

# COMMUNITY INVOLVEMENT PLAN



## FEDERATED METALS CORP WHITING SUPERFUND SITE



SEPTEMBER 2024

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# INTRODUCTION

This section describes the purpose of this Community Involvement Plan and gives an overview of the Superfund program.

The *Community Involvement Plan* is a working document that will evolve as the investigation and cleanup process continues and input is received from the community. It is intended to be flexible, adaptable and used as a guideline for our communication with the community.

The Federated Metals Corporation Whiting Superfund Site is currently on the *National Priorities List*, and community involvement for the site is covered under the Superfund Program. See Page 4 for more information on *Superfund*.

# Community Involvement Plan Overview

On September 5, 2023, the U.S. Environmental Protection Agency added the Federated Metals Corporation, or FMC, Whiting site to the **Superfund National Priorities List**, or **NPL**. The NPL is a list of the nation's most **hazardous waste** sites eligible for federal funding under the Superfund law. The FMC site, located on the border of Hammond and Whiting, Indiana, is a former metal **smelting, refining**, recovery, and recycling facility that operated from 1937 to 1983. **Contamination** from the site includes **lead** and **arsenic**. A brief site history and description are provided in "The Site" section on page 7.

EPA prepared this **Community Involvement Plan**, or **CIP**, to inform, engage and support the communities near the FMC site in Hammond and Whiting, Indiana. Our **community involvement** effort is committed to promoting effective and meaningful communication between the public and EPA. We want to make sure that members of the affected communities know and understand when and how they can participate in decision-making during the **cleanup** activities at this site and the communities' concerns and information needs are considered and addressed as activities at the site progress.

This CIP was prepared to support environmental and cleanup activities at and near the FMC site. We used several information sources to develop this plan, including research, discussions with community members and information gathered at community interviews. EPA scheduled in-person interviews with community members at the Whiting Public Library located at 1735 Oliver Street in Whiting, Indiana. EPA interviewed 16 individuals from December 5 to 19, 2023. Interviewees included local residents, local officials, members of local community groups and other parties interested in activities and cleanup efforts.

This CIP describes EPA's plan for addressing concerns and keeping residents informed and involved in investigation and cleanup activities at the site. We will use this document as a guide to involve and communicate with residents, businesses and the local government in the cities of Hammond and Whiting.

## EPA's Community Outreach Objectives:

- Assist the public in understanding the decision-making process and the community's role in that process during site investigation and cleanup.
- Give the public accessible, accurate, timely and understandable information about the project as it moves forward.
- Ensure adequate time and opportunity for the public to give informed and meaningful input.
- Respect and fully consider public input throughout the entire process.
- Reflect community concerns, questions and information needs.

If you are interested in submitting comments or have questions or suggestions concerning this CIP, please contact:

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# Superfund Program

## What is the Superfund Program?

Superfund is an environmental cleanup program enabled by a federal law enacted in 1980 known as the **Comprehensive Environmental Response, Compensation, and Liability Act**, or **CERCLA**, also called Superfund. In 1986, another law, the **Superfund Amendments and Reauthorization Act**, or **SARA**, reauthorized CERCLA to continue Superfund cleanup activities. EPA requires those responsible for contaminating Superfund sites, known as **potentially responsible parties**, or **PRPs**, to clean up those sites or reimburse the government if EPA conducts the cleanup at the site. If EPA and the PRP can't reach a cleanup agreement, EPA can order the PRP to do the work or have the Department of Justice require the PRP to do the work through the federal court system. If a PRP is not complying with a cleanup agreement or order, EPA's enforcement program takes action to correct the situation. If a PRP is not found or the company no longer exists, EPA uses money from Congress to fund investigations and cleanups. Superfund site identification, monitoring and response activities are coordinated with state, tribal and territorial environmental protection and waste management agencies. FMC and its parent corporation ASARCO are considered the PRP for the FMC site. While FMC and ASARCO entered into a **federal consent decree** to perform **Resource Conservation and Recovery Act**, or **RCRA**, corrective action across the entire 36-acre smelter property in 1992, ASARCO declared bankruptcy before the corrective action work was complete. In 2009, a bankruptcy settlement agreement established a Trust that took over the property and conducted cleanup activities (see the *Site History* section beginning on page 9 for more details). However, no Trust funds remained to investigate potential contamination in the surrounding neighborhoods, so EPA's Superfund program took over investigation and cleanup activities.

Once EPA has been made aware of a site by individuals, local and state agencies or others, EPA follows a step-by-step process to determine the best way to clean it up and protect human health and the environment. If the site poses an immediate threat to public health or the environment, EPA can intervene with an **emergency response action**. The goal of EPA's Emergency Response and Removal Program is to protect the public and the environment from immediate threats posed by the release or discharge of **hazardous substances**. From 2018 to 2019, EPA performed a short-term emergency response action excavating lead-contaminated soils at 33 priority residential properties in Whiting and Hammond. For further information about this emergency response, please see the *Site History* section beginning on Page 9.

The Superfund program encourages active dialogue between communities affected by the release of hazardous substances and all the agencies responsible for carrying out or overseeing cleanup actions. EPA considers community involvement to be an important part of the Superfund program, and opportunities for community involvement occur throughout the process. At each step in the process, there are opportunities for various levels of community involvement; see the graphic in the *Community Engagement in Superfund Cleanups* section below.

### Visit these EPA websites for more information on the Superfund process.

Superfund: [www.epa.gov/superfund](http://www.epa.gov/superfund)

Cleanup Process: <https://www.epa.gov/superfund/cleaning-superfund-sites>

Community Involvement:

<https://www.epa.gov/superfund/superfund-community-involvement>

## Community Engagement in Superfund Cleanups

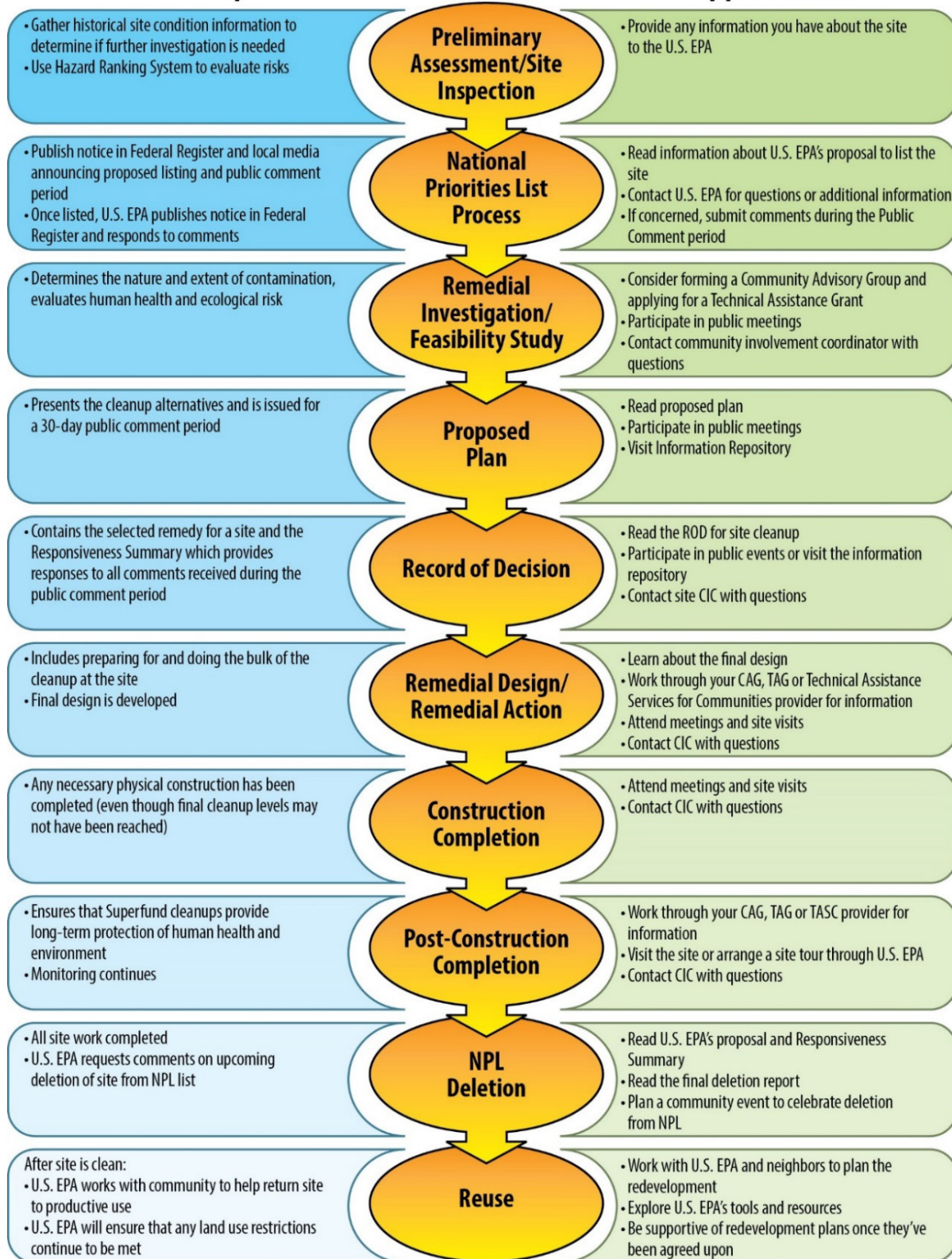
Ongoing input and involvement by the community are essential to our efforts to provide effective **community engagement**. We have learned that EPA's decision-making ability is enhanced by actively seeking input and information from the community. Community members need to be involved in all phases of the investigation and cleanup so that the contamination is addressed in a way that protects people and the environment – now and in the future.

Residents, business owners and local government officials may be able to provide valuable information about a hazardous site that can help us determine the best way to clean it up. Information can help determine the location of contamination, how people may be exposed to the contamination and perhaps sources of the contamination.

Local residents educated EPA about their community and told EPA about their concerns, which are provided in the *Community Interviews* section beginning on page 24.

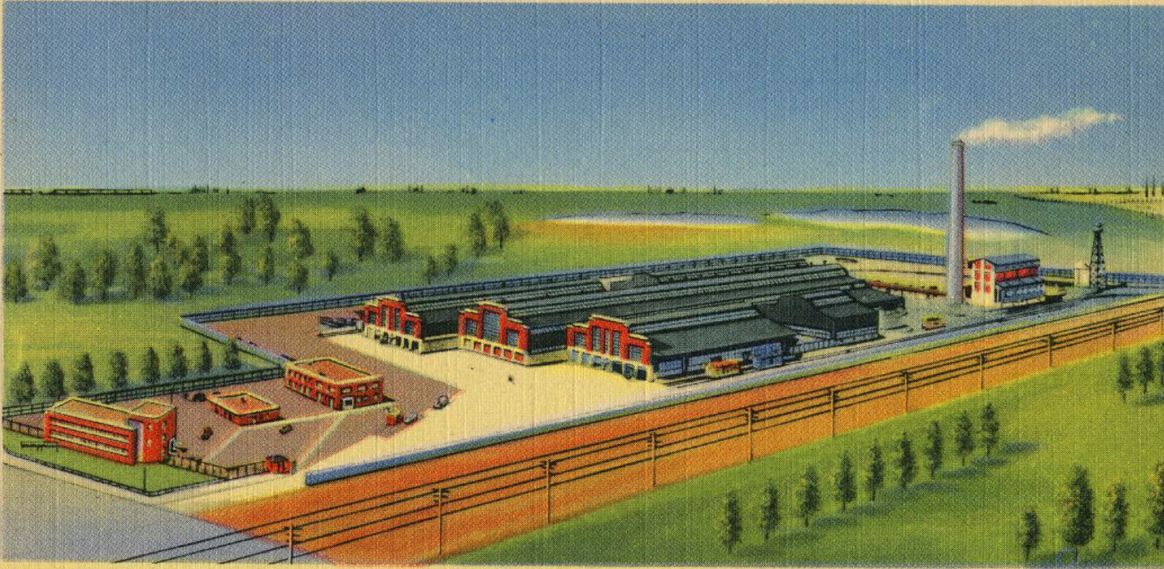
## Superfund Process Steps

## Community Involvement Opportunities



# THE SITE

This section presents a description and history of activities at the site, as well as the next steps.



**FEDERATED METALS DIVISION**  
**AMERICAN SMELTING AND REFINING COMPANY**  
**WHITING, INDIANA**

OB-H2118





## Site Description and Location

The FMC site is at 2230 Indianapolis Boulevard in Whiting, Lake County, Indiana, adjacent to George Lake, sometimes referred to as Lake George. The 19-acre site consists of two land parcels, a 9-acre former smelter and a 10-acre landfill near the shore of George Lake. The property is in a residential and commercial area. The parcel is bounded to the north by George Lake Trail, vacant land and residences; to the east by a commercial building and New York Avenue; to the south by vacant land and Calumet College of St. Joseph; and to the west by vacant land and George Lake. Lake Michigan is located approximately 0.7 miles northeast of the parcel.

In 2023, EPA finalized the FMC site's placement on the NPL. Placement on the NPL makes the site eligible for federal money to investigate and clean up the site under EPA's Superfund program. The EPA is investing money from the **Bipartisan Infrastructure Law**, or **BIL**, to clean up the site. Contamination at the site and surrounding area includes lead and arsenic in soil. During EPA's site investigation and evaluation of the site for the NPL, George Lake sediments were found to have elevated lead concentrations, which may impact wildlife. EPA has confirmed that approximately 130 residential properties have lead-contaminated soil, and an estimated 700 residential properties still need to be sampled. Most of the information in this section is taken from the EPA FMC site website under the "Cleanup Activities" tab: [www.epa.gov/superfund/federated-metals](http://www.epa.gov/superfund/federated-metals).



Federated Metals Corporation site layout map. The site is outlined in yellow.

## Site History

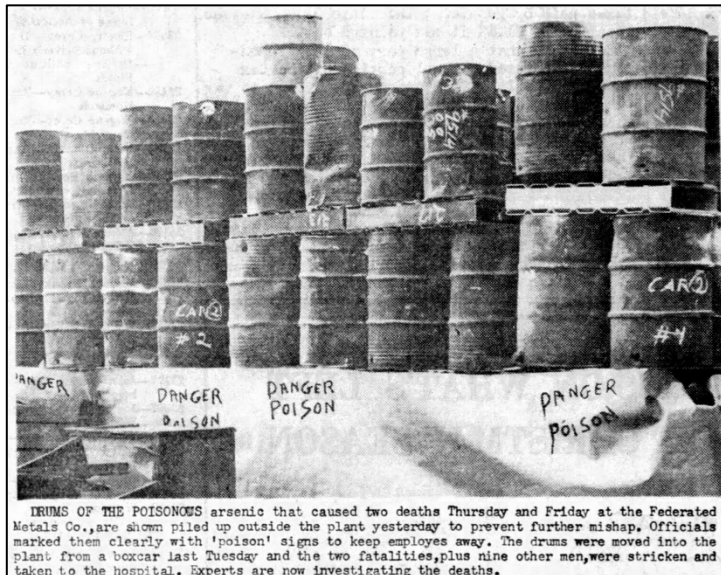
From 1937 until 1983, FMC operated a 36-acre metal smelting, refining, recovery and recycling facility along the border of Hammond and Whiting, Indiana. In 1985, FMC sold the 17-acre smelter manufacturing facilities to HBR Partnership. Subsequently, other businesses, including Northern Indiana Metals and Whiting Metals, purchased the 17-acre parcel and continued to conduct smelting operations off and on until 2020. Historically, smelter operations often emitted lead and other heavy **metals** from the facilities' stack, baghouse and waste piles.



The Federated Metals facility. Source:

<https://www.wrhistoricalsociety.com/news/2018/12/17/federated-metals-was-a-pollution-problem-from-the-start>

In 1939, residents near FMC were alarmed by the fumes and smoke from the plant, as people began feeling ill once the plant began operating. The Hammond Health Board gave FMC 60 days to eliminate the noxious fumes and smoke from its plants; however, FMC did not comply. By 1940, about a year after the smoke was first noticed by residents, FMC constructed a taller smokestack to solve the smoke problem. Over the following years, FMC accumulated numerous environmental complaints ([Whiting-Robertsdale Historical Society](#)).



DRUMS OF THE POISONOUS arsenic that caused two deaths Thursday and Friday at the Federated Metals Co., are shown piled up outside the plant yesterday to prevent further mishap. Officials marked them clearly with 'poison' signs to keep employees away. The drums were moved into the plant from a boxcar last Tuesday and the two fatalities, plus nine other men, were stricken and taken to the hospital. Experts are now investigating the deaths.

Photo from the Hammond Times of the drum shipment at the Federated Metals facility. Source:

<https://www.wrhistoricalsociety.com/tragedy-at-federated-metals-in-1949>

In January 1949, a train deposited 49 unsealed, steel drums of raw material at FMC. Each drum contained 700 to 1,000 pounds of metal **dross** containing aluminum arsenide. Workers unloaded the drums and dumped their contents on the concrete floor of the receiving department. The workers mixed the material, some of it wet with rain, and made separate piles for production and lab samples. Within four days, four men died and 19 men had become sick. When aluminum arsenide comes into contact with water it decomposes in a chemical reaction that creates deadly arsine gas. The deputy Lake County coroner concluded that safeguards against arsenic poisoning were not in place at the plant; these safeguards could have saved the lives of workers. After learning about this

incident, the U.S. Interstate Commerce Commission ordered new regulations governing containers and hazardous material identification for cross shipments across state lines as well as implementing safety training for employees who handle dross ([Whiting-Robertsdale Historical Society](#)).

In 1992, FMC and its parent corporation, ASARCO, entered into a federal consent decree to settle an EPA lawsuit alleging RCRA hazardous waste violations and agreed to perform RCRA corrective action across the entire 36-acre smelter property, not just the 19 acres that FMC still owned. From 2001 to 2006, the smelter property was subject to a \$3.35 million federal RCRA corrective action and Indiana State RCRA closure project that is nearly complete. The corrective action involved demolishing an onsite baghouse and consolidating slag dredged from adjacent George Lake with contaminated soils excavated from facility production areas and non-hazardous baghouse demolition debris into an existing on-site landfill on the property. The landfill included a “phyto-cap” feature designed to use plants and trees to reduce landfill **contaminants** from leaching into the groundwater.

In December 2005, ASARCO declared bankruptcy and abandoned the site before the RCRA corrective action was completed. In 2009, a federal bankruptcy court allocated \$1.2 million to a federal trustee to complete the corrective action at the 10-acre landfill and 9-acre area undergoing corrective action. The trustee has spent about half of the funds originally given by the bankruptcy court to complete the RCRA corrective action at the FMC landfill. The trust completed the landfill cover, installed additional groundwater monitoring wells, and conducted several rounds of on-site and off-site groundwater sampling to confirm that the landfill cap was preventing groundwater contamination. This RCRA corrective action work is still ongoing; however, no trust funds remain to investigate potential releases of contaminants to the surrounding neighborhood. Consequently, EPA’s Superfund program initiated an investigation of the neighborhood yards and excavated those yards that were most heavily contaminated with lead.



At the request of EPA’s RCRA program, in late 2016 and early 2017, EPA’s Superfund Division sampled soils at city-owned properties and rights-of-way in Hammond and Whiting to determine if heavy metals from the former FMC facility had contaminated the surrounding residential areas. The results showed some lead and arsenic contamination at unoccupied properties in the community.

EPA residential yard cleanup. Air monitoring equipment in the bottom left of the photo is used to monitor air quality and dust.

In May 2017, EPA sampled the former facility's landfill to determine whether contamination found in the community was from the former smelter. The analysis showed a link between materials found in the landfill and the soils to the north of the site. These combined endeavors led EPA to define a new soil sampling area that included occupied residential properties.

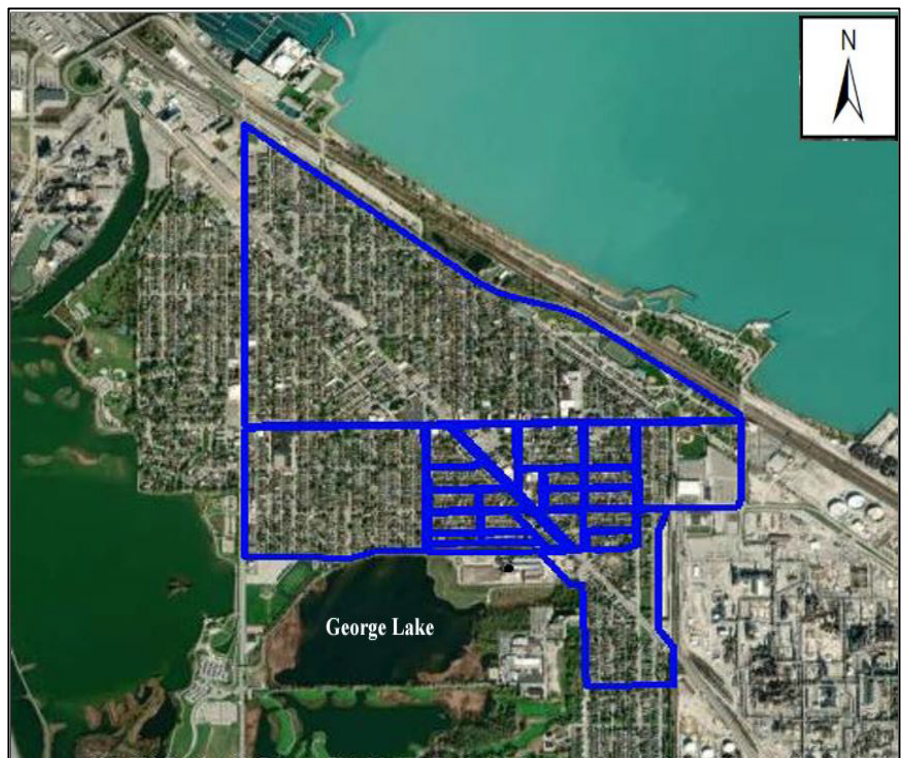
In October 2017, EPA and the cities of Hammond and Whiting informed local residents of a sampling study taking place at residential properties to better understand the levels of arsenic and lead in the soil. The results showed soil at some of the sampled properties had lead above EPA's **Removal Management Levels**, or **RMLs**. RMLs help identify areas, contaminants and conditions where a **removal action** may be appropriate.

