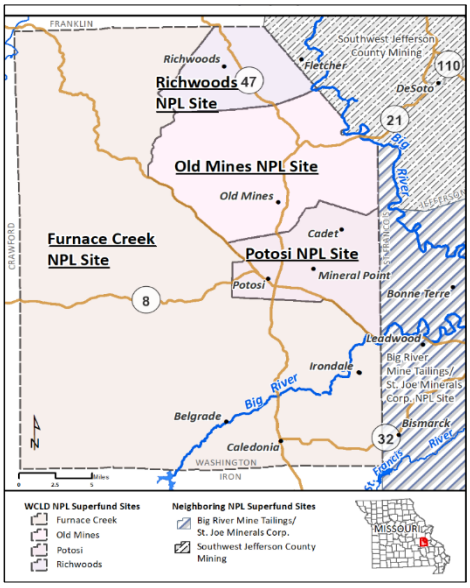
Washington County Lead District
Furnace Creek Superfund Site
Washington County, Missouri

Community Involvement Plan **March 2021**

SECTION 1
Overview of the Community Involvement Plan

The U.S. Environmental Protection Agency (EPA) Region 7 will use the information in this Community Involvement Plan (CIP) to help identify and address current matters of concern, and to review past community involvement efforts as EPA's Superfund cleanups project progresses at the Washington County Lead District – Furnace Creek Superfund Site, or site. The CIP will also provide guidance to EPA staff and help to ensure that community needs are addressed throughout the cleanup process.



The CIP is intended to:

- Encourage community interest and participation throughout EPA's involvement at the site.
- Initiate and support two-way communication between EPA and the community.
- Help ensure that community members understand the Superfund process and the opportunities it presents them to participate in the decision-making process regarding site cleanup.

This Community Involvement Plan identifies issues of concern and interest to the community potentially affected by the Washington County Lead District – Furnace Creek Superfund Site covering a portion of Washington County Missouri. A Site Map can be found on Page 4. For additional site information, visit: www.epa.gov/superfund/washingtoncountyfurnacecreek. This CIP contains information from the files of the EPA Region 7 office, as well as information gathered by EPA during community interviews and conversations with other interested parties and regulatory authorities.

EPA Invites Your Comments

If you have questions or comments on this community involvement plan, please contact:

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In This Plan

EPA Region 7 is conducting activities at the site pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, a federal law passed in 1980 and commonly known as Superfund; and the National Oil and Hazardous Substances Pollution Contingency Plan, revised in 1990.

Cleanup Responsibility: Federal and state regulatory authorities each have a role to play in cleaning up hazardous waste sites.

When EPA has the primary responsibility for Superfund activities at a site, the state provides technical and regulatory guidance and support to EPA, as needed. In some cases, the state takes the lead while EPA provides regulatory and technical support.

SECTION 2
Community Involvement Plan Objectives

Throughout the investigation and cleanup of the site, EPA will endeavor to keep community members informed of and involved in the cleanup process. To do this, EPA may employ a variety of tools and techniques, some of which are described in the next section. The specific communication effort will be based on the level of community interest, identified community issues and concerns, and the complexity and duration of the site investigation and cleanup. The level of participation sought by some communities or individual community members varies. EPA encourages those who want a greater level of participation to consider forming a Community Advisory Group and/or applying for Technical Assistance Grant funding. For additional details on the CAG and TAG programs, contact the Community Involvement Coordinator (CIC) listed on Page 1.

The CIP for this site is intended to provide general Superfund program information to interested community members, as well as help them identify the many participation opportunities and options available to them throughout the cleanup. The CIP is also intended to be an information resource for EPA staff members assigned to the site team. The following community involvement objectives help to ensure that avenues of communication between EPA and the community are established and maintained.

Objectives include:

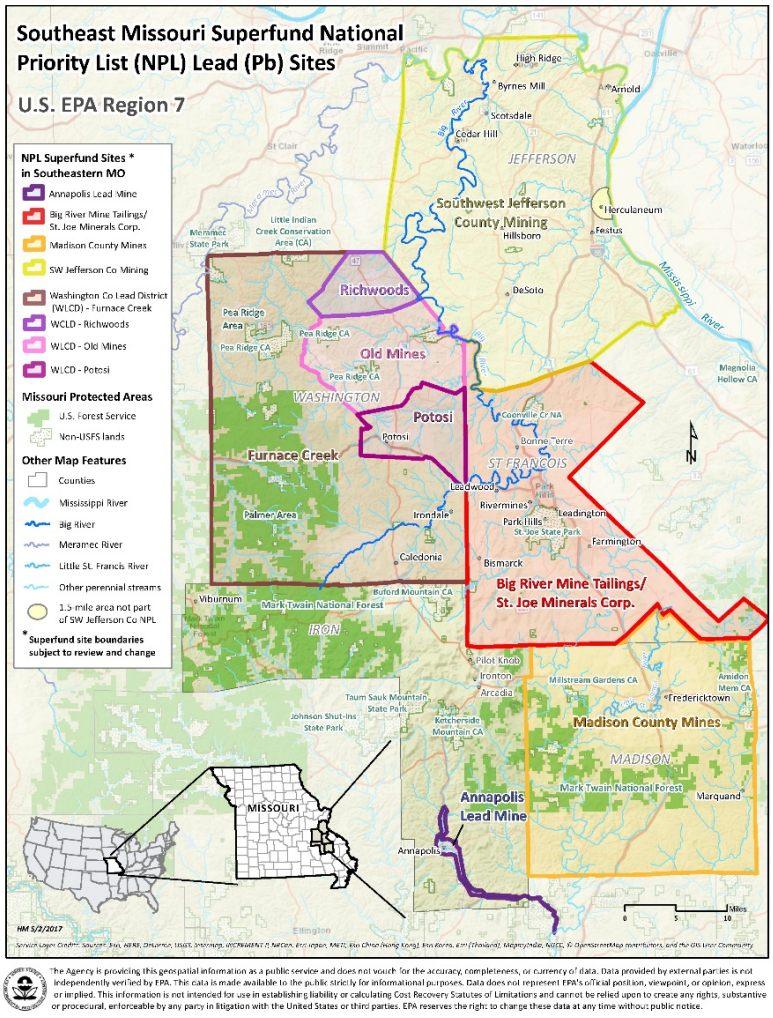
- Provide timely, site-specific information to community members so that they are able to participate in, or closely follow, site-related activities to the maximum extent desired, and the process allows.
- Provide a direct contact for community members by assigning a CIC for this site. The CIC will act as a liaison between the community and EPA.
- Provide opportunities for community input that are tailored to the needs and concerns of the community.
- Help ensure that community members are well-informed, so that they are knowledgeable about site activities and the Superfund process.
- Enhance communications between EPA and local officials to help ensure that officials are informed of site-related activities, and that EPA benefits from the officials' insights regarding the community and its concerns, the site and its history, and local regulatory issues.
- Enhance communications between EPA and the media to help ensure reporters are provided timely information about site-related activities and events, and are aware of pertinent site-related topics.

