydrographic Category = Perennial	88.23
4	Big Bass Lake	Lake/Pond: Hydrographic Category = Perennial	60.77
5	Loomis Lake	Lake/Pond: Hydrographic Category = Perennial	50.30
6	Eliza, Lake	Lake/Pond: Hydrographic Category = Perennial	37.86
7	Silver Lake	Lake/Pond: Hydrographic Category = Perennial	36.76
8	Mink Lake	Lake/Pond: Hydrographic Category = Perennial	34.17
9	Chubb Lake	Lake/Pond: Hydrographic Category = Perennial	32.07
10	Holiday, Lake	Lake/Pond: Hydrographic Category = Perennial	26.66
11	Minnehaha, Lake	Lake/Pond: Hydrographic Category = Perennial	20.61
12	Mud Lake	Lake/Pond: Hydrographic Category = Perennial	19.22
13	Sagers Lake	Lake/Pond: Hydrographic Category = Perennial	19.14
14	Carlson Pond	Lake/Pond: Hydrographic Category = Perennial	17.51
15	Rice Lake	Lake/Pond: Hydrographic Category = Perennial	16.64
16	Clear Lake	Lake/Pond: Hydrographic Category = Perennial	15.41
17	Norman Olson Lake	Lake/Pond: Hydrographic Category = Perennial	15.29
18	Dog Lake (historical)	Lake/Pond: Hydrographic Category = Perennial	13.09
19	Green, Lake on the	Lake/Pond: Hydrographic Category = Perennial	12.67
20	Morgan Lake	Lake/Pond: Hydrographic Category = Perennial	11.91
21	Moss Lake	Lake/Pond: Hydrographic Category = Perennial	10.47
22	Billington Lake	Lake/Pond: Hydrographic Category = Perennial	10.08
23	Spectacle Lake	Lake/Pond: Hydrographic Category = Perennial	10.00
24	Canada Lake	Lake/Pond: Hydrographic Category = Perennial	7.90
25	Pratt Lake	Lake/Pond: Hydrographic Category = Perennial	5.94
26	Deep Lake	Lake/Pond: Hydrographic Category = Perennial	5.14
27	Robbins Pond	Lake/Pond: Hydrographic Category = Perennial	5.08

28	Chestnut Lakes	Lake/Pond: Hydrographic Category = Perennial	4.01
29	Bulls-Eye Lake	Lake/Pond: Hydrographic Category = Perennial	0.86

Response Strategies

#	Name	Count
1	Burns Harbor West	1
2	Indiana Dunes National Lake Shore	1

Response Strategies (Cont'd)

#	Name	Count
1	Burns Harbor West	1
2	Indiana Dunes National Lake Shore	1

Response Strategies (Cont'd)

#	Name	Strategy	Boom Length (Feet)	Shoreline Type	Location	Comments	Count
1	Burns Harbor West	Exclusion	5000	Sand or mud flats	Beach area W of Burns Harbor break wall. Boat staging from Burns Ditch Marina. Land access from Midwest Steel along US Hwy 12, Portage, IN. Contact facility for access.	Prevent spilled product from making landfall on protected beach. Anchor boom at shore on W end and break wall on E end. Location will depend on spill trajectory and weather.	1
2	Indiana Dunes National Lake Shore	Diversion	2000+	Sand or mud flats	Over 20 mi. shoreline between Burns Harbor and Michigan City. National Lakeshore at 1100 N Mineral Springs Rd., Porter, IN. Staging in Park parking lots. Boat access from Burns Ditch Marina or Washington Park Marina in Michigan City.	Deploy sets of diversion boom to minimize shore impact of spill. Determine spill trajectory and weather to guide strategy and boom needs. Wave conditions will severely impact exclusion booming.	1

APPENDIX D

Northwest Indiana Inland Zone Sub-Area

Habitat and Species Fact Sheets

Habitat Fact Sheets

Habitat Fact Sheets contain information regarding responses within a particular habitat. These fact sheets were developed by the Region 5 Regional Response Team and are available on rrt5.org under “[RCP/ACP Tools Habitat Fact Sheets](#)”. A complete list of available Habitat Fact Sheets is listed below and those specific to the Northwest Indiana Inland Zone Sub-Area are included in this appendix.

Beach and Sand Bar	Floodplain Forest	Shallow Marsh Annuals
Bog	Mudflats	Shallow Marsh Perennials
Calcareous Fern	Open Water	Shallow Marsh Shrub
Deep Marsh Annuals	Rooted Floating Aquatics	Submersed Vegetation
Deep Marsh Perennials	Sedge Meadow	Wet Meadow
Deep Marsh Shrub		

The following habitat fact sheets are included in this appendix:

Beach and Sand Bar

Bog

Calcareous Fern

Deep Marsh Perennials

Deep Marsh Shrub

Floodplain Forest

Mudflats

Open Water

Rooted Floating Aquatics

Shallow Marsh Perennials

Shallow Marsh Shrub

Submersed Vegetation

Wet Meadows

Species Fact Sheets

Species Fact Sheets contain information regarding responses that may impact a particular species. These fact sheets are available on rrt5.org under “[RCP/ACP Tools Species Factsheets](#)”. A complete list of available Species Fact Sheets is listed below and those specific to the Southeast Ohio Inland Zone Sub-Area are included in this appendix.

Beavers	Frogs and Toads	Toxic Plants
Freshwater Mussels	River Otters	Water Fowl

The following species fact sheets are included in this appendix:

Beavers

Freshwater Mussels

Frogs and Toads

River Otters

Toxic Plants

Water Fowl

*Species Fact Sheets for Turtles, and Herons & Egrets are being finalized by Department of Interior, Fish & Wildlife Service.

APPENDIX E

Northwest Indiana
Inland Zone Sub-Area Response Plans

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USCG Sector Lake Michigan Area Contingency Plan.....	2
State Response Plans	2
Indiana Standard Multi-Hazard Mitigation Plan	2
Tribal Response Plans	2
Local Response Plans	2
Private Sector Response Plans	3
BP Products North America, Inc.	3
Buckeye Partners LP	3
Buckeye Terminals, LLC	3
MPLX Terminals, LLC.....	3
Premcor Pipeline Company	3
Citgo Petroleum Corporation	3
Exxon Mobil Oil Corporation	3
Mobil Oil Corporation/sold Norco Pipeline	3
Enbridge Energy Company.....	3
SKORC Oil Recovery Company	3
United States Steel	3
Wolf Lake Terminals, Inc.....	3
Arcelormittal, Inc.	3
Arcelormittal Steel, Inc.	3
Tanco Terminals, Inc.....	3
Frick Services, Inc Liquid Terminal	3
Arcelormittal Burns Harbor, LLC.....	3
Other Response Plans	3
EPA Inland Response Tactics Manual	3
NPS Indiana Dunes National Park Preparation Plan	3

Federal Response Plans

Links to Federal Response Plans

EPA/USCG Joint Regional Contingency Plan/Area Contingency Plan

EPA Region 5 and the U.S. Coast Guard developed a joint [Regional Contingency Plan \(RCP\)/Area Contingency Plan \(ACP\)](#) to address releases of oil and hazardous substances. This RCP/ACP fulfills the requirements of Sections 300.210(b) and (c) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and Section 311(j)(4) of the Clean Water Act (CWA), as well as relevant portions of the National Response Framework, particularly Emergency Support Function #10—Hazardous Materials (ESF #10).

USCG Sector Lake Michigan Area Contingency Plan

The U.S. Coast Guard developed a [Coast Guard Sector Lake Michigan Area Contingency Plan](#) to address releases of oil and hazardous substances. This ACP provides for orderly and effective implementation of response actions to protect people, natural resources, and property in the Coastal Zone from the impacts of an actual or substantial threat of oil discharges or hazardous substances releases. The Plan details common roles, responsibilities, incident response planning process and resources management and principles and policy.

State Response Plans

Indiana Standard Multi-Hazard Mitigation Plan

In 2019, the State of Indiana developed a [Standard Multi-Hazard Mitigation Plan](#). The Plan describes key functions and responsibilities in the protection and preservation of life and property for both emergency and disaster situations.

Tribal Response Plans

Tribal Response Plan information is provided in Appendix I Tribal Fact Sheets.

Local Response Plans

Links to local response plans or county emergency management agencies are listed below.

County	Contact	Phone Number	Email	Plan Link
Lake County	Bob Walker, Lake County EMA Director	219-755-3549	--	2021 Multi-Hazard Mitigation Plan
LaPorte County	Robert Sabie, Emergency Management of Homeland Security Agency Interim Director	219-362-7210	rsabie@laporteco.in.gov	2016 Multi-Hazard Mitigation Plan
Porter County	Lance Bella, EMA Director	219-45-3490	lance.bella@porterco.org	2011 Multi-Hazard Mitigation Plan

Private Sector Response Plans

The following facilities in the planning area have FRPs on file with EPA.

Facility	Location	County
BP Products North America, Inc.	Whiting	Lake
Buckeye Partners LP	East Chicago	Lake
Buckeye Terminals, LLC	Hammond	Lake
MPLX Terminals, LLC	Hammond	Lake
Premcor Pipeline Company	Hammond	Lake
Citgo Petroleum Corporation	East Chicago	Lake
Exxon Mobil Oil Corporation	Hammond	Lake
Mobil Oil Corporation/sold Norco Pipeline	East Chicago	Lake
Enbridge Energy Company	Schererville	Lake
SKORC Oil Recovery Company	East Chicago	Lake
United States Steel	Gary	Lake
Wolf Lake Terminals, Inc.	Hammond	Lake
Arcelormittal, Inc.	East Chicago	Lake
Arcelormittal Steel, Inc.	East Chicago	Lake
Tanco Terminals, Inc.	Portage	Porter
Frick Services, Inc Liquid Terminal	Portage	Porter
Arcelormittal Burns Harbor, LLC	Burns Harbor	Porter

Other Response Plans

EPA Inland Response Tactics Manual

EPA developed an [Inland Response Tactics Manual](#) with general tactics to be applied during initial response to a spill of oil in fresh water.

NPS Indiana Dunes National Park Preparation Plan

The National Park Service (NPS) Spill Response Team has developed a Park Preparation Plan for the Indiana Dunes National Park. The plan provides an initial guide to federal, state, and local responders when an oil discharge or release of hazardous substances impacts or threatens to impact the Indiana Dunes National Park. Information pertaining to this plan can be accessed by contacting the National Parks Service Indiana Dunes contact provided in Section 5.5 Response Expertise.

APPENDIX F

Northwest Indiana

Inland Zone Sub-Area Resource Inventory List

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Federal Resources

Federal Resources Available for Response

EPA Region 5 Equipment Catalog

The EPA Region 5 Equipment Catalog details available response equipment including where the equipment is located in Region 5.

EPA Region 5 Emergency Response Capability

The EPA Region 5 Emergency Response Capability Catalog details the capabilities of EPA Region 5's Emergency Response Branch.

Agency	Equipment	Amount	Unit	Description	Location	Comment

State Resources

Agency	Equipment	Amount	Unit	Description	Location	Comment
IDEM						
IDNR						

Tribal Resources

Tribe	Equipment	Amount	Unit	Description	Location	Comment
Pokagon Band of Potawatomi Indians						

Local Resources

County	Equipment	Amount	Unit	Description	Location	Comment
Lake						
	Response Trailer	1	Trailer	22 feet		Two compartments; Comms. and meeting area
	Sandbagger	1	Sandbagger	Motorized	Trailer	Fill rate: 600 bags/hr
LaPorte						
	Containment boom	800	feet	6 inch	Michigan City - trailer	
	Absorbent boom	3000	feet	8 inch	Michigan City - trailer	
	Containment boom	200	feet	6 inch	LaPorte - warehouse	
	Ocean boom	1250	feet	24 inch	LaPorte - warehouse	Soon to be replaced with 6 inch boom
	Absorbent boom	4000	feet	5 inch	LaPorte - warehouse	4000' each or combined?
	Absorbent boom	4000	feet	8 inch	LaPorte - warehouse	4000' each or combined?
	Containment boom	800	feet	6 inch	Michigan City - trailer	
	Absorbent boom	3000	feet	8 inch	Michigan City - trailer	
	Containment boom	200	feet	6 inch	LaPorte - warehouse	
	Absorbent matting	3	rolls	150 foot	LaPorte - warehouse	
	Absorbent matting	1	rolls	900 foot	LaPorte - warehouse	For light oils
	Absorbent pad	6	bundles	16" x 18"	Response trucks	Distributed between 3 trucks (2 bundles ea.)
	Absorbent boom	240	feet	5 inch	Response trucks	Distributed between 3 trucks (80 ft. ea.)
	Absorbent matting	300	feet		Response trucks	For light oils; distributed between 3 trucks (100 ft. ea.)

	Absorbent matting	3	rolls	150 foot	LaPorte - warehouse	
Porter						
	Oil boom	400	feet	5 inch		
	Oil boom	400	feet	8 inch		
	Oil pad	150	pads			
	Overpack drum	4	drums	95 gallon		
	Overpack drum	1	drums	20 gallon		
	Overpack drum	1	drums	30 gallon		

Private Sector Resources

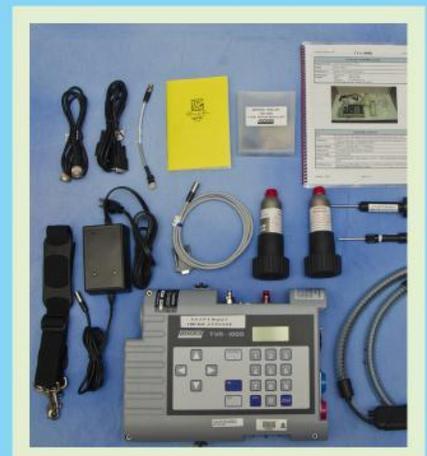
Facility	Equipment	Amount	Unit	Description	Location	Comment

Other Resources

Name	Equipment	Amount	Unit	Description	Location	Comment

USEPA REGION 5 FIELD EQUIPMENT CATALOG

(IL: Willowbrook, Chicago, Des Plaines, Marion. MI: Ann Arbor, Traverse City.
OH: Westlake, Cincinnati. IN: Indianapolis. WI: Green Bay. MN: St. Paul)



INTRODUCTION

This equipment catalog was developed by U.S. Environmental Protection Agency (EPA), Region 5 Superfund staff for the purpose of helping Region 5, Removal Program On-Scene Coordinators (OSCs) understand the types and quantities of field response equipment located throughout Region 5 and field services available to them through the Field Services Section (FSS).

The equipment presented in this catalog includes all Removal Program equipment at the following Region 5 locations*:

- Willowbrook Warehouse, Willowbrook, Illinois
- Chicago Office (5th floor equipment closet)
- Des Plaines, Illinois (back-up EOC)
- Ann Arbor, Michigan
- Westlake, Ohio
- Cincinnati, Ohio
- Green Bay, Wisconsin
- Indianapolis, Indiana
- Marion, Illinois
- Saint Paul, Minnesota
- Traverse City, Michigan

Equipment presented in this catalog includes items that are part of the National Equipment List (NEL). This catalog also presents a selection of other non-removal program equipment, such as trailers, that might be useful to OSCs.

To access Willowbrook Warehouse equipment, please visit the Warehouse Monday through Friday, 8:00 am to 5:00 pm, or call the warehouse at 630-481-5000. The Willowbrook Warehouse is located at 600-A Joliet Road, Willowbrook, Illinois.

To access equipment at Ann Arbor or Westlake, please call Jeff Borseth at 734-214-4899.

For all other inquiries concerning equipment at other locations presented in this catalog or the catalog itself, contact Steve Padovani, Chief, Field Services Section (FSS), Region 5 Superfund Division at 312-353-6755.

Please note, this catalog will be updated periodically to help ensure the inventory presented is current.

** The Region 5 Willowbrook Warehouse is the primary location for centrally managing the Region 5 Emergency Response Program's emergency response and removal assets. Staffs that support these effort responsibilities include but are not limited to; tagging, inventorying, tracking calibrating, maintenance and shipping of Region 5 response assets. Based on the Emergency Response Program Concept of Operations, a portion of the Region 5 equipment assets are decentralized and assigned directly and to their program office. Assigned equipment has been identified as critical to support the health and safety of OSCs and as the program's overall response mission.*

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1. ER RESPONSE HEALTH & SAFETY

This section presents descriptions of the following health, safety & PPE:

- 1-1. **Respiratory Protection**
 - a. **Air Purifying Respirator**
 - i. Scott AV 3000 Respirator
 - ii. Scott 420 Plus PAPR
 - b. **Air Supplied Respirator**
 - i. Scott Air Pack 4.5 SCBA
 - ii. SCBA with Supplied Air
 - iii. Level A Pass-Through Suit
 - c. **Breathing Air Filling Station (Air Trailer)**
 - i. Compressor, Breathing Air Filling Station
 - ii. Trailer, Breathing Air Filling Station
 - d. **Respiratory Protection Equipment Matrix**
- 1-2. **Cooling Vest, Isotherm**
- 1-3. **Hazmat Suit, Level A**
- 1-4. **Blood Pressure Monitor**
- 1-5. **Coveralls**
 - a. Tyvek
 - b. Saranex
 - c. Nomex
- 1-6. **Boot Covers, Latex**
- 1-7. **Thermometer, Infrared**
- 1-8. **Lightning Detector, Personal**
- 1-9. **Gloves**
 - a. Neox, Edmont, 9-922
 - b. Silver Shield, North
 - c. Butyl, North
 - d. Viton, North
 - e. Nitrile
 - f. Vinyl
 - g. Work
 - h. Nylon Foam, Winter Gloves

1. ER RESPONSE HEALTH & SAFETY

(Continued)

- 1-10. Rubber Boots**
- 1-11. Hard Hats**
- 1-12. Flotation Devices, Personal (PFD)**
- 1-13. Signage, Barricade Tape, Sticker Labels**
- 1-14. Sound Level Meter**
- 1-15 Ductless Fume System**

1-1. Respiratory Protection

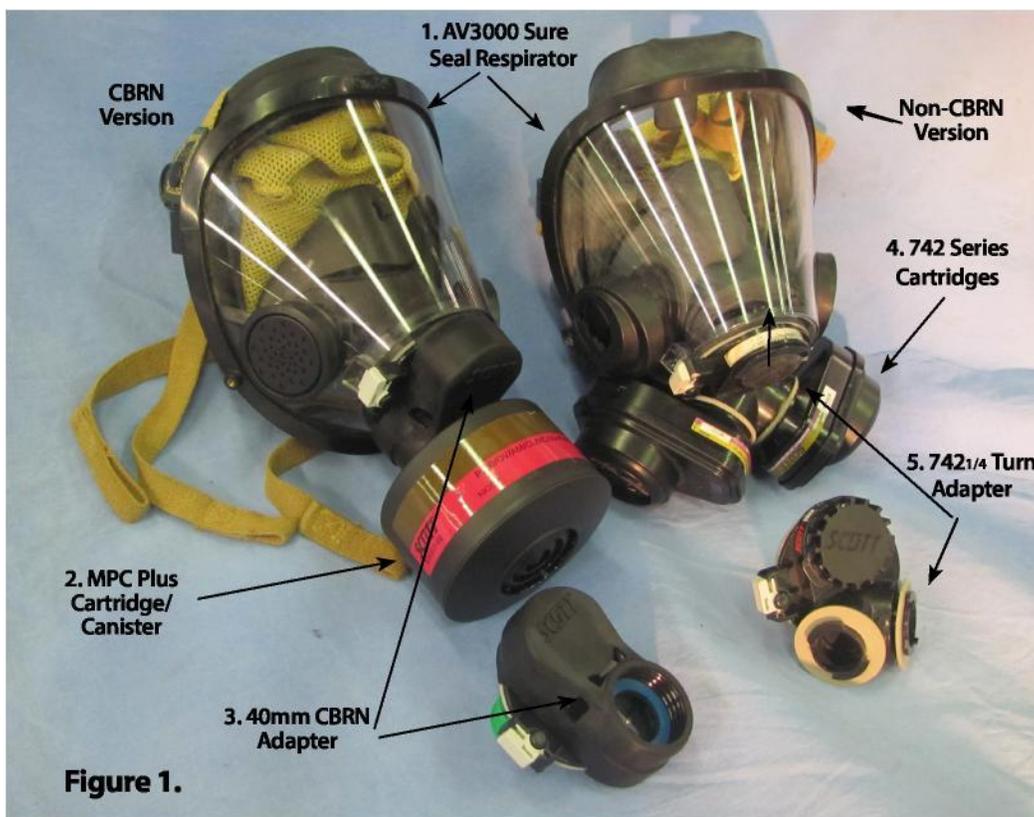
Description:

To promote consistency and interchangeability among EPA Emergency Responders, EPA has chosen Scott brand as the standard issue respirator. OSCs and support staff use tight fitting full face pieces as either negative pressure air purifying respirators (APR) or atmospheric supplying respirators (ASR). EPA Emergency Responders must choose from the EPA standard issue equipment unless the individual cannot achieve an acceptable fit test using the standard issue face piece. In these circumstances another brand of respirator may be substituted in accordance with guidance in EPA's Respiratory Protection Program. Each Region 5 OSC is assigned APR and ASR equipment. The following sections identify the standard issue respiratory protection equipment and their current configurations.

1-1.a. Air Purifying Respirator

1-1.a.i. Scott AV 3000 Respirator- Scott AV3000

Respirator consists of a sure seal face piece, a model 742 1/4 turn adapter configured with 742 series cartridges for operating in a non-CBRN environment; It also can be configured with a 40 mm CBRN adaptor and either a multi-purpose canister (MPC) or CBRN canister for operating in CBRN environment (Figure 1). The respirator can also be configured with a EPIC voice amplifier with the addition of a EPIC mounting bracket (Figure 2).



OSC Assigned APR Parts List;

Manufacturer: Scott Safety

1. AV 3000 Respirator w/ Sure Seal Face Piece P/N 31001738 (small) 31001739 (medium) 31001740 (large) (1 ea.)
2. MPC Cartridges or Canisters P/N 045170 (1 set)
3. 40 mm Adaptor P/N 805059-01
4. 742 Series Cartridges P/N 7422-SD1 (also see attached selection guide)
5. 742 ¼ Turn Adapter P/N 805622-01 (Twin Cartridge Model)
6. EPIC Voice Amplifier P/N 200261-01
7. EPIC Voice Amplifier Bracket P/N 200715-01



1-1.a.ii. Scott 420 Plus Powered Air Purifying Respirator Kit

The SCOTT C420 Plus respirator kit consists of a SCOTT AV 3000 Sure Seal respirator, a breathing tube to connect the face piece to the blower assembly, and a blower assembly with a fresh battery installed and fitted with two (2) matching filtration canisters/cartridges that are selected based on the contaminant of concern. A belt assembly supports the blower assembly on the user's waist. An Airflow Indicator which is used to check for minimum airflow is also provided. This configuration along with the CBRN CAP-1 canisters qualifies for Chemical, Biological, Radiological, and Nuclear (CBRN) approval status under the NIOSH standard.



Figure 3.

OSC Assigned C420 PAPR Parts List;

Manufacturer - Scott Safety

1. AV 3000 Respirator w/ Sure Seal Face Piece P/N 31001738 (small) P/N 31001739 (medium) 31001740 (large) (one per OSC)
2. MPC Cartridges or Canisters P/N 045170 (1 set) (see attached selection guide)
3. C 420 PAPR Kit P/N 200698-30 (1 ea.)
4. Batteries LiSO₂ P/N 805358-01 Nickel Metal Hydride P/N 31001504 (5.0 volt/5.8 amp) (1 ea.)
5. Air Flow Indicator P/N 805374-01(1 ea.)
6. Battery Charger P/N 200703-01(1 ea.)
7. 36-inch breathing tube, P/N: 200829-36
8. Belt assembly P/N 805359-01
9. Battery cap for Nickel Metal Hydride battery P/N 31001506 (1 ea.)

1-1.b. Air Supplied Respirator (ASR)

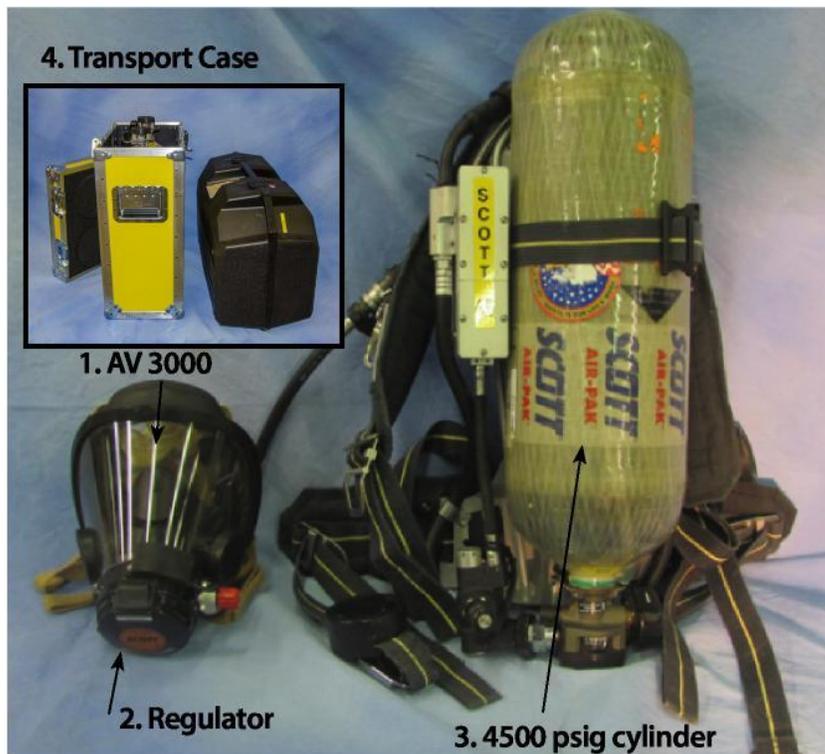
An ASR is required for high hazard environments, including those that are oxygen deficient (less than 19.5 % oxygen) or high concentrations of contaminants that create IDLH (Immediate Danger to Life and Health) conditions. Under IDLH conditions, the ASR must be configured to be either a full-face piece pressure demand self-contained breathing apparatus (SCBA) or as a full face piece pressure demand supplied air respirator (SAR) with an auxiliary self-contained air supply.

1-1.b.i.) Scott Air-Pak 4.5 SCBA Equipment

Set-Consists of an AV3000 Sure Seal respirator, a cylinder and valve assembly to store a supply of breathing air under pressure, a back frame and harness assembly to support the cylinder and valve assembly and pressure reducer on the body, a back frame mounted pressure reducer to supply the air to the breathing regulator, a remote pressure gauge mounted on the wearer's right shoulder strap and an air saver switch on top of the breathing regulator.

OSC Assigned SCBA Parts List

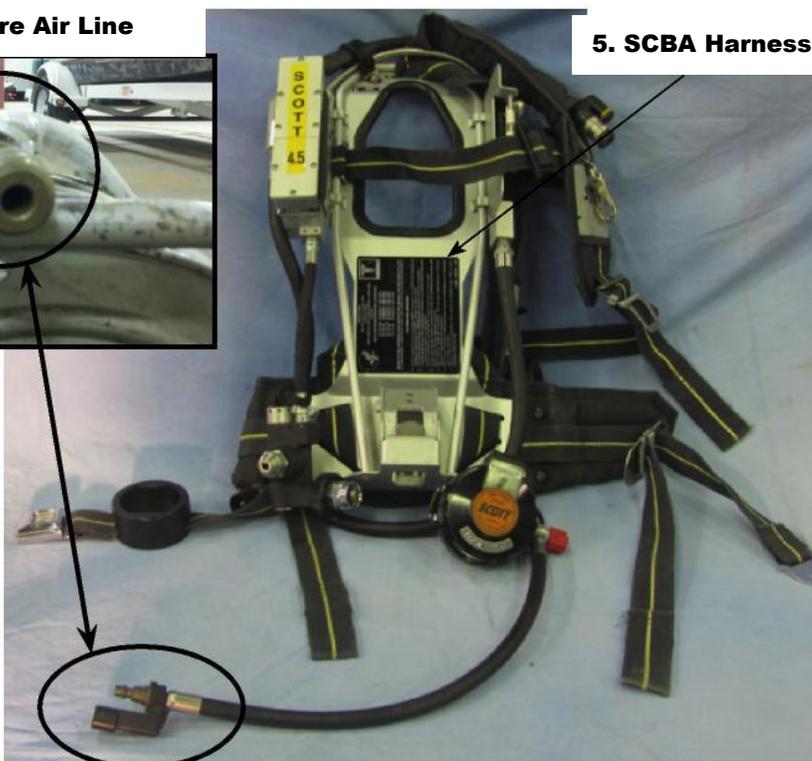
1. AV 3000 Respirator (same as above)
2. Regulator
3. 4500 psig Cylinders
4. Transport Case
5. SCBA Harness
6. Low Pressure Air Line



6. Low Pressure Air Line

1-1.b.ii.) SCBA w/ Auxiliary Supplied Air

The Scott mask mounted breathing regulator is equipped with a quick disconnect fitting in the low pressure air hose leading to the regulator. The quick disconnect enables the breathing regulator to be disconnected without the use of tools. This connection also enables the regulator to be supplied breathing air via a low pressure air line hose that is connected to a portable air source providing an uninterrupted supply of breathing air. The Region has configured a mobile air trailer to serve as a cylinder fill station or to provide an uninterrupted supply of breathing air. The Region 5 Air Trailer is maintained and mobilized by the Environmental Quality Management ERRS contactors location in Hammond, Indiana.



1-1.b.iii.) Level A Pass Through Suit

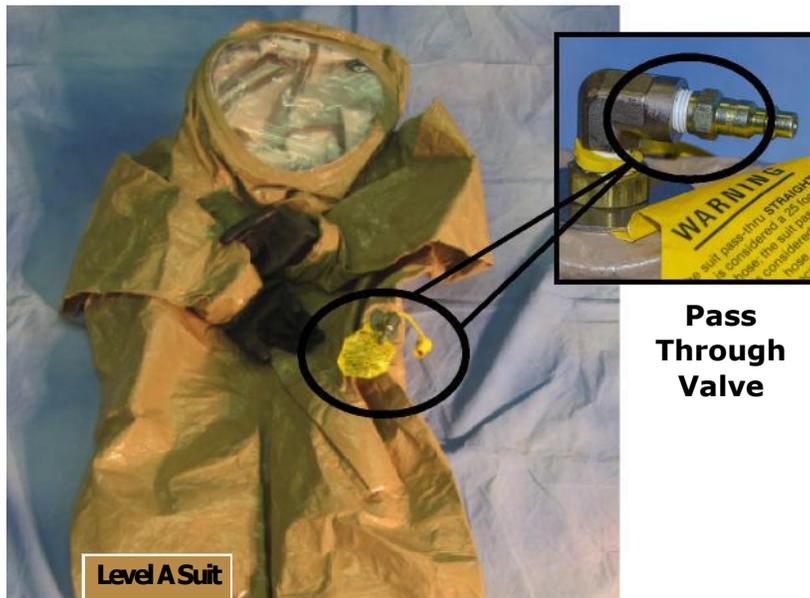
The Kappler/DuPont Tychem Responder Level A suits are designed with a pass through valve for direct connection to an uninterrupted supply of breathing air via a low pressure hose.

Quantity Available:

Willowbrook: 3

NOTE:

These suits are strictly for training purposes only.



Pass Through Valve

Level A Suit

1-1.c.) Breathing Air-Filling Station (Air Trailer)

This system is a 16-foot trailer that has been configured with Bauer CFSII 3M Air Compressor. This system utilizes a multistage air cooled compressor coupled to a water cooled diesel engine. The trailer provides protection from inclement weather and road debris. This system can be operated as a cylinder fill station or as a standalone system supplying an uninterrupted supply of breathing air through a low pressure air-line to an SCBA regulator. Operating as a cylinder fill station, it utilizes the multi-stage compressor to compress air to the correct pressure and filter out carbon monoxide, oil, water, taste and odor from the air to SCBA cylinders. Fill times will depend on the ambient temperature. Operating as a standalone system it utilizes the multistage compressor to compress and filter the ambient air. Air can be delivered directly from the compressor or through four 6000 psig storage cylinders located underneath the trailer. A high pressure line delivers the filtered air from the system to a junction box or splitter that connects to four individual low pressure air-line hoses and coupling assemblies. Each individual line is 300 feet in length. These low pressure lines connect directly to the SCBA regulator line. Performance checks on the air trailer are performed on a quarterly basis along with the collection of an air sample to verify Grade E air quality.

High Pressure Line

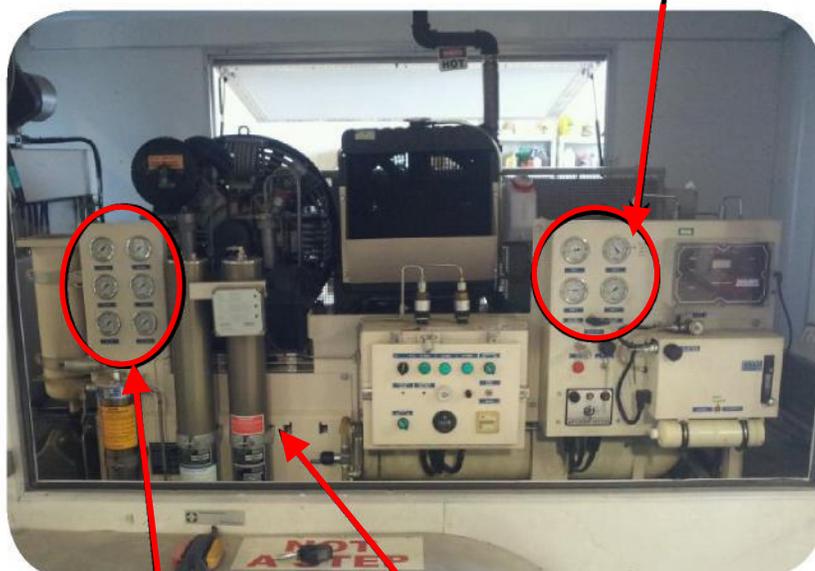


Cylinder Fill Station

Low Pressure Line

Also See Section 9-9.

Storage Cylinder



Compressor Gauges

Air Filtration System

1-1.d. Respiratory Protection Equipment Matrix

Respiratory Protection Surplus & Assigned Equipment Matrix													
Equipment		Program Office											
RP Equipment	P/N	Willowbrook (spare) [ER]	Chicago (spare)	Ann Arbor (spare)	Westlake (spare)	Des Plaines (spare)	Cincinnati	Green Bay	Indianapolis	St. Paul	Marion	Traverse City	Regional Totals (spare)
AV 3000 SS Respirator	805773-83	5	12	7	0	1	1	1	2	1	1	1	32
742 1/4 Turn Adaptor	805622-01	5	12	7	0	1	1	1	2	1	1	1	32
742 PF Cartridge (OV)	7422-SD-1	10	24	14	9	2	2	2	4	2	2	2	73
742 PF Cartridge (MV)	7422-2B-1	10	24	14	20	2	2	2	4	2	2	2	84
40 mm CBRN Adapter	200423-01	5	12	7	0	1	1	1	2	1	1	1	32
MPC 40PF (PAPR) Canister	45170	5	12	7	4	1	1	1	2	1	1	1	36
MPC Plus 40 mm Canister	905557-01	5	12	7	4	1	1	1	2	1	1	1	36
CBRN CAP-1 Canister	45135	5	12	7	8	1	1	1	2	1	1	1	40
C 420 PAPR Kit (CBRN)	200698-00	5	12	7	0	1	1	1	2	1	1	1	32
PAPR Hose	200829-36	5	12	7	0	1	1	1	2	1	1	1	32
Battery End Cap C420 PAPR	31001506	5	12	7	0	1	1	1	2	1	1	1	32
LiS02 Battery (PAPR)	805358-01	5	12	7	0	1	1	1	2	1	1	1	32
Ni Metal Hydride Batt. (PAPR)		5	12	7	0	1	1	1	2	1	1	1	32
Battery Charger	20073-01	5	12	7	0	1	1	1	2	1	1	1	32
SCBA 3.5 Harness		5	12	7	0	1	1	1	2	1	1	1	32
4500 psig Cylinder	10009672	5 (4) [1]	11 (5)	7 (4)	6 (3)	1 (0)	2	2	2	2	2	2	42 (16) [1]
Transport Case (yellow-Anvil)	804497	5	12	7	3	1	1	1	2	1	1	1	35
EPIC Comm Bracket	220715	5	12	7	0	1	1	1	2	1	1	1	32
EPIC Voice Amplifier	200261-01	5	12	7	0	1	1	1	2	1	1	1	32
EPIC Lapel MIC	200262-04	5	12	7	0	1	1	1	2	1	1	1	32
PTT Paddle Epic RI	200725-01	5	12	7	0	1	1	1	2	1	1	1	32

This Matrix is intended to identify surplus respiratory protection equipment in addition to equipment assigned to each OSC. Regional totals include OSC assigned equipment. There are currently 38 OSCs in Region 5.

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1-2. Cooling Vest

Manufacturer:

Bullard

Model:

Isotherm Cooling Vest

Quantity Available:

Willowbrook 8

Ann Arbor: 7

Westlake: 4

Description:

The Isotherm is a reusable cooling vest for field use in hot conditions. Torso cooling for approximately two hours for each insert sets.

1-3. Hazmat Suit, Level A



Manufacturer:

DuPont

Model:

Dupont Tychem TK

Quantity Available:

Willowbrook 4

Ann Arbor: 4

Westlake: 4

Description:

High performance encapsulated suit with attached gloves and socks.

(On National Equipment List)



1-4. Blood Pressure Monitor

Manufacturer: OMRON

Model: HEM-711 with Intelli sense

Quantity Available:

Willowbrook: 1

Description:

Automatic blood pressure monitor with display, arm cuff, storage bag, 14 memory storage. Includes AC adapter and digital oral thermometer.



1-5.a. Tyvek Coverall

Manufacturer: DuPont

Model: Tyvek coverall TY127SWH

Quantity Available:

Quantities of this item will vary over time at these locations.

Willowbrook, Chicago, Westlake

Description:

DuPont Tyvek® Coverall. Comfort Fit Design. Respirator Fit Hood. Elastic Wrists and Ankles. Elastic Waist. Serged Seams. White.



1-5.b. Saranex Coverall

Manufacturer: DuPont

Model: Tychem SLL22BG1, Chem Max 850

Quantity Available:

Quantities of this item will vary over time at these locations.

Willowbrook, Chicago, Ann Arbor

Description:

ChemMax® 2 offers quality, value, durability and the proven protection of Dow Saranex® 23P barrier film. Hood, storm flap over zipper, elastic face and wrists, attached boots

(see appendix G for permeation data)

1-5.c. Nomex Clothing

Manufacturer: Protexall, Rubin Brothers, Inc.

Model: Jackets, Nomex III Coverall

Quantity Available:

Quantities of these items will vary over time at this location.

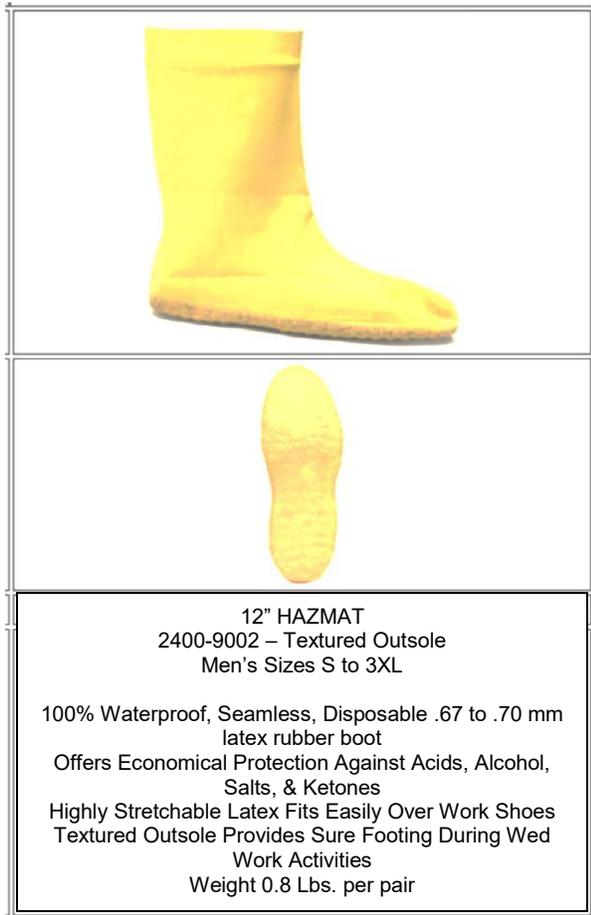
Willowbrook

Description:

Nomex clothing helps protect wearer from direct exposure to fire. Nomex won't melt or drip.



1-6. Latex Boot Covers



Manufacturer: Onguard

Model: 2400 9002

Quantity Available:

Quantities of this item will vary over time at these locations.

Willowbrook, Chicago, Ann Arbor

Description:

Textured outsole, 100% waterproof, seamless, disposable .67mm - .70mm latex rubber boot, highly stretchable latex fits easily over work shoes, textured outsole provides sure footing during wet work activities

1-7. Thermometer



Manufacturer: Fluke

Model: Infrared thermometer

Quantity Available:

Willowbrook: 1
Chicago: 1
Ann Arbor: 2
Westlake: 1
Cincinnati: 1
Green Bay: 1
Traverse City: 1

Description:

Handheld Infrared Thermometer with laser sighting. Temperature Range: -25° F to 1600° F. Close Focus for measuring small surfaces down to 1/4 in. Measuring distance: 0 to > 40 Ft.; 2 AA alkaline batteries; Weight: 1 lb. 6 oz.



1-8. Personal Lightning Detector

Manufacturer: Strike Alert

Model: LD-1000 Personal Lightning Detector

Quantity Available:

Willowbrook: 6

Ann Arbor: 2

Description:

Strike Alert provides an early warning of approaching lightning strikes, and lets you know if the storm is coming your way. The detector is housed in a small pager-like casing that can be clipped on a belt loop.

1-9. Gloves



Manufacturer: Various

Model: Nitrile Glove, Gauntlet Supported, Gauntlet Unsupported, Standard Unsupported, Exam Unsupported.

Quantity Available: Quantities of these items will vary over time at these locations.

Willowbrook, Ann Arbor

Description: Nitrile gloves are disposable gloves made of synthetic rubber. They contain no latex proteins and offer excellent resistance to wear and tears. Nitrile gloves are more puncture resistant

than many other types of rubber gloves and can be used to offer superior resistance to many types of chemicals. They are often considered to be one of the strongest types of disposable glove and are generally safe for people who are allergic to latex.

1-9.a. Edmont Neox Glove 9-922

Manufacturer: Edmont Neox Glove 9-922

Model: 9-922 wet/dry, chemical resistant black glove with gauntlet cuff.

Quantity Available: Quantities of this item will vary over time at this location. Willowbrook

Description: Black chemical resistant glove made of neoprene coating. Use for handling specialty chemicals such as: oils, acids, caustics, alcohols, petrochemicals.



1-9.b. North Silver Shield Glove

Manufacturer: North Silver Shield Glove

Model: Silver Shield Glove

Quantity Available: Quantities of this item will vary over time at this location. Willowbrook

Description: Resistant to over 280 different chemicals, including alcohols, aliphatics, aromatics, chlorines, ketones and esters - Provides high performance protection in the most demanding applications.

Economical - Disposable glove, no need for cleaning and re-cycling.

No latex or chemical accelerators - Little or no allergic reactions.

Ambidextrous design for single glove use. Single glove can be discarded without wasting a pair.

Can be used as a secondary inner glove - Allows worker maximum protection in heavy duty jobs where the dangers of mechanical damage to gloves are high.



1-9.c. North Butyl Gloves



Manufacturer: North by Honeywell

Model: Butyl Gloves

Quantity Available: Quantities of this item will vary over time at this location.

Willowbrook:

Description: Black chemical gloves with highest permeation resistance to gas & water vapor for greater worker protection, especially when handling toxic substances.

Highly resistant to ketones (MEK, MIBK, acetone) and esters (tricresyl phosphate, amyl acetate, ethyl acetate).

Flexible and sensitive, even at lower temperatures.

Curved finger and hand design provides a better fit for greater worker comfort.

1-9.d. Viton Glove, North



Manufacturer: North

Model: F-124 Viton Glove

Quantity Available: Quantities of this item will vary over time at this location. Willowbrook

Description:

North Viton® - Unsupported Gloves

Unsurpassed performance against chlorinated & aromatic solvents.

Features and Benefits

- Excellent chemical resistance to chlorinated and aromatic solvents.
- Can be used in water-based solvents without dissolving.
- Superior resistance to PCBs.
- Curved finger and hand design provides a better fit for greater worker comfort.



1-9.f. Vinyl Gloves

Manufacturer: Various

Model: Disposable Vinyl Glove

Quantity Available: Quantities of this item will vary over time at these locations.

Willowbrook, Ann Arbor

Description: Medical grade quality One size fits all, ambidextrous Powder-free to reduce dry skin irritation



1-9.g. Work Gloves

Manufacturer: Various

Model: Work Glove

Quantity Available: Quantities of this item will vary over time at this location.

Willowbrook

Description: Cotton gauntlet style glove with leather palm and fingers



1-9.h. Nylon Foam Gloves (winter)

Manufacturer: Wells-Lamont

Model: CF2179 Bemac Flambeau Winter Glove

Quantity Available: Quantities of this item will vary over time at this location.

Willowbrook

Description:

Bemac Flambeau Glove

PVC with Sandy finish

Orange/Red

Knit Wrist Cuff

Heavy Weight Nylon Foam Removable Washable Liner



1-10. Rubber Boots

Manufacturer: Various

Model: Various

Quantity Available:

Quantities of these items will vary over time at these locations.

Willowbrook, Chicago,
Ann Arbor

Description: Rubber boots,
steel toe.



1-11. Hard Hats

Manufacturer: Various

Model: White cap style 4 point
snap lock and white full brim
with two connecting points for
chin strap.

Quantity Available: Quantities
of these items will vary over
time at these locations.

Willowbrook, Chicago,
Ann Arbor, Westlake

Description: Adjustable, one size fits all construction workplace environment hard hats constructed from high density polyethylene plastic. Meets OSHA requirements. Cap type hat commonly used for general purpose work environments while full brim is used inside Level A suits to keep a gap area around the head area.

1-12. Personal Flotation Devices (PFD)

Manufacturer: Various

Models:

Type I off-shore life jacket (back row),
Type IV throw-able device (front row left),
Type V near-shore work vest (front row middle)
Inflatable suspender vest Type A/M/24 (front row right).

Quantity Available: Quantities of these items will vary over time at these locations.

Willowbrook, Chicago, Des Plaines, Ann Arbor, Westlake, Cincinnati, Green Bay, Indianapolis, Marion, Saint Paul, Traverse City.

Description:

Water flotation devices for working on open water or near open water. PFDs are available in different sizes to accommodate variances in body weight. Check specification label before use. Note: Certain jobs or work platforms may require special PFD's.





