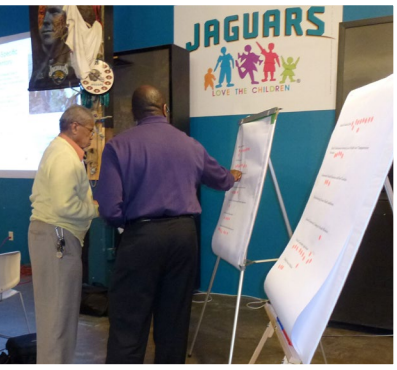
GETTING RISK COMMUNICATION RIGHT:

Helping Communities Plan at Superfund Sites



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Cover page photos (left to right):

Top row: Westlake Landfill Superfund Site (Missouri), Colorado Smelter Superfund Site (Colorado), and Lower Darby Creek Area Superfund Site (Pennsylvania).
Bottom row: Jacksonville Integrated Planning Process (multiple Superfund sites in Jacksonville, Florida), Bunker Hill Mining & Metallurgical Complex Superfund Site (Idaho), 35th Avenue Superfund Site (Alabama), Atlantic Wood Industries, and Peck Iron & Metal Superfund sites (Virginia).

INTRODUCTION

Risk communication is one of the most important parts of the EPA's work with communities, stakeholders, and regulatory partners at Superfund sites. Effective risk communication and community engagement builds trust and often leads to better cleanup decisions that return sites to beneficial reuse as quickly as possible.

Improving risk communication across all EPA programs is a priority of the Administrator. As part of the EPA's Superfund Task Force,[1] an internal workgroup was charged with developing a plan to improve risk communication and community involvement practices during the post-construction, long-term stewardship phase of Superfund site remediation (see charge statement - Appendix A). To do this, the workgroup assessed current processes, tools, and methods (Appendix B); listened to stakeholders, staff, and other regulators; and solicited input from people who live and work near Superfund sites (Appendix C). The resulting FY2020 Superfund risk communication improvement plan will include the following actions (see page 3 for more details):

FY 2020 ACTIONS

1. *Develop criteria for prioritizing risk communications.*
2. *Select sites to evaluate current EPA risk communication practices.*
3. *Start a national dialogue and strengthen partnerships.*
4. *Choose and test measures for improvement.*
5. *Apply lessons learned throughout Superfund process.*

This is a dynamic plan, built on dialogue with communities, external stakeholders, internal staff, and regulatory partners. The plan will be updated as we incorporate feedback and results. A final report will be prepared to summarize the outcomes of the FY2020 effort, including FY2021 measures for continuous improvement of risk communication at Superfund sites.

Although the current focus is on the post-construction, long-term stewardship phase, lessons learned from implementing this plan will be applied across the life-cycle of the Superfund process, and in other EPA programs. This FY2020 plan will be closely coordinated with the Administrator's EPA-wide risk communication initiative to share and incorporate knowledge and best practices.

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1. The Superfund Task Force was created in 2017 to accelerate the Superfund remediation process and shorten the path to redevelopment and safe, productive reuse at contaminated sites. The final Task Force report was released on September 9, 2019, and is available at https://www.epa.gov/superfund/superfund-task-force.

WHAT IS LONG-TERM STEWARDSHIP?

Long-term stewardship applies to sites where long-term management of contaminated environmental media is necessary to protect human health and the environment. The EPA and its regulatory partners rely on long-term stewardship at these sites to ensure that current and future site users are protected long after the construction phase of the site remedy has been completed. Long-term stewardship must operate effectively for the life of the remedy, which can take years, decades, or even longer. See more at: https://www.epa.gov/sites/production/files/documents/lts_fact_sheet_1006.pdf.

WHY IS EFFECTIVE RISK COMMUNICATION IMPORTANT?

People perceive risk through very individual lenses. There are many factors that can influence how we perceive risk, including prior knowledge and experience, uncertainties, and lack of control. **Effective risk communication is based on an understanding that risk means different things to different people.** Risk communication provides an opportunity for the Agency and the community to exchange information, facilitates community participation in the decision-making process, helps the site team understand and appreciate the community's perception of risk, and helps establish mutual trust and a productive relationship between the EPA and the community. Community members often have important information that can help improve the accuracy of the site characterization and the baseline human health risk assessment.