Mention of trade names, products or services in this CIP does not convey official EPA approval, endorsement or recommendation. For an explanation of abbreviations and acronyms, see Appendix B.

SECTION 3
Site Background

SITE OVERVIEW AND LOCATION

The Washington County Lead District is comprised of four National Priorities List (NPL) Superfund Sites: Potosi, Old Mines, Richwoods, and Furnace Creek. These four sites encompass the entirety of Washington County, approximately 762 square miles, in which extensive lead and barite mining, milling, and smelting activities were conducted for over 200 years.



The Agency is providing this geospatial information as a public service and does not vouch for the accuracy, completeness, or currency of data. Data provided by external parties is not independently verified by EPA. This data is made available to the public strictly for informational purposes. Data does not represent EPA's official position, viewpoint, or opinion, express or implied. This information is not intended for use in establishing liability or calculating Cost Recovery Statutes of Limitations and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with the United States or third parties. EPA reserves the right to change these data at any time without public notice.

The Washington County Lead District – Furnace Creek Superfund site, or site, encompasses approximately 533 square miles (341,000 acres). The Furnace Creek NPL site includes areas within and surrounding Hopewell, Irondale, Caledonia, Belgrade, Courtois, and Pea Ridge.

EPA and Missouri state agencies have been addressing lead-contaminated soils in Washington County for more than a decade, providing information, soil assessments, and removal actions.

EPA has also conducted ongoing residential yard cleanups. EPA has sampled (tested) over **6,300** residential yards for lead levels and over **600** yards have been cleaned up. Many more properties are eligible for remediation. EPA aims to sample as many residential and child high-use areas as possible for potential lead contamination. In addition, since 2006, approximately **4,200** private drinking water wells have been tested for elevated lead levels in the groundwater, including approximately 1,819 properties with samples collected from the Furnace Creek site. EPA has provided filter systems or bottled water to prevent residents from drinking elevated levels of lead in their well water.

If your property has not been sampled, and you would like to have your soil and groundwater analyzed, please contact EPA. Or, if you have questions about prior testing and/or need information about how to change private drinking water well filters, please contact EPA.

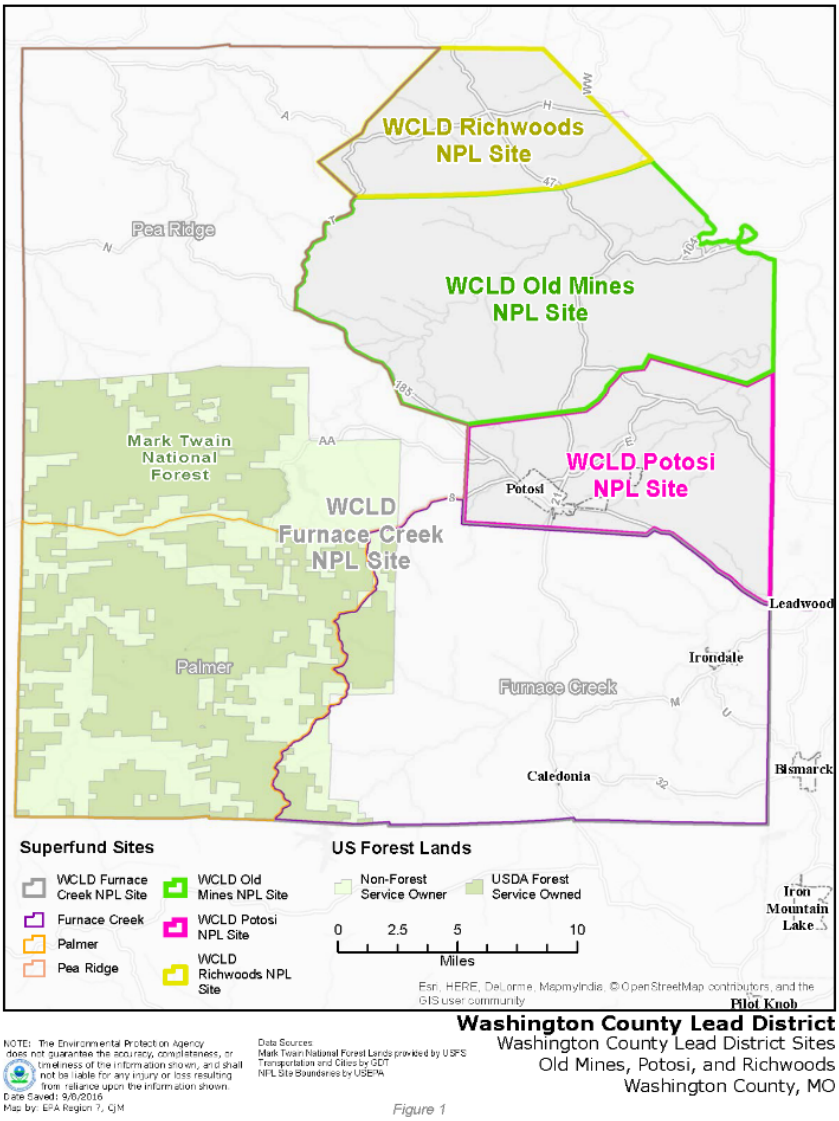


Figure 1

ANNUAL BLOOD TESTING

It is important that children 7 years old and younger have their blood lead level tested annually. The only way to know if your child has elevated blood lead levels is to have his or her blood tested. Children are exposed to lead when playing outside or on the floor of their homes if contaminated dust or dirt has been tracked in from outside. They can also be exposed if they eat certain kinds of fish caught in the Big River, swallow or breathe contaminated dust or dirt.

ABOUT LEAD AND PUBLIC HEALTH

Lead exposure can cause a range of adverse health effects for children and adults, from lifelong behavioral disorders and learning disabilities to seizures and death. EPA classifies lead as a probable human carcinogen and is a cumulative toxicant.

Lead is particularly dangerous to children 7 years old and younger because their growing bodies absorb more lead than adults do, and their developing brains and nervous systems are more sensitive to the damaging effects of lead. Pregnant women and nursing mothers should avoid exposure to protect their children. Babies and young children can also be more highly exposed to lead, because they often put their hands and other objects into their mouths that can have lead from dust or soil on them.

It is important that children in this age range have their blood lead level tested annually because lead-poisoned children do not always look or act sick. It is important to know that even exposure to low levels of lead can severely harm children.