1-13. Signage, Banner Guard and Sticker Labels



Model: N/A

Quantity Available: Quantities of these items will vary over time at these locations.

Willowbrook:

Banner guards include:

"Danger Asbestos"

"Caution"

"Hazardous Materials Do Not Enter"

Stickers include:

"Hazardous Waste"

"Flammable Liquid"

"Flammable Gas"

"Flammable Solid"

"Poison"

"Poison Gas"

Ann Arbor: Rolls of caution tape, plus, other various rolls.

Description:

Various signs, banners & Stickers as shown. Designs are mostly made of metal or fiberglass.

"Exclusion Zone" signs are made of cardboard.

NOTE: Lost or damaged signs while on-site must be replaced using site specific funds.

1-14. Sound Level Meter



Manufacturer: BAFX Products

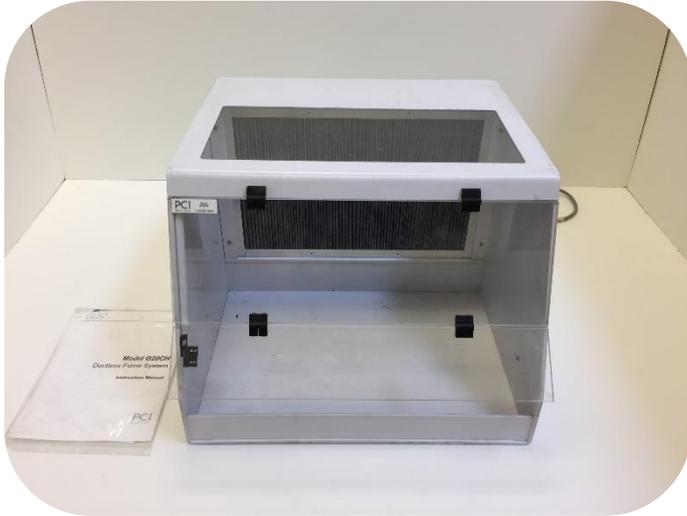
Model: 05-SLM 001

Quantity Available:

Willowbrook: 1

Description:

Measurement range 30dB to 130dB in dBA & dBC frequencies, internal storage capacity of 4,700 data points, includes analysis software for Windows XP, Accuracy within +/-1.5 dB, adjustable sample rate reset to 20x/second, requires 4 AA batteries, also 6V DC wall adapter option (but not part of this kit).



1-15. GUS[®] Ductless Fume System with Three Phase Filter

Manufacturer: PCI Medical

Model: G20CH

Quantity Available: Westlake: 1 system

Description:

A ductless fume system used as a safe environment for processing toxic chemicals. Dangerous fumes are drawn away from staff using a three-phase filter (See below figure). Two layers of filter are

composed of a patented carbon media that absorbs chemical fumes. Air then passes through a high efficiency particulate air (HEPA) filter that is 99.99% efficient at 0.3 microns.

Dimensions: 16" x 21" x 27" at 38 lbs.



Filter

Type: Combo Heap and Activated Carbon

Dimensions: 18.75" x 12.125" x 3.5"

2. ER HAZMAT

This section presents descriptions of the following ER Hazmat equipment:

2-1. Mercury Vapor Analyzer

- a. Lumex 915 Plus Atomic Absorption Spectrometer**
- b. Lumex RA-915M Atomic Absorption Spectrometer**
- c. Jerome 431-X, Gold Film Sensor Method**
- d. Jerome J505, Atomic Fluorescence Spectroscopy**

2-2. Chemical Analyzer, Chip Measurement System

2-3. Elemental Analysis, X-Ray Fluorescence

- a. Innov-X Alpha 4000 SL**
- b. Innov-X Delta DP-4000**
- c. Bruker S1 Titan 600**
- d. Olympus Vanta VMR**

2-4. Multi Threat Monitoring Devices

- a. MultiRAE Pro**
- b. AreaRAE**
 - i. AreaRAE Enclosures**
- c. AreaRAE Pro**
- d. AreaRAE Sensor Conditioning Stations**
- e. Portable Radio-Frequency Modem for RAE Systems**
- f. Calibration Gases**

2. ER HAZMAT

2-5. Multi Gas Monitoring Devices

- a. Photoionization Detector, UltraRAE PGM-7360**
- b. Photoionization Detector, MultiRAE Benzene**
- c. PID/FID, Toxic Vapor Analyzer, TVA-2020**
- d. Colorimetric Tape Target Gas Monitor, SPM Flex**

2-6. Particulate Monitors

- a. Portable DataRAM, PDR1500**
- b. DustTrak DRX Handheld 8534**
- c. DustTrak II, 8533EP**

2-7. Hydrogen Sulfide Monitor

2-1. Mercury Vapor Analyzer



2-1.a. Atomic Absorption Spectroscopy Analyzer

Type:

Atomic Absorption Spectrometer

Manufacturer:

Lumex

Model:

RA-915+ Mercury Analyzer

Quantity Available:

Ann Arbor: 1

Cincinnati: 1

Traverse City: 1

Description:

The RA-915+ is a portable Zeeman Mercury Analyzer. It is a portable spectrometer designed for interference free analysis/monitoring of mercury content in ambient air. Measures Mercury concentrations in ppb. Powered by an internal rechargeable battery. Weighs 7.5 kg.



2-1.b. Atomic Absorption Spectroscopy Analyzer

Type:

Atomic Absorption Spectrometer

Manufacturer:

Lumex

Model:

RA-915M Mercury Analyzer

Quantity Available:

Chicago: 1

Westlake: 1

Description:

The RA-915M Mercury Analyzer is a portable multifunction atomic absorption spectrometer with Zeeman background correction, which eliminates the effect of interfering impurities. Powered by an internal rechargeable battery that provides up to 12 hours of operation. Weighs 7 kg.

2-1. Mercury Vapor Analyzer



2-1.c. Gold Film Analyzer

Type:

Gold Film

Manufacturer:

Arizona Instrument

Model:

Jerome 431-X Mercury Analyzer

Quantity Available:

Willowbrook: 1

Ann Arbor: 1

Westlake: 1

(On National Equipment List)

Description:

The 431-X is a portable handheld gold film Mercury Vapor Analyzer. It measures Mercury concentrations in ppm. Powered by internal rechargeable battery. Weighs 7 lb.



2-1.d. Atomic Fluorescence Spectroscopy Analyzer

Type:

Atomic Fluorescence Spectroscopy

Manufacturer:

Jerome

Model:

J 505

Quantity Available:

Willowbrook: 1

Indianapolis: 1

(On National Equipment List)

Description:

A portable fluorescence spectroscopy analyzer which has a simpler, smaller and lighter weight detection cell than other spectroscopy instruments. Has less interferences than those units using atomic absorption method. Weight 7 lbs.



2-2. Chemical Analyzer

Manufacturer:

Dräger

Model:

CMS Analyzer

Quantity Available:

Willowbrook: 2

Ann Arbor: 1

Westlake: 1

(On National Equipment List)

Description:

The CMS (Chip Measurement System) is a portable handheld electronic colorimetric grab sampling system. Uses compound specific colorimetric chips (10 samples per chip) and provides concentration measurements in parts per million. Currently 56 compound sensitivity specific chips available for this system. Internal data logger. Alkaline battery powered for mobility (7 hour run time).

SPECIAL NOTE: We no longer stock colorimetric chips, due to low turnover, so chips must be purchased by user.

2-3. Elemental Analysis, X-Ray Fluorescence



2-3.a. Elemental Analysis XRF Alpha-4000

Manufacturer:
Olympus/Innov-X

Model:
Alpha 4000 SL XRF

Quantity Available:
Willowbrook: 1
Ann Arbor: 1

Description:

The alpha-4000 is a handheld X-ray Fluorescence Analyzer. It is used to detect metals in soils and other media. Powered by removable rechargeable battery packs with 8 hour run time. Weighs 2.625 lbs.



2-3.b. Elemental Analysis XRF DP-4000

Manufacturer:
Olympus/Innov-X

Model:
Delta DP-4000 XRF

Quantity Available:
Willowbrook: 2

Description:

The Delta DP-4000 is a handheld X-Ray Fluorescence Analyzer. The DP-4000 detects metal contaminants in soils and other media. One unit is equipped with the Lead Paint Module which makes it capable of detecting elemental lead in paint analysis. The unit is powered by a rechargeable battery pack or by external power in the charging/sampling cradle.



2-3.c. Elemental Analysis XRF S1 TITAN 600

Manufacturer:

Bruker

Model:

S1 TITAN 600

Quantity Available:

Ann Arbor: 1

Westlake: 1

Description:

The SI Titan is a light handheld X-ray Fluorescence Analyzer. It is used to detect metals in soils and other media. Powered by removable rechargeable battery packs with 8-10 hours run time. Weighs 3.3 lbs.



2-3.d. Elemental Analysis XRF VANTA VMR

Manufacturer:

Olympus

Model:

Vanta VMR

Quantity Available:

Willowbrook: 2

Description:

The Vanta VMR handheld X-ray Fluorescence Analyzer features the Olympus "new Axon" technology, providing a faster and accurate elemental analysis. Data is easily exported via Wi-Fi, Bluetooth, or USB. Unit is powered by removable rechargeable 14.4 V. Li-ion battery or 18V power transformer 100-240 VAC, 50-60 Hz. Weighs 3.39lbs.

2-4. Multi Threat Monitoring Devices

2-4.a. MultiRAE Pro



Manufacturer:

RAE Systems

Model:

MultiRAE Pro PGM-6248

Quantity Available:

Willowbrook: 3
Chicago: 3
Green Bay: 1
Ann Arbor: 3
Indianapolis: 1
Westlake: 2
St. Paul: 1
Cincinnati: 1
Marion: 1
Des Plaines: 1

(On National Equipment List)

Description:

The MultiRAE PRO is a portable handheld wireless Multi Threat Monitor. It's configuration allows it to monitor Oxygen Level, Lower Explosive Limit (LEL) of combustible gases and vapors, Volatile Organic Compounds (VOCs), 2 Toxics (CO and H₂S installed) and Gamma radiation. It has a selection of 20 different interchangeable electrochemical sensors available for toxic compounds. VOC sensor detects concentrations in ppb. The Gamma sensor has a range of 0 to 20,000 μ REM/h with a resolution of 1 μ REM/h. The dose range is 1 μ REM to 4.29 REM.



2-4.b. AreaRAE

Manufacturer:

RAE Systems

Model:

AreaRAE Rapid Deployment Kit (RDK)

Quantity Available:

Willowbrook: 2
Ann Arbor: 1
Chicago: 1
Westlake: 1

(On National Equipment List)

Description:

The AreaRAE Rapid Deployment Kit is a wireless remote multigas monitoring system. The kit comes with 4 PGM5020 ruggedized, battery powered multi gas monitors with built in radio transmitters. The ruggedized host controller (laptop w/ receiver) running ProRAE Guardian software can track and monitor readings up to two miles away. The monitors can detect Oxygen Level, Lower Explosive Level, Volatile Organic Compounds, and two different selectable toxic compounds at ppm concentrations (standard confined entry configuration includes Hydrogen Sulfide and Carbon Monoxide Sensors). Additional monitors with the same radio channels can be used with the system (up to 64 units simultaneously).

2-4.b.i. AreaRAE Enclosures



Manufacturer: L-Com

Model: NBE 141006 14" x 10" x 6" two latch lockable enclosure

Quantity Available:

Willowbrook: 20

Ann Arbor: 4

Description: Associated parts: Band-IT mini Brak-ITS flared leg D31099; 40" x 0.5" SS quick release worm gear damp and 4 number combination lock.

Note: Units are currently being evaluated for excess.



2-4.c. AreaRAE PRO

Manufacturer:

RAE Systems

Model:

AreaRAE PRO Rapid Deployment Kit

Quantity Available:

Willowbrook: 1

Westlake: 1

START-Chicago: 1

START-Detroit: 1

START-Westlake: 1

(On National Equipment List)



Description:

The AreaRAE PRO Rapid Deployment Kit is a wireless area monitor kit that can detect toxic and combustible gases, VOC levels and meteorological factors that can determine the speed and direction of the threats. The kit includes 4 GPS enabled AreaRAE PRO Monitors, PGM-6560D. The ruggedized host controller (laptop w/ receiver) running PRORAE Guardian software can track and monitor readings up to 2 miles away. Additional monitors with the same radio channels can be used with the system, up to 64 units simultaneously.

2-4.d. AreaRAE Sensor Conditioning Stations



Manufacturer: RAE Systems

Models: SensorRAE 4R+ and SensorRAE

Quantity Available:

Willowbrook: 1 of each

Westlake: 2 of each

Description: AreaRAE sensor warming and conditioning station for either 4 or 6 sensors allowing for immediate deployment. Case is ruggedized and waterproof for storing and transporting sensors.

2-4.e. Portable Radio-Frequency Modem for RAE Systems



Manufacturer: RAE Systems

Model: RLM-3001

Quantity Available:

Willowbrook: 15

Westlake: 1

START-Chicago: 2

START-Detroit: 2

START-Westlake: 2

(On National Equipment List)

Description:

Provides long-range wireless communication between remote portable air monitors (MultiRAE Pro, AreaRAE, UltraRAE) and a base station or computer for comprehensive monitoring. 3 Configuration modes: Remote, Host, Repeater.

2-4.f. Calibration Gases

Manufacturer: Various

Model: Various

Quantity Available:

Varies per usage & expiration dates.
All R5 offices and out-stationed OSCs
expected to have available stocks.

SPECIAL NOTICE:

Calibration must be conducted with
gases that fall within acceptable usage
dates. **GAS CANISTERS CANNOT BE
SHIPPED/TRANSPORTED ON
AIRCRAFT.**

Description:

Used to calibrate monitoring sensors.



Typical gas requirements shown below:

<u>COMPONENTS</u>		<u>CONCENTRATION</u>
ARGUS-HAZCO	Part No.	GD34-092-N-58A
Hydrogen Sulfide (H2S)		10 ppm
Carbon Monoxide (CO)		50 ppm
Methane (CH4)		50% LEL
Oxygen (O2)		18%
Nitrogen (N2)		Balance
ARGUS-HAZCO	Part No.	58L-252-10
Chlorine (Cl2)		10 ppm
Nitrogen (N2)		Balance
ARGUS-HAZCO	Part No.	58L-HCN-10
Hydrogen Cyanide (HCN)		10 ppm
Nitrogen (N2)		Balance
ARGUS-HAZCO	Part No.	58L-PH3-5
Phosphine (PH3)		5 ppm
Nitrogen (N2)		Balance
ARGUS-HAZCO	Part No.	GD01-004-N-58A
Ammonia (HCN)		50 ppm
Nitrogen (N2)		Balance
ARGUS-HAZCO	Part No.	GD37-001-A-1035
Isobutylene (C4H8)		100 ppm
Air		Balance

Note: Other brand names may be available

2-5. Multi Gas Monitoring Devices

2-5.a. Photoionization Detector, UltraRAE



Type:
Photoionization Detector

Manufacturer:
RAE Systems

Model:
UltraRAE 3000 PGM-7360

Quantity Available:
Willowbrook: 2
Ann Arbor: 2
Westlake: 1

Description:

The UltraRAE 3000 is a portable handheld compound-specific VOC Monitor. It is a Photoionization Detector that has an extended range of 0.05 to 10,000 ppm in VOC Mode and 50 ppb to 200 ppm in benzene-specific mode. Uses RAE-Sep tubes for detecting specific compounds. Comes with 9.8 eV UV lamp and is powered by a Li-Ion battery pack with 16 hour run time. Weighs 26 oz.

2-5.b. Photoionization Detector, MultiRAE Benzene



Type:
Photoionization Detector

Manufacturer:
RAE Systems

Model:
MultiRAE Benzene

Quantity Available:
Willowbrook: 2

Description:

The MultiRAE Benzene is a wireless portable six gas Monitor with Benzene-Specific Measurement. It is a Photoionization Detector that has an extended range of 0 to 2,000 ppm in VOC Mode and 0 ppm to 200 ppm in benzene-specific mode. Uses Benzene RAE-Sep Tube Cartridges. Comes with 9.8 eV UV lamp and is powered by a Li-Ion battery pack with 18 hour run time. Weighs 31oz.



2-5.c. PID/FID Toxic Vapor Analyzer

Type:

FID/PID

Manufacturer:

Thermo Scientific

Model:

TVA2020 Toxic Vapor Analyzer

Quantity Available:

Willowbrook: 1

Ann Arbor: 1

Westlake: 1

Description:

The TVA 2020 is a portable combination Photo Ionization Detector/Flame Ionization Detector (FID/PID). The detectors can be used separately or simultaneously. The PID can detect Organic Vapors in a range from 0.5 to 500 ppm while the FID can detect Organic Vapors in a range from 1.0 ppm to 10,000 ppm. The FID allows detection of higher ionization potential VOCs than the PID cannot detect. The unit weighs 9.4 lb. and has a typical run time of 10 hours minimum on battery power. These units come with a handheld probe with measurement display and function buttons.



2-5.d. Colorimetric Tape Gas Monitor

Type:

Colorimetric Tape

Manufacturer:

Honeywell

Model:

SPM Flex

Quantity Available:

Westlake: 1

START-Chicago: 2

START-Detroit: 2

START-Westlake: 1

Description:

The Single Point Monitor (SPM) is a portable fast response monitor for the detection of a target gas. Uses compound specific colorimetric tape (not included) to provide concentration values in parts per billion. Tapes have short shelf life and are purchased as needed. Powered by internal rechargeable battery pack. Weight 9.1 lbs.

2-6. Particulate Monitors



2.6.a. DataRAM, Portable

Manufacturer:

Thermo Scientific

Model:

pDR 1500 DataRAM

Quantity Available:

Willowbrook: 1

Ann Arbor: 2

Westlake: 1

Description:

Personal data ram. Portable real time particulate monitor. Pump has flow range of 1.0 to 3.5 μ m. Maximum response range of 0.1 to 10 μ m. Cut point range 1 to 10 μ m. Available with cyclone pairs of PM10/PM4 and PM2.5/PM1. Run time on a set of alkaline batteries: 1.2 μ m > 24 hrs and 3.5 L/min > 6 hrs. Weight: 41 oz.



2-6.b. DustTrak DRX Handheld

Manufacturer:

TSI Incorporated

Model:

8534

Quantity Available:

Willowbrook: 2

Ann Arbor: 1

Westlake: 1

Description:

The DustTrak DRX handheld monitor is a battery operated, data-logging, light-scattering laser photometers that gives you real-time aerosol mass readings. The aerosol monitor can simultaneously measure size-segregated mass fraction concentrations corresponding to PM1, PM2, Respirable, PM10 and total PM size fractions. The internal rechargeable battery provides a battery runtime of up to 6 hours. Unit weight is 3.3 lbs.

2-6.c. DustTraK II Desktop

Manufacturer:

TSI Incorporated

Model:

8533EP

Quantity Available:

Willowbrook: 16

Description:

Measures Atmospheric particulate matter (PM) or particulates using 90° light scattering method.

Includes:

External pump kit, inlet heater, battery pack/charger and tripod.

Viper System compatible.

Size segregated Mass Functions for PM₁, PM_{2.5}, Respirable (PM₄), PM₁₀, and Total.

Contacts: Jim Mitchell 312-353-9537, Brian Cooper 312-353-8651



Particle size range 0.1 to approximately 15 μm
(see chart below-blue zone).





2-7.0 H2S Sensor

Manufacturer:

Interscan

Model:

Single gas monitor

Quantity Available:

Willowbrook: 2

Description:

Single gas monitor. Includes H₂S sensor. Measures to ppb.

Note: The Sensors in these units need to remain wet and once they dry out, they will need to be replaced. The sensors will need to be purchased by the user. The single gas monitor is a good candidate for site work, but not for Emergency Response.

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3. ER CHEMICAL WARFARE AGENT DETECTORS

This section presents descriptions for various chemical agent detector equipment:

3-1. Proengin AP2Ce (Flame Spectrophotometer)

3-2. Colorimetric Chemical Agent Detectors

a. Dräger CDS Simultantest (colorimetric)



3-1. Flame Spectrophotometer

Type:

Flame Spectrophotometer

Manufacturer:

Proengin

Model:

AP2Ce

Quantity Available:

Westlake: 1

Ann Arbor: 1

Willowbrook: 1

Description:

The AP2Ce is a portable handheld Chemical Agent Detector. It is a Flame Spectrophotometer that detects sulfur and phosphorus atoms and can be used to monitor for chemical agents GA, GB, GD, GF, HD and Vx. It is a ruggedized, simplified military type instrument that can detect agents in all forms: vapor, aerosols, droplets, dust agents and frozen agents. The AP2Ce runs off a rechargeable battery pack or disposable Li-Ion batteries. The unit weighs 4.5 lb. The hydrogen source to operate the detector is included in the case.



3-2.a. Chemical Detector, Dräger

Type:

Colorimetric

Manufacturer:

Dräger

Model:

CDS Simultantest

Quantity Available:

Willowbrook: 1

Ann Arbor: 2

Cincinnati: 1

Description:

Dräger CDS Simultantest Kit (Civil Defense System) colorimetric sampling detects precursors to chemical agents.

SPECIAL NOTE: Colorimetric tubes have short shelf life and are not stocked. User must purchase tubes for specific site applications.

4. ER BIO-RESPONSE

4-1. Biological Sampling Supplies

4-1. Biological Sampling Supplies

NOTE: Check with laboratory before sample collection to ensure the laboratory will accept the material. Although these materials have been vetted with the laboratory response network (LRN) individual laboratories may not accept the type of sample. Check the expiration date prior to use.



Type: Wipe Samples

Quantity Available:

Willowbrook:	50
Cincinnati:	25
Westlake:	25

Description: The sponges are sterile and pre-wetted with a neutralizing buffer solution and has been approved for use by the laboratory response network (LRN) for general biological sampling. These wipes are the same wipes provided for BioWatch Phase 1 sampling (Anthrax, Plague, Tularemia, etc) and have been used for Ricin. After wipe sample is collected, the sponge is put into a sterile specimen container.

Type: Packing Material

Quantity Available:

Willowbrook:	50
Cincinnati:	25
Westlake:	25

Description: Sterile Specimen cups for packing the wipe sample. Parafilm is available to wrap around the lid to ensure the lid does not come loose after sampling.



Type: Air Samples (MCE Filter)

Quantity Available:

Willowbrook:	30
Cincinnati:	10
Westlake:	10

Description: Sterile MCE filter sample cassette. Appropriate for air sampling for biological agents. **Requires a low flow sample pump and tubing for use.**

5. ER RADIATION RESPONSE

- 5-1. Health & Safety
 - a. Thermoluminescent Dosimeter (TLD)
 - b. Electronic Personal Dosimeter (EPD)
- 5-2. OSC Response Kits
 - a. Case 1 - Exposure Rate Monitoring
 - i. Model 192 Micro R Exposure Rate Meter
 - b. Case 2 - Contamination and Exposure Rate Monitoring
 - i. Model 2241-3 Survey Meter
 - 1. Model 133-2 Gamma Exposure Rate Probe
 - 2. Model 44-9 Pancake GM Probe
 - 3. Model 43-90 Alpha Scintillator Probe
- 5-3. OSC Response Kit Wallet Card
- 5-4. Removal Support
 - a. Contamination Monitoring
 - i. Model 2241-2 Survey Meter with 44-9 Pancake GM and 43-90 Alpha Scintillation Probes (“ABG” Case)
 - ii. Model 2241 Survey Meter with 44-9 Pancake GM Probe (“BG” kit)
 - b. Exposure Rate Monitoring
 - i. Fluke 451B Ion Chamber
 - ii. Personal Radiation Monitors
 - c. Air Sampling
 - i. H-810 Air Sampler
 - d. Air and Wipe Sample Counting
 - i. Model 3030 Alpha/Beta Counter
 - e. Radioisotope Identification
 - i. SAM-940 Radioisotope Identifier (RIID)
 - f. Gamma Count Rate Monitoring
 - i. Model 2221 with Model 44-10 2” x 2” NaI Detector
 - g. Personnel / Decon Line Monitoring
 - i. Model 52-2 Portal Monitor
 - h. Neutron Monitoring
 - i. Model 15 Neutron Probe with G-M detector

5-1. Health & Safety

5-1.a. Thermoluminescent Dosimeter (TLD)



Manufacturer: Panasonic

Model: UD-800 series

Quantity Available: 1 assigned to each OSC

Description: The standard device used for external radiation dose monitoring is the Thermoluminescent Dosimeter (TLD). TLDs provide the official dose of record and are capable of measuring both Hp10 (deep) and Hp07 (shallow) components of external ionizing radiation dose resulting from gamma, X-ray, and some beta radiation. TLDs are normally exchanged, and their results are reported on a calendar-quarterly basis. However, the exchange interval can be more frequent, contingent upon factors such as a worker's declared pregnancy, the potential for elevated worker exposures in high radiation areas, and

other conditions as determined by the Radiation Program Representative or Radiation Safety Officer in consultation with the SHEMP Manager. Depending on work activities, additional special dosimeters may be required, for example, extremity TLD dosimeters (ring, wrist), or neutron dosimeters.

5-1.b. Electronic Personal Dosimeter (EPD)



Manufacturer: Thermo / Siemens

Model: EPD-MK2

Quantity Available: 1 assigned to each OSC, 20 surplus in Willowbrook

Description: The Siemens EPD MK2 Electronic Personal Dosimeter (EPD) is a self-reading dosimeter that monitors dose and dose rate from gamma radiation, x-ray radiation, and beta radiation. Display and function are controlled by a single button on the front of the unit, recessed to prevent inadvertent operation. An EPD is issued to each OSC in the Removal Program, while an additional cache of EPDs are maintained at the Willowbrook Warehouse to support rotation and large-scale radiation incidents. EPD functionality includes: 1) On/Off 2) Test 3) Dose rate and 4) Total accumulated dose. The EPD has various

alarm set-points for Hp10 (deep) and Hp07 (shallow) integrated dose and dose rate exceedance. Selection of these alarm set-points is consistent with the administrative limits set by OSHA and EPA Health & Safety policy for the performance of normal operations or site work where the administrative control level (ACL) of 0.5 rem over 12 consecutive months applies. Modifications to the EPD alarm set-points may be necessary for EPA personnel responding to a National Response Framework (NRF) incident or other radiological emergency under Incident Command supervision where exceeding the ACL is necessary. Programming of EPA set-points can only be performed by the Region 5 Superfund Health Physicist, or other appropriately trained staff.

5-2. OSC Response Kits



OSC Response Kits - Each Program Office is provided with 2 radiation equipment cases. Case 1 is configured with one survey meter to estimate gamma radiation exposure rate at levels ranging from background to 5,000 micro-R/hr (5 mR/hr). Case 2 is configured with one radiation survey meter that can be connected to three different probes for determining the presence of alpha and beta contamination (fixed and removable) and gamma radiation exposure rate at levels ranging from 100 micro-R/hr

(0.1 mR/hr) to 1 R/hr. The instruments provided are intended to support the health and safety of responders consistent with EPA's Radiation Health and Safety Program.

5-2.a. Case 1 - Exposure Rate Monitoring Kit

The instrument in Case 1 is intended for sensitive gamma radiation detection and exposure rate estimation at background levels (5 to 20 $\mu\text{R/hr}$) up to 5,000 $\mu\text{R/hr}$ (5 mR/hr) which is a level requiring posting as a radiation area under Nuclear Regulatory Authority (NRC) regulations.



5-2.a.i Model 192 Micro-R Exposure Rate Meter

Manufacturer: Ludlum

Model: Model 192 Micro-R Meter

Quantity Available: 18 Case 2 kits at Program Offices and Willowbrook

Description: The Ludlum Model 192 MicroR survey meter is a high-sensitivity gamma microR (μR) ratemeter used for low-level gamma survey. It employs an internally housed sodium iodide (NaI) detector and is sensitive to slight changes in background radiation. The 192 has four range selections: X1 (0 – 5 $\mu\text{R/hr}$), X10 (0 – 50 $\mu\text{R/hr}$), X100 (0 – 500 $\mu\text{R/hr}$), and X1000 (0 – 5,000 $\mu\text{R/hr}$). When the instrument is turned on, it takes an eight-second measurement of background radiation levels and determines a deviation alarm setting. If the radiation level exceeds this setting, the alarm audio will beep and the

front panel red lamp will flash. At readings above 100 $\mu\text{R/hr}$ and if more accurate exposure rate measurements are required, users are encouraged to use the Ludlum 2241-3 with the 133-2 probe or other appropriate instrument.

5-2.b. Case 2 - Contamination and Exposure Rate Monitoring Kit

The instruments in Case 2 are intended to support alpha and beta contamination measurement (both fixed and removable contamination), and measurement of higher exposure rates ranging from 100 $\mu\text{R/hr}$ (0.1 mR/hr) up to 1,000 mR/hr (1 R/hr). One survey meter is provided with the ability to connect to the three different probes provided in the case.



5-2.b.i. Model 2241-3 Survey Meter

Manufacturer: Ludlum

Model: 2241-3

Quantity Available: 18 Case 2 kits at Program Offices and Willowbrook

Description: This instrument is a general purpose, digital ratemeter with a built-in scaler that provides timed counts over a user specified period. This system will store detector setup information for up to four detectors and offers a front-panel mounted rotary switch so personnel can quickly swap detectors in the field. The LCD presents readings in a four-digit, auto-ranging and moving decimal format. The LCD's backlight can be activated and remains lit for a user-adjustable interval. Front-panel controls include a rotary switch for selecting between Off, and up to four detector setups; separate switches for selecting

Ratemeter Mode and Scaler Mode, audio on/off, and fast/slow response time; and push-buttons for activating the LCD backlight and for either resetting the counts or acknowledging alarms. Calibration, user configured alarms, scaler count intervals and detector setups can be configured via an internally housed switchboard or through an RS-232 serial interface to a PC.



5-2.b.i.1 Model 133-2 Gamma Exposure Rate Probe

Manufacturer: Ludlum

Model: 133-2

Quantity Available: 18 Case 2 kits at Program Offices and Willowbrook

Description: This is an energy compensated Geiger-Mueller probe for gamma exposure rate measurements ranging from 100 $\mu\text{R/hr}$ (0.1 mR/hr) up to 1,000,000 $\mu\text{R/hr}$ (1,000 mR/hr or 1 R/hr). Typical measurements made with this probe include: area gamma monitoring (generally at 1-meter above the ground) and measurements from packages and objects ("contact" measurements without touching and measurements at 1-meter away). The probe is connected to the 2241-3 survey meter using the cable included in the Case 2 kit.

5-2.b. Case 2 - Contamination and Exposure Rate Monitoring Kit (continued)



5-2.b.i.2. Model 44-9 Pancake GM Probe

Manufacturer: Ludlum

Model: 44-9

Quantity Available: 18 Case 2 kits at Program Offices and Willowbrook

Description: This Geiger-Mueller (GM) pancake-type detector is one of the most popular radiation detectors used throughout the world. The 44-9 can detect alpha, beta, and gamma contamination and is conveniently shaped and sized for checking contamination on people and objects. Measurements are made by holding the detector face above the surface being surveyed, generally about 0.1 to 0.25-inch away and without touching the person or object. The probe is connected to the 2241-3 survey meter using the cable included in the Case 2 kit.



5-2.b.i.3. Model 43-90 Alpha Scintillator Probe

Manufacturer: Ludlum

Model: 43-90

Quantity Available: 18 Case 2 kits at Program Offices and Willowbrook

Description: This alpha scintillator probe is exceptionally sensitive for the detection and measurement of only alpha contamination without detecting other beta and gamma contamination, if present. Measurements are made by holding the detector face as close to the surface being surveyed without touching it. The probe is connected to the 2241-3 survey meter using the cable included in the Case 2 kit.

5-3 OSC Response Kit Wallet Card

Radiation Meter/Detector	Radiation Detected	UNITS	Sensitivity	Range	Bkgd Range
Ludlum Micro-R Model 192†	γ^*	micro-roentgen/milli-roentgen	600,000 cpm = 1mR/hr	5 - 5,000 uR/hr or .005 - 5 mR/hr**	5-15 uR/hr
Ludlum Model 2241-3 + 44-9 Pancake	α, β, γ^*	cpm	3300cpm = 1mR/hr	0 - 999,000 cpm	30-60 cpm
Ludlum Model 2241-3 + 43-90 Alpha	α	cpm	N/A	0 - 999,000 cpm	0-1 cpm
Ludlum Model 15 + 44-7 End Window	α, β, γ^*	cpm	2100 cpm = 1mR/hr	0 - 999,000 cpm	20-40 cpm
Eberline RO-20 Ion Chamber	γ^*	milli-roentgen/roentgen	N/A	.1 mR - 50 R**	N/A
Ludlum Model 15 + Bf ₃ Neutron	neutrons	cpm	60cpm = 1mR/hr	0 - 999,000 cpm	0
SAM-935 MCA	γ^* and neutron (if He ₃ detector present)	micro-roentgen/milli-roentgen & std. dev. above bkgd.	N/A	.01 mR/hr - 30 mR/hr†	5-15 uR/hr

α = alpha particle travels 2 inches, does not penetrate skin, tyvek, etc, internal hazard.

β = beta particle (electron) travels 12 feet per MeV, low penetrating ability, does not penetrate tyvek, internal and external hazard

γ = gamma photon travels hundreds of feet, high penetrating ability, use time distance and shielding for protection, internal and external hazard

* X-rays will also be detected with energies typically less than 100keV

** 1000uR/hr = 1 mR/hr 1000mR/hr = 1 R/hr NOTIFICATION LEVEL 100uR/hr TURNBACK LEVEL 1.5 R/hr
per hazard evaluation flow chart during Emergency Responses only

† Range is not capable of detecting TURNBACK LEVEL

Activity

1,000 millicuries = 1 Curie

1,000 micro curies = 1 millicurie

1 millicurie of Cs¹³⁷ @ 1 meter ~ 500 uR/hr

1 millicurie of Ra²²⁶ @ 1 meter ~ 1 mR/hr

EPA Radiation Dose Limits Non-Emergency Response site worker = 500 mRem/year
Emergency Response = 5,000 mRem (5 Rem)

Decon Pancake detector > 100 cpm decontaminate Respiratory protection > 400 cpm
Alpha Scintillometer > 50 cpm decontaminate with pancake or alpha

5-4.a. Removal Support – Contamination Monitoring

The following contamination monitoring equipment is available upon request to support removal actions and radiological emergency response activities. While this equipment is maintained at the Willowbrook Warehouse, a limited number are kept calibrated and the rest are inactive. Inactive equipment requires calibration prior to its use, which may require 2 to 4 weeks following its request.



5-4.a.i. Model 2241-2 Survey Meter with 44-9 Pancake GM and 43-90 Alpha Scintillation Probes ("ABG" Case)

Manufacturer: Ludlum

Models: 2241-2, 44-9, and 43-90

Quantity Available: 8 ABG Case kits at Willowbrook (2 calibrated, the rest are inactive)

Description: "ABG" cases provide alpha, beta, and gamma contamination measurement capability. The case includes a Ludlum 2241-2 survey meter, similar to the 2241-3 but only capable of connecting two

different probes. The probes included in this case are the 44-9 pancake GM probe and the 43-90 alpha scintillation probe. The probes are connected to the 2241-2 survey meter using the cable included in the "ABG" case.



5-4.a.ii. Model 2241 Survey Meter with 44-9 Pancake GM Probe ("BG" kits)

Manufacturer: Ludlum

Models: 2241 and 44-9

Quantity Available: 7 BG kits at Willowbrook (2 calibrated, the rest are inactive)

Description: "BG" cases provide beta and gamma contamination measurement capability. The case includes a Ludlum 2241 survey meter, similar to the 2241-3 but only capable of connecting one probe. The detector included in this kit is the 44-9 pancake GM probe. The probe is connected to the 2241 survey meter using the cable included in the kit.

5-4.b. Removal Support – Exposure and Dose Rate Monitoring

The following exposure rate monitoring equipment is available upon request to support removal actions and radiological emergency response activities. While this equipment is maintained at the Willowbrook Warehouse, a limited number are kept calibrated and the rest are inactive. Inactive equipment requires calibration prior to its use, which may require 2 to 4 weeks following its request.



5-4.b.i. Fluke 451B Ion Chamber

Manufacturer: Fluke Biomedical

Model: 451B-DE-SI-RYR

Quantity Available: 3 at Willowbrook

Description: The 451B is a portable air ionization chamber instrument used to measure gamma deep dose rate (H^*10) consistent with ICRU-47. It effectively measures gamma dose rates ranging from $10 \mu\text{Sv/hr}$ up to 500 mSv/hr (1 mR/hr up to 50 R/hr) when the sliding beta shield is closed. With the beta shield open, the 451B can measure skin dose at $H^*(0.07)$. It measures dose rate and total dose simultaneously, with the capability to record the peak dose rate. It features an LCD display with both numeric and bar-graph readings, and is auto-ranging and auto-zeroing. The 451B also has a RS-232 port that can support remote operation via a long cable, and can operate with EPA Region 5's FAST software for geospatial data collection.



5-4.b.ii. Personal Radiation Monitors

Manufacturer: Canberra

Models: UDR-13A, UDR-13BR, UDR-14, UDR-14E

Quantity Available:

Willowbrook: UDR-13BR (2), UDR-14 (2), UDR-14E (6) All Inactive

START-Chicago: UDR-13BR (3)

START-Detroit: UDR-13BR (3)

START-Westlake: UDR-13BR (3)

START-Indianapolis: UDR-13A (2)

Description: The UDR-series personal radiation monitors provide exposure rate and total exposure measurement in an extremely rugged instrument. Features include a large, easy-to-read back-lit LCD display, and audible, visual and vibrating alarms. These are generally useful for health and safety measurements in areas ranging from 1-mR/hr to $200,000 \text{ mR/hr}$ (200 R/hr).

5-4.c. Removal Support – Air Sampling



5-4.c.i. H-810 Air Sampler

Manufacturer: RADeCo

Model: H-810 Air Volume Totalizer (AVT)

Quantity Available: 12 at Willowbrook

Description: The H-810 AVT is a High Volume Air Sampler with an Air Volume Totalizer. The Model H-810 samples the environment until the desired total volume or total elapsed time has been reached and then turns itself off. The H-810 requires an external 120VAC power source to operate. This air sampler is equipped with a 2" filter holder and 47mm particulate filters (LB5211). These filters are counted with the model 2929 or 3030 to determine airborne concentrations of radioactive materials.

5-4.d. Removal Support – Air and Wipe Sample Counting



5-4.d.i. Model 3030 Alpha/Beta Counter

Manufacturer: Ludlum

Model: 3030

Quantity Available: 3 at Willowbrook (all are inactive)

Description: The Model 2929 and 3030 are available to perform simultaneous alpha and beta radiation measurement on air filter and wipe (swipe) samples. Data from the measurement of air filters these are used to calculate airborne radioactivity concentrations, and data from the measurement of wipe/swipes/smears are used to determine the concentration of removable activity from a surface. The 3030 requires beta and alpha radioactive plate sources for daily functional and efficiency checks.

5-4.e. Removal Support – Radioisotope Identification



5-4.e.i. SAM-940 Radioisotope Identifier (RIID)

Manufacturer: Berkeley Neucleonics

Model: SAM-940

Quantity Available: 7 at Willowbrook

Description: The SAM-940 is a portable radioisotope identifier (RIID) with the ability to identify multiple gamma-emitting radionuclides concurrently within seconds. Upon identification it can provide the assumed category of the radioisotope: medical, naturally occurring, industrial, and special nuclear material. Spectral data are saved to a SD card which can be sent to a health physicist for further analysis. Six SAM-940s have sodium iodide (NaI) probes, and one SAM-940 has a lanthanum bromide (LaBr) probe for higher identification resolution.

5-4.f. Removal Support – Gamma Count Rate Monitoring



5-4.f.i. Model 2221 with Model 44-10 2" x 2" NaI Probe

Manufacturer: Ludlum

Model: 2221 with 44-10

Quantity Available: 9 at Willowbrook (2 dedicated to site use)

Description: The Model 2221 is a general purpose ratemeter and scaler, with simultaneously operating analog meter and LCD digital displays. The 2221 can also perform scaler counting (total counts) over selectable periods ranging from 0.1 to 5 minutes. During scaler counting one can switch the display for current count rate information. The 2221 has a variety of controls and settings on front that make it easy to configure for site-specific remediation work. The 2221s are supplied with a 44-10 2" x 2" sodium iodide (NaI) probe. When calibrated together, this system can be used to support site

assessment and remediation verification activities. Operation can be performed by a person performing radiological surveys by either walking across a site, or by mounting the instruments to a vehicle that is driven across a site. The 2221s have RS-232 data export features, so they can be used in radiological geospatial surveys when configured with GPS system and a laptop computer running EPA Region 5's FAST software.

5-4.g. Removal Support – Personnel/Decon Line Monitoring



5-4.g.i. Model 52-2 Portal Monitor

Manufacturer: Ludlum

Model: 52-2

Quantity Available: 2 at Willowbrook (inactive)

Description: The Model 52-2 Personnel Portal Monitor is a beta/gamma personnel contamination monitor. It can be used in walk-through mode or the more sensitive stop-and-count mode. Has audio and LED condition indicators and an LCD Display for setup and detector counts. Powered by 85-250 VAC or three "D" cell alkaline batteries (24 hour run time). 81"H x 24"W. Weight in storage/transport case (wheeled) —110 lb.

5-4.h. Removal Support – Neutron Monitoring



5-4.h.i. Model 15 Neutron Probe with G-M detector

Manufacturer: Ludlum

Model: 15

Quantity Available: 2 at Willowbrook (inactive)

Description: The Model 15 is a survey meter coupled to a Model 42-14H neutron probe and moderator, and a Model 44-7 thin end-window GM detector. This combination provides the capability for measuring and monitoring fast and slow neutrons (removable moderator for thermal neutrons), as well as alpha, beta, and gamma contamination with the GM detector.

6. METEOROLOGICAL

6-0. Weather Monitoring MK III Weather Station



6-0. Weather Monitoring

Manufacturer:

Rainwise

Model:

MK III Weather Station

Quantity Available:

(On National Equipment List)

Willowbrook: 2

Ann Arbor: 2

Westlake: 1

Cincinnati: 1

Description:

The MK III is a Solar-Powered Wireless Weather Station. It is powered by a small solar panel attached to the station. The display unit is wireless and has a range of about 50 ft. The station measures wind speed and direction, temperature, humidity, barometric pressure and rainfall.

7. AIR SAMPLING EQUIPMENT

This section presents descriptions of the following air sampling equipment:

7-1. Low Flow Air Sampling Pumps

- a. GilAir-5, *500 to 5000 mL/min.* (5 pump kit)**
- b. AirChek XR5000, *5 to 5000 mL/min.***
- c. Pocket Pump TOUCH, *20 to 500 mL/min.***

7-2. High Flow Air Sampling Pumps

- a. Aircon-2, *2 to 30 L/min.***

7-3. Air Flow Calibration Pumps

- a. Defender 510/520/530**

7-1. Low Flow Air Sampling Pumps

7-1.a. GilAir-5 (5 Pump Kit)



Manufacturer: Sensidyne

Model: Gilian GilAir-5

Quantity Available:

Willowbrook: 25 Pumps (six 5 pack kits)

Westlake: 5 Pumps (one 5 pack kit)

Description:

The GilAir-5 is a low-flow Constant Flow Air Sampling Pump. It comes in a pack of 5 pumps. They operate at a constant flow rate in a range from 500 to 5000 ml/min (0.5 to 5 L/min).

(On National Equipment List)

7-1.b. AirChek XR5000



Manufacturer: SKC Incorporated

Model: AirChek XR5000

Quantity Available:

Westlake: 5

Description:

Constant flow portable air sampler suitable for low flow gas/vapor or high flow particulate sampling. Adjustable from 5 to 5000 ml/min. (0.005 to 5 L/min)

Includes charging train: AC power adapter to charging unit to unit's battery pack.

7-1.c. Pocket Pump TOUCH



Manufacturer: SKC Incorporated

Model: Pocket Pump TOUCH

Quantity Available:

Westlake: 3

Description:

The Pocket Pump TOUCH personal air sample pump provides low flows suitable for gas and vapor sampling. Can be paired with the SmartWave mobile app or PC via bluetooth connection. UL Listed for intrinsic safety. Adjustable from 20 to 500 ml/min. (0.02 to 0.5 L/min).

7-2. High Flow Air Sampling Pumps



7-2.a. Aircon-2

Manufacturer:

Sensidyne

Model:

AirCon-2

Quantity Available:

Willowbrook: 9

Ann Arbor: 3

Westlake: 3

Description:

The Aircon-2 is a High Volume Air Sampler. It has a constant flow range of 2 to 30 L/min. The Aircon-2 is powered by sealed lead-acid battery packs capable of 8 hour run time. The packs can be stacked to increase the run time. Needs two battery packs to run 8 hours.

Note: Batteries inside battery cases can be replaced with off the shelf batteries. Refer to battery specs on the batteries inside the cases.

7-3. Air Flow Calibration Pumps



7-3.a. Defender 510/520/530

Manufacturer:

MesaLabs/Bios International

Model:

Defender 510/520/530 Primary Flow Calibrator

Quantity Available:

Willowbrook: 7

510L (1), 510M (1), 510H (1), 530M (2), 530H (2)

Ann Arbor: 2

530M (1), 530H (1)

Westlake: 2

520M (1), 530M (1), 530H (1)

Description:

The Defender 510, 520, and 530 are a series of Primary Standard Pump Calibrators with each pump series available in 3 models, 5XXL, 5XXM, 5XXH. Each model meets a certain range of flow rates, (L) Low flow, (M) Medium flow and (H) High flow, that can be used to calibrate the low flow personal pumps, GilAir-3, as well as the medium GilAir-5, to high flow pumps of the Aircon2 and PQ 200.