Local community knowledge can help the site team:

- Identify beneficial future land uses based on community needs and interests.
- Better understand the site's history and the type and extent of contamination.
- More accurately characterize exposure pathways due to site-specific community behavior.
- Identify unique ways in which the community uses local resources, such as consuming high quantities of one type of food (e.g., fish from a contaminated river) or using plants grown near the contaminated site in food, medicinal remedies, or traditional practices.
- Become aware of whether certain segments of the community may have a disproportionate burden of exposure or environmental health effects due to race/ethnicity, national origin, or income compared to other nearby communities (i.e., issues related to environmental justice).

Enhancing our risk communication and community involvement efforts during post-construction and long-term stewardship will help to:

- Build and maintain relationships with local officials and key community members.
- Plan for changing conditions in the community and/or the site and how to address those changes.
- Ensure that local officials and the community know who to contact with questions and concerns.
- Engage developers, local officials, and the community to identify redevelopment opportunities for the site.

While the Superfund program has a robust toolkit for engaging communities and communicating risk, post-construction and long-term stewardship activities at certain sites can present unique challenges that will benefit from enhanced, tailored outreach. As site conditions change it may become necessary to address new community concerns that arise.

Scenarios that may benefit from enhanced risk communication:

- **New development near the site (homes and businesses)**
- **Discovery of a new contaminant**
- **Routine operation and maintenance, repairs, or an emergency response**
- **Weather events that may impact the integrity of the cleanup**
- **Ongoing community involvement and interest in site activities**

FY2020 ACTIVITIES

In FY2020, the EPA will implement the following actions to improve risk communication at Superfund sites:

1. **Develop criteria** for prioritizing risk communication efforts:
   - Focus on Superfund sites and situations that pose risk communication challenges in the post-construction, long-term stewardship phase.
   - Apply criteria to identify candidate sites for focused attention.
2. **Select up to five Superfund sites** that cover a range of challenging risk communication scenarios for targeted outreach and evaluation:
   - Use listening sessions, focus groups, surveys, and other methods to understand and assess how communities, local officials, and other stakeholders perceive and respond to EPA risk communications.
   - Test new and existing processes, tools, strategies, and technical assistance to adapt risk communication approaches for more targeted and effective outcomes.
3. **Initiate and maintain an ongoing dialogue** on Superfund risk communication:
   - Continue to build and strengthen partnerships to improve risk communication and support for affected communities.
   - Identify challenges for collaborative problem-solving.
4. **Choose and test measures** of risk communication improvement for use by the EPA:
   - Focus on effectiveness of communication and community engagement.
5. **Use lessons learned** from this work to:
   - Enhance risk communication processes, tools, guidance, and training.
   - Apply flexible, targeted communication strategies at sites early and throughout the Superfund process.

Gowanus Canal Superfund Site (New York)

FEEDBACK FROM STAKEHOLDERS

SELECT QUOTES

"I believe the relentless references to ***"cleaning up"*** the site by many stakeholders inadvertently produced a false impression of what was possible or indeed feasible."

Gordon Chase, Past CAG Co-Chair 2016, Bo-Rit Site, Ambler PA, co-winner of 2016 EPA National Notable Achievement Award for Communications, Partnerships and Analysis

"Come to the communities, listen to their concerns, understand the communities… communicate what you know, what can be done within Superfund, what can't, what the challenges are…Make sure the Remedial Project Manager working on the site understands the dynamics of the communities i.e. Native American communities, sovereignty, etc."

Susan Hanson, National Environmental Justice Advisory Committee Superfund Task Force Recommendation 42 Working Group Member

"First and foremost, successful community engagement and risk communication require the establishment of **trust** between agencies and the public. Team members need to be aware of other issues or local history that may influence the level of trust at a site."

Lenny Siegel, Executive Director, Center for Public Environmental Oversight

"Use a forward-thinking approach to integrate redevelopment options into superfund sites that generally support and are protective of health and safety where feasible. Be sure that the community at large is comfortable and can trust technical assistance providers."

Miles Ballogg, National Environmental Justice Advisory Committee Superfund Task Force Recommendation 42 Working Group Member

WHAT WE HEARD

SUMMARY OF STAKEHOLDER FEEDBACK

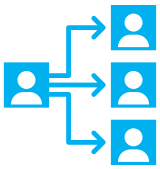
Stakeholder feedback and results of the EPA workgroup evaluations can be grouped under the following themes:

Identify and prioritize the most challenging risk communication issues and situations.