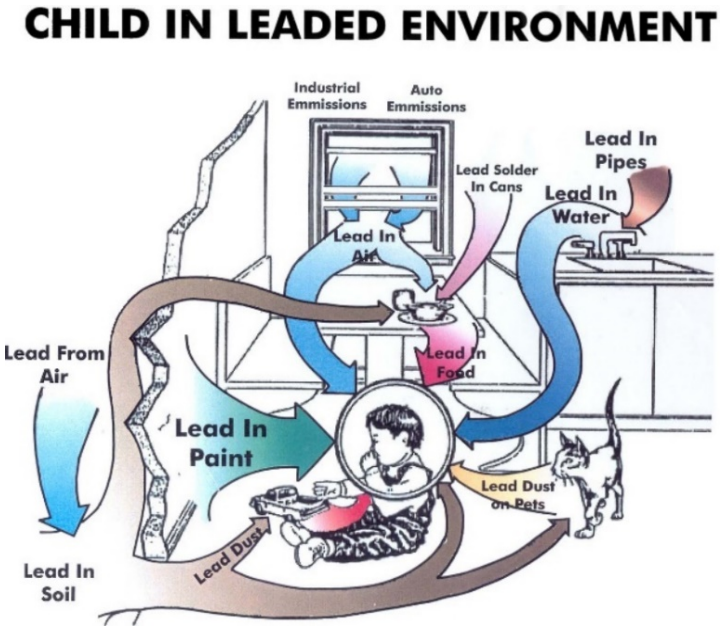
Exposure to lead can cause negative health effects in infants and young children, including, but not limited to:

- Nervous system and kidney damage

- Learning disabilities, attention-deficit disorder, and decreased intelligence
- Speech, language, and behavior problems
- Poor muscle coordination
- Decreased muscle and bone growth, and hearing damage

Lead exposure is also dangerous for adults and can cause health issues, such as fertility problems in men and women, high blood pressure, digestive problems, nerve disorders, memory and concentration problems, muscle and joint pain. For more information about lead and lead health risks, visit the CDC's Lead page at: www.cdc.gov/nceh/lead.

In general, lead exposure can be reduced by:



- Washing hands after playing outside and before meals.
- Eating a diet high in calcium and iron (and low in fat).
- Regularly cleaning floors, windowsills, and other surfaces. Use a mop or sponge with warm water and general all-purpose cleaner. Thoroughly rinse sponges and mop heads often during cleaning of dirty or dusty areas, and again afterward.
- Regularly washing children's hands, bottles, pacifiers, stuffed animals, and toys. Keep play areas clean.
- Removing shoes or wiping soil from shoes before entering your home to avoid tracking in lead from soil.
- Making sure children avoid fatty (or high fat) foods and eat nutritious meals high in iron and calcium. Children with good diets absorb less lead.
- Contact EPA about testing your residence for potential lead contamination.
- Before purchasing gravel (for driveways and other areas), request the quarry provide certification that the material does not exceed EPA action levels.

To arrange for lead screening of your children, please contact the **Washington County Health Department**, 520 Purcell Dr., Potosi, Missouri; phone: 573-438-2164. **You may also feel free to contact EPA about testing your residential yard and/or private drinking water well at no cost to you.**

HOW WILL EPA CLEAN UP MY PROPERTY?

If your property has been sampled and the level of lead exceed health-based limits, it qualifies for cleanup (also known as remediation). EPA will include an **access agreement** with a sampling results letter. By **signing** and **returning** the **access agreement**, owners are taking the first step in the process to allow the EPA contractor to clean up the affected areas of the yard. This work is being conducted **at no cost to the property owner.**

Step 1: The EPA contractor will schedule a time to meet with the property owner, review the affected areas of the yard or driveway, answer any questions, and address any concerns.

Step 2: The EPA contractor will ask the owner to sign the checklist and give them final permission to start the work. Once utilities are located, the cleanup may begin within a few weeks, weather permitting. The contractor's checklist of items to discuss will include the location of private utilities installed by the homeowner, documentation of pre-excavation property conditions, and determining the best way to provide access to heavy equipment. It is the sole responsibility of the contractor to have utilities marked and work around them as necessary. If the contractor damages utilities, they will repair the utilities **at no cost to the property owner**. Property owners will be provided full access to their residence during all phases of work.

Step 3: The cleanup generally includes excavating up to 1 foot of soil or gravel from areas that qualify for cleanup unless it is a garden. If a garden is still above the EPA "action level" at 1 foot of depth, it will be excavated to 2 feet. If contamination is still present after digging is complete, a highly visible barrier will be placed at depth prior to backfilling. If the soil is disturbed in the future, it warns people of contaminated soil below the barrier.

Step 4: The EPA contractor will then replace these areas with clean soil or gravel (if a gravel driveway was excavated), return the grade to the original contours, and restore the lawn. ***Note:*** *The contractor is only permitted to restore the property to its original condition and is required to repair or replace any items damaged during the cleanup process.*

Step 5: Once the restoration work is complete, the EPA contractor will request a final meeting with you to review the work and sign a final checklist to confirm satisfactory completion.

PREVIOUS INVESTIGATIONS AND ACTIVITIES

The site is separated into four Operable Units (OUs). Operable Unit 1 (OU-1) includes Soil (residential soil); Groundwater is OU-2; Mine Waste is OU-3; and Surface Water and Sediment are OU-4. EPA works on the various operable units on a priority basis, based on the potential for human health and environmental risks. EPA is also conducting the Remedial Investigation/Feasibility Study (RI/FS) for groundwater (OU-2), mine waste (OU-3), and surface water/sediment (OU-4).

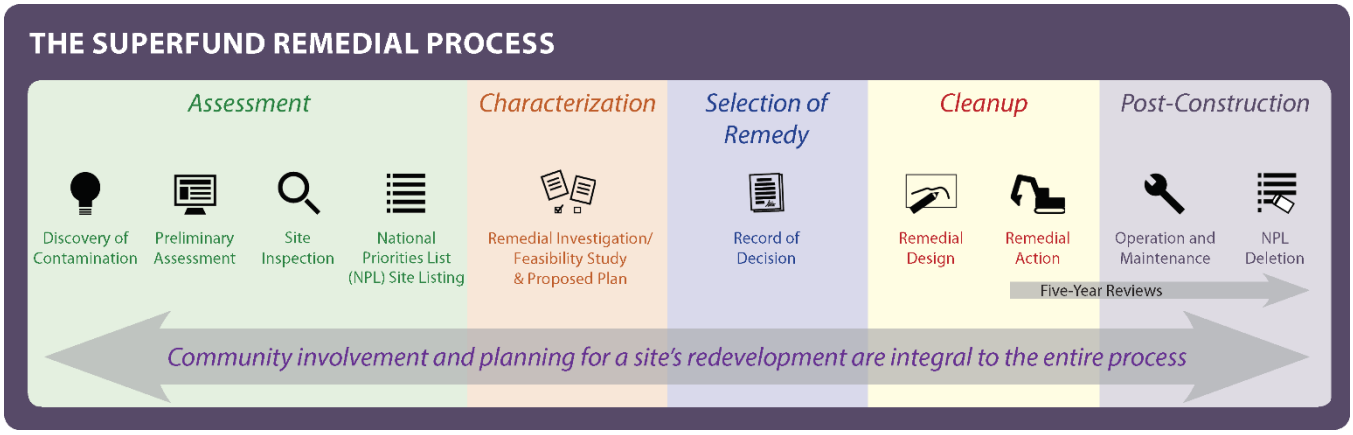
Remedial Investigations aim to define the nature and extent of contamination. The RI will include additional sampling at the site and an evaluation of risk to human health and the environment. Following the RI, a Feasibility Study (FS) includes evaluations of technologies capable of treating the contamination. It also includes an assessment of the cost and performance of technologies that could be used to clean up the site. The FS consists of development, screening, and a detailed evaluation of alternative remedial actions.