8. FIELD COMMUNICATION

This section presents descriptions of the following field communication equipment:

8-1. Two-Way Radio Sets

- a. Motorola HT 1250 (for Level A)**
- b. Motorola XTS 5000**

8-2. Satellite Phone, Iridium Model 9555

8-3. Portable Satellite Unit (PSU)

8-1. Two-Way Radio Sets

8-1.a. Motorola HT 1250 Intrinsically Safe



Manufacturer:

Motorola

Model:

HT-1250 Two-way Radio

Quantity Available:

Willowbrook: 20

Ann Arbor: 7

Westlake: 5

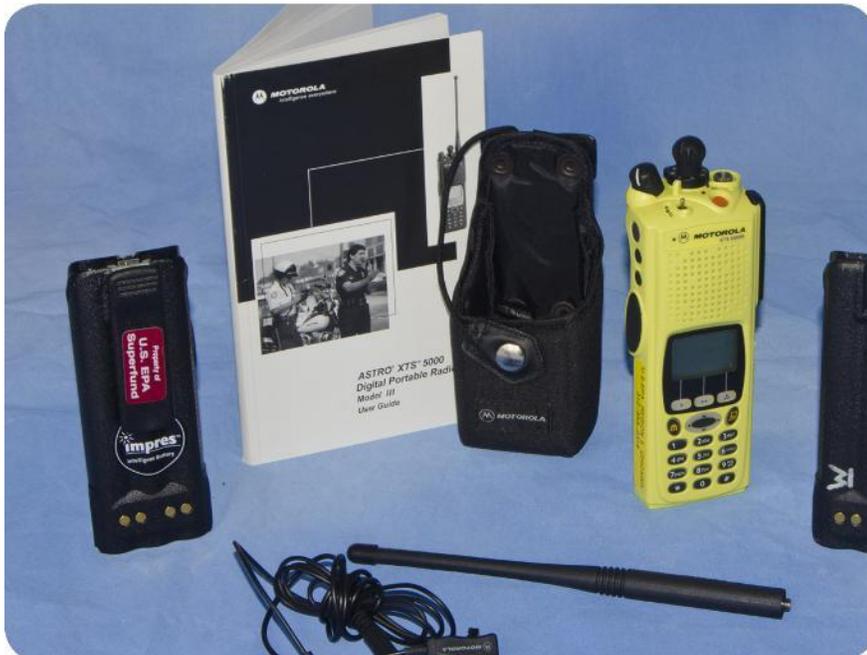
Cincinnati: 1

(On National Equipment List)

Description:

The HT-1250 is a handheld digital Two-Way Radio. They operate in the VHF Range and have 6 EPA Channels programmed in. They are intrinsically safe and can be used in Hot Zone.

8-1.b. Motorola XTS 5000



Manufacturer:

Motorola

Model:

XTS 5000 Two-way Radio

Quantity Available:

Willowbrook: 24

Ann Arbor: 9

Westlake: 5

Cincinnati: 1

(On National Equipment List)

Description:

The XTS 5000 is a handheld digital Two-Way Radio. These radios operate in the VHF range (30-300MHz) and have 6 EPA Channels programmed in. They are capable of Front Panel Programming for tuning to any frequency in the VHF Range.

8-2. Two-Way Communication Satellite Phone

Manufacturer: Iridium **Model:** 9555 Satellite Phone
Quantity Available: Willowbrook: 1; Ann Arbor: 1; Westlake 1
 (On National Equipment List)



Description:

Iridium 9555 quick access interface, with menu-driven commands and graphical display, offers straightforward usability. Setting up the handset is fast and easy, with:

- Simplified dialing with + key international access (with country code and number)
- A choice of 21 languages for menu prompts, and Iridium 9555 users also benefit from inherent performance advantages due to the proximity to the Earth of Iridium's unique Low Earth Orbiting (LEO) global satellite constellation. These include:
 - The lowest communication delays of all mobile satellite service providers
 - The lowest latency of voice and data communications, and
 - The shortest registration time

8-3. Portable Satellite Unit*

Manufacturer: Various **Model:** Various
Quantity Available: Two Storage Locations: **PSU-1**, Stored at the Westlake, Ohio Office.
 (On National Equipment List) **PSU-2**, Stored at the Willowbrook Warehouse.

Description: The PSUs are a National Asset purchased and supported by the EPA National Approach to Response-Field Communications (NARFCOM) group. PSUs are field ready, line of sight, always-on satellite dish and control unit that provides 24/7/365 Internet and Voice over Internet Protocol (VoIP) phone service to EPA On-Scene Coordinators and Response Support Corp (RSC) members deployed to Emergency Responses and Removal Sites. The satellite contract provides Internet service, which can be upgraded on the fly during an Emergency Response; unlimited VoIP phone service; 24-hour help desk support; on-site maintenance support; and system upgrade/update potential to all EPA Regions and Special Teams. The system is designed to fit inside a Suburban or pickup truck and the control unit, is about the size of a small suit case. The control unit has several cables, some up to 100' long, that are attached to the antenna. The antenna is designed to be outdoors, but the control unit must be kept and operated indoors. **NOTE: NOC recommends a 20-30' exclusion zone in front of the dish due to signal propagation, although smaller areas have been used successfully.**

PSU-1 Phone Number: 312-212-3002 PSU-2 Phone Number: 312-212-3009

Note: Numbers may change annually. Also, dialing codes are different depending on type of system called (Cell, POTS). Call contacts below for information.

24-Hour Satellite Support (Knight-Sky): 240-252-1963 or noc@knight-sky.com, also notify Jon Gulch: 734-740-9017. The Quick-Start Guide for the Region 5 PSU is located at:

www.epaosc.org/r5co

(Private Login Required)

*For inquiries related to this asset, contact:

Jeff Borseth: 734-692-7663 or

Jim Ursic: 312-353-1526



9. TRANSPORTATION

(All located at Argonne except MCP and Air Trailer)

This section presents descriptions of the following trailers, boat motors and boat:

9-1. Cargo Trailer, Enclosed

- a. **8' Enclosed** GVWA 2,000 Lbs.
- b. **14' Enclosed** GVWA 2,990 Lbs.
- c. **20' Enclosed** GVWA 12,000 Lbs.
- d. **10' Enclosed**
- e. **12' Enclosed** GVWA 3,000 Lbs.
- f. **22' Enclosed** GVWA 7,000 Lbs.
- g. **14' Enclosed** GVWA 7,000 Lbs.

9-2. Cargo Trailer, Flat Bed

- a. **16' Flat Bed, Dual Ramps** GVWA 10,000 Lbs.
- b. **11' Flat Bed, Tilting Bed** GVWA 6,200 Lbs.
- c. **11' Flat Bed, Single Ramp** GVWA 3,500 Lbs.

9-3. Cargo Trailer, Boat

- a. **12' Support Profile, Flat Bottom**

9-4. Mobile Trailer, Processing Platform

- a. **HazMat Trailer**

9-5. Marine Transportation

- a. **Gasoline, Outboard 4 Stroke**
 - i. 15 hp Johnson
 - ii. 9.9 hp Mercury
- b. **Gas/Oil Mix, Outboard 2 Stroke**
 - i. 15 hp Mercury
- c. **Electric Motor**
 - i. 40 Lb. Thrust Trolling Motor
- d. **Jon Boat, 12' Aluminum with Trailer**

9. TRANSPORTATION

(Continued)

- 9-6. Mobile Command Post (MCP - Bluebird)**
- 9-7. Mobile Command Vehicle (MCV - Sprinter)**
- 9-8. Mule UTV 4WD/2WD**
- 9-9. Air Trailer (see section 1-1.c.i)**

9-1. Cargo Trailers, Enclosed



9-1.a. Wells Cargo 8' Box

Manufacturer:

Wells Cargo

Model:

TC8

Box Dimensions, Interior:

7' 9" L x 4' 8" W x 4' 8" H

Quantity Available: 1

Stored at Argonne National Laboratory, Lemont, Illinois Contact Willowbrook Warehouse or Jim Ursic

Description:

8' enclosed single axle trailer. Single right hand reverse swing rear door 4' 5" H x 4' W. Cargo capacity 1,400 lb., trailer wt. 600 lbs., GVWR 2,000 lbs. Requires 2" ball and flat 4 connector. Lock key number 548. Has wiring for an optional internal alarm (requires control fob and car battery). Built 1987.

License Plate: EPA 5211T



**9-1.b.
Wells Cargo 14' Box**

Manufacturer:

Wells Cargo

Model:

TM141M

Box Dimensions, Interior:

13' 9" L x 5' 10" W x 6' 6" H

Quantity Available: 1

Stored at Argonne National
Laboratory, Lemont, Illinois

Contact Willowbrook

Warehouse or Jim Ursic



Description:

14' enclosed one axle trailer. Gas generator, combination electric air conditioner/electric heater and nose-cone. Cargo capacity 1,850 lbs., trailer wt. 1,150 lbs., GVWR 3,000 lbs. Electric (battery) breakaway system. Ramp rear door and right side access door. Requires 2" ball and round 7 connector. Primary vehicle for moving IMT equipment and is on emergency stand-by. Requires key for lock number 548. Built 1993.

License Plate: EPA 5204T

9-1.c. 20' Box Trailer

**Manufacturer:**

Avenger

Model:

CW820TAE

Box Dimensions, Interior:

19' 8" L x 11' 7" W x 7' 10" H

Quantity Available: 1

Stored at Argonne National Laboratory, Lemont, Illinois Contact Willowbrook Warehouse or Jim Ursic

Description:

20' enclosed two axle trailer. Cargo capacity 8,420 lbs., trailer wt. 3,580 lbs., GVWR 12,000 lbs. Right side access door and double rear doors and floor rails. Trailer is currently used for equipment/tool storage and is not immediately roadworthy. Purchased for transporting GeoProbe but current towing vehicle and typical IL driver license Class rating is beyond trailers weight limits. Requires 2 5/16" ball and round 7 connector and weight distribution system for hitch. Built 1998.

License Plate: EPA 5208T

9-1.d. 10' Box Trailer

**Manufacturer:**

Play-Tow

Model:

N/A

Quantity Available: 1

Stored at Argonne National laboratory, Lemont, Illinois
Contact willowbrook Warehouse or Jim ursic.

Description:

10' enclosed one axle trailer. Single right hand reverse swing rear door. Sky light on roof. Requires 2" ball and flat 4 connector.

License Plate: EPA 5205T

9-1.e. 12' Box Trailer

**Manufacturer:**

Wells Cargo

Model:

TM121M

Box Dimensions, Interior:

11' 9" L x 5' 9" W x 5' 6" H

Quantity Available: 1

Stored at Argonne National Laboratory, Lemont, Illinois.

Contact Willowbrook Warehouse or Jim Ursic

**Description:**

12' enclosed one axle trailer with nose-cone. Cargo capacity 3,000 lbs.. Ramp rear door and right side access door. Requires 2" ball and flat 4 connector. Pre-wired for door alarms with remote FOB. Requires key for lock number 548. Built 1998.

License Plate: EPA 5203T

9-1.f. 22' GIS Trailer

**Manufacturer:**

American Hauler

Model:

Night Hawk NH851STA2

Quantity Available: 1

Stored at Argonne National Laboratory, Lemont, Illinois

Contact Willowbrook Warehouse or Brian Cooper

Description:

22' enclosed two axle GIS-office trailer. Maximum Cargo wt. 4,250 lbs., Trailer wt. 2,750 lbs., GVWR is 7,000 lbs. Ramp rear door and right side access door. Electric heat/air conditioner. Electric brakes and round 7 connector. Requires 2 5/16" ball. Counter and cabinet space, interior and exterior lighting, exterior awning, skylight and left side window. Requires external portable generator (not included) or shore power. Built 2004.

License Plate: EPA 5248T

9-1.g. 14' Vibracore Equipment Trailer

**Manufacturer:**

Southwest

Model:

Express-line

Box Dimensions, Interior:

13' 9" L x 6' 8" W x 6' H

Quantity Available: 1

Stored at Argonne National Laboratory, Lemont, Illinois. Built 2000.

Contact Willowbrook Warehouse or Chuck Roth.

Description:

14' enclosed two axle vibracore boat trailer. Cargo capacity 4,700 lbs., Trailer wt. 2,290 lbs., GVWR 7,000 lbs. Rear double doors and right side access door. Electric brakes and round 7 connector. Requires 2 ⁵/₁₆" ball. Note: Special Purpose unit, pre-configured and currently loaded to carry vibracore, Jon boats, and equipment.

License Plate: EPA 5201T

9-2. Cargo Trailers, Flat Bed

9-2.a. 16' GeoProbe Trailer



Manufacturer:

Hooper

Model:

16x7 Flatbed

Quantity Available: 1

Stored at Argonne National Laboratory, Lemont, Illinois. Primary Transportation for GeoProbe.

Contact Willowbrook Warehouse or Jim Ursic



Description:

16' flatbed two axle trailer. 16' L x 7' W. Cargo capacity 8,000 lbs., Trailer wt. 2,000 lbs., GVWA 10,000 lbs. Two axle flatbed with fold down ramps, wood deck, electric (battery), break away system and spare tire. Requires 2-5/16" ball and round 7 blade connector. Reserved for GeoProbe transportation. Built 2000.

License Plate: EPA 5212T

9-2.b. 11' Tilting Flat Bed

**Manufacturer:**

Eager Beaver

Model:

TL6

Quantity Available: 1

Stored at Argonne National Laboratory, Lemont, Illinois.

Contact Willowbrook Warehouse or Jim Ursic

**Description:**

11' flatbed one axle trailer. 11' L x 5.5' W. Maximum Cargo wt. 6,000 lbs., Trailer wt. 1,300 lbs., GVWA 7,300 lbs. One axle flatbed with tilt bed deck, electric (battery) break away system and spare tire. Tow mechanism is a tow eye and round 7 connector. Built 1990.

License Plate: EPA 5210T

9-2.c. 11' Flat Bed Single Ramp

**Manufacturer:**

Schrick

Model:

N/A

Quantity Available: 1

Stored at Argonne National Laboratory, Lemont, Illinois

Contact Willowbrook Warehouse or Chuck Roth

**Description:**

11' flatbed one axle trailer. 11' L x 5' W. GVWA 3,500 lbs. One axle flatbed with expanded metal ramp, wood deck and spare tire. Requires a 2" ball and flat 4 connector.

License Plate: EPA 5207T

9-3. Cargo Trailers, Boat

9-3.a. 12' Jon Boat Tilting Bed Trailer

Manufacturer:

Cox

Model:

Mark CF800

Quantity Available: 1

Stored at Argonne National Laboratory, Lemont, Illinois. Obtained through CH₂M Hill.

Contact Willowbrook Warehouse or Jim Ursic

**Description:**

12' one axle trailer for Jon Boat. Frame configured for flat bottom Jon boat with spare tire and manual winch. Requires a 1-7/8" ball and flat 4 connector.

License Plate: EPA 5206T

9-4. Mobile Trailer, Processing Platform

9-4.a. HazMat Office/Processing Platform



Manufacturer:

Wells Cargo

Model:

AS 142 - 46962

Box Dimensions, Interior:

19' L x 8' W x 9' H

Quantity Available: 1

Stored at Ann Arbor Office, Michigan

Contact Willowbrook Warehouse or
Jeff Borseth



Description:

Small mobile improvised lab/processing platform, counter space, vent-hood (not certified fume hood), sink, (no holding tank-external port), air conditioning/heat, roof vent, gasoline generator (Briggs & Stratton 8750/7000 watt), 2 propane tanks for heat, roll-out awning, curb door w/step, rear double doors, stabilizing jacks, two axle, small side windows/screen both sides, GVWR 7,200 lbs., requires 2-5/16" ball, electric brakes and breakaway system, and round 7 connector. Built 1990.

License Plate: EPA 5197T

9-5. Marine Transport



9-5.a.i. Johnson 4 Stroke Motor

Type: 4 Stroke Gas Motor

Manufacturer: Johnson

Model: 15hp outboard motor, forward and reverse speeds with stand and tank

Description: 15hp outboard motor

Quantity per location: 1

(Willowbrook Warehouse)

Contact Jim Ursic



9-5.a.ii. Mercury 4 Stoke Motor

Type: 4 Stroke Gas Motor

Manufacturer: Mercury

Model: 9.9 hp-F9.9M

Description: 9.9 4 stoke motor gas fueled with stand and tank

Quantity per location: 1

(Willowbrook Warehouse)

Contact Chuck Roth

9-5.b.i Mercury 2 Stroke Motor



Type: 2 Stroke Oil/Gas Fuel Mixture Motor

Manufacturer: Mercury

Model: 15hp outboard motor, forward and reverse speeds with stand and tank

Description: 15hp outboard motor with stand and tank.

Quantity per location: 1

(Willowbrook Warehouse)

Contact Jim Ursic

9-5.c. Electric Trolling Motor



Type: 12v Electric Motor

Manufacturer: Minn Kota

Model: Turbo 90

Description: Electric trolling motor. 40 lb thrust, 5 forward-2 reverse speeds, with weed-less wedge propeller.

Quantity per location: 1

(Willowbrook Warehouse)

**9-5.d. 12' Aluminum
Jon Boat with Trailer****Manufacturer:** Smoker-Craft**Model:** Jon 1232**Quantity per location:** 1
(Willowbrook Warehouse)**Description:**

12 foot Aluminum Jon boat with Trailer. Weight limits: 3 Persons or 375 lbs., total craft limitations are 540 lbs. for persons, motor and gear. Up to 10 hp outboard motor. Trailer has 1 7/8" ball and flat 4 connector. Trailer has a tilt feature for easy loading/unloading.

WARNING:

Staff must complete "Boating Safety Course" training to operate boats. Contact Health and Safety Office for required training. Approximately a two hour CD presentation. Course is a one time requirement, no refreshers are needed.

9-6. Mobile Command Post*

Manufacturer: BlueBird

Model: Custom Manufactured

Quantity Available: 1 - Stored at the Contractor EQ Warehouse in Hammond, Indiana

Equipment maintained and transported by US. EPA Contractor and requires a CDL license to move.

*For inquires related to this vehicle contact:

Jeff Borseth (734-214-4899 or 734-740-9012 cell) or Jim Ursic (312-353-1526).

Fuel: Vehicle and on-board generator, diesel (both use same tank). **Do not use** Biodiesel.

Description: The MCP is made up of two main areas, separated by a slide pocket door; a forward work area with several workstations and the communications rack and a rear conference room with video conferencing capability. The MCP can be hard-wired to electrical shore power and phones or can operate from an on-board generator. The MCP has a satellite dish for internet data service, satellite television, Voice over Internet Protocol (VoIP) phones, and radio communications equipment. The MCP can monitor Regional television broadcasts via satellite and local stations through the Internet and local over-air broadcast for situational news updates and changing weather patterns. The MCP is equipped with a telescoping external camera that can elevate above the scene and remotely operated to zoom in on nearby events. Security camera images can be captured on an on-board DVD-R recorder. An internal camera is in the command staff area of the MCP so briefings can be conducted and transmitted wirelessly to other locations, such as field command posts or the Regional office. The MCP has a computer network system with wired and wireless Internet, fax capability, and a local print server with two color printers and a large color plotter. The network is available on several on-board workstations and one external work area with flat panel display. The MCP has its own compact weather station. The MCP can be staffed with fully trained Logistics/Communications Unit personnel through the Region 5 Response Support Corp (RSC). Awning can be configured with surrounding curtain.

MCP Phone Number is currently being updated. If phone number is needed, please contact Jon Gulch 734-740-9017.

24-Hour Satellite Support (Knight-Sky): 240-252-1963 or noc@knight-sky.com, also notify Jon Gulch 734-740-9017.

The QuickStart Guide for the Region 5 MCP is located at: www.epaos.org/r5coms (Private Login Required)



9-7. Mobile Command Vehicle*

Manufacturer: Freightliner

Model: Sprinter, Custom Modified

Quantity Available: 1 - Stored at the USEPA Willowbrook warehouse.

*For inquiries related to this vehicle contact Jesse Aparicio (630-481-5000) or Steve Padovani (312-353-6755).

Fuel: Diesel (vehicle and generator) Note: Generator uses fuel from vehicle fuel tank.

Description:

The EPA Region 5 MCV is an 18-foot Sprinter for communications and compact mobile office space. The MCV was designed by On-Scene Coordinators to be an always available asset that is in ready condition for immediate deployment to any Emergency Response incident or for short-term use on Removal Sites. The MCV is made up of one main area with three workstations and the communications rack with a flat screen monitor. The MCV can be hard-wired to electrical power or can operate from an on-board generator. The MCV has a satellite dish for internet data service, Voice over Internet Protocol (VoIP) phone, and radio repeater. The MCV can monitor Regional television broadcasts via satellite and local stations through the Internet and over-air broadcast for situational news updates and changing weather patterns. The MCV has a computer network system with wired and wireless Internet, fax capability, and a local color printer. The MCV can be staffed with fully trained Logistics/Communications Unit personnel through the Region 5 Response Support Corp (RSC).

MCV Phone Number is currently being updated. If phone number is needed, please contact Jon Gulch 734-740-9017.

24-Hour Satellite Support (Knight-Sky): 240-252-1963 or noc@knight-sky.com, also notify Jon Gulch 734-740-9017

The QuickStart Guide for the Region 5 MCV is located at: www.epaosc.org/r5coms (Private Login Required)



9-8. Mule UTV 4WD/2WD

Manufacturer: Kawasaki

Model: Mule 3010 KAF620E year 2005.

Fuel type: gas

Quantity Available:

Willowbrook: 1

Westlake: 1

Description:

Utility vehicle with tilt bed, 2 passenger, 14.7 kW/3,600 rpm, curb weight 1,367lbs. Two speeds forward, one reverse. Interior heater, enclosed cabinet, seat belts, DC/AC converter, 1" hitch receptor, head/tail lights.

Note : Must be transported on trailer.

Contact: Chuck Roth 312-886-0242



9-9. Air Trailer (See Also Section 1-1.c.)

Manufacturer:

Haulmark (trailer); Bauer Compressors (bottle station)

Model: KD?/12WT3 (trailer); CFSII-3M (bottle station)

Quantity Available:

EQ Warehouse Hammond, IN: 1

Description (trailer):

GVWR: 10,000 lbs/ dual axle, two barn door rear opening, flip up side openings, electric brakes, connector round 7, hitch, 3" Eye type coupler, spare tire, EPA logos.

Description (compressor):

Three bottle filling station

SPECIAL NOTICE: Equipment maintained by EQ. Air samples from compressor must be analyzed by certified air laboratory quarterly to ensure air purity is within approved limits. Operators must be trained in use of this equipment.

Contact: Steve Peterson 312-353-1422

License Plate: EPA 5200T



10. SPECIALIZED EQUIPMENT

This section presents descriptions of the following *Removal* warehouse equipment:

- 10-1. Chemical Identifiers, Portable
 - a. HazMatID Elite & 360 Chemical Identifiers
 - b. Point-and-Shoot Chemical Identifier
- 10-2. Thermal Imaging Camera (Color)
- 10-3. Fluid Level Meters/Water Quality Samplers
 - a. Water Level Meter
 - b. T-L-C Meter (Temperature, Water Level, Conductivity)
 - c. Oil/Water Interface Probe
 - d. Multi Probe System Water Quality Sampler YSI 556 MPS
- 10-4. Portable Electric Generators
 - a. 5600 watt generator (gasoline)
 - b. 3500 watt generator (gasoline)
 - c. 2000 watt generator (gasoline)
 - d. 800 watt generator, non-removal (gasoline)
- 10-5. Traffic Control Equipment, Temporary
 - a. Workers Signage
 - b. Flagman Icon Signage
 - c. Traffic Cones
- 10-6. Containment Pool, Portable
- 10-7. Water Buoys
- 10-8. Barrel Pump, Hand Operated
- 10-9. Tripod, Flexible, Small
- 10-10. Drum Thief, Glass

10. SPECIALIZED EQUIPMENT

(Continued)

- 10-11. Solar Powered Electrical Supply System**
- 10-12. Kemmerer Water Sampler**
- 10-13. Ultra-Violet Light**
- 10-14. Global Navigation Satellite System (GNSS) Receiver**
- 10-15. Dual Grade Laser Level Kit**

10-1. Chemical Identifiers, Portable



10-1.a. Chemical Identification

Manufacturer:

Smiths Detection

Model:

HazMatID Elite & HazMatID 360

Quantity Available: (On National Equipment List)

Willowbrook: 1 of each

Ann Arbor: 1 (HazMatID 360)

Description:

The HazMatID 360 & Elite are advanced portable FT-IR Chemical Identifier.

It creates an Infrared Spectrum "fingerprint" of a liquid or solid sample and compares it to an extensive internal library of IR fingerprints for known compounds. The results are displayed in percent probability of a match to the closest identified compounds.

10-1.b. Point-and-Shoot Chemical Identifier

Manufacturer: Thermo Scientific **Model:** First Defender RM **Quantity Available:** Westlake: 1



Description:

- Quickly identifies unknown solid and liquid chemicals from a vast sample library including: explosives, toxic industrial chemicals (TICs), toxic industrial materials (TIMs), chemical warfare agents (CWAs) white powders, narcotics and more
- Mixture analysis software identifies mixture components in seconds including solid/liquid combinations and aqueous solutions
- Handheld weighs less than 2 lb (800g) for easy transport
- Certified to meet MIL STD-810G requirements for ruggedness
- Designed for use in the hot zone with tough form factor, quick decontamination and easy operation in full Level A gear
- Non-contact sampling requires no calibration and no consumables
- Point-and-shoot™ operation through sealed translucent containers avoids contamination and exposure and maintains evidence

10-2. Thermal Imaging Camera (Color)



Type: Color, WiFi communication

Manufacturer:

FLIR

Model:

E60

Quantity Available:

Willowbrook: 1

Westlake: 1

Description:

Compact thermal imaging camera with 320x240 IR resolution and measurement modes, 3 spots, 4 area box, isotherm, auto hot/cold spots. Bluetooth; 3.5" touchscreen; picture-in-picture and multi spectral dynamic imaging.

10-3 Fluid Level Meters/Water Quality Samplers



10-3.a. Water Level Meter

Manufacturer:

Solinst

Model:

101 P2

Quantity Available: Willowbrook: 3

Description:

Water level meter for measuring water levels in wells up to 150' deep with diameters of 0.55" or more. Heat Embossed Markings on Polyethylene Tape every 1/100 of a foot.

10-3.b. T - L - C Meter

Manufacturer:

YSI

Model:

3000

Quantity Available: Willowbrook: 1

Description:

Self-contained filed instrument and probe system that measures temperature, water level or depth, conductivity and temperature compensated conductivity for water quality applications. The meter can deploy to a depth of 150 feet. Probe diameter is 1", depth marked every foot.



10-3.c. Oil/Water Interface Probe



Manufacturer:

ORS Environmental Equipment

Model:

1068013

Quantity Available: Willowbrook: 2

Description:

Hand held interface probe for measuring depth to water or oil in tanks or wells. The system is approved for Class 1, Division 1, Group D applications. The unit is intrinsically safe provided the following requirements are met: Batteries must be changed only in a non-hazardous location and **Batteries must be Duracell Type MN1500 (size AA). Substitution will impair intrinsic safety and void approval.** The probe is 1" in diameter and has 100 feet of cable. Tape is marked every 1/10' and in cm. Oil slick must be $\geq 1/16"$. Always use grounding cable.



10-3.d. YSI 556 MPS Water Quality Sampler

Manufacturer:

YSI

Model:

556 MPS (Multi Probe System)

Quantity Available:

(On National Equipment List)

Willowbrook: 2

Ann Arbor: 1

Westlake: 1

Description:

The 556 MPS is a portable handheld multi-parameter water sampling system. This meter measures dissolved oxygen, temperature, conductivity, pH and Oxidation-Reduction Potential (ORP). Powered by alkaline batteries. 50 foot probe cable. Unit has been discontinued, but still supported by YSI.

10-4. Portable Electric Generators



10-4.a. 5600 Watt Gas Generator

Manufacturer: Craftsman

Model: 5600

Quantity Available: Willowbrook: 5
Des Plaines: 1
Ann Arbor: 1*
(*Located with HazCat Trailer)

Kit Includes: 5600watt gasoline generator.
Acquired on National Buy after 9/11.

10-4.b. 3500 Watt Gas Generator

Manufacturer: Honda

Model: 3500 Gas Generator

Quantity Available:

Willowbrook: 2

Kit Includes: Gas generator, small
tool kit



Generator Specifications

Engine	8 HP, Single Cylinder, Overhead Valve, Air Cooled
Displacement	242 cc
AC Output	120/240V 3500W max. (29.2114.6A) 3000W rated (25.0/12.5A)
Receptacles	20A 125V Duplex NEMA Plug Number: 5-20P 30A 125V Locking Plug NEMA Plug Number: L5-30P 20A 125/250V Locking Plug NEMA Plug Number: L14-20P
DC Output	12V, 100W, (8.3A)
Starting System	Recoil (Optional Electric)
Fuel Tank Capacity	4.5 gallons
Run Time on One Tankful	8.5 hrs. @ rated load 14.2 hrs. @ 1/2 load
Dimensions (L x W x H)	23.8" x 25.8" x 22.4"
Noise Level	68 dB @ rated load
Dry Weight	160 lbs.

10-4.c. 2000 Watt Gas Generator

Manufacturer: Honda

Model: EU2000i

Quantity Available:

Willowbrook: 2

Ann Arbor: 1

Westlake: 1

Description: Engine: Honda GX200

- Displacement: 98.5cc
- AC Output: 120V 2000W max - 16.7A, 1600W rated - 13.5A
- Receptacles: 20A 125V Duplex
- DC Output: 12V, 96W - 8A
- Starting System: Recoil
- Fuel Tank Capacity: 1.1 gallon
- Runtime per tankful 4 hrs at rated load, 96 hrs at 1/4 load
- Dimensions: 20.1 in. x 11.4 in. x 16.7 in.
- Dry weight 46 lbs.



10-4.d. 800 Watt Gas Generator

Manufacturer: Honda

Model: EX800 Gas Generator

Quantity Available: Willowbrook: 1

Kit Includes: Small gas generator, hour meter

Note: This is not Removal equipment and normally used for geophysical equipment. Contact Jim Ursic for access.



10-5. Traffic Control Equipment, Temporary



10-5.a. Workers Signage

Type: Worker Icon

Manufacturer: USA Sign

Model: 5'Wide, fabric

Quantity Available: Willowbrook: 1

Description: Worker icon with stand, large 5'wide, roll-able fabric panel.



10-5.b. Flagman Icon Signage

Type: Flagman Icon

Model: 4'wide, fabric roll-able panel

Quantity Available:

Willowbrook: 1

Description: Flagman icon with stand, 4'wide, roll-able fabric with stand.



10-5.c. Traffic Cones

Type: 1 9" & 28" tall, orange plastic traffic cones

Model: Various

Quantity Available: Willowbrook: 9 Mixed sizes

Description: Plastic traffic cones, no reflective tape. Not all cones are marked "EPA" or "USEPA"

10-6. Containment Pool

Type: Containment Pool

Quantity Available:

Willowbrook: 1

Description: Collapsible sides that can be folded for storage. 6" sides and 5" square plastic with stiff side boards.





10-7. Water Buoys

Type: Closed Area with icon

Manufacturer: Rolyan

Model: Closed area with icon

Quantity Available: Willowbrook: 4

Description: Plastic buoys 10" diameter and 5' long with weighed bottom and eye loop for securing line(s). Also has reflective tape.



10-8. Hand Operated Barrel Pump

Type: Rotary Drum Pump

Manufacturer: ABC Industrial Supplies

Model:

Quantity Available: Willowbrook: 1

Description: Three section suction tube with bung.



10-9. Flexible Tripod

Type: 9" Flexible tripod

Manufacturer: JOBY

Model: Gorillapod

Quantity Available: Willowbrook: 1

Description: Small 9" portable flexible tripod, with case.



10-10. Glass Drum Thief

Type: Drum Thief/Coliwaser

Manufacturer: CONBAR Environmental Products

Model: 5500

Quantity Available: Willowbrook 24

Description: Disposable, glass, Viton Seal, 42" long, 200 ml capacity.

10-11. Solar Power System, 200 Watt

Type: In-house built Solar Power System

Manufacturer: In-House Assembly

Model: N/A

Quantity Available: Willowbrook: 1

Description: System allows up to 30 amps at 12 volts for approximately 360 watts of power with full or partial sun.

Examples of power requirements related to this system

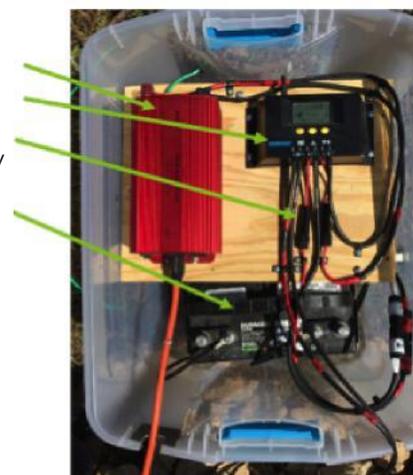
Electronics	Watts	Amp hours	Total Battery
Computer	40 to 120	3.3 to 10	56 Amp Hours
Printer	30 to 50 (3 to 5)*	2.5 to 4.2	
Cell Phone Charger	2 to 6	0.2 to 0.5	
Power Drill Battery Charger	220	18.3	
LED Work Light	20 to 40	1.6 to 3.3	

- 3 to 5 watts on standby mode
- ▶ 56 Amp hours based on 12 volt marine deep cycle battery purchased for this system.
- ▶ 200 Watt systems powers 3 laptop computers, a printer, charged cell phones, and recharged a power drill battery
- ▶ Also Powered small air compressor



Basic Components

- 1,000 Watt Inverter
- 30 Amp Charge Controller
- Cables, Connectors & Fuses
- Marine Deep Cycle 12 Volt Battery
- Solar Panels
- Miscellaneous: plastic case, grounding rods, extra wire



10-12. Kemmerer Water Sampler

Manufacturer: WILDCO

Model: 1204 and 1510

Quantity Available: Willowbrook: 2

Description: Portable water sampler with messenger weight.

SPECIAL NOTE: Samplers with blue seals may leach phosphorus and mercury and are not recommended for chemical sampling. Requires Rinsate Samples prior to use.





10-13. Ultra-Violet Light

Type: 395 mm 12 LED Bulbs

Model: UV Sight

Quantity Available: Willowbrook: 1

Description: Locates stains. Requires 3 AAA batteries.

NOTES: Eye protection recommended; Do not use for prolonged periods of time, turn off if overheated.



10-14. GNSS Receiver

Manufacturer:

EOS Positioning Systems

Model:

Arrow 100 GNSS Receiver

Quantity Available:

Willowbrook: 7

Ann Arbor: 1

Westlake: 1

Description:

The Arrow 100 is a Submeter GNSS (Global Navigation Satellite System) receiver for use with a variety of mobile devices, including a smartphone, tablet, or notebook computer. The unit can achieve up to 60cm real-time accuracy, under ideal conditions.

Note: This unit is not intended for Survey Grade measurements. (See APPENDIX B)



10-15. Grade Laser Kit

Manufacturer:

Leica Geosystems

Model:

Rugby 880 Dual Grade Laser

Quantity Available:

Willowbrook: 1

Description:

The Rugby 880 is a dual grade laser, that provides continuous high laser accuracy for precision grading and excavation depth confirmation. This unit is capable of tilting $\pm 10\%$ in a single axis, and $\pm 3\%$ in both axes, along with vertical & horizontal self-leveling (within ± 6 degrees).

Provides an accuracy of $\pm 1/16$ -inch at 100 feet, and a max operating range of up to 4,200 feet.

11. Miscellaneous Non-Removal Equipment

**This section presents descriptions of the following
warehouse equipment:**

- 11-1. Torpedo heater**
- 11-2. Air compressor**
- 11-3. Power Washer-Hot Water**
- 11-4. Overpack Drum**
- 11-5. Hand Augers**
- 11-6. Utility Light on Tripod**
- 11-7. Mixing Bowls**
- 11-8. Hip Waders**
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- 11-10. Groundwater Sampling Pump - Grundfos**
- 11-11. Groundwater Sampling Pump - Keck**
- 11-12. Sediment Hand Corer - 20"**
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(Continued on next page)

11. Miscellaneous Non-Removal Equipment (Continued)

- 11-18. Post Hole Digger**
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- 11-22. Measuring Wheel Feet**
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- 11-30. Tripod, Engineering**
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- 11-32. Hand Tools**
- 11-33. Flagging Tape**
- 11-34. Floor Mat**



11-1. Torpedo Heater

Type:

Kerosene fuel

Manufacturer:

Remington

Model:

100 Portable Forced Air Torpedo Heater

Quantity Available:

Willowbrook: 1

Description:

Portable torpedo heater with blower



11-2. Air Compressor

Type:

Gasoline Engine

Manufacturer:

Emglo

Model:

Air compressor

Quantity Available:

Willowbrook: 1

Description:

Air compressor



11-3. Pressure Washer

Type:

Hot Water Power Washer

Manufacturer:

Arrow

Model:

Hot Water Pressure washer

Quantity Available: Willowbrook: 1

Description:

Power washer can be fueled with gasoline, diesel, or kerosene, also has suction hose to dispense soap into pressure stream.



11-4. Overpack

Manufacturer:

Overpack

Model:

Overpack

Quantity Available:

Willowbrook: 1

Description:

Overpack drum with screw lid (plastic)

11-5. Hand Augers-Soil Sampling

Manufacturer:

Various

Model:

N/A

Quantity Available:

Willowbrook: 20 augers

Westlake: 2 hammer augers

Description:

Hand Augers for soil sampling down to 5 feet. Available in 1", 1.5", 2", 3" and 4" diameters.



11-6. Utility Light

Manufacturer:

(N/A)

Model:

N/A

Quantity Available: Willowbrook: 4

Description:

Two-head tripod mount Utility Light, 120 VAC. 1,000W (500Wx2) 83 Amp Rated for wet conditions.



11-7. Stainless Steel Mixing Bowls

Manufacturer:

Various

Model:

N/A

Quantity Available:

Willowbrook: 14 bowls
various sizes

Description:

Stainless steel mixing bowls, various sizes, for soil and sediment compositing and mixing.



11-8. Hip wader

Manufacturer:

Varies

Model:

Hip wader

Quantity Available:

Willowbrook:

Quantities of this item will vary over time at this location.

Description:

Hip wader



11-9. Canvas Duffel Bags

Manufacturer: Various

Model: Various

Quantity Available: Willowbrook: Quantities of these items will vary over time at this location.

Description:

Canvas duffel bags, various sizes and colors.



11-10. Groundwater Sampling Pump

Manufacturer: Reel EZ (reel); Grundfos Redi Flo (pump); BMI converter (controller)

Models: Reel EZ, MP 1, BMI

Quantity Available: Willowbrook: 1

Description:

Portable pumping and sampling system for high and low flow sampling (pump; water-jacketed, variable speed submersible impeller type).

System is used for purging, sampling and water quality monitoring in wells as small as 2" ID. The reel is made from lightweight aluminum with has a built in cable guide and Happy Hose® (cable, tubing and safety cable bonded together). The reel is made to install at ground level or attached to vertical well casing. Power supply is required to output single phase 230 volts at 60 Hz and 10 amps; this power supply feeds the controller/

converter for the pump which converts to 3 phase 25 volts to 3 phase 220 volts at 46 to 400 Hz at 5.5 amps. Pump has 2 HP with thermal overload and is 1.81" in diameter; length is 11.3". Max depth 200, flow rates up to 9 gpm or less dependent on head and depth. Additional Equipment Required for Operation: Honda Generator EM3500.

11-11. Keck Pump

Manufacturer: Keck (reel); Grundfos Redi Flo (pump); BMI converter (controller)

Model: Keck (large collector w/center discharge and wheels), MP 1, BMI

Quantity Available: Willowbrook: 1 system

Description:

Portable pumping and sampling system for high and low flow sampling (pump; water-jacketed, variable speed submersible impeller type.

System is used for purging, sampling and water quality monitoring in wells as small as 2" ID. The reel is made from lightweight aluminum with 2 hard rubber wheels for portability. Unit has center discharge and requires separate discharge tubing, power cable and safety cable. Power supply is required to output single phase 230 volts at 60 Hz and 10 amps; this power supply feeds the controller/converter for the pump which converts to 3 phase 25 volts to 3 phase 220

volts at 46 to 400 Hz at 5.5 amps. Pump has 2 HP with thermal overload and is 1.81" in diameter; length is 11.3". Max depth 200, flow rates up to 9 gpm or less dependent on head and depth.

Additional Equipment Required for Operation: Honda Generator EM3500





11-12. 20-inch Aquatic Sediment Hand Core Sampler

Manufacturer:

Wildco

Model:

20-inch Hand Core Sampler

Quantity Available:

Willowbrook: 4

Description:

Hand operated 20-inch stainless steel liner-type sediment sampler intended for shallow coring in fresh, salt or brackish waters. Includes stainless steel core tube threaded at both ends, two removable handles, screw pin clevis and automatic polyurethane flutter valve, 2 nosepieces, 2 clear CAB liner tubes with caps, and 3 eggshell catchers. Includes a 4 foot T-handle and Two additional 4' rod sections for a total extension of 12'

Operation: push it into bottom sediments using handles on the head assembly. After the corer penetrates the bottom, twist or pull it free to retrieve sample. The hand corer works by creating a partial vacuum which holds the sample in place and helps prevent washout. As the tube is pulled up, the polyurethane flutter valve on the head assembly tightly seals the upper end of the sampler. As long as the bottom end of the tube is 2-3" (50-75 cm) under water, the corers will hold.

11-13.a. Petite Sediment Sampling Dredge

Manufacturer: Ekman

Model:

6 inch

Quantity Available:

Willowbrook: Two 6-inch dredges

Description:

Petite dredge for sampling benthic communities inhabiting soft bottomed aquatic environments. Hinged upper doors swing open as dredge is lowered, allowing water to pass through and minimize shock wave. Stainless steel messenger closes dredge, preventing washout of sample. Cable release system, with bar grip, helps set dredge with greater safety. Dredge is constructed of stainless steel with special welding for added strength and durability. A case, line, and messenger are included.



11-13.b. 9" Sediment Sampling Dredge



Manufacturer: Wildco

Model:
9" Ekman Dredge

Quantity Available: Willowbrook: 1
Description:

Simple to use fresh and salt water sediment grab sampler designed for hard bottoms such as sand, gravel, consolidated marl or clay. It's a sturdy dredge deliberately made heavy for biting deep into the bottom and is good for invertebrate recovery. Self-closing scoops have center pivot closing action. A case, line, and messenger are included.

11-14 Binoculars

Manufacturer: Swift, Nikon, OpTex

Model:

Swift model 774 (7x15), Swift model 789 (7x50),
Nikon model Action (10x50), OpTex model 104
(10x50)

Quantity Available:

Willowbrook: Two 7x15 power, one 7x50
power, two 10x50 power.



Description:

Magnification Power Binoculars are identified by 2 numbers. The first is magnification power, the second is the diameter of the front lenses, explained below.

Example: 7 x 15 binoculars have a magnification power of 7.

A magnification power of 7 means that an object will appear 7 times closer than it would to your unassisted eye. For example, if you view a deer that stands 200 yards away from you through 7x binoculars, it will appear as though it were 28.6 yards away (200 divided by 7).

Note: binoculars with magnification powers greater than 10 amplify the movements of your hands, making steady viewing difficult.

Objective Lens Diameter The second number used in binocular identification refers to the diameter (in millimeters) of the objective lenses (those farther from your eyes; those closer to the "object" being viewed).

Example: 7 x 15 binoculars have objective lenses measuring 15mm.

The diameter of the objective lenses largely determines how much light your binoculars can gather. If you have 2 binoculars with exactly the same specifications except for objective lens diameter, those with the larger diameter objective lenses will capture more light. More light means a brighter view, particularly in low-light conditions.



11-15. Digital Camera

Manufacturer: Canon

Model:
PowerShot SX260 HS (PC1742)

Quantity Available: Willowbrook: 6 cameras
Ann Arbor: 6 cameras

Description:
12 MegaPixel Digital Camera, CMOS Sensor,
20X Optical Zoom, GPS, HD Video



11-16. Ice Auger

Quantity Available: Willowbrook: 1

Description:
7" diameter and 16" Auger depth



11-17. Slam Bar

Quantity Available: Willowbrook: 4

Description:
2" and 3" diameter



11-18. Post Hole Digger

Quantity Available: Willowbrook: 4

Description:

Makes post holes.



11-19. Steel Ramps

Quantity Available: Willowbrook: 1

set **Description:**

One set steel ramps with expanded metal holes for traction. One side has small lip for easy access. 7' 6" long and is 3" thick.



11-20. Air Circulator

Manufacturer: Patton

Model: 1010 MP

Quantity Available: Willowbrook: 2

Description:

30" blade -2 speed fan. Support can be raised for increased height.

11-21. Steel Well Sounding Tape Measure

Manufacturer: Lufkin

Model: 100' Steel Tape in 1/10's of inch

Quantity Available:

Willowbrook: 5

Description:

Steel tape has brass weight on end of tape for sounding the bottom of monitoring wells. Length of brass weight must be corrected for measurements. Also used for measuring groundwater levels by rubbing a block of blue chalk on the first few feet of tape and calculate depth to where the chalk is wet (a darker blue color).



11-22. Measuring wheel-feet with case

Manufacturer: Rolatape

Model: N/A

Quantity Available: Willowbrook: 4

Description:

Distance measuring wheel in feet. Resettable counter.



11-23. Sieves

Manufacturer: Combustion Engineering

Model: U.S.A. Standard Testing Sieve

Quantity Available: Willowbrook: 1 each

Description:

Size References: A.S.T.M.E-11 Specification, Millimeter, inches and Tyler Equivalent

ASTNE-11 sizes available, 6, 7, 10, 18, 25, 45, 60, 120, 170, 230 and 325





11-24. Coolers for Samples/Food

Manufacturer: Various

Model: Various

Quantity Available: Willowbrook: 6

Description:

Coolers available for food and non-food purposes.



11-25. Ladders, Portable

Manufacturer: Various

Model: Various

Quantity Available: Willowbrook: 8

Description:

Ladders, aluminum, wood, fiberglass, step-ladders, extension ladders.



11-26. Tables, folding

Manufacturer: Various

Model: Various

Quantity Available: Willowbrook: 6

Description:

Various folding tables.



11-27. Bags, zip lock type

Manufacturer: Various

Model: Various

Quantity Available: Willowbrook: Varies

Description:

14"x 24"; 12"x 15"; 12"x 12"; 10.5"x 11"; 9"x 12";
8"x 10"; 5.5"x 8"; 4.5"x 14"

All bags are 4 mil in thickness



11-28. Light Table, portable, AC powered

Manufacturer: Gagne, Inc

Model: Porta-Trace

Quantity Available: Willowbrook: 1

Description:

18"x 11" AC powered light table, comes with its own travel case.



11-29. Tripod, prism pole

Manufacturer: Tru Point Products

Model: N/A

Quantity Available: Willowbrook: 4

Description:

Used for holding round survey poles, etc. up to 1 3/8" diameter poles.

Note: center pole not part of issued unit.



11-30. Tripod, engineering

Manufacturer: Lietz

Model: N/A

Quantity Available: Willowbrook: 1

Description:

Used for holding survey instruments.



11-31. Stadia Rod, Engineering

Manufacturer:

Model:

Quantity Available: Willowbrook: 1

Description:

Fiberglass, 35 feet in tenths, comes with fabric cover.



11-32. Hand Tools, various

Manufacturer: Various

Model: Various

Quantity Available: Willowbrook: Varies

Description:

Various handheld tools.



11-33. Flagging Tape

Manufacturer: N/A

Model: N/A

Quantity Available: Willowbrook: Various rolls

Description:

Plastic, 1"width, assorted color, flagging tapes.



11-34. Floor Mat, Black

Manufacturer: N/A

Model: N/A

Quantity Available: Willowbrook: 1

Description:

Black floor mat, approx. 3'x4'. Water bottle for Scale.

