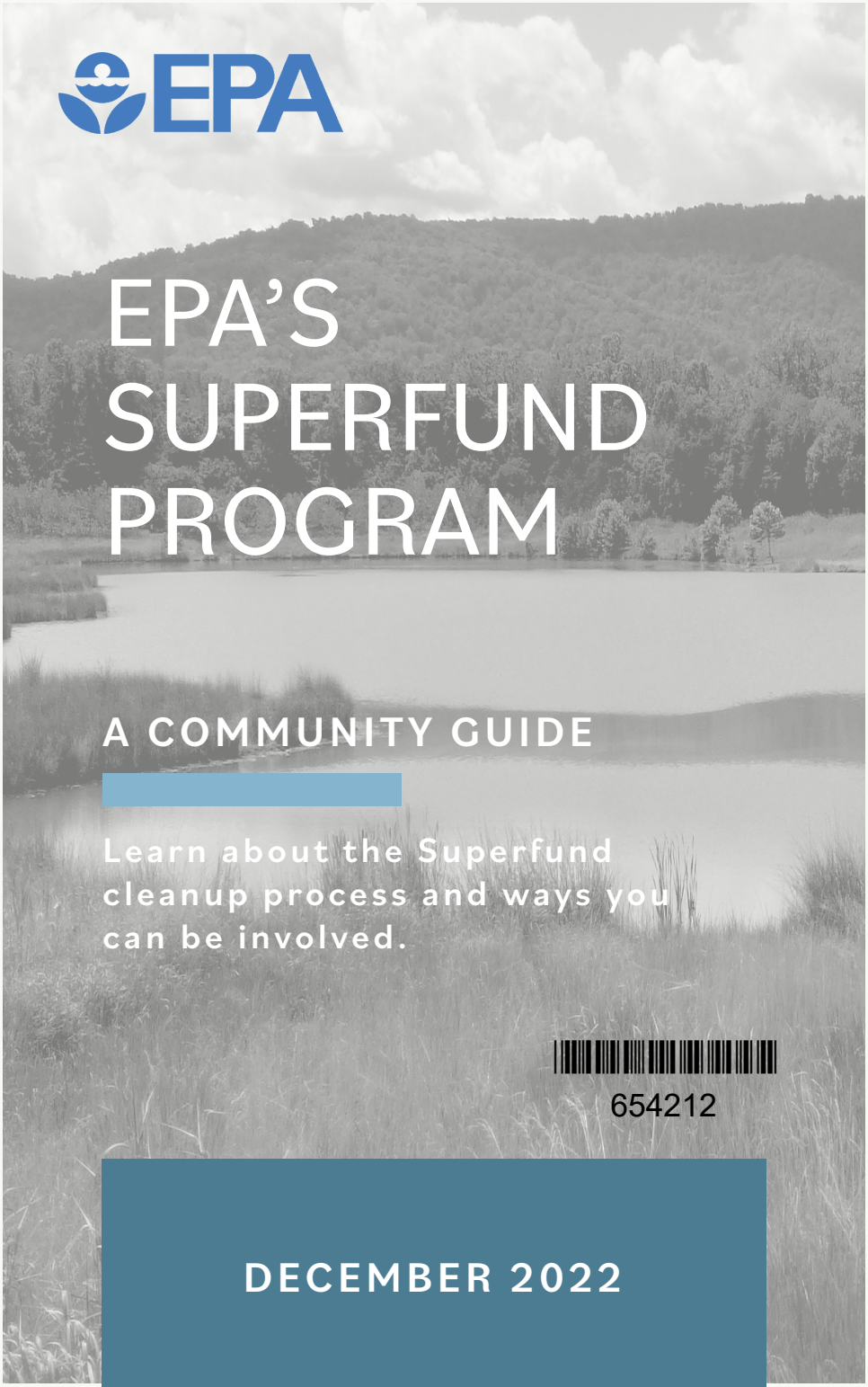


EPA'S SUPERFUND PROGRAM

A COMMUNITY GUIDE

Learn about the Superfund cleanup process and ways you can be involved.

654212

DECEMBER 2022

What is Superfund?

For more than 40 years, the U.S. Environmental Protection Agency's (EPA's) Superfund program has been a cornerstone of the work EPA performs for communities across the country. The Superfund program cleans up some of the nation's most contaminated lands and responds to environmental emergencies, oil spills and natural disasters.

To protect people's health and the environment, the Superfund program focuses on making a lasting difference in communities, ensuring that people can live and work in healthy, vibrant places. The Superfund program oversees long-term cleanups at sites listed on the National Priorities List (NPL), short-term cleanups (called removal actions), and responses to chemical and oil spill emergencies.

There are thousands of Superfund sites across the country. These sites include abandoned chemical manufacturing and storage facilities, processing plants, landfills and mines. Thanks to these efforts, communities have reclaimed and reused thousands of acres of formerly contaminated land. Today, about 1,000 Superfund sites support new and ongoing uses.

EPA's Superfund program makes a lasting difference in communities by cleaning up the nation's worst contaminated waste sites, tackling threats to people's health and the environment, supporting local economies, enhancing quality of life, and preventing future contaminated substance releases.

Why was Superfund established?

Superfund was established in 1980 by an act of Congress, giving EPA the funds and authority to clean up contaminated sites.

Congress established the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in response to growing concerns over the health and environmental risks posed by contaminated waste sites. This law was enacted after the discovery of toxic waste dumps such as Love Canal and A.L. Taylor (Valley of Drums) in the 1970s.

CERCLA is informally called Superfund. EPA administers the Superfund program in cooperation with tribal and state governments. It allows EPA to clean up abandoned and uncontrolled contaminated waste sites and make sure responsible parties perform cleanups or reimburse the government for cleanups led by EPA.