Operable Unit 1 – Residential Yards

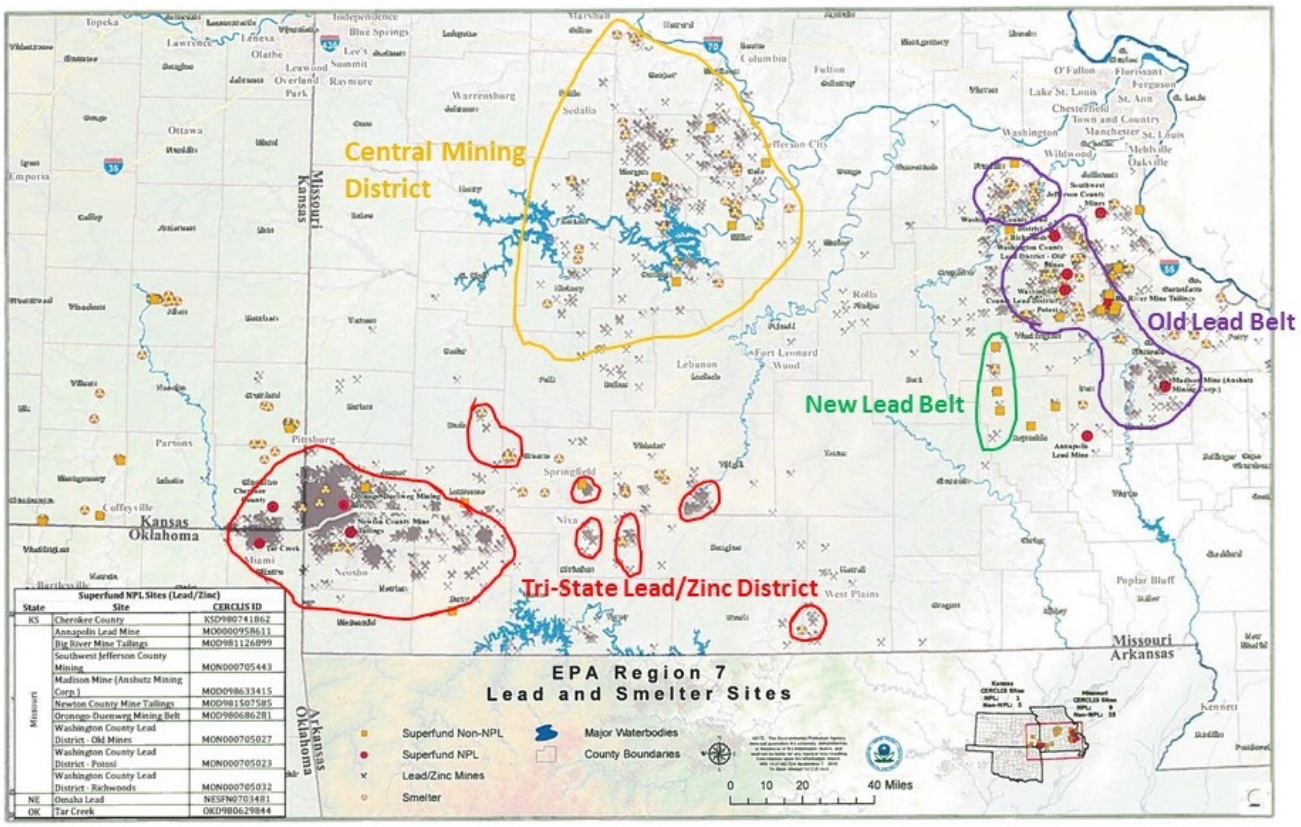
The RI/FS Report for the site was issued in August 2013. After completion of the RI/FS for OU-1, EPA submitted a Proposed Plan to the public for review; presented Agency findings in a public forum; provided an opportunity for the public to submit comments; and compiled responses to comments into an Interim Record of Decision (IROD) in 2017. The IROD for OU-1 was finalized Sept. 26, 2017.

The IROD identified the cleanup objectives that would be used to evaluate how properties would be addressed. The selected interim remedy is soil excavation and disposal, health education, and institutional controls.

The **Remedial Action** phase is the actual construction or implementation of a Superfund site cleanup that follows the remedial design. The cleanup consists of excavating and removing contaminated soil and gravel from affected properties and replacing the excavated material with clean fill and vegetative cover, including sod, hydro-seed, or gravel. The Remedial Action began in May 2019.



EPA continues to sample soil and residential groundwater wells. EPA will work to inform the community about site progress throughout all phases of the cleanup. For additional site information, visit: www.epa.gov/superfund/washingtoncountyfurnacecreek. For more information about the Superfund cleanup process, visit: www.epa.gov/superfund/superfund-cleanup-process.



Fish Advisories in Missouri

The Missouri Department of Health and Senior Services (MDHSS) works with the Missouri Department of Conservation (MDC) and other agencies to evaluate the level of contaminants in Missouri sport-caught fish. MDHSS then determines the health risks associated with eating fish from Missouri water bodies.

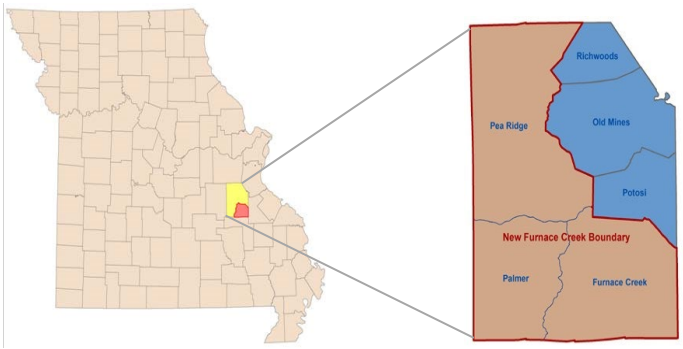
Fish Advisory - Big River Contaminant: Lead Species Affected: Carp, Sunfish*, and Suckers. Sizes Affected: All Sizes Recommendation: Do Not Eat *For this advisory, Sunfish specifically refers to longear sunfish, green sunfish, bluegill, warmouth, and rock bass. *(Source: Missouri Department of Health & Senior Services).* For additional information, visit: https://health.mo.gov/living/environment/fishadvisory/index.php.