APPENDICES

IN-HOUSE FIELD SERVICES

APPENDIX A.	DIRECT PUSH (GEOPROBE)
APPENDIX B.	TOTAL STATION SURVEY
APPENDIX C.	SAMPLING & SURVEY BOATS
APPENDIX D.	GEOPHYSICAL SURVEYS
APPENDIX E.	RADIATION HEALTH PHYSICIST
APPENDIX F.	DATA ACQUISITION (VIPER)
APPENDIX G.	PNEUMATIC SLUG TEST

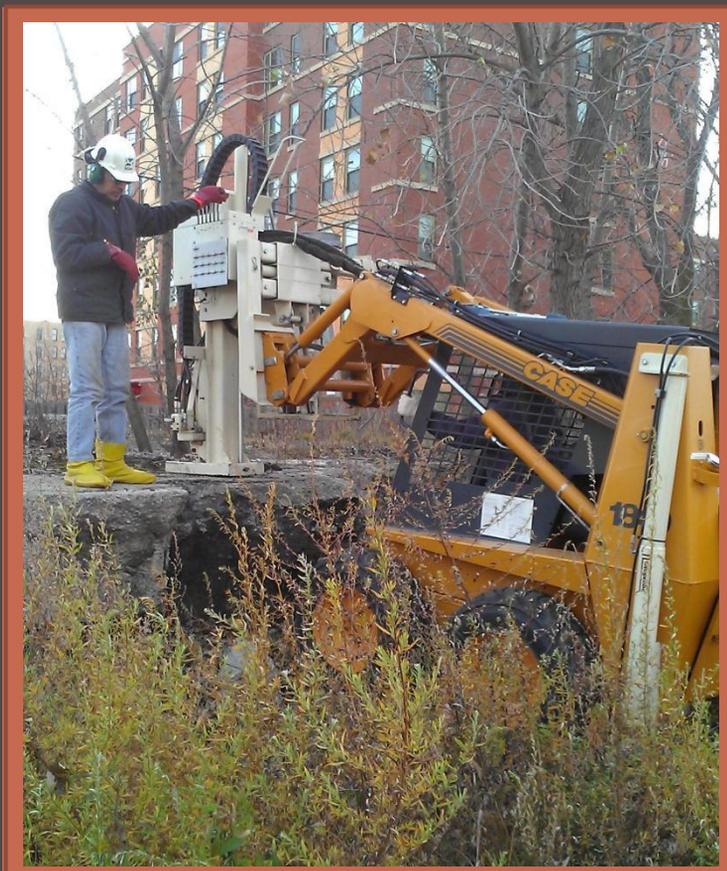
PROTECTIVE CLOTHING PERMEATION DATA

APPENDIX I.	ASTM F1001 CHART
APPENDIX II.	PROTECTIVE SUITS & GLOVES

Appendix A

FIELD
SERVICES
SECTION

Direct Push Sampling System - GeoProbe® 540B



Region 5
Superfund
Division

Access to Services:

Jim Ursic: 312.353.1526

Ursic.James@epa.gov



BACKGROUND

The USEPA, Region 5 Superfund Division owns, maintains and deploys a GeoProbe® 540B direct push sampling unit mounted on a CASE® 1840 skid steer for mobility. The unit provides a means to sample soil, ground water, and soil gas at Superfund sites. In addition, this equipment is used to install piezometers (small wells), drill through concrete to access soil/water beneath and obtain sub-surface resistivity measurements to detect shallow contaminate plumes. This system was purchased on November 5, 1998. However, EPA did own a less powerful unit prior to this system.



Collecting Ground Water Samples Using GeoProbe® 540B

The unit has a compact size for accessing entrance areas as small as 4'8" wide and 6'4" high and once deployed at a sampling location requires an operating height of 10'. The front articulating probing hammer allows operations on steep grades or to reach elevated areas. The system is transported on a FSS owned flatbed trailer towed by a FSS support vehicle which has built-in compartments to transport and store tooling and supplies for the probe. Two trained and experienced FSS staff members operated the unit until 2007 when one operator left the Section leaving Jim Ursic as the only operator. If needed, the operator has access to experienced USEPA contractor assistants familiar with the GeoProbe® (not as operators) and all have backgrounds in chemistry who aid in sample collection.

An additional benefit of this particular equipment configuration is the probing hammer unit (white assembly seen in Figure 1) can be disconnected in about 10 minutes allowing the unit to be used as a conventional Skid Steer. The only additional Skid Steer equipment FSS has purchased is an adjustable pallet fork. This configuration is used in our Willowbrook warehouse to move large pallets and to load and unload pallets from trucks. The main GeoProbe® tool assembly can be reconnected and tested in about 20 minutes using several built-in quick connect hydraulic lines.



Soil Samples Ready for Analysis

This equipment supports the entire Region 5 Superfund program and has been used primarily as: 1) an initial sampling reconnaissance tool or 2) supplementing major site investigation processes when additional sampling is desired to augment previous sampling efforts. This system has a typical depth of investigation to about 30' below ground surface, but under optimal conditions could reach 45'.

Soil Sampling

This unit can sample soil using several accepted methods which include:

- a) Dual Tube (DT22) Sampling which allows collection of soil in clear plastic liners. Collection can either be depth specific or continuously.
- b) Macro Core (MC5) Sampling which collects soil in greater quantities in clear plastic liners and can also be applied to specific depths or continuously.

Ground Water Sampling

There are three methods to sample ground water, one vacuum type, one impeller and two low flow methods through probe rods or wells.

- a) The vacuum system uses a Cole Parmer peristaltic pump which is subject to limited depths of sampling.
- b) A Grundfos Pump operates on a mechanical impeller method generally used for purging wells.
- c) One low flow method is a mechanical bladder pump with an electric actuator.
- d) The other low flow method is a Geocontrol Pro air operated bladder pump.

Temporary Access to Specific Depths for Ground Water Sampling

There are two methods to access ground water at specific depth intervals

- a) A mill slot tube 3' long, having a 2.125" I.D. with 42 slots 1.5" long and 0.020" wide slots (0.5 mm or 20 slot). This tube is pushed to the desired depth and is then ready for sampling.
- b) Single Point 16 (SP 16) ground water sampling unit is pushed to desired depth and an expendable probe point is removed and the rod string is pulled up 5 feet, allowing a stainless steel screen to deploy for sampling. When sampling is complete the rod string is removed from the hole, reset with a new expendable probe point ready for the next sampling depth. The opening for sampling is 0.5"

Pre-packed Screen Monitoring Wells or Pizometers

There are two options for installing pre-packed monitoring wells.

- a) I.D. of 0.75" with an O.D. of 1.4" and schedule 40 PVC, 0.010" slots, 0.125 spacing, 20/40 mesh sand. Total length 3' and can be stacked.
- b) I.D. of 0.5" with O.D. of 1.4" and schedule 80 PVC, 0.010" slots, 0.125 spacing, 20/40 mesh sand. Total length 3' and can be stacked.

Soil Vapor Implants & Post Run Tubing (PRT) System

Two methods are available for sampling soil vapor. One is used for temporary gas sampling while the other uses an expendable screen attached to tubing.

- a) The PRT system is driven to the desired depth and an expendable probe tip is removed down hole, the probe string is pulled back several inches and the gas is sampled through a tube attached to the bottom of the string
- b) Implants are designed to remain in the ground at a desired depth with tubing attached that reaches the surface. When sampling is complete the tubing is pulled out or cut while the screened implant remains in the ground with the expendable probe tip. The screen has 0.25" I.D, 6" long with 0.15 mm pore openings.

Direct Sensing Electrical Conductivity

This system is used for determining geology of the ground or best used for determining depths of certain contaminate plumes. The unit measures changes in the electrical properties in the ground using Wenner array to detect changes in ground conductivity. Changes can be due to changes in stratigraphy or contaminants having much higher or lower electrical properties than the host materials. The measurements are recorded on a computer as the probe string is pushed into the ground.

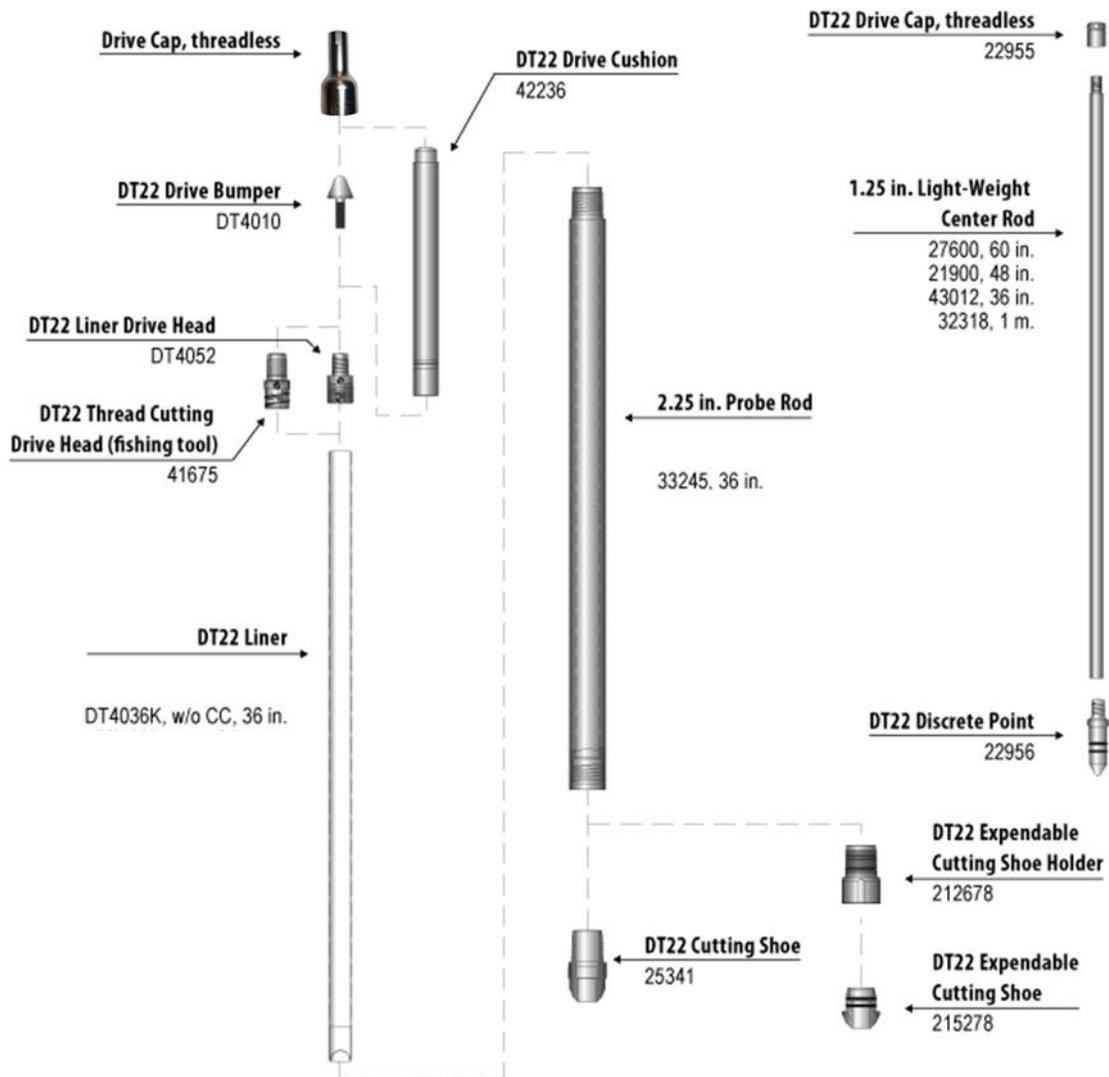
Concrete Breakers and Coring Systems

There are two options for going through concrete floors/roadways.

- a) A carbide drill bit can be used to drill a hole in concrete, but will not penetrate metal rebar. The diameter is 3.5"
- b) A diamond tipped concrete coring bit is used to remove concrete and any metal rebar. The diameter is 5".

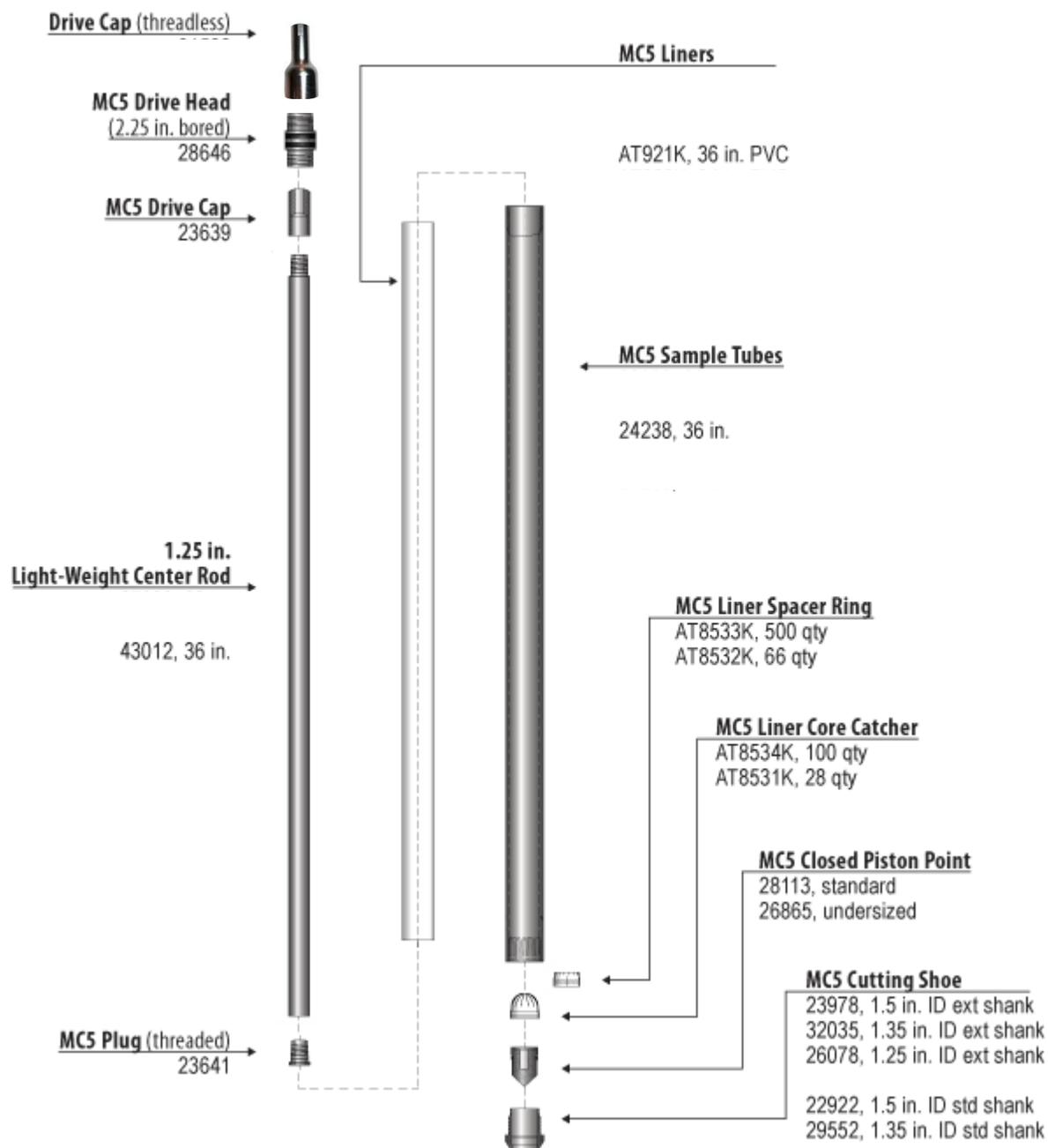
Dual Tube 22 Soil Sampling System

Figure 1



Macro Core (MC5) Soil Sampling System

Figure 2





Peristaltic Pump



Grundfos Pump



Mechanical Bladder Pump



Air – Water Lines for
Bladder Pump



Air Activated Bladder
Pump



Flow Through Cell

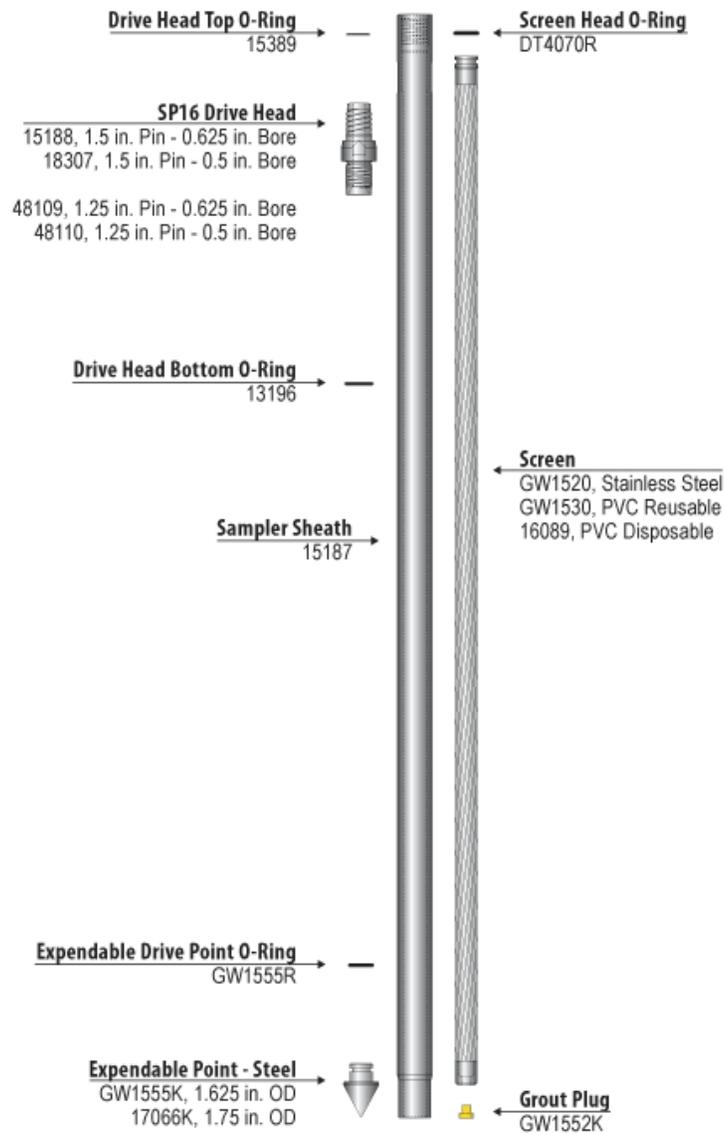


Mill Slot Probe Rod for GW Sampling

Figure 4

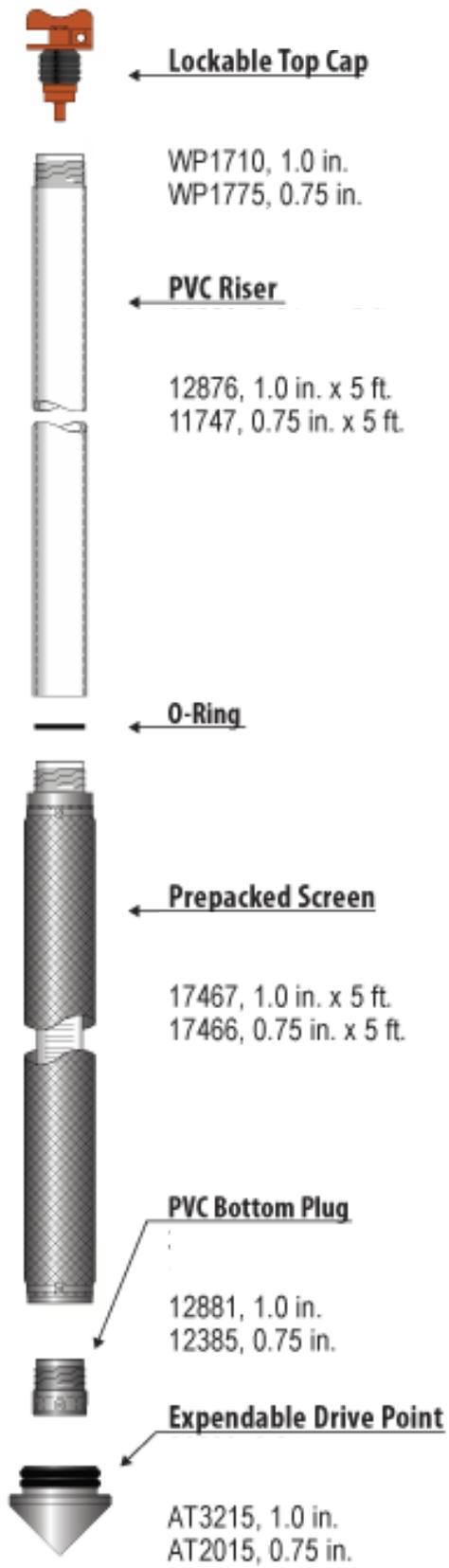
Screen Point 16 Ground Water Sampler

Figure 5



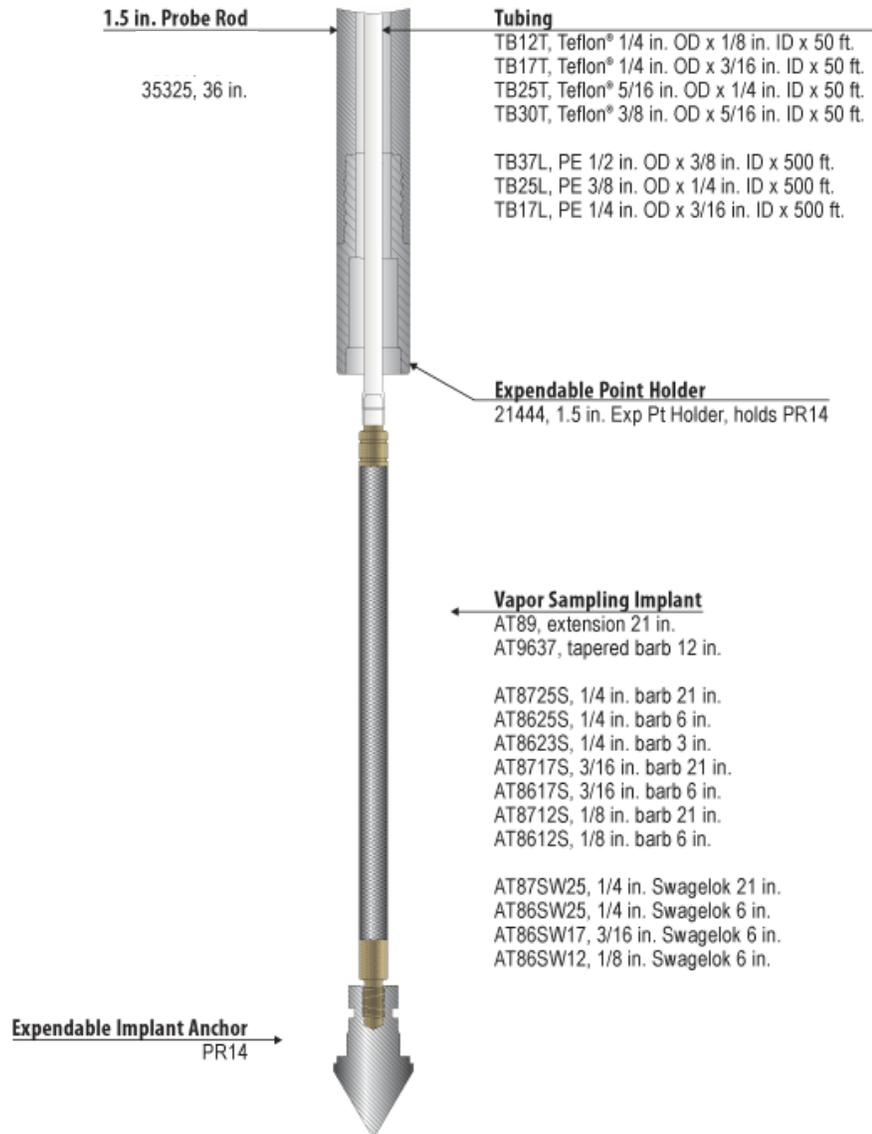
Pre-Packed Well Screen

Figure 6



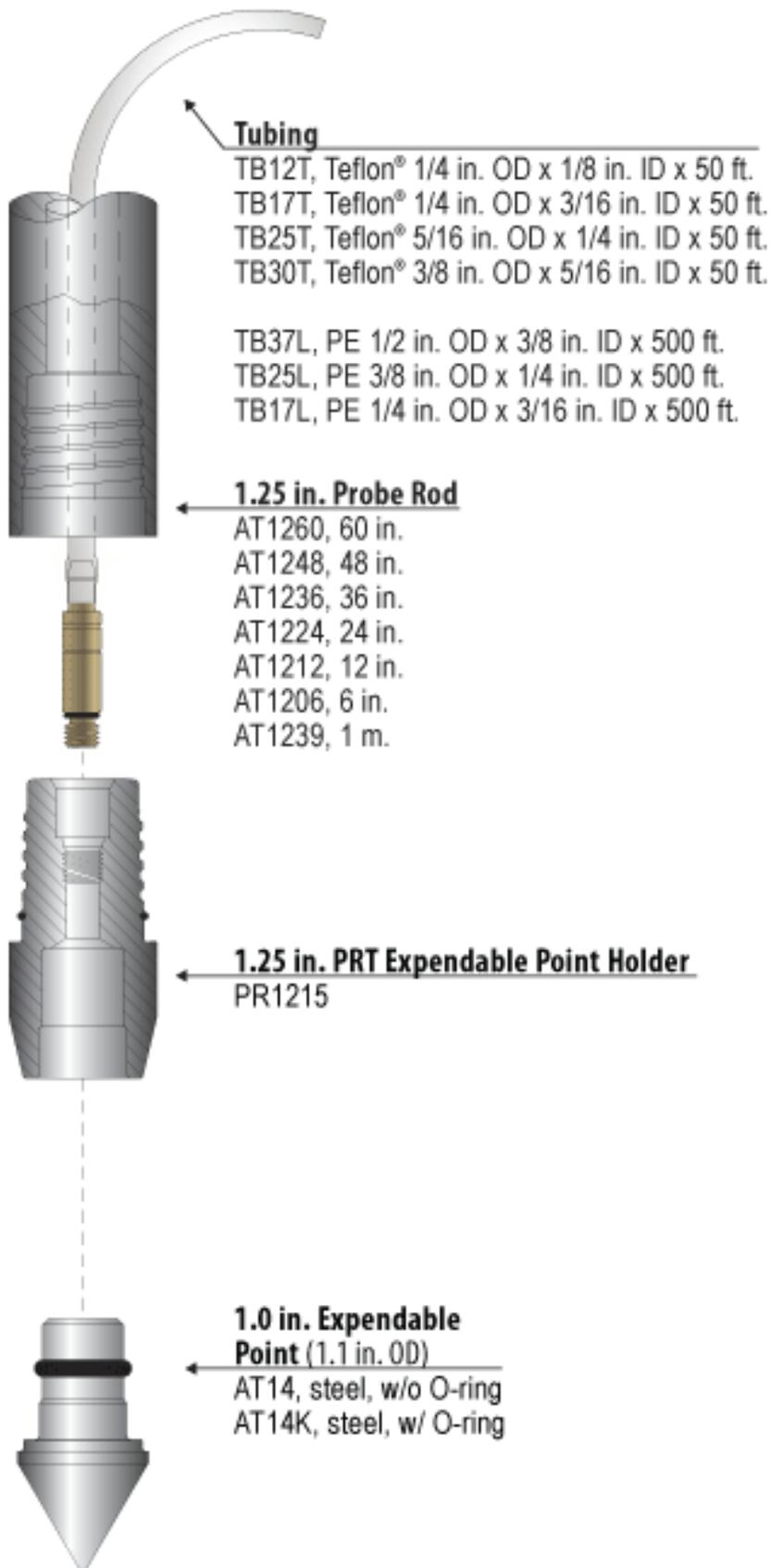
Soil Vapor Implants

Figure 7



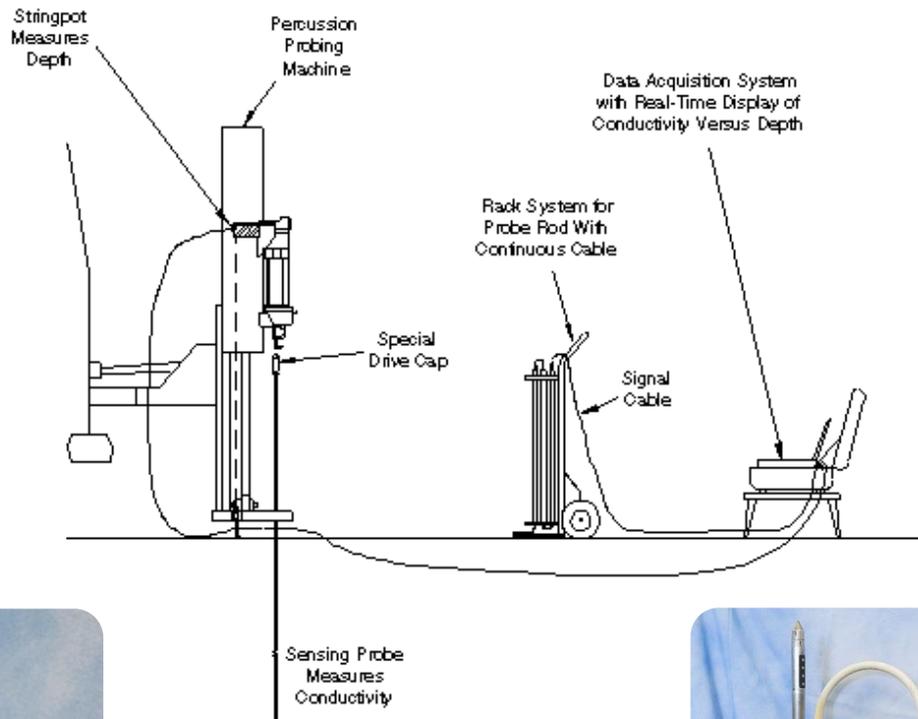
Soil Vapor Implants

Figure 8



Direct Sensing Electrical Conductivity

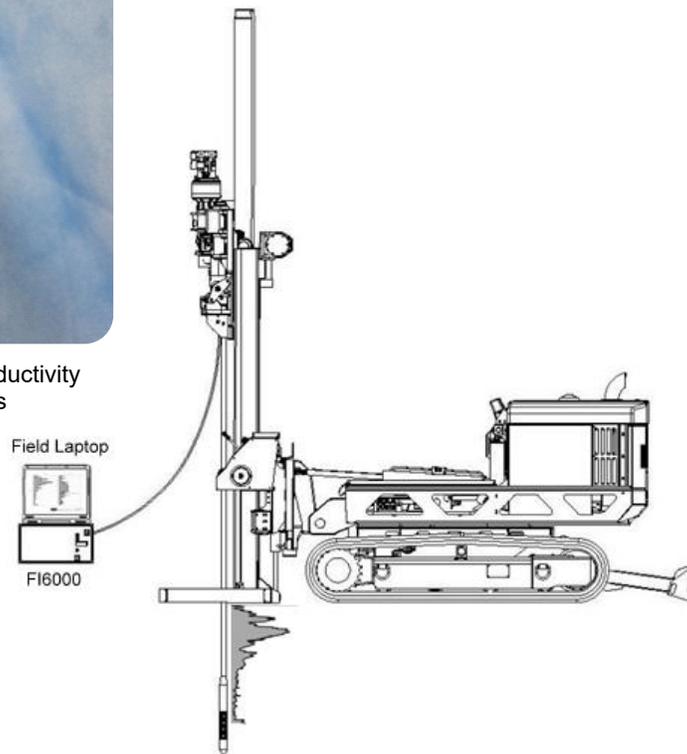
Figure 9



Probe Tip – Conductivity
Electrodes

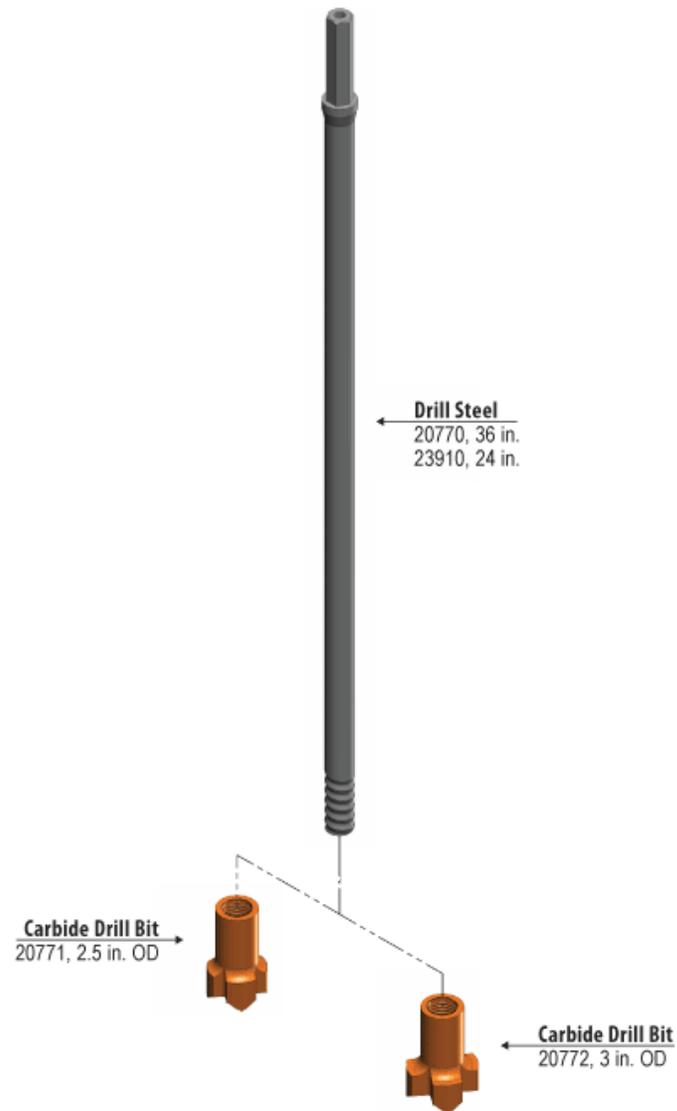


Conductivity
Rod Set



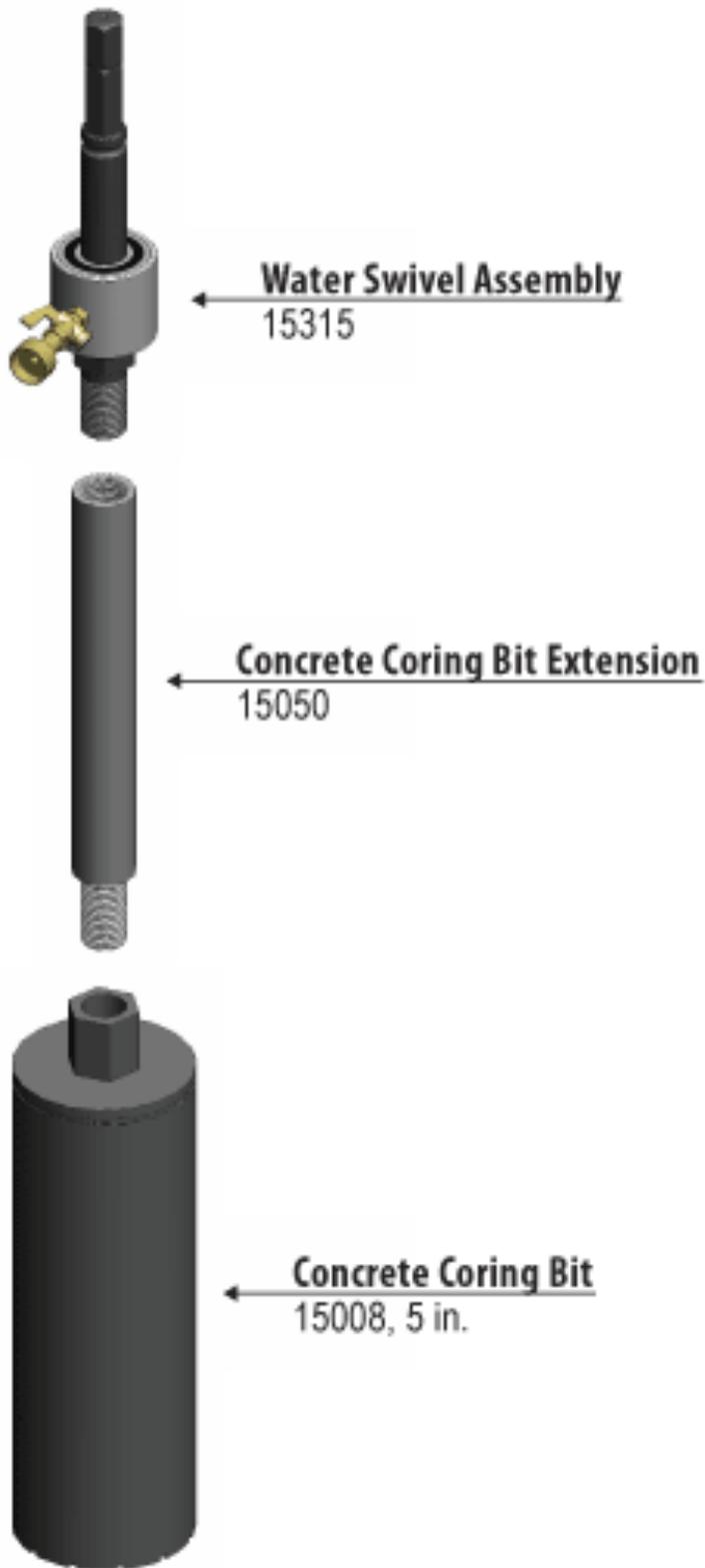
Carbide Drill Bit

Figure 10



Diamond Drill Coring Bit

Figure 11



Concrete Coring Bit
8" Concrete Foundation Core
12 minutes to Cut

APPENDIX B

Total Station Survey Services



To access these services contact:

Brian Cooper: 312-353-8651

cooper.brian@epa.gov

The Leica Complete Total Station is an electronic/optical instrument used for highly accurate surveying (X, Y, and Z or northing, easting and elevation).

The Leica Complete Total Station consists of an RTK GPS receiver, with 1 cm accuracy, and an optical total station (survey transit). The RTK GPS provides extremely accurate X-Y coordinates plus true elevation to centimeter accuracy. When paired with the optical total station, surveys can be performed on almost any terrain, including areas with considerable vegetation, which is a major limitation with other GPS technology. The total station is laser guided and locks onto the stadia rod reflector allowing for rapid data collection and less field time. Another time-saving feature is that the base corrections for RTK GPS come from a network of base stations provided by each state's transportation agencies (at no cost). The GPS corrections are transmitted via internet connection to the Leica computer. Although this requires a mobile internet connection (MiFi) to transfer the data from the base network, set-up and survey time are considerably reduced.

With the Leica system, EPA has the ability to obtain very accurate coordinates which are often critical for both assessment sampling and removal operations. Elevation surveys (contouring on a map) assist in understanding the dynamics of a contaminant on a site and often can be used to reduce or eliminate certain areas from an AOC. Highly accurate sample locations are often needed to accurately determine remediation footprints and subsequent removal boundaries. RTK GPS has also been useful to accurately determine water levels for bathymetric surveys and groundwater flow. Below is a list of survey objectives during 2012 and 2013.

Survey objectives in FY2012-2013:

Collect sample locations with 1 cm accuracy

Survey wells to model groundwater flow

Survey for elevation contouring

Establish local benchmarks

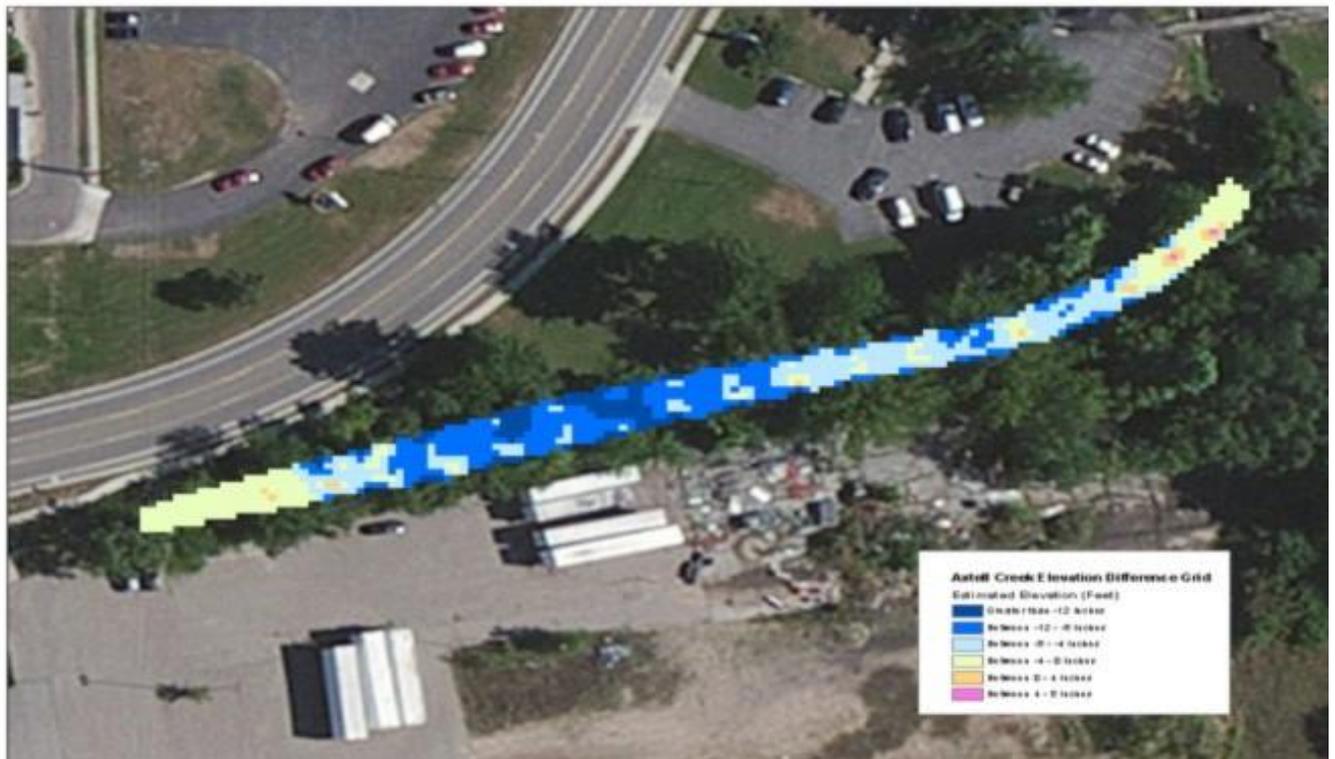
Map removal areas and staging areas.

Assess removal construction accuracy

Sediment movement post-construction

One of the benefits of this tool when used by the FIELDS program is that FIELDS uses the tool to provide in-depth analyses that contractor services would not offer, or would need to be contracted out to multiple sources. The following is one small example using the Portage Creek Site.

At Portage Creek, FIELDS used the total station to produce highly accurate maps of removal footprints and provide in-field setup of removal grids. The elevation model that was produced was also used by the backhoe rig operator during the removal to determine the correct depth to excavate each grid cell. Post-removal surveys assessed the quality of the excavation and will later measure the extent of post-construction sediment movement over time. This process will be completed in ten different areas over the course of the project. Additionally, surveys and mapping of potential staging areas have been useful in the efficient placement of staging



Difference between pre- and post-removal

APPENDIX C

Sampling and Survey Boats



To access these services contact:

Chuck Roth: 312-886-0242

John Canar: 312-886-6182, or

Brian Cooper: 312-353-8651

The USEPA, Region 5 Superfund Division owns, and the FSS FIELDS Program maintains and uses, boats for sediment sampling (cores and ponars) and for bathymetric and sub-bottom surveys. There are currently three Superfund Division staff who are trained, experienced and competent in the operation of this boat: John Canar, Brian Cooper and Charles Roth.

The boats (shown below) currently used consist of two small boats connected together and is referred to as the “twin jon boats” or “the little dog”. This boat unit is equipped with a 10 hp engine and can be used individually or in tandem as a pontoon boat. The boat is assembled on-site so that it can be used on small water bodies where larger, trailer transported boats would be difficult to use. It is rigged with an A-frame for core sampling, with power supplied by batteries or a small portable generator. It has a six-inch draft and is best suited for work on small bodies of water (ex, streams, rivers, small lakes).



APPENDIX D

Environmental Geophysical Methods

D – 1.0 Surface Applications

D – 2.0 Borehole Applications



To access these services contact:

Jim Ursic: 312-353-1526

ursic.james@epa.gov

BACKGROUND

The USEPA, Region 5 Superfund Division owns maintains and deploys several environmental geophysical methods. These methods include surface and borehole geophysical applications. These methods support the Remedial and Removal Branches in the Superfund Division.

Surface methods are used to locate buried objects, such as tanks, piping, foundations, edges of landfills, and dump sites. It is also used to locate plumes and define geology.

Borehole geophysical methods are used to evaluate physical conditions within existing wells, help drillers properly locate well screen intervals, measure lateral and horizontal flow within well, measure fluid parameters and determine geologic conditions near the well. Our logging platform is a Chevy Suburban that has on-board generator, printer, controlling software and cable to reach depths of 1,800 feet. Tools are also available to sample water at these extreme depths through probes equipped with empty cylinders that can be filled by activating an automated valve to capture and seal the sample.

The operators of this equipment prefer to use several different, but relevant, methods when evaluating problems. This provides another level of data to confirm any anomalies that may be found.

Geophysical activities within the section have been ongoing since 1987. All equipment is stored and maintained at our Willowbrook warehouse.

Surface Geophysical Methods

Gradient Magnetometer

The cesium vapor proton precession magnetometer is shown below being carried by the operator although it can be mounted on an All-Terrain-Vehicle for larger sites. It is often the first instrument deployed when looking for ferrous objects. It is deployed in a dual sensor configuration (two white canisters in photo below) known as a gradient mode since this reduces unwanted background interference. Its sensing depth limitation is based on the amount of mass present so the greater the ferrous mass the deeper it can be detected.



Gradient Magnetometer Hand Carried



Gradient Magnetometer Mounted on ATV.

Marine Applications of Magnetics

Region 5 Does Not Own Marine Tools – But Has Access to Instruments



Man Holding Marine Magnetometer Prior to Deployment.

Calumet Channel Gary, IN.
USCG Towing Marine Seismic Tool (closest to boat) and Marine Magnetometer to Locate Pipelines Crossing Channel.



D-1.0 Surface Geophysical Methods

Electromagnetics

There are two categories of electromagnetic instruments, time domain and frequency domain. It is important to note that although these instruments are used to find anomalies below ground, they are not shielded from metal objects above the tools, such as power lines.

Frequency Domain Electromagnetics

These instruments include the EM31, EM34, EM38 and GEM2. These instruments measure terrain conductivity, in-phase response, and magnetic susceptibility of rock, soil, fill, pore fluids and metal. There are additional differences between the EM38, EM31 and EM34 and is based on how their geometries are applied. Each of the EM38, 31 & 34 instruments have differing coil spacing which determines the depth of investigation, generally the depth, in optimum conditions, will be approximately one and one half times the coil spacing.

