

Note to Speakers: Please be sure to test your audio/video equipment and choose the presentation format that is right for you:

- *Community Module with WMV Videos* – works only on a PC with Windows Media Player installed
- *Community Module with MPEG Videos* – works on a PC or Mac with QuickTime or other video player installed
- *Community Module with YouTube Videos* – works on any PC or Mac but requires Internet connection to view videos
- *Community Module with no audio or video* – works on any PC or Mac; be sure to un-check the “Use Rehearsed Timings” box under “Slide Show”

SLIDE 1

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

Five-year reviews are conducted at federal facilities to provide a periodic “snapshot” to assess the effectiveness of the government’s efforts to protect the public and the environment from contaminants.

The five-year review process is used by project managers at a variety of federal sites, from currently-operating military bases to neighborhoods built on sites that were formerly owned by the federal government. A similar review process is used at many state and privately-owned sites, as well.

The U.S. Environmental Protection Agency, in collaboration with the Department of Defense, Department of Energy, and Department of the Interior, developed this presentation to help communities living near federal facilities understand what to expect from a five-year review, how to find key information within a review, and how to engage with the process.

SLIDE 2

(Play video)

SLIDE 3

This presentation will cover:

- Basic information about federal facilities cleanup,
- The purpose and goals of a five-year review,
- Key steps in the five-year review process,

- How to find and interpret key information, and
 - How community members can engage with the process.
-

SLIDE 4

Let's start with some basic information about the cleanup activities at federal facilities.

The U.S. government operates thousands of facilities to promote the security and welfare of American citizens.

These include military bases, weapons plants, shipyards, research facilities, parks, and many other facilities.

We now know that past practices at some federal facilities resulted in hazardous wastes—such as toxic chemicals, radioactive wastes, and explosives—remaining in soil, water, and buildings. It is not possible to remove and destroy all the wastes from every site. Some waste will often remain.

Federal and state environmental regulations require that hazardous materials from federal facility operations and cleanup are properly disposed of, monitored, and maintained for as long as the hazards remain. Federal agencies are responsible for the stewardship of these hazards.

SLIDE 5

Federal and private-sector facilities fall under the Comprehensive Environmental Response, Compensation, and Liability Act—also known as CERCLA or Superfund. These facilities are responsible for complying with CERCLA by cleaning up contaminated sites and managing any hazards that remain on-site.

The CERCLA process has three main steps:

- First, the agency in charge of the federal facility—such as the Department of Defense or Department of Energy— works with the EPA, state, or Tribal regulators to identify the hazards associated with contaminated sites, assess the risk to human health and the environment from potential or actual exposures, and select a cleanup strategy.
- Second, the agency in charge of the federal facility implements remedies to address these hazards. “Remedies” are the actions chosen to clean up the site. There are many different kinds of remedies, ranging from caps, to groundwater treatment systems, to land use controls.
- Finally, ongoing monitoring and maintenance ensures the remedies that leave contaminants in place continue to work properly. A key part of this ongoing monitoring is the five-year review process.

SLIDE 6

“The purpose of a five-year review is to evaluate the implementation and performance of the remedy in order to determine if the remedy is or will be protective of human health and the environment.”

The law requires the government to conduct a five-year review at least once every five years at sites where contaminants that are left in place do not allow for unlimited use and unrestricted access. The review is an important way for the government to monitor its progress in a cleanup effort and assess the protectiveness of the remedy.

SLIDE 7

(Play video)

SLIDE 8

The five-year review is also an important resource for other federal agencies, states and Tribal authorities, local governments and community groups, and the public.

The five-year review report gives an overview of the contaminants and remedies at the site, the status of the cleanup, and information about ongoing activities, as well as general information about who owns the site and who are the main points of contact.

Most importantly, it describes how well the remedies are working and identifies any changes that are needed to ensure people and the environment remain protected.

SLIDE 9

To conduct a five-year review, a site’s project manager first issues a public notice to alert people that the site is being reviewed. Public notices typically note the timeline for the review and list ways for community members to engage with the process.