SECTION 4
Community Background

ABOUT THE COMMUNITY – Washington County, Missouri, is located in southeastern Missouri, approximately 74 miles south of St. Louis.

Per the United States Census Website:

- *City of Potosi, Population Estimate (2018): 2,614*
- *City of Potosi, Total Housing Units (2014-2018): 1,170*
- *City of Potosi, Median Household Income: (Source: 2014-2018 American Community Survey 5-Year Estimates): $34,214*
- *Washington County Population (2019 Estimate): 24,730*
- *Washington County Median Household Income: $39,621*



Sources: www.census.gov, www.meramecregion.org/counties/washington-county, www.potosicity.com/visitors/categories/historic, www.fs.usda.gov/main/mtnf/home, and www.legendsofamerica.com/caledonia-missouri.

Environmental Justice (EJ) – Environmental justice is 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.

EPA prepared an **Environmental Justice Screening and Mapping Tool (EJSCREEN)** for this site that includes the area around the county seat of Potosi in Washington County, Missouri. All 11 indicators used by this tool were above the level in which EPA would classify this site as having potential EJ concerns. Please contact Monica Espinosa, Environmental Justice Program Specialist, to address any EJ concerns at (913) 551-7541(See Appendix D for EJSCREEN Report and Map.) For more information, visit: www.epa.gov/ejscreen.

Community Issues and Concerns

This section provides an overview of interviewees' key concerns and recommendations gathered through community interviews and engagement with the local community.

EPA conducted 11 interviews with members of the local community, elected officials, and leaders to inform this Community Involvement Plan for the site. Individuals interviewed were asked a set of standard questions**.**

For additional information, please contact the EPA CIC listed on Page 1 and Appendix A.

Summary of Community Concerns and Information Needs

Site Awareness, Community Meeting Recommendations and Requests

While most participants felt adequately informed about the site, some were not aware of all EPA actions, investigations, and cleanup activities at the site. For EPA public meetings, most recommended Monday, Tuesday or Thursday evenings in Potosi, Caledonia or Irondale. Wednesdays were not recommended because many people attend various church services weekly on Wednesday evenings. For Potosi and other areas, the local high schools or elementary schools were recommended for holding community meetings or other events. In Caledonia, local churches and the Red Barn were suggested. In Irondale, local churches and the Fire Station were recommended; daytime meetings were suggested for Irondale. Hosting events in each community would also prevent residents from having to travel across the county.

Most of the interviewees preferred direct, face-to-face interaction. Overall, most interviewees appreciated receiving mail, emails, and face-to-face interaction with EPA and EPA's contractors – especially regarding individual residential lead testing and cleanup activities.

For the widespread distribution of information, community members and leaders recommended sharing information through the Washington County Community Partnership, Washington County Health Department, local faith-based organizations, and local Facebook groups or community bulletins. *The Independent Journal* was recommended by most as the main newspaper to publish public notices; *The Daily Journal* in neighboring Farmington County was the second option other than the *St. Louis Post-Dispatch* in St. Louis.

Alternate Drinking Water for Contaminated Private Drinking Water Wells

One resident who has been on bottled water for approximately six years explained how much they appreciated the bottled water delivery (for years) and that EPA has done an excellent job providing an alternate source of drinking water for them, their family, and grandchildren.

Another interviewee who chose to use drinking water filters was concerned that he'd forgotten to change his filter for over two years even though it had been blinking red. This homeowner felt that changing drinking water filters was their personal responsibility, but that this approach leaves room for user error. Regardless, they appreciated EPA's free drinking water well testing, filtration devices, and the prior demonstration/training on changing filters. EPA continues to provide contact information to request additional drinking water filters.

Childhood Blood Lead Levels

One resident and an elected official said that they would want the site to be cleaned up to the right health standard, referencing the Centers for Disease Control and Prevention's (CDC's) updated level of concern for childhood blood lead levels. Some interviewees recommended that the childhood blood lead testing be more extensive to better protect children from lead health risks.

Several interviewees were concerned that the state of Missouri continues to use an outdated, less stringent level of concern for elevated blood lead levels (EBLs) in children, 0 micrograms per deciliter (µg/dl), rather than the current CDC reference level of 5 µg/dl.

Fish Advisories and Fish Tissue Sampling

Questions were asked about the presence of lead in fish and fish tissue testing, ecological risks, and assessments in Washington County. Some interviewees were concerned that people could be fishing in tailings ponds from mines. One community member stated that they were not eating the fish from local streams because they felt that the fish were contaminated and could harm them. Another community member said that they continue to fish but wonder if the fish are safe to eat. (See Page 8 for information on local fish advisories.)

Plants, Animals, and the Agricultural Community

Several residents expressed the need for a greater understanding of how lead contamination can impact soil, plants, animals, and the agricultural community.

Lead Exposure Awareness

Some residents said that everyone in America has now heard about lead because it is now a national issue. Some residents are concerned about the comprehensive risk from all sources of lead, including lead from drinking water pipes, lead-based paint, and toys. However, some interviewees were not as aware of issues with lead-contaminated soil and drinking water wells.

Many interviewees shared conflicting perceptions of lead absorption and bioavailability, with differing understandings of lead and different types of lead. Some interviewees didn't understand how lead can be absorbed and accumulate in the body. Some expressed concern about the bioavailability of different types of lead and shared conflicting perceptions of health risks.

Community Involvement, Technical Assistance, and Community Advisory Groups

The interviewees receiving site information felt that it was very clear and easy to understand and that the level of community involvement was appropriate. Most were grateful for EPA interaction and welcomed additional opportunities for coordination and collaboration in the future.

Almost all interviewees appreciated knowing about each of the ways to get involved; they were also interested in the various options for technical assistance – having a technical advisor and/or a grant. Most interviewees liked the idea of forming a community advisory group, but many expressed that they had little free time (despite their high level of interest). Some explained that they were already on a number of other unpaid volunteer committees that met regularly to address other community needs.

For future community engagement, most interviewees were interested in receiving site updates during the investigation and cleanup. For regular site updates, folks recommended coordinating with local community groups, faith-based groups, and additional key community members/leaders. Several interviewees invited and encouraged EPA staff to become a part of the community and attend regular city/town meetings,

community partnership meetings, county health fairs, and/or back-to-school fairs. Several folks offered to share EPA public notices and other information to promote EPA updates on an as-needed basis.

Human Health Risks and Lead Exposure Concerns

Interview participants living on or near the site had several concerns regarding lead exposure and children's health. Concerns were shared about various topics, such as: various public health risks from lead contamination; problems with the ongoing replacement of drinking water filters; technical and practical questions about lead absorption; lead tesing and real estate concerns; unknowns surrounding untested residential yards and private, domestic drinking water wells; future maintenance of already cleaned up areas; sites awaiting cleanup or repair; and safety of properties awaiting cleanup (remediation).