The one exception to this rule is the GEM2 instrument which have digital processors to enable the operator to program specific frequencies (EM38, 31 & 34 have fixed frequencies) to approximate the desired depths of investigation. Up to six frequencies can be collected at one time. One drawback to this system is that data is collected so fast, it is futile to have a digital readout. This instrument is extremely sensitive to any metal worn by the operator and every effort should be made to reduce the amount of metal on the operator.

Time Domain Electromagnetics

The EM61 is a time domain instrument and is also known as a high sensitivity metal detector. The increased sensitivity of this instrument limits how far the tool can transmit and receive information, which is about 15' below the ground surface. One advantage of the tool is that its signal is fairly limited to the extent of the 1 meter by ½ meter antenna. Unlike the magnetometer, which responds to a wide area around an anomaly, the EM61 can easily define the limits of a tank, for example.



EM34: Orange and white round antennas in shipping case. Options for cables, 10M, 20M and 40M in length allow for shallow and deeper exploration.



EM61: Operator pushing antennas and wearing a backpack with electronics and battery. Data are collected by a data logger mounted on handle bars.



EM38: Instrument has one-meter coil spacing for near surface investigations.



Gem2:
Commonly known as the ski, operator is surveying a parking lot in search of buried Tanks.



EM61:
Being towed on Torch Lake in shallow waters to locate metal flasks that may contain Mercury. Note GPS over antennas & rubber raft To isolate tool from nearby metal towing craft.

Surface Geophysical Methods

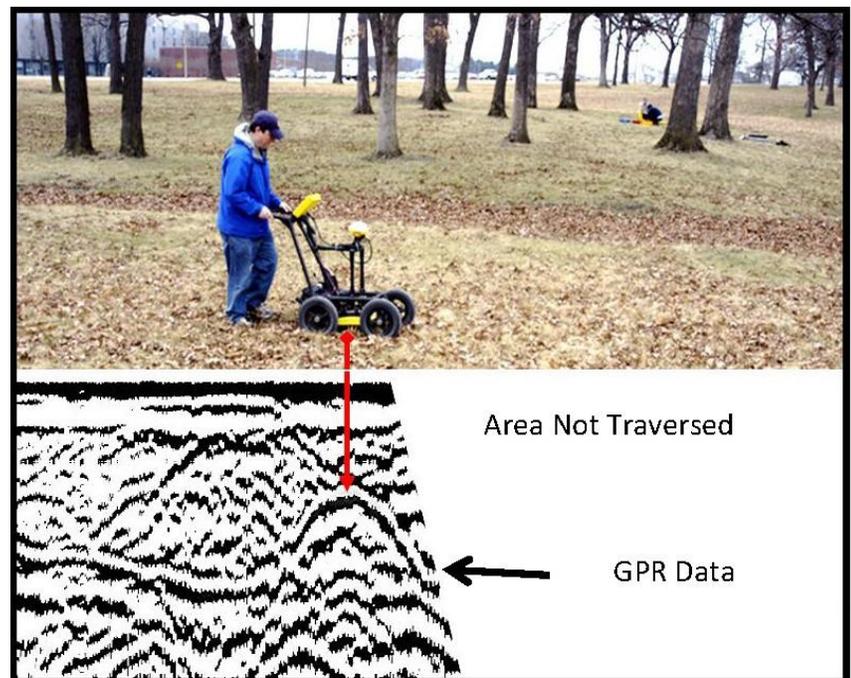
Ground Penetrating Radar

Ground penetrating Radar or GPR provides the best resolution of the near subsurface. It is capable of detecting the shape of rounded objects near-surface, such as tanks. When properly calibrated for the soil conditions, it can be used to calculate the depth of a target.

Unlike other geophysical methods the data from the system is immediately plotted on a display as data are collected so the operator has an idea where targets exist as they move over the ground. GPR is very limited in its operating conditions; it works best in dry sand.

Wet or moist ground such as wet sand and clay tend to absorb and scatter the transmitted pulses. This can be overcome, somewhat, by lowering the frequency of the antenna, but doing so also reduces the resolution of the data. So, a general rule of thumb, high frequencies offer the best resolution of small objects, while low frequencies can penetrate deeper - but lose resolution of small objects and only detect larger objects.

The GPR can generally detect thicker layers of petroleum based contaminants near surface provided it has not volatilized in the ground.



GPR pushed along to collect data. Black and white lines underneath the unit show data. The red arrow is pointing to the top of a hyperbola which is generally the signature of a buried tank.



GPR antennas can take many forms. To the left is a GPR unit with separate transmitter and receiver. In order to obtain good GPR records using this system, it is moved only several inches at a time.



GPR configured to be towed by ATV for large sites.

D-2.0 Borehole Geophysical Methods

Borehole geophysical tools provide information about conditions in and around the well bore whether it is the fluids in the well, pore fluids outside the bore, stratigraphy, water movement and casing/well bore condition.

Parameters measured can either be combined into one tool or isolated into one tool. Depending on the parameters being measured, operators must know the well bore conditions, for example: some tools will not work in cased wells, where some are able to detect outside plastic casing. Other tools require the well bore must be full of a fluid.

Generally, more complicated tools have larger diameters and require inside well diameters of 3 inches or more. Since environmental monitoring wells are usually 2 inches in diameter, this is a concern.

One of the primary uses of borehole geophysics is to locate the proper location for placing well screens. Therefore, proper application would be to log wells just after they have been drilled and before well casing is set.

Region 5 does not own any tools that require a radioactive source due to licensing issues and liability issues if a tool is lost in a hole.

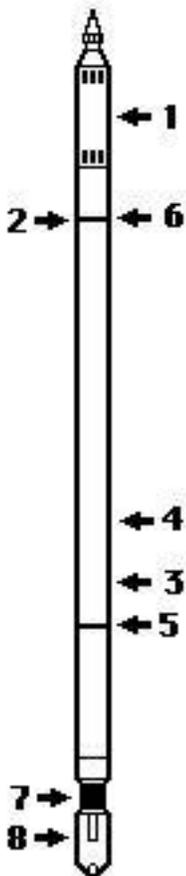
Background Information 9041 Tool

The 9041 tool is a multi-parameter resistivity tool primarily used for water well logging and monitoring wells.

The tool records nine different parameters simultaneously in one pass of the borehole.

The nine parameters are the following:

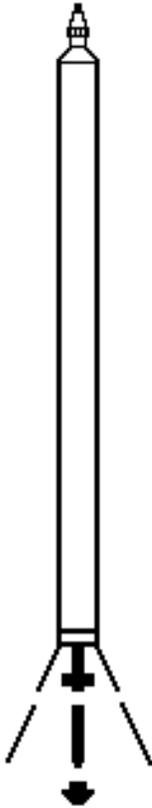
natural gamma, spontaneous potential, single point resistance, 16 in. normal resistivity, 64 in. normal resistivity, 48 in. lateral resistivity, fluid resistivity, temperature, and differential temperature.



Features		Features Properties Measured (see diagram)
Properties Measured (see diagram)		
1. Fluid Resistivity: Offset: 17.0 cm (6.7 in.)	5. Lateral Resistivity 48 in. Offset: 179.07 cm (70.5 in.)	Tool Specifications Length: 213 cm (84 in.) Temperature: 50 C (122 F) Diameter: 64 mm (2.5 in.) Pressure: 232 kg/cm ² (3300 PSI) Weight: 15 kg (33 lbs.) Logging Speed: 9 m/min. (30 ft./min.) Tool Voltage Required: 50 VDC
2. Natural Gamma: 2.5 x 10.1 cm (1.0 x 4.0 in.)	6. Spontaneous Potential: +/- 0.1 mv resolution Offset: 36.6 cm (14.4 in.)	
NAI Scintillation Offset: 137.2 cm (54 in.)	7. Single Point Resistance: +/- 0.1 ohm resolution Offset: 207.3 cm (81.6 in.)	
Normal Resistivity: 2. 64 in.	8. Temperature/Delta Temperature: 0.004 C (0.007 F) resolution Offset: 210.3 cm (82.8 in.)	
Normal: Offset: 118.11 cm (46.5 in.)		
3. 16 in.		
Normal: Offset: 179.07 cm (70.5 in.)		

Background Information on 9605 Tool

The 9065 Three Arm Caliper logging tool, is a three--arm caliper configuration used to measure the diameter of the borehole. They can be used in both open and cased holes.



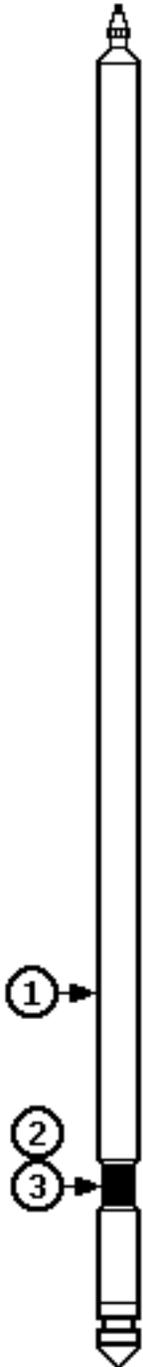
Features	
Properties Measured (see diagram)	Tool Specifications
<p>1. Three Arm Caliper: Short-- or Long-- arm configuration, motor operated</p> <p>Sensor Offset: Short--arm: 156 cm (61.5 in.) Long--arm: 195.4 cm (76.9 in.)</p>	<p>Tool Length: With Short--arms: 178 cm (64 in.) With Long--arms: 203 cm (80 in.)</p> <p>Temperature: 70 C (158 F)</p> <p>Diameter: 43 mm (1.7 in.)</p> <p>Pressure: 281 kg/cm² (4000 PSI)</p> <p>Weight: Short--arm: 7.7 kg (20 lbs.) Long--arm 9.2 kg (24 lbs.)</p> <p>Logging Speed: 9 m/min. (30 ft./min.)</p> <p>Tool Voltage Required: 56 VDC</p>

Sensor Response Ranges		
Sensor	Response Limits	Accuracy
Short--Arm Caliper	5.1 to 61.0 cm (2 to 24 in)	+/--0.38 cm (0.15 in)
Long--Arm Caliper	5.1 to 91.4 cm (2 to 36 in)	+/--0.64 cm (0.25 in)
Tool Information		
Item	Model #	
Three Arm Caliper, Short Arm or Long Arm	9065	

Background Information on 9060 Tool

The 9060 tool is a multi-parameter slim hole mining and hydrology tool that records natural gamma, SP, single-point resistance.

With the tool's slim-hole design, it can also be used in 5.08 cm (2 in.) steel or plastic cased holes to record natural gamma for lithology. Even with its simple design, this tool records all three parameters simultaneously, without any merging or down logging required.



Features	
Properties Measured (see diagram)	Tool Specifications
1. Natural Gamma: 1.3 x 7.6 cm (0.5 x 3.0 in.) NAI Scintillation Offset: 276.8 cm (69.6 in.) 2. Spontaneous Potential +/-0.1 ohm Resolution Offset: 204.2 cm (80.4 in.) 3. Single Point Resistance +/-0.1 ohm Resolution Offset: 204.2 cm (80.4 in.)	Length: 225.5 cm (88.8 in.) Temperature: 75 C (167 F) Diameter: 3.6 cm (1.4 in.) Pressure: 281 kg/cc2 (4000 PSI) Weight: 14.5 kg (16 lb.) Logging Speed: 9 m/min. (30 ft./min.) Tool Voltage Required: 30 VDC

Sensor Response Ranges		
Sensor	Response Limits	Accuracy
Natural Gamma	0--10,000 API units	+/-5%
Resistance	0 to 1500 ohms	+/-5%
Spontaneous Potential	--400 to 400 mv	+/-10mv

Borehole Television Camera (downhole & side-view)

This unit is a black and white borehole camera. The pointed metal tip shown in the center of this photograph contains a mirror at a 45 degree angle. This mirror rotates to show the sidewalls of the well bore or casing provided fluids in the well are clear. It can also operate in dry holes. There is also another camera lens tip that only views downhole.



This unit is circa 1960 and was obtained from an EPA laboratory in Las Vegas, it has been repaired twice over the years and we were informed by the manufacturer that it will not be supporting this model in the future.

We have two sets of cables and printed circuit cards, one set is for the 100' cable length and the other is for the 200' cable length.

The following tools are not owned by EPA Region 5, but can be accessed through the USGS for our use along with others not mentioned such as various flowmeters.

Q40 OBI-1000, Optical Televiewer

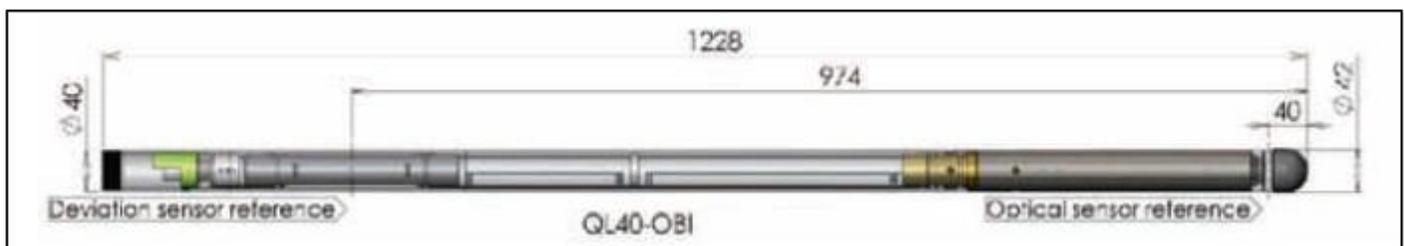
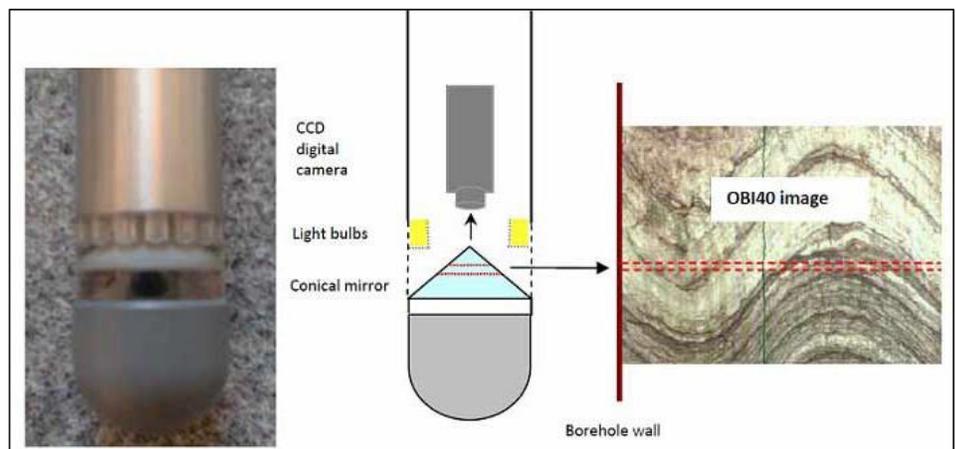
The QL40 OBI and the OBI40 Optical Borehole Imagers are advanced slimhole logging tools designed for optical imaging of the surface wall of open and cased wells, either in air or clear water.

The QL40 OBI tool is supplied as a bottom sub of the Quick Link (QL) product line. It can either be combined with other QL40 tools to form a tool string or it can be run as a stand-alone tool. The OBI40 is the standalone-non stackable-version.

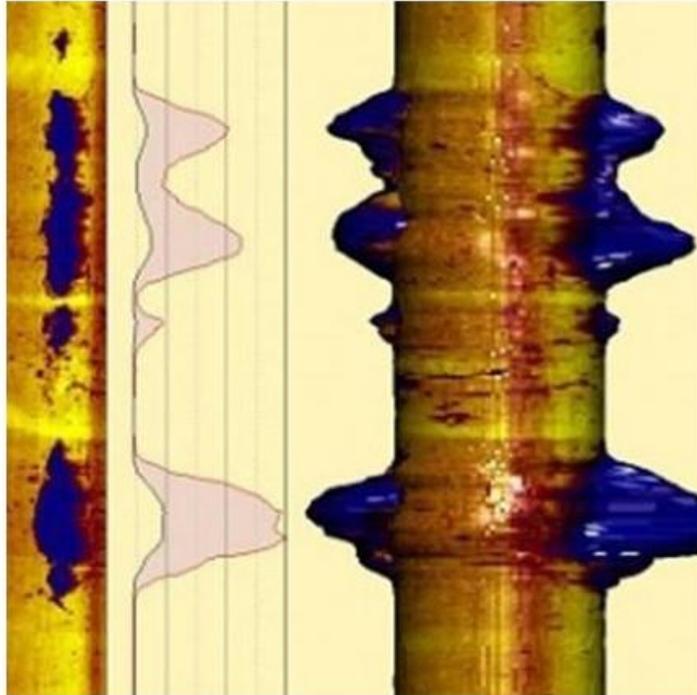
Designed to complement the ALT Acoustic Televiewers (ABI) in dry well situations, the tool operates with the ALT Logger and Matrix logging systems. They can be run on any

standard wireline (mono, 4 or 7 conductor, coax). The optical televiewer is fully downhole digital. It includes a high precision deviation sensor (APS544) allowing accurate orientation of the image and borehole.

The OBI incorporates a high resolution, high sensitivity CCD digital camera with matching Pentax optics. The CCD camera, located above a conical mirror, captures the reflection of the borehole wall. The light source is provided by a light ring assembly located in the optical head.



Q40ABI-1000 Acoustic Televiewer



The ABI40 is the next generation of the pioneering FAC40. Based on 8 years of experience and market leadership with BHTV technology, the new system consists of the industry standard focused acoustical head with new deviation subsystem and completely redesigned electronics. The new electronic architecture uses a 14bits@10Mhz A/D converter directly coupled to a super FAST 75Mops DSP processor capable of performing complex data processing in real time on each individual ultrasonic wave train.

The ABI40 tool generates an image of the borehole wall by transmitting ultrasound pulses from a rotating sensor and recording the amplitude and travel time of the signals reflected at the interface between mud and borehole wall. The amplitude of these reflections is representative of the properties of the rock surrounding the borehole. The travel time represents the borehole shape and diameter and is used to provide exceptionally accurate borehole diameter measurements, which makes the tool ideal for casing inspection and structural geology.

Compared to the FAC40, which measures one echo (one amplitude and one travel time), the ABI40 is a multi-echo system. This is achieved by digital recording of the reflected acoustic wave train. On line analysis of the acoustic data is made by a DSP (digital signal processor). Sophisticated algorithms allow the system to detect reflections from the acoustic window and to separate/classify all subsequent echoes.

APPENDIX E

Radiation Health Physicist



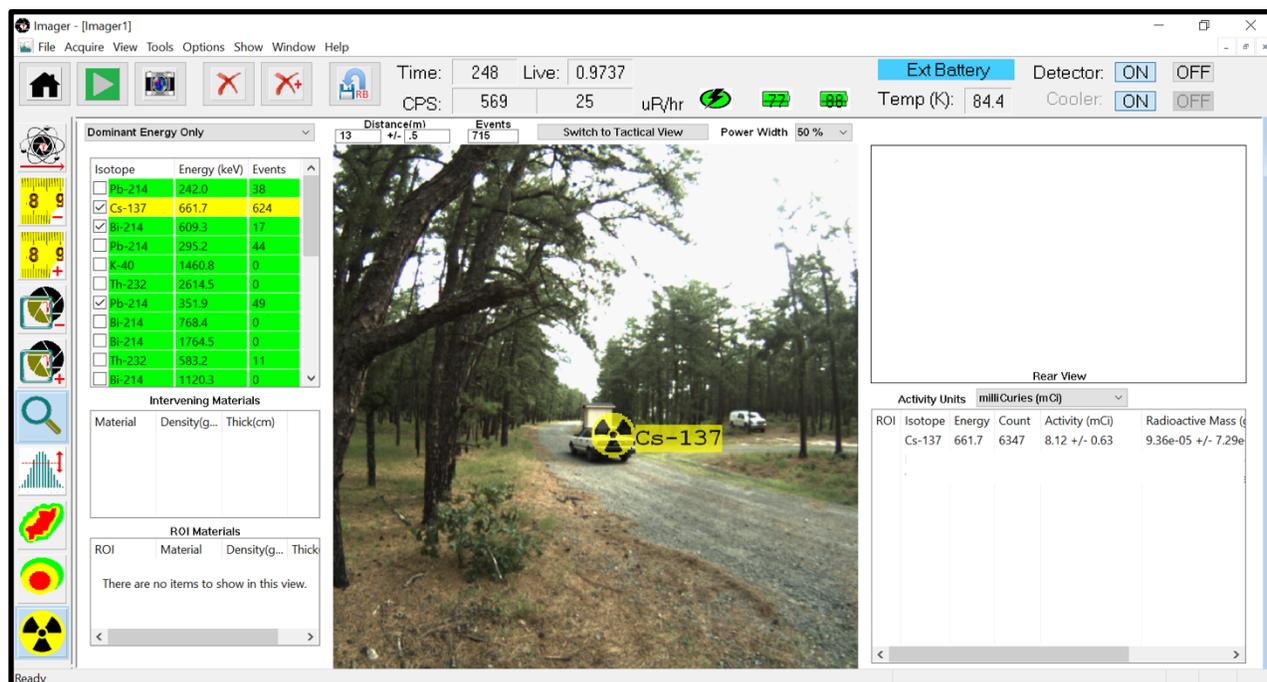
To access these services contact
Gene Jablonowski at
312-886-4591
Jablonowski.Eugene@epa.gov

Eugene (Gene) Jablonowski serves as the Regional Radiation Expert and Senior Superfund Health Physicist who can provide radiation, assessment, and remediation support for the Removal and Remedial programs including:

- Advice and actions at sites involving radiation. Advice may be to EPA staff, EPA management, State and local government officials, potentially responsible parties, consultants, the media and the general public. Response actions may include document review, instrument selection, health and safety plan development, quality assurance and quality control plan development, site assessment, criteria development, risk assessment, and verification.
- Advice and recommendations to EPA management on radiation issues.
- Development and review of radiation risk assessments, serving as the Regional Radiation Risk Assessor.
- Review of documents involving radiation issues for EPA Headquarters, EPA Region 5, Regional states, Regional municipalities, health physicists, other professionals, consultants, and the general public.
- Review of documents involving radiation quality assurance and quality control.
- Review of documents involving radiation health and safety.
- Training of Regional staff or other relevant parties on radiation issues.
- Participation in EPA Regional, EPA Headquarters, Federal, State, municipal committees and working groups that involve radiological issues.
- Participation in the review and critique of State, county and municipal plans for emergency response to Regional nuclear power plant accidents, including participation in the Federal Emergency Management Agency's (FEMA) Radiation Assessment Committee (RAC).
- Of particular interest to the Removal program:
 - Orphan source recovery, packaging and transportation.
 - Waste transportation and disposal consultation.
 - Liaison to other EPA offices, Federal agencies and organizations with radiological missions.
 - Radiation investigation development and review.

Gene's activities also include:

- Working on radiological emergency response planning, exercises and training for nuclear power plant (NPP), radiological dispersal device (RDD), and improvised nuclear device (IND) incidents.
- Member of the Advisory Team for Environment, Food and Health (Advisory Team), an inter-agency radiological emergency response group tasked with providing protective action recommendations to state and local governments on behalf of its member agencies.
- Federal Radiological Monitoring and Assessment (FRMAC) Type 1 Liaison who can explain FRMAC's data products and assist with their interpretation, and can also dispense information about FRMAC (capabilities, processes and status).



Example of GeGI Display at Military Exercise



Example of GeGI-4 in Building Assessment



The ORTEC Trans-SPEC-DX-100T is a portable High Purity Germanium (HPGe) gamma spectrometer that can be used for the identification and quantification of radioactive sources, such as point sources and containers of material. When mounted on a special tripod with its detector pointed downward (1 meter above the ground, aka “M-1”), it can perform in-situ measurement of radioactivity in soil and surfaces, potentially eliminating the need for physical sample collection. An anticipated consequence management application is to use this alongside an RSDetection ion chamber (mentioned below) for radiological assessments, and to determine radiation dose as it relates to the deposited radionuclide contamination mixture. Region 5 has two units.



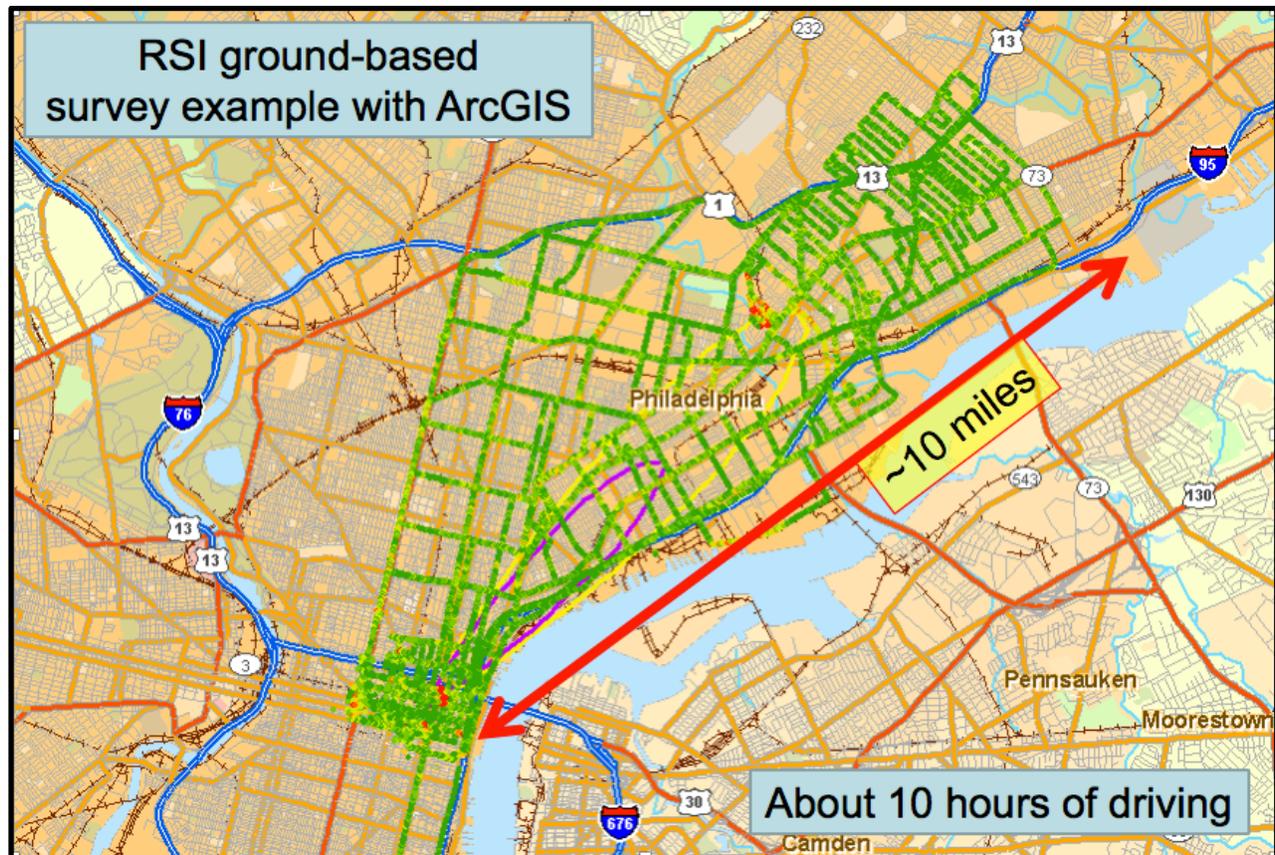
The ORTEC Micro-Trans-SPEC is similar to the trans-SPEC-DX-100T with similar features and applications, but smaller and lighter to carry. Since the detector is smaller detector it is less sensitive than the trans-SPEC, meaning longer count times are required where needed. Region 5 has one Micro-Trans-SPEC unit. An example of a Micro-Trans-Spec on a tripod for soil and surface measurement (aka “M-1” configuration) is on the left.



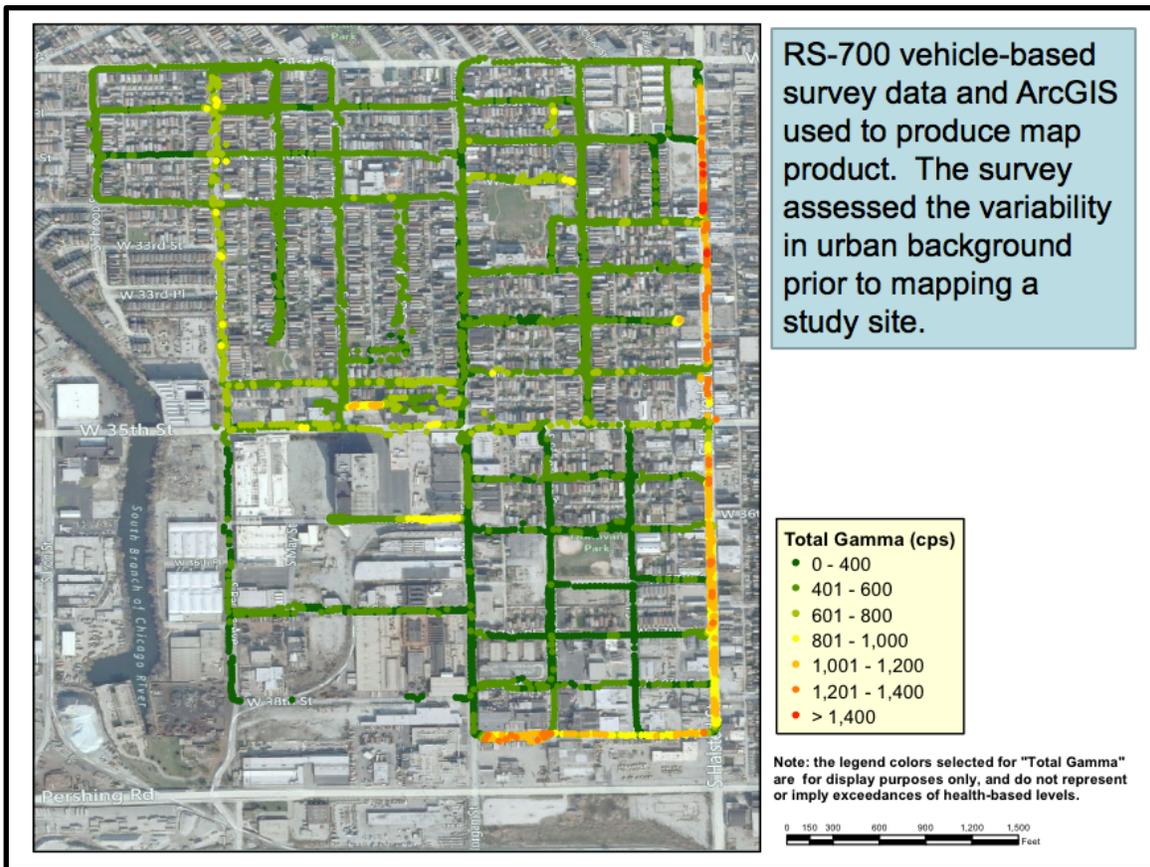
The General Electric / Baker-Hughes RSDetection is the next generation Reuter Stokes environmental radiation monitor, providing superior technology for the detection and measurement of low-level gamma radiation. The RSDetection’s detector is a high-pressure ionization chamber (HPIC) that provides unmatched sensitivity, reliability, and stability for measurements at natural background levels. The RSDetection is typically mounted on a tripod for area radiation measurements 1-meter above the ground surface. It can support site assessment activities and verification of remediation and meets the needs for regulatory compliance with cleanup standards. It can also be used to ground truth aerial radiation measurement systems, and support radiological assessments following wide-area incidents. An anticipated consequence management application is to use this alongside an ORTEC Trans-Spec for radiological assessments, and to determine radiation dose as it relates to the deposited radionuclide contamination mixture.



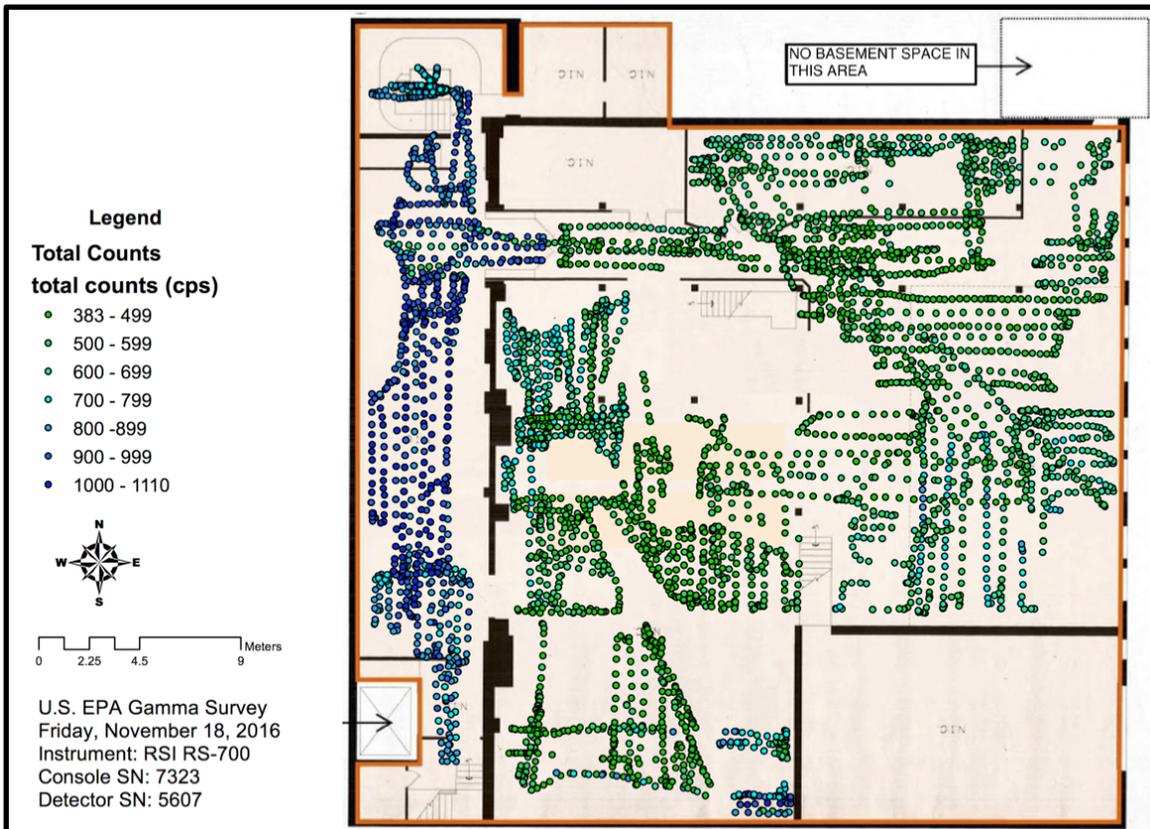
The Radiation Solution RS-700 system consists of a large sodium-iodide (NaI) detector (4" x 4" x 16") coupled with a gamma spectrometer, a GPS unit, and a rugged laptop, providing a system that can perform wide-area gamma mapping outdoors and indoors. For outdoor applications, the system can be mounted on a cart (pictured) or on a vehicle (ATV, van, SUV). For indoor applications the system is mounted on a cart and a Leica Total Station is used for indoor GPS-like positioning. The RS-700 can provide real-time gamma radiation mapping to the user, identification of the gamma-emitting radionuclides, and export the collected data for using in GIS systems. This hardware is similar to what is used on EPA's ASPECT aircraft, and DOE's AMS aircraft, and other government applications.



Example Data Product of RS-700 Urban Gamma Mapping for Liberty RadEx



Example Data Product of RS-700 Urban Gamma Mapping for Site Study



Example Data Product of RS-700 Indoor Mapping with Leica Total Station



The CANBERRA Colibri VLD-GPS is a survey meter with its own built-in GPS and data-logging capability. Its internal “very low dose” detector has a measurement range from background up to 100 mrem/hr, with these measurements and their GPS locations automatically logged every 5 seconds. The Colibri can also use external probes that are connected either by cable or wirelessly with Bluetooth. External probes include a NaI 2” x 2” probe, 15cm² alpha/beta PIPs probe, 100cm² alpha/beta scintillation probe, and a wide range gamma probe (up to 1,000 rem/hr). Data can be exported from the Colibri as an ASCII CSV file. This data can then be used with GIS software to produce maps of the automated dose rate measurements along with any other external probe data that was collected. An example Colibri data product is presented on the following page. Region 5 has three Colibri and probe sets.



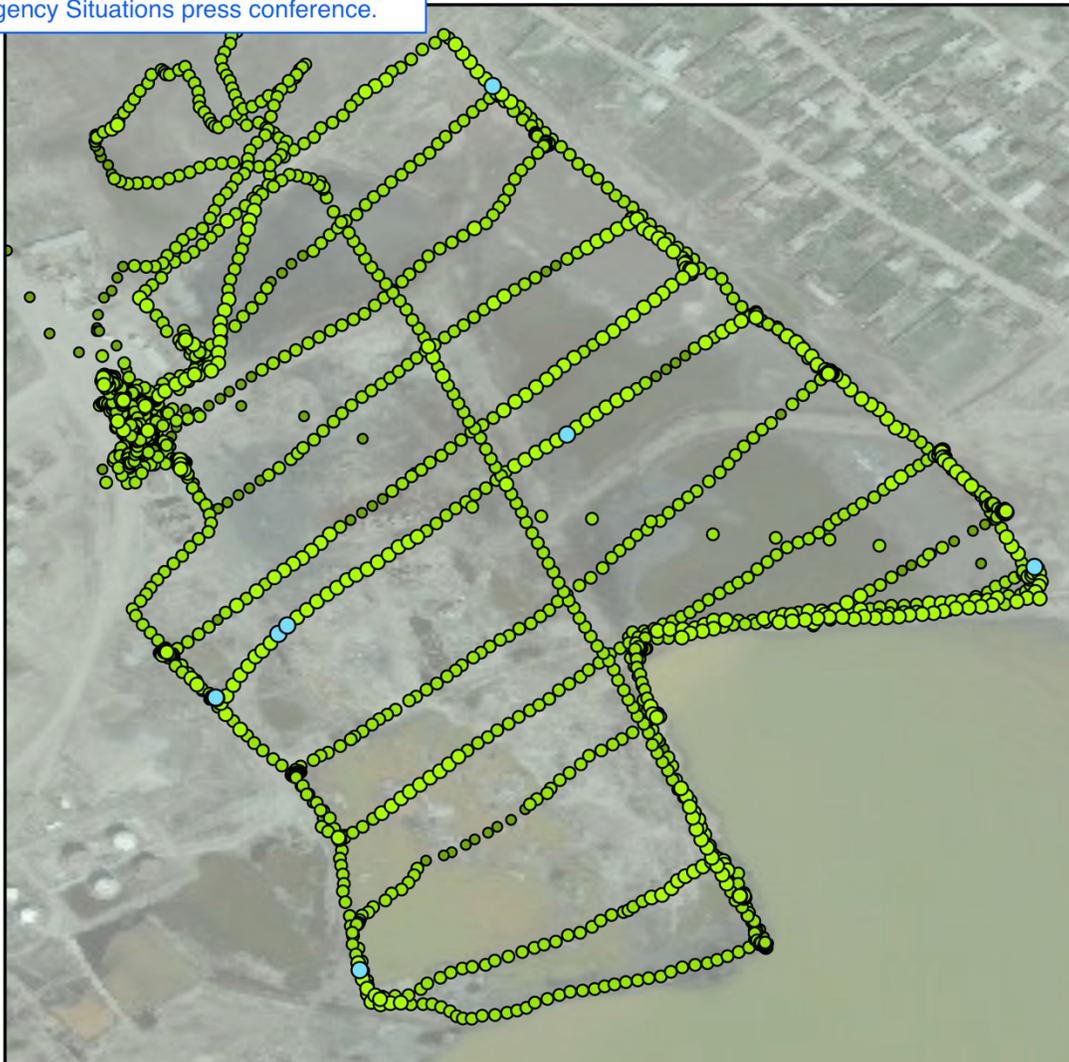
The ORTEC IDM-200 system is a portable High Purity Germanium (HPGe) gamma spectrometer for applications such as in-situ measurement of surfaces and objects, and analysis of samples. The Region’s IDM-200 is currently configured with lead shielding to support sample analysis. Region 5 has one IDM-200 system.



The CANBERRA iSolo is a portable, single-sample, alpha/beta counter. The iSolo is designed for the analysis of air filters and most other types of alpha/beta samples. When analyzing air filters, the iSolo discriminates both radon and thoron and their progeny from transuranic and fission product materials on the air filter samples. The iSolo uses a solid state silicon PIPS[®] detector for alpha and beta detection. The iSOLO can be operated for 10 hours or more with internal batteries and is totally self-contained. Region 5 has two iSolo alpha/beta counters.

Example map of radiation data collection from Neftchala site. Data was collected and map was created by Gene Jablonowski for presentation at the Ministry of Emergency Situations press conference.

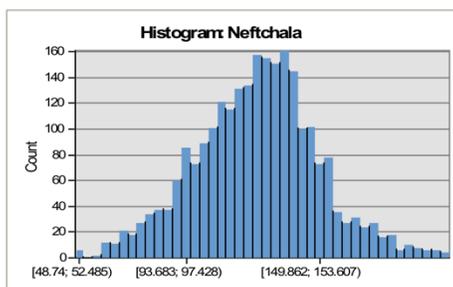
Neftchala Site



Gamma Dose Rate (nSv/hr)

nSvHr

- 0 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- 200 - 270
- 270 - 400
- > 400



0 25 50 100 150 200
Meters

Dose Rate Measurements
Canberra Colibri VLD-GPS (SN: 26)
Labeled points indicate static measurements



Note: legend colors are for display purposes only and do not represent or imply exceedance of health-based levels.

Example of Data Product from Canberra Colibri VLD-GPS Gamma Mapping in Azerbaijan

APPENDIX F

Remote Sensor Data Acquisition

900mHz Radio Modems & Cellular LINC/Gateway Go-Kits



To access these services contact:

Brian Cooper: 312-353-8651

cooper.brian@epa.gov

The FIELDS Hybrid Viper system is a wireless network based communications system designed to enable real time transmission of data from field sensors to a local computer and enterprise server to help provide data management, analysis, and visualization. The system incorporates the use of 900 Mhz radio modems in order to transmit data from the field to a laptop in the command post. The system incorporates a number of field data sensors including Thermo dataram 4000s, Rae System's multiraes, Ludlum 2241s, Honeywell's SPMs and other sensors. The system can link up to 8 devices at a time with the current configuration. Distance is limited based-up terrain, buildings, and interference but is usually effective up to a 1 mile range. Indoor data collection can also be achieved.



The viewing computer will emulate the remote instruments meter face by displaying real-time sensor values every second on the screen. Color and audio alarms can be set based-upon HASP requirements. Each sensor value is then stored locally on the laptop and time stamped. GPS coordinates can also be integrated into each reading allowing for data mapping.

If internet connectivity is available, ERT's deployment manager can be used to plot near real-time sensor values using Google maps. Also, automated emails can also be set-up through ERT based upon your HASP thresholds.



VIPER: DEPLOYMENT MANAGER
Welcome [campbell.john@epa.gov](#) | [Log Out](#) | [Change Password](#)

Deployments (44) | Unassigned Runs (1) | Admin | Help

U.S. Finishing Cone Mills Deployment

Start: 10/4/2011
End:
Description:

1375-17: U.S. Finishing Cone Mills

Start: 11/30/2011 1:18:05 PM
End:
Description: 4-0-BAMs, 2 DataRAMs
Location:

[View Recent Data in Google Earth](#)

Instruments and Latest Readings:

DataRAM DR-4000(s)

Instrument ID	Connection	Location	COND	PWA	Temp	BH	PM10 1-Hour Avg	Received
[39] DataRAM DR-4000 *	Unknown	0.0000000, 0.0000000						
[39] DataRAM DR-4000 *	Down	34.8841400, -82.4251800	0 ug/m3	6.6 ug/m3	73 C	23 %	6.11279 ug/m3	12/6/2011 3:38 PM

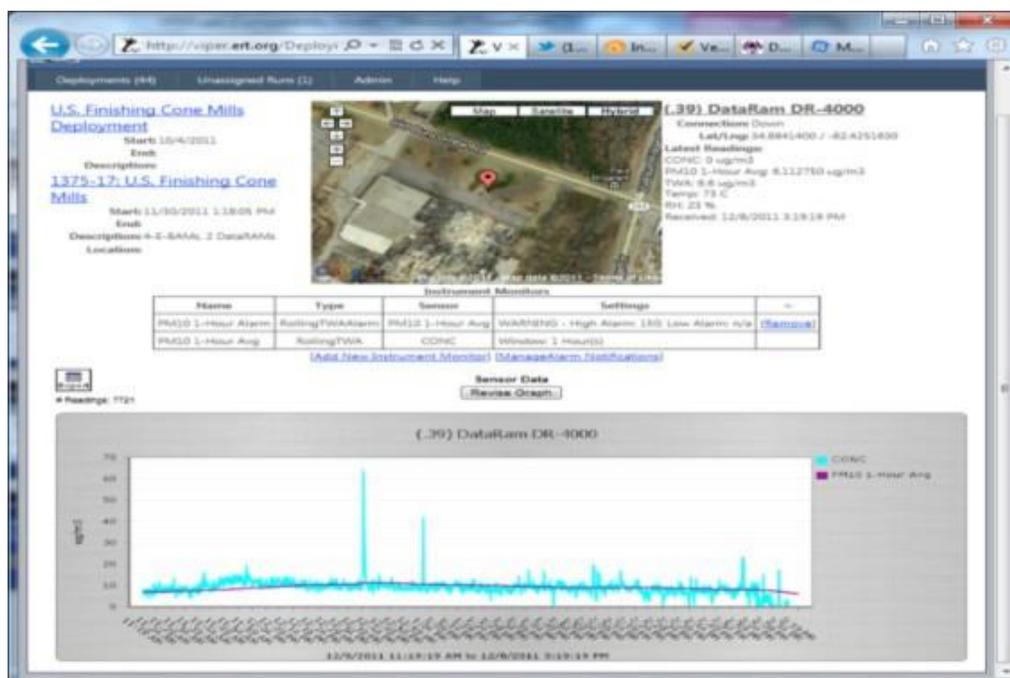
EBAM(s)

Instrument ID	Connection	Location	CondRT	CondHS	Flow	WS	WD	AT	RHa	RHi	BV	PT	AlarmFlags	Received
[39] EBAM *	OK	34.8828800, -82.4279800	0.024 ug/m3	0.027 ug/m3	16.7 lpm	14 m/s	120 Deg	5.8 C	1 %	35 %	14 V	14.4 C	0 lvs	12/13/2011 5:57 AM
[39] EBAM *	Down	34.8820000, -82.4271200	0.01 ug/m3	0.012 ug/m3	16.7 lpm	13 m/s	40 Deg	4.5 C	0 %	24 %	14.3 V	13.3 C	0 lvs	12/12/2011 3:45 AM
[39] EBAM *	OK	34.8819000, -82.4267200	0.008 ug/m3	0.024 ug/m3	16.7 lpm	13 m/s	111 Deg	7 C	1 %	36 %	14.3 V	13.3 C	0 lvs	12/13/2011 5:57 AM
[39] EBAM *	OK	34.8815200, -82.4275800	0.009 ug/m3	0.029 ug/m3	16.7 lpm	16 m/s	126 Deg	6 C	0 %	33 %	14.2 V	13.3 C	0 lvs	12/13/2011 5:57 AM

* Indicates that Alarm Notifications have been Enabled for this Instrument.