The project manager then reviews key documents about the site’s cleanup activities. These include, but are not limited to, decision documents—which lay out specific remediation goals called Remedial Action Objectives—monitoring and maintenance reports, new investigations, and technical memorandums.

Then, the project manager reviews the remedies and analyzes data about the current levels of contaminants at the site. When reviewing the remedies, the manager also makes sure land use controls are in place and operating properly.

Then, he or she conducts a site inspection and may interview site workers and community members about the cleanup efforts. This is an opportunity for members of the community to provide input into the five-year review.

Finally, all of this information is compiled into a report documenting whether the remedies are meeting the Remedial Action Objectives to protect human health and the environment.

SLIDE 10

Preparing the five-year review is the responsibility of each facility's current or former federal owner. Representatives from state or Tribal authorities may review the draft report and provide comments.

Where EPA is involved in the review, it provides comments and oversight throughout the process. At the end, an EPA representative looks at the review and either confirms the lead agency's assessment or issues an independent assessment. This ensures appropriate checks and balances in the review process.

SLIDE 11

Some of the report's key pieces of information include:

- Protectiveness statements, which say whether the remedies are working properly;
- Issues that affect the performance of the remedies and recommended actions to address those issues;
- A technical assessment, which provides the data used to determine the protectiveness statements; and finally,
- Maps and graphs showing exactly where contaminants are located on the site.

Now, let's go through these items in more detail.

SLIDE 12

An important part of the five-year review is the protectiveness statement, which summarizes whether the remedy is working as it was designed to work. It tells you whether the people and environment around the site are being protected.

There are five possible types of protectiveness statements:

- “Protective” indicates the remedies are successfully meeting the Remedial Action Objectives that have been set for the site.
- “Protective in the short term” means the public and the environment are not currently exposed, but that actions need to be taken so the remedy will be protective in the long term.
- “Will be protective” means some construction is ongoing, but people are not currently being exposed to hazards and the remedy is expected to be protective upon completion.
- “Protectiveness deferred” means more information is needed to support a protectiveness statement. In this case, the report will set a due date for collecting additional information and issuing an addendum with a protectiveness statement.
- “Not protective” means people are at risk of being exposed to hazards.

If a remedy is found to be not protective, protective in the short term, will be protective, or if protectiveness is deferred, the report will list recommendations to ultimately make the remedy protective in the long term.

SLIDE 13

A five-year review often includes more than one protectiveness statement.

For example, if a site contains soil contaminated with solvents and groundwater contaminated with pesticides, the five-year review may include separate protectiveness statements for the different remedies used to clean up the soil and the groundwater. The EPA refers to different remedies on a single site as “operable units.” Reviews for larger sites may contain several protectiveness statements—one for each individual operable unit.

A site-wide protectiveness determination is made once the construction on the site has been completed.

Health-based standards may change over time. Protectiveness statements are based on standards in effect at the time of the review.

SLIDE 14

Let’s look at a few examples of protectiveness statements you might find in a five-year review report. This is an example of a remedy that is protective. Note that the statement clearly identifies which operable units it applies to, briefly describes the remedy, and states that the remedy is protective of human health and the environment.

SLIDE 15

This statement identifies a remedy that is protective in the short term.

There are sites where the remedies are considered protective even though the cleanup goal has not yet been met.

The remedy is currently protective because land use controls prevent people from drinking the contaminated groundwater. However, the report recommends that contaminated soil needs to be removed in order to ensure long-term protectiveness.

SLIDE 16

Finally, this example shows a protectiveness statement for a remedy that is not protective. For remedies that are not protective, the report will recommend what needs to be done to ultimately make the remedy protective.

In this particular example, human health is actually being protected, because contaminants are below human health standards. However, because the contaminant levels are too high to support a trout fishery, the environment is not being adequately protected. Thus, a finding of “not protective” can reflect impacts on either human health or the environment.