EPA collected soil samples from 242 properties near the former FMC facility to determine the extent of historical lead contamination in the area. The assessment found 163 residential yards that had soil lead levels above EPA's health standard.

In May 2018, EPA began excavating soil at priority properties within the sampling area. From 2018 to 2019, EPA performed a short-term removal emergency response action excavating lead-contaminated soils at 33 priority residential properties in Whiting and Hammond. These priority properties were properties where surface lead levels were equal to or exceeded 1,200 parts lead per million parts soil and where sensitive populations lived. For this project, the sensitive population was defined as pregnant women and children under seven.

In August of 2021, the city of Hammond began a project to remove and dispose of lead-contaminated soil in Hammond properties affected by the site. In early 2023, the city of Hammond informed EPA that 47 residential yards were cleaned up.

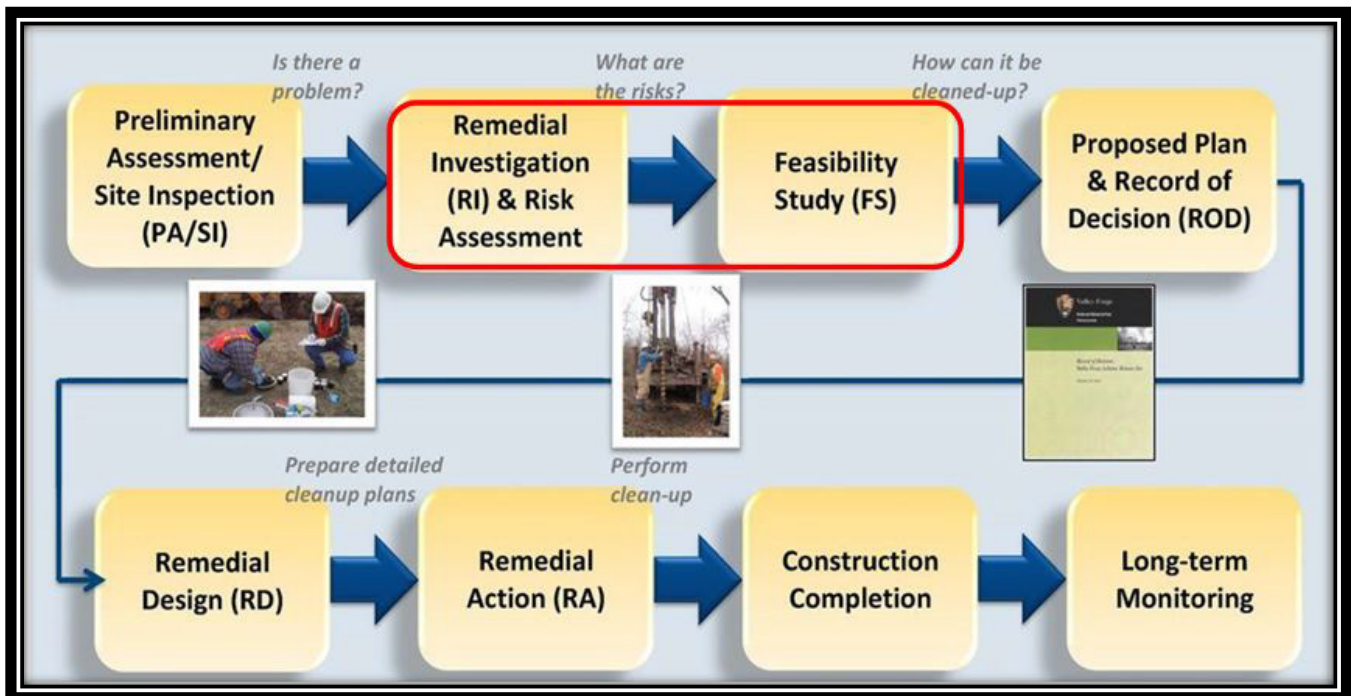
On September 6, 2023, EPA issued a press release announcing the addition of the FMC site to the Superfund NPL. In that press release, EPA confirmed that approximately 130 residential properties had lead-contaminated soil, and an estimated 700 residential properties still needed to be sampled. To read the press release, please visit: <https://www.epa.gov/newsreleases/epa-adds-federated-metals-corp-whiting-site-hammond-indiana-superfund-national>



Areas near the Federated Metals facility sampled in the EPA 2018 short-term removal action outlined in blue. EPA plans to conduct soil sampling at additional properties in these areas and may include additional areas outside the blue boundary for sampling as part of the upcoming investigation.

## Next Steps

EPA is currently in the **Remedial Investigation/Feasibility Study**, or **RI/FS**, stage of the Superfund process at the site. This stage involves evaluating the nature and extent of contamination at a site and surrounding area and assessing potential threats to human health and the environment. Activities also include evaluating the potential performance and cost of the treatment options identified for a site. The FMC site has been divided into to **operable units**, or **OUs** to aid in the investigation and cleanup process: OU 1, includes residential exposure and OU 2 includes George Lake and the FMC site.



The steps throughout the Superfund process. The site is currently in the RI/FS stage.

The RI/FS may include the following activities:

- Investigate the source of contamination at the site by sampling soil, sediments, surface water and groundwater in areas that may be affected by site-related contamination.
- Investigate contamination at residences surrounding the site by sampling soil.
- Use the results of the first round of soil, sediments, surface water, and groundwater sampling to guide additional sampling efforts and broaden the study area until the full extent of the contamination is defined.
- Evaluate potential options to clean up the source of contamination once the RI is complete. These options will be documented in the FS.
- Hold a local meeting to present all options, including a recommended option, for addressing the contamination.
- Provide updates to the community on its website, through public meetings, and mailings throughout the investigation.

# THE COMMUNITY

This section provides information about the cities of Hammond and Whiting communities, including their histories, governments and demographics.



# Community History

## Hammond

The city of Hammond is in Lake County, Indiana, and is one of the oldest cities in northern Lake County. Hammond was named in honor of George Hammond, who established a slaughterhouse in the area in 1869, which was the first industrial facility in the region. The city originated as a modest community of German farmers who arrived to the area around 1847. With the founding of George Hammond's slaughterhouse and beef packaging facility, the town witnessed transformative growth. Proximity to Lake Michigan played a pivotal role in fostering the town's development and industrial expansion. Officially incorporated as a city on April 21, 1884, with Marcus Towle as its inaugural mayor, Hammond underwent substantial expansion post-incorporation, reaching a peak population of 111,698 in 1960 ([History of Hammond, Indiana u-s-history.com](http://History_of_Hammond.Indiana_u-s-history.com)).



George Hammond.

Hammond, an innovator in utilizing refrigerated railcars for transporting fresh meat, pioneered this method with his small packing enterprise in Detroit, Mich. In 1868, Hammond secured a patent for his refrigerator car design. He established a new facility in Northern Indiana alongside the Michigan Central Railroad tracks. By 1873, the George H. Hammond Co. achieved annual meat sales of \$1 million, a figure that rose to nearly \$2 million by 1875. The company's expansive packing house in Hammond rivaled those at the Union Stock Yard in Chicago. Following Hammond's death in 1886, the company diminished in significance and eventually succumbed to the dominance of Chicago's major packers ([Hammond \(George H.\) Co. chicagohistory.org](http://Hammond(George.H.)Co.chicagohistory.org)).

Hammond was initially characterized as a German, working-class city boasting a considerable percentage of homeowners. The city played a significant role in the Pullman Strike of 1894, where local workers, backed by city officials, refused to handle Pullman cars. City officials initially backed the strikers, but the situation escalated into violence, leading to the occupation of Hammond by federal troops. On July 7, 1894, during this occupation, the troops fatally shot a local carpenter. In response, citizens expressed outrage and condemned President Grover Cleveland for deploying the troops.

After 1901, the need for labor diminished following a fire that ravaged the Hammond Company, resulting in the loss of 1,500 jobs and posing a significant crisis for the city. Hammond authorities attempted to lure new industries, leading to the establishment of the Standard Steel Car Company, which employed 3,500 individuals. However, Hammond never attained the same level of industrialization as neighboring cities like Whiting, East Chicago and Gary. Instead, Hammond developed a robust regional downtown with department stores, office blocks and movie palaces. The downtown Hammond shopping district included major chains like Sears and J.C. Penney.

In 1966, the new River Oaks Mall in Calumet City generated adversity for Hammond's 70-year-old retailing center. Long-established businesses began to close throughout the 1970s and early 1980s. The area's

industries began to close as well, such as American Steel Foundries in 1973, Pullman-Standard in 1981, and Rand McNally in 1981.

Between 1970 and 1990, Hammond experienced a 22 percent decrease in population, declining from 107,983 to 84,236. In 1980, the workforce composition included 47 percent in manufacturing occupations, 40 percent in technical sales and service and 13 percent in managerial and professional roles.

Notable manufacturing companies in Hammond today include Cargill Food Processing, Muster Steel and Dover Chemical. ExxonMobil and Marathon have large oil storage facilities in Hammond. In 1996, Empress Casino opened in Hammond, which was replaced by Horseshoe Casino in 2001 ([Hammond, IN chicagohistory.org](http://Hammond, IN chicagohistory.org)).

Today, Hammond has a diverse range of entertainment and recreational activities to enjoy. The Towle Theater offers live performances, while the Horseshoe Casino provides gaming and dining experiences. Shoppers can explore unique antique and furnishing stores, as well as the expansive 185,000-square-foot Cabela's retail showroom catering to outdoor enthusiasts. Hammond is also home to the Lost Marsh Environmental Recreation area, which includes a 330-acre golf course and nature preserve. Hammond's Festival of the Lakes provides five days of fun and entertainment every July.



**Top:** George Lake Pedestrian Bridge.

**Right:** George Lake with a swan and ducks. The Pavilion at Wolf Lake Memorial Park is seen in the background. The Pavilion hosts concerts and outdoor activities, including Festival of the Lakes.

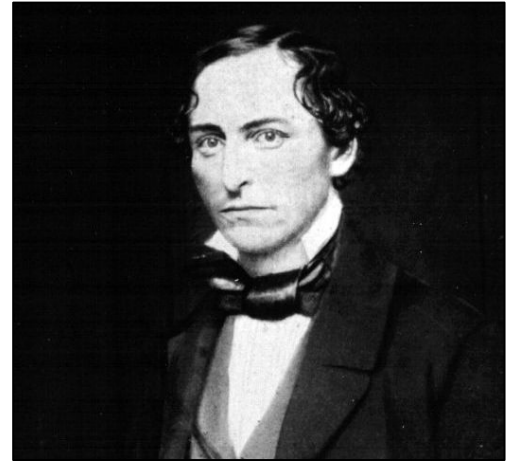




## Whiting

The city of Whiting is in Lake County, Indiana, located on the southern shore of Lake Michigan, approximately 16 miles from downtown Chicago. Whiting has a rich history shaped by industrial development and key land acquisitions. In the mid-19th century (1850 to 1855), original landowners, George W. Clarke and George M. Roberts acquired extensive swamp lands in the northwestern Calumet region. Following Clarke's death in 1866, his property passed to his sister and her husband, Jacob Forsythe, who expanded the holdings. Over the next two decades, Forsythe gained ownership of present-day East Chicago and substantial tracts of land that would later be developed as Whiting in 1889 ([A standard history of Lake County, Indiana, and the Calumet region archive.org](#)).

Herbert Whiting played a significant role in the history of Whiting. Beginning as a farmer and laborer, he transitioned to a career in railroading, eventually becoming a conductor for the New York and Boston Railway. In 1852, Whiting assumed a role with the Michigan Southern Railway as it began operations in Chicago. For another 15 years, Whiting continued as a conductor for the Michigan Southern, which later became the Lake Shore and Michigan Southern.



Herbert Whiting.

In 1868, a railroad siding, a secondary track off the main line, in northwest Indiana was named in Whiting's honor: Whiting's Siding. The railroad's reasoning for naming the siding after Whiting is unclear, as Whiting often passed through the area but never lived or owned property there. One existing theory stems from an 1894 newspaper article that stated a "gray-haired conductor," dubbed "Pap Whiting," allegedly ran his train off the track, leading to the area being called "Pap Whiting's Siding." Over time, the name "Pap Whiting's Siding" changed to "Pop Whiting's Siding." Regardless of the story's truth, the name "Pop" Whiting would be remembered for generations.

Whiting's legacy grew into a colorful legend, with stories of his fearless or reckless nature as a conductor and engineer. Despite conflicting accounts about the city's naming, Whiting stood out as a working man who earned respect over his forty-year career. Herbert Whiting passed away in 1897, leaving a lasting impact on the city that bears his name. He spent 45 years with the Lake Shore Railroad and continued working until his death ([Pop Whiting: How Whiting Got Its Name — Whiting-Robertsdale Historical Society wrhistoricalsociety.com](#)).

Henry Schrage was another important figure in Whiting's history. Schrage arrived in Whiting in 1854 at the age of 10. After serving in the Union Army during the Civil War, participating in significant battles, and accompanying General William Tecumseh Sherman on his March to the Sea, Schrage returned to Whiting. In 1868, he married Caroline Wuesenfeld and opened the city's first retail business, a general store near the railroad tracks.



Henry Schrage.

In 1871, Schrage became the city's first postmaster, using his store as the post office. When Schrage became postmaster, the name of the community was shortened from Pop Whiting's Siding to Whiting. He went on to serve as a town alderman and township trustee in the community's early days.

In 1880, the population of Whiting was 115. In March and April of 1889, the Standard Oil Company arrived along the lakefront in Whiting. Schrage sold Standard Oil part of his land and helped the company acquire other land needed for building a refinery. He invested his profits in real estate and opened the Bank of Whiting on April 21, 1895. In 1911, the bank relocated to its present site at 119<sup>th</sup> Street and New York Avenue ([Schrage Family History is Early Whiting History — Whiting-Robertsdale Historical Society wrhistoricalsociety.com](https://www.whitingindiana.com/about-the-city/history/)).

By 1895, 2,500 people resided around Standard Oil, leading to the incorporation of Whiting as a town. Whiting achieved city status in early 1903, and the first officers were elected in May of that year. New city services came with incorporation, including a public library and a lakefront park (<https://www.whitingindiana.com/about-the-city/history/>). W. E. Warwick served as mayor from May 1903 to May 1906, overseeing initial efforts to enhance the streets, including replacing wooden sidewalks with cement. Later, major thoroughfares were paved with brick and Westrumite, an asphalt cement produced by a local plant ([A standard history of Lake County, Indiana, and the Calumet region archive.org](https://www.whitingindiana.com/about-the-city/history/)).

Throughout the twentieth century, Standard Oil was a major influence on the city. The Industrial Relations Plan, initiated in 1919, provided workers with stock-purchase plans, health insurance, and retirement programs. In 1923, Standard Oil provided land and funding for the Memorial Community Center, which became central to city life with its social and athletic facilities. By 1923, Standard Oil employed over 4,000 workers, and the city population was approximately 10,000 (<https://www.whitingindiana.com/about-the-city/history/>).

In 1955, a massive explosion and fire at the Standard Oil plant prompted the company to modernize its facility. This modernization, however, reduced the demand for employees, leading to layoffs in the early 1960s. Families accustomed to favorable benefits and job stability turned their support to a union outside the company's control for the first time—the Oil, Chemical and Atomic Workers. Despite this, employment levels continued to decline, and the population dwindled from 10,880 in 1930 to 5,137 by 2000, with most of the loss



The August 1955 fire at Standard Oil. The fire lasted 8 days and killed two people. Another 40 people were injured, and 1,500 were evacuated. Source: <https://pophistorydig.com/topics/whiting-refinery-fire-1955/>

occurring after 1950. In 1951, Calumet College of St. Joseph was founded. The college remains an important facet of the community, with 685 undergraduates and 95 graduate students enrolled as of fall 2022 ([Whiting, INchicagohistory.org](http://Whiting.INchicagohistory.org)).

Today, Whiting is still home to varying industries and businesses. The Downtown Whiting Business District is known for its many unique shops, restaurants and bars. Pierogi Fest, an annual event celebrating the eastern European heritage prominent in Whiting residents, is a perfect example of the vibrancy and culture expressed by Whiting's community. Whiting is also home to Whiting Lakefront Park, which features a boardwalk, bike trail, formal garden and 300-foot pier. Adjacent to Whiting Lakefront Park is Whihala Beach.



Whiting Lakefront Park, located along the shoreline of Lake Michigan.

Source: <https://www.southshorecva.com/listing/whiting-lakefront-park/1723/>



Whiting Lakefront Trail.

## Government Structure

The city of Hammond is governed by a mayor-council form of government, with a mayor and nine council members – three at-large members and six members representing six wards. Every four years, Hammond residents vote to elect City Council members for their districts and Council members at Large to serve on the council for the next four years. Hammond City Council meetings are held on the second and fourth Monday of each month at 6:00 p.m. A contact list including the current mayor and city council is included in Appendix B.

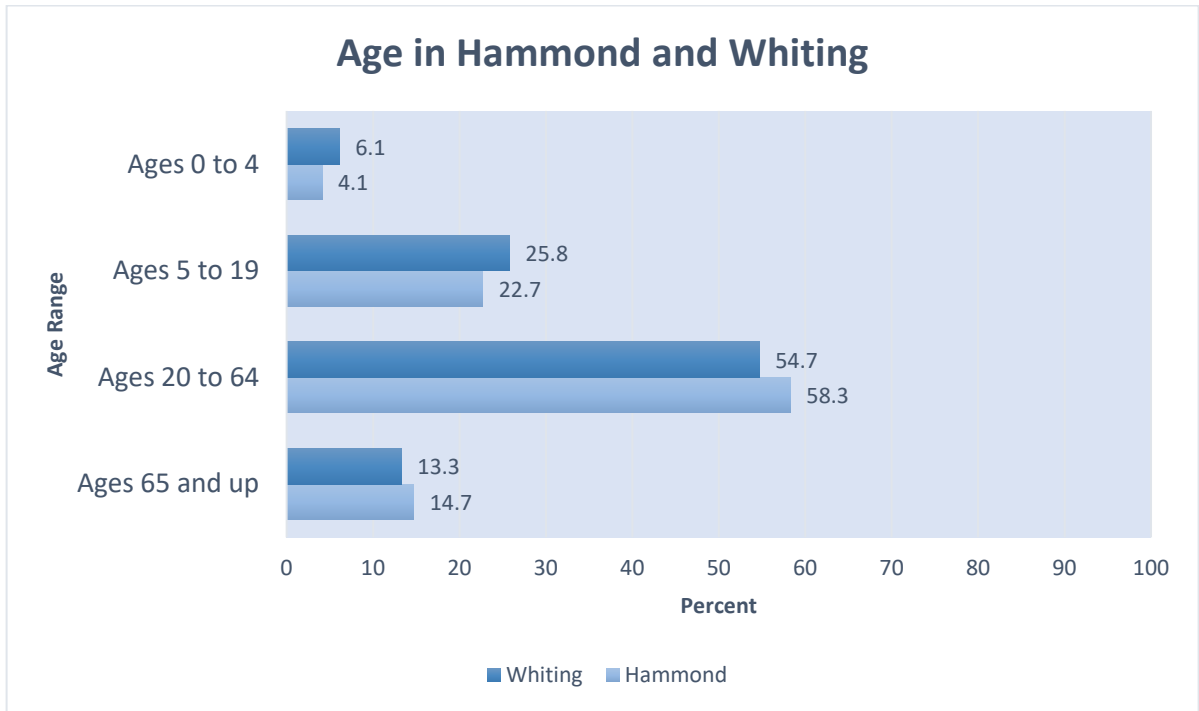
The city of Whiting is governed by a mayor-council form of government, with a mayor and five council members – two at large members and three members representing three wards. Whiting City Council meetings are held on the first and third Tuesday of each month at 6:30 p.m. A contact list, including the current mayor and city council, is included in Appendix B.