Auto refresh in 55 seconds.

Near real-time histograms can also be generated through the deployment manager. The histograms can plot values for each instrument depicting exceedances at time intervals. The data can they be exported as a comma delimited file for use in excel or other spreadsheet programs.



Currently we have 8 Hyper-Viper setups in the region. Each set-up contains 4 radio modem pairs but pairs can be added or removed based upon site requirements. High gain antennas and amplifiers can be added to the system if needed. START training is available and has been ongoing. Once the system is set-up initially operation of the system is very easy. The system has been deployed successfully on over 20 removal sites.

Viper Life•line Go-Kit

Manufacturer:

Safe Environment Engineering

Model:

Viper Life•line Go-Kit

Quantity Available:

Willowbrook: 5

START-Chicago: 3

START-Detroit: 3

START-Westlake: 3



Description:

The Viper Life•line Go-Kit is wireless network telemetry system that has been pre-configured for use with a TSI DustTrak DRX aerosol monitor. The kit includes 1 Life•line Gateway, 1 LINC (Life•line Interoperable Network Communicator), and their chargers. The Life•line Gateway included in this kit utilizes a cellular modem to remotely transmit data to ERT's servers. This means the kit can be deployed anywhere as there is adequate cellular coverage.

NOTE: YOU WILL NEED TO OBTAIN A CELLULAR SIM CARD WITH A STATIC PUBLIC FACING IP. WE DO NOT PROVIDE THESE.



Life•line Smart Gateway

Manufacturer:

Safe Environment Engineering

Model:

Life•line Smart Gateway

Quantity Available:

Willowbrook: 1

START-Chicago: 1

START-Detroit: 1

START-Westlake: 1

Description:

The Life•line Smart Gateway is an All-in-One sensor data acquisition & transmission device, as well as a local host server. This device can be used with or without LINC's or other gateways. Data can be remotely transmitted to ERT's servers, or can be stored locally and accessed via a remote desktop connection forgoing the need for a virtual machine.

NOTE: YOU WILL NEED TO OBTAIN A CELLULAR SIM CARD WITH A STATIC PUBLIC FACING IP. WE DO NOT PROVIDE THESE.



Spare Viper LINC (Generic)

Manufacturer:
Safe Environment Engineering

Model:
LINC

Quantity Available:

Willowbrook: 7
START-Chicago: 2
START-Detroit: 2
START-Westlake: 2

Description:

These spare Viper LINC (Life•line Interoperable Network Communicators) are pre-configured for use with a TSI DustTrak DRX, but can be reprogrammed for use with a variety of instruments.

NOTE: These LINC require a Safe Env. Gateway or Smart Gateway to function.



Viper SPM LINC

Manufacturer:
Safe Environment Engineering

Model:
Viper SPM LINC

Quantity Available:

Willowbrook: 1
START-Chicago: 2
START-Detroit: 2
START-Westlake: 2

Description:

These Viper SPM LINC (Life•line Interoperable Network Communicators) are pre-configured for use with a Honeywell SPM Flex.

NOTE: These LINC require a Safe Env. Gateway or Smart Gateway to function.

**FIELD
SERVICES
SECTION**

APPENDIX G

Pneumatic Slug Test Kit by GeoProbe®

GW1600

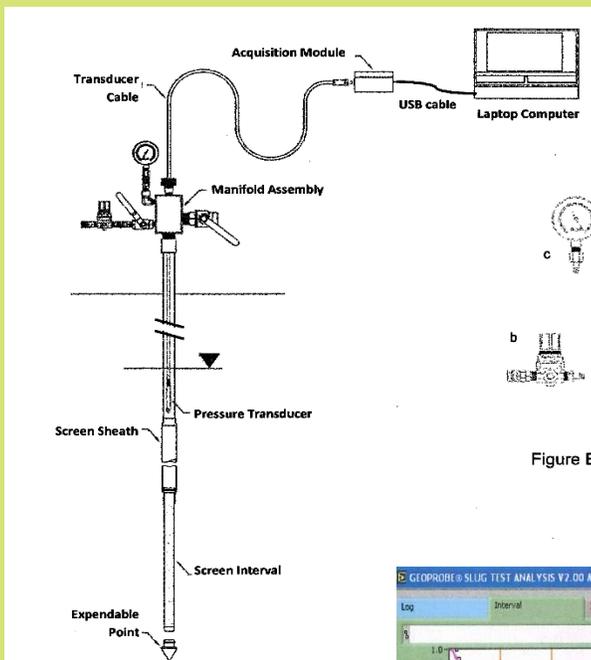
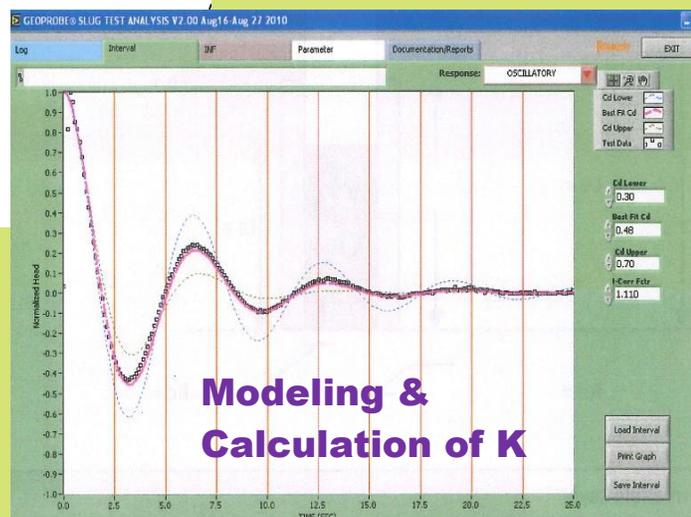


Figure A: Typical field setup with SP15/16 groundwater sampler



Figure B



**Modeling &
Calculation of K**

To access these services contact:

Jim Ursic: 312-353-1526

ursic.james@epa.gov

BACKGROUND

The USEPA, Region 5 Superfund Division, owns maintains and deploys a pneumatic slug test kit for existing 2" monitoring wells or temporary wells installed by direct push method which allows considerable flexibility in placing slug test locations. Cable length of the slug test transducer, which limits the depth of a slug test in existing wells, is just under 100 feet. Depth limitations for the Region 5 direct push rod and screen equipment is between 20 to 30 feet depending on stratigraphy. This method is used to support the Remedial and Removal Branches in the Superfund Division.

The slug test responses are modeled and used to determine the hydraulic conductivity (K) of the screened aquifer. Included in this slug test kit is a slug test analysis software package. This package includes the Bouwer and Rice model and the Hvorslev model for calculation of K. The software provides variants of these two basic models for confined or unconfined aquifers, partially or fully penetrating wells, and over or underdamped aquifer responses. A correction for oscillatory slug test responses in small-diameter wells, by Butler, also is included in this analysis software.

The system is capable of using rising head or falling head pneumatic tests in small direct push rods.

Standard operating procedure of this system conforms to the ASTM Standard Practice D 7242 (ASTM 2013a) for performing pneumatic slug tests with direct push methods.

Appendix I: Permeation Data for ASTM Recommended List of Chemicals for Evaluating Protective Clothing Materials (ASTM F1001)

<u>Challenge Chemical</u>	<u>CAS Number</u>	<u>Physical State</u>	<u>ChemMax® 2</u>
Acetone	67-64-1	Liquid	9
Acetonitrile	75-05-8	Liquid	<15
Ammonia Gas	7664-41-7	Gas	15
1,3-Butadiene Gas	106-99-0	Gas	>480
Carbon Disulfide	75-15-0	Liquid	imm.
Chlorine Gas	7782-50-5	Gas	>480
Dichloromethane	75-09-2	Liquid	imm.
Diethylamine	109-89-7	Liquid	imm.
Dimethyl Formamide	68-12-2	Gas	18
Ethyl Acetate	141-78-6	Liquid	21
Ethylene Oxide Gas	75-21-8	Gas	24
n-Hexane	110-54-3	Liquid	21
Hydrogen Chloride Gas	7647-01-0	Gas	>410
Methanol	67-56-1	Liquid	>480
Methyl Chloride Gas	74-87-3	Gas	>480
Nitrobenzene	98-95-3	Liquid	45
Sodium Hydroxide, 50%	1310-73-2	Liquid	>480
Sulfuric Acid, 98%	7664-93-9	Liquid	>480
Tetrachloroethylene	127-18-4	Liquid	imm.
Tetrahydrofuran	109-99-9	Liquid	imm.
Toluene	108-88-3	Liquid	imm

Index: imm = immediate

Appendix II: Permeation Data for Suits and Gloves

See following pages for information on suits and gloves.



CHEMICAL RESISTANCE GUIDE

This Chemical Resistance Guide incorporates three types of information:

- Degradation (D) is a deleterious change in one or more of the glove's physical properties. The most obvious forms of degradation are the loss of the glove's strength and excessive swelling. Several published degradation lists (primarily "The General Chemical Resistance of Various Elastomers" by the Los Angeles Rubber Group, Inc.) were used to determine degradation.
- Breakthrough time (BT) is defined as the elapsed time between initial contact of the liquid chemical with the outside surface of the glove and the time at which the permeation rate reaches 0.1 mg/m²/sec. WHEN BREAKTHROUGH OCCURS, THE GLOVE IS NO LONGER PROVIDING ADEQUATE PROTECTION.
- Permeation rate (PR), measured in milligrams per square meter per second (mg/m²/sec) is the measured steady state flow of the permeating chemical through the glove elastomer. Glove thickness plays an important role in resistance to permeation.

The glove styles tested for permeation were the SSG, F101, B174, CS113B, LA102G and PNLB1815. The permeation data in this guide are based on permeation tests performed in accordance with ASTM Standard F 739 under laboratory conditions by North Safety Products or independent AIHA accredited laboratories. Neither North Safety Products nor the independent laboratory assumes any responsibility for the suitability of an end user's selection of gloves based on this guide.

General Recommendation:

The Guide also provides a color-coded general recommendation on which gloves should be evaluated and tested first, based on data from multiple sources. (See general recommendation color key). Technical Assistance Data on chemicals not listed here can be obtained by calling the North Technical Service Department at

(800) 430-4110. North also offers **ezGuide™**, an interactive software program which is designed to electronically help you select the proper glove for use against specific chemicals. This "user friendly" guide walks you step-by-step through the process to determine what type of glove to wear and its permeation resistance to the selected contaminant. Product features, benefits and ordering information of the suggested products also are included in the program. **ezGuide** can be accessed from the North web site, www.northsafety.com or ordered by e-mailing us at marketing@northsafety.com.

The finest chemical handling gloves deserve to be used with the finest respiratory products. Please consult the current North Safety Products Respiratory Protection Catalog and **ezGuide™** for proper respiratory selection.

Warning:

Protective gloves and other protective apparel selection must be based on the user's assessment of the workplace hazards. Glove and Apparel materials do not provide unlimited protection against all chemicals. It is the users responsibility to determine before use that the Glove and Apparel will resist permeation and degradation by the chemicals (including chemical mixtures) in the environment of intended use.

Failure by the user to select the correct protective gloves can result in injury, sickness or death

To obtain maximum life, protective gloves and other protective apparel should have chemicals removed from the surface by washing or other appropriate methods after each use. Protective apparel should be stored away from the contaminating atmosphere.

Punctured, torn or otherwise ruptured apparel must be removed from service; unservicable apparel may be disposed of only in accordance with applicable waste disposal regulations.

Key to Degradation and Permeation Ratings

E - Excellent	Exposure has little or no effect. The glove retains its properties after extended exposure
G - Good	Exposure has minor effect with long term exposure. Short term exposure has little or no effect
F - Fair	Exposure causes moderate degradation of the glove. Glove is still useful after short term exposure but caution should be exercised with extended exposure
P - Poor	Short term exposure will result in moderate degradation to complete destruction
N/D	Permeation was not detected during the test
I/D	Insufficient data to make a recommendation

General Recommendation Color Key

	Good for total immersion
	Good for accidental splash protection and intermittent contact
	Only use with extreme caution. Glove will fail with only short exposure

Physical Performance Chart

Physical Characteristics	Silver Shield®	Viton†	Butyl	Chemsoft®	Nitrile	Natural Rubber
Abrasion Resistance	F	G	G	E	E	E
Cut Resistance	P	G	G	E	E	E
Puncture (Snag) Resistance	P	G	G	E	E	E
Flexibility	E	G	G	E	E	E
Heat Resistance	F	G	G	G	G	G
Ozone Resistance	E	E	E	G	G	P
Tensile Strength	E	G	G	E	E	E
Low Gas Permeability	E	E	E	F	F	P

Note: Products in these categories vary in capabilities. Laboratory tests are necessary for specific recommendations.

† Viton is a Registered Trademark of DuPont Company.

		Silver Shield			Viton			Butyl			Chemsoft			Nitrile			Natural Rubber		
Chemical Name	CAS No.	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR
Acetaldehyde	75-07-0	E	>8 hrs	N/D	P	0 min	281.9	E	>8 hrs	0.066	I/D	I/D	I/D	P	0 min	161	I/D	I/D	I/D
Acetic Acid (100%) (Glacial)	64-19-7	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	F	37 min	13.3	F	38 min	1.9	F	1.3 hrs	0.39
Acetic Aldehyde	75-07-0	E	>8 hrs	N/D	P	0 min	281.9	E	>8 hrs	0.066	I/D	I/D	I/D	P	0 min	161	I/D	I/D	I/D
Acetic Ester	141-78-6	E	>8 hrs	N/D	I/D	I/D	I/D	E	7.6 hrs	3.4	I/D	I/D	I/D	P	8 min	145	I/D	I/D	I/D
Acetone	67-64-1	E	>8 hrs	N/D	P	2 min	383	E	>8 hrs	N/D	P	1 min	42.3	P	3 min	291	P	8 min	93.2
Acrylic Acid	79-10-7	E	>8 hrs	N/D	G	5.9 hrs	0.23	E	>8 hrs	N/D	I/D	I/D	I/D	F	I/D	I/D	G	54 min	1.6
Acrylonitrile	107-13-1	E	>8 hrs	N/D	F	14 min	28	E	>8 hrs	N/D	P	4 min	42	P	6 min	29.8	P	16 min	0.11
Ammonia (99%)	7664-41-7	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Ammonium Hydroxide (29%)	1336-21-6	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	F	2 hrs	0.115	F	2.2 hrs	0.05	G	60 min	28.7
Aniline	62-53-3	E	>8 hrs	N/D	P	6 min	18.7	E	>8 hrs	N/D	I/D	I/D	I/D	F	1.1 hrs	45	I/D	I/D	I/D
Aniline Oil	62-53-3	E	>8 hrs	N/D	P	6 min	18.7	E	>8 hrs	N/D	I/D	I/D	I/D	F	1.1 hrs	45	I/D	I/D	I/D
Benzaldehyde	100-52-7	I/D	I/D	I/D	E	>8 hrs	4	E	>8 hrs	N/D	I/D	I/D	I/D	P	I/D	I/D	I/D	I/D	I/D
Benzene	71-43-2	E	>8 hrs	N/D	E	5.9 hrs	0.012	P	31 min	32.3	P	I/D	I/D	P	<6 min	>29	I/D	I/D	I/D
Bromoacetonitrile	590-17-0	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Bromobenzene	108-86-1	E	I/D	I/D	E	>8 hrs	N/D	P	32 min	39.8	I/D	I/D	I/D	P	13 min	9.1	I/D	I/D	I/D
1,3-Butadiene	106-99-0	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D
Butyl Acetate	123-86-4	E	>8 hrs	N/D	P	I/D	I/D	G	1.8 hrs	7.61	I/D	I/D	I/D	P	29 min	54.4	F	18 min	47
Butyraldehyde	123-72-8	I/D	I/D	I/D	P	54 min	9	E	>8 hrs	N/D	I/D	I/D	I/D	P	I/D	I/D	I/D	I/D	I/D
Carbon Bisulfide	75-15-0	E	>8 hrs	N/D	E	>8 hrs	N/D	P	3 min	98.4	I/D	I/D	I/D	P	9 min	51	I/D	I/D	I/D
Carbon Disulfide	75-15-0	E	>8 hrs	N/D	E	>8 hrs	N/D	P	3 min	98.4	I/D	I/D	I/D	P	9 min	51	I/D	I/D	I/D
Carbon Tetrachloride	56-23-5	E	>8 hrs	N/D	E	>13 hrs	N/D	P	I/D	I/D	F	1.3 hrs	3.45	G	3.4 hrs	5	I/D	I/D	I/D
Caustic Soda (50%)	1310-73-2	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D
Chlorine	7782-50-5	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
2-Chloroethanol	107-07-3	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Chloroform	67-66-3	E	>8 hrs	N/D	E	9.5 hrs	0.46	P	I/D	I/D	I/D	I/D	I/D	P	4 min	352	I/D	I/D	I/D
3-Chloroprene	107-05-1	E	>4 hrs	N/D	F	31 min	16	P	50 min	281	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Curing Agent Z	N/A	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Cyclohexane	110-82-7	E	>4hrs	N/D	E	>7 hrs	N/D	P	50 min	103.8	E	>8 hrs	N/D	G	I/D	I/D	I/D	I/D	I/D
Cyclohexanol	108-93-0	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>11 hrs	N/D	E	>6 hrs	N/D	E	>16 hrs	N/D	I/D	I/D	I/D
Cyclohexanone	108-94-1	E	>8 hrs	N/D	P	29 min	86.3	E	>16 hrs	N/D	I/D	I/D	I/D	P	I/D	I/D	F	15 min	46.9
Di(2-ethylhexyl)phthalate	117-81-7	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D
Dibutylphthalate	84-74-2	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>16 hrs	N/D	E	>8 hrs	N/D	E	>16 hrs	N/D	I/D	I/D	I/D
1,2-Dichloroethane	107-06-2	E	>8 hrs	N/D	E	>8 hrs	N/D	P	2.9 hrs	53	I/D	I/D	I/D	P	8 min	82.7	I/D	I/D	I/D
Dichloromethane	75-09-2	E	>8 hrs	N/D	F	1 hr	7.32	I/D	I/D	I/D	I/D	I/D	I/D	P	4 min	766	I/D	I/D	I/D
Diethyl Ether	60-29-7	E	>8 hrs	N/D	P	12 min	21.5	P	8 min	92.2	I/D	I/D	I/D	P	14 min	21.8	I/D	I/D	I/D

D = Degradation
BT = Breakthrough Time
PR = Permeation Rate

E = Excellent
G = Good
F = Fair
P = Poor

N/D = None Detected
I/D = Insufficient Data

 Good for total immersion

 Good for accidental splash protection and intermittent contact

 Only use with extreme caution. Glove will fail with only short exposure

		Silver Shield			Viton			Butyl			Chemsoft			Nitrile			Natural Rubber		
Chemical Name	CAS No.	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR
Diethyl Oxide	60-29-7	E	>8 hrs	N/D	P	12 min	21.5	P	8 min	92.2	I/D	I/D	I/D	P	14 min	21.8	I/D	I/D	I/D
Diethylamine	109-89-7	E	>8 hrs	N/D	P	35 min	852	P	47 min	46	I/D	I/D	I/D	F	I/D	I/D	I/D	I/D	I/D
Diethylaminoethanol	100-37-8	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>7.8 hrs	0.02	E	>8 hrs	N/D	I/D	I/D	I/D
1,4-Diethylene Dioxide	123-91-1	I/D	I/D	I/D	P	23 min	26.8	E	>20 hrs	N/D	I/D	I/D	I/D	P	28 min	77.1	I/D	I/D	I/D
Diethylene Ether	123-91-1	I/D	I/D	I/D	P	23 min	26.8	E	>20 hrs	N/D	I/D	I/D	I/D	P	28 min	77.1	I/D	I/D	I/D
Diethylene Oxide	123-91-1	I/D	I/D	I/D	P	23 min	26.8	E	>20 hrs	N/D	I/D	I/D	I/D	P	28 min	77.1	I/D	I/D	I/D
Diethylenetriamine	111-40-0	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	P	I/D	I/D	I/D	I/D	I/D
Diisobutyl Ketone (80%)	108-83-8	E	>8 hrs	N/D	F	1.1 hrs	90.6	G	3.3 hrs	41.2	I/D	I/D	I/D	F	2.9 hrs	49	I/D	I/D	I/D
Dimethyl Acetamide	127-19-5	F	1.5 hrs	0.728	P	25 min	3	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Dimethyl Formamide	68-12-2	E	>8 hrs	N/D	P	8 min	6.5	E	>8 hrs	N/D	I/D	I/D	I/D	F	9 min	15	I/D	I/D	I/D
Dimethyl Mercury	593-74-8	E	>4 hrs	<0.017	P	<15 min	3.1	P	<15 min	46.7	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Dimethyl Sulfoxide	67-68-5	G	I/D	I/D	F	1.5 hrs	5	E	>8 hrs	N/D	F	41 min	3.7	F	40 min	5.2	I/D	I/D	I/D
Dimethylketone	67-64-1	E	>8 hrs	N/D	P	2 min	383	E	>8 hrs	N/D	P	1 min	42.3	P	3 min	291	P	10 min	12.2
Dioctyl Phthalate	117-81-7	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D
1,4-Dioxane	123-91-1	I/D	I/D	I/D	P	23 min	26.8	E	>20 hrs	N/D	I/D	I/D	I/D	P	28 min	77.1	I/D	I/D	I/D
Dioxyethylene Ether	123-91-1	I/D	I/D	I/D	P	23 min	26.8	E	>20 hrs	N/D	I/D	I/D	I/D	P	28 min	77.1	I/D	I/D	I/D
Divinyl Benzene	1321-74-0	E	>8 hrs	N/D	E	>17 hrs	N/D	F	2.2 hrs	238	I/D	I/D	I/D	P	I/D	I/D	I/D	I/D	I/D
Epichlorohydrin	106-89-8	I/D	I/D	I/D	P	2 hrs	4	E	>8 hrs	N/D	I/D	I/D	I/D	P	I/D	I/D	I/D	I/D	I/D
1,2-Epoxypropane	75-56-9	I/D	I/D	I/D	P	1 min	1790	F	2.2 hrs	7	I/D	I/D	I/D	P	<6 min	>3.9	I/D	I/D	I/D
Ethanal	75-7-0	E	>8 hrs	N/D	P	0 min	281.9	E	>8 hrs	0.066	I/D	I/D	I/D	P	0 min	161	I/D	I/D	I/D
Ethanol	64-17-5	E	>8 hrs	N/D	I/D	I/D	I/D	E	>8 hrs	N/D	F	1.2 hrs	3.3	I/D	I/D	I/D	I/D	I/D	I/D
Ether	60-29-7	E	>8 hrs	N/D	P	12 min	21.5	P	8 min	92.2	I/D	I/D	I/D	P	14 min	21.8	I/D	I/D	I/D
Ethyl Acetate	141-78-6	E	>8 hrs	N/D	P	I/D	I/D	G	7.6 hrs	3.4	I/D	I/D	I/D	P	8 min	145	I/D	I/D	I/D
Ethyl Alcohol	64-17-5	E	>8 hrs	N/D	I/D	I/D	I/D	E	>8 hrs	N/D	F	1.2 hrs	3.3	I/D	I/D	I/D	G	31 min	2.4
Ethyl Aldehyde	75-07-0	E	>8 hrs	N/D	P	0 min	281.9	E	>8 hrs	0.066	I/D	I/D	I/D	P	0 min	161	I/D	I/D	I/D
Ethyl Ether	60-29-7	E	>8 hrs	N/D	P	12 min	21.5	P	8 min	92.2	I/D	I/D	I/D	P	14 min	21.8	I/D	I/D	I/D
Ethylamine (70% in water)	75-04-7	F	51 min	0.65	P	I/D	I/D	E	>12 hrs	N/D	I/D	I/D	I/D	F	1.1 hrs	30.1	I/D	I/D	I/D
Ethylene Dichloride	107-06-2	E	>8 hrs	N/D	E	>8 hrs	N/D	F	2.9 hrs	53	I/D	I/D	I/D	P	8 min	82.7	I/D	I/D	I/D
Ethylene Glycol	107-21-1	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	E	>8 hrs	N/D	I/D	I/D	I/D	E	>8hrs	N/D
Ethylene Oxide	75-21-8	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Formaldehyde (37% in water)	50-00-0	E	>8 hrs	N/D	E	>16 hrs	N/D	E	>16 hrs	N/D	E	>8hrs	0.007	E	>21 hrs	N/D	I/D	I/D	I/D
Furfural	98-01-1	E	>8 hrs	N/D	F	3.5 hrs	14.8	E	>16 hrs	N/D	I/D	I/D	I/D	P	24 min	265	I/D	I/D	I/D
Glutaraldehyde (25%)	111-30-8	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	P	I/D	I/D	E	>6 hrs	N/D
Heptane	142-82-5	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	E	>6 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D
Hexahydrobenzene	110-82-7	E	>4hrs	N/D	E	>7 hrs	N/D	F	50 min	103.8	E	>8 hrs	N/D	F	I/D	I/D	I/D	I/D	I/D

D = Degradation
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PR = Permeation Rate

E = Excellent
G = Good
F = Fair
P = Poor

N/D = None Detected
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		Silver Shield			Viton			Butyl			Chemsoft			Nitrile			Natural Rubber		
Chemical Name	CAS No.	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR
Hexahydrophenol	108-93-0	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>11 hrs	N/D	E	>6 hrs	N/D	E	>16 hrs	N/D	I/D	I/D	I/D
Hexamethylene	110-82-7	E	>4hrs	N/D	E	>7 hrs	N/D	F	50 min	103.8	E	>8 hrs	N/D	F	I/D	I/D	I/D	I/D	I/D
Hexanaphthene	110-82-7	E	>4hrs	N/D	E	>7 hrs	N/D	F	50 min	103.8	E	>8 hrs	N/D	F	I/D	I/D	I/D	I/D	I/D
Hexane	110-54-3	E	>8 hrs	N/D	E	>8 hrs	N/D	P	I/D	I/D	E	>6 hrs	N/D	E	I/D	I/D	I/D	I/D	I/D
Hydrochloric Acid (37%)	7647-01-0	E	>8 hrs	N/D	E	I/D	I/D	E	I/D	I/D	E	>6 hrs	N/D	E	>6 hrs	N/D	E	>6 hrs	N/D
Hydrofluoric Acid (48%)	7664-39-3	E	>8 hrs	0.013	G	I/D	I/D	F	I/D	I/D	I/D	I/D	I/D	G	1 hr	0.49	E	7 hrs	0.18
Hydrogen Chloride (gas)	7647-01-0	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Iodomethane	74-88-4	P	4 min	0.026	E	6.3 hrs	0.7	F	55 min	82	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Isobutyl Alcohol	78-83-1	E	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D
Isopropyl Alcohol	67-63-0	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	E	>6 hrs	N/D	E	>6 hrs	N/D	G	1.7 hrs	0.42
Ketohexamethylene	108-94-1	E	>8 hrs	N/D	P	29 min	86.3	E	>16 hrs	N/D	I/D	I/D	I/D	P	I/D	I/D	F	2.1 hrs	0.07
Methacrylic Acid	79-41-4	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	F	1.7 hrs	23	I/D	I/D	I/D
Methacrylonitrile	126-98-7	E	I/D	I/D	F	4 min	462	E	>8 hrs	N/D	I/D	I/D	I/D	P	7 min	560	I/D	I/D	I/D
Methanol	67-56-1	E	6 hrs	0.02	F	3 hrs	1	E	>8 hrs	N/D	I/D	I/D	I/D	F	32 min	11.8	F	19 min	1.97
Methenyl Trichloride	67-66-3	E	>8 hrs	N/D	E	9.5 hrs	0.46	I/D	I/D	I/D	I/D	I/D	I/D	P	4 min	352	I/D	I/D	I/D
Methyl Alcohol	67-56-1	E	6 hrs	0.02	F	3 hrs	1	E	>8 hrs	N/D	I/D	I/D	I/D	F	32 min	11.8	F	19 min	1.97
1-Methyl-4-tert-butylbenzene	98-51-1	E	>8 hrs	N/D	E	>8 hrs	N/D	F	1.78 hrs	8	I/D	I/D	I/D	P	I/D	I/D	I/D	I/D	I/D
Methyl Cellosolve	109-86-4	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	F	55 min	13.2	F	45 min	0.56
Methyl Chloride	74-87-3	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	0.0013	I/D	I/D	I/D	I/D	I/D	I/D
Methyl Chloroform	71-55-6	E	>8 hrs	N/D	E	>15 hrs	N/D	P	I/D	I/D	I/D	I/D	I/D	P	37 min	76.4	I/D	I/D	I/D
Methyl Iodide	74-88-4	P	4 min	0.026	E	6.3 hrs	0.7	F	55 min	82	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Methylamine (40% in water)	74-89-5	F	46 min	1.28	E	>16 hrs	N/D	E	>15 hrs	N/D	F	1.7 hr	7	E	>8 hrs	N/D	I/D	I/D	I/D
Methylbenzene	108-88-3	E	>8 hrs	N/D	E	>16 hrs	N/D	P	6 min	511	I/D	I/D	I/D	P	11 min	68.1	P	3 min	82.2
Methylene Chloride	75-09-2	E	>8 hrs	N/D	F	1 hr	7.32	P	I/D	I/D	P	I/D	I/D	P	4 min	766	I/D	I/D	I/D
4,4-Methylene Dianiline	101-77-9	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	F	I/D	I/D	I/D	I/D	I/D
Monoethanolamine	141-43-5	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D
Morpholine	110-91-8	E	>8 hrs	N/D	G	1.9 hrs	97	E	>16 hrs	N/D	I/D	I/D	I/D	P	48 min	206	I/D	I/D	I/D
Naphtha	8052-41-3	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	E	>8 hrs	N/D	E	>6 hrs	N/D	I/D	I/D	I/D
n-Hexane	110-54-3	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	E	>6 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D
Nitrobenzene	98-95-3	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	F	29 min	1.7	P	7 min	8.4
Nitromethane	75-52-5	I/D	I/D	I/D	I/D	I/D	I/D	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	P	7 min	2.83
1-Nitropropane	108-03-2	E	>8 hrs	N/D	P	17 min	26.1	E	>8 hrs	N/D	I/D	I/D	I/D	P	12 min	29.5	I/D	I/D	I/D
n-Methyl-2-Pyrrolidone	872-50-4	I/D	I/D	I/D	I/D	I/D	I/D	E	8 hrs	N/D	I/D	I/D	I/D	F	1.45 hrs	0.388	F	1.26 hrs	3.14
n-Propyl Acetate	109-60-4	E	>8 hrs	N/D	I/D	I/D	I/D	F	2.7 hrs	2.86	I/D	I/D	I/D	P	17 min	72.5	I/D	I/D	I/D
Oxalic Acid	144-62-7	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	G	I/D	I/D	I/D	I/D	I/D

D = Degradation
BT = Breakthrough Time
PR = Permeation Rate

E = Excellent
G = Good
F = Fair
P = Poor

N/D = None Detected
I/D = Insufficient Data

 Good for total immersion
 Good for accidental splash protection and intermittent contact
 Only use with extreme caution. Glove will fail with only short exposure

		Silver Shield			Viton			Butyl			Chemsoft			Nitrile			Natural Rubber		
Chemical Name	CAS No.	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR	D	BT	PR
p-Dioxane	123-91-1	I/D	I/D	I/D	P	23 min	26.8	E	>20 hrs	N/D	I/D	I/D	I/D	P	28 min	77.1	I/D	I/D	I/D
Perchloric Acid (70%)	7601-90-3	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D
Perchloroethylene	127-18-4	E	>8 hrs	N/D	E	>17 hrs	N/D	P	I/D	I/D	F	1 hr	3.8	F	1.3 hrs	5.5	I/D	I/D	I/D
Perchloromethane	56-23-5	E	>8 hrs	N/D	E	>13 hrs	N/D	I/D	I/D	I/D	F	1.3 hrs	3.45	F	3.4 hrs	5	I/D	I/D	I/D
Phenol (85% in water)	108-95-2	E	>8 hrs	N/D	E	>15 hrs	N/D	E	>20 hrs	N/D	I/D	I/D	I/D	P	39 min	>1500	F	2.2 hrs	4.64
Phenylamine	62-53-3	E	>8 hrs	N/D	P	6 min	18.7	E	>8 hrs	N/D	I/D	I/D	I/D	F	1.1 hrs	45	I/D	I/D	I/D
Phosphoric Acid (85%)	7664-38-2	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D
Pimelic Ketone	108-94-1	E	>8 hrs	N/D	P	29 min	86.3	E	>16 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	F	2.1 hrs	0.07
2-Propanone	67-64-1	E	>8 hrs	N/D	P	2 min	383	E	>8 hrs	N/D	P	1 min	42.3	P	3 min	291	P	10 min	12.2
Propyl Acetate	109-60-4	E	>8 hrs	N/D	P	I/D	I/D	G	2.7 hrs	2.86	I/D	I/D	I/D	P	17 min	72.5	I/D	I/D	I/D
Propyl Alcohol	71-23-8	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	G	3.8 hrs	0.35	E	4.4 hrs	1.1	I/D	I/D	I/D
Propylene Oxide	75-56-9	I/D	I/D	I/D	P	1 min	1790	F	2.2 hrs	7	I/D	I/D	I/D	P	<6 min	>3.9	I/D	I/D	I/D
p-tert-Butyltoluene	98-51-1	E	>8 hrs	N/D	E	>8 hrs	N/D	F	1.78 hrs	8	I/D	I/D	I/D	P	I/D	I/D	I/D	I/D	I/D
Pyridine	110-86-1	I/D	I/D	I/D	P	38 min	74	E	>8 hrs	N/D	I/D	I/D	I/D	P	I/D	I/D	I/D	I/D	I/D
Sodium Hydroxide 50%	1310-73-2	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D
Stoddard Solvent	8052-41-3	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	E	>8 hrs	N/D	E	>6 hrs	N/D	I/D	I/D	I/D
Styrene	100-42-5	E	>6 hrs	N/D	E	>6 hrs	N/D	F	35 Mins	0.19	P	16 min	39	P	11 min	>3.35	I/D	I/D	I/D
Sulfuric Acid (50%)	7664-93-9	E	>6 hrs	N/D	E	I/D	I/D	E	I/D	I/D	G	>8 hrs	N/D	G	>6 hrs	N/D	G	>6 hrs	N/D
Sulfuric Acid (93%)	7664-93-9	E	>8 hrs	N/D	E	>8 hrs	N/D	E	>8 hrs	N/D	P	2 min	N/D	F	1.9 hrs	11.4	G	5.1 hrs	N/D
Tetrachloroethylene	127-18-4	E	>8 hrs	N/D	E	>17 hrs	N/D	P	I/D	I/D	F	1 hr	3.8	F	1.3 hrs	5.5	I/D	I/D	I/D
Tetrachloromethane	56-23-5	E	>8 hrs	N/D	E	>13 hrs	N/D	I/D	I/D	I/D	F	1.3 hrs	3.45	F	3.4 hrs	5	I/D	I/D	I/D
Tetrahydrofuran	109-99-9	E	>8 hrs	N/D	P	0 min	327	F	27 min	112	P	I/D	I/D	P	0 min	167	P	5 min	360
Thioglycolic Acid	68-11-1	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D	I/D
Toluene	108-88-3	E	>8 hrs	N/D	E	>16 hrs	N/D	P	6 min	511	P	I/D	I/D	P	11 min	68.1	P	3 min	82.2
Toluene Diisocyanate	584-84-9	E	>8 hrs	N/D	I/D	I/D	I/D	E	I/D	I/D	F	1 hr	2.52	G	I/D	I/D	I/D	I/D	I/D
1,1,1-Trichloroethane	71-55-6	E	>8 hrs	N/D	E	>15 hrs	N/D	P	I/D	I/D	I/D	I/D	I/D	F	37 min	76.4	I/D	I/D	I/D
Trichloroethylene	79-01-6	E	>8 hrs	N/D	E	7.4 hrs	0.24	P	14 min	550	I/D	I/D	I/D	P	4 min	283	P	<5 min	894
Trichloromethane	67-66-3	E	>8 hrs	N/D	E	9.5 hrs	0.46	I/D	I/D	I/D	I/D	I/D	I/D	P	4 min	352	I/D	I/D	I/D
Triethanolamine	102-71-6	I/D	I/D	I/D	I/D	I/D	I/D	E	>8 hrs	N/D	E	>8 hrs	N/D	I/D	I/D	I/D	E	>8 hrs	N/D
Triethylamine	121-44-8	I/D	I/D	I/D	E	>8 hrs	N/D	P	I/D	I/D	E	5.8 hrs	0.18	E	>8 hrs	N/D	I/D	I/D	I/D
Vinegar Naphtha	141-78-6	E	>8 hrs	N/D	P	I/D	I/D	E	7.6 hrs	3.4	I/D	I/D	I/D	P	8 min	145	I/D	I/D	I/D
Vinylstyrene	1321-74-0	E	>8 hrs	N/D	E	>17 hrs	N/D	F	2.2 hrs	238	I/D	I/D	I/D	P	I/D	I/D	I/D	I/D	I/D
Xylene	1330-20-7	E	>8 hrs	N/D	E	>8 hrs	N/D	P	I/D	I/D	P	I/D	I/D	P	21 min	18.5	I/D	I/D	I/D

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E = Excellent
G = Good
F = Fair
P = Poor

N/D = None Detected
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Good for total immersion



Good for accidental splash protection and intermittent contact



Only use with extreme caution. Glove will fail with only short exposure



Silver Shield®/4H® Chemical Protection Guide

A comprehensive listing of Permeation Rates and Breakthrough Times for North Silver Shield®/4H® Hazardous Chemical Gloves, Aprons, Sleeves and Booties against 280 Chemical Contaminants in two temperatures.

TEST PROCEDURE

Chemical testing as per ASTM Standard F 739-91.

Detection limit: 0.1 µg / cm² / min.

Chemical testing as per EN 374: CE-0120.

KEY TO BREAKTHROUGH AND PERMEATION RATE

NT - Not Tested

NC - Not Calculated

C - Known or suspected Carcinogen

Chemical	C A S Reg. No.	21° C (70° F)		35° C (95° F)	
		Break-Through Time minutes	Permeation Rate µg / cm ² / minute	Break-Through Time minutes	Permeation Rate µg / cm ² / minute
ACCUMIXR (mixture) N-Alkyl Dimethyl Benzyl Amm. Chloride	68391-01-5				
N-Alkyl Dimethyl Ethylbenzyl Amm. Chloride Water	68956-79-6 7732-18-5	> 240		NT	
Ethyl Alcohol	64-17-5				
Acetaldehyde	75-07-0	> 240		NT	
Acetic Acid 100%	64-19-7	> 480		53	2.4
Acetic Anhydride	108-24-7	> 480		> 240	
Acetone	67-64-1	> 1440		> 240	
Acetone/Petrol 1:1	67-64-1 8032-32-4	9	NC	3	NC
Acetone/Toluene/ Methylated Spirit/ Conc. Ammonia 2 : 1 : 1 : 1	67-64-1 108-88-3 — 7664-41-7	190	NC	40	NC

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Chemical	C A S Reg. No.	21° C (70° F)		35° C (95° F)		
		Break-Through Time minutes	Permeation Rate µg / cm ² / minute	Break-Through Time minutes	Permeation Rate µg / cm ² / minute	
Acetone/Water 20:80	67-64-1	> 240		> 240		
Acetonitrile	75-05-8	> 1440		> 240		
Acetonitrile 25% in water	75-05-8	> 240		> 240		
Acetophenone	98-86-2	> 480		> 240		
Acrolein	107-02-8	> 480		> 240		
Acrylamide 15% in MEK	79-06-1 78-93-3	> 240		> 240		C
Acrylamide Mixture n-n' methylenebisacrylamide	79-06-1 110-26-9	> 240		> 240		
Acrylate UV Lacquer (ethylacetate/butylacetate)	—	> 240		> 240		
Acrylic Acid	79-10-7	> 240		> 210	NC	
Acrylonitrile	107-13-1	> 480		> 240		C
AeroShell Fluid 4	—	> 240		> 240		
Allyl chloride	107-05-1	> 240		> 240		
Allylamine (propyleneamine)	107-11-9	15	NC	NT		
Ammonia Water 2N	7664-41-7	110	NC	40	NC	
Ammonia Water 25%	7664-41-7	> 240		30	NC	
Ammonium Fluoride 34%	12125-01-8	> 240		> 240		
Ammonium Hydroxide (29, 1 w/w%) in water	1336-21-6	> 240		> 240		
Aniline	62-53-3	> 1440		> 240		
BENLATER (Benomyl)	17804-35-2	> 240		NT		
Benzaldehyde	100-52-7	> 480		> 240		
Benzene	71-43-2	> 1440		> 240		C
3, 3', 4, 4' Benzophenone Tetracarboxylic Dianhydride	2421-28-5	> 240		NT		
Benzyl Alcohol	100-51-6	> 480		NT		
Benzyl Chloride	100-44-7	> 480		> 240		
Benzyl Cyanide	140-29-4	> 240		> 240		
n-Benzyl Dimethylamine	103-83-3	> 240		NT		
Bispenol A diglycidyl Ether (EPOXY) 50% in MEK	1675-54-3 78-93-3	> 480		> 240		
Bromoacetic Acid	79-08-3	> 240		> 240		
Bromoacetonitrile	590-17-0	> 240		> 240		
2-Bromoacetophenone	70-11-1	> 240		> 240		
1-Bromoethylethyl Carbonate	89766-09-6	> 240		> 240		
1, 4-Butanediol diglycidyl ether 50% in MEK	2425-79-8 78-93-3	> 240		> 240		
n-Butanol	71-36-3	> 480		> 240		
sec-Butanol	78-92-2	> 480		> 240		
tert-Butanol	75-65-0	> 480		> 240		
n-Butyl Acetate	123-86-4	> 480		> 240		
Butyl Acrylate	141-32-2	> 480		> 240		
2-Butoxyethanol (butyl glycol)	111-76-2	> 240		> 240		
tert-Butyl Hydroperoxide	75-91-2	> 240		NT		
Butyraldehyde	123-72-8	> 480		> 240		
Carbon Disulfide	75-15-0	> 1440		> 240		
Carbon Tetrachloride	56-23-5	> 480		> 240		
Chlorine	7782-50-5	> 240		NT		
Chloroacetone	78-95-5	> 240		> 240		
2-Chloroethanol	107-07-3	> 240		> 240		
Chloroform	67-66-3	> 1440		> 240		C
Chloroform/ tert. Butanol 80 : 20	67-66-3 75-65-0	> 240		> 8		C

Chemical	C A S Reg. No.	21° C (70° F)		35° C (95° F)		
		Break-Through Time minutes	Permeation Rate µg / cm ² / minute	Break-Through Time minutes	Permeation Rate µg / cm ² / minute	
Chloroform	67-66-3	> 240		> 240		C
w/30% Methanol	67-66-3	> 240		> 240		
3-Chloropropene	107-05-1	> 240		NT		
CLOVA THINNER #19 ^o						
Toluene 50%	108-88-3					
MEK 15%	78-93-3	> 240				NT
Methanol 15%	67-58-1					
2-Butoxyethanol 10%	111-76-2					
Ethyl Acetate 10%	141-78-6					
Chromic Acid 50%	1333-82-0	> 240		> 240		
Chromic Acid/ Sulphuric Acid	1333-82-0 7664-93-9	> 240		> 240		
Coal Tar/ Benzene 1:1	— 71-43-2	> 240		> 240		C
Corrosive Fluid Dryrup 49685	—	102	NC	20	NC	
Creosote	8001-58-9	> 240		> 240		C
p-Cresol 50% in MEK	106-44-5 78-93-3					
Cyclohexane	110-82-7	> 480		> 240		
Cyclohexanol	108-93-0	> 480		> 240		
Cyclohexanone	108-94-1	> 480		> 240		
Cyclohexylamine 32%	108-91-8					
Morpholine 8% Water 60%	110-91-8	> 240	NT			
Cyclopentanone	120-92-3	> 240		> 240		
CYMBUSHR (Cypermethrin)	52315-07-8	> 240		NT		
DEEP WOODS OFF ^o (Mixture)	134-62-3	> 240		NT		
N, N-Diethyltoluamide Ethanol	64-17-5					
DEGALAN S 309 ^o (Mixture)	—	> 240		NT		
DEGALAN S 696 ^o (Mixture)	—	> 240		NT		
Diacetone alcohol	123-42-2	> 240		> 240		
4, 4'-Diaminodiphenyl- methane (MDA) 50% in MEK	537-65-5 78-93-3	> 480		> 240		C
1, 2-Dibromoethane	106-93-4	> 480		NT		
Dibutyl Ether	142-96-1	> 480		NT		
Di-n-Butyl Phthalate	84-74-2	> 240		> 240		
1, 3-Dichloro-2-Butene	926-57-8	> 240		NT		
1, 2-Dichlorobenzene	95-50-1	> 240		> 240		
1, 2-Dichloroethane	107-06-2	> 240		> 240		C
1, 1-Dichloroethylene	75-35-4	> 420		> 420		
Dichloromethane 90% Isopropyl Alcohol 10%	75-09-2 67-63-0	> 480		> 240		
Diethanolamine						
50% in Water	111-42-2	> 240		> 240		
n, n-Diethylacetamide	685-91-6	> 480		> 240		
Diethylamine	109-89-7	> 60	NC	6	NC	
Diethylenetriamine	111-40-0	> 240		NT		
Diethyl Ether	60-29-7	> 480		> 240		
N, N Diethyl nitrosoamine	55-18-5	> 240		NT		