Many stakeholders noted that not all sites require focused risk communication and outreach at the post-construction stage, rather it is specific conditions and scenarios that merit attention. The challenge is to identify which sites and scenarios fall into this category.

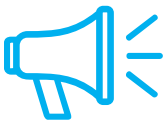
Listen to communities to develop more effective, targeted risk communication strategies.

Stakeholders clearly articulated the need to listen first to ascertain their concerns and needs and then use this information to tailor the risk communication plans to meet their needs.



Clearly define and explain roles and responsibilities for conducting long-term stewardship and coordinate with all responsible parties on risk communications.

We heard from stakeholders that the roles and responsibilities for implementing activities associated with long-term stewardship, including risk communication, is often confusing and sometimes the messages conflict.



Develop and share consistent risk communication messaging for similar types of risk scenarios and sites.

The feedback from stakeholders point to a need to ensure consistency in our approach to communicating potential risks. This is an opportunity to develop and make available tools, strategies, templates, and examples for more consistent risk communication messaging.

Expand risk communication training requirements and access to the latest resources.

Several stakeholders noted that risk communication can be uneven in terms of quality and quantity. The EPA aims to improve risk communication training by emphasizing the need to ascertain community needs, providing the tools to adapt risk communications approaches as appropriate, and making sure that all EPA staff working with communities take the latest training.

CASE STUDY:
BORIT ASBESTOS SUPERFUND SITE

The BoRit Asbestos Superfund site is a legacy of the once-robust asbestos manufacturing industry in Ambler, Pennsylvania. Additionally, the nearby Ambler Asbestos Superfund site holds legacies of its own, including stories of children sliding down its "white mountains" before it became a Superfund site. In comparison, the BoRit site appeared less dramatic, overgrown with vegetation and surrounded by beautiful waterways. But a closer look showed exposed asbestos waste on the site and along the streambanks. A playground sat atop one portion of the site and had to be closed. The houses just across the street would be of most concern for potential exposure. People became concerned about the safety of their community and if the asbestos was going to harm them.

Today, the asbestos waste is capped and the site is ready to be used for recreational or other non-residential purposes. The reservoir portion of the site is currently used as a waterfowl preserve and the former playground area is expected to become a community park. The asbestos waste portion of the site has been planted with native vegetation to encourage ecological revitalization. The transformation at the site was not only an engineering success but also an example of how the EPA site team worked with the community to understand their concerns and design risk communication strategies to address their specific needs.

The gateway for the EPA's risk communication and community involvement activities was the BoRit Community Advisory Group (CAG). Established in 2007, the CAG played an instrumental role in identifying community concerns and disseminating information. Through the CAG, the EPA site team provided neutral facilitation expertise and specialized technical assistance that helped the community understand and comment on our work. Other activities such as open houses, site tours, and community cleanup days were fun and easy ways to get the community involved and helped to build trust.

Site pre-Superfund Site

Members of the BoRit CAG

Although the site work is finished, the EPA's engagement with the community will continue to be robust. Now that the site has entered the post-construction and long-term stewardship phase, the EPA wants to preserve our investment in the community's understanding of the cleanup and remain engaged with local officials into the future. Long-term stewardship activities will include:

- Participating in CAG meetings.
- Remaining engaged in any redevelopment plans for the BoRit pile and park parcels.
- Updating the Ambler community with new information as needed.
- Supporting an Ambler Area Asbestos website that provides residents with in-depth information about both the BoRit and Ambler Superfund sites and the history of asbestos production and disposal in Ambler.
- Conducting community interviews as part of the Five-Year Review process, which will begin in 2021, to adjust the EPA's outreach approach as necessary.

Site post-construction

NEXT STEPS

To implement this plan, by October 31, 2019, EPA's Superfund program, with support from the existing Superfund Task Force workgroup, will coordinate with EPA regions to:

- **Develop an implementation plan** with timeline and milestones for conducting FY2020 Activities.
- **Conduct an initial evaluation of the number and types of Superfund sites** in post-construction with significant long-term stewardship requirements and develop initial criteria for identifying and prioritizing sites with challenging risk communication situations.
- **Apply the criteria, in consultation with the Regions, to identify up to five sites** that cover a range of challenging risk communication scenarios for focused outreach and evaluation.
- **Evaluate how tools, methods, and approaches can be tailored** to improve risk communication with affected communities and develop a plan for testing at priority focus sites.
- **Develop plans and a timeline for a national dialogue** with communities, public and private stakeholders, developers, regulatory partners, the NEJAC Working Group on Superfund Remediation and Redevelopment for EJ Communities, and other interested groups - to build and strengthen partnerships, obtain feedback, and sustain continuous improvement in risk communication at Superfund sites.
- **Build a risk communication web page** as a resource for consolidated guidance, training, tools, and communication.