EPA Contractors, Completing Cleanups Effectively, and Local Economy

Notably, the majority of interviewees that had prior direct contact with EPA staff and/or contractors/operators stated that they are great people, great to work with, and/or have done great work. Most interviewees didn't have a preference for using EPA staff or EPA contractors, but some said they'd prefer to work directly with EPA. However, most people interviewed have been happy with the direct face-to-face interaction that they've experienced.

Concerns were raised about the amount of time it takes to work with contracts/contractors, especially with prior contract issues that delayed cleanups. Some expressed concern about damage to local roads by heavy truck traffic and potential issues with transporting lead-contaminated substances. One interviewee said to ensure that only dedicated trucks are used and that contractors should only use their vehicles for EPA cleanups to avoid cross-contamination of materials in the truck.

One elected official voiced that their biggest concern was that the cleanup be done right, for EPA to take care of all of the contamination, do it right, and not just try to get by. Another interviewee wasn't as concerned about how the lead contamination is cleaned up, just that it gets cleaned up. Several interviewees stated that cleanups seemed to be sporadic and they would like completion in a timely fashion for residents. Some interviewees were concerned that funding seems to them to be at a trickle, that the funding is not enough. Some said that EPA should be stronger, bigger, and better-funded; but some said that residents may prefer less involvement by the federal government in the local community. One elected official stated that they'd like to find a way to use the lead cleanups as an economic driver for the community – to beautify the area, bring jobs to the local economy, and find ways to reuse areas impacted by hazardous substances using technological improvements. One interviewee was very happy to hear about incentives to hire locally as a way to give back and support the local economy; supporting the local economy was very important to many interviewees.

<u>Community Involvement Core Principles</u> – Community involvement at the site will focus on the following core principles:

1. Timely and accurate responses to questions raised by area residents, local officials, organizations, and the media.
2. Establishment of an information repository in the community.
3. Informal public dialogue between EPA representatives and all interested parties.
4. Preparation of a responsiveness summary, as needed.
5. Revision to this plan, as necessary.

6. Assistance to communities by providing information on the following, as necessary:
   - How to apply for a Technical Assistance Grant
   - How to apply for Technical Assistance Services for Communities
   - How to form a Community Advisory Group

Lead Health Education and Voluntary Institutional Controls Program

EPA has developed an innovative partnership with the Missouri Department of Health and Human Services (MDHSS) and the Washington County Health Department (WCHD). The WCHD has received a multiyear grant from EPA through MDHSS for an amount up to $153,652 in the first year. There are two aspects of the grant activity: 1) lead health education, including lead poisoning prevention education, and 2) to assist community leaders and members in developing and implementing a Voluntary Institutional Controls Program for the Washington County area. For additional information, contact the Washington County Health Department at (573) 438-2164 or visit their website at www.wcmohealth.org. *(Source: Washington County Health Department Press Release)*.

Recent Community Involvement Events

To address community concerns and questions about lead, EPA has attended local events to provide enhanced community engagement.

Examples of recent site activities include, but are not limited to:

- On Saturday, Sept. 10, 2016, EPA participated in the 22nd Annual Washington County Health Fair at the Potosi High School.
- In June 2017, EPA held two formal Public Meetings and a public comment period about the Proposed Plan for Operable Unit 1 (OU-1) for Residential Yards.
- In September 2019, EPA, ATSDR and MDHHS conducted a "SoilSHOP" at the Washington County Health Fair and partnered with the WCHD and Washington County Community Partnership to broadcast information about free soil screenings.

Appendix A
List of Key Contacts

A.1 EPA Region 7 Contacts

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EPA's Toll-Free Hotline:
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Outside of EPA Region 7, call 1-800-223-0425

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Email: sturgess.steven@epa.gov

A.1 Federal Elected Officials

https://elections.mytimetovote.com/elected_officials/missouri.html

Roy Blunt, U.S. Senator
Washington, D.C. Office:
260 Russell Senate Office Building
Washington, DC 20510
Phone: (202) 224-5721

Columbia District Office:
1123 Wilkes Boulevard, Suite 320
Columbia, MO 65201
Phone: (573) 442-8151

Josh Hawley, U.S. Senator
Washington, D.C. Office:
212 Russell Senate Office Building
Washington, DC 20510
Phone: (202) 224-6154

Columbia District Office:
1123 Wilkes Blvd, Suite 220
Columbia, MO 65201
Phone: (573) 554-1919

Jason Smith
U.S. Representative – 8th Congressional District
Washington, DC Office:
U.S. House of Representatives
Longworth House Office Building, Suite 1118
Washington, DC 20515
Phone: (202) 225-4404

Local Office:
22 East Columbia Street
Farmington, MO 63640
Mailing Address: P.O. Box 1165
Phone: (573) 756-9755

A.2 State Elected Officials

Michael L. Parson, Governor
201 West Capitol Avenue, Room 216
Jefferson City, MO 65101
Phone: (573) 751-3222
Mailing Address:
PO Box 720
Jefferson City, MO 65101
https://governor.mo.gov/

State Elected Officials (cont.)

https://www.sos.mo.gov/elections/s_default/maps
https://house.mo.gov/MemberRoster.aspx

State Senator – Senatorial District 3
Vacant

Mike McGirl, State Representative
House District 118
201 West Capitol Avenue, 201-A
Jefferson City MO 65101
Phone: (573) 751-2398

Nate Tate, State Representative
House District 119
201 West Capitol Avenue, 114-A
Jefferson City MO 65101
Phone: (573) 751-0549

Chris Dinkins, State Representative
House District 144
201 West Capitol Avenue, 110-A
Jefferson City MO 65101
Phone: (573) 751-2112

A.3 Local Elected Officials

https://www.mocounties.com/washington-county.php

Washington County

David Sansegraw
Presiding Commissioner
102 N Missouri St., Suite C
Potosi, MO 63664-1799
Phone: (573) 438-6111

Beverly Boyer
Public Administrator
102 North Missouri
Potosi, MO 63664

Jeanette Allen
County Clerk
102 N Missouri St., Suite C
Potosi, Missouri 63664-1799
Phone: (573) 438-6111, ext. 221

County Health Department

Nicholas Hughey, Director
Washington County Health Department
520 Purcell Drive
Potosi, MO 63664
Phone: (573) 438-2164
Fax: (573) 438-4759
www.wcmohealth.org

City Officials

Potosi
https://www.potosicity.com/city-government/

Thomas R. (T.R.) Dudley
Mayor, City of Potosi – *County Seat*
City Hall
121 E High St.
Potosi, MO 63664

Brenda Smith
City Clerk - City of Potosi
City Hall
121 E High St.
Potosi, MO 63664

Irondale
https://www.meramecregion.org/about-the-meramec-region/counties-cities/irondale/

Doris Keim
Mayor, City of Irondale
Phone: (573) 749-3223
Fax: (573) 749-3340
Email: irondale@centurytel.net