THE GOALS OF THE SUPERFUND PROGRAM

- Protect people's health and the environment by cleaning up contaminated sites.
- Make responsible parties clean up sites or pay for cleanup work.
- Involve communities throughout the Superfund process.
- Support the return of Superfund sites to productive and beneficial use.

How are Superfund sites discovered?

Residents, local, state, tribal and federal agencies, and businesses report the potential presence of contamination to EPA. EPA inspections and investigations into these complaints can confirm the contamination.

To report potential releases of contaminated substances and oil, please call the National Response Center toll free at 800-424-8802, 24 hours a day, seven days a week. You can also contact your tribal, state and local authorities.

The NRC is the national point of contact for reporting all oil, chemical, radiological and biological releases into the environment anywhere in the United States and its territories.

REPORT A POTENTIAL RELEASE OF CONTAMINATED SUBSTANCES OR OIL

Contact the National Response Center at 800-424-8802.

How does EPA manage Superfund sites?

After Superfund sites are discovered or identified, EPA uses two basic types of responses to manage contaminated sites.

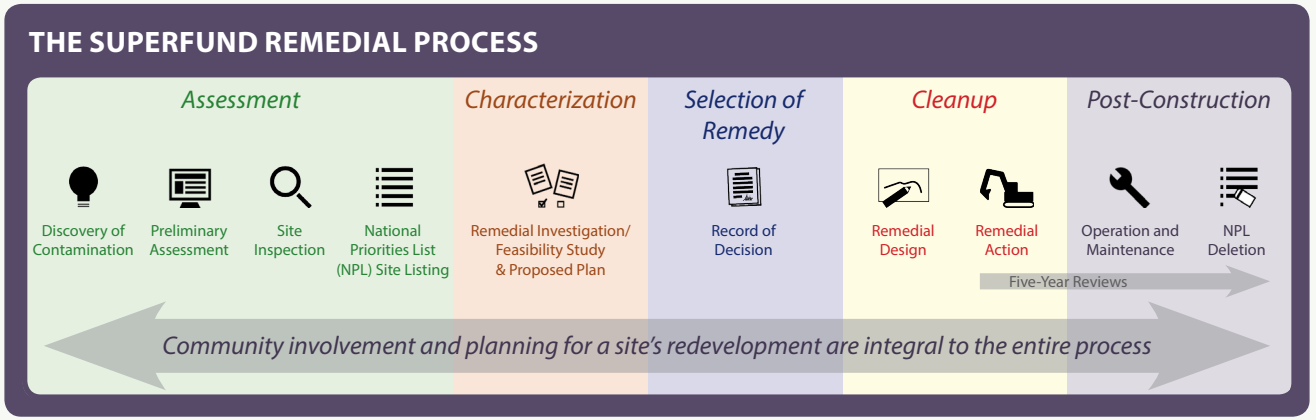
Remedial Actions handle complex sites needing long-term responses. Remedial actions manage releases that do not pose an urgent threat to people's health or the environment and do not require immediate action. Remedial actions involve complex and highly contaminated sites that often require several years to study the problem, develop a permanent solution, and clean up the contaminated waste. These are the sites that most people think of when they hear about the Superfund program.

Removal Actions address releases or threatened releases requiring prompt responses. Emergency actions eliminate immediate risks and ensure public safety. Examples of such emergencies are chemical releases at a facility or during transportation. EPA may respond to help state and local authorities deal with these emergencies quickly.

The following pages provide more information about the Superfund remedial and removal processes.

EPA strives to conserve natural resources, minimize waste generation and reduce energy consumption to improve the environmental performance of Superfund activities while protecting people's health and the environment.

What are the steps in a Superfund remedial action cleanup?



ASSESSMENT

EPA determines if the site poses a threat to people and the environment and whether hazards need to be addressed immediately or if more site information will be collected. EPA uses information from the assessment phase of the Superfund process to score sites according to the danger they may pose to people's health and the environment. If a site has a high-enough score on the Hazard Ranking System (HRS) and meets all other criteria, EPA may propose it for listing on the NPL.

CHARACTERIZATION

Once a site is on the NPL, further investigation into the problems at the site and the best way to address them is required. This is called the remedial investigation and feasibility study (RI/FS). EPA will develop cleanup alternatives for the site, including EPA's preferred cleanup option, and will share it with the community for evaluation and comment in a Proposed Plan.

SELECTION OF REMEDY

The cleanup method ultimately chosen for the site, and the reasons for the selection, are documented in the Record of Decision (ROD). The ROD discusses all activities prior to selection of a cleanup method and describes how the cleanup method will be protective of people's health and the environment.

CLEANUP

The cleanup phase has two parts. During the remedial design, plans for the cleanup method are carefully designed. The remedial action starts the actual cleanup at a site. At some sites, a removal action may also be done at the site at any point during the remedial action.

POST-CONSTRUCTION

After EPA completes the construction of the cleanup, post-construction activities make sure the cleanup actions will protect people's health and the environment over the long term. These activities may include routine maintenance at the site such as making sure signs and fences are intact or soil treatment systems are running smoothly.

EPA also conducts in-depth site reviews every five years. EPA may delete a site or part of a site (sometimes called an operable unit) from the NPL if all cleanup goals have been met and no further cleanup action is required to protect people's health and the environment.

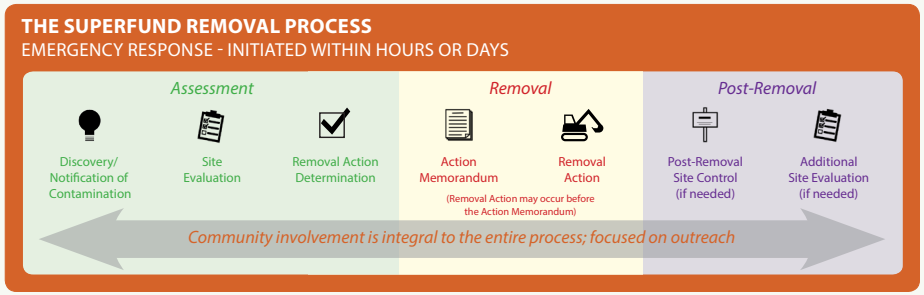
What are the steps in Superfund removal cleanup actions?

