

# A Process for Systematically Considering Environmental Justice in CERCLA Investigations at Federal Facility NPL Sites

## Environmental Justice Reference Guide



Environmental Justice Pilot Project –  
EPA's Federal Facilities Restoration and Reuse Office (FFRRO) and Region 3,  
U.S. Department of Defense (DOD), and state agencies

EPA's Environmental Justice Reference Guides provide tips to help CERCLA Superfund project team members apply guidance, tools and strategies to identify and address concerns related to environmental justice.\* These concerns can indicate vulnerabilities and conditions that lead to disproportionate impacts.

At federal facility Superfund sites, the lead agency is responsible for cleaning up the sites. Federal agencies and their facilities must comply with environmental laws and requirements in the same manner and to the same extent as any other regulated facility. EPA and state regulators oversee site cleanups to ensure compliance with environmental laws and requirements and the protection of human health and the environment. The project team comprises the lead agency, EPA and the state.

This Reference Guide describes a flexible and iterative six-step process to incorporate environmental justice-related concerns into CERCLA investigations. The process can be applied at any step in the CERCLA investigation to identify communities that may have environmental justice concerns, opportunities to improve engagement with communities, and sources of potential risks and disproportionate impacts.

This Reference Guide also suggests ways to document work transparently. To test the six-step process, EPA pilot teams performed the following tasks:

	<p><b>Step 1: Identify Potentially Vulnerable Communities</b></p> <p>Screen nearby communities for information related to demographics, health and other environmental justice-related factors.</p>
	<p><b>Step 2: Identify Sources and Releases</b></p> <p>Integrate information about the communities with knowledge related to site-specific chemicals, sources and releases.</p>
	<p><b>Step 3: Develop Questions to Guide Engagement</b></p> <p>Develop questions to address site-specific gaps and guide community outreach and engagement.</p>
	<p><b>Step 4: Engage Communities</b></p> <p>Select outreach strategies to apply to reach and engage with different communities to deepen and support analyses.</p>
	<p><b>Step 5: Assess and Protect</b></p> <p>Apply information and learning outcomes to refine the pilot teams' conceptual understanding of communities that may have been exposed to site contamination, or that may be exposed in the future.</p>
	<p><b>Step 6: Document Work</b></p> <p>Document the results referencing the CERCLA process as well as different community settings and variable levels of past engagement.</p>

\* CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act



## Step 1: Identify Potentially Vulnerable Communities

During the first step, project teams screen potentially impacted communities to identify vulnerabilities that could result in disproportionate impacts. Strategies include:

- Assessing communities using desktop screening tools such as EJScreen, EnviroAtlas, and the Climate and Economic Justice Screening Tool (CEJST).
- Identifying indicators of the potential for vulnerabilities and disproportionate impacts. Examples may include:
  - Demographics and socioeconomic status
  - Language and cultural factors
  - Sources of pollution
  - Land use
  - Health burdens
- Noting conditions and circumstances that may result in barriers to engagement. Examples may include:
  - Low-income status
  - Lack of transportation
  - Need for childcare
  - Language barriers
  - Educational barriers
  - Under-resourced and underserved status, in terms of access to resources such as health care, fresh food, internet access and green space
- Integrating results to identify areas with potentially vulnerable communities.
- Identifying issues that require follow-up verification to confirm potential vulnerabilities and disproportionate impacts.



## Step 2: Identify Sources and Releases

During the second step, project teams identify sources and releases of site contaminants that may have direct or indirect impacts on nearby communities. Impacts may range from direct exposures to concerns about potential exposures. Locating the intersections between site contaminants and potentially impacted communities is key to focusing outreach strategies to address gaps and challenges. Maps and descriptive narratives are both helpful ways to highlight this information.



## Step 3: Develop Questions to Guide Engagement

By evaluating the information on potentially vulnerable communities from Step 1 and site data from Step 2, project teams next identify information gaps and develop questions to guide community engagement during Step 3. These questions serve three purposes:

- Guide project teams in the verification of data.
- Facilitate the refinement of engagement strategies necessary to address these gaps.
- Identify opportunities to protect peoples' health.