## Community Demographics

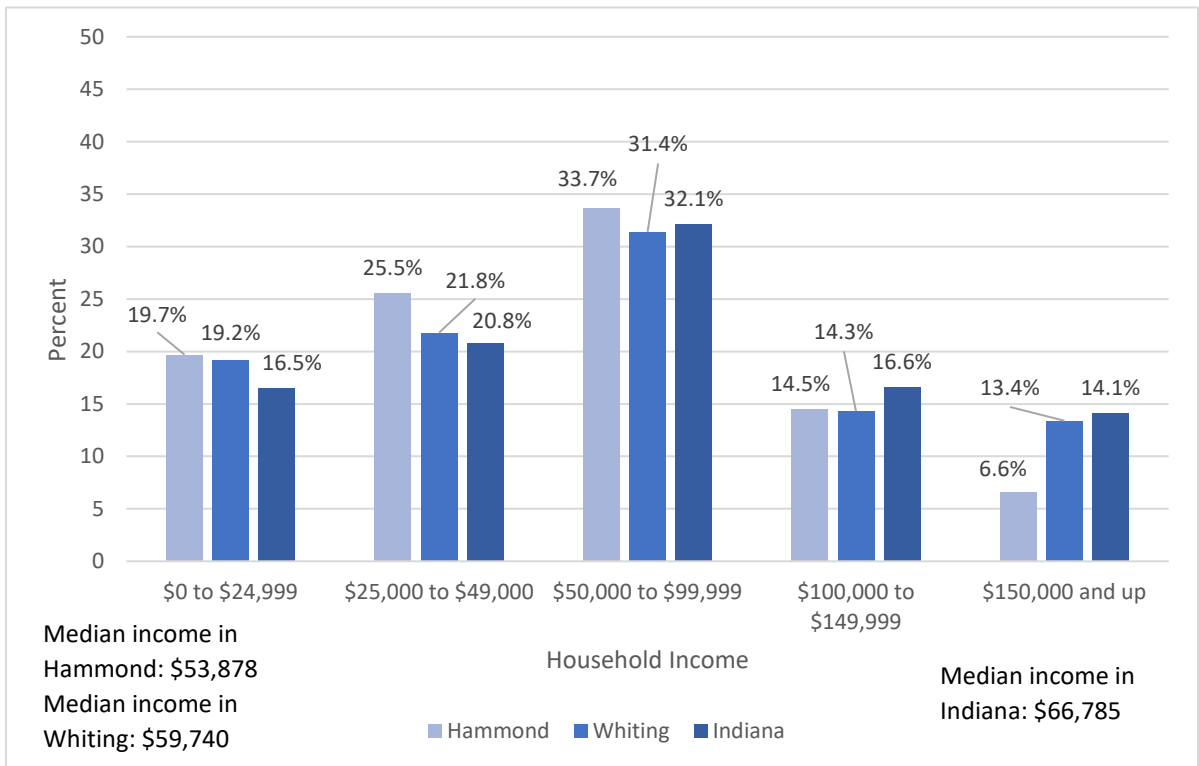
The following demographic information was obtained from the U.S. Census Bureau data tables and an EPA mapping and screening tool called EJScreen for the cities of Hammond and Whiting. Specific demographic information from EJScreen within a 3-mile radius of the former Federated Metals facility is available in Appendix E of this plan. EJScreen provides users with a nationally consistent dataset and approach for combining environmental and demographic indicators. According to the U.S. Decennial Census, 77,879 people live in 27,940 housing units in Hammond, Indiana, and 4,559 people live in 1,580 housing units in Whiting, Indiana. Of the population aged 18 and over in Hammond, 77.1 percent speak only English at home. Of the population aged 18 and over in Whiting, 74.1 percent speak only English at home.

	Hammond	Whiting	Indiana
<b>Median Age</b>	35.3 years	34.6 years	38.2 years
<b>One Race</b>	87.3%	88.5%	93.0%
White	34.0%	56.7%	77.5%
Black or African American	24.7%	4.7%	9.3%
Asian	0.9%	0.5%	2.5%
American Indian and Alaska Native	1.4%	2.9%	0.3%
Native Hawaiian and Other Pacific Islander	0%	0%	0%
Other Race	26.3%	23.8%	3.2%
<b>Hispanic or Latino</b>	43.1%	50.5%	7.8%
<b>Two or More Races</b>	12.7%	11.5%	7.0%

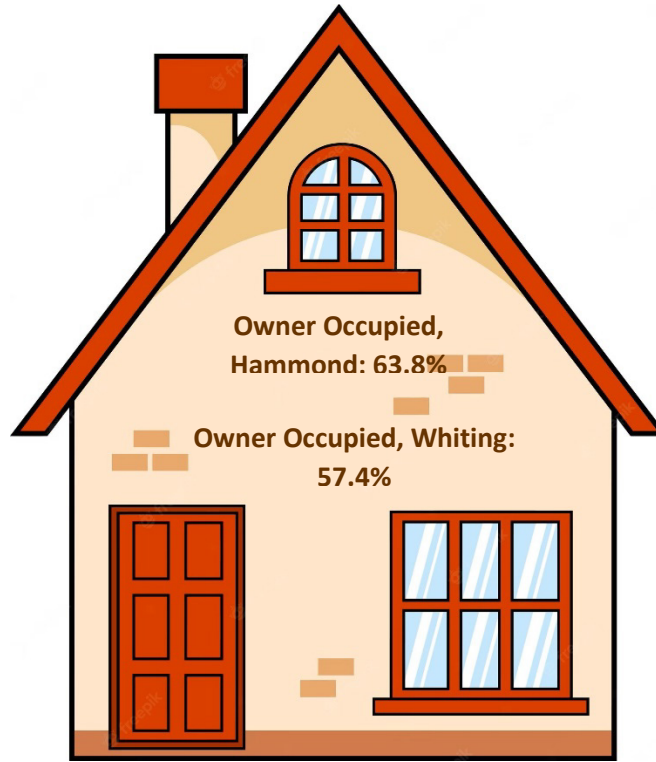
## Breakdown by Age



## Household Income



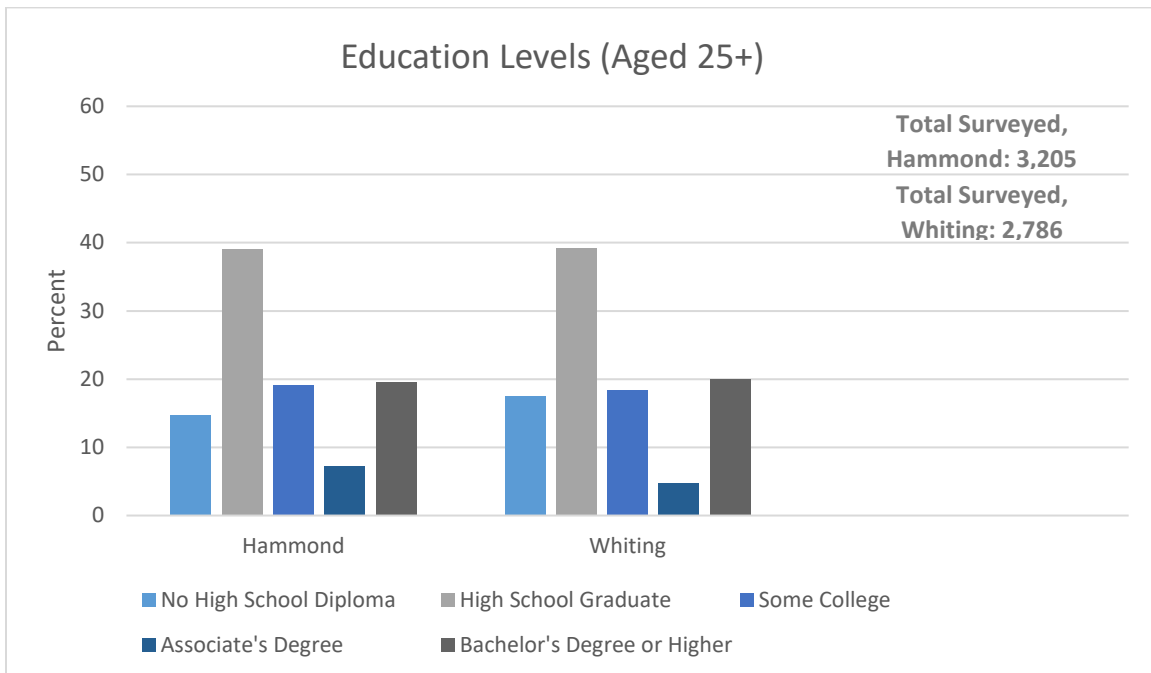
## Housing in Hammond and Whiting



Median Home Value,  
Hammond: \$163,900

Median Home Value,  
Whiting: \$221,300

## Education Levels (Aged 25+)



## COMMUNITY INVOLVEMENT

**This section summarizes the EPA community interviews that occurred in December 2023, highlights EPA's community involvement activities and provides information on Environmental Justice.**

When establishing the objectives for a site-specific community involvement program, we consider several factors, including federal requirements and EPA policy that assess the nature and extent of known or perceived site **contaminants** and known community concerns and requests.

Community involvement is the process of engaging in dialogue and collaboration with community members. The goal of Superfund community involvement is to advocate and strengthen early and meaningful community participation during Superfund cleanups.

To be effective, our community involvement program is designed to meet the community's need to know, give information in a timely manner and accommodate the community's interests and its willingness to participate in decision-making processes. We must also share information in a language the public can understand. In May 2018, EPA held a **public meeting** at the Whiting Family YMCA to share with community members the activities taking place near the FMC site.

From 2018 to 2019 EPA conducted recurring door to door canvassing efforts to keep residents up to date throughout the short-term soil cleanup of 33 priority properties in Whiting and Hammond under EPA's Superfund removal authority. From March 27 to May 30, 2023, EPA conducted a 60-day **public comment period** proposing to add the FMC site to the NPL and published a support document with responses to the public comments received. EPA then announced the addition of the site to the NPL on September 6, 2023.

To announce the placement of the FMC site on the NPL, EPA held a public meeting at Whiting High School on October 18, 2023. On November 15, 2023, EPA hosted a Superfund Process Training and Open House at Whiting High School to help community members understand the Superfund process and keep them involved and updated on activities at the FMC site. To view the public meeting presentation and the Superfund Process Training presentation, please click on the "Site Documents & Data" tab on the site website at: [www.epa.gov/superfund/federated-metals](http://www.epa.gov/superfund/federated-metals).

To meet the needs of the community and respond to information obtained during discussions and community interviews conducted with residents and other community members in December 2023 and to meet federal requirements, we have established the following objectives for our community involvement efforts:

- Enlist the support, coordination and involvement of the cities of Hammond and Whiting-Robertsdale officials and community leaders.
- Monitor community interest in the site and respond accordingly.
- Keep the community well informed of ongoing and planned site activities.
- Explain technical site activities and findings in an understandable format for community members.
- Get public input on key decisions.
- Change planned activities, where warranted, based on community input.
- Update EPA's website regularly and provide useful information on it for the community.
- Update the cities of Hammond and Whiting-Robertsdale officials periodically even if no activities are occurring at the site.
- Hold public meetings, when necessary, within the community to give all residents an opportunity to attend.



The following section summarizes community concerns, questions asked and what the community told EPA during the December 2023 community interviews.

## Community Interviews

On Dec. 3, 2023, EPA placed a public notice in *The Times of Northwest Indiana* to announce community interview sessions to the community surrounding the FMC site. EPA conducted in-person interviews between Dec. 5 and 7, 2023, at the Whiting Public Library. EPA also conducted virtual interviews from Dec. 12 to 19, 2023. EPA Community Involvement Coordinators Adrian Palomeque and Caitlin McIntyre and EPA Remedial Project Manager Leslie Patterson conducted the interviews. On Dec. 5, 2023, two Agency for Toxic Substances and Disease Registry representatives joined an afternoon interview.

EPA spoke with 16 people, 11 of whom were in person and five of whom were virtual. All interviewees live or own properties or businesses in Hammond or Whiting. Some specifically stated they live in the Robertsdale neighborhood. Four interviewees are active in Hammond or Whiting-Robertsdale environmental organizations, including Saving Whiting and Neighbors, or S.W.A.N., Southeast Environmental Task Force, and the Hammond Department of Environmental Management. Another interviewee is a bird migration expert, and a few other interviewees are well-versed in the wildlife issues in the area. Responses to the full list of 33 interview questions were not received from all interviewees.

### Overview

Everyone interviewed is either a resident of Hammond or Whiting, works in the area, or is a former resident. About half of the interviewees have lived in the area for over 20 years. Most residents stated they own their own homes. All interviewees spoke English, though many people stated that Spanish communication would be beneficial for the community. Most interviewees said they are or were active in the community in some capacity.

All interviewees asked about their awareness of the FMC site stated they knew of the site and its issues before attending the interviews. Of those same individuals, many had always known about the Federated Metals facility but became more concerned during EPA's initial emergency action in 2018. Additionally, most interviewees know that the main contaminant of concern from the FMC site is lead.

During the interviews, the interviewees educated EPA on their community and told us about their concerns. A summary of what we heard is below.

**Note:** This summary intends to faithfully record and reflect the issues and concerns expressed to EPA by residents and officials interviewed during our community interviews. By necessity, this is a collection and summary of thoughts and observations, and, in some cases, opinions. Please be cautioned that the statements contained in this section may or may not be factual and that the opinions/concerns expressed may or may not be valid.

## Communication

All the respondents have internet access either through high-speed internet at their homes or cellular devices. Many interviewees expressed interest in receiving information in the mail and said they received informational mailers from EPA about the site for public meetings. One interviewee mentioned EPA should inform residents before sending mail. A few residents stated their discontent with the Federated Metals mailings because information about EPA meetings arrived last minute or after the meeting occurred. Overall, opinions on mail were mixed, with a small number of interviewees expressing concern about timeliness and efficiency. Many interviewees mentioned email as a means of communication with the community. Others mentioned social media as an outlet for communication, although a few mentioned that social media is more accessible and useful for younger audiences. Other recommended forms of sharing information with Hammond and Whiting residents include:

- City Facebook pages
- Continued EPA meetings
- Door-to-door outreach
- EPA website
- Fact sheets
- FDR Democratic Club
- Fliers
- Local radio stations, including WJOB
- The Times of Northwest Indiana newspaper
- S.W.A.N. Facebook page
- Whiting-Robertsdale Chamber of Commerce: WRite Stuff
- Wild Ones Gibson Woods Chapter

Most interviewees asked about public meetings said they were willing to attend. A few more people favored in-person meetings over virtual meetings. Many interviewees said that hosting the meetings at 6 p.m. on Wednesdays at Whiting High School is an appropriate time and accessible location to have the meetings. However, a few interviewees offered alternative meeting locations including Whiting YMCA, Franklin Elementary School, Mascot Hall of Fame, St. John the Baptist, Whiting-Robertsdale Historical Society, Lost Marsh Golf Course and Calumet College of St. Joseph.

Many residents expressed the need for a variety of informational meeting types. Interviewees said open house meetings are nice because they can direct questions to organizations and resources that attend the meeting outside of the EPA. People also said there is value in hearing other community members' opinions in an open forum format, although some people expressed a concern that the format lends itself to grandstanding by a few vocal individuals. Less than one-third of the interviewees prefer virtual meetings, but those individuals also expressed willingness to attend in-person meetings. A little over one-third of individuals who prefer in-person meetings expressed a willingness to attend virtual meetings if needed. The rest of the interviewees either stated they were not interested in attending a public meeting or did not specifically mention a meeting preference.

## Concerns

Many of the interviewees expressed concerns related to the following topics at the site:

- Accuracy of EPA drawn boundaries
- Site cleanup plans
- Groundwater monitoring processes
- Community health
- Environmental justice
- City plans for Clark Athletic Field
- Communication and site education
- George Lake
- Wildlife impacts
- EPA's remediation plan
- Property values

Common concerns mentioned by area residents are provided in more detail below. Complementary information related to some of these concerns can be found in the Questions section.

### Federated Metals Corporation Whiting Site

Some of the interviewees raised concerns about the status of the current buildings located at the old Federated Metals facility. Specifically, a business at that location collects donations, and a few people were concerned there might be persisting contaminants affecting the donations dispersed to unknowing people. There is a general concern regarding the fact that the building in which Federated Metals operated has not been knocked down. The overall status and plan for the old Federated Metals building and surrounding commercial properties were of particular concern for select interviewees.

### Communication and Site Education

An overarching theme of concern among interviewees was communication and efforts to raise awareness of the site's plans and status. Some interviewees mentioned communication and transparency between the local government entities and the residents have been lacking in the past. Of the interviewees asked, all but one stated that they had felt adequately informed by the EPA. However, some interviewees mentioned a frustration with the timeliness of information sent by mail. Several people, including, but not limited to, some of those interviewed, reported receiving letters about the EPA public meetings either the day of or the day after they occurred.

One interviewee felt important information was being omitted, such as relevant political history. The same interviewee suggested recording public meetings and making them available to people to increase the accessibility of the information being shared. Others echoed arguments in favor of increased accessibility, as not everyone may be willing or able to attend meetings or want to speak about the problem publicly.

## Site Cleanup Plans

Interviewees had questions and concerns about the logistics and plans for the testing and remediation of their properties. A couple of interviewees raised questions about the borders that designate which properties will be tested. Said interviewees questioned why certain locations were not included within the boundaries despite specific reasons supporting their inclusion. In some instances, interviewees had questions about the process of testing and remediating their properties that had already been tested at some point by the EPA during the emergency response stage, by another organization or government



Residential soil excavation as part of EPA's 2018 short-term cleanup.

entity or by self-testing performed by residents. Other interviewees raised concerns about the EPA's operable units and the order of the cleanup steps; a few interviewees worried that cleaning the Federated Metals property after the residential areas could lead to recontamination.

## Health and Safety Concerns

One of the biggest areas of concern discussed during the interviews was the health and safety of residents threatened by past and present contamination. Some interviewees mentioned the health of those who worked at the FMC site or near the property. Other interviewees mentioned their concern about soil in their yards that was played in and had food grown in it. Multiple interviewees mentioned a high rate of cancer in the area and cancer clusters in areas more closely located to either the Federated Metals property or other sites of contamination. One interviewee even mentioned noticing the sickness rate among dog breeds that like to dig in yards versus dogs or other pets that do not tend to dig.

A few interviewees expressed concern about the need for remediating nonresidential areas in addition to residential ones. As lead is dangerous for human health, especially among children, interviewees were concerned about recreational areas and how few are left for kids to play in. For example, multiple interviewees discussed their concern with the local golf course, which was built on top of a landfill unrelated to Federated Metals. Additionally, concerns were raised regarding the popular bike path along the lake. Another interviewee thought it was concerning that there could be contamination near colleges, unaware students and families.

## George Lake and Wildlife

Many interviewees had concerns relating to the local wildlife and ecosystems surrounding the site. There has been an increasingly worrisome dying of birds in and around George Lake. Interviewees seemed split on the cause, with some saying that these birds are being affected by contamination in the lake and others wondering if the cause is related to a parasite found in the lake. One interviewee expressed a combination of these two ideas, stating, "Lead led to suppressed immune systems for wildlife and is the reason why parasites may have become a lot more deadly." Regardless of the cause, the concern for these animals and the lake's prosperity was evident throughout the interviews.



George Lake.

Many interviewees also had concerns about the diminishing green spaces in the community. The recent development in the Clark Fields area used to be a natural space and was changed to create more housing, much to the dismay of some residents.

## Environmental Justice

The topic of Environmental Justice, or EJ, was viewed with mixed results. Of the interviewees asked, only one had not heard of EJ, and slightly more than half of those who had heard of it said that there are EJ concerns in the community. A few interviewees raised EJ concerns, one of whom stated, "Lower economic people tend not to say anything but are often the victims of polluters and contamination." A couple of interviewees also mentioned concern that EPA has not properly considered EJ concerns in the past and hopes that the EPA will do so this time around.

## Other Potential Contamination

Interviewees discussed a few other instances of potential contamination in the area. The first and most prominent example discussed was PolyJohn Corporation's potential contribution to contamination in the area. A few interviewees wanted to know what PolyJohn's role in the cleanup might be or how potential contamination from PolyJohn will be handled during the FMC cleanup processes. Another example of contamination provided by residents relates to BP's operations.

A few interviewees also mentioned specific substances of concern. One of those substances is an airborne material called kish that looks like glitter and can be found on surfaces of outdoor property as quickly and randomly as overnight. Another interviewee mentioned an unidentified black crumble flying off passing trains, and no one had been able to find answers about it.

## Questions

The following questions were posed during the interviews:

### General

- Who are EPA's primary stakeholders in this process?

EPA's primary stakeholders generally include the following:

- State agencies, in this case the Indiana Department of Environmental Management, or IDEM.
- Federal, state and county health agencies, including the Agency for Toxic Substances and Disease Registry.
- Residents and other community members.
- Municipal and county governments.
- Site property owners.
- Federal and state natural resource trustees, such as the U.S. Fish & Wildlife Service.
- Any parties identified as being potentially responsible for cleanup.

- What is EPA's timeline and next steps?

EPA is currently acquiring contractors to perform the investigations and remedial designs needed to support additional residential cleanup at the site. EPA and its contractors will begin developing specific plans for these activities in the summer of 2024.

- Is EPA partnering with academics, such as those taking soil samples of George Lake?