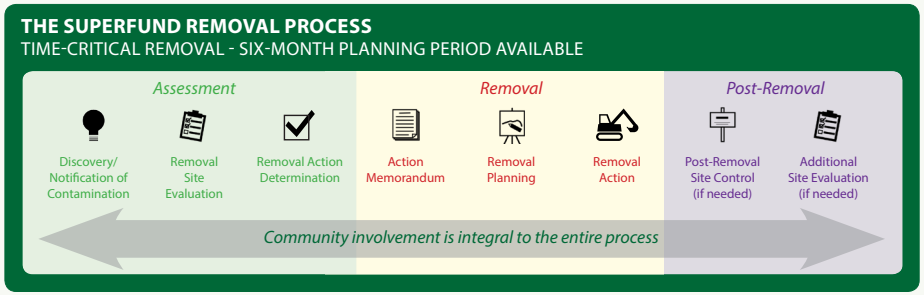
Superfund removal cleanup actions vary depending upon the type of removal needed. They generally include an assessment phase, a removal or cleanup phase, and a post-removal phase. Removals are classified as emergency response, time-critical or non-time-critical removals, depending on the extent and type of contamination.

Emergency removal responses require an immediate response to releases or threatened releases to the environment. Emergency removals start within hours or days of the determination that a removal action is appropriate. Typical emergency removals address immediate threats such as fires, explosions, toxic spills and imminent contamination of water supplies.

Time-critical removals are situations where EPA determines that a removal is appropriate and on-site removal activities must begin within six months. Examples include removal of drums or small volumes of contaminated soil and stabilization of lagoons.

Non-time-critical removals happen when EPA determines that a removal action is appropriate, and the situation allows for a planning period of at least six months before on-site activities must begin. Because non-time-critical removal sites do not present an immediate threat to people's health or safety, more time is available to assess potential threats thoroughly and evaluate cleanup alternatives.





Who is involved in a Superfund cleanup?

- *Potentially Responsible Parties (PRPs):* the parties (e.g., people, businesses, government entities, etc.) responsible for contamination at a Superfund site. PRPs are required to perform a cleanup or pay for costs incurred by EPA in performing cleanup activities, to address contamination at a site. Whenever possible, EPA requires that PRPs clean up the contaminated waste sites they have created or pay for the cleanups.
- *Contractors:* companies hired by PRPs and tribal, federal and state agencies to do work at Superfund sites.
- *EPA:* the United States Environmental Protection Agency, responsible for overseeing site cleanup at the federal level. Key support staff include on-scene coordinators (OSCs) for removal actions, remedial project managers (RPMs) for remedial actions and community involvement coordinators (CICs) for both remedial and removal actions.
- *Nation/Tribal Governments:* leadership and representatives of federally recognized Nations/Tribes coordinating in a government-to-government relationship with EPA on Superfund cleanups within Nation/Tribal lands or aboriginal Treaty lands of interest to the Nation/Tribes pursuant to federal policy, statute and case law.
- *State Environmental Agencies:* the agencies overseeing site cleanup at the state level and coordinating with EPA.
- *Community Members and Local Governments:* site stakeholders that are an integral part of the cleanup process, providing information about site history, local interests and concerns, and community priorities for the future.

What is the role of community involvement in the Superfund process?

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

EPA works every day with other federal agencies, tribes, states and communities to improve people's health and protect the environment. Community involvement at Superfund sites gives communities an opportunity to have a say in how their neighborhoods are cleaned up and how they might be used in the future. Working together produces better results for everyone.

How can I be involved in the cleanup?

- Stay informed by reading fact sheets, visiting webpages, participating in meetings and talking with site cleanup staff. EPA will make materials and meetings available in languages other than English.
- Provide EPA with information on past and current site uses and features that can inform the cleanup.
- Get technical assistance.
- Share input in writing or in person during public comment periods.
- Be part of reuse discussions for the site.
- Let site staff know about any activities at the site that might endanger people (e.g., trespassing, unauthorized digging).

EPA's community involvement priorities include ensuring transparency and accessibility in the Superfund decision-making process, providing information and technical assistance that makes a difference for communities, and producing site outcomes that are responsive to stakeholder concerns and aligned with community needs.

Your involvement is very important. You have the opportunity and the right to be engaged in and comment on the work done at sites in your community.

EPA has a variety of programs that support early and effective community involvement during Superfund decision-making. To learn more:

- Get in touch with your regional Superfund community involvement contact.
- Review EPA's Superfund community involvement resources page.
- Learn about EPA's Superfund community involvement tools and resources.
- Check out EPA's Superfund technical assistance for communities resources page.

What is Superfund redevelopment?

Consideration of future use is an integral part of EPA's cleanup programs from initial site investigations and cleanup selection through to the design, implementation, and operation and maintenance of a site's cleanup. EPA works with communities to make sure sites and portions of sites are used appropriately. EPA and its partners have an effective process and the necessary tools and information to return Superfund sites to productive use at any point during the cleanup process.

EPA also works with site stakeholders to think about how future land use considerations can inform the implementation and long-term stewardship of site remedies as well as cleanup planning. At some sites, for example, reuse considerations can inform the future location of groundwater monitoring wells and other operation and maintenance equipment that might inadvertently hinder redevelopment efforts.