Caledonia
http://www.caledoniamo.org/

John Robinson III
Mayor, Village of Caledonia
218 South State Highway 21
Caledonia, MO 63631
Phone: (573) 779-3492
Email: city029@centurytel.net

Appendix B
List of Abbreviations, Acronyms and Glossary

AR	Administrative Record
ARARs	Applicable or Relevant and Appropriate Requirements
ATSDR	Agency for Toxic Substances and Disease Registry
BHHRA	Baseline Human Health Risk Assessment
CAG	Community Advisory Group
CD	Consent Decree
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CIC	Community Involvement Coordinator
CFR	Code of Federal Regulations
CIP	Community Involvement Plan
COC	Contaminant of Concern
DOJ	U.S. Department of Justice
EPA	U.S. Environmental Protection Agency
ESD	Explanation of Significant Differences
FS	Feasibility Study
HRS	Hazard Ranking System
IC	Institutional Control
MCL	Maximum Contaminant Level
MoDNR	Missouri Department of Natural Resources
MCLG	Maximum Contaminant Level Goal
NCP	National Contingency Plan (formerly National Oil and Hazardous Contingency Plan)
NPL	National Priorities List
OU	Operable Unit
O&M	Operation & Maintenance
PA/SI	Preliminary Assessment/Site Inspection
Pb	Lead
PRAP	Proposed Remedial Action Plan
PRP	Potentially Responsible Party
PPB	Parts per billion
PPM	Parts per million
RA	Remedial Action
RAO	Remedial Action Objective
RD	Remedial Design
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
RS	Responsiveness Summary
SARA	Superfund Amendments and Reauthorization Act
SuperJTI	Superfund Job Training Initiative
TAG	Technical Assistance Grant
TAP	Technical Assistance Plan
TSCA	Toxic Substances Control Act
USGS	U.S. Geological Survey

Glossary of Technical Terms

The EPA Superfund Glossary is available online at: www.epa.gov/superfund/superfund-glossary.

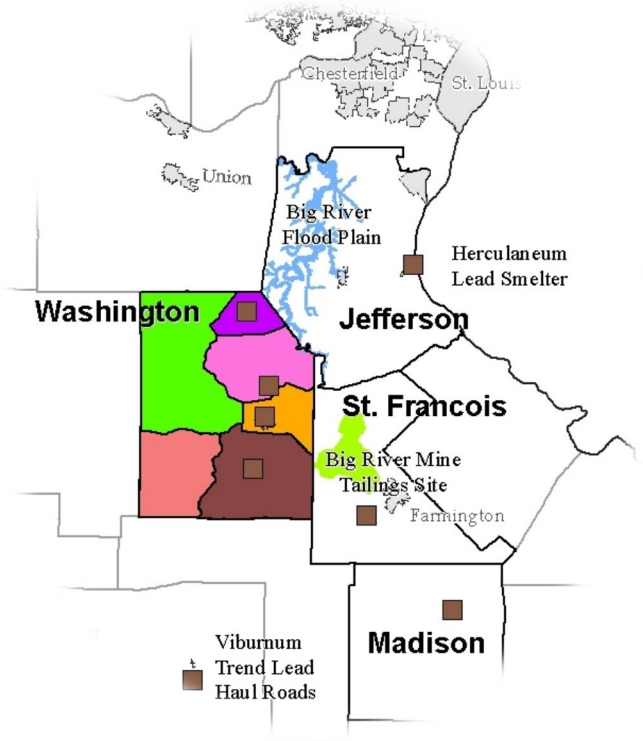
Appendix C
Site Background

SITE HISTORY

The Washington County Lead District is part of Missouri's Old Lead Belt, where lead mining has occurred for hundreds of years. The Old Lead Belt provided approximately 80% of the lead produced in the U.S.

Lead mining has been continuous until the present day in southeast Missouri, where lead is still mined in the Viburnum Trend, which includes part of Washington County (Doe Run's Viburnum Mine 29).

The Missouri Geological Survey has identified historical mining activity at several thousand locations in the Southeast Missouri Mining District, beginning in the early 1700s, with over 1,000 sites in Washington County.



Some notable entries in the Furnace Creek area include the following areas:

Furnace Creek Diggings	Plaffy Diggings
Evans Mine	Smith Mine
Hopewell Furnace	Bennings Diggings
Washington County	Zinc Works, Sand Diggings
Forker Diggings	Swallow Mine
Dry Fork Diggings	Guignon LaGiaue Mine
Flat Creek Mine	Galterman Farm Mine

Additional historical site background is available online at: https://response.epa.gov/furnacecreek and www.epa.gov/superfund/washingtoncountyfurnacecreek. A geologic history of the area is available at: https://dnr.mo.gov/geology/lrp/mininfo.htm and https://dnr.mo.gov/geology/lrp/mineralsandmining.htm.

- Furnace Creek response website: https://response.epa.gov/furnacecreek
- For information about the other three NPL sites in the Washington County Lead District:
  - Richwoods: www.epa.gov/superfund/washingtoncountyrichwoods
  - Old Mines: www.epa.gov/superfund/washingtoncountyoldmines
  - Potosi: www.epa.gov/superfund/washingtoncountypotosi

Appendix D
EJSCREEN Report and Map

United States Environmental Protection Agency

EJSCREEN Report (Version 2019)

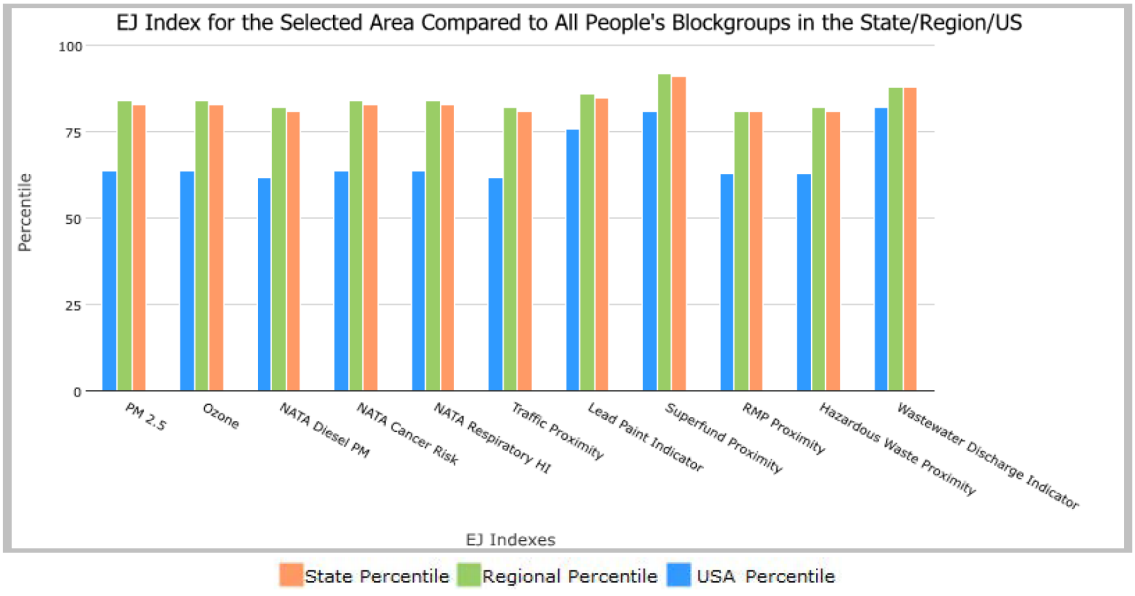
Blockgroup: 292214603001, MISSOURI, EPA Region 7