As of the date of this publication, EPA has not been contacted by any academics doing work at or near the site and is not coordinating or partnering with any academics on site work. However, EPA always invites input from members of academia.

- Is there anything that community members can do to improve the level of communication between EPA and the community?

Community members are welcome to call or email EPA staff with any concerns or questions.

- Are there upcoming community meetings?

No additional community meetings are planned at this time, but any future meetings will be announced in advance using multiple outlets and resources.

- How was the open house style of meeting received? What was the feedback?

People who participated in the community interviews said that open house meetings are nice because they can direct questions to organizations and resources that attend the meeting outside of the EPA. People also said there is value in hearing other community members' opinions in an open forum format, although some people expressed a concern that the format lends itself to grandstanding by a few vocal individuals. This feedback has also been included in the CIP within the Communication section of Community Involvement.

- Were EPA presentations made available? Can the presentations and more information be found on the website?

Yes. Presentations shared with the public during EPA's public meetings for the site, along with EPA's Superfund Process training, are available on the site's webpage at [www.epa.gov/superfund/federated-metals](http://www.epa.gov/superfund/federated-metals) within the "Web Content" weblink of the Site Documents & Data section.

- Can EPA send a warning out to residents with kids or grandkids who play on their properties?

EPA has conducted extensive outreach to inform residents about the site and the potential contamination associated with the site. EPA will continue using tools and resources available to ensure residents with kids or grandkids are aware of the potential risks in the area.

- Was it the EPA or Hammond that ran meetings in 2018?

EPA was the primary organization that prepared and facilitated the May 2018 public meeting at the Whiting Family YMCA. EPA coordinated closely with the cities of Hammond and Whiting and with state agencies to make site information widely available to residents and businesses.

### Soil Testing and Remediation

- Will there be additional soil testing?

Yes. Properties that have not yet been tested will be sampled, and some properties that have already been sampled may need to be resampled.

- How will you sample residential properties going forward?

Details of the residential soil sampling process EPA will use going forward will be outlined in the sampling plan to be developed in the summer and fall of 2024. EPA will share details when they are available.

- What happens when people refuse or ignore sampling of their property?

It is not uncommon for some property owners to deny access for sampling or remediation. In those instances, EPA makes repeated attempts to communicate the potential risks of not addressing soil contamination and to request access.

- What is the difference between X-ray fluorescence, or XRF, soil testing and lab soil testing? Is there a lot of variances in results?

XRF is a technique that uses the interaction of X-rays with a material to determine what chemical elements it contains. Because XRF can be done with a hand-held tool, it has the advantage of providing fast characterization. The results may be quantitative, but individual XRF machines typically have a bias, either high or low, when compared with laboratory results. A study to understand the bias of a specific machine is typically undertaken so that XRF results can be adjusted to account for the bias.

Laboratory soil testing uses rigorous preparation and analytic procedures to quantify the concentration of constituents in a sample. EPA typically bases excavation decisions on laboratory testing but can use XRF for screening purposes and to evaluate the base of excavation concentrations.

- Who pays for the remediation process and what happens to things in the yard? Will digging be done in backyards by machinery? How do you get machines in backyards? Do fences come down and get paid for?

EPA has an “enforcement first” policy in which EPA seeks to find liable parties to perform and pay for cleanup. To date, EPA has not identified any such parties for FMC. Unless that changes, the remedial investigation, feasibility study, and remedial design phases will be paid for by EPA. EPA would pay 90 percent of remedial action itself, with the State of Indiana funding the remaining 10 percent.

Before excavating, EPA prepares a diagram and photolog of the property that documents the presence of fences, plants, paved areas, etc. Large trees are typically manually excavated and not removed. All other landscape plants would be removed, and the soil mechanically excavated. A gate or portion of a fence may also need to be removed. Removed items such as fences and plants are replaced with the same material or plant as was removed.

- When soil is remediated, is it completely replaced? What happens to the trees? Do the mature trees tolerate the remediation?

Large trees are typically manually excavated and not removed. All other landscape plants would be removed, and the soil mechanically excavated. Excavated soil is disposed of in a licensed landfill and new, clean soil brought in before sod and/or landscape plants are placed. New vegetation must be watered regularly until established.

- The lead testing threshold is 400 parts per million, or ppm, right?

EPA’s removal program excavated soil used a threshold of 1,200 ppm, combined with the presence of sensitive populations, to identify properties for background. EPA has not established a cleanup level for additional excavations.

- Who does the actual remediation?

Contractors and sub-contractors to EPA.

- Why are grids used in the boundaries for EPA testing?

EPA identified an area of interest for sampling, which was subsequently enlarged. EPA may present data using grids so that the concentrations on specific properties cannot be identified.

- Will remediation deal with hotspots along the bike path?

The bike path directly north of the former FMC facility has been partially excavated. If additional areas are determined to be above a cleanup level, the remediation will address it.



## Federated Metals Site

- Do the employees at the business currently operating on the FMC site know about the potential contamination there?

Because of the diverse outreach EPA has done over the past few years, it is our understanding that a number of employees at the businesses located at the site are aware of the potential contamination. EPA will continue conducting outreach to businesses and residents in the area to increase awareness about the site and potential contamination associated with it.

- Will Federated Metals be cleaned up after the residential areas? Are buildings going to be blown up in the process?

The former facility area and George Lake are part of Operable Unit, or OU, 2, which will be addressed once a remedy for OU1 is underway. The Superfund program addresses releases of contamination into the environment. This may include indoor dust if it migrated there from the environment. However, the Superfund program does not address contaminants that are part of the buildings themselves, and removal of buildings is generally not necessary to protect human health and the environment.

- Does the EPA think the buildings can be reused?

Risks to persons working in the buildings on the former facility have not been evaluated.

- What are the plans for the Federated Metals site itself? Will the businesses there continue operating?

The former facility and the risks it may pose have not been fully evaluated. After that evaluation, EPA will consider measures that may be necessary to protect human health and the environment.

- How can you clean up the site and not re-contaminate the neighborhood?

The potential for recontamination is considered as a factor in remedy selection. EPA cleanups regularly take measures to ensure that airborne dust and run-off from areas undergoing remediation do not migrate elsewhere. These measures include things like air monitoring, dust suppression and proper management of waste.

- Why is the onsite landfill not mentioned as a part of the history in any EPA documents?

The landfill is referenced numerous places in EPA's *Hazard Ranking System (HRS) Documentation Record*, available at <https://semspub.epa.gov/src/document/HQ/404023>, as well as other documents. See pages 33 to 34 specifically.

## George Lake

- Is EPA going to drain George Lake?

Lake sediment and surface water, and the risks they may pose, have not been fully evaluated. After that evaluation, EPA will consider measures that may be necessary to protect human health and the environment.

- What would you do with the lake if you found contamination?

Most sediment and surface water remedies involve dredging and/or capping sediment. The type, source, magnitude, and extent of contamination would all be considered in developing a protective remedy.

- Is there any way to remove invasive species from the lake if it is remediated?

The Superfund program addresses releases of contamination into the environment. However, the U.S. Fish and Wildlife or Indiana Department of Natural Resources may have the ability to address invasive species.

### Other Concerns

- How does PolyJohn play into this cleanup?

EPA is addressing releases from smelting operations from the Federated Metals facility. EPA does not have information that PolyJohn has responsibility for releases associated with the FMC site.

- What is the long-term proposal for groundwater monitoring?

EPA Superfund has not investigated or selected a remedy for groundwater and does not have a long-term groundwater monitoring proposal. However, groundwater monitoring is being performed in relation to a Corrective Action under RCRA. You may contact Monica Onyszko at [onyszko.monica@epa.gov](mailto:onyszko.monica@epa.gov) or (312) 353-5139 for additional information.

- Is the information from the city of Hammond reliable information? How was testing done, and is it reliable?

Please see information above on the difference between XRF and laboratory data. XRF data are generally reliable for some purposes when the bias of the XRF machine has been evaluated.

- Was testing done at the playpark that used to be behind the lakeview strip?

Testing was performed along much of the strip between the bike path and Lakeview Street.

- Did Lost Marsh Golf Course used to be a landfill?

EPA understands that the Lost March Golf Course is the result of a Brownfields cleanup of a slag pile unrelated to the Federated Metals facility.

- How did the smokestack demolition impact pollution and contamination in the area?

EPA has not yet begun a full investigation of the site.

- What exactly is going to happen to the residences around the site?

Although the cleanup plan has not yet been developed, EPA anticipates excavating soil on contaminated properties, backfilling with clean soil, and restoring to pre-excavation conditions.

## General Comments

- It would be something to get the schools involved. Get the kids involved so they can understand a little bit more. Highschool is when you start getting into some politics in school with council and such. Thinks age is a part of the inclusivity aspect that EPA mentioned and that kids should be involved.
- I didn't like interview meetings being held at the library because of parking issues.
- There is potential for bioremediation in natural spaces around the site. Ability of sunflowers to treat contamination, for example.
- I realized that the anger and trauma experienced by communities affected by contamination is not unique to Whiting and Hammond.
- The lack of responses to participation could be from townspeople being used to having their issues pushed to the side.
- We would like meetings to be recorded and posted on the website. Interaction between the community and officials is the important part of meetings.
- There are not many areas left for kids to play.

## Community Involvement Activities

To meet federal requirements and address community concerns and questions described in the Community Interviews section, EPA has conducted (or will conduct) the activities described below. Through these activities, it is our goal to inform, involve and engage the community during site cleanup decisions and efforts. As the needs of the community change, we will modify the community involvement strategies to address them. The following plan is intended as an opportunity for communication between the community and EPA and to address key concerns and questions raised during the discussions and community interviews conducted in December 2023.

### Maintain a Point of Contact and Toll-free Number

Adrian Palomeque is the primary liaison between EPA and the community. Palomeque serves as the point of contact for community members and fields general questions about the site. For technical site issues, he coordinates with EPA's RPM for the site, Leslie Patterson.

We will include current contact information for the project staff on all written and electronic information and will notify the community of any contact information changes. The next page includes site contact information.

**EPA has designated the following people as primary site contacts for local residents:**

**Adrian Palomeque**  
Community Involvement Coordinator  
440-250-1715  
Toll-free Ext.: 61715  
[palomeque.adrian@epa.gov](mailto:palomeque.adrian@epa.gov)

**Leslie Patterson**  
Remedial Project Manager  
312-886-4904  
Toll-free Ext.: 64904  
[patterson.leslie@epa.gov](mailto:patterson.leslie@epa.gov)

*They can also be reached weekdays toll-free at 800-621-8431 from 8:00 a.m. to 4:30 p.m.*

Adrian Palomeque is located in the Cleveland office and Leslie Patterson is located in the Chicago office. Both can be reached using the toll-free number listed in the box above. Ask for them by name or use the telephone extensions listed above. Residents can call these numbers as questions or concerns arise instead of waiting for a public meeting or to receive written information. We will provide the toll-free number periodically in local newspaper advertisements and include the toll-free number in all fact sheets and all our other communications with the public.

## Share Information on the Internet

We will provide information on activities and post communications on the following EPA website. The website will be updated as events occur. [www.epa.gov/superfund/federated-metals](http://www.epa.gov/superfund/federated-metals)

### Superfund Site:

- Superfund Home
- This Site's Home Page**
- Site Contacts
- Cleanup Activities
- Health & Environment
- Redevelopment
- Site Documents & Data
- View Site on Map

## FEDERATED METALS CORP WHITING HAMMOND, IN

### Background

#### Summary

The Federated Metals Corporation (FMC) site is a former metal smelting, refining, recovery, and recycling facility, that operated nearly 50 years in Hammond, Indiana along the shore of Lake George. After operations ceased at FMC, the corporation sold the manufacturing buildings and partially performed an EPA-required cleanup on site but filed for bankruptcy and abandoned the facility before the work was completed. A bankruptcy Trust was established to finish the EPA-required work at the smelter, but no Trust funds were available to investigate soil contamination in the surrounding neighborhoods. EPA's Superfund program then performed a ... [Continue reading background >](#)

### Site Contacts

**Community Involvement Coordinator**  
[Adrian Palomeque](#)  
(440) 250-1715

**Remedial Project Manager**  
[Leslie Patterson](#)  
(312) 886-4904

[View all site contacts >](#)

### Site Location

**Street Address:**  
2230 INDIANAPOLIS BLVD  
HAMMOND, IN 46394

Community members interviewed recommended that EPA use email, mail, the local newspaper, and local Facebook pages to reach people as well as communicating with the cities of Hammond and Whiting. See Appendix B for a list of interested parties EPA will provide information to post on their sites and/or distribute to their members electronically.

## Update the Site Mailing List

We have established a mailing list of local community members, organizations, businesses and officials for the site. This list will be used for mailing fact sheets, site updates, invitations to public meetings and events and other site-related information mailed to the community. We will update the list regularly to reflect address changes and changes in elected officials and to add new people interested in site activities.

We use the site mailing list to distribute written information such as fact sheets and meeting notifications. This is a way to ensure that those who do not have access to the internet or other information sources still have a way to receive information directly about the site and are notified about important meetings. The mailing list is for EPA use only and is not shared with outside entities. If a community member is interested in being placed on the mailing list, they can contact Adrian Palomeque.

## Prepare and Distribute Fact Sheets, News Releases, and Public Notices

We will prepare and distribute fact sheets, letters and site updates to those on the site mailing and e-mail lists summarizing current information about the site and describing upcoming activities. These documents are written in non-technical language and are typically published to coincide with important site activities. These fact sheets and other communications will be posted on EPA's website and will be printed and distributed to locations in the community. People interviewed provided EPA with numerous locations throughout the neighborhoods to distribute written materials including local organizations, community centers, churches, schools, libraries, etc. Those locations are listed under neighborhood organizations in Appendix B.

EPA will prepare and release announcements to the local newspaper, such as *The Times of Northwest Indiana*, to share information about events such as significant site investigation findings, public comment periods, public meetings and completion of major milestones, such as the proposal of a cleanup plan. We will also provide this information to the city officials for posting on the city website as well as publishing in any community newsletters and social media platforms.

We use these types of documents to give the community detailed information in a relatively quick, simple and easy-to-understand manner. News releases allow us to reach large audiences quickly. In addition to being shared with individuals on the site mailing list, we also place the fact sheets, site updates, and news releases in the **information repository** and post them on EPA's website:

[www.epa.gov/superfund/federated-metals](http://www.epa.gov/superfund/federated-metals)



## Establish and Maintain an Information Repository and Administrative Record

We have set up a local information repository for the site at the Whiting Public Library located at 1735 Oliver Street in Whiting, Indiana. Paper copies of the CIP and other site-related documents are available at the library for residents to view.



Whiting Public Library at 1735 Oliver Street in Whiting, Indiana.

The repository is a collection of site information available to the public for reading and printing. Documents include fact sheets, technical reports, the CIP, general Superfund information and other documents. EPA adds new documents about the site as the documents become available. Information repositories give residents local access to site information in forms that can be easily read and printed for future use. An online information repository is also available on the site's web page [www.epa.gov/superfund/federated-metals](http://www.epa.gov/superfund/federated-metals) to access information electronically.

A copy of the **administrative record** for the site can be found at the repositories listed above, at the EPA Region 5 Superfund Records Center in Chicago (see Appendix D), and on the site webpage. We will update the administrative record, as necessary. The administrative record gives residents a paper trail of all documents the EPA relied on, or considered, to reach decisions about the site cleanup.

## Meet with the Public and Participate in Local Events

A public meeting is an opportunity for EPA to present specific information and a proposed course of action. Meetings may either be held in person or virtually. EPA staff is available to share information and answer questions. A public meeting is not a formal public hearing where testimony is received. Instead, it might be a meeting to exchange information or comments. In addition, EPA may hold an informal open-house style meeting, called an availability session, where residents can meet EPA experts one-on-one to discuss the activities at the site. Either type of meeting allows community members an opportunity to express their concerns and ask questions of EPA, state or local government officials. Public meetings or availability sessions can be held at various times throughout the investigation and cleanup process. We

typically schedule a meeting when there are technical milestones or when the community has expressed an interest in having a meeting.

A public hearing is a formal meeting where we hear the public's views and concerns about an EPA action or proposal. There are specific regulations about when the EPA is required to consider such comments when evaluating its actions. Public hearings are recorded by a professional transcriber and become part of the administrative record. The comments are also posted on the internet.

EPA will consider conducting additional meetings at different times and locations throughout the community to give all residents an opportunity to attend as needed. Most residents said Whiting High School would be the best location to hold a meeting.

On occasion, neighborhood or community groups will request EPA's participation in events to provide site information and respond to resident concerns. EPA considers invitations and offers to speak to community groups based on the event's ability to meaningfully reach members of the public. During our community interviews, residents suggested that EPA participate in events to connect with the community.

## Provide Additional Tools for Communities as Needed

There are additional programs that can be helpful to the community if there is a need for them. Two of these programs are the **Technical Assistance Services for Communities**, or **TASC**, and the **Technical Assistance Grant**, or **TAG**. The TASC program supplies communities with technical help so they can better understand the science, regulations and policies of environmental issues and EPA actions. TAGs provide money for activities that help communities participate in decision-making at eligible Superfund sites. For more information on these and other programs available, visit [www.epa.gov/superfund/superfund-technical-assistance-communities](http://www.epa.gov/superfund/superfund-technical-assistance-communities).

Another tool that can be helpful to the community is creating a **Community Advisory Group**, or **CAG**. A CAG is made up of representatives of diverse community interests. A CAG is designed to serve as the focal point for the exchange of information among the local community and EPA, the State regulatory agency, and other pertinent Federal agencies involved in cleanup of the Superfund site. Its purpose is to provide a public forum for community members to present and discuss their needs and concerns related to the Superfund decision-making process. A CAG can assist EPA in making better decisions on how to clean up a site. The existence of a CAG does not eliminate the need for the Agency to keep the community informed about plans and decisions throughout the Superfund process. For more information about the CAGs, visit [www.epa.gov/superfund/superfund-community-advisory-groups](http://www.epa.gov/superfund/superfund-community-advisory-groups).

## Evaluate and Adjust Community Involvement and Outreach Efforts

This CIP was designed to consider site- and community-specific factors as well as to comply with federal requirements. This CIP summarizes community concerns gathered during discussions and interviews with local residents and other community members. Based on that information, EPA has developed the objectives of the community involvement program for the site and some specific activities to address these concerns. We recognize that changes in areas, such as community perceptions, information needs and population demographics can occur over time and that such changes may necessitate a revised

approach to conducting community involvement activities. For this reason, as well as to determine whether the activities in this revised plan are achieving their intended objectives, we will conduct periodic reviews to determine whether additional activities are warranted or whether changes to the activities outlined in this plan are necessary. As the needs of the community change, we will modify the community involvement strategies to address them in a CIP revision.

The following table presents the status of the activities above.

Activity	Status
Establish and maintain a point of contact: <b>Adrian Palomeque, 440-250-1715</b>	Completed
Establish a toll-free number for residents to ask questions and receive information: 800-621-8431	Completed
Maintain communication with local officials, agencies and community residents	Ongoing
Share information on the Internet: <a href="http://www.epa.gov/superfund/federated-metals">www.epa.gov/superfund/federated-metals</a>	Ongoing
Create, update and maintain the site mailing list	Ongoing
Prepare and distribute fact sheets and site updates	Ongoing
Establish and maintain a site-specific information repository	Completed/Ongoing
Establish and maintain a site-specific administrative record	Completed/Ongoing
Conduct public meetings, hearings and information sessions	As needed/Ongoing
Participate in local events	As appropriate
Prepare site videos	As appropriate
Provide additional tools for communities as needed	As needed/Ongoing
Write and distribute news releases and public notices	Ongoing
Evaluate community involvement and outreach efforts and adjust	As needed



# Environmental Justice

The Environmental Justice Act of 1992 obligates federal agencies to make **environmental justice, or EJ**, part of its overall mission. EPA's goal is to provide an environment where all people enjoy the same degree of protection from environmental and health hazards and equal access to the decision-making process to maintain a healthy environment in which to live, learn, and work.

In 2021, President Biden issued two executive orders – Executive Order 13985 (Advancing Racial Equity and Support for Underserved Communities Through the Federal Government) and Executive Order 14008 (Tackling the Climate Crisis at Home and Abroad) – that give direction to federal agencies to promote and work toward proactively achieving EJ. Federal agencies have been directed to develop and implement policies and strategies that strengthen compliance and enforcement, incorporate EJ considerations in their work, increase community engagement and demonstrate that at least 40 percent of environmental benefits occur in disadvantaged communities. Additionally, in 2023, President Biden issued Executive Order 14096 (Revitalizing Our Nation's Commitment to Environmental Justice for All) which reaffirms that the pursuit of EJ is a duty of all executive branch agencies and should be incorporated into their missions, directs federal agencies to actively facilitate meaningful public participation and just treatment of all people in agency decision-making, and charges federal agencies with conducting new assessments of their EJ efforts and developing, implementing and periodically updating an Environmental Justice Strategic Plan.

**U.S. EPA has this goal for all communities and persons across this nation. It will be achieved when everyone enjoys:**

- the same degree of protection from environmental and health hazards, and
- equal access to the decision-making process to have a healthy environment in which to live, learn and work.