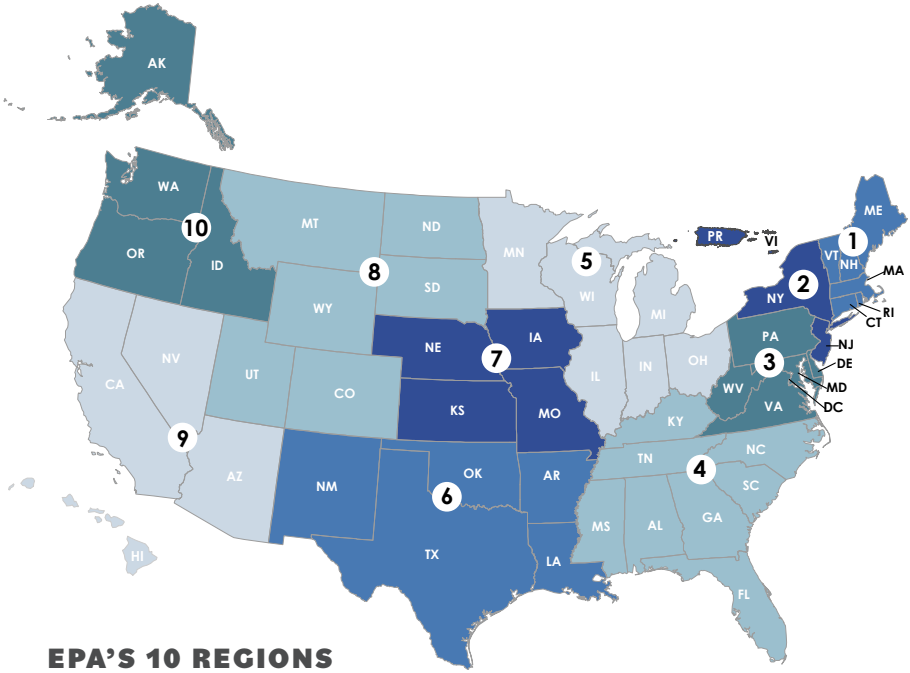
At other sites, detailed site reuse plans have provided additional benefits that save time and reduce redevelopment costs. For example, future infrastructure corridors or building footers can be installed in coordination with site cleanup activities.

The results – the transformation of formerly contaminated lands nationwide into valuable community resources – are remarkable. Today, about 1,000 Superfund sites support new and ongoing uses, employing over 200,000 people.

The cleanup and reuse of Superfund sites often restores value to site properties and surrounding communities that have been negatively affected by contamination. Site redevelopment can revitalize a local economy with jobs, new businesses, tax revenues and local spending.

Superfund sites across the country are home to industrial and commercial parks, retail centers, government offices, and neighborhoods. Many sites continue to host industrial operations such as large-scale manufacturing facilities. Other sites support natural areas, parks and recreation facilities.

Who can I contact for more information?



EPA'S 10 REGIONS

EPA'S REGIONAL SUPERFUND COMMUNITY INVOLVEMENT CONTACTS:

Region 1: 888-372-7341

Region 2: 800-346-5009

Region 3: 800-438-2474

Region 4: 800-241-1754

Region 5: 800-621-8431

Region 6: 800-533-3508

Region 7: 800-223-0425

Region 8: 800-227-8917

Region 9: 866-372-9378

Region 10: 800-424-4372

Meeker Avenue Plume Superfund Site
Superfund Workshop | December 2022

Community Involvement Resources

The goal of Superfund community involvement is to advocate and strengthen early and meaningful community participation during Superfund cleanups. EPA offers a variety of programs and tools for communities to help engage residents and stakeholders in the Superfund process.

Community Advisory Groups

A Community Advisory Group (CAG) is made up of people living near a Superfund site representing various community interests. The group's purpose is to facilitate the exchange of information among the community and EPA, state regulatory agencies and other agencies involved in the cleanup of a nearby Superfund site. Please contact your site's Community Involvement Coordinator (CIC) for more information.

EPA Superfund CAG home page: www.epa.gov/superfund/superfund-community-advisory-groups
EPA CAG resources page: www.epa.gov/superfund/community-advisory-group-cag-resources

Technical Assistance Grants

A Technical Assistance Grant (TAG) helps communities participate in Superfund cleanup decision-making. An initial grant of up to $50,000 is available to qualified community groups to contract their own technical advisor to interpret and explain technical reports, site conditions and EPA's proposed cleanup proposals and decisions. TAGs are available at Superfund sites on EPA's National Priorities List (NPL) or proposed for listing on the NPL, and for which a response action has begun.

EPA Region 2 TAG Coordinator: Shereen Kandil – (215) 637-4333| kandil.shereen@epa.gov
EPA National TAG Coordinator: Freya Margand – (202) 566-1033 | margand.freya@epa.gov
EPA TAG home page: www.epa.gov/superfund/technical-assistance-grant-tag-program

Technical Assistance Services for Communities (TASC) Program

The TASC program provides independent assistance through an EPA contract to help communities better understand the science, regulations and policies of environmental issues and EPA actions. Under the TASC contract, a contractor provides scientists, engineers, and other professionals to review and explain information to communities. TASC services are determined on a project-specific basis and provided at no cost to communities.

EPA Region 2 TASC Coordinator: Shereen Kandil – (215) 637-4333| kandil.shereen@epa.gov
EPA TASC National Program Managers: Freya Margand – (202) 566-1033 | margand.freya@epa.gov and Tina Conley – (202) 566-0973 | conley.tina@epa.gov
EPA TASC home page: www.epa.gov/superfund/technical-assistance-services-communities-tasc-program

Technical Assistance Needs Assessments

A Technical Assistance Needs Assessment (TANA) is a site-specific process that identifies whether a community needs additional help from EPA to understand technical information and engage meaningfully in the Superfund decision-making process. TANAs are developed based on conversations and input from community members and stakeholders. Please contact the Region 2 TASC Coordinator to learn more or to request a TANA.