Minot Landfill Superfund Site (North Dakota)

APPENDIX A

LONG-TERM STEWARDSHIP RISK COMMUNICATION TEAM

Superfund Task Force Recommendation 40 Charge Statement

Charge:

Evaluate how the EPA can help communities, local governments, tribes, states, and stakeholders better understand and support long-term stewardship at Superfund sites.

Identify opportunities for the EPA, potentially responsible parties (PRPs), tribes, states, local governments, and other federal agencies to improve support for institutional controls (ICs), operations and maintenance, oversight responsibilities, public communications, and other long-term requirements necessary to protect human health and the environment at Superfund sites.

Evaluate and work to ensure effective communication of risks at sites with remedies that require long-term stewardship.

The workgroup will focus on:

- Enhancement of current outreach and engagement practices designed to educate communities about the long-term implications of institutional controls, five-year reviews, and other post-construction activities.
- Engagement and communication with affected communities with low or no capacity to meaningfully participate in Superfund issues, including vulnerable, underserved, economically distressed, and rural populations.
- Existing state, tribal, and local government IC communication processes.
- Potential gaps in skills and resources that may impact the effectiveness of risk communication.
- Potential process changes that could improve public understanding of long-term stewardship obligations, including the communication of new scientific data that may change the risk to human health and the environment at a site.
- Enforcement tools that may address improper or incomplete implementation, maintenance, and breaches of ICs and enforcement of proprietary and governmental controls.

The Long-Term Stewardship Risk Communication Team will meet and engage with stakeholders and other partners to get input on the above focus areas and will develop an action plan and potential measures of improvement for EPA leadership review by July 25, 2019.

APPENDIX B

RISK COMMUNICATION AND COMMUNITY INVOLVEMENT GUIDANCE, TOOLS, AND RESOURCES

This table presents examples of guidance documents, tools, and resources related to stakeholder outreach and risk communication. This list is not intended to be comprehensive and may be updated in the future.

Community Involvement, Training, and Resources

Superfund Community Involvement Toolkit
https://www.epa.gov/superfund/superfund-community-involvement-tools-and-resources
Overview:
- Directed at Superfund Regional site teams and CIC staff.
- Multiple guidance documents available through this site.

Community Involvement at Federal Facilities
https://www.epa.gov/fedfac/community-involvement-federal-facilities
Overview:
- Directed at communities living adjacent to Federal Facility NPL sites.
- Multiple resources and additional web links available through this site.

Community Involvement Five Year Review Tool
https://semspub.epa.gov/src/document/HQ/100001744
Overview:
- Community involvement activities during the five-year review should include notifying the community that the five-year review will be conducted, notifying the community that the five-year review has been completed, and providing the results of the review to the information repository.
- Community involvement is an important part of the five-year review process. CICs can provide valuable insight on a community's issues and concerns and help tailor community involvement activities for the five-year review to the needs of the community.
- Conduct additional community involvement activities at high-profile sites, sites with significant public interest, and other sites for which the regional office determines a need for additional community involvement activities.

Five-Year Review Community Training
Getting to Know the Five-Year Review: A Guide for Communities Near Federal Facilities

Video
http://www.youtube.com/watch?v=VguoeVT4FjI

Presentation
https://www.epa.gov/fedfac/getting-know-five-year-review-guide-communities-near-federal-facilities

Overview:
- Community-focused training video and presentation.
- Explain the FYR process at NPL sites.

Getting to Know the Five-Year Review Videos
Module 1:
http://www.youtube.com/watch?v=IaRY9Spsa4g
Module 2:
http://www.youtube.com/watch?v=R6mGXb5zs_g
Module 3:
https://www.youtube.com/watch?v=qry9eUPpd7U

Overview:
- Community-focused videos.
- Explain the FYR process at NPL sites.

Using the Five-Year Review Community Outreach Materials
https://www.epa.gov/sites/production/files/documents/how_to_use_community_outreach_materials.pdf
Overview:
- Directed at site managers, CICs.
- Companion to training tools with information on how to customize.