Environmental justice means the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other Federal activities that affect human health and the environment so that people:

- are fully protected from disproportionate and adverse human health and environmental effects (including risks) and hazards, including those related to climate change, the cumulative impacts of environmental and other burdens, and the legacy of racism or other structural or systemic barriers; and
- have equitable access to a healthy, sustainable, and resilient environment in which to live, play, work, learn, grow, worship, and engage in cultural and subsistence practices.

Meaningful engagement means:

- providing timely opportunities for members of the public to share information or concerns and participate in decision-making processes;

- fully considering public input provided as part of decision-making processes;
- providing technical assistance, tools, and resources to assist in facilitating meaningful and informed public participation, whenever practicable and appropriate; and
- seeking out and encouraging the involvement of persons and communities potentially affected by Federal activities by:
  - ensuring that agencies offer or provide information on a Federal activity in a manner that provides meaningful access to individuals with limited English proficiency and is accessible to individuals with disabilities;
  - providing notice of and engaging in outreach to communities or groups of people who are potentially affected and who are not regular participants in Federal decision-making; and
  - addressing, to the extent practicable and appropriate, other barriers to participation that individuals may face.

EPA works with all stakeholders, including the State of Indiana, the Cities of Whiting and Hammond, and local residents to constructively and collaboratively address environmental and public health issues and concerns. The Office of Environmental Justice and External Civil Rights (OEJECR) coordinates the Agency's efforts to integrate environmental justice into all policies, programs, and activities.

Specific information that combines environmental and demographic socioeconomic indicators for the area around the FMC site utilizing the mapping tool EJScreen is available in Appendix E of this plan. For additional information regarding EJ, including grants and resources, strategic planning, and collaborative partnerships, please contact the Regional EJ Coordinator below or visit [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice).

**Kathy Triantafillou**

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# Appendix A

## Glossary – Initials – Acronyms

**Administrative Record.** The body of documents that forms the basis for the selection of a particular response at a site. For example, the Administrative Record for remedy selection includes all documents that were considered or relied upon to select the remedy through the **record of decision**.

**Arsenic.** Arsenic is a naturally occurring element that is found in combination with either inorganic or organic substances to form many different compounds. Inorganic arsenic compounds are found in soils, sediments, and groundwater. These compounds occur either naturally or as a result of mining, ore smelting, and industrial use of arsenic. Organic arsenic compounds are found mainly in fish and shellfish. People are most likely to be exposed to inorganic arsenic through drinking water. Other sources of inorganic arsenic exposure include contact with contaminated soil.

**Bipartisan Infrastructure Law.** In 2021, Congress passed the Bipartisan Infrastructure Deal (Infrastructure Investment and Jobs Act) to rebuild roads, bridges and rails, expand access to clean drinking water, ensure citizens have access to high-speed internet, tackle the climate crisis, advance environmental justice, and invest in communities that have often been left behind. The Bipartisan Infrastructure law provides EPA with more than \$60 billion over five years for a wide range of environmental programs. In 2023, EPA announced the second wave of approximately \$1 billion in funding from President Biden’s Bipartisan Infrastructure Law to start new cleanup projects at 22 Superfund sites and expedite over 100 other ongoing cleanups across the country, including the Ottawa Radiation Superfund Site. To learn more about this law, refer to the following websites:

[Fact Sheet: The Bipartisan Infrastructure Deal](#)

[EPA: Biden-Harris Administration Announces Additional \\$1B in Bipartisan Infrastructure Law Funds to Start New Cleanup Projects and Expedite On-going Cleanup Work Across the Country](#)

**BIL.** See Bipartisan Infrastructure Law.

**CAG.** Community Advisory Group.

**CERCLA.** See Comprehensive Environmental Response, Compensation and Liability Act.

**CIC.** See Community Involvement Coordinator.

**CIP.** See Community Involvement Plan.

**Cleanup.** Actions taken to deal with a release or threat of release of a hazardous substance that could affect humans and/or the environment. The term “cleanup” is sometimes used interchangeably with the terms “remedial action,” “remediation,” “removal action,” “response action,” or “corrective action.”

**Community Advisory Group.** A Community Advisory Group (CAG) is made up of representatives of diverse community interests. A CAG is designed to serve as the focal point for the exchange of information among the local community and EPA, the State regulatory agency, and other pertinent Federal agencies involved in cleanup of the Superfund site. Its purpose is to provide a public forum for community members to present and discuss their needs and concerns related to the Superfund decision-making process. A CAG can assist EPA in making better decisions on how to clean up a site. It offers EPA a unique opportunity to hear-and seriously consider-community preferences for site cleanup and remediation. However, the existence of a CAG does not eliminate the need for the Agency to keep the community informed about

plans and decisions throughout the Superfund process. For more information, please visit: [www.epa.gov/superfund/superfund-community-advisory-groups](http://www.epa.gov/superfund/superfund-community-advisory-groups).

**Community Engagement.** The process of involving communities in all phases of the cleanup process. Communities are asked to provide input on how the cleanup will be conducted and how it may affect community plans and goals. See also Community Involvement.

**Community Involvement.** The term used by EPA to identify its process for engaging in dialogue and collaboration with communities affected by Superfund site. EPA's community involvement approach is founded in the belief that people have a right to know what the Agency is doing in their community and to have a say in it. Its purpose is to give people the opportunity to become involved in the Agency's activities and to help shape the decisions that are made.

**Community Involvement Coordinator.** The EPA official whose lead responsibility is to involve and inform the public about the Superfund process and response actions in accordance with the interactive community involvement requirements set forth in the National Oil and Hazardous Substances Pollution Contingency Plan.

**Community Involvement Plan.** A plan that outlines specific community involvement activities that occur during the investigation and cleanup at the site. The CIP outlines how EPA will keep the public informed of work at the site and the ways in which residents can review and comment on decisions that may affect the final actions at the site. The document is available in the site's information repository maintained by EPA. The CIP may be modified as necessary to respond to changes in community concerns, information needs and activities.

**Comprehensive Environmental Response, Compensation, and Liability Act.** A federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act. Commonly known as Superfund, CERCLA is intended to protect people's health and the environment by investigating and cleaning up abandoned or uncontrolled hazardous waste site. Under the program, EPA can either:

- Pay for site cleanup when parties responsible for the contamination cannot be located or are unwilling or unable to do the work; or
- Take legal action to force parties responsible for site contamination to clean up the site or pay back the federal government for the cost of the cleanup.

**Contaminant(s).** Any physical, chemical, biological or radiological substance or matter that has an adverse effect on air, water or soil.

**Contamination.** Introduction into water, air and soil of microorganisms, chemicals, toxic substances, wastes or wastewater in a concentration that makes the medium unfit for its next intended use. Also applies to surfaces of objects, buildings and various household use products.

**Dross.** A mass of solid impurities floating on a molten metal. It can be skimmed off, recycled and used in secondary metal making.

**EJ.** See Environmental Justice.

**Emergency Response Action.** Responses to hazardous waste releases that threaten the public health, welfare or the environment. Emergency response actions tend to be rapid to address immediate threats.

**Environmental Justice.** The just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other Federal activities that affect human health and the environment so that people:

- are fully protected from disproportionate and adverse human health and environmental effects (including risks) and hazards, including those related to climate change, the cumulative impacts of environmental and other burdens, and the legacy of racism or other structural or systemic barriers; and
- have equitable access to a healthy, sustainable, and resilient environment in which to live, play, work, learn, grow, worship, and engage in cultural and subsistence practices.

**Feasibility Study.** The feasibility study (FS) is the mechanism for the development, screening, and detailed evaluation of alternative remedial actions.

**Federal Consent Decree.** An agreement or settlement that resolves a dispute between two parties without admission of guilt or liability. A judicial consent decree is the only settlement type that EPA can use for the final cleanup phase (remedial action) at a Superfund site.

**FS.** See Feasibility Study.

**Hazardous Substance(s).** Any material that poses a threat to human health and/or the environment. Typical hazardous substances are toxic, corrosive, ignitable, explosive or chemically reactive. Any substance designated by EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or is otherwise released into the environment.

**Hazardous Waste.** Byproducts that can pose a substantial or potential hazard to human health or the environment when improperly managed. Hazardous wastes usually possess at least one of four characteristics (ignitability, corrosivity, reactivity or toxicity) or appear on special EPA lists.

**Information Repository.** A file containing current information, technical reports and reference documents regarding a site. The information repository usually is located in a public building convenient for local residents such as a public school, town hall or library.

**Lead.** Lead is a naturally occurring element found in small amounts in the earth's crust. While it has some beneficial uses, it can be toxic to humans and animals, causing health effects. Much of our exposure comes from human activities including the use of fossil fuels including past use of leaded gasoline, some types of industrial facilities and past use of lead-based paint in homes. Lead and lead compounds have been used in a wide variety of products found in and around our homes, including paint, ceramics, pipes and plumbing materials, solders, gasoline, batteries, ammunition and cosmetics.

**Metals.** Metals, or heavy metals, is a broad term used to describe a group of naturally occurring metallic elements of high molecular weight and density when compared to water. At low concentrations, certain heavy metals, such as iron, zinc, copper, and manganese, are essential for human survival but can become toxic agents at higher concentrations. Other heavy metals, such as arsenic, cadmium, lead, thallium, and mercury, serve no biological role. However, they will inevitably enter the human body due to their presence in the environment.

**National Priorities List.** EPA's list of serious uncontrolled or abandoned hazardous waste site identified for possible long-term cleanup under Superfund. The list is based primarily on the score a site receives from the Hazard Ranking System. EPA is required to update the National Priorities List at least once a year.

**NPL.** See National Priorities List.

**Operable Unit.** During cleanup, a site can be divided into several distinct areas depending on the complexity of the problems associated with the site. These areas called operable units may address geographic areas of a site, specific site problems, or areas where a specific action is required. An example of a typical operable unit could include the removal of drums and tanks from the surface of a site.

**OU.** See Operable Unit.

**Potentially Responsible Parties:** Any individual or company (including owners, operators, transporters or generators that has been identified as being potentially responsible for or contributing to a spill or other potential contamination at a Superfund site. Whenever possible, through administrative and legal action, EPA requires PRPs to clean up hazardous sites that have been contaminated.

**Public Comment Period(s).** A formal opportunity for community members to review and contribute written comments on various EPA documents or actions.

**Public Meeting(s).** Formal public sessions that are characterized by a presentation to the public followed by a question-and-answer session. Formal public meetings may involve the use of a court reporter and the issuance of transcripts. Formal public meetings are required only for the proposed plan and Record of Decision amendments.

**PRPs:** See Potentially Responsible Parties.

**RCRA.** See Resource Conservation and Recovery Act.

**Record of Decision.** A **ROD** is a legal, technical and public document that explains which cleanup alternative will be used at a Superfund NPL site. The ROD is based on information and technical analysis generated during the remedial investigation and feasibility study and consideration of public comments and community concerns.

**Remedial Investigation.** The remedial investigation is a study designed to collect the data necessary to determine the nature and extent of contamination at a site.

**Remedial Project Manager.** The EPA or state official responsible for overseeing on-site remedial action.

**Removal Action.** Removal actions are quick responses to immediate threats from hazardous substances to eliminate dangers to the public. Typical situations requiring removal actions include chemical fires or explosions, threats to people from exposure to hazardous substances, or contamination of drinking water supplies. Examples of removal actions include removing and disposing of hazardous substances, constructing a fence or taking security precautions to limit human access to a site, providing a temporary alternative water supply to local residents when drinking water is contaminated, and temporarily relocation area residents if necessary.

**Removal Management Level.** Removal Management Levels, or RMLs, are chemical-specific concentrations for individual contaminants in tap water, air, and soil. They are calculated with risk levels and exposure scenarios that align with identifying areas, contaminants, and conditions where a removal action may be appropriate. RMLs are used to help define areas, contaminants and conditions that may warrant a removal action at a site. The generic RMLs are generally higher levels than those selected as final cleanup levels at sites where a remedial action may be required under Superfund authority.

**Refining.** In metallurgy, refining consists of purifying an impure metal.

**Resource Conservation and Recovery Act.** The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from cradle to grave. This includes the generation,

transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

**RI.** See Remedial Investigation.

**RML.** See Removal Management Level.

**ROD.** See Record of Decision.

**RPM.** See Remedial Project Manager.

**SARA.** See Superfund Amendments and Reauthorization Act.

**Smelting.** The process used to refine ores, which contain metals, into usable metals. The smelting process melts the ore to separate the metal, and a chemical agent decomposes the ore, driving off other elements as dross or slag, and leaving the metal base behind.

**Superfund Amendments and Reauthorization Act.** Modifications to the Comprehensive Environmental Response, Compensation and Liability Act, enacted on October 17, 1986.

**Superfund.** The program operated under the legislative authority of CERCLA that funds and carries out EPA solid waste emergency and long-term removal and remedial activities. These activities include establishing the National Priorities List, investigating site for inclusion on the list, determining their priority and conducting and/or supervising cleanup and other remedial actions.

**TAG.** See Technical Assistance Grant.

**TASC.** See Technical Assistance Services for Communities.

**Technical Assistance Grant.** This grant provides money for activities that help communities participate in decision making at eligible Superfund sites.

**Technical Assistance Services for Communities.** This program supplies communities with technical help so they can better understand the science, regulations and policies of environmental issues and EPA actions.

# Appendix B

## List of Contacts

### Environmental Protection Agency



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### Indiana Department of Environmental Management

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### Agency for Toxic Substances and Disease Registry

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### **Chris Sarvanidis**

City Councilmember At-Large  
1627 Cleveland Ave.  
Whiting, IN 46394  
219-688-2261  
[sarvo2015@aol.com](mailto:sarvo2015@aol.com)

## Lake County Officials

### **David Hamm**

Councilmember, District 1  
2293 N Main St.  
Crown Point, IN 46307  
219-755-3280

### **Clorius Lay**

Councilmember, District 2  
2293 N Main St.  
Crown Point, IN 46307  
219-755-3280

### **Shawn M. Turpin**

City Councilmember At-Large  
1443 119<sup>th</sup> St.  
Whiting, IN 46394  
219-656-5369  
[STurpin@whitingindiana.com](mailto:STurpin@whitingindiana.com)

### **John Haynes**

City Clerk-Treasurer  
1443 119<sup>th</sup> St.  
Whiting, IN 46394  
219-659-3100

### **John Sotello**

Police Chief  
1914 Schrage Ave.  
Whiting, IN 46394  
219-659-2131  
[jsotello@whitingindiana.com](mailto:jsotello@whitingindiana.com)

### **Don Harbin**

Fire Chief  
1916 Schrage Ave.  
Whiting, IN 46394  
219-659-1069  
[Dharbin@whitingindiana.com](mailto:Dharbin@whitingindiana.com)

### **Parks and Recreation**

1443 119<sup>th</sup> St.  
Whiting, IN 46394  
219-659-0860  
[parks@whitingindiana.com](mailto:parks@whitingindiana.com)

### **Charlie Brown**

Council President, District 3  
2293 N Main St.  
Crown Point, IN 46307  
219-755-3280

### **Pete Lindemulder**

Councilmember, District 4  
2293 N Main St.  
Crown Point, IN 46307  
219-755-3280

**Christine Cid**

Council Vice-President, District 5  
2293 N Main St.  
Crown Point, IN 46307  
219-218-3126

**Ted Bilski**

Councilmember, District 6  
2293 N Main St.  
Crown Point, IN 46307  
219-755-3280

**Randy Niemeyer**

Councilmember, District 7  
2293 N Main St.  
Crown Point, IN 46307  
219-755-3280

**Kyle W. Allen, Sr.**

Commissioner, District 1  
2293 N Main St., Building A, Floor 3  
Crown Point, IN 46307  
219-755-3204

**Jerry Tippy**

Commissioner, District 2  
2293 N Main St., Building A, Floor 3  
Crown Point, IN 46307  
219-755-3203

**Michael C. Repay**

Commissioner, District 3  
2293 N Main St., Building A, Floor 3  
Crown Point, IN 46307  
219-755-3205

**Oscar Martinez**

Sheriff  
2293 N Main St., Building C, Door J-2  
Crown Point, IN 46307  
219-755-3400

**LaTonya Spearman**

Assessor  
2293 N Main St., Building A, Floor 2  
Crown Point, IN 46307  
219-755-3100

**John Petalas**

Treasurer  
2293 N Main St., Building A, Floor 2  
Crown Point, IN 46307  
219-755-3760

## **Neighborhood Organizations**

**United Neighbors Inc.**

5925 Calumet Ave., Suite 204  
Hammond IN 46320  
219-937-0200

<https://www.unihammond.com/>

**Pulaski Park Neighborhood Association**

American Legion Post 428  
617 Gostlin St. #428  
Hammond, IN 46327  
<https://www.gohammond.com/events/pulaski-park-neighborhood-association-022321/>

**Greater Hammond Community Services, Inc.**

824 Hoffman St.  
Hammond, IN 46327  
219-932-4800  
<http://www.greaterhammond.com/>

**Hammond Hispanic Community Committee**

824 Hoffman St.  
Hammond, IN 46327  
219-804-2108  
[hhccin1993@gmail.com](mailto:hhccin1993@gmail.com)  
<https://www.hhccin.com/>

**Community Services of Northwest Indiana**

824 Hoffman St.  
Hammond, IN 46327  
219-932-4800  
[info@greaterhammond.com](mailto:info@greaterhammond.com)  
<https://communityservicesofnwi.com/>

**American Legion Post #80**

2003 Indianapolis Blvd.  
Whiting, IN 46394  
219-659-0215

**Elk Lodge #1273**

1521 119<sup>th</sup> St.  
Whiting, IN 46394  
219-659-9528

<https://www.elks.org/lojges/home.cfm?lodgenumber=1273>

**Daughters of Isabella**

1438 Roberts Ave.  
Whiting, IN 46394  
219-659-0090

**Knights of Columbus**

1120 119<sup>th</sup> St.  
Whiting, IN 46394  
219-659-9837

<https://www.facebook.com/whitingkofc>

**Lions Club**

P.O. Box 349  
Whiting, IN 46394

[efrenagomez10@yahoo.com](mailto:efrenagomez10@yahoo.com)

<https://www.facebook.com/WhitingLionsClub/>

**Roosevelt Democratic Club Inc.**

1934 Front St.  
Whiting, IN 46394  
219-659-3781

<https://www.facebook.com/whitingkofc>

**Sokol Lodge #269**

1908 Calumet Ave.  
Whiting, IN 46394  
219-659-9633

<https://sokolusa.org/>

**S.W.A.N**

<https://www.facebook.com/groups/s.w.a.n.sawehitingandneighbors/>

**United Citizens Association, Inc.**

2148 Superior Ave.  
Whiting, IN 46394  
219-659-5814

**Veterans of Foreign Wars #2724**

P.O. Box 548  
Whiting, IN 46394  
219-659-0215

**Whiting Family YMCA**

1938 Clark St.  
Whiting, IN 46394  
219-370-5091

[www.crymca.org](http://www.crymca.org)

**Whiting-Robertsdale Chamber of Commerce**

1417 119<sup>th</sup> St.  
Whiting, IN 46394  
219-659-0292

**Whiting-Robertsdale Community Improvement Corp.**

1442 119<sup>th</sup> St.  
Whiting, IN 46394  
219-659-0292

**Whiting-Robertsdale Historic Society**

1610 119<sup>th</sup> St.  
Whiting, IN 46394  
219-659-1432

**Whiting-Robertsdale Senior Citizens**

Georgette Blackwell  
219-473-0855

**Wild ones Gibson Woods Chapter**

<https://gibsonwoods.wildones.org/>

## **Television**

### **WBBM CBS-2**

22 W Washington St.  
Chicago, IL 60602  
888-274-5343

<https://www.cbsnews.com/chicago/>

### **WSNS NBC-5**

454 N Columbus Dr.  
Chicago, IL 60611  
312-836-5555

<https://www.nbcchicago.com/>

### **WLS ABC-7**

190 N State St.  
Chicago, IL 60601  
312-750-7777

<https://abc7chicago.com/>

### **WGN-TV 9**

2501 W Bradley Pl.  
Chicago, IL 60681  
773-528-2311

<https://wgntv.com/>

### **WFLD FOX-32**

205 N Michigan Ave.  
Chicago, IL 60601  
312-565-5532

<https://www.fox32chicago.com/>

## **Newspaper**

### ***The Times of Northwest Indiana***

601 W 45<sup>th</sup> Ave.  
Munster, IN 46321  
219-933-3333

<https://www.nwitimes.com/>

## **Radio**

### **WJOB-AM 1230**

7150 Indianapolis Blvd.  
Hammond, IN 46324  
219-844-1230

[jed@wjob1230.com](mailto:jed@wjob1230.com)

<https://jean-x.weebly.com/>

### **WGN-AM 720**

303 E Wacker Dr., Floor 18  
Chicago, IL 60601  
312-981-7200

[comments@wgnradio.com](mailto:comments@wgnradio.com)

<https://wgnradio.com/>

### **WLPR-FM 89.1**

8625 Indiana Pl.  
Merrillville, IN 46410  
219-756-5656

[info@lakeshorepublicmedia.org](mailto:info@lakeshorepublicmedia.org)

<https://www.lakeshorepublicmedia.org/>

### **WBBM-AM 780/FM 105.9**

180 N Stetson, Suite 1100  
Chicago, IL 60601  
312-297-7800

[wbbmnewsradioweb@entercom.com](mailto:wbbmnewsradioweb@entercom.com)

<https://www.audacy.com/wbbm780>

### **WLS-AM 890**

<https://www.wlsam.com/>

# Appendix C

## Community Interview Questions

### Community Interview Questionnaire Federated Metals Corp Whiting Site – December 2023

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Home Phone: (\_\_\_\_) \_\_\_\_\_ Cell Phone: (\_\_\_\_) \_\_\_\_\_

E-Mail Address: \_\_\_\_\_ Date: \_\_\_\_\_

### About the Site & Community

1. **Do you live or work on or near the site? If no, are you affiliated with any organization that has an interest in the site?** [What organization?]
2. **How long have you lived or worked in the area?**
3. **What do you consider special or important about your community?**
4. **What do you know about the site and/or planned cleanup?**
5. **When did you first become aware of the site?**
6. **If you have concerns about the Site, what are they?**
7. **Do you know what are the contaminants of concern at the site?**
8. **Do you have comments or concerns about the initial study area for the site?** The initial study area covers from U.S 41 to the west, to Front St. to the east; and from Railroad St. and Ohio Ave. to the north; to 125<sup>th</sup> St. to the southeast, and 122<sup>nd</sup> St., to the southwest.