EPA TANA home page: www.epa.gov/superfund/technical-assistance-needs-assessments-tanas

Conflict Prevention and Resolution Center

The Conflict Prevention and Resolution Center (CPRC) provides expert services in conflict and issues assessment and provides support for public participation and stakeholder involvement, consensus building and collaborative processes, and alternative dispute resolution. Please contact your site's Community Involvement Coordinator (CIC) for more information or to request CPRC services.

EPA CPRC home page: www.epa.gov/adr
EPA CPRC services page: www.epa.gov/adr/cprc-services

Other Superfund Community Involvement Resources

- **EPA's Community Involvement Toolkit:** EPA's Community Involvement Toolkit includes a variety of community involvement tools that Superfund site teams may use to involve and inform the community. To access the Toolkit, visit: https://www.epa.gov/superfund/superfund-community-involvement-tools-and-resources.

- **EPA's Community Involvement Handbook:** EPA's Community Involvement Handbook provides guidance to EPA staff on how EPA typically plans and implements community involvement activities at Superfund sites. To view the handbook, visit: https://semspub.epa.gov/work/HQ/100002505.pdf.
- **EPA's Superfund Community Guides Series:** EPA's Superfund Community Guides Series is a set of two-page fact sheets describing cleanup methods used at Superfund and other hazardous waste cleanup sites. The guides are available in English and Spanish. To access the Community Guides Series, visit: https://www.epa.gov/superfund/superfund-community-involvement-tools-and-resources#guides.

Meeker Avenue Plume Site EPA Contact Information

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Government and the Superfund Process

The U.S. Environmental Protection Agency (EPA) administers the federal government's Superfund program.[1] EPA is part of the executive branch of our government – meaning EPA implements and enforces federal laws and regulations. The Superfund program is supported by other EPA offices and government agencies. All relevant offices and agencies coordinate to clean up contaminated sites, protect people's health and the environment, pursue those responsible for the contamination, and support redevelopment of cleaned-up sites to restore and revitalize communities. The following table describes the roles and responsibilities of the government agencies that may be involved at the Meeker Avenue Plume site.

Federal Agencies

Federal agencies are created by laws passed by Congress or through presidential executive orders. Federal agencies determine how federal laws should be implemented across the United States and its territories. Each federal agency manages different laws and their work only falls within the parameters of those laws. Multiple federal agencies may become involved to help address local situations, depending upon the agencies' mission and expertise.

U.S. Environmental Protection Agency (EPA)	EPA manages the national Superfund program, through its headquarters in Washington, D.C. and 10 regional offices. Under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, commonly known as Superfund), EPA has the authority to clean up uncontrolled or abandoned releases of contamination, such as asbestos and lead, that pose a threat to people's health and the environment, which includes – but is not limited to – sites on the National Priorities List (NPL). EPA's Superfund program oversees long-term cleanups and short-term cleanups known as removal actions. Removal actions can be either emergency, time-critical or non-time-critical depending on the extent and type of contamination.

[1] There are also state Superfund programs that are different from the federal government's Superfund program. This fact sheet focuses on agency responsibilities as they relate to the federal government's Superfund program.

Agency for Toxic Substances and Disease Registry (ATSDR)	ATSDR is part of the Centers for Disease Control and Prevention, within the U.S. Department of Health and Human Services. The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, commonly known as Superfund) created ATSDR to address community concerns about hazardous waste. ATSDR responds to and protects people from harmful exposures to contaminants. During the Superfund process, ATSDR conducts public health assessments and health consultations at National Priorities List (NPL) sites, as well as all sites proposed for the NPL. • A public health assessment evaluates the level or concentrations of hazardous substances; whether and how people may be exposed to contamination; what levels of a substance may cause harm to people; whether working or living near the site may affect people's health; and other dangers to people at the site, such as unsafe buildings or abandoned mine shafts. ATSDR and other agencies may use public health assessments to determine whether further studies or public health actions are necessary. • A health consultation is a response to a specific request for information about health risks related to a specific site, a chemical release, or the presence of a hazardous substance.
Bureau of Land Management (BLM)	BLM is part of the U.S. Department of the Interior. BLM's mission is to sustain the health, diversity and productivity of public lands for present and future generations. Under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, commonly known as Superfund), BLM has the authority to clean up environmental contamination on its public lands, prepare and implement emergency responses for oil and chemical spills, and recover costs from potentially responsible parties. BLM carries out these functions through its Abandoned Mine Lands program and Hazardous Materials Management program.
Department of Energy (DOE)	DOE's mission is to address the country's energy, environmental and nuclear challenges to ensure national security and prosperity. At DOE Superfund sites, DOE is the lead agency while EPA provides oversight under an interagency agreement often referred to as a Federal Facility Agreement (FFA). The FFA is enforceable and provides the technical, legal and management framework for the cleanup.
Department of Housing and Urban Development (HUD)	HUD regulates affordable housing and equitable community development to ensure fair and equal housing opportunities for all. HUD's community development programs and grants may provide assistance for infrastructure, community centers, public services and other needs. HUD also works with EPA at Superfund sites to help ensure residents of HUD assisted housing are protected from human health risks from Superfund sites.