Effective engagement helps project teams learn about community concerns and activities that enable them to update and refine their understanding of community vulnerabilities and exposure scenarios. The screening tools help project teams ask the right questions.

Examples of questions to ask include:

- Do low-income families have ready access to transportation and childcare that would allow them to attend meetings?
- How do the communities typically receive information (for example, is there a trusted publication, radio station, house of worship or other source)?
- Are there related demographic or socioeconomic factors that could decrease resilience and increase potential impacts?
- What is healthcare access like in the communities?

The answers to these questions guide project teams as they select outreach strategies for area communities. As the teams learn more about local conditions, concerns and priorities over time, they will need to adjust and update their strategies to reflect this information.



#### Step 4: Engage Communities

Initial outreach strategies should be rooted in Step 1 and Step 2 findings (key community data and site information) and designed to answer questions identified in Step 3, with an overarching goal of making more meaningful connections with affected communities to ensure successful cleanups. Early community engagement is crucial. The emphasis of these efforts should be on listening and seeking to understand community concerns. This is a highly iterative process, where project teams modify engagement strategies based on what they learn about community concerns and preferences.

Key activities include:

- Verify screening data.
- Identify communities that may not be engaged, particularly if there is the potential for disproportionate impacts.
- Develop targeted strategies for engagement and identifying partner organizations.
- Conduct community outreach to understand local concerns, needs and engagement preferences.
- Use information to refine and tailor further engagement activities, understand potential exposure scenarios and refine Conceptual Site Models (CSMs).

These activities may include focused efforts to connect with people who have been historically underrepresented in decision-making and who have a wide range of education levels, literacy and proficiency in English. Strategies may need to be tailored and revised over time, based on the information collected.

Community engagement tips identified by EPA pilot teams during EPA's Environmental Justice Pilot Project include:

- Convey issues in ways that are tailored to each population (e.g., translation, timing, location).
- Bridge cultural and economic differences that affect participation.
- Use communication techniques that enable more effective interactions with community members and other stakeholders.
- Develop partnerships on a one-to-one basis or a small-group basis to ensure representation.
- Build trust between governments and potentially affected communities.

- Develop stakeholder capacities to participate effectively in future decision-making processes.

More broadly, EPA has extensive community engagement resources available (see <https://www.epa.gov/superfund/superfund-community-involvement-tools-and-resources>).



## Step 5: Assess and Protect

Using the information from screening tools, site investigations and community engagement ensures that the scope of the investigation is sufficient to characterize and evaluate risks to human health, including parts of a community that may be more highly exposed and disproportionately impacted. This assessment and evaluation should consider if the information collected suggest new exposure pathways to consider or modifications or adjustments to existing exposure pathways, or if there are qualitative considerations that need to be added to the risk assessment and carried through risk management options.

For example, project teams should seek community input at the outset of any project to help shape risk assumptions and conclusions on issues such as:

- Current land use and reasonably anticipated future land use, including:
  - Drinking water sources
  - Hunting and fishing
  - Farming and gardening
  - Recreation activities
- The presence of sensitive subpopulations.
- Whether other conditions, such as additional sources of pollution, demographics, socioeconomic information and health risks, create sensitive or more vulnerable populations.

In particular, this information should inform the refinement of technical plans critical to protecting communities, including CSMs, Sampling and Analysis Plans (SAPs) and risk assessments.

Key findings from quantitative and qualitative analyses need to be shared with partners and stakeholders.



## Step 6: Document Work

Since the goal is to develop methods that promote consistent and systematic application of environmental justice considerations at federal facility National Priorities List (NPL) sites throughout the CERCLA process, it is also necessary to document analyses, findings, key messages and actions in meaningful ways. These methods should be woven into all relevant documents, including Community Involvement Plans as well as technical documents such as Quality Assurance Project Plans (QAPPs) and SAPs, CSMs, risk assessments, Remedial Investigation Reports, decision documents and Five-Year Review Reports. This will ensure that relevant information regarding potentially vulnerable and disproportionately impacted communities will be considered throughout the CERCLA process.

---

*Note:* This fact sheet is intended solely as general information. It is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States, or to endorse the use of products or services provided by specific vendors.