### Communication Preferences

9. **How would you like to receive site information?**  
(Examples: by mail, via email, in person [such as door-to-door], in groups [such as community or public meetings], websites, social media [which platforms?], newspaper articles [which papers?], radio [which stations?], television [which stations?], from community members, family and friends [word-of-mouth?], public meetings held by EPA or state or local health departments, public meetings held by other local organizations)
10. **In what format or setting would you like to receive information?**  
(Examples: fact sheets, flyers, postcards, technical documents, written questions and answers; PowerPoint presentations, one-on-one discussions, group discussions, listening to or watching interviews, information sessions, interactive activities, workshops)

**Community Interview Questionnaire**  
**Federated Metals Corp Whiting Site – December 2023**

- 11. Do you know of people living in the study area who need site update information in a language other than English? If so, what language(s)?**
- 12. Where do you prefer to go for news about current issues?**  
(Examples: newspapers/online papers [The Times of NW Indiana, others], television stations [ABC 7 Chicago, WGN-TV], radio stations [WLPR-FM, 89.1, public radio; WGVE-FM 88.7 MHz in Gary; WXRD X-Rock 103.9, Crown Point; WVUR-FM, The Source 95, Valparaiso; etc.], social media platforms (e.g., Twitter, Facebook, Snapchat, Nextdoor, friends and neighbors, community groups, other)
- 13. Do you feel that you have been adequately informed about the site from EPA? If not, what other kind of information would you like/need?**
- 14. How would you describe your experience communicating with EPA site team members and our contractors?**
- 15. Have you had contact with other government officials regarding the site in the past?**  
(Examples: Cities of Whiting and/or Hammond, IDEM, ATSDR, County or State Health Departments)
- 16. Do you have any suggestions on how we can improve communication?**

## **Meetings**

Public meetings are important to the Superfund process. This section includes questions about these meetings:

- 17. We have held meetings at the Whiting YMCA and the Whiting High School. How convenient are these locations?**
- 18. Do you have any recommendations for other meeting locations?**
- 19. Would you be able to participate in meetings virtually if needed?**  
(Examples: Do you have a device with internet access to connect to a live meeting?)
- 20. Last two EPA public events were held on a Wednesday at 6 p.m. Is that a good day and time for you and/or most people?**
- 21. What style of meeting do you prefer?**  
(Examples: classroom, open house, meeting with discussion)



**Community Interview Questionnaire**  
**Federated Metals Corp Whiting Site – December 2023**

**Potential Environmental Justice Issues/Concerns**

22. **Which race/ethnicity category best describes you?** Mention all that apply to you.  
(Examples: *American Indian or Alaska Native*—For example, Kumeyaay, Luiseño, Juaneño, Navajo Nation, Blackfeet Tribe, Mayan, Inupiat, Eskimo. *Asian*—For example, Chinese, Filipino, Asian Indian, Vietnamese, Korean, Japanese. *Black or African American*—For example, Jamaican, Haitian, Nigerian, Ethiopian, Somali. *Hispanic, Latino or Spanish Origin*—For example, Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, Colombian. *Middle Eastern or North African*—For example, Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian. *Native Hawaiian or Other Pacific Islander*—For example, Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, Marshallese. *White*—For example, German, Irish, English, Italian, Polish, French. *I prefer not to answer.*)
23. **How many people live in your household?**  
(Examples: 1, 2, 3, 4, 5, 6, 7, 8 or more. I prefer not to answer)
24. **Does your household include any of the following people?**  
(Examples: *Children or Seniors? A person or people with chronic health concerns [such as asthma, diabetes, high blood pressure, heart disease]?*)
25. **Do you consider yourself an active member of your community? If so, what role do you see yourself playing?**
26. **In your opinion could you explain what this community looks like in terms of demographics (racially, ethnically, socio-economically), and aesthetically?**
27. **Environmental justice can be defined as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” Does this definition match your understanding of environmental justice? Why or why not?**
28. **Do you think there are environmental justice concerns in this community? Why or why not?**

**Community Interview Questionnaire  
Federated Metals Corp Whiting Site – December 2023**

**Wrap-Up Questions**

29. Are there any other people or groups you think we should talk to about the site either because they have unique information or would like to know more from EPA?
30. Is there anything else you would like to share with us?
31. Do you have any questions?
32. Would you like to be added to our notification list to get updates about the Site?
33. Would you like to receive a hard copy of the Community Involvement Plan?

# Appendix D

## Information Repository, Administrative Record, Websites and Meeting Locations

### Local Information Repository



**Whiting Public Library**  
1735 Oliver St.  
Whiting, IN 46394  
219-473-4700

#### **Regular Library Hours**

Monday	9:00 a.m. – 5:00 p.m.
Tuesday	9:00 a.m. – 8:00 p.m.
Wednesday	9:00 a.m. – 5:00 p.m.
Thursday	9:00 a.m. – 5:00 p.m.
Friday	9:00 a.m. – 5:00 p.m.
Saturday	9:00 a.m. – 5:00 p.m.
Sunday	Closed

### Official Information Repository

#### **EPA Region 5 Superfund Records Center**

77 W. Jackson Blvd.  
Room 711, 7th Floor  
Ralph Metcalfe Federal Building  
Chicago, IL 60604

#### **EPA Site Webpage**

[www.epa.gov/superfund/federated-metals](http://www.epa.gov/superfund/federated-metals)



### Possible Meeting Locations

#### **Whiting High School**

1751 Oliver St., Whiting, IN 46394  
219-659-0255

#### **Whiting Family YMCA**

1938 Clark St., Whiting, IN 46394  
219-370-5091

#### **St. John the Baptist**

1849 Lincoln Ave., Whiting, IN 46394  
219-659-0023

#### **Franklin Elementary School**

1000 E 116<sup>th</sup> St., Whiting, IN 46394  
219-659-1241

#### **Mascot Hall of Fame**

1851 Front St., Whiting, IN 46394  
219-354-8814

#### **Whiting-Robertsdale Historical Society**

1610 119<sup>th</sup> St., Whiting, IN 46394  
219-659-8129

#### **Lost Marsh Golf Course**

1001 129<sup>th</sup> St., Hammond, IN 46320  
219-932-4653

#### **Calumet College of St. Joseph**

2400 New York Ave., Whiting, IN 46394  
219-473-7770

# Appendix E

## EJ Screen Environmental and Demographic Indicators

### **What is EJScreen?**

EJScreen is an EPA's environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic socioeconomic indicators. EJScreen users choose a geographic area; the tool then provides demographic socioeconomic and environmental information for that area. All the EJScreen indicators are publicly available data. EJScreen simply provides a way to display this information and includes a method for combining environmental and demographic indicators into EJ indexes. EJScreen is available at [www.epa.gov/ejscreen](http://www.epa.gov/ejscreen).

EJScreen includes:

- 13 environmental indicators
- 7 socioeconomic indicators
- 13 EJ indexes
- 13 supplemental indexes

Each EJ and supplemental index combine socioeconomic indicators with a single environmental indicator. The tool provides several capabilities, including:

- Color coded mapping
- The ability to generate a standard report for a selected area
- Comparisons showing how a selected area compares to the state or the nation

EJScreen users should note there is substantial uncertainty in demographic and environmental data, particularly when looking at small geographic areas. EJScreen is not intended to provide a risk assessment. Also, EJScreen does not provide data on every environmental impact and demographic indicator that may be relevant to a particular location, and data may be several years old. Screening results should be supplemented with additional information and local knowledge to get a better understanding of the issues in a selected location. For caveats and limitations of using EJScreen, visit [www.epa.gov/ejscreen/limitations-and-caveats-using-ejscreen](http://www.epa.gov/ejscreen/limitations-and-caveats-using-ejscreen).

### **EJSCREEN Community Report**

The following information was gathered from data available on February 15, 2024, and within a 3-mile ring (buffer) from the FMC site (41.673472, -87.493415). Areas with any of the 13 EJ Indexes at or above the 80<sup>th</sup> percentile nationally should be considered as a potential candidate for further review.

The following EJScreen report is a starting point, and the EJ Indexes in the report indicate that potential environmental justice issues may be present in the area. However, additional analysis is still needed to get a better understanding. Eleven of the 13 EJ Indexes were at the 80<sup>th</sup> percentile or above compared to the rest of the United States, and 12 were at the 80<sup>th</sup> percentile or above compared with the rest of the state. The EJ index combines data on low-income and people of color populations with a single environmental indicator.



# EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

## Hammond, IN

3 miles Ring Centered at 41.673472,-87.493415

Population: 42,568

Area in square miles: 28.27

A3 Landscape



### COMMUNITY INFORMATION



### BREAKDOWN BY RACE



### BREAKDOWN BY AGE



### LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	55%
Spanish	43%
Russian, Polish, or Other Slavic	1%
Total Non-English	45%

### LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

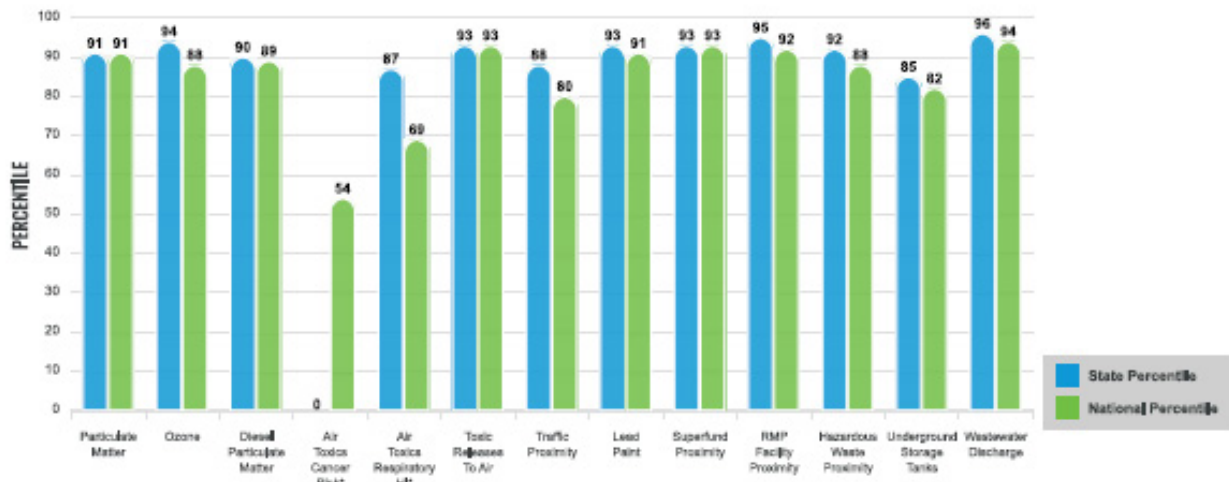
## Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

### EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

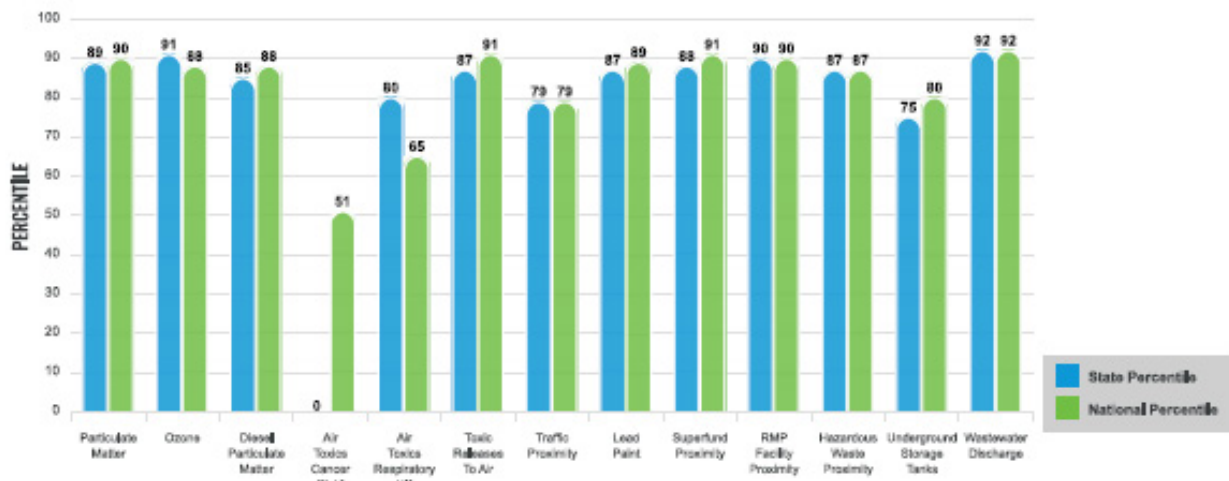
#### EJ INDEXES FOR THE SELECTED LOCATION



### SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

#### SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 3 miles Ring Centered at 41.673472,-87.493415

# EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
<b>POLLUTION AND SOURCES</b>					
Particulate Matter (µg/m <sup>3</sup> )	10	8.98	89	8.08	91
Ozone (ppb)	65.8	61.4	98	61.6	79
Diesel Particulate Matter (µg/m <sup>3</sup> )	0.429	0.259	91	0.261	86
Air Toxics Cancer Risk* (lifetime risk per million)	21	21	0	25	5
Air Toxics Respiratory HI*	0.3	0.25	53	0.31	31
Toxic Releases to Air	13,000	16,000	87	4,600	94
Traffic Proximity (daily traffic count/distance to road)	150	96	82	210	68
Lead Paint (% Pre-1960 Housing)	0.79	0.38	88	0.3	91
Superfund Proximity (site count/km distance)	0.65	0.17	94	0.13	96
RMP Facility Proximity (facility count/km distance)	3	0.51	98	0.43	98
Hazardous Waste Proximity (facility count/km distance)	4	1	94	1.9	86
Underground Storage Tanks (count/km <sup>2</sup> )	7.9	3.2	87	3.9	85
Wastewater Discharge (toxicity-weighted concentration/m distance)	980	200	95	22	99
<b>SOCIOECONOMIC INDICATORS</b>					
Demographic Index	55%	27%	88	35%	79
Supplemental Demographic Index	19%	14%	77	14%	75
People of Color	72%	22%	92	39%	79
Low Income	38%	32%	65	31%	67
Unemployment Rate	8%	5%	76	6%	72
Limited English Speaking Households	7%	2%	92	5%	80
Less Than High School Education	19%	11%	82	12%	79
Under Age 5	7%	6%	62	6%	65
Over Age 64	13%	17%	37	17%	38
Low Life Expectancy	21%	21%	56	20%	69

\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risk over geographic areas of the country, not determine risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/air-toxics-data-update>

**Sites reporting to EPA within defined area:**

Superfund .....	1
Hazardous Waste, Treatment, Storage, and Disposal Facilities .....	11
Water Dischargers .....	123
Air Pollution .....	80
Brownfields .....	30
Toxic Release Inventory .....	37

**Other community features within defined area:**

Schools .....	14
Hospitals .....	0
Places of Worship .....	48

**Other environmental data:**

Air Non-attainment .....	Yes
Impaired Waters .....	Yes

Selected location contains American Indian Reservation Lands* .....	No
Selected location contains a "Justice40 (CEJST) disadvantaged community .....	Yes
Selected location contains an EPA BRA disadvantaged community .....	Yes

Report for 3 miles Ring Centered at 41,673472,-87.493415

## EJScreen Environmental and Socioeconomic Indicators Data

### HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	21%	21%	56	20%	69
Heart Disease	6.9	6.8	50	6.1	65
Asthma	9.9	10.4	35	10	49
Cancer	5.6	6.4	22	6.1	35
Persons with Disabilities	12.1%	14.5%	35	13.4%	47

### CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	22%	9%	93	12%	87
Wildfire Risk	2%	2%	97	14%	79

### CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	16%	16%	60	14%	66
Lack of Health Insurance	10%	8%	72	9%	68
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Report for 3 miles Ring Centered at 41.673472,-87.493415



# Appendix F

## Fact Sheets & Postcards

### Site-Related Fact Sheets



#### Join us!

EPA invites you to attend the public meeting announcing the placement of Federated Metals Corp Whiting Superfund Site to the NPL on **October 18, 2023**, at the **Whiting High School Cafeteria**.

#### Public meeting

**Date:** October 18, 2023

**Time:** 6 p.m.

**Location:** Whiting High School  
Cafeteria  
1751 Oliver Street  
Whiting, Indiana 46394

#### Contact information

##### Adrian Palomeque

Community Involvement  
Coordinator  
440-250-1715  
palomeque.adrian@epa.gov

##### Danielle Kaufman

Community Involvement  
Coordinator  
312-886-6703  
kaufman.danielle@epa.gov

##### Leslie Patterson

Remedial Project Manager  
312-886-4904  
patterson.leslie@epa.gov

You may call EPA toll-free at 800-621-8431, 9 a.m. – 4:30 p.m., weekdays

#### Information repository

Site documents can be viewed on [www.epa.gov/superfund/federated-metals](http://www.epa.gov/superfund/federated-metals)

## FEDERATED METALS CORP WHITING ADDED TO THE NPL

### Federated Metals Corp Whiting Superfund Site

Hammond, Indiana

October 2023

U.S. Environmental Protection Agency added the Federated Metals Corporation, or FMC, Whiting site in Hammond, Indiana, to the Superfund National Priorities List, or NPL, on September 6, 2023. The NPL is a list of sites in the United States where releases of hazardous substances, pollutants, or contaminants pose significant threats to human health and the environment. The NPL serves as a basis for prioritizing EPA Superfund cleanup funding and enforcement actions. Listing the Site on the NPL allows EPA to perform a thorough investigation and cleanup of chemicals released from the site.



Figure 1: Federated Metals Corp Whiting Layout map; the facility and onsite landfill area are outlined in yellow.

#### Site background

From 1937 through 1983, the FMC site operated a 36-acre metal smelting, refining, recovery and recycling facility in Hammond, Indiana, along the shore of Lake George. Historically, such smelter operations often emitted lead and other heavy metals from the facilities' stack, baghouse and waste piles. In 1985, FMC sold 17 acres of the smelter manufacturing facilities to HBR Partnership. Subsequently, other businesses, including various metals fabricating and reclaiming businesses, have continued to operate at the former smelter.

#### Superfund cleanups

Superfund cleanups provide health and economic benefits to communities. The program is credited for significant reductions in birth defects and blood-lead levels among children living near sites, and research has shown residential property values increase up to 24 percent within 3 miles of sites after cleanup.



*Figure 2: Areas near the FMC facility sampled in the EPA 2018 short-term removal action are outlined in blue. EPA plans to conduct soil sampling on additional properties in these areas, and may include additional areas for sampling, as part of the upcoming NPL cleanup investigation.*

### **EPA cleanup activities at FMC**

In 1992, FMC and its parent corporation, ASARCO, entered into a federal consent decree to settle an EPA lawsuit alleging Resource Conservation and Recovery Act, or RCRA, violations and agreed to perform a corrective action on the 36-acre property, not just the 19 acres FMC still owned.

From 2001 to 2006, the smelter property was subject to a RCRA corrective action/Indiana State RCRA closure project. The work included demolishing an on-site baghouse; consolidating debris, on-site hazardous wastes and slag dredged from Lake George into the landfill; and constructing a phyto-cap, a remedy that consists of growing plants and trees on a landfill to reduce contaminants into groundwater.

In 2005, before the cleanup was complete, ASARCO filed for bankruptcy and abandoned the facility. In 2009, a bankruptcy Trust was established to finish the EPA-required work at the smelter.

The Trust completed the landfill cover, installed groundwater monitoring wells and conducted several rounds of groundwater sampling to confirm the landfill cap was preventing groundwater contamination. Maintenance and monitoring work at the landfill is ongoing. No Trust funds were available to investigate soil contamination in the surrounding neighborhoods.

In late 2016 and early 2017, EPA's Superfund Division sampled soil at city-owned properties and rights-of-way in Hammond and Whiting to determine if heavy metals from the former FMC facility had contaminated the surrounding residential areas. The results showed lead and

arsenic contamination at unoccupied properties in the community.