Chemical	C A S Reg. No.	21° C (70° F)		35° C (95° F)	
		Break-Through Time minutes	Permeation Rate µg / cm² / minute	Break-Through Time minutes	Permeation Rate µg / cm² / minute
Diethylphthalate (Phthalic acid diethylester)	84-66-2	> 240		NT	
Diisobutyl ketone	108-83-8	> 240		> 240	
Dimercapthodiazole 10% in Butyldioxotol/MEK 1:1	1072-71-5	> 240		> 240	
N, N Dimethyl- Cyclohexylamine	98-94-2	> 480		NT	
Dimethylmercury	593-74-8	60		NT	
Dimethyl Sulfoxide	67-68-5	> 480		194	2.2
N, N-Dimethylacetamide	127-19-5	> 240		> 240	
2 – Dimethylamino - Ethanol	108-01-0	350		NT	
N, N-Dimethylaniline	121-69-7	> 240		> 240	
Dimethylethanolamine	108-01-0	> 240		> 240	
Dimethylethylamine	598-56-1	9	NC	2	NC
Dimethylformamide	68-12-2	> 1440		> 240	
Dimethylsulphate	77-78-1	> 240		> 240	C
Dinol	—	> 240		NT	
Dinoseb (47, 6% in Xylene)	88-85-7 1330-20-7	> 240		> 240	
1, 4-Dioxane	123-91-1	> 480		> 240	C
Dipentene (limonen)	138-86-3	> 480		36	
2, 3-Diphenyl-2-cyclopropen- 1-one 2% Acetone w/10% Propyleneglycol	886-38-4 67-64-1 57-55-6	> 240		> 240	
Di-(2-ethylhexyl) phthalate	117-81-7	> 240		> 240	C
Diquat Dibromide	85-00-7	> 240		> 240	
Dodecane	112-40-3	> 480		> 240	
Dynasylan BH-N	—	> 480		NT	
Epichlorohydrin	106-89-8	> 240		> 240	C
EPOXIDHARZ-KLEBSTOFF* Schüco art. 298011 A	—	> 240		> 240	
EPOXIDHARZ-KLEBSTOFF* Schüco art. 298011 B	—	> 240		> 240	
Ethanol 96%	64-17-5	> 480		> 240	
Ethanolamine	141-43-5	> 480		> 240	
Ethidium Bromide	1239-45-8	> 480		NT	
2-(2-Aminoethoxy)ethanol	929-06-6	> 240		> 240	
2-Ethoxy-1-Propanol	19089-45-5	> 240		> 240	
Ethyl Acetate	141-78-6	> 1440		> 240	
Ethyl Acrylate	140-88-5	> 240		> 240	C
Ethyl Benzene	100-41-4	> 480		> 480	
Ethyl Glycol	110-80-5	> 240		> 240	
Ethyl Glycol Acetate	111-15-9	> 240		> 240	
Ethylendiamine	107-15-3	92	NC	47	NC
Ethylene Glycol	107-21-1	> 240		> 240	
Ethylene Oxide	75-21-8	> 240		NT	
Extraction petrol 80/110	—	> 240		> 240	
Fluoroboric solution: Hydrofluoric acid Boric acid Nitric acid	7664-39-3 10043-35-3 7697-37-2	> 240		NT	
Formaldehyde	50-00-0	> 240		> 240	
Formaldehyde 37% w/10% Methanol	50-00-0 67-56-1	> 480		> 240	C

Chemical	C A S Reg. No.	21° C (70° F)		35° C (95° F)	
		Break-Through Time minutes	Permeation Rate µg / cm² / minute	Break-Through Time minutes	Permeation Rate µg / cm² / minute
Formic Acid 98-100%	64-18-6	120	NC	60	NC
Freon 113	76-13-1	> 240		> 240	
Furfural	98-01-1	> 480		> 240	
Furfuryl Alcohol	98-00-0	> 480		> 240	
GammaButyrolactone Merck 801661	96-48-0	> 480		NT	
GLANCER (mixture)	—	> 240		NT	
Glutarialdehyde 2% in Water	111-30-8	> 240		> 240	
Glutarialdehyde 25% in Water	111-30-8	> 240		> 240	
Glycerol	56-81-5	> 240		> 240	
Glycerol Monothioglycolate 80%	30618-84-9	> 240		NT	
Glycerolpropoxy-triacrylate	—	> 240		> 240	
GLUMA	—	> 240		NT	
Heptane	142-82-5	> 480		> 240	
1, 1, 1, 3, 3, 3 – Hexamethyl Disilazane	999-97-3	> 240		> 240	
n-Hexane	110-54-3	> 1440		> 240	
Hexane/Benzene 9:1	110-54-3 71-43-2	> 240		> 240	C
Hydraulic oils	—	> 240		> 240	
Hydrazin 80%	7803-57-8	> 240		> 240	C
Hydrocarbon Mixture (K-Blend)	—	> 240		NT	
Hydrochloric Acid 2N	7647-01-0	> 240		> 240	
Hydrochloric Acid 37%	7647-01-0	> 240		NT	
Hydrochloric Acid 37% /Nitric Acid 65% 3:1	7647-01-0 7697-37-2	> 240		> 240	
Hydrofluoric Acid 10%	7664-39-3	> 240		120	NC
Hydrofluoric Acid 30%	7664-39-3	> 240		120	NC
Hydrofluoric Acid 40%	7664-39-3	> 240		120	NC
Hydrofluoric Acid 49%	7664-39-3	> 240		30	NC
Hydrofluoric Acid 70%	7664-39-3	60	NC	30	NC
Hydrofluoric Acid 100%	7664-39-3	15			
Hydrogen Cyanide	74-90-8	> 240		NT	
Hydrogen Peroxide 30%	7722-84-1	> 240		NT	
Hydroquinone 33% in Ethanol	123-31-9 64-17-5	> 240		> 240	
2-Hydroxy-Methacrylate (HEMA)	868-77-9	> 240		NT	
2-Hydroxyethyl-N, N, N- Trimethyl ammonium Hydroxid	—	> 240		> 240	
2-Hydroxyethyl Acrylate	818-61-1	> 240		> 240	
IMRON 192R S/Hexamethylene Diisocyanate 37%	—	> 240		NT	
Isobutanol	78-83-1				
Isopentylalcohol/ Chloroform 1:24	123-51-3 67-66-3	176	NC	40	NC
Isophorone	78-59-1	> 240		> 240	
Isopropanol	67-63-0	> 240		> 240	
Isopropyl Nitrate	1712-64-7	> 240		NT	
Jet Fuel (Jet A-1/Shell)	—	> 240		> 240	

Chemical	C A S Reg. No.	21° C (70° F)		35° C (95° F)	
		Break-Through Time minutes	Permeation Rate µg / cm ² / minute	Break-Through Time minutes	Permeation Rate µg / cm ² / minute
KOVAC'S INDOLREGENT®	—	> 240		> 240	
Lubricat. Oil, DTE 25	—	> 240		> 240	
Malathion	121-75-5	> 240		NT	
2-Mercaptoethanol	60-24-2	> 240		> 240	
Mercury (Hg)	7939-97-6	> 480		NT	
Methacrylic Acid	79-41-4	> 480		> 240	
Methacrylic Adhesive	—	> 240		> 240	
Methanol	67-56-1	> 480		30	1.6
1-Methoxy-2-Propanol	107-98-2	> 240		> 240	
1-Methoxy-2-Propylacetate	108-65-6	> 240		> 240	
2-Methoxyethanol	109-86-4	> 240		> 240	
2-Methoxyethyl-Acetate	110-49-6	> 240		> 240	
Methyl Acetate	79-20-9	> 480		> 240	
Methyl Ethyl Ketone (MEK)	78-93-3	> 1440		> 240	
Methyl Ethyl Ketone/ Toluene 1:1	78-93-3 108-88-3	114	NC	9	NC
5-Methyl-2-Hexanone (Methyl Isoamyl Ketone)	110-12-3	> 480		> 240	
Methyl Isobutyl Ketone	108-10-1	> 480		> 240	
Methyl Methacrylate	80-62-6	> 480		> 480	
5-Methyl-5-Norbornene 2, 3-Dicarboxylic Anhydride (Methyl Nadic Anhydride)	25134-21-8	> 240		NT	
Methyl-pentyl-ketone	110-43-0	> 240		> 240	
Methyl n-propyl Ketone (2-Pentanone)	107-87-9	> 480		NT	
N-Methyl-2-Pyrrolidone	872-50-4	> 240		> 240	
Methyl-tert-Butyl Ether	1634-04-4	> 480		NT	
Methyl Trichlorosilane	75-79-6	> 240		NT	
Methylamine 40%	74895	> 240		80	1.3
4, 4' -Methylene bis (MOCA, MBOCA or MBOCHA) (2-Chloroaniline) 50% in Acetone	101-14-4 67-64-1	> 240		NT	C
Methylene Bisphenyl- 4, 4-diisocyanate (MDI)	101-68-8	> 480		> 240	
Methylene Chloride	75-09-2	> 1440		> 240	C
4, 4' -Methylenedianiline 10% in Isopropyl alcohol	537-65-5 67-63-0	> 240		NT	
Methylenedianiline 50% in MEK (MDA)	537-65-5 78-93-3	> 480		NT	C
Methyl iodide	74-88-4	123	NC	8	NC
Mixture of: N-Methyl Pyrrolidone Butyrolactone Styrene	872-50-4 96-48-0 100-42-5	> 480		> 480	
Mixture of: Methylene Chloride 20% Trichlorethylene 20% Xylene 45% Mineral Spirits 15%	75-09-02 79-01-06 1330-20-7 8032-32-4	> 240		> 240	
Mixture of: MEK 66% Cyclohexanone 24% Toluene 10%	78-93-3 108-94-1 108-88-3	> 480		NT	

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		Break-Through Time minutes	Permeation Rate µg / cm ² / minute	Break-Through Time minutes	Permeation Rate µg / cm ² / minute
Mixture of: 1, 3-Phenylenediamine 30% Ethylacetate 70%	108-45-2 141-78-6	> 480		NT	
Mixture of: Toluene 50% Isopropylalcohol 25% Methylethylketone 25%	108-88-3 67-63-0 78-93-3	> 480		NT	
Morpholine	110-91-8	> 480		94	2.5
Mustard Gas	505-60-2	> 1440		> 1440	C
N35091 Cleaning agent	—	> 480		NT	
N 39/3010 Thinner	—	> 480		NT	
Naphthalene 25% in Toluene	91-20-3	> 240		> 240	
1-Naphthylamine 25% in Isopropanol	134-32-7	> 240		> 240	
Nicotine	54-11-5	> 240		> 240	
Ninhydrin 4% in 2-Methoxyethanol	485-47-2	> 240		> 240	
Nitric Acid 2N	7697-37-2	> 480		> 240	
Nitric Acid 65%	7697-37-2	> 40		NT	
Nitric Acid 100% (red fuming)	7697-37-2	180	NC	60	
Nitrobenzene	98-95-3	> 1440		> 240	
2-Nitrobenzylbromide	3958-60-9	> 240		> 240	
4-Nitrodiphenylamine	119-75-5	> 240		> 240	
Nitroethane	79-24-1	> 480		> 240	
Nitroglycerol	55-63-0	> 240		NT	
Nitroglycol	628-96-6	> 240		NT	
Nitromethane	75-52-5	> 480		> 240	
2-Nitropropane	79-46-9	> 240		> 240	C
O-Tolidine	95-53-4	> 480		> 480	
Orthocid 83	133-06-2	> 240		NT	
KVK PARATHION 35R	—	> 240		NT	
PAINTSTRIPPER D23® 30% in Dichloromethane	—	200	NC	NT	
PCB 12/60 Chloric	1336-36-3	> 240		> 240	C
Pentane	109-66-0	> 480		> 240	
Perchloric Acid 70%	760 1-90-3	> 240		> 240	
Perchloroethylene	127-18-4	> 480		> 480	C
PERGA KAN® Domo/Master A/S - DK	—	> 240		> 240	
PERMA FLUID "MICA" (8% Ammonia Thioglycolate)	—	> 240		> 240	
Petroleum (Gasoline) 95 & 96 unleaded/leaded	93572-29-3	> 240		> 240	
Petroleum (Gasoline) (Shell specialty)	—	> 240		> 240	
80% Petroleum 20% n-Methyl-2-pyrrolidone	— 872-50-4	> 240		> 240	
Petroleum ether 80/110	8032-32-4	> 480		> 480	
Phthalic Acid Anhydride	85-44-9	> 240		NT	
Phenol 50% in MEK	108-95-2 78-93-3	> 240		> 240	

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		Break-Through Time minutes	Permeation Rate µg / cm² / minute	Break-Through Time minutes	Permeation Rate µg / cm² / minute	
Phenol/Isopentanol/ Chloroform 25:1:24	108-95-2 123-51-3 67-66-3	130	NC	70	NC	
Phosphoric Acid 85%	766-38-2	> 240		> 240		
Phosphorylic Chloride	10025-87-3	> 240		> 240		
PHOTO RESIST 1450® (INMOS)	111-15-9 1330-20-7 123-86-4	> 240		> 240		
3-Picolyl Chloride Hydrochloride 25% in water	6959-48-4	> 240		> 240		
3-Picolyl Chloride Hydrochloride/ Acetonitrile/water 4:3:9	6959-48-4 75-05-8	> 240		> 240		
4-Picolylchloride hydrochloride	1822-51-1	> 240		> 240		
Polyethyleneglycol	25322-68-3	> 480		NT		
Polyol mixture	—	> 480		NT		
Posistrip LE, (INMOS)	110-91-8 96-48-0 872-50-4	> 240		> 240		
Potassium Hydroxide 50%	1310-58-3	> 240		> 240		
Potass. Permanganate Solution, Saturated	7722-64-7	> 240		NT		
PRAMITOLR	1610-18-0	> 240		NT		
PRO STRIPR (Mixture): Monoethanolamine Glycol Ether Isopropanol Polyoxyethylene Phenylether Phosphate Ammonium Hydroxide	141-43-5 111-76-2 67-63-0 39464-70-5 1336-21-6	> 240		NT		
1-Propanol	71-23-8	> 240		> 240		
Propiophenone	93-55-0	> 240		> 240		
Propyl Acetate	109-60-4	> 480		> 240		
Propylene Glycol	57-55-6	> 240		> 240		
Propylene Glycol Moroethyl Ether Acetate	19234-20-9	> 240		> 240		
1, 2-Propylene Oxide	75-56-9	> 480		NT		
1, 2-Propylene Oxide in Water	75-56-9	> 240		26	3.0	C
Propyzamide 50% (Kerb 50®) 10% suspended in Water	23950-58-5	> 240		NT		
Pyridine	110-86-1	> 480		> 240		
PYROTEC HFD 46R	—	> 240		NT		
Quinoline	91-22-5	> 240		> 240		
REGLONER	85-00-7	> 240		NT		
830 RESIST STRIPPERR (INMOS)	929-06-6 872-50-4	> 240		> 240		
ROUNDUP® Glyphosat-isopropylamine derivate 450 g/l	38641-94-0	> 240		NT		
SADOFOS PRIMER® 17	—	> 240		> 240		
SADOFOS PRIMER® 513	—	> 240	64	NC		

Chemical	C A S Reg. No.	21° C (70° F)		35° C (95° F)		C
		Break-Through Time minutes	Permeation Rate µg / cm² / minute	Break-Through Time minutes	Permeation Rate µg / cm² / minute	
Silver Cyanide 4%	506-64-9	> 240		NT		
SKYDROL® (mix of Tributyl phosphate/ Dibutylphenolphosphate)	126-73-8	> 480		NT		
Sodium Hydroxide 2N	1310-73-2	> 1440		> 240		
Sodium Hydroxide 50%	1310-73-2	> 480		> 240		
Sodium Hydroxide 96-98%	1310-73-2	> 480		NT		
Sodium Hypochlorite 15% in Water	7681-52-9	> 240		> 240		
SOLMASTER® Methylene Chloride/Ethanol	—	> 240		> 240		
STAR THINNER 7040® Xylene/Butylglycol	1330-20-7 111-76-2	> 240		> 240		
Styrene	100-42-5	> 1440		> 240		
Sulphuric Acid 90%	7664-93-9	> 480		> 240		
Sulphuric Acid 93%	7664-93-9	> 1440		NT		
Sulphuric Acid 96% w.65% SO ₂ (oleum)	7664-93-9	120	NC	30	NC	
Sulphuric Acid 2N	7664-93-9	> 240		> 240		C
Sulphuric Acid 96% Hydrogen Peroxide 30% 3:1	7664-93-9 7722-84-1	> 480		NT		
Tetrachloroethylene	127-18-4	> 1440		> 240		
Tetraethyl Orthosilicate	78-10-4	> 480		> 480		
Tetrafluoroboric Acid (HBF ₄) 35%	16872-11-0	> 240		NT		
Tetrahydrofuran	109-99-9	> 480		> 240		
Tetrahydrofuran 50% Toluene 50%	109-99-9 108-88-3	89	NC	NT		
Tetramethyl Ammonium Hydroxide in water	75-59-2	> 240		> 240		
Thioglycolic Acid	123-93-3	> 240		> 240		
Thiourea 7, 5% in 50% Ethanol	62-56-6 64-17-5	> 240		> 240		
Toluene	108-88-3	> 1440		> 240		
Toluene-2, 4-Diisocyanate TDI 40% in Xylene	584-84-9 1330-20-7	> 480		> 240		
Toluene Isopropanol 1:1	108-88-3 67-63-0	> 240		> 240		
Transformer Oil Nytro 10X, Nynäs/Oslo	—	> 240		> 240		
Transmission Oil Opel, Dextron GM 6137M	—	> 240		> 240		
Tributylphosphate	126-73-8	> 240		> 240		
1, 1, 1-Trichloroethane	71-55-6	> 480		> 240		C
1, 1, 1-Trichloroethane w. 3% 1, 4-Dioxane	71-55-6 123-91-1	> 240		> 240		
1, 1, 1-Trichloroethane /Ethanol/Turpentine amounts unknown	71-55-6 64-17-5 8006-64-2	> 240		NT		
1, 1, 1-Trichloroethane 73% Methylene Chloride 17% Dodecylbenzensulphonic acid 10%	71-55-6 75-02-9 2776-87-0	> 240		NT		
1, 1, 1-Trichloroethane/ Propyleneglycolmono- ethyletheracetate 3:1	71-55-6 19234-20-9	> 240		>240		
Trichloroethylene	79-01-6	> 1440		> 240		

Chemical	C A S Reg. No.	21° C (70° F)		35° C (95° F)	
		Break-Through Time minutes	Permeation Rate $\mu\text{g} / \text{cm}^2 /$ minute	Break-Through Time minutes	Permeation Rate $\mu\text{g} / \text{cm}^2 /$ minute
Triethanolamine 50% in Water	102-71-6	> 240		> 240	
Triethylenediamine	280-57-9	> 480		NT	
Triethylenediamine 25% in Water	280-57-9	> 240		220	NT
Triethylene Tetramine (TETA) 50% in MEK	112-24-3 78-93-3	> 240		> 240	
Trifluoroacetic Acid	76-05-1	> 240		> 240	
Triphosgene	32315-10-9	> 240		> 240	
Tripropylene glycol Diacrylate	42978-66-5	> 240		> 240	
TURCO 5092® (Stripping agent)	—	132	NC	28	NC
U-V RESIN 20074®	—	> 240		> 240	
Vinyl Acetate	108-05-4	> 480		> 240	
Vinyl Chloride 99%	75-01-4	> 480		> 480	
N-Vinylpyrrolidone	88-12-0	> 240		> 240	
White Spirit (Naphtha)	8052-41-3	> 480		> 240	
XYLAMON®	—	> 240		NT	
Xylene	1330-20-7	> 1440		> 240	
Xylene/Ethyl Glycol 1:1	1330-20-7, 110-80-5	> 240		> 240	

All product or corporate names listed as trademarks or registered trademarks are the property of their respective companies.

EPA Region 5 Superfund and Emergency Management Division Response Capabilities

This catalog provides an overview of the EPA Region 5 Superfund and Emergency Management Division's (SEMD) capabilities for the local, State, Tribal and Federal response communities.

Superfund Overview

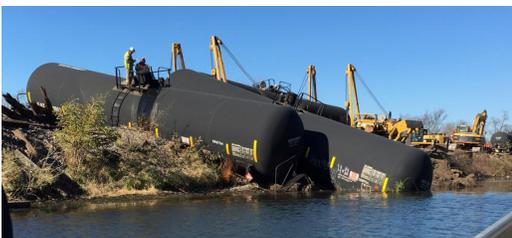
The Superfund program was created in 1980 when Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), amended in 1986 by the Superfund Amendments and Reform Act (SARA). These laws created a program to clean up abandoned or uncontrolled hazardous waste sites that pose a threat to human health or the environment. It made "potentially responsible parties" (owners, operators, or transporters to the facility, also known as PRPs) retroactively, jointly, and severally responsible for cleaning up the sites. For those sites where the PRPs cannot be found, are bankrupt, or refuse to perform the cleanup, it created a separate Federal fund (the "Superfund") for the U.S. Environmental Protection Agency (EPA) to carry out the cleanup.



What Type of Emergency Response or Cleanups does EPA Conduct?

Emergency responses that must be addressed immediately, such as:

- Derailed train cars containing hazardous chemicals
- Fires containing hazardous materials
- Traffic incidents involving hazardous materials spills
- Chemical or mercury spills
- Chemical air releases where air monitoring is required
- Potable water system contamination



Reimbursement to Local Governments for Emergency Response to Hazardous Substance Releases

In the event of a release of hazardous substances, EPA may reimburse local governments for expenses related to the release and associated emergency response measures. The Local Governments Reimbursement (LGR) Program provides a “safety net” of up to \$25,000 per incident to local governments that do not have funds available to pay for response actions. For more information, including details on eligibility and how to apply for reimbursement: <https://www.epa.gov/emergency-response/local-governments-reimbursement-program>

Superfund Local Government Reimbursement Program

- Alleviates financial burden on local governments
 - Town, township, city, municipality, parish, county
 - Federally-recognized Indian Tribe
- Reimbursements provided for:
 - Rental or leasing of equipment
 - Special technical and laboratory services
 - Evacuation services
 - Replacement of equipment lost or destroyed

Time-critical removals

Time-critical removals are defined as sites that should be cleaned up within a few months of discovery. In most communities typical time-criticals are:

- Abandoned hazardous waste sites including plating waste or unknown drums, tanks or other containers
- Vapor intrusion sites
- Lead or chemical contaminated soil sites, especially in residential settings

Removal sites are managed by an On-Scene Coordinator (OSC), often supported by EPA contractors and in coordination with local officials.



Oil Spill Response

Since CERCLA explicitly excluded cleanup of petroleum-only releases, those sites (if the release threatens a navigable water) are handled by OSCs under the Oil Pollution Act (OPA) of 1990. The OPA has its own appropriation, including funding received from the U.S. Coast Guard National Pollution Fund Center. The OPA, which is a part of the Clean Water Act (CWA), strengthened EPA's ability to prevent and respond to catastrophic oil spills. A fund is available to EPA and the Coast Guard to clean up oil spills when the responsible party is incapable or unwilling to do so. The OPA also requires the development of Area Contingency Plans to prepare and plan for oil spill response on a regional scale. EPA Region 5 maintains a staff of Area Planners dedicated to this work.





How to Contact EPA for Oil and Hazardous Substance Response

The National Response System (NRS) is a mechanism routinely and effectively used to respond to a wide range of oil and hazardous substance releases. It is a multi-layered system involving individuals and teams from local, State, Tribal, and Federal agencies, as well as industry and other organizations.

At the heart of the system is the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The NCP outlines the process to ensure that the Federal government's resources and expertise are available immediately for response actions that are beyond the capabilities of local and State responders. The NCP provides the framework for the NRS and establishes how it works.

The National Response Center (NRC) is a part of the Federally established National Response System and staffed 24 hours a day at 1-800-424-8802. It is the designated Federal point of contact for reporting all oil, chemical, radiological and biological discharges into the environment, anywhere in the United States and its territories.

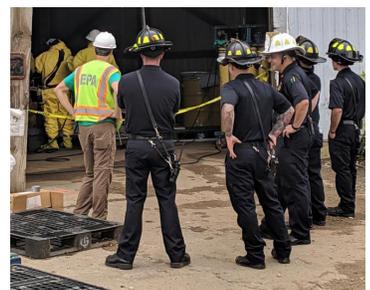
Reports to the NRC activate the NCP and the Federal government's response capabilities. It is the responsibility of the NRC staff to notify the pre-designated OSC assigned to the area of the incident and to collect available information on the size and nature of the release, the facility or vessel involved, and the party or parties responsible for the release.



Superfund Program in Region 5



EPA manages its programs through ten regional offices across the country. Region 5 is responsible for the following six Midwestern states: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Within the Regional office located in Chicago, the program is handled by the Superfund and Emergency Management Division (SEMD), which includes OSCs managing emergency responses and time-critical removal actions and Remedial Project Managers managing NPL sites.





Region 5 Emergency Response Branch

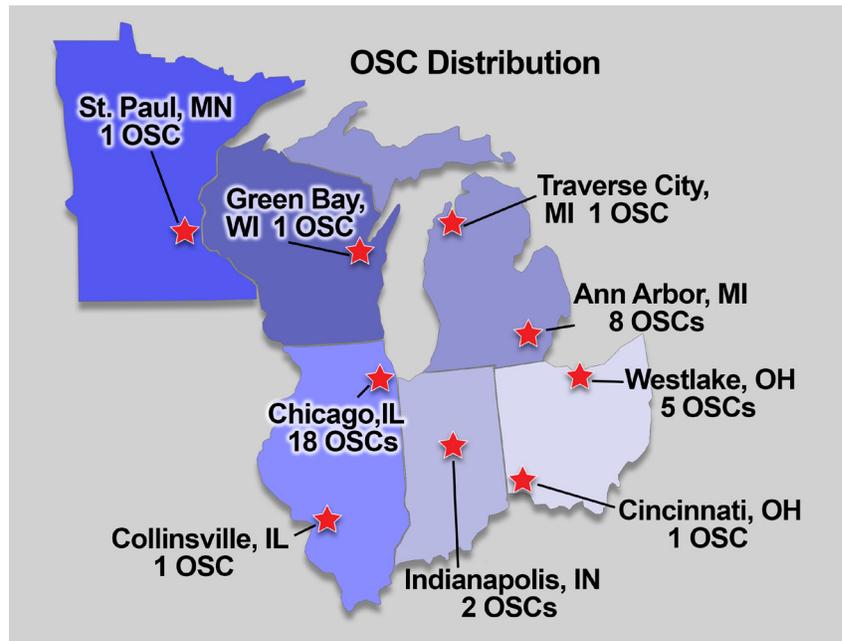
Region 5 maintains 38 Level A response-ready OSCs, who have also received advanced training in biological, chemical, and radiological terrorism response, as well as training in advanced Incident Command System (ICS) operations. The Regional office also has “reach back” capacity to activate several hundred additional emergency trained staff with a wide range of specialized skills and expertise.

Emergency response has recognized the value and benefit of having OSCs work in close proximity to the communities they serve. OSCs stationed in the field develop effective working relationships with local and State responders. They also enhance the understanding of multi-government roles and capabilities during coordinated response actions.



Region 5 has OSCs stationed in 11 locations:

- Chicago, Illinois
- Des Plaines, Illinois
- Collinsville, Illinois
- Willowbrook, Illinois
- Indianapolis, Indiana
- Ann Arbor, Michigan
- Traverse City, Michigan
- St Paul, Minnesota
- Cincinnati, Ohio
- Westlake, Ohio
- Green Bay, Wisconsin



Region 5 has increased its total number of field offices. It places 26 OSCs in field offices—over half of all OSCs in Region 5. Superfund emergency response and the Region have already benefited from these recent field offices. Over the past several years, local and State governments referred an unprecedented number of response and removal actions to these offices.

Removal Program in Region 5

Since the program began in 1980, Region 5 has performed or overseen removal actions at 2,234 sites. Over the past 10 years, there were 546 removal cleanups (emergency responses, time-critical removals, and non-time-critical removals). During this time, the program has worked to increase the number of PRPs leading cleanups, increasing the percentage of PRP-lead completions from 23% in the last 10 years.



USEPA REGION 5 (For Reproduction Use) FIELD EQUIPMENT CATALOG

(IL: Willowbrook, Chicago; DE: Plains; MA: Merrimack; MI: Grosse Ile, Traverse City; OH: Westlake, Cincinnati; IN: Indianapolis; WI: Green Bay; MN: St. Paul)



Region 5 Response Equipment

EPA Region 5 maintains a vast array of specialized emergency response (ER) and removal equipment to support the health and safety of OSCs and the program's overall response mission. Equipment is distributed across hub and outstationed OSC locations throughout Region 5.

Response equipment includes:

- ER health & safety (personal protection equipment)
- Real-time detection instruments for chemicals, dust, mercury
- ER chemical warfare agent/detectors
- Real-time radiation meters
- Weather station
- Air sampling equipment
- Field communication (radios and satellite phones)
- Transportation (mobile command post, ATV, air trailer)
- Specialized equipment such as chemical identifiers, thermal imaging cameras



Disaster Response and the National Response Framework

The National Response Framework (NRF) is a guide to how the U.S. responds to all types of disasters and emergencies. It is built on scalable, flexible, and adaptable concepts identified in the National Incident Management System (NIMS) to align key roles and responsibilities across the nation. The NRF describes specific authorities and best practices for managing incidents that range from the serious but purely local to large-scale terrorist attacks or catastrophic natural disasters. The NRF provides coordinating mechanisms to bring in additional agencies and components as they are needed.

The NRF's Emergency Support Function Annexes (ESFs) group capabilities and resources into functions most likely needed during an Incident of National Significance. A large-scale natural disaster or significant terrorist incident can require the activation of many ESFs. A localized flood or tornado might only require activation of a few ESFs. Each ESF has one or two coordinating federal agencies that are in charge of orchestrating federal support and managing staff and resources for that functional area, and additional agencies that have supporting roles. For example, during the Hurricane Katrina in 2005, EPA managed ESF #10 (oil and hazardous waste materials recovery) across several states.

National Response Framework



Homeland Security





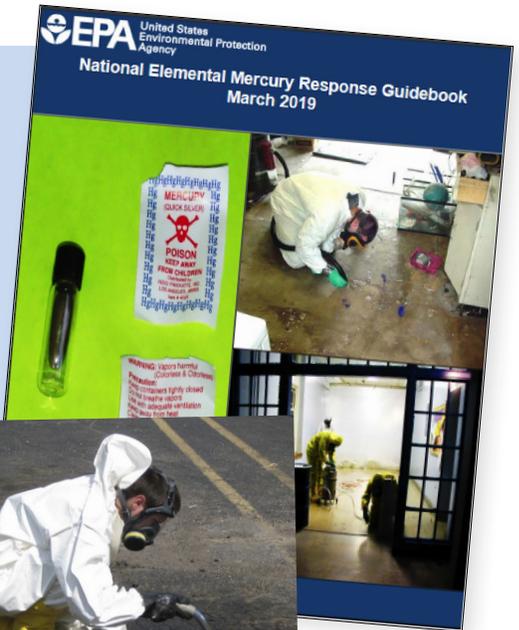
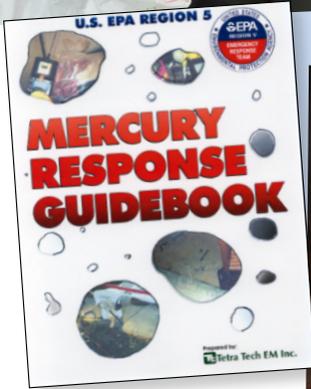
Emergency Support Function #10 – Oil & Hazardous Materials Response Annex
 EPA and the Department of Homeland Security/U.S. Coast Guard are the primary agencies for overseeing Emergency Support Function ESF #10- Oil and Hazardous Materials Response Annex under the National Response Framework. ESF #10 provides a coordinated federal response to actual or potential oil and hazardous materials incidents. Response under ESF #10 occurs when there has been a Presidential Disaster Declaration under the Stafford Act or there is a need to support a response under the NCP, with additional resources.

Does EPA Respond to Mercury Spills?



Mercury Response

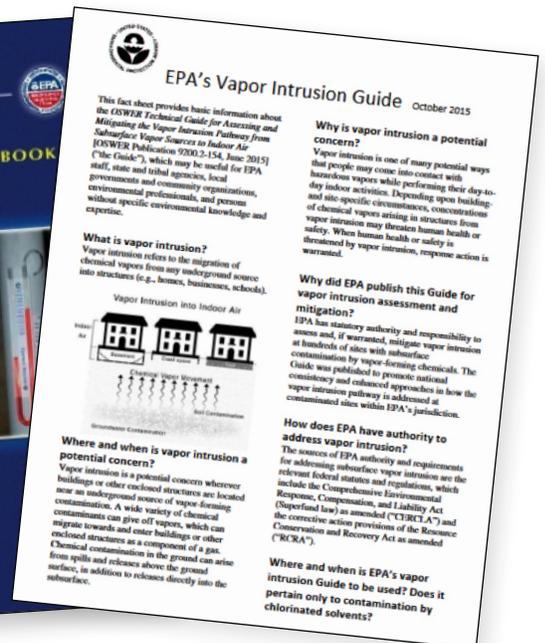
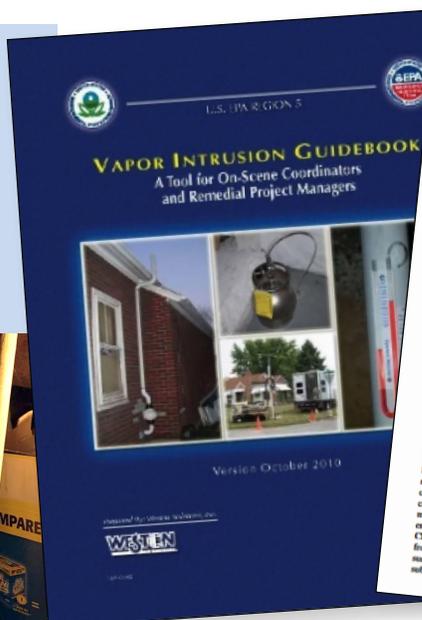
Region 5 OSCs respond to mercury spills in schools, homes and businesses that pose a threat of release to the environment. Our OSCs have developed regional guidance and participated in the development of the National Mercury Response Guidebook.



What About Vapor Intrusion Sites?

Vapor Intrusion Response

EPA has responded to Vapor Intrusion sites where an exposure pathway has been documented linking subsurface contamination from a source to residential indoor air. Examples include former dry-cleaners and solvent contaminated sites.



Emergency Response Training for Railroad Incidents

EPA Region 5 OSCs, working with U.S. Department of Transportation, U.S. Coast Guard, local, State and Tribal responders, and Class I railroads have updated and delivered the Transportation Rail Incident Preparedness and Response (TRIPR) training course to first responders in 15 locations since 2016. The new TRIPR training curriculum includes discussion of risk-based incident response principles, use of Incident Command System (ICS) at responses, recent railroad case studies of crude-by-rail incidents, and an interactive panel discussion involving responders and railroads. Since 2016, over 1,600 local and State emergency managers, firefighters, hazmat technicians, public health professionals, and law enforcement officials have participated in the 8-hour training sessions.



TRANSPORTATION RAIL INCIDENTS PREPAREDNESS AND RESPONSE TRAINING

JANUARY 25, 2017

WAYNE COUNTY COMMUNITY COLLEGE DISTRICT
DOWNRIVER CAMPUS AUDITORIUM
21000 NORTHLINE ROAD
TAYLOR, MI 48180

The Transportation Rail Incidents Preparedness and Response (TRIPR), Flammable Liquid Unit Trains event was developed to provide critical information on best practices related to rail incidents involving hazard class 3 flammable liquids, such as crude oil and ethanol. A key component of this initiative is to learn from past experiences and to leverage the expertise of public safety agencies, rail carriers, and industry subject matter experts in order to prepare first responders to safely manage incidents involving flammable liquids unit trains. More information is available at: <http://www.epa.gov/region5/transportation>

To attend this training event, please RSVP using this link: <http://www.waynecommunitycollege.edu/transportation> by January 23, 2017.

Logistics and additional registration information will be provided in advance of the training date.

FREE TRAINING FOR FIRE DEPARTMENT, LEPC, EMA AND FIRST RESPONDERS

FIRST OFFERING OF NATIONALLY DEVELOPED TRAINING IN MI

8 HOUR TRAINING FOR FIRST RESPONDERS IN COMMUNITIES WITH RAIL TRAFFIC

TRAINING DEVELOPED AND PROVIDED BY:

Homeland Security/Counter-Terrorism

Since 1998, EPA Region 5 has been acquiring assets and developing tactical approaches to respond to incidents involving intentional chemical, biological, radiological, and nuclear (CBRN) releases. In addition, EPA has developed a Homeland Security program to assist local and State partners prepare for potential incidents through research, planning, and pre-deployments. EPA Region 5 has extensive experience in cleaning up and assisting with the recovery of CBRN, nationally significant events, and high-hazard incidents.

EPA CBRN and Homeland Security activities and resources

CBRN Preparedness and Response:

- Specialized equipment including multi-media monitoring and laboratory assets
- Cleanup guidance
- Treatment and disposal guidance
- Emerging research

Homeland Security Preparedness:

- Integrated planning between Federal agencies and EPA regions
- Participation in local, statewide, and nationwide exercises
- Pre-deployment support to key events (political conventions, major sporting events)



National Special Teams available to support EPA and stakeholders



Environmental Response Team

The Environmental Response Team (ERT) is a national group of EPA technical experts who provide around-the-clock assistance at the scene of hazardous substance releases. ERT offers expertise in such areas as oil spill response, air monitoring, hydrology, geology, and engineering. ERT can

provide support to the full range of emergency response actions, including unusual or complex emergency incidents. In such cases, ERT can bring in specialized equipment and experienced responders, and can provide an EPA On-Scene Coordinator or lead responder with experience and advice. The ERT Warehouse is in the Cincinnati, Ohio area.



Radiological Emergency Response Team

The Radiological Emergency Response Team (RERT) is a specialized unit that responds to emergencies requiring the cleanup of radioactive substances. RERT provides onsite and lab-based radiation risk monitoring services.



Consequence Management Advisory Division

The Chemical, Biological, Radiological, and Nuclear Consequence Management Advisory Division (CBRN CMAD) provides scientific support and technical expertise for decontamination of buildings, public infrastructure, and agriculture. CMAD also provides specialized expertise, such as health physics, toxicology, HVAC engineering, and industrial hygiene.

Based near Dallas Texas, and able to deploy within one hour of notification, ASPECT is the nation's only airborne real-time chemical and radiological detection, infrared and photographic platform available to assist local, national, and international agencies. ASPECT is available 24/7/365 and can collect data at any site in the continental U.S. within 9 hours.



National Criminal Enforcement Response Team

The Office of Criminal Enforcement, Forensics, and Training's National Criminal Enforcement Response Team (NCERT) supports environmental crime investigations involving chemical, biological, or radiological releases to the environment. NCERT's specially trained law enforcement officers collect forensic evidence within contaminated zones, serve as liaisons with other agencies, and provide protective escorts to EPA's OSCs, contractors, and other EPA special teams during national emergencies.



Region 5 Emergency Operation Center

The Region 5 Emergency Operations Center (EOC) is the central command and control hub responsible for managing emergency preparedness and emergency response at a strategic level. Located at EPA's R5 Chicago office, the EOC is designed to ramp up when warranted by emergency circumstances.

The EOC assists with disseminating information, and deploying and tracking field assets, including EPA Region 5 personnel. The EOC also collects, gathers, and analyzes data; and disseminates information to all responders, agencies, and communities involved in the emergency response.

Incident Command System/Incident Management Team

The Incident Command System (ICS) provides a standardized incident management approach used by all levels of government—local, State, Tribal, and Federal. ICS integrates resources and provides a coordinated response among jurisdictions to hazardous incidents of regional or national scope. EPA has used ICS for response actions under its CERCLA, OPA, and Stafford Act authorities (i.e., hazmat incidents, oil spills, and natural disaster response).

EPA Region 5's Regional and sub-area contingency plans identify a National Incident Management System-type ICS as the response management system to be implemented.

EPA Region 5 maintains a fully staffed Incident Management Team (IMT) that may be mobilized to any point within the Region within 12 to 24 hours. In addition, most Region 5 OSCs have been trained and exercised as Division/Group Supervisors.



Oil Spill Prevention

EPA conducts inspections at oil storage facilities to determine compliance with the Clean Water Act's Spill Prevention, Control, and Countermeasure (SPCC) regulation. SPCC helps facilities prevent oil releases from reaching navigable waters and adjoining shorelines. The SPCC team works with facilities to ensure that they correct violations identified during inspections.

According to the CWA, facilities that store more than 1 million gallons of oil are required to prepare and submit a Facility Response Plan (FRP) to respond to a worst-case discharge of oil and the threat of such a discharge. Once the FRP has been submitted to EPA and approved, EPA conducts Government-Initiated Unannounced Exercises (GIUE) to verify that a facility can implement the response plan.



Regional Response Team

The Region 5 Regional Response Team (RRT5) is comprised of members from State and Federal agencies and Tribes committed to working collaboratively to minimize oil and chemical incidents that affect human health and safety, as well as the environment. RRT5 ensures coordinated, efficient, and effective support of local, State, Tribal, and Federal responders to significant oil and hazardous substance incidents across the six Great Lakes states.



RRT5 functions in two ways: as a standing team and an incident specific team.

- The Standing RRT meets twice yearly in varying locations in Region 5 to develop working relationships, exchange information, and develop regional response policies and procedures. The Standing RRT provides a regional mechanism for developing and coordinating preparedness and planning activities.
- The incident-specific RRT provides assistance to OSCs and other responding agencies during a major event. The role of the Incident-Specific RRT is determined by the circumstances of the incident, but key responsibilities can include: monitoring the response, providing advice to the OSC on the use of chemical countermeasures and in-situ burning, and assisting the OSC in mobilizing resources available from RRT members within Region 5. Participation by RRT members will depend on the specific nature of the incident, including location.



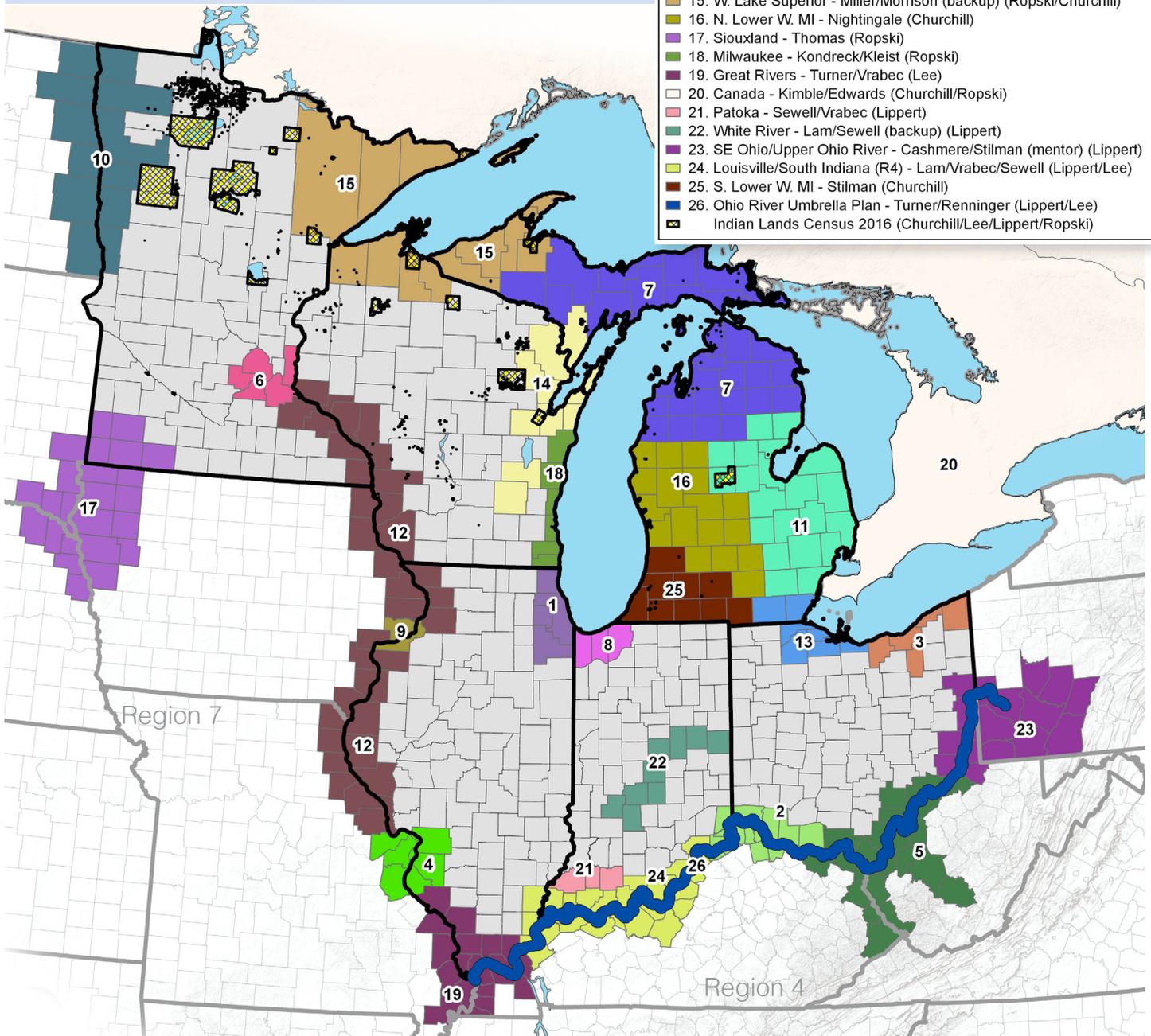
Spill Response Planning Areas

The Regional Contingency Plan (RCP) describes response protocols and assists in providing a coordinated response capability in the event of a release or spill that poses a threat to the environment or to human health and welfare.

To enhance the integration of other Area Plans which fosters a local/State/Federal relationship, EPA Region 5 created Sub-Area Contingency Plans. There are 26 sub-areas identified in EPA Region 5. A planner and OSC(s) are assigned to work in each sub-area. For more information on a specific sub-area, <http://www.rrt5.org/SubAreas.aspx>

R5 Planning Areas (OSC/Planner Assignments)

- 1. Chicago - Ruesch/Mitchell (Lee)
- 2. Cincinnati - Renninger (Lippert)
- 3. Cleveland/E. Lake Erie - Pohl/Justice (mentor) (Lippert)
- 4. St. Louis - Hassan/Vrabec (Lee)
- 5. SE Ohio/Huntington - Kocher/Wolfe (mentor) (Lippert)
- 6. Minneapolis/St. Paul - Morrison (Ropski)
- 7. N. Michigan - Dollhopf (Churchill)
- 8. NW Indiana - Haag (Ropski/Lippert)
- 9. Quad Cities - Mendoza (Lee)
- 10. Red River - Mendez/Morrison (backup) (Ropski)
- 11. Detroit/SE Michigan - Kimble/Edwards (Churchill)
- 12. Upper Mississippi River - Maguire/Morrison (backup) (Lee/Ropski)
- 13. W. Lake Erie - Gulch (Churchill/Lippert)
- 14. Green Bay/Horicon - Kleist/Kondreck (mentor) (Ropski)
- 15. W. Lake Superior - Miller/Morrison (backup) (Ropski/Churchill)
- 16. N. Lower W. MI - Nightingale (Churchill)
- 17. Siouxland - Thomas (Ropski)
- 18. Milwaukee - Kondreck/Kleist (Ropski)
- 19. Great Rivers - Turner/Vrabec (Lee)
- 20. Canada - Kimble/Edwards (Churchill/Ropski)
- 21. Patoka - Sewell/Vrabec (Lippert)
- 22. White River - Lam/Sewell (backup) (Lippert)
- 23. SE Ohio/Upper Ohio River - Cashmere/Stilman (mentor) (Lippert)
- 24. Louisville/South Indiana (R4) - Lam/Vrabec/Sewell (Lippert/Lee)
- 25. S. Lower W. MI - Stilman (Churchill)
- 26. Ohio River Umbrella Plan - Turner/Renninger (Lippert/Lee)
- Indian Lands Census 2016 (Churchill/Lee/Lippert/Ropski)



Chemical Emergency Preparedness

Region 5 Superfund Emergency Response includes the Chemical Emergency Preparedness and Prevention Section (CEPPS), which works to prevent chemical and oil spills and assist local preparedness efforts. The CEPPS team includes staff who conduct outreach and inspections—

and where necessary, pursue enforcement actions—involving CERCLA 103 (chemical releases), EPCRA 311/312 (chemical storage reporting to State and local officials), CWA 311 (oil spill prevention, control, and countermeasures) and CAA 112r (preparedness and prevention for highly hazardous chemicals).