APPENDIX B

Risk Communication, Institutional Controls, Five Year Review Guidance Relevant to Community Engagement

Community Involvement Risk Communication Tool

https://semspub.epa.gov/src/document/HQ/100002136

Citizen's Guide to Institutional Controls

https://www.epa.gov/sites/production/files/documents/ic_ctzns_guide.pdf

Overview:

- ICs should fit the needs of the site and community.
- The community can play an important role in identifying potential future uses.
- A cooperative relationship should be established early between the EPA and the community.
- Seeking community input and involvement can maximize the effectiveness of ICs.
- Communities can play a vital role as "eyes and ears" for monitoring ICs.

Institutional Controls at Contaminated Sites

https://www.epa.gov/sites/production/files/documents/final_pime_guidance_december_2012.pdf

Overview:

- Community input often is critical in helping site managers and site attorneys develop assumptions regarding the reasonably anticipated future land use for a site, and in selecting ICs as a component of the response action.
- Site teams are encouraged to develop strategies to ensure that the community understands why ICs are needed.
- Communities can play a critical role in identifying potential issues regarding state, local, or tribal government capacity to carry out IC responsibilities.

Institutional Controls: Institutional Control Implementation and Assurance Plans (ICIAP)

https://www.epa.gov/fedfac/institutional-controls-guide-preparing-institutional-control-implementation-and-assurance

Overview:

- Ensure that information on ICs and the ICIAP document itself are publicly available.
- Specific outreach steps that may be helpful include: informing the public of where ICIAP information has been placed (e.g., information repositories); reaching out to community groups; holding availability sessions to outline the roles and responsibilities discussed in the ICIAP and address questions; and posting information on a publicized website.
- Engaging the public during and after development of the ICIAP typically is important because the community and other interested stakeholders can help ensure that local planning efforts avoid conflicts with selected substantive use restrictions.

Five Year Review Process in the Superfund Program

https://semspub.epa.gov/src/document/HQ/174760

Overview:

- Directed at site managers but may be of interest to communities.

Five-Year Review of Federal Facility Cleanups

https://www.epa.gov/fedfac/five-year-review-federal-facility-cleanups

Overview:

- Community-focused.
- Multiple resources and additional web links.

Emerging Contaminants and Federal Facility Contaminants of Concern

https://www.epa.gov/fedfac/emerging-contaminants-and-federal-facility-contaminants-concern

Overview:

- Site managers but may be of interest to communities.
- Emerging contaminants are of particular interest to LTS programs and FYRs. Includes links to technical fact sheets.

APPENDIX B

Grants, Services, and Advisory Groups

Technical Assistance Grants
https://www.epa.gov/superfund/technical-assistance-grant-tag-program

Technical Assistance Services for Communities
https://www.epa.gov/superfund/technical-assistance-services-communities-tasc-program

Community Advisory Groups
https://www.epa.gov/superfund/superfund-community-advisory-groups

Mapping Resources

These mapping tools help citizens identify Superfund sites, hazardous waste sites, and other potential source areas located in the vicinity of their homes.

EPA EJScreen
https://ejscreen.epa.gov/mapper/

Overview:

- Community-focused mapping tool.
- Enter address and select Superfund Proximity through EJScreen Maps to see location of sites.

EPA My Environment
https://www3.epa.gov/myem/envmap/find.html

Overview:

- Community-focused mapping tool.
- Enter address and add layers of interest. Also provides summary information about air, water quality, etc.

APPENDIX C

LIST OF MEETINGS WITH STAKEHOLDERS AND PARTNERS

Stakeholder
Agency for Toxic Substances and Disease Registry
Association of State and Territorial Solid Waste Management Officials - Focus Groups
ASTM International, EPA Office of Office of Site Remediation Enforcement
BoRit Superfund Site, Community Advisory Group
Center for Public Environmental Oversight (CPEO)
Department of Agriculture
Department of Defense
Department of Energy
Department of Interior
EPA Community Involvement Coordinators
EPA Five Year Review Coordinators
EPA Remedial Project Managers
Federal Facilities Forum
Local Government Advisory Committee (LGAC)
National Environmental Justice Advisory Committee (NEJAC)
NEJAC Superfund Working Group
OLEM Human Health Regional Risk Assessors Forum (OHHRRAF)
Superfund Settlements Project
Tribes