In May 2017, EPA sampled the landfill at the FMC facility to determine if contamination found in the community was from the former smelter. The analysis showed a link between materials found in the landfill and materials found in soil to the north of the site. Later that year, results from residential sampling showed soil on some properties contained lead above EPA's removal management levels, or RMLs. RMLs help identify areas, contaminants and conditions where a removal action may occur.

In May 2018, EPA began removing soil at priority properties in the sampling area. Priority properties were properties where surface lead levels were equal to or exceeded 1,200 parts lead per million parts soil and where sensitive populations lived (pregnant women and children under 7). From 2018 to 2019, EPA performed a short-term removal action, removing lead-contaminated soils from 33 residential properties in Whiting and Hammond.

In total, EPA collected soil samples from 242 properties near FMC to determine the extent of lead contamination. The assessment found 163 residential yards had soil lead levels above EPA's health standard. Because 130 of these yards could be addressed by a follow-up cleanup action, and additional properties still need to be tested, EPA proposed the Site to the National Priority List.

In August 2021, the city of Hammond began removing and disposing of lead-contaminated soils in Hammond properties affected by the site. In early 2023, Hammond notified EPA that 47 residential yards were cleaned up.

From March 27 to May 30, 2023, EPA conducted a 60-day public comment period about adding the site to the NPL. In September 2023, EPA published a Support Document with responses to the public comments received. EPA also published an NPL Site Narrative with general information about the site.

## Next Steps

On **October 18, 2023**, EPA will hold a public meeting regarding the addition of the FMC Whiting site to the NPL. The meeting will be at the **Whiting High School at 6:00 p.m.**

Additionally, on November 15, 2023, EPA is planning to offer a Superfund Process Training followed by an Open House at the Whiting High School at 6:00 p.m.

Finally, on December 5, 6, and 7, 2023, EPA is preparing to hold interviews with community members for the basis of creating a Community Involvement Plan, or CIP at the Whiting Public Library, on 1735 Oliver St. in Whiting. A CIP is a site-specific strategy to enable meaningful community involvement throughout the Superfund cleanup process. CIPs specify EPA-planned community involvement activities to address community needs, concerns and expectations that are identified through community interviews and other means. More information about the Superfund training, Open House, and community interviews are available at [www.epa.gov/superfund/federated-metals](http://www.epa.gov/superfund/federated-metals).



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# Federated Metals 2018 Work Activities Summary

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## Federated Metals Site

Hammond and Whiting, Indiana

December 2018

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### EPA contacts

If you have questions, comments or need more information about the Federated Metals site you can contact the site's **Hotline** at **219-561-9553** or these EPA team members:

*For soil sampling and cleanup questions*

**Andrew Maguire**

On-Scene Coordinator

312-353-8782

maguire.andrew@epa.gov

*For general questions*

**Charles Rodriguez**

Community Involvement

Coordinator

312-886-7472

rodriguez.charles@epa.gov

### EPA toll-free

800-621-8431, 8:30 a.m. to 4:30 p.m., weekdays.

### EPA mailing address

U.S. EPA Region 5

77 W. Jackson Blvd.

Mail Code: SI-6J

Chicago, IL 60604

### On the web

[epa.gov/in/federated-metals-corporation-site](http://epa.gov/in/federated-metals-corporation-site)

### Para información en español:

Si prefiere recibir una copia en español de este documento, por favor comuníquese con Charles Rodriguez, cuya información de contacto se encuentra arriba.

U.S. Environmental Protection Agency has completed cleanup work and assessment activities for the year near the Federated Metals site in Hammond and Whiting, Ind. This fact sheet updates the community about the soil assessment and cleanup projects the Agency has been undertaking in residential areas.

### Soil sampling

During 2018, EPA collected soil samples from 242 properties to determine the extent of historic lead contamination from the Federated Metals plant. The investigation area is bounded by the alley between 119th Street and Fischrupp Avenue to the north, extending to Atchison Avenue to the west, and to White Oak Avenue to the east. The southern border is located between George Lake Trail and East Lakeview Street.

The assessment found 163 residential yards that had soil lead levels above EPA's health standard. EPA provided property owners with results letters after the data was validated by the laboratories that analyzed the samples.

### Cleanup activities

EPA used its legal authority under the Superfund law to conduct what is called a "time-critical removal action" to clean up priority properties where surface lead levels were equal to or exceeded 1,200 parts lead per million parts soil and where sensitive populations resided. For this project, sensitive population was defined as pregnant women, and children under seven.

In 2018, EPA cleaned up 28 priority properties before suspending activities for the winter months. Cleanup work involved the excavation of lead-contaminated soil, backfilling with clean earth, and yard restoration. Precautions were taken to minimize dust generation during the work, and air monitoring was conducted.

### What's next?

EPA will return in spring 2019 to clean up three remaining priority properties and complete all restoration activities that were suspended for the winter.

Residential properties remain where the soil sampling showed elevated lead levels but were not cleaned up because they did not meet the criteria for a time-critical removal action. EPA will continue to coordinate and share data with the cities of Whiting and Hammond, and the Indiana Department of Environmental Management, and to work with them to explore ways to find funding and legal authority to clean up the remaining contaminated properties at the site.

*Continued on back ...*

## Protect yourself

When they received their sample results from EPA, property owners with high lead levels in their yards were advised on steps they could take to protect their families. Residents whose properties have not been sampled and who have concerns about possible lead contamination in their soil can take these precautions:

- Cover and maintain any exposed soil on your property with grass, mulch, gravel, or paving. This will reduce the possibility of coming into direct contact with lead-contaminated soil.
- Anyone working or playing in the yard should remove their shoes before entering the home to prevent tracking soil inside.
- It is also important that people living in the home, especially children, wash their hands thoroughly before preparing food, eating, or drinking.
- Garden in raised beds filled with clean soil purchased from a nursery or garden store.

You can also obtain information about lead contamination at these websites:

- [www.epa.gov/lead](http://www.epa.gov/lead).
- [www.cdc.gov/nceh/lead](http://www.cdc.gov/nceh/lead).



*This is what typical soil excavation work looked like in yards near Federated Metals. Grass, trees and vegetation were restored after the contaminated soil was removed.*



# EPA Starting New Phase In Lead Cleanup

## Federated Metals Site

Hammond/Whiting, Indiana

May 2018

### EPA contacts

If you have questions, comments or need more information about the Federated Metals site you can contact the site's **Hotline** at **219-561-9553** or these EPA team members:

*For soil sampling and cleanup questions:*

**Andrew Maguire**  
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maguire.andrew@epa.gov

**Adrian Palomeque**  
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Coordinator  
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*For Federated Metals plant site cleanup:*

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**EPA toll-free** at 800-621-8431,  
weekdays, 8:30 a.m. to 4:30 p.m.

**EPA mailing address:**  
U.S. EPA Region 5  
77 W. Jackson Blvd.  
Mail Code: SI-6J  
Chicago, IL 60604

**On the web:**  
<https://www.epa.gov/in/federated-metals-corporation-site>

After overseeing cleanup on the Federated Metals property, U.S. Environmental Protection Agency this spring will begin removing and replacing soil from residential yards contaminated with lead that moved off the plant site due to operations into surrounding neighborhoods. Initially, the soil removal project will be done at high-priority properties with the homeowner's permission and at no cost to them.

Sampling late last year and this April showed that historical pollution had spread beyond the boundaries of the Federated Metals plant site. The soil on some properties was found to contain lead above EPA's designated level. In order to take early action at priority properties while the soil investigation continues, EPA will use its legal authority under the Superfund law to conduct what is called a "time-critical removal action." This will occur in the neighborhoods surrounding the former Federated Metals facility. In this first round of yard cleanup, EPA is targeting properties where surface lead levels are equal to or exceed 1,200 parts lead per million parts soil and sensitive population reside. For this project, sensitive population is defined as pregnant women and children under seven. EPA will also evaluate removal actions in properties where children in the house have a blood lead level at or above a scientific measurement of 10 micrograms of lead per deciliter.

If the homeowners at these target properties agree, the time-critical removal action will include excavation of contaminated soil, backfill of clean soil, and restoration of the yard.

EPA continues to work with the cities of Whiting and Hammond as well as  
*(continued on back page)*



*Federated Metals Corporation site map. The site is located at 2230 Indianapolis Boulevard in Hammond, Indiana.*

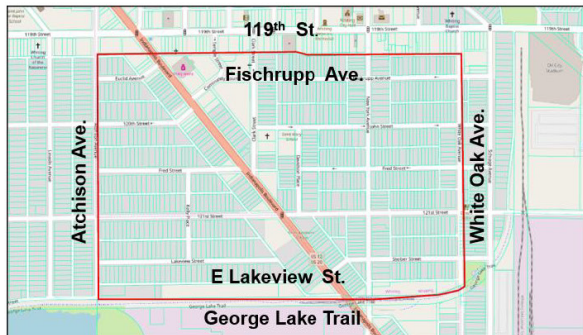
*(continued from front)*

Lake County and the Indiana Department of Environmental Management to assess the extent of contamination around the Federated Metals plant property.

### **Study area**

The time-critical removal is just the beginning of EPA's investigation into residential lead contamination. The Agency has established a Soil-Sampling Study Area defined as a rectangular zone bounded by the alley between 119th Street and Fischrupp Avenue to the north, extending to Atchison Avenue to the west, and to White Oak Avenue to the east. The southern border is located between George Lake Trail and East Lakeview Street. The area includes a mixture of industrial, commercial, and residential properties as well as vacant lots, community centers, playgrounds, parks, churches, and schools.

EPA is offering soil sampling to residents living within the study area. If you live in the study area and would like to have your soil sampled, please contact EPA representatives Andrew Maguire and Adrian Palomeque listed on Page 1.



*Soil sampling Study Area*

### **Site background**

EPA has been working to clean up the actual plant site since the early 1990s. The property is located about a mile south of Lake Michigan, and is east of and adjacent to Lake George. From 1937 to 1983, Federated Metals Corp., or FMC, produced copper, lead, and zinc-based alloys in a scrap metal smelting, refining, and metals recovery operation.

EPA used another federal law called the Resource Conservation and Recovery Act, or RCRA, to supervise FMC's handling and disposal of hazardous materials and to compel the company to clean up uncontrolled pollution releases.

In 1992, EPA and FMC entered into a legal order called a consent decree requiring the company to perform corrective measures to clean up contamination at the site, including performing a RCRA facility investigation, conducting a corrective measures study, and carrying out a corrective measures implementation plan.

In 2001, EPA issued a Final Remedy Decision, identifying several steps needed to manage or clean up contamination on the plant property. Through late 2005, FMC completed many, but not all, of the corrective actions that were specified in the Final Remedy Decision. Some of these corrective actions that were performed included removing waste material from areas on site, consolidating the waste into the existing onsite landfill, and demolishing and disposing of the onsite baghouse structures.

FMC had been acquired by a company called American Smelting & Refining, or ASARCO, in the 1930s. In 2005, ASARCO declared bankruptcy. In 2009, a federal bankruptcy court allocated \$1.2 million to a federal trustee to complete corrective actions at the Federated Metals site. The remaining actions consist primarily of maintaining a landfill cap and installation and monitoring of underground water wells to ensure the cap is protective to human health and the environment.

## Fact Sheets on Contaminants of Concern

### Lead - ToxFAQs™

#### What is lead?

Lead is a metal found naturally in the earth's crust. It can be found in all parts of our environment, including air, water, and soil. Lead can combine with other chemicals to make different compounds.



Lead is used in the production of batteries, ammunition, and metal products (solder and pipes). Because of health concerns, the use of lead in paints, ceramic products, caulking, and pipe solder has been dramatically reduced. The use of lead as an additive to automobile gasoline was banned in 1996 in the United States.

#### What happens to lead in the environment?

- Lead is an element, so it does not break down.
- When lead is released into the air, it may be transported long distances before it lands and stays on the ground.
- Once on the ground, lead can often stick to soil particles.
- Lead in soil can get into groundwater, but the amount of lead that moves into groundwater will depend on the lead compound and soil type.

#### How can I be exposed to lead?

- Eating food or drinking water that contains lead.
- Drinking water from pipes that were soldered with lead can cause exposure.
- Spending time or living in homes with lead-based paints can result in exposure when the paint breaks down and forms dust, which can get on your hands, or into your mouth and nose and be swallowed.
- Spending time in areas where the soil is contaminated with lead.
- Working in a job where lead is used or participating in certain hobbies where lead is used, such as making stained glass.
- Using healthcare products from other countries, alternative treatments, or folk remedies.

**Lead can cause health problems in almost every organ and system in your body.**

#### How can lead affect my health?

The effects of lead are the same whether it enters the body by breathing it in or eating it. Lead can affect almost every organ and system in your body. The nervous system is the main target for lead poisoning in children and adults. Long-term exposure can result in decreased learning, memory, and attention, and weakness in fingers, wrists, or ankles. Lead exposure can cause anemia (low iron in the blood) and damage to the kidneys. It can also cause increases in blood pressure, particularly in middle-aged and older individuals. Exposure to high lead levels can severely damage the brain and kidneys and can cause death. In pregnant women, exposure to high levels of lead may cause a miscarriage. In men, it can cause damage to reproductive organs.



# Lead

## How can lead affect children?

Children are more vulnerable to lead poisoning than adults because their nervous system is still developing. Children can be exposed to lead in their environment and before birth from lead in their mother's body. At lower levels of exposure, lead can decrease mental development, especially learning, intelligence, and behavior. Physical growth may also be decreased. A child who swallows large amounts of lead may develop anemia, severe stomachache, muscle weakness, and brain damage. Exposure to lead during pregnancy can also result in premature births. Some effects of lead poisoning in a child may continue into adulthood.

## Can lead cause cancer?

Several agencies and organizations both in the United States and internationally have reviewed studies and made an assessment about whether lead can cause cancer.

- The Department of Health and Human Services (HHS) has determined that lead and lead compounds are reasonably anticipated to be human carcinogens (causing cancer in people).
- The U.S. Environmental Protection Agency (EPA) has classified lead as a probable human carcinogen.
- The International Agency for Research on Cancer (IARC) has determined that inorganic lead is probably carcinogenic to humans, and that there is insufficient information to determine whether organic lead compounds will cause cancer in humans.

## Can I get a medical test to check for lead?

A blood test is available to measure the amount of lead in your blood. Blood tests are commonly used to screen children for lead poisoning. Your doctor can draw blood samples and send them to appropriate laboratories for analysis. If you think you or anyone in your family has been exposed to lead, contact your doctor, nurse, or poison control center.

## How can I protect my family from lead exposure?

- Avoid exposure to sources of lead.
- Do not allow children to chew or mouth surfaces that may have been painted with lead-based paint.
- If your home contains lead-based paint (built before 1978), or if you live in an area contaminated with lead, wash children's hands and faces often to remove lead dusts and soil, and regularly clean the house to remove lead dust and lead tracked in soil.
- Certain water pipes may contain lead, so if you know that pipes have lead solder, you should avoid drinking from that source.
- Check for lead in some products such as toys and jewelry and avoid such products.
- Lead is sometimes in candies imported from other countries or traditional home remedies; find out if yours has any lead and avoid using these products or giving them to children.
- You can learn more about preventing lead poisoning here: <https://www.cdc.gov/nceh/lead/faqs/lead-faqs.htm>

## Want more information?



Call CDC-INFO at 1-800-232-4636, or submit your question online at <https://wwwn.cdc.gov/dcs/ContactUs/Form>

Go to ATSDR's [Toxicological Profile for Lead](#)

CDC Lead Poisoning Prevention Program <https://www.cdc.gov/nceh/lead/default.htm>

Environmental Protection Agency <https://www.epa.gov/lead/protect-your-family-exposures-lead>

Go to ATSDR's Toxic Substances Portal: <https://wwwn.cdc.gov/TSP/index.aspx>

If you have any more questions or concerns, you can also find & contact your ATSDR Regional Representative at [http://www.atsdr.cdc.gov/DRO/dro\\_org.html](http://www.atsdr.cdc.gov/DRO/dro_org.html)

# Plomo - ToxFAQs™

## ¿Qué es el plomo?

El plomo es un metal que se encuentra en forma natural en la corteza terrestre. Se puede encontrar en todas partes de nuestro medioambiente, como el aire, el agua y la tierra. El plomo se puede combinar con otras sustancias químicas para crear distintos compuestos.



Se usa en la fabricación de pilas, municiones y productos de metal (soldaduras y tuberías). Debido a preocupaciones de salud, se ha reducido radicalmente el uso de plomo en pinturas, cerámicas, calafateo (*caulking*) y soldadura de tuberías. El uso de plomo como un aditivo de la gasolina de automóviles se prohibió en 1996 en los Estados Unidos.

## ¿Qué ocurre con el plomo en el medioambiente?

- El plomo es un elemento, así que no se degrada.
- Cuando el plomo se libera al aire, puede desplazarse largas distancias antes de caer a la tierra y depositarse en ella.
- Cuando ya está en la tierra, el plomo puede, a menudo, adherirse a partículas de tierra.
- El plomo en la tierra puede llegar al agua subterránea, pero la cantidad de plomo que pasa al agua subterránea depende del compuesto de plomo y del tipo de tierra o suelo.

## ¿Cómo puedo quedar expuesto al plomo?

- Al comer alimentos o beber agua que contengan plomo.
- Beber agua proveniente de tuberías que fueron soldadas con plomo puede causar la exposición.
- Pasar tiempo o vivir en casas con pinturas a base de plomo puede resultar en la exposición cuando la pintura se degrade y forme polvo, el cual puede contaminar las manos o entrar a la boca y la nariz y tragarse.
- Al pasar tiempo en áreas donde la tierra está contaminada con plomo.
- Al trabajar en una ocupación en la que se usa plomo o al dedicarse a ciertos pasatiempos en los que se usa plomo como, por ejemplo, la fabricación de vitrales.
- Al usar productos sanitarios de otros países, tratamientos alternativos o remedios naturales.

**El plomo puede causar problemas de salud en casi todos los órganos y sistemas del cuerpo.**

## ¿Cómo puede el plomo afectar mi salud?

Los efectos del plomo son los mismos, sea que entre al cuerpo a través de la inhalación o de la ingestión. El plomo puede afectar casi todos los órganos y sistemas del cuerpo. El sistema nervioso es el más afectado por la intoxicación por plomo en los niños y los adultos. La exposición a largo plazo puede resultar en una disminución de la capacidad de aprendizaje, memoria y atención, y debilidad en los dedos de las manos, las muñecas o los tobillos. La exposición al plomo puede causar anemia (bajo nivel de hierro en la sangre) y daños a los riñones. También puede causar aumento de la presión arterial, especialmente en personas de mediana edad y mayores. La exposición a niveles altos de plomo puede provocar graves daños en el cerebro y los riñones, y puede causar la muerte. En las mujeres embarazadas, la exposición a niveles altos de plomo puede causar un aborto espontáneo. En los hombres, puede provocar daños a los órganos reproductores.

# Plomo

## ¿Cómo puede el plomo afectar a los niños?

Los niños son más vulnerables a la intoxicación por plomo que los adultos porque su sistema nervioso todavía está desarrollándose. Los niños pueden estar expuestos al plomo en su medioambiente y, antes de nacer, en el cuerpo de su madre. A niveles más bajos de exposición, el plomo puede disminuir el desarrollo mental, especialmente el aprendizaje, la inteligencia y el comportamiento. También puede disminuir el crecimiento físico. Un niño que traga grandes cantidades de plomo puede presentar anemia, dolores de estómago intensos, debilidad muscular y daño cerebral. La exposición al plomo durante el embarazo también puede resultar en nacimientos prematuros. Algunos efectos de la intoxicación por plomo en un niño pueden continuar en la edad adulta.

## ¿Puede el plomo causar cáncer?

Varias agencias y organizaciones tanto en los Estados Unidos como a nivel internacional han revisado estudios y han hecho una evaluación para ver si el plomo puede causar cáncer.

- El Departamento de Salud y Servicios Humanos (HHS) ha determinado que es razonable anticipar que el plomo y los compuestos de plomo sean cancerígenos (que causan o pueden causar cáncer) en los seres humanos.
- La Agencia de Protección Ambiental de los Estados Unidos (EPA) ha clasificado al plomo como un probable cancerígeno en los seres humanos.
- La Agencia Internacional para la Investigación del Cáncer (IARC) ha determinado que el plomo inorgánico es probablemente carcinogénico en los seres humanos y que no hay suficiente información para determinar si los compuestos orgánicos de plomo causan cáncer en los seres humanos.

## ¿Puedo hacerme un examen médico para ver si tengo plomo?

Hay pruebas de sangre para medir la cantidad de plomo en la sangre. Estas pruebas se usan comúnmente para detectar la intoxicación por plomo en los niños. Su médico puede tomar muestras de sangre y enviarlas a un laboratorio adecuado para su análisis. Si cree que usted o alguien en su familia han estado expuestos al plomo, contacte a su médico, al personal de enfermería o al centro de control de intoxicaciones y envenenamientos.