Federal Emergency Management Agency (FEMA)	FEMA is part of the U.S. Department of Homeland Security. FEMA's mission is to help people before, during and after manmade or natural disasters. FEMA leads planning and training for hazardous materials emergency management, including incidents at manufacturing, processing, storage and disposal facilities as well as hazardous materials in transit by highways, water, rail and air.
National Oceanic and Atmospheric Administration (NOAA)	NOAA is part of the U.S. Department of Commerce. NOAA focuses on understanding and predicting changes in climate, weather, oceans and coasts. NOAA also works to conserve and manage coastal and marine ecosystems and resources. At coastal zone Superfund sites, NOAA may provide scientific support coordinators to advise on responses to oil and chemical spills, chemical hazard analyses and other scientific issues.
National Park Service (NPS)	NPS is part of the U.S. Department of the Interior. NPS manages the National Park System to preserve natural and cultural resources and educate and inspire present and future generations. NPS has the authority to lead cleanups at sites in its jurisdiction under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, commonly known as Superfund). • NPS has an Abandoned Mineral Lands program that maintains a nationwide inventory of abandoned mineral lands within the NPS system and collaborates with other agencies to address related safety, environmental and cultural issues.
U.S. Army Corps of Engineers **(the Corps)**	The Corps is part of the Department of Defense. The Corps provides engineers to support national security, economic stability and disaster resiliency. The Corps also provides their expertise to support the Superfund program. The Corps may manage design and construction contracts and provide technical assistance to EPA during the cleanup process. • Under the Formerly Utilized Sites Remedial Action Program (FUSRAP), the Corps also cleans up sites with contamination from the country's early atomic energy program.
U.S. Coast Guard (USCG)	USCG is part of the U.S. Department of Homeland Security. USCG protects and defends the country's coastlines and waterways. USCG provides on-scene coordinators to manage removal of oil spills or hazardous substance releases within coastal zones and coordinates with EPA if further long-term cleanup may be required. • USCG also manages and staffs the National Response Center, the national point of contact for reporting all oil, chemical, radiological and biological releases in the United States and its territories, which is where many releases leading to Superfund sites are reported and initially discovered.

U.S. Fish and Wildlife Service (USFWS)	USFWS is part of the U.S. Department of the Interior. Among other federal laws, USFWS is responsible for implementing the Endangered Species Act to conserve, protect and enhance fish, wildlife and plants and their habitats. At Superfund sites, USFWS provides expertise to EPA to ensure that site cleanup decisions are protective of threatened species and their habitats.
U.S. Forest Service (USFS)	USFS is part of the U.S. Department of Agriculture. Its mission is to sustain the health, diversity and productivity of the nation's forests and grasslands for present and future generations. USFS has the authority to respond to or cleanup sites in its jurisdiction under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, commonly known as Superfund) but does not have access to funding directly. • USFS has its own Abandoned Mine Land program to mitigate the impacts of mine operations on National Forest System lands. Many of these mining sites are Superfund sites.
U.S. Geological Survey (USGS)	USGS is part of the U.S. Department of the Interior. USGS collects, monitors and analyzes information about natural resource issues. At Superfund sites, USGS provides expertise to EPA to support abandoned mine lands investigations and cleanups.

Tribal Governments/Tribal Agencies

The U.S. government has a government-to-government relationship with federally recognized tribes. Federally recognized tribes have the power to form their own governments, make and enforce laws, and tax, license and regulate activities within their jurisdictions. EPA may enter into cooperative agreements with tribal governments to support EPA in the response to and cleanup of a Superfund site. A Superfund cooperative agreement is a legal agreement that allows funds to be transferred from EPA to a state or tribal government for cleanup activities.

State Agencies

Each state government has its own constitution and state agencies and is responsible for enforcing local laws that are separate from federal laws. At Superfund sites, EPA may enter into either cooperative agreements or contracts with state agencies to perform hazardous waste cleanup actions. If EPA is considering the Superfund Alternative (SA) approach for a site, EPA consults with and receives approval from the state in which the site is located.

New York State Department of Environmental Conservation (NYSDEC)	At the Meeker Avenue Plume site, EPA is the lead agency and NYSDEC is the support agency. EPA is required to work with state environmental agencies during negotiations with parties known as potentially responsible parties (PRPs) that may have contributed to or caused the contamination at a site. EPA and NYSDEC also work together during the National Priorities List (NPL) listing and deletion process, site investigations, and the selection and implementation of site cleanups. At Superfund sites where PRPs are unable to fully fund cleanup activities, states help pay for them. EPA pays for the federal portion of these cleanups through a Superfund Trust Fund.
New York State Department of Health (NYSDOH)	Agency for Toxic Substances and Disease Registry (ATSDR) may enter into agreements with state health departments to conduct public health assessments or health consultations at the site. NYSDOH has staff with expertise that can inform site-related public health issues, including regional office staff who can share local health information and perspectives.

Local Government

Local governments generally include counties (or boroughs or parishes) and municipalities (such as cities or towns). EPA and state environmental agencies keep local officials aware of cleanup progress through telephone conversations, emails, in-person meetings and briefings. City and county government agencies may also provide key information about Superfund sites, including information on past site operations and parties that may have contributed to contamination. Local entities are also involved in the acquisition, cleanup, reuse and long-term protectiveness of contaminated properties. It is important to work and communicate with local governments and organizations during stakeholder engagements to gain a better understanding of community perspectives, needs and aspirations.

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United States Environmental Protection Agency

EPA INVESTIGATES VAPOR INTRUSION AT THE MEEKER AVENUE PLUME SUPERFUND SITE

BROOKLYN, NEW YORK

OCTOBER 2022

Current and Upcoming Activities

The U.S. Environmental Protection Agency (EPA) will sample vapors under and indoor air in residential properties within the Meeker Avenue Plume Superfund site in Brooklyn, New York.

Beginning in November 2022, EPA will sample the indoor air and vapors beneath buildings to assess levels of chlorinated volatile organic compounds (CVOCs), including tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (DCE), and vinyl chloride, that may be entering buildings as vapors from soil and/or groundwater contamination.

EPA added the Meeker Avenue site to the Superfund National Priorities List (NPL) in March 2022. New York State Department of Environmental Conservation (NYSDEC) has been sampling the area since 2007, and EPA is sampling specific properties based on information from the NYSDEC sampling. EPA is assessing the level of contamination and its impacts to people's health. This initial sampling will help EPA understand the extent of contamination better and plan its additional sampling and cleanup efforts. Figure 1 shows the overall study area which may be updated throughout the Superfund process.