CEPPS Outreach Support Tools:

- Presentations at State, industry and education-specific conferences, meetings, and classes
- Coaching and capacity building for local, State, and Tribal organizations
- Webinars focusing on current topics such as chlorine management for water systems
- Outreach efforts to help develop an understanding of the reporting requirements and best practices under EPA's chemical and oil preparedness and prevention regulations

In addition, CEPPS provides contractor support to assist Local Emergency Planning Committees (LEPCs) exercise their emergency response plans. Exercising these plans is critical to test and evaluate a local preparedness plan's effectiveness. Exercises identify and eliminate planning and procedural problems and highlight successes.

LEPC exercises also enable stakeholders from local, State, Tribal and Federal, law enforcement, emergency, civil support, healthcare, and industry to interact and learn more about their respective roles in chemical incidents.



LEPC exercises can be either tabletop or full-scale exercises.

Tabletop exercises are discussion-based sessions, often on a weeknight, where members meet in an informal classroom setting to discuss roles during an emergency and responses to a particular emergency situation. A full-scale exercise is a multi-agency, multi-jurisdictional, multi-discipline exercise involving functional (e.g., joint field office, emergency operation centers) and "boots on the ground" response (e.g., testing equipment or decontaminating mock victims) scenarios. Full-scale exercises are generally more elaborate, time-consuming, and resource intensive.



EPA Region 5 SEMD Response Capabilities Contact Information

To learn more about EPA Region 5 response capabilities or to discuss removal support, contact Jason El-Zein (el-zein.jason@epa.gov, 734-214-4900), or Sam Borries (borries.samuel@epa.gov, 312-353-8360).

APPENDIX G

Northwest Indiana Inland Zone Sub-Area Worst Case Discharge Analysis

REDACTED

APPENDIX H

Northwest Indiana Inland Zone Sub-Area Acronyms

A

AC	Area Committee
ACP	Area Contingency Plan
APHIS	Animal Plant Health Inspection Service
AST	Aboveground Storage Tank
ATDSR	Agency for Toxic Substances and Disease Registry

B

C

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COOP	Continuity of Operations Plan
CWA	Clean Water Act

D

DOT	United States Department of Transportation
-----	--

E

EMA	Emergency Management Director
EO	Executive Order
EOC	Emergency Operations Center
EOU	Emergency Operations Unit
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERT	Environmental Response Team

F

FRP	Facility Response Plan
-----	------------------------

G

GIS	Geographic Information System
-----	-------------------------------

H

HASP	Health and Safety Plan
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Hazmat	Hazardous Materials
IAP	Incident Action Plan
IC	Incident Command or Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
IDEM	Indiana Department Environmental Management
IRT	Incident Response Team
ISA	Inland Sensitivity Atlas
J	
JIC	Joint Information Coordinator
JIS	Joint Information Systems
JPIC	Joint Public Information Coordinator
K	
L	
LEPC	Local Emergency Planning Committee
M	
MAC	Multiagency Coordination Group
MHz	Megahertz
N	
NCP	National Contingency Plan
NEBA	Net Environmental Benefit Analysis
NIMS	National Incident Management System
NOAA	National Oceanic and Atmospheric Administration
NRDA	Natural Resource Damage Assessment
NRDAR	Natural Resource Damage Assessment and Restoration

NRF National Response Framework

O

OPA Oil Pollution Act of 1990

OSC On-Scene Coordinator

OSHA Occupational Safety and Health Administration

OSLTF Oil Spill Liability Trust Fund

OSRO Oil Spill Response Organization

P

PIO Public Information Officer

PRFA Pollution Removal Fund Authorization

PSC Planning Section Chief

Q

R

RCP Regional Contingency Plan

RCP/ACP Region 5 Joint Regional Contingency Plan and Area Contingency Plan

RP Responsible Party

RRT Regional Response Team

S

SACP Sub-Area Contingency Plan

SCAT Shoreline Cleanup Assessment Technique

SECO State Emergency Operations Center

SERS Surveillance and Emergency Response System

SitRep Situation Report

T

U

UC Unified Command

USACE	United States Army Corp of Engineers
USCG	United States Coast Guard
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGC	United States Geological Survey

V

W

WCD Worst Case Discharge

WS Wildlife Service

X

Y

Z

APPENDIX I

Northwest Indiana Inland Zone Sub-Area Tribal Fact Sheets

Tribal Fact Sheets

Tribal Fact Sheets includes contact information for Tribes located in, or adjacent to, the Northwest Indiana Inland Zone Sub-Area. If a discharge of oil or release of a hazardous substance occurs and could impact areas, industry, facilities, populations, etc. outlined in the Tribal Fact Sheets, notification must be made to the Tribe. The EPA Tribal Liaison can assist with notifications and coordination with tribal governments.

The following Emergency Response Fact Sheets for Tribes are included in this appendix:

Pokagon Band of Potawatomi Indians

Fact Sheet: Pokagon Band of Potawatomi Indians

Allegan, Cass*, Berrien*, and Van Buren* Counties, Michigan

LaPorte*, St. Joseph*, Starke, Marshall, Elkhart, and Kosciusko Counties, Indiana

*Counties with tribal properties in them (versus entire service area county listing)

<p>Michigan State Police, Emergency Management and Homeland Security Division (24 Hour emergency notification): (800) 292-4706</p> <p>Michigan Department of Health and Human Services Division of Environmental Health: (800) 648-6942</p> <p>For public health emergencies, contact the Cass County Health Department: (269) 782-0064</p> <p>Michigan Pollution Emergency Alert System [PEAS] Hotline (24 Hour): (800) 292-4706</p> <p>Michigan Department of Environmental Quality Environmental Assistance Center (non-emergency): (800) 662-9278</p> <p>EPA Planning OSC: Ralph Dollhopf Office: (231) 264-8713 Cell: (231) 301-0559 E-Mail: dollhopf.ralph@epa.gov</p> <p>EPA Region 5 Spill Line (staffed 24 hours): (312) 353-2318</p> <p><i>Updated [December 2, 2016]</i></p>	<table border="1"> <tr> <th data-bbox="462 298 1521 336">CONTACTS</th> </tr> <tr> <td data-bbox="462 336 1521 945"> <p>Emergency: 911 / (269) 783-9749 Cass County 911/ (866) 630-7679 Berrien County 911/ (269) 657-3101 Van Buren County 911/ (574) 235-9611 St. Joseph County</p> <p>Primary Tribal POC: Jennifer Kanine, DNR Director, office: (269) 462-4214, mobile: (269) 783-9749 William Lux, Tribal Police Director, office: (269) 782-2232, mobile: (269) 462-5343</p> <p>Tribal Environmental Response Coordinator: Kyle Boone, Environmental Specialist, office: (269) 782-9602, mobile: (260) 446-5682</p> <p>LEPC Chair: Berrien County Jeanette Leahey (269) 983-7141, Cass County David Smith (269) 445-1460, Van Buren Robert Kirk (269) 657-7786, John Antonucci, St Joseph County Indiana (574) 235-9378. LaPorte County, Larry Butcher (219) 362-7210</p> <p>Tribal Chair: John P. Warren, (269) 782-8998 Tribal Manager: Jason M. Wesaw, (269) 782-8998 Tribal Police: William Lux, (269) 782-2232 Tribal Health Services: Matt Clay, (269) 782-4141</p> <p>https://www.pokagonband-nsn.gov</p> </td> </tr> <tr> <th data-bbox="462 945 1521 982">RESERVATION DESCRIPTION</th> </tr> <tr> <td data-bbox="462 982 1521 1470"> <p>County FIPS Codes: MI.26.027 (Cass); MI.26.021(Berrien); [Reservation Map] MI.26.159 (Van Buren); IN.18.091 (La Porte); IN.18.141 (St. Joseph)</p> <p>Land Area: 9.948 square miles Estimated Population: 5,215 Total Enrolled Citizens</p> <p>Major Industries: Gaming, Tourism, Government Major Rail Lines: CSX Grand Rapids Subdivision, Emergency: 1-800-232-0144, General: (904) 359-3100 Amtrak Wolverine Line, Emergency: 1-800-331-0008, General 1-800-872-7245</p> <p>Major Roadways: U.S. Interstate 94, State Route 51, U.S. 12 Major Towns: Dowagiac, New Buffalo, Hartford, South Bend Major Water Bodies: Paw Paw River, Dowagiac River, St. Joseph River, Galien River, Kankakee River, Ports: None identified</p> </td> </tr> <tr> <th data-bbox="462 1470 1521 1507">HOSPITALS WITH TRAUMA CENTERS</th> </tr> <tr> <td data-bbox="462 1507 1521 1627"> <p>Memorial Hospital of South Bend (Level 2): 615 North Michigan St. South Bend, IN 46601, Phone: (574) 647-1000 Bronson Methodist Hospital (Level 1): 601 John St. Kalamazoo, MI 49007, Phone: (269) 341-6000 Lakeland Hospital St. Joseph (Level 1): 1234 Napier Avenue, MI 49085, Phone (269) 983-3200</p> </td> </tr> <tr> <th data-bbox="462 1627 1521 1665">OTHER HOSPITALS</th> </tr> <tr> <td data-bbox="462 1665 1521 1785"> <p>Borgess-Lee Memorial Hospital: 420 W High St. Dowagiac, MI 49047, Phone: (269) 782-8681 Lakeland Hospital: 31 N St. Joseph Ave, Niles, MI 49120, Phone: (269) 683-5510 Lakeland Hospital: 400 Medical Drive, Watervliet, MI 49098 Phone: (269) 463-3111</p> </td> </tr> <tr> <th data-bbox="462 1785 1521 1822">CLOSEST BURN UNIT</th> </tr> <tr> <td data-bbox="462 1822 1521 1911"> <p>Bronson Burn and Wound Center: 601 John St W-308, Kalamazoo, MI 49007, Phone: (269) 341-8827 Lutheran Health Network: 700 Broadway, Fort Wayne, Indiana 46802 Phone: (260) 425-3000</p> </td> </tr> <tr> <th data-bbox="462 1911 1521 1948">PLANNING TOOLS</th> </tr> <tr> <td data-bbox="462 1948 1521 1974"> <p>[List]</p> </td> </tr> </table>	CONTACTS	<p>Emergency: 911 / (269) 783-9749 Cass County 911/ (866) 630-7679 Berrien County 911/ (269) 657-3101 Van Buren County 911/ (574) 235-9611 St. Joseph County</p> <p>Primary Tribal POC: Jennifer Kanine, DNR Director, office: (269) 462-4214, mobile: (269) 783-9749 William Lux, Tribal Police Director, office: (269) 782-2232, mobile: (269) 462-5343</p> <p>Tribal Environmental Response Coordinator: Kyle Boone, Environmental Specialist, office: (269) 782-9602, mobile: (260) 446-5682</p> <p>LEPC Chair: Berrien County Jeanette Leahey (269) 983-7141, Cass County David Smith (269) 445-1460, Van Buren Robert Kirk (269) 657-7786, John Antonucci, St Joseph County Indiana (574) 235-9378. 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<p>Emergency: 911 / (269) 783-9749 Cass County 911/ (866) 630-7679 Berrien County 911/ (269) 657-3101 Van Buren County 911/ (574) 235-9611 St. Joseph County</p> <p>Primary Tribal POC: Jennifer Kanine, DNR Director, office: (269) 462-4214, mobile: (269) 783-9749 William Lux, Tribal Police Director, office: (269) 782-2232, mobile: (269) 462-5343</p> <p>Tribal Environmental Response Coordinator: Kyle Boone, Environmental Specialist, office: (269) 782-9602, mobile: (260) 446-5682</p> <p>LEPC Chair: Berrien County Jeanette Leahey (269) 983-7141, Cass County David Smith (269) 445-1460, Van Buren Robert Kirk (269) 657-7786, John Antonucci, St Joseph County Indiana (574) 235-9378. LaPorte County, Larry Butcher (219) 362-7210</p> <p>Tribal Chair: John P. Warren, (269) 782-8998 Tribal Manager: Jason M. Wesaw, (269) 782-8998 Tribal Police: William Lux, (269) 782-2232 Tribal Health Services: Matt Clay, (269) 782-4141</p> <p>https://www.pokagonband-nsn.gov</p>													
RESERVATION DESCRIPTION													
<p>County FIPS Codes: MI.26.027 (Cass); MI.26.021(Berrien); [Reservation Map] MI.26.159 (Van Buren); IN.18.091 (La Porte); IN.18.141 (St. Joseph)</p> <p>Land Area: 9.948 square miles Estimated Population: 5,215 Total Enrolled Citizens</p> <p>Major Industries: Gaming, Tourism, Government Major Rail Lines: CSX Grand Rapids Subdivision, Emergency: 1-800-232-0144, General: (904) 359-3100 Amtrak Wolverine Line, Emergency: 1-800-331-0008, General 1-800-872-7245</p> <p>Major Roadways: U.S. Interstate 94, State Route 51, U.S. 12 Major Towns: Dowagiac, New Buffalo, Hartford, South Bend Major Water Bodies: Paw Paw River, Dowagiac River, St. Joseph River, Galien River, Kankakee River, Ports: None identified</p>													
HOSPITALS WITH TRAUMA CENTERS													
<p>Memorial Hospital of South Bend (Level 2): 615 North Michigan St. South Bend, IN 46601, Phone: (574) 647-1000 Bronson Methodist Hospital (Level 1): 601 John St. Kalamazoo, MI 49007, Phone: (269) 341-6000 Lakeland Hospital St. Joseph (Level 1): 1234 Napier Avenue, MI 49085, Phone (269) 983-3200</p>													
OTHER HOSPITALS													
<p>Borgess-Lee Memorial Hospital: 420 W High St. Dowagiac, MI 49047, Phone: (269) 782-8681 Lakeland Hospital: 31 N St. Joseph Ave, Niles, MI 49120, Phone: (269) 683-5510 Lakeland Hospital: 400 Medical Drive, Watervliet, MI 49098 Phone: (269) 463-3111</p>													
CLOSEST BURN UNIT													
<p>Bronson Burn and Wound Center: 601 John St W-308, Kalamazoo, MI 49007, Phone: (269) 341-8827 Lutheran Health Network: 700 Broadway, Fort Wayne, Indiana 46802 Phone: (260) 425-3000</p>													
PLANNING TOOLS													
<p>[List]</p>													

<p>Electric Utilities: Midwest Energy Cooperative: (800) 492-5989 Nipsco: (800) 464-7726</p> <p>Gas Utilities: Nipsco: (800) 464-7726 Enbridge Energy: (269) 683-7592</p> <p>Pipelines: https://www.npms.phmsa.dot.gov/PublicViewer Gas: Cass: MCNIC Michigan Holdings: (313) 235-1127 Berrien & Cass: ANR Pipeline Co: (248) 205-7604 Berrien: Vector Pipeline LP: (832) 214-9057 St. Joseph: Northern Indiana Public Service Co: (219) 647-6556 Hazardous Liquid: Van Buren, Berrien & Cass: Wolverine Pipeline Co: (269) 323-2491 Berrien: Marathon Pipe Line LLC: (419) 421-4600 Berrien: Enbridge Energy: (715) 395-3619 St. Joseph: Buckeye Partners, LP: (610) 904-4113 Amoco Oil Co: (800) 548-6482</p> <p>Types of Facilities: FRP: 0 NPDES: 0 RCRA: 1 RMP: 2 w/in 5 miles SARA Title III: 0 SPCC: 0 TRI:</p> <p>Water Bodies: Paw Paw River, Dowagiac River, St. Joseph River,</p>	
	APPLICABLE RESPONSE PLANS
	<p>Federal:</p> <ul style="list-style-type: none"> • Region 5 Regional Contingency Plan/Area Contingency Plan <p>State:</p> <ul style="list-style-type: none"> • Michigan and Indiana Emergency Operations Plan <p>County / Other:</p> <ul style="list-style-type: none"> • Berrien, Cass, Van Buren, St. Joseph, and LaPorte County Emergency Operation Plans
SENSITIVE AREAS	
<p>Special Populations: 28</p> <ul style="list-style-type: none"> • Not Federally Threatened or Endangered <ul style="list-style-type: none"> ○ Black ash (<i>Fraxinus nigra</i>) ○ Wild rice (<i>Zizania palustris</i>) ○ Wild river rice (<i>Zizania aquatica</i> var. <i>aquaticus</i>) MI state threatened ○ White cedar (<i>Thuja occidentalis</i>) ○ Eastern box turtle (<i>Terrapene carolina carolina</i>) MI state concern ○ Ornate box turtle (<i>Terrapene ornata ornata</i>) IN state endangered ○ Spotted turtle (<i>Clemmys guttata</i>) MI and IN state endangered ○ Blanding's turtle (<i>Emydoidea blandingii</i>) IN state endangered ○ Alligator snapping turtle (<i>Macrochelys temminickii</i>) IN state endangered ○ American black bear (<i>Ursus americanus</i>) ○ Cougar (<i>Felis concolor</i>) MI state endangered ○ Marbled salamander (<i>Ambystoma opacum</i>) MI state endangered ○ Trumpeter swan (<i>Cygnus buccinator</i>) MI state threatened ○ Common loon (<i>Gavia immer</i>) MI state threatened ○ Franklin's ground squirrel (<i>Spermophilus franklinii</i>) IN state endangered ○ Prairie vole (<i>Microtus ochrogaster</i>) MI state endangered • Federally Threatened/Endangered Animals <ul style="list-style-type: none"> ○ Indiana Bat (<i>Myotis sodalis</i>) ○ Northern long-eared bat (<i>Myotis septentrionalis</i>) ○ Eastern massasauga (<i>Sistrurus catenatus catenatus</i>) ○ Piping plover (<i>Charadrius melodus</i>) ○ Gray Wolf (<i>Canis lupus</i>) ○ Copperbelly water snake (<i>Nerodia erythrogaster neglecta</i>) ○ Rayed bean mussel (<i>Villosa fabalis</i>) ○ Karner blue butterfly (<i>Lycaeides melissa samuelis</i>) ○ Mitchell's satyr butterfly (<i>Neonympha mitchellii mitchellii</i>) ○ Rusty patched bumble bee (<i>Bombus affinis</i>) proposed as endangered • Federally Threatened/Endangered Plants <ul style="list-style-type: none"> ○ Small whorled pogonia (<i>Isotria medeoloides</i>) ○ Pitcher's thistle (<i>Cirsium pitcheri</i>) <p>Environmentally Sensitive Areas: 4 Boot Lake Nature Preserve Chamberlain Lake Nature Preserve Galena (Springfield Fen) Wetland Conservation Area Pipewort Pond Nature Preserve</p> <p>Wildlife Management Areas: 12</p> <p>Berrien County: Boyle Lake State Wildlife Area Webster Lake State Game Area</p> <p>Cass County: Crane Pond State Game Area Three Rivers State Game Area</p> <p>Allegan County: Allegan State Game Area</p> <p>Van Buren County: Cornish State Game Area Fuller Woods State Game Area</p>	

<p>Galien River, Kankakee River, Rodgers Lake, Sassafras Lake, Gage Lake</p> <p>Water Intakes (Industrial): 0</p> <p>Water Utilities: Four Winds Dowagiac [NTNCWS-050593910]: (866) 494-6371</p>	<p>Keeler State Game Area Kinney Waterfowl Production Area LaPorte County: Kingsbury Fish and Wildlife Area Starke County: Kankakee Fish and Wildlife Area Kosciusko County: Tri-County Fish And Wildlife Area</p> <p><u>Drinking Water Intakes:</u> [#; List with Phone] Economically Sensitive Areas: [#; List]</p>
SOURCES OF RESPONSE EQUIPMENT	
HAZMAT TEAMS	
<p>Berrien County Sheriff's Department Hazardous-Material Team 5th District Regional Hazmat RRT</p>	
DEFENSE SITE LOCATIONS	
None	
MISCELLANEOUS	
<p>RCRA Subtitle I UST: MB C Store</p> <p>Facilities required to prepare risk management plan (RMP) within 5 miles: Hanson Cold Storage Company – Hartford Division 61834 Red Arrow HWY E Hartford, MI The Mennel Milling Company of Michigan 301 South Mill Street Dowagiac, MI</p> <p>Palisades Nuclear Power Plant 27780 Blue Star Highway, Covert, MI 49043 Phone (269) 764-2000</p>	
MUNICIPAL WWTP	
<p>City of Hartford Public Works, 19 West Main Street, Hartford, MI, 49057 City of Hartford, Wastewater Treatment Plant, 66460 56th Ave, Hartford, MI 49057 City of South Bend Public Works, 227 West Jefferson Blvd, Suite 1300 N, South Bend, IN 46601 City of South Bend, Waste Water Treatment Plant, 3113 Riverside Drive, South Bend, IN 46628</p>	
FRP FACILITIES	
<p>[Note: facilities that store and use oil that are required to prepare and submit a plan to respond to discharges] None identified</p>	
TRI FACILITIES	
<p>[Note: facilities that are required to report under the Toxic Release Inventory]</p> <p>MICHIGAN Allegan County: Drug Laboratory Disposal Inc, 331 Broad St., Plainwell, MI 49080 JBS Plainwell, 11 Eleventh Street, Plainwell, MI 49080 Otsego Paper INC, 320 N Farmer St., Otsego, MI 49078 Parker Hannifin, 300 Parker Dr., Otsego, MI 49078 Allegan Metal Finishing Co, 1274 Lincoln Rd., Allegan, MI 49010 Holland BPW James De Young Generation Station, 64 Pine Ave., Holland, MI 49423 Safholland INC OAC, 430 W 18th St., Holland, MI 49423 Repolite Paints INC, 473 W 17th St., Holland, MI 49423 Benteler Automotive Holland INC, 365 W 24th St., Holland, MI 49423 Uniform Color Co, 942 Brooks Ave., Holland, MI 49423 Sherwin Williams Co, 636 E 40th St., Holland, MI 49423 S2 Yachts INC Tiara Yachts INC Div., 725 E 40th St., Holland, MI 49423 LG CHEM Michigan INC, 1 LG Way, Holland, MI 49423</p>	

Haworth INC, 1 Haworth Center, Holland, MI 49423-8820
48th St Parking Station, 491 E 48th St., Holland, MI 49423
Trans Matic Manufacturing Company, 300 E 48th St., Holland, MI 49423
Sekisui Polymer Innovations LLC, 1305 Lincoln Ave., Holland, MI 49423
Johnson Controls Interiors Maplewood Facility, 88 48th St., Holland, MI 49423
Johnson Controls APS Production INC, 70 W 48th St., Holland, MI 49423
Johnson Controls Interiors PMSC CW JCIM LLC SV, 1776 Airport Court, Holland, MI 49423

Berrien County:

Alutech LLC, 1320 Paw Paw Ave, Benton Harbor, MI 49022
Primetals Technologies USA LLC, 470 N Paw Paw Ave., Benton Harbor, MI 49022
Thelamco INC, 1202 Territorial Rd., Benton Harbor, MI 49022
Benton Harbor LLC, 800 S. Fair Ave., Benton Harbor, MI 49022
Tech Nickel INC, 1200 South Crystal Ave., Benton Harbor, MI 49022
Gast Manufacturing INC, 2300 Hwy. M139, Benton Harbor, MI 49022
Sandvik Materials Technology, 2235 Dewey Rd., Benton Harbor, MI 49022
Anderson Building Materials Co., 216 Upton Dr., St. Joseph, MI 49085
Vail Rubber Works INC, 521 Langley Ave., St. Joseph, MI 49085
Leco Corp, 3000 Lakeview Ave., St. Joseph, MI 49085
Hoffman Die Cast LLC, 229 Kerth St., St. Joseph, MI 49085
Alutech LLC, 2800 Yasdick Dr., Stevensville, MI 49127
Supreme Casting INC, 3389 Linco Rd., Stevensville, MI 49127

Cass County:

Mennel Milling Co Of Michigan, 301 South Mill Street, Dowagiac, MI 49047
Premier Tool Die Cast Corporation, 51241 M51 N, Dowagiac, MI 49047
Postle Extrusions, 201 N Edwards St., Cassopolis, MI 49031
Mercury Displacement Industries INC, 25028 US 12 E, Edwardsburg, MI 49112
Midwest Timber INC, 210 Kraus Road, Edwardsburg, MI 49112

St. Joseph County:

Iac Mendon, 236 Clark St., Mendon, MI 49072
Ox Paperboard Michigan LLC, 700 Centerville Rd., Constantine, MI 49042
Michigan Milk Producers Association, 125 Depot St., Constantine, MI 49042
White Pigeon Paper Co, 15781 River St., White Pigeon, MI 49099
Morgan Olson LLC, 1801 S Nottawa St., Sturgis, MI 49091
Abbott Nutrition, 901 N Centerville Rd., Sturgis, MI 49091
Kadant Johnson INC, 805 Wood St., Three Rivers, MI 49093
Armstrong International INC, 816 Maple St., Three Rivers, MI 49093
American Axle Manufacturing INC, 1 Manufacturing Drive, Three Rivers, MI 49093
Metal Technologies INC Three Rivers Gray Iron, 428 4th St., Three Rivers, MI 49093
Day International INC A Flint Group Company, 111 Day Dr., Three Rivers, MI 49093
Aquatic Co, 888 W Broadway, Three Rivers, MI 49093

INDIANA

Starke County:

Manitex Sabre INC, 5420 E State Rd. 8, Knox, IN 46534
MPI Products LLC, 1200 Klockner Dr., Knox, IN 46534
Knox Fertilizer Co INC, 2660 E 100 S, Knox, IN 46534

LaPorte County:

Nipsco Michigan City Generating Station, 101 Wabash St., Michigan City, IN 46360
Alexander Chemical Corp, 7593 S First Rd. Kingsbury Industrial Pk., Kingsbury, IN 46345
Triplex Plating Co INC, 1555 E US 12, Michigan City, IN 46360
Dwyer Instruments INC, 120 Hupp Rd. BLDGS, R52, R53, R62, R63, & R64, Kingsbury, IN 46345
Criterion Catalysts & Technologies LP, 1800 E US12, Michigan City, IN 46360
Accurate Castings INC Kingsbury Div., 3232 3rd Rd. Annex Kingsbury Industrial Pk., Kingsbury, IN 46345
Prinova Solutions, 1700 E US 12, Michigan City, IN 46360
Sullair LLC, 3700 E Michigan BLVD, Michigan City, IN 46360
Precoat Metals, 858 E Hupp Rd., La Porte, IN 46350

GAF, 505 N Roeske Ave., Michigan City, IN 46360
Casting Service, 300 Philadelphia St., La Porte, IN 46350
Silgan Containers Manufacturing Corp, 300 N Fail Rd., La Porte, IN 46350
Aero Metals INC, 1201 E Lincolnway, La Porte, IN 46350
Prairie Packaging LLC, 7277 S 2nd Rd. Plant 3, La Porte, IN 46350
Rotadyne Roll Group La Porte, 1164 E 150 N, La Porte, IN 46350
Weil McLain, 500 Blaine St., Michigan City, IN 46360
American Renolit Corp, 1207 E Lincolnway, La Porte, IN 46350
Diamond Midwest, 600 Royal Rd., Michigan City, IN 46360
Howmet Castings & Services, 1110 E Lincolnway Ave., Michigan City, IN 46360
FAS-PAK INC, 411 Fairfield Ave., Michigan, City, IN 46360
FAS-PAK INC, 401 Darlington St., La Porte, IN 46350
New York Blower Co, 171 Factory St., La Porte, IN 46350
Accurate Castings INC, 118 Koomler Ave., La Porte, IN 46350

St. Joseph County:

Eaton HD Transmission Forge Plant, 2930 Foundation Dr., South Bend, IN 46628
I/N Kote, 30755 Edison Rd., New Carlisle, IN 46552-9695
Suzuki Garphyttan Corp, 4404 Nimitz PRKY, South Bend, IN 46628
AM General LLC, 12900 McKinley HWY, Mishawaka, IN 46545
SAPA Aluminum NA LLC, 400 S Main St., North Liberty, IN 46554
American Roller Co LLC, 201 Industrial Dr., Walkerton, IN 46574
Imagineering Enterprises INC, 1302 W Sample St., South Bend, IN 46619
Janco Engineered Products LLC, 920 S Logan St., Mishawaka, IN 46544
Sampson Fiberglass INC, 2424 Home St., Mishawaka, IN 46545
Ultra/Glass of Lakeville INC, 520 Industrial Dr., Lakeville, IN 46536
Steel Warehouse-Profiling Dept., 1400 Riverside Dr., South Bend, IN 46616
Standard Motor Products INC, 1718 N Home St., Mishawaka, IN 46545
Honeywell Aerospace South Bend, 3520 Westmoor St., South Bend, IN 46628
Ozinga Ready Mix Concrete INC-South Bend, 715 W Ireland Rd., South Bend, IN 46628
Federal-Mogul Corp, 3605 Cleveland Rd., South Bend, IN 46628
NCP Coatings INC, 1413 Clover Rd., Mishawaka, IN 46545
Safety-Kleen Systems (SBI), 2217 Western Ave., South Bend, IN 46628
EDCOAT LP, 30350 Edison Rd., New Carlisle, IN 46552
UFP Granger LLC, 50415 Herbert St., Granger, IN 46530
Royal Adhesives & Sealants, 2001 W Washington St., South Bend, IN 46228
Molding Products LLC, 1545 S Olive St., South Bend, IN 46619
LIT (South Bend), 1215 S Walnut St., South Bend, IN 46619
Steel Warehouse Co LLC, 2722 W Tucker Dr., South Bend, IN 46619
Lock Joint Tube (SB), 515 W Ireland Rd., South Bend, IN 46614
Harbor Metals LLC, 802 S Fellows St., South Bend, IN 46601
Polygon Co, 103 Industrial Park Dr., Walkerton, IN 46574
Parker Hannifin, 56641 Twin Branch Dr., Mishawaka, IN 46545
Jackel INC, 15314 Harrison Rd., Mishawaka, IN 46544

Elkhart County:

Smoker Craft, 68143 Clunette St., New Paris, IN 46553-0065
Better Way Products, 71211 CR 23, New Paris, IN 46553
Merchants Metals, 71347 CR 23, New Paris, IN 46553-9145
Gulf Stream Coach, 503 S Oakland Ave., Nappanee, IN 46550-1005
Fairmont Homes LLC, 502 S Oakland, Nappanee, IN 46550-2332
Consolidated Nutrition LC, 301 S Jackson, Nappanee, 46550-2721
Kountry Wood Products, 500 E Wabash Ave., Nappanee 46550
Newmar Corp, 355 N Delaware St., Nappanee, IN 46550
Bull Moose Tube Co., 29851 CR 20 W, Elkhart, IN 46517
Supreme Corp, 2572 E Kercher Rd., Goshen, IN 46528
Lippert Components INC Plant 45, 2703 College Ave., Goshen, IN 46528
Meyer Material Co./Goshen Ready Mix Plant, 1700 Egbert Ave., Goshen, IN 46528-4214
Lippert Components INC Plants 19, 26, 30, 16840 Skyview Dr., Goshen, IN 46526-6438
Keystone RV Co, 2642 Hackberry Dr., Goshen, IN 46526
Crane Composites INC Goshen Operations, 2424 E Kercher Rd., Goshen, IN 46526
Forest River INC College Ave. Complex, 2780, 2790, 3010 College Ave., Goshen, IN 46526

Kennametal Stellite LP, 1201 N Eisenhower Dr., Goshen, IN 46526-5311
 Masterbrand Cabinets INC, 1002 N Eisenhower Dr., Goshen, IN 46526-5396
 Benteler Automotive Corp, 910 Eisenhower Dr., Goshen, IN 46526-5351
 Parker Hannifin Corp, 1525 S 10th St., Goshen, IN 46526-4505
 Independent Protection Co INC, 1607 S Main St., Goshen, IN 46526
 Dairy Farmers of America INC Goshen, 1110 S 9th St., Goshen, IN 46526
 Huntington Alloys Corp, 52800 Higgins Rd., Elkhart, IN 46514
 Specialty Heat Treating Co, 55226 CR1 N, Elkhart, IN 46514-9765
 Cana INC, 29240 Phillips St., Elkhart, IN 46514
 Premier Fiberglass, 55080 Phillips St., Elkhart, IN 46514-1202
 Fidler INC, 801 N Nappanee St., Elkhart, IN 46514
 Crosbie Foundry Co INC, 1600 Mishawaka St., Elkhart, IN 46514-1898
 Jessen Manufacturing Co INC, 1409 W Beardsley Ave., Elkhart, IN 46514-1827
 Elkhart Brass Manufacturing Co INC, 1302 W Beardsley Ave., Elkhart, IN 46514-1891
 DW INC, 941 Oak St., Elkhart, IN 46514-2287
 Elkhart Products Corp, 1255 Oak St., Elkhart, IN 46514
 Acoa INC, 2551 CR 10 W, Elkhart, IN 46514-8786
 Morryde Intl INC, 1536 Grant St., Elkhart, IN 46514-3756
 Lipperts Components INC, 701 Collins Rd., Elkhart, IN 46514-5491
 Geocel Corp, 53280 Marina Dr., Elkhart, IN 46514-8641
 Sapa Extruder INC Elkhart Operation, 23842 Reedy Dr., Elkhart, IN 46514-7667
 Forest River INC Dynamax Division, 2745 Northland Dr., Elkhart, IN 46514
 Camco Manufacturing INC, 52650 Leer CT, Elkhart, IN 46514
 Goshen Coach INC, 25161 Leer Dr., Elkhart, IN 46514
 Superior Fiberglass Resins, 1030 All Pro Dr., Elkhart, IN 46514
 Heartland Recreational Vehicles LLC, 1001 All Pro Dr., Elkhart, IN 46514
 Vixens Composites LLC, 2965 LaVanture Place, Elkhart, IN 46514
 McDowell Enterprises INC, 2010 Superior St., Elkhart, IN 46516
 Thor Motor Coach INC, 704 CR 15, Elkhart, IN 46516
 Carrera Custom Painting INC, 4201 Eastland Dr., Elkhart, IN 46516
 Carrera Custom Painting INC, 1101 Herman St., Elkhart, IN 46516
 Global Composites INC Plant 3, 56807 Elk Park Dr., Elkhart, IN 46516-1451
 Global Composites INC Plant 1 & 2, 28967 Old US 33 W, Elkhart, IN 46516-1698
 American Electronic Components, 1101 Lafayette St., Elkhart, IN 46516
 Newlett INC DbA Gemstone, 435 Harrison, Elkhart, IN 46516-2771
 L. E. Johnson Products INC, 2100 Sterling Ave., Elkhart, IN 46516-4909
 Connselmer INC Woodwind Facility, 1000 Industrial PKWY, Elkhart, IN 46516-5526
 Connselmer INC Elkhart N, 500 Industrial PKWY, Elkhart, IN 46516
 Dometic Corp, 2320 Industrial PKWY, Elkhart, IN 46516
 Siemens Healthcare Diagnostics INC, 3400 Middlebury St., Elkhart, IN 46516
 Godfrey Conveyor Co INC, 720 CR 15, Elkhart, IN 46516
 Carpenter Co Elkhart Division, 195 CR 15 S, Elkhart, IN 46516-9630
 Tenneco INC, 4825 Hoffman Rd., Elkhart, IN 46516-9052
 Poldyn 3 LLC, 107 Rush CT, Elkhart, IN 46516
 Alpha Systems INC, 5120 Beck Dr., Elkhart, IN 46516
 Premium Custom Painting Co, 21888 Beck Dr., Elkhart, IN 46516-9245
 Altec Engineering LLC, 2940 Gateway Dr., Elkhart, IN 46514
 Global Composites INC Plant 6 Panel Division, 57500 CR 3, S Elkhart, IN 46517
 Ranch Fiberglas INC, 28564 Holiday PL, Elkhart, IN 46517-1172
 Inncor Foam Tech. Acp INC, 1900 W Lusher Ave., Elkhart, IN 46517
 Gaska Tape INC, 1810 W Lusher Ave., Elkhart, IN 46517-1395
 Jason Industries INC, 1500 W Lusher Ave. Elkhart, IN 46517-1422
 Harman Professional INC DbA Crown, 1718 W Mishawaka Rd., Elkhart, IN 46517-9439
 Patrick Industries INC DbA Adorn Door, W Hively, Elkhart, IN 46517-4026
 Altec Engineering INC, 28274 CR 20 W, Elkhart, IN 46517-1128
 Truck Accessories Group LLC DbA Tag Midwest, 58288 Ventura Dr., Elkhart, IN 46517
 Global Composites INC Plant 4, 58190, CR 3 S, Elkhart, IN 46517-9007
 Delivery Concepts Plant 2, 29301 W Mishawaka Rd., Elkhart, IN 46517
 Diversified Machine Bristol LLC, 51650 CR 113, Bristol, IN 46507-9588
 Trelleborg Sealing Profiles US INC, 1151 Bloomingdale, Bristol, IN 46507-8403
 Forest River Housing INC, 66700 SR 19, Wakarusha, IN 46573
 Forest River INC Primetime Manufacturing Division, 66149 SR 19, Wakarusha, IN 46573

Navistar Incorporated, 400 Indiana Ave., Wakarusha, IN 46573

Kosciusko County:

Land O Lakes Purina, 346 E 1350 N, Milford, IN 46542
Pigtek A Div of Ctb INC, 401 E Syracuse St., Milford, IN 46542
Ctb INC, 611 Higbee St., Milford, IN 46542
Bison Mfg., 804 S Higbee St., Milford, IN 46542-9608
Group Dekko, 8735 E Backwater Rd., IN 46555
Jackson Oil Solvents, 112 E Himes St., North Webster, IN 46555
Warsaw Chemical Co INC, 390 Argonne Rd., Warsaw, IN 46580
Dalton Corp Warsaw Manufacturing Facility, 1900 E Jefferson St., Warsaw, IN 46580
Zimmer Biomet INC, 1800 W Center St., Warsaw, IN 46580
R R Donnelly Sons Co, 2801 US 30 West, Warsaw, IN 46580-0837
Front Line Manufacturing Warsaw, 2466 County Road 200 North, Warsaw, IN 46580
Riepen LLC Danco Anodizing, 2450 Deelyn Dr., Warsaw, IN 46580-8500
Akzo Nobel Coatings, 1102 Leiter Rd., Warsaw, IN 46580
Louis Dreyfus Agricultural Industries LL, 7344 State Rd., Claypool, IN 46510-9289
Symmetry Medical Warsawbuilding 2, 111 N Clay St., Claypool, IN 46510
Cargill Animal Nutrition, 104 N Etna St., Mentone, IN 46539-9115
Paragon Medical INC, 8 Matchett Dr., Pierceton, IN 46562
Contech Castings LLC, 5 Arnolt Dr., Pierceton, IN 46562
Wasbash Valley Manufacturing, 505 E Main St., Silver Lake, IN 46982
Highwater Marine LLC DbA Polarkraft, 300 E Chicago St., Syracuse, IN 46567
Nautic Global Group, 300 W Chicago St., Syracuse, IN 46567-1597
J. P. INC DbA Jasper Plastic Solutions, 501 W Railroad Ave. Suite 2, Syracuse, IN 46567
Polywood INC, 1001 Brooklyn St., Syracuse, IN 46567

Marshall County:

Topp Industries INC, 820 Dewey St., Argos, IN 46501-1284
Medallion Cabinetry INC, 515 W Mill St., Culver, IN 46511
Indiana Heat Transfer, 500 W Harrison St., Plymouth, IN 46563-1399
A Schulman INC, 1301 N Flora St., Plymouth, In 46563-1395
Pirod INC, 1545 Pidco Dr., Plymouth, IN 46563-1354
Maax US Corp., 1001 N Oak Rd., Plymouth, IN 46563-3416
AK Industries INC, 2055 Pidco Dr., Plymouth, IN 46563
Hoosier Racing Tire Corp, 2233 Pidco Dr., Plymouth, IN 46563
Azz Galvanizing Servicesplymouth, 2631 Jim Neu Rd., Plymouth, IN 46563
Zentis N American Operating LLC, 2050 N Oak Rd., Plymouth, IN 46563-3407
Composite Technology Assemblies LLC, 904 Markley Dr., Plymouth, IN 46563
ET Products, 747 Douglas Rd., Bremen, IN 46506
Better Way Products, 3659 Destiny Dr., Bremen, IN 46506-9076
International Wire Groupmega Wire Facility, 833 Legner St., Bremen, IN 46506
Nishikawa Cooper LLC, 501 High Rd., Bremen, IN 46506
Precision Painting INC, 730 High Rd., Bremen, IN 46506
Coleman Cable LLC E Facility, 515 Copperfield Way, Bremen, IN 46506
Bremen Castings INC, 500 N Baltimore St., Bremen, IN 46506-1138
Maax US Corp., 1010 Dewey St., Bremen, IN 46506
Coleman Cable LLC E Facility, 1115 W Plymouth St., Bremen, IN 46506
Johns Manville, 1215 Dewey St., Bremen, IN 46506
Universal Bearings LLC, 431 N Birkey St., Bremen, IN 46506-0038
Bremen Technologies, 425 N Industrial Dr., Bremen, IN 46506-2111
Creative Foam Medical Systems, 405 N Industrial Dr., Bremen, IN 46506-2100
Rbc Precision Products, 225 Industrial Dr., Bremen, IN 46506-2115
Supreme Corp, 2572 E Kercher Rd., Goshen, IN 46528

APPENDIX J

Northwest Indiana Inland Zone Sub-Area Communication Plan

Northwest Indiana COMMUNICATION PLAN

EXECUTIVE SUMMARY

The Communication Plan outlines protocols to facilitate the exchange of information between federal, tribal, state, and local agencies, private organizations, and the public during a response to a discharge of oil or a release hazardous substance(s) within the Northwest Indiana Inland Zone Sub-Area. The Communication Plan is a part of the Northwest Indiana Inland Zone Sub-Area Contingency Plan (SACP) and has been developed to be consistent with, and support, existing plans and procedures including the EPA Region 5 Regional Contingency Plan/Area Contingency Plan (RCP/ACP), industry response plans, state and tribal response plans, and local response plans.

The Incident Action Plan (IAP) provided in Appendix B should be used in conjunction with this Communication Plan. The IAP provides a standardized approach to identifying and communicating the overall strategic priorities and incident objectives in the context of both operational and support activities. The IAP is intended to help launch a response organization using the Incident Command System (ICS). The IAP designates communication related responsibilities to the Public Information Officer, the Liaison Officer, and the Communications Unit under the Logistics Section. The IAP includes an ICS 205 Incident Communication Plan template that contains a detailed emergency contact list that is referenced in this Communication Plan.

This Communication Plan is intended to provide guidance on notification protocols for various response scenarios that may occur within the Northwest Indiana Inland Zone Sub-Area.

COMMUNICATION PROTOCOLS

Protocols for handling communications between federal, tribal, state, and local agencies, private organizations, and the public during a response to a discharge of oil or a release of hazardous substance(s) within the Northwest Indiana Inland Zone Sub-Area are provided in the following sections.

Environmentally Sensitive Areas

If a discharge of oil or release of hazardous substance(s) impacts or threatens to impact environmentally sensitive receptors such as threatened or endangered species or designated critical habitat, EPA will notify:

- Indiana Department of Natural Resources (IDNR)
- Indiana Department of Environmental Management (IDEM) Northwest Regional Office
- IDEM Natural Resource Damage Assessment (NRDA) Coordinator
- US Fish and Wildlife Service (USFWS)
- National Park Service (NPS) Indiana Dunes National Park

Culturally Sensitive Areas

If a discharge of oil or release of hazardous substance(s) impacts or threatens to impact culturally sensitive areas such as tribal lands, archaeological sites, or historic landmarks or places, EPA will notify:

- Pokagon Band of Potawatomi Indians Tribal Point of Contact and Tribal Environmental Response Coordinator
- IDNR Division of Historic Preservation and Archaeology (DHPA) State Historic Preservation Office (SHPO)

Critical Infrastructure

If a discharge of oil or release of hazardous substance(s) impacts or threatens to impact critical infrastructure such as drinking water intakes, navigational locks and dams, flood control reservoirs or bridges, EPA will notify:

- City Public Water System(s) (PWS)
- County Public Health Department(s)
- US Army Corps of Engineers Indiana Harbor
- US Army Corps of Engineers Chicago District
- US Coast Guard Sector Lake Michigan

To the extent possible, notifications should consist of the following information:

- Date and time of the discharge/release event
- Location of the discharge/release
- Type and quantities of materials discharged/released
- Proximity to sensitive downstream receptors relevant to the agency or organization being notified;

Examples include:

- Proximity to drinking water intakes when notifying local health departments and PWS

- Proximity to sensitive habitat or threatened or endangered species when notifying state Departments of Natural Resources or the National Park Service
- Velocity of the waterbody impacted by the discharge or release
- Contact information for the responding agencies, Incident Command (IC), or Unified Command (UC)
- Actions taken to stop the discharge or release
- Containment and recovery actions underway

Information on the discharge or release may be obtained through the National Response Center (NRC) incident report. Downstream sensitive receptors and waterbody conditions can be found using Indiana Mapping Project on the rrt5.org website under the “Interactive Mapping” tab.

Contact information for individuals within the agencies or organizations identified above is provided in the IAP found in Appendix B. At a minimum, the following agencies will be notified during discharges of oil and releases of hazardous substances that impact or may impact resources or receptors those agencies manage.

Organization	Contact
IDEM Northwest Regional Office	Cathy Csatari, Division Director
IDEM NRDA Coordinator	Beth Admire
Indiana DNR	
Indiana DNR DHPA/SHPO	Chad Slider
USFWS	Dan Sparks
NPS Indiana Dunes National Park	Dan Plath, Resource Management Division Chief
Pokagon Band of Potawatomi Indians	Tribal Point of Contact Tribal Environmental Response Coordinator
US Army Corps of Engineers Indiana Harbor	Damian Allen, Facility Manager
US Army Corps of Engineers Chicago District	Michelle Kozak, Emergency Management Chief
US Coast Guard Sector Lake Michigan	Timothy Weller