## ¿Cómo puedo proteger a mi familia de la exposición al plomo?

- Evite la exposición a fuentes de plomo.
- No permita que los niños muerdan o pongan la boca en superficies que puedan haber sido pintadas con pintura a base de plomo.
- Si su casa tiene pintura a base de plomo (si fue construida antes de 1978) o si vive en un área contaminada con plomo, lave las manos y la cara de los niños con frecuencia para quitarles el polvo y la tierra con plomo, y limpie regularmente la casa para sacar el polvo y la tierra con plomo que haya entrado.
- Algunas tuberías de agua pueden contener plomo, así que, si usted sabe que las tuberías tienen soldadura de plomo, debe evitar beber agua proveniente de esa fuente.
- Preste atención a la presencia de plomo en algunos productos como juguetes y joyas, y evite los que contengan plomo.
- A veces, hay plomo en los caramelos importados de otros países o en remedios caseros tradicionales; averigüe si los suyos contienen plomo y evite usarlos o dárselos a los niños.
- Puede obtener más información sobre cómo prevenir la intoxicación por plomo aquí:  
<https://www.cdc.gov/nceh/lead/faqs/lead-faqs.htm>

### ¿Quiere más información?

Llame a CDC-INFO al 1-800-232-4636, o envíe su pregunta en línea en <https://wwwn.cdc.gov/dcs/ContactUs/Form>

Visite la página de la ATSDR [Perfil toxicológico del plomo \(Toxicological Profile for Lead\)](#)

CDC, Programa de Prevención de la Intoxicación por Plomo en la Niñez: <https://www.cdc.gov/nceh/lead/default.htm>

Agencia de Protección Ambiental de los EE. UU.: <https://www.epa.gov/lead/protect-your-family-exposures-lead>

Visite el portal de la ATSDR sobre sustancias tóxicas: <https://wwwn.cdc.gov/TSP/index.aspx>

Si tiene más preguntas o preocupaciones, busque y contacte a su representante regional de la ATSDR en

[http://www.atsdr.cdc.gov/DRO/dro\\_org.html](http://www.atsdr.cdc.gov/DRO/dro_org.html)



This fact sheet answers the most frequently asked health questions (FAQs) about arsenic. For more information, call the CDC Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

**HIGHLIGHTS:** Exposure to higher than average levels of arsenic occur mostly in the workplace, near hazardous waste sites, or in areas with high natural levels. At high levels, inorganic arsenic can cause death. Exposure to lower levels for a long time can cause a discoloration of the skin and the appearance of small corns or warts. Arsenic has been found in at least 1,149 of the 1,684 National Priority List (NPL) sites identified by the Environmental Protection Agency (EPA).

## What is arsenic?

Arsenic is a naturally occurring element widely distributed in the earth's crust. In the environment, arsenic is combined with oxygen, chlorine, and sulfur to form inorganic arsenic compounds. Arsenic in animals and plants combines with carbon and hydrogen to form organic arsenic compounds.

Inorganic arsenic compounds are mainly used to preserve wood. Copper chromated arsenate (CCA) is used to make "pressure-treated" lumber. CCA is no longer used in the U.S. for residential uses; it is still used in industrial applications. Organic arsenic compounds are used as pesticides, primarily on cotton fields and orchards.

## What happens to arsenic when it enters the environment?

- Arsenic occurs naturally in soil and minerals and may enter the air, water, and land from wind-blown dust and may get into water from runoff and leaching.
- Arsenic cannot be destroyed in the environment. It can only change its form.
- Rain and snow remove arsenic dust particles from the air.
- Many common arsenic compounds can dissolve in water. Most of the arsenic in water will ultimately end up in soil or sediment.
- Fish and shellfish can accumulate arsenic; most of this arsenic is in an organic form called arsenobetaine that is much less harmful.

## How might I be exposed to arsenic?

- Ingesting small amounts present in your food and water or breathing air containing arsenic.
- Breathing sawdust or burning smoke from wood treated with arsenic.
- Living in areas with unusually high natural levels of arsenic in rock.
- Working in a job that involves arsenic production or use, such as copper or lead smelting, wood treating, or pesticide application.

## How can arsenic affect my health?

Breathing high levels of inorganic arsenic can give you a sore throat or irritated lungs.

Ingesting very high levels of arsenic can result in death. Exposure to lower levels can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet.

Ingesting or breathing low levels of inorganic arsenic for a long time can cause a darkening of the skin and the appearance of small "corns" or "warts" on the palms, soles, and torso.

Skin contact with inorganic arsenic may cause redness and swelling.

Almost nothing is known regarding health effects of organic arsenic compounds in humans. Studies in animals show that some simple organic arsenic

# Arsenic

CAS # 7440-38-2

compounds are less toxic than inorganic forms. Ingestion of methyl and dimethyl compounds can cause diarrhea and damage to the kidneys.

## How likely is arsenic to cause cancer?

Several studies have shown that ingestion of inorganic arsenic can increase the risk of skin cancer and cancer in the liver, bladder, and lungs. Inhalation of inorganic arsenic can cause increased risk of lung cancer. The Department of Health and Human Services (DHHS) and the EPA have determined that inorganic arsenic is a known human carcinogen. The International Agency for Research on Cancer (IARC) has determined that inorganic arsenic is carcinogenic to humans.

## How can arsenic affect children?

There is some evidence that long-term exposure to arsenic in children may result in lower IQ scores. There is also some evidence that exposure to arsenic in the womb and early childhood may increase mortality in young adults.

There is some evidence that inhaled or ingested arsenic can injure pregnant women or their unborn babies, although the studies are not definitive. Studies in animals show that large doses of arsenic that cause illness in pregnant females, can also cause low birth weight, fetal malformations, and even fetal death. Arsenic can cross the placenta and has been found in fetal tissues. Arsenic is found at low levels in breast milk.

## How can families reduce the risks of exposure to arsenic?

- If you use arsenic-treated wood in home projects, you should wear dust masks, gloves, and protective clothing to decrease exposure to sawdust.
- If you live in an area with high levels of arsenic in water or soil, you should use cleaner sources of water and limit contact with soil.

- If you work in a job that may expose you to arsenic, be aware that you may carry arsenic home on your clothing, skin, hair, or tools. Be sure to shower and change clothes before going home.

## Is there a medical test to determine whether I've been exposed to arsenic?

There are tests available to measure arsenic in your blood, urine, hair, and fingernails. The urine test is the most reliable test for arsenic exposure within the last few days. Tests on hair and fingernails can measure exposure to high levels of arsenic over the past 6-12 months. These tests can determine if you have been exposed to above-average levels of arsenic. They cannot predict whether the arsenic levels in your body will affect your health.

## Has the federal government made recommendations to protect human health?

The EPA has set limits on the amount of arsenic that industrial sources can release to the environment and has restricted or cancelled many of the uses of arsenic in pesticides. EPA has set a limit of 0.01 parts per million (ppm) for arsenic in drinking water.

The Occupational Safety and Health Administration (OSHA) has set a permissible exposure limit (PEL) of 10 micrograms of arsenic per cubic meter of workplace air ( $10 \mu\text{g}/\text{m}^3$ ) for 8 hour shifts and 40 hour work weeks.

## References

Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for Arsenic (Update). Atlanta, GA: U.S. Department of Health and Human Services. Public Health Service.

## Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636

ToxFAQs™ Internet address via WWW is <http://www.atsdr.cdc.gov/toxfaqs/index.asp>.

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

# ToxFAQs™ sobre el arsénico

CAS#: 7440-38-2

Esta hoja informativa responde las preguntas de salud más frecuentes acerca del arsénico. Para obtener más información, llame al Centro de Información de la ATSDR al 1-800-232-4636. Esta hoja informativa es parte de una serie de resúmenes acerca de sustancias peligrosas y sus efectos en la salud. Es importante que usted entienda esta información porque esta sustancia puede hacerle daño. Los efectos de la exposición a cualquier sustancia peligrosa dependen de la dosis, la duración, la manera en que usted fue expuesto, así como de sus características y hábitos personales, y de si hay o no otras sustancias químicas presentes.

**Puntos importantes:** La exposición a niveles de arsénico más altos que lo normal ocurre principalmente en lugares de trabajo, cerca de sitios de desechos peligrosos o en áreas con niveles de arsénico naturalmente elevados. A niveles altos, el arsénico inorgánico puede causar la muerte. La exposición prolongada a niveles más bajos puede causar la decoloración de la piel y la aparición de pequeños callos o verrugas. El arsénico se ha encontrado en al menos 1149 de los 1684 sitios de la "Lista de prioridades nacionales" Identificados por la Agencia de Protección Ambiental (EPA).

## ¿Qué es el arsénico?

El arsénico es un elemento de origen natural ampliamente distribuido en la corteza terrestre. En el medioambiente, el arsénico se combina con oxígeno, cloro y azufre para formar compuestos inorgánicos de arsénico. El arsénico en los animales y plantas se combina con carbono e hidrógeno para formar compuestos orgánicos de arsénico.

Los compuestos inorgánicos de arsénico se usan principalmente para preservar madera. El arseniato cromado de cobre (CCA, por sus siglas en inglés) se usa para hacer madera "presurizada". El uso residencial del CCA se discontinuó en los Estados Unidos, pero aún se utiliza en aplicaciones industriales. Los compuestos orgánicos de arsénico se usan como pesticidas, principalmente en cultivos de algodón y huertos frutales.

## ¿Qué ocurre con el arsénico cuando se libera en el medioambiente?

- El arsénico se encuentra de forma natural en la tierra y en minerales y puede liberarse al aire, al agua y al suelo proveniente del polvo que levanta el viento y puede entrar al agua proveniente de desbordamientos o filtraciones.
- El arsénico no puede ser destruido en el medioambiente. Solamente puede cambiar de forma.
- La lluvia y la nieve sacan las partículas de polvo de arsénico del aire.
- Muchos compuestos comunes de arsénico pueden disolverse en el agua. La mayor parte del arsénico en el agua terminará en última instancia en la tierra o en sedimentos.
- Los peces y mariscos pueden acumular arsénico; la mayor parte de este arsénico está en una forma orgánica llamada arsenobetaina que es mucho menos nociva.

## ¿Cómo podría exponerme al arsénico?

- Al ingerir pequeñas cantidades de arsénico presentes en los alimentos y el agua o al respirar aire que contenga arsénico.

- Al inhalar aserrín o el humo proveniente de la quema de madera tratada con arsénico.
- Al vivir en áreas con niveles naturales inusualmente altos de arsénico en las rocas.
- Al trabajar en una ocupación que implique la producción o el uso de arsénico como, por ejemplo, la fundición de cobre o plomo, el tratamiento de madera o la aplicación de pesticidas.

## ¿Cómo puede el arsénico afectar mi salud?

La inhalación de niveles altos de arsénico inorgánico puede producir dolor de garganta e irritación de los pulmones.

La ingestión de niveles muy altos de arsénico puede ser mortal. La exposición a niveles más bajos puede causar náuseas y vómitos, una menor producción de glóbulos rojos y blancos, ritmo cardíaco anormal, daños a los vasos sanguíneos y una sensación de hormigueo en las manos y los pies.

La ingestión o inhalación prolongada de niveles bajos de arsénico inorgánico puede causar un oscurecimiento de la piel y la aparición de pequeños callos o verrugas en la palma de las manos, la planta de los pies y el torso.

El contacto de la piel con arsénico inorgánico puede causar enrojecimiento e hinchazón.

No se sabe casi nada acerca de los efectos de los compuestos orgánicos de arsénico en la salud de los seres humanos. Algunos estudios en animales han demostrado que algunos compuestos orgánicos de arsénico simples son menos tóxicos que las formas inorgánicas. La ingestión de compuestos de metilo y dimetilo puede causar diarrea y daño en los riñones.

## ¿Qué probabilidades hay de que el arsénico cause cáncer?

Varios estudios han demostrado que la ingestión de arsénico inorgánico puede aumentar el riesgo de tener cáncer de piel y cáncer en el hígado, la vejiga y los pulmones. La inhalación de arsénico inorgánico puede causar un mayor riesgo de cáncer de pulmón. El Departamento de Salud y Servicios Humanos (DHHS) y la EPA han determinado que el arsénico inorgánico es un conocido cancerígeno en los seres humanos. La Agencia

Agency for Toxic Substances and Disease Registry  
Division of Toxicology and Health Human Sciences



# ToxFAQs™ sobre el arsénico

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Internacional para la Investigación del Cáncer (IARC) ha determinado que el arsénico inorgánico es carcinogénico en los seres humanos.

## ¿Cómo puede el arsénico afectar a los niños?

Hay evidencia de que la exposición prolongada al arsénico en los niños puede dar como resultado puntajes más bajos del coeficiente intelectual. También hay evidencia de que la exposición al arsénico durante la gestación y los primeros años de la infancia puede aumentar la mortalidad en los adultos jóvenes.

También hay evidencia, aunque los estudios no son definitivos, de que el arsénico inhalado o ingerido puede ser perjudicial para las mujeres embarazadas o sus bebés en gestación. Los estudios en animales muestran que grandes dosis de arsénico, que causan enfermedades en las hembras preñadas, también pueden causar crías con bajo peso al nacer, malformaciones fetales e incluso la muerte fetal. El arsénico puede atravesar la placenta y se ha detectado en los tejidos del feto. El arsénico se ha encontrado en niveles bajos en la leche materna.

## ¿Cómo pueden las familias reducir el riesgo de exposición al arsénico?

- Si usted usa madera tratada con arsénico en proyectos domésticos, debe usar una máscara para protegerse del polvo, guantes y ropa protectora para disminuir la exposición al aserrín.
- Si usted vive en un área con niveles altos de arsénico en el agua o la tierra, debe usar fuentes más limpias de agua y limitar el contacto con la tierra.
- Si usted trabaja en una ocupación en la que puede exponerse al arsénico, debe tener en cuenta que puede acarrear el arsénico a su hogar en la ropa, la piel, el cabello o en sus herramientas. Asegúrese de ducharse y cambiarse la ropa antes de irse a su casa.

## ¿Dónde puedo obtener más información?

Si tiene preguntas o inquietudes, comuníquese con el departamento de salud o de control de calidad ambiental de su comunidad o estado, o...

**Para obtener más información, comuníquese con la siguiente entidad:**

Agency for Toxic Substances and Disease Registry  
Division of Toxicology and Human Health Sciences  
1600 Clifton Road NE, Mailstop F-57  
Atlanta, GA 30329-4027  
Teléfono: 1-800-CDC-INFO - 888-232-6348 (línea TTY)  
Correo electrónico: Comuníquese con CDC-INFO  
La Agencia para Sustancias Tóxicas y el Registro de Enfermedades (ATSDR) también puede decirle dónde encontrar centros de salud ocupacional y ambiental. Estas clínicas se especializan en el reconocimiento, la evaluación y el tratamiento de enfermedades causadas por la exposición a sustancias peligrosas.

**Línea de información y asistencia técnica:**  
Teléfono: 888-422-8737

## ¿Hay algún examen médico que determine si he estado expuesto al arsénico?

Existen pruebas para medir la cantidad de arsénico en la sangre, la orina, el cabello y las uñas. La prueba de orina es la más confiable para detectar si hubo exposición al arsénico en los últimos días. Las pruebas del cabello y las uñas pueden medir la exposición a niveles altos de arsénico en los últimos 6 a 12 meses. Estas pruebas pueden determinar si usted ha estado expuesto a niveles de arsénico superiores al promedio. No pueden predecir si los niveles de arsénico en su cuerpo afectarán su salud.

## ¿El gobierno federal ha hecho recomendaciones para proteger la salud de los seres humanos?

La EPA ha establecido límites para la cantidad de arsénico que las industrias pueden liberar en el medioambiente y ha restringido o cancelado muchos de los usos del arsénico en pesticidas. La EPA ha establecido un límite de 0.01 parte por millón (ppm) de arsénico en el agua potable.

La Administración de Seguridad y Salud Ocupacional (OSHA) ha establecido un límite de exposición permisible (LEP) de 10 microgramos de arsénico por metro cúbico de aire en el lugar de trabajo (10 µg/m<sup>3</sup>) para turnos de 8 horas y semanas laborales de 40 horas.

## Referencias

Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for Arsenic (Update). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

**Para solicitar perfiles toxicológicos, comuníquese con la siguiente entidad:**

National Technical Information Service  
5285 Port Royal Road  
Springfield, VA 22161  
Teléfono: 800-553-6847 o 703-605-6000

## Descargo de responsabilidad

Algunos archivos PDF pueden ser conversiones electrónicas de una copia en papel u otros archivos electrónicos de texto ASCII. Estas conversiones pueden haber generado errores en la traducción de caracteres o de formato. Los usuarios deben remitirse a la copia original en papel del perfil toxicológico para obtener el texto, las cifras y las tablas oficiales. Las copias originales en papel se pueden obtener siguiendo las instrucciones que aparecen en la página principal de perfiles toxicológicos, que también contiene otra información importante acerca de los perfiles.

La información que aparece aquí era correcta al momento de su publicación. Por favor comuníquese con la agencia correspondiente para saber si hubo cambios a las regulaciones o directrices citadas.

## Postcards to the Community



### EPA Hosting Training & Open House Federated Metals Corp Whiting Site

U.S. Environmental Protection Agency will provide a **Superfund Process training** session followed by an **Open House** in **November 15** as part of EPA's ongoing outreach activities to keep the community informed and involved regarding the recent addition of the Federated Metals Corp site into the National Priorities List, or NPL, at the Whiting High School. People can participate in one of the sessions or both.

#### Whiting High School Cafeteria

1751 Oliver St., Whiting

*\*Use school door 10, facing New York Ave., to enter the cafeteria*

**Date:** November 15, 2023

**Times:** 6-6:50 pm – **Superfund Process Training**

7-8 pm – **Open House**

As a separate outreach activity, EPA is preparing to hold *community interviews* in December to learn more about site-related needs, concerns, and expectations. Information gathered through community interviews also serve as the basis of creating a Community Involvement Plan for the site. In-person interviews are being planned for December 5, 6, and 7 at the Whiting Public Library, on 1735 Oliver St., Whiting. Phone or virtual interviews are being planned for December 12, 13, and 14. Information on how to schedule community interviews is available at the Federated Metals site webpage.

If you have questions or require specific accommodations for these events, please contact EPA's Community Involvement Coordinators, Danielle Kaufman, at [kaufman.danielle@epa.gov](mailto:kaufman.danielle@epa.gov) / 312-886-6703; or Adrian Palomeque at [palomeque.adrian@epa.gov](mailto:palomeque.adrian@epa.gov) / 440-250-1715.



For additional information visit: [www.epa.gov/superfund/federated-metals](http://www.epa.gov/superfund/federated-metals)

### EPA Hosting a Public Meeting Federated Metals Corp. Site



### Reunión pública de la EPA Sitio de Federated Metals Corp.

U.S. Environmental Protection Agency is hosting a public meeting to update community members on the **residential soil sampling and cleanup activities** taking place near the Federated Metals Corp. site located on 2230 Indianapolis Blvd. in Hammond, Ind.

The meeting will be **Wednesday, May 23** from **4 to 7 p.m.** at the **Whiting Family YMCA Social Room**, 1938 Clark St. in Whiting. The meeting will start with a *presentation* followed by a *general questions & answers* session. After the Q & A session there will be an opportunity to talk to us one on one.

For more information about this meeting and activities taking place at the Federated Metals Corp. site, visit [www.epa.gov/in/federated-metals-corporation-site](http://www.epa.gov/in/federated-metals-corporation-site).

For additional information you can also contact EPA's *Community Involvement Coordinator*, Adrian Palomeque at 800-621-8431, ext. 32035, [palomeque.adrian@epa.gov](mailto:palomeque.adrian@epa.gov); or EPA's *On-Scene Coordinator*, Andy Maguire at 800-621-8431, ext. 38782, [maguire.andrew@epa.gov](mailto:maguire.andrew@epa.gov).

La Agencia de Protección Ambiental, EPA por sus siglas en inglés, está organizando una reunión pública para dar a los miembros de la comunidad la más reciente información acerca de **las muestras de tierra residencial y de las actividades de limpieza** que se están llevando a cabo cerca del sitio llamado Federated Metals Corp., situado en el 2230 Indianapolis Blvd. en Hammond, Indiana.

La reunión será el **miércoles, 23 de mayo** de **4 a 7 p.m.** en el Salón Social del **YMCA de Whiting**, situado en el 1938 Clark St. en Whiting. La junta empezará con una *presentación* y después habrá una sesión de *preguntas y respuestas*. Al terminar la sesión de preguntas y respuestas habrá una oportunidad para hablar con nosotros uno a uno.

Para mayor información acerca de esta junta y de las actividades que se están llevando a cabo en el sitio de Federated Metals Corp., visite [www.epa.gov/in/federated-metals-corporation-site](http://www.epa.gov/in/federated-metals-corporation-site).

Si necesita más información también puede contactar al *Coordinador de Participación Comunitaria de la EPA*, Adrian Palomeque al 800-621-8431, ext. 32035, [palomeque.adrian@epa.gov](mailto:palomeque.adrian@epa.gov); o en inglés puede contactar al *Coordinador de acciones en terreno de la EPA*, Andy Maguire al 800-621-8431, ext. 38782, [maguire.andrew@epa.gov](mailto:maguire.andrew@epa.gov).