Approximate Population: 1,527

Input Area (sq. miles): 5.55

Potosi (County Seat), Washington, Missouri

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	83	84	64
EJ Index for Ozone	83	84	64
EJ Index for NATA* Diesel PM	81	82	62
EJ Index for NATA* Air Toxics Cancer Risk	83	84	64
EJ Index for NATA* Respiratory Hazard Index	83	84	64
EJ Index for Traffic Proximity and Volume	81	82	62
EJ Index for Lead Paint Indicator	85	86	76
EJ Index for Superfund Proximity	91	92	81
EJ Index for RMP Proximity	81	81	63
EJ Index for Hazardous Waste Proximity	81	82	63
EJ Index for Wastewater Discharge Indicator	88	88	82



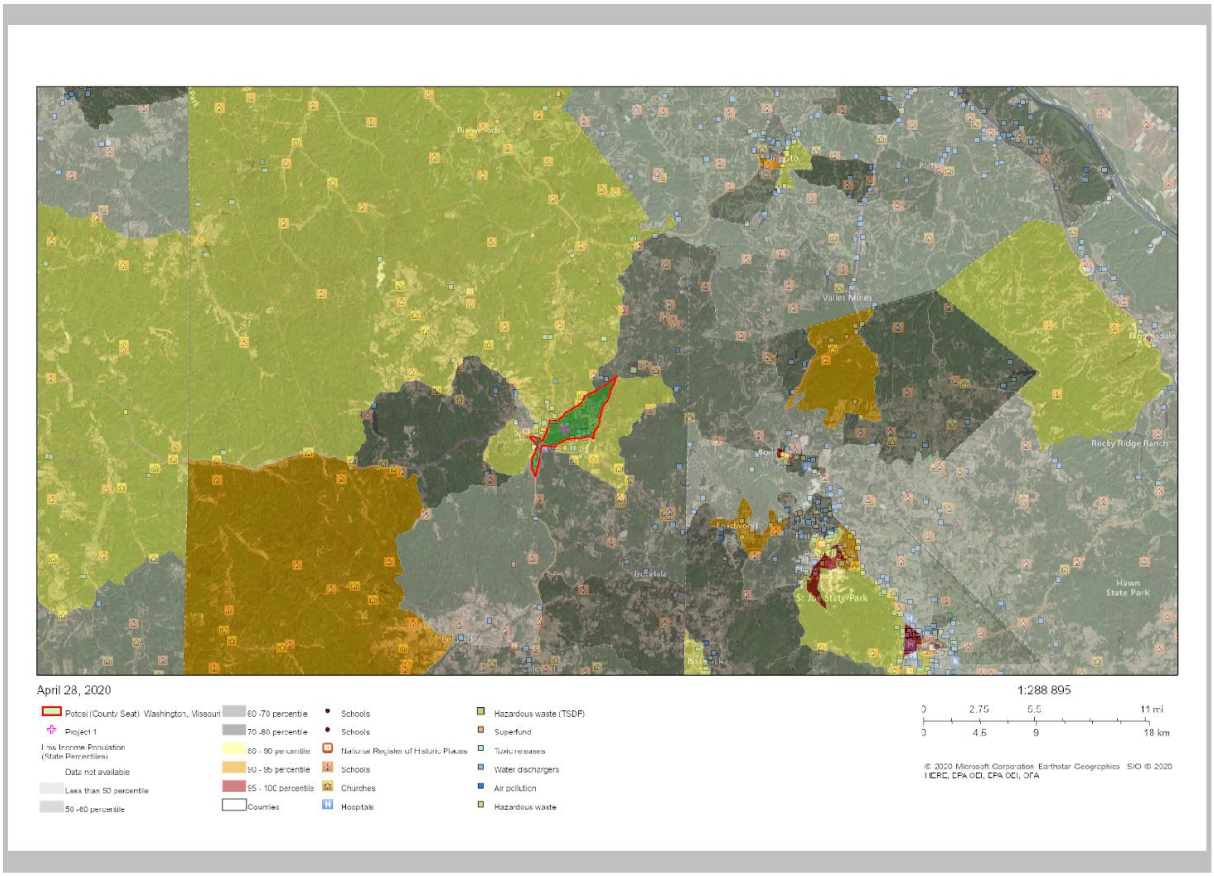
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

April 28, 2020 1/3

EJSCREEN Report (Version 2019)

Blockgroup: 292214603001, MISSOURI, EPA Region 7

Approximate Population: 1,527
Input Area (sq. miles): 5.55
Potosi (County Seat), Washington, Missouri



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJSCREEN Report (Version 2019)

Blockgroup: 292214603001, MISSOURI, EPA Region 7

Approximate Population: 1,527

Input Area (sq. miles): 5.55

Potosi (County Seat), Washington, Missouri

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m^3)	7.78	8.29	27	7.77	51	8.3	33
Ozone (ppb)	40.3	43.1	9	42.5	17	43	30
NATA* Diesel PM (µg/m^3)	0.19	0.447	20	0.367	<50th	0.479	<50th
NATA* Cancer Risk (lifetime risk per million)	30	32	32	27	60-70th	32	<50th
NATA* Respiratory Hazard Index	0.4	0.42	32	0.36	60-70th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	61	370	37	330	37	750	27
Lead Paint Indicator (% Pre-1960 Housing)	0.42	0.29	74	0.34	64	0.28	71
Superfund Proximity (site count/km distance)	0.35	0.099	96	0.1	95	0.13	92
RMP Proximity (facility count/km distance)	0.16	0.63	38	0.94	23	0.74	30
Hazardous Waste Proximity (facility count/km distance)	0.16	0.99	38	0.8	39	4	30
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0.00067	1.6	57	0.97	57	14	64
Demographic Indicators							
Demographic Index	41%	27%	82	26%	83	36%	64
Minority Population	37%	20%	83	19%	84	39%	56
Low Income Population	45%	34%	72	32%	76	33%	73
Linguistically Isolated Population	0%	1%	72	2%	66	4%	45
Population With Less Than High School Education	27%	11%	94	10%	94	13%	87
Population Under 5 years of age	3%	6%	19	6%	16	6%	19
Population over 64 years of age	9%	16%	17	15%	19	15%	24

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

April 28, 2020 3/3