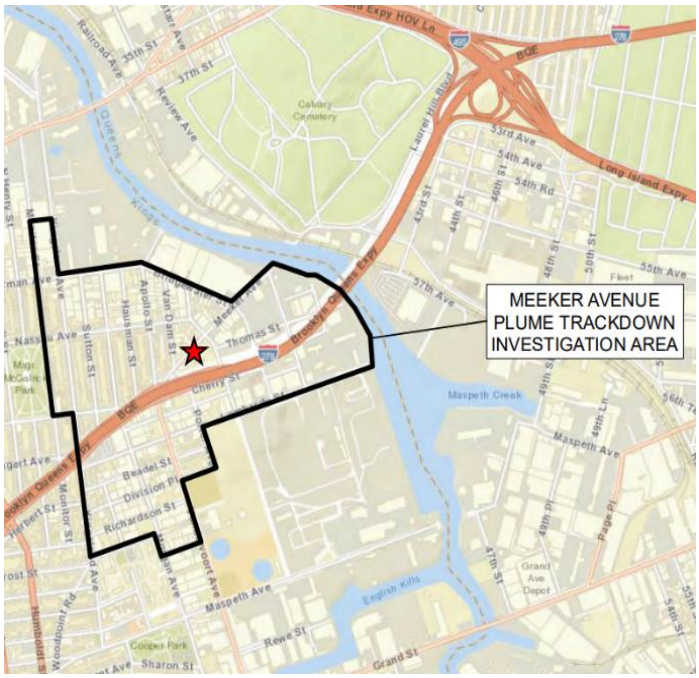

Figure 1: Study Area

Community Engagement

A community meeting about the site and the overall Superfund process is tentatively planned for December 1, 2022. EPA will inform the community once this meeting is scheduled.

If you are interested in learning more about this meeting and future community engagement opportunities, please email Donette Samuel, EPA's Community Involvement Coordinator, to sign up for the site's mailing list.

About the Contaminants

Chlorinated Volatile Organic Compounds (CVOCs): man-made chemicals that evaporate at room temperature. Prolonged exposure to CVOCs is associated with higher risk of developmental and reproductive effects, and cancer.

Vinyl Chloride: man-made chemical found in packaging material, housewares, and water pipes. When the material breaks down, it turns into a vapor. Prolonged exposure to vinyl chloride is associated with cancer risk.

Learn more about CVOCs (PCE, TCE and DCE) and Vinyl Chloride from New York State Department of Health.

Past Activities

Soil and groundwater at the Meeker Avenue Plume site are contaminated with chlorinated volatile organic compounds (CVOCs), including tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (DCE), and vinyl chloride. NYSDEC discovered the contamination while overseeing a cleanup action on what is now the northeastern portion of the site. Over time, contamination has moved from the soil into groundwater, creating a groundwater contaminant plume, an underground area where contaminants disperse, underneath the Meeker Avenue area. The contaminated soil and groundwater underneath the site have turned into vapors that are seeping into basements and the indoor air of some residential and commercial structures. The community receives drinking water from the New York City Water Supply System, which receives water from the Croton, Catskill and Delaware Reservoir Systems and not from the contaminated groundwater.

Site Background

The site spans several city blocks. Newtown Creek bounds the eastern part of the site, and the Brooklyn-Queens Expressway crosses the site. CVOC contaminants in areas outside the historic petroleum spill are considered part of the site. The full nature and extent of groundwater, subsurface vapor, soil contamination, and impacts on indoor air is unknown at this time. EPA added the site to the NPL in March 2022 and will investigate the extent of contamination and work to address any associated risks to people's health and the environment.

What is Vapor Intrusion?

When chemicals leak into the shallow groundwater, they can turn into gases or vapors that move through the soil and seep through cracks in basements, foundations, sewer lines, and other openings inside buildings (see Figure 2). When vapors enter a structure, the health risk varies based on the type of chemical, the concentration of chemicals, how long someone is exposed to the chemical, and the health of the person exposed. In addition, low-level chemical exposures over many years may raise the lifetime risk of cancer and other chronic diseases. For more information on vapor intrusion, visit: www.epa.gov/vaporintrusion. For additional information concerning health effects, see the "About the Contaminants" section.

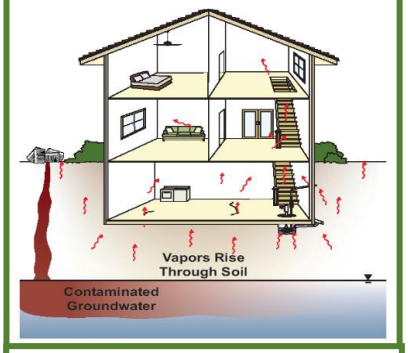

Figure 2. Vapors entering a home.

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www.epa.gov/superfund/meeker-avenue-plume

https://www.facebook.com/eparegion2/

https://twitter.com/EPAregion2

For information on general environmental concerns or the federal Superfund hazardous waste program, for concerns or complaints about the Superfund program, or if you seek assistance in resolving site-specific issues that were not fully addressed by EPA, please contact: **George Zachos**, EPA Regional Public Liaison, (732) 321-6621 or toll free at (888) 283-7626

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Glossary

Administrative Record

A collection of documents that explains to the public why EPA conducted a particular action or response at a site. The Record is typically made available for public review at an information repository near the site, at the regional EPA office and on an EPA website.

Cleanup

The term used for actions taken to deal with a release or threat of release of a hazardous substance that could affect human health and/or the environment. The term is sometimes used interchangeably with the terms remedial action, removal action, response action and corrective action.