You’ll find protectiveness statements in the Executive Summary and in the full report.

SLIDE 17

The “Issues and Recommendations” table summarizes the issues that affect the protectiveness of the remedies, as well as recommendations for what needs to be done to address these issues. The table also specifies whether protectiveness is affected currently or in the future, identifies responsible parties, and provides approximate time frames for future activities.

SLIDE 18

The report also includes the technical information that was used to determine the protectiveness statements. You can look here for detailed information about site improvements over time. For example, this graph shows the concentration of a chemical in well-water samples. In this case, the chemical’s concentrations fell below the Maximum Contaminant Level—the maximum level allowed in drinking water—in 2001.

The technical assessment can help you understand the contaminants and how they are being measured and monitored.

SLIDE 19

The report also will include maps describing the overall site and the operable units or areas of contamination. This map, for example, shows the locations of several different operable units, represented by colored areas on the map.

SLIDE 20

The report also might have maps that show you exactly where contaminants are located. This map, called a plume map, shows the concentration and distribution of a chemical in the groundwater under this site. As you can see, the contamination was more concentrated in 1990, indicated by the larger pink and orange areas on the map for that year. In 2005, the plume was somewhat larger overall, but much less concentrated.

SLIDE 21

The Executive Summary provides a brief synopsis of the report's findings.

Typically, the Executive Summary focuses particularly on findings pertaining to remedies that are not considered protective and gives an overview of the issues and recommendations for addressing them.

SLIDE 22

Five-year reviews often provide some background about the site and its contaminants. They may also review the progress of the cleanup since the last five-year review.

However, these reports are not intended to provide a comprehensive history or a complete analysis of the site. The five-year review can be thought of as a snapshot of the site at a particular moment in time.

For more detailed information, contact your site's project manager or consult the Administrative Record.

SLIDE 23

Many people have a stake in the cleanup activities at federal facilities. You have the right to know how these activities affect your health and safety.

The five-year review is part of the ongoing dialogue between project managers and community members. People living near a federal facility, tribal governments, local governments, and community advisory boards can all benefit from the five-year review process. In addition, communities have an important role in the cleanup and long-term maintenance of federal facilities, because they live close to these sites and know the day-to-day realities. Community members can offer valuable input about what's happening on and around these sites.

The government values community engagement with the cleanup processes at federal facilities, and wants the five-year review to be a useful resource for the people living near these sites.

SLIDE 24

(Play video)

SLIDE 25

It's important that community members know when a five-year review is initiated. Look for public notices in local newspapers or on the Web when the review process begins, and then again when the report is released. These notices indicate whom to contact if you have information pertaining to the site. During the five-year review process—rather than after the report is released—is the best time for community members to discuss their concerns with project managers.

The project manager may ask people from the community or local government to participate in interviews during the five-year review. Managers seek input representing a wide range of perspectives. These interviews help them understand people's concerns and can provide important information for the project managers.

In some cases, project managers hold public meetings with community members living near a site. There are additional opportunities for communities to engage with cleanup planning and decisions in the times before and after each five-year review. For example, you may be able to join a community advisory board. Contact your site project manager to find more ways to participate.

SLIDE 26

For questions and comments about a federal facility near you, you can contact the site's project manager—also known as the Remedial Project Manager. Some sites have project managers from the lead agency, EPA, and the state. Some sites also have a public affairs representative from the site's lead agency. In addition, each EPA regional office has Community Involvement Coordinators.

SLIDE 27

For more information about five-year reviews—or to find a five-year review for a site near you—please explore these websites. They are maintained by the EPA and offer a wealth of information about five-year reviews, clean-up at federal facilities, and community involvement in Superfund sites.

SLIDE 28

We hope this presentation has helped you get to know the five-year review process. This presentation was developed by the Five-Year Review Workgroup as part of an interagency collaboration between the Environmental Protection Agency, U.S. Department of Defense, U.S. Department of Energy, and U.S. Department of the Interior. Thank you!