Community Advisory Group (CAG)

A Superfund Community Advisory Group (CAG) is a committee, task force or board made up of residents of a community with Superfund or other environmental problems. The Community Advisory Group enhances public participation in the cleanup process and other environmental decision-making by providing a public forum where community representatives can discuss their diverse interests, needs and concerns.

Community Involvement

The community relations activities (e.g., plan, implementation and responsiveness summary) that must be completed at a site to address community concerns.

Community Involvement Plan (CIP)

A document that identifies techniques used by EPA to communicate effectively with the public during the Superfund cleanup process at a specific site. A CIP typically describes the site history, nature and history of community involvement, and concerns expressed during community interviews. In addition, the plan outlines methodologies and timing for continued interaction between the agencies and the public at the site.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (commonly known as Superfund)

A law, enacted by Congress in December 1980, that created the Superfund program. CERCLA provides EPA with the authority to clean up contaminated sites and identify parties that may be held responsible for performing cleanup work or reimbursing the government for cleanup costs.

Contaminants of Concern (COCs)

Chemicals identified during in-depth site studies (Remedial Investigation/Feasibility Study) that need to be addressed by a cleanup action because they pose an unacceptable threat to human health or the environment.

Environmental Justice (EJ)

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.

Explanation of Significant Differences (ESD)

A document that describes significant changes to a Superfund cleanup plan (i.e., a ROD) and the reasons for the changes.

Exposure

Contact with a substance by swallowing, breathing, or touching the skin or eyes. Exposure may be short-term (acute exposure), of intermediate duration, or long-term (chronic exposure).

Extraction Well

Extraction wells are used to pump groundwater to the surface, where the contaminants are removed.

Five-Year Review

A periodic review of a Superfund site that is required when hazardous substances remain on site above levels that permit unrestricted use and unlimited exposure. The purpose of a Five-Year Review is to evaluate the implementation and performance of a remedy and whether a remedy remains protective of public health and the environment.

Groundwater

The supply of fresh water found beneath the surface of the earth.

Hazard Ranking System (HRS) Score

The Hazard Ranking System (HRS) is the principal screening tool used by EPA to make a determination of whether a contaminated site should be added to the National Priorities List (NPL). This score is the primary factor in deciding if the site should be on the NPL and has no significance as an indicator of a specific risk level to people or environmental receptors.

Information Repository

A collection of technical reports and other documents regarding a Superfund site. The information repository is usually located in a public building that is convenient for local residents, such as a public school, city hall or library, as well as online. The Administrative Record for site decisions is part of the information repository.

Maximum Containment Level (MCL)

The highest level of a contaminant allowed in drinking water by EPA or state regulations. These levels are based on consideration of health risks, technical feasibility of treatment and a cost-benefit analysis.

National Priorities List (NPL)

EPA's list of uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action.

Operable Unit (OU)

During cleanup, a site can be divided into a number of 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 removal of drums and tanks from the surface of a site.

Potentially Responsible Parties (PRPs)

The parties (e.g., people, businesses, government entities, etc.) responsible for contamination at a Superfund site. PRPs are required to perform a cleanup or pay for costs incurred by EPA in performing cleanup activities, to address contamination at a site.

Record of Decision

A public document that explains which cleanup alternative(s) will be used at National Priorities List sites.

Remedial Action

The actual construction or implementation phase of a Superfund site cleanup that follows remedial design.

Remedial Design

Remedy design (RD) is the phase in Superfund site cleanup where the technical specifications for cleanup remedies and technologies are designed.

Remedial Investigation / Feasibility Study (RI/FS)

The phase of the Superfund process intended to gather the data necessary to: (1) determine the nature and extent of problems at the site; (2) establish cleanup criteria for the site; (3) identify preliminary alternative remedial actions; and (4) support the technical and cost analyses of the alternatives.

Remedy

The method selected to clean up a Superfund site.

Removal Action

Short-term actions that address releases of hazardous substances that require expedited responses. Removal actions can occur at any stage of the Superfund process.

Risk/Health Assessment

At each site, EPA determines the possibility for human and ecological contact (i.e., exposure) with contaminants at the site as apart of the RI/FS. If the possibility for exposure to contamination exists, EPA conducts a study known as a risk assessment. During the risk assessment, EPA determines if the site poses unacceptable risks to human or ecological receptors. If unacceptable risks are identified, then EPA has a basis to clean up a site.

Superfund

The common name used for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Superfund activities include conducting and/or supervising hazardous waste site cleanups and other remedial actions.

Technical Assistance

The provision of services focused on increasing community understanding of the science, regulations and policies related to environmental issues and EPA actions.

Technical Assistance Grant (TAG)

Technical Assistance Grants of up to $50,000 are provided to citizens' groups to obtain assistance in interpreting information related to cleanups at Superfund sites or those proposed for the National Priorities List. Grants are used by such groups to hire technical advisors to help them understand the site-related technical information for the duration of response activities.

Vapor Intrusion (VI)

Vapor intrusion occurs when there is a migration of vapor-forming chemicals from any subsurface source (e.g., soil and groundwater) into an overlying building.

Volatile Organic Compound (VOC)

Organic compounds that have relatively low boiling temperatures and high vapor pressure at room temperature. VOCs are emitted as gases from certain solids or liquids.

Acronyms and Abbreviations

Acronym or Abbreviation	Definition
ATSDR	Agency for Toxic Substances and Disease Registry
CAG	Community Advisory Group
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIC	Community involvement coordinator
CIP	Community involvement plan
EPA	Environmental Protection Agency
HRS	Hazard Ranking System
NPL	National Priorities List
O&M	Operations and maintenance
OSC	On-scene coordinator
PRP	Potentially responsible party
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study

Acronym or Abbreviation	Definition
ROD	Record of Decision
RPM	Remedial project manager
TAG	Technical Assistance Grant
TASC	Technical Assistance Services for Communities
VOC	Volatile Organic Compound