

Protecting Public Health FAQ

Frequently Asked Questions on Environmental Cleanup and How Public Health is Protected

The Navy Base Realignment and Closure (BRAC)'s top priority is the health and safety of community members near former military installations. The cleanup process followed by the Navy is proactive and extensive, complies with the requirements detailed in federal law, and includes ongoing science-based evaluations to ensure the communities surrounding former bases and the workers on site remain protected. Specific public health protectiveness measures are rigorously tested and uniformly implemented at BRAC sites across the country. This document provides an overview of questions you may have about the Navy's efforts to keep communities safe.

Cleanup Process

What process does the Navy follow to clean up sites?

The Navy follows an established procedure for cleaning up contamination under a federal law, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), that has been used for more than 40 years. As shown below, the process includes assessment, site characterization, remedy selection, cleanup, and long-term monitoring to confirm that the remedy has achieved protection of human health and the environment.

The multi-step CERCLA process and selected remedial actions can take a number of years to decades to achieve appropriate cleanup levels. For this reason, formal reviews are conducted by the Navy every five years, in conjunction with regulatory

stakeholders, to ensure protectiveness of remedies over the long term.

Who sets the standards that ensure public health is protected?

Protection standards are established by many federal and state agencies, including the U.S. Environmental Protection Agency (EPA), and state and local health departments. The Navy works with these agencies and others to ensure compliance with all federal site cleanup requirements. While some public health protectiveness measures are used widely across installations, others are specific to the needs of each site as determined by the Navy and regulatory agencies.

Protective Measures Employed Throughout CERCLA Process



FIVE YEAR REVIEWS



Assessment & Characterization

How does the Navy determine risk posed by site contaminants to human health and the environment?

A Preliminary Assessment/Site Inspection (PA/SI) identifies contaminated sites based on a review of historical hazardous waste disposal practices to determine if a release is known or suspected to have occurred. In cases of potential radiological contamination, each site follows an investigative starting point known as a Historical Radiological Assessment (HRA). If the site contains contaminants that could cause a risk to human health or the environment, the next step is the Remedial Investigation (RI) phase to determine the nature and extent of contamination. The RI sampling results are used to conduct human health and ecological risk assessments to determine the risks posed by site contaminants and the extent of cleanup required.

Selection of Remedies

How does the Navy select the cleanup technologies and remedies that will be protective?

If cleanup is necessary, the next step is a Feasibility Study (FS), which screens and evaluates remediation technologies. The remedy that is chosen is based on the type and amount of contamination, its location (i.e., soil or groundwater), the cleanup goals that need to be achieved, and other performance criteria defined under CERCLA. The remedies chosen and the rationale for them are detailed in a Record of Decision (ROD), which is reviewed and concurred on by regulatory agencies.

Long Term Monitoring

How does the Navy ensure remedies remain protective over the long-term?

Depending on the remedy selected, maintenance and monitoring may be employed to ensure long-term remedial actions continue to perform as designed. A full review of protective measures is performed every five years as part of the CERCLA Five Year Review process. After property transfer, the inspection and maintenance requirements continue in perpetuity.

Can contamination be brought to the surface by burrowing animals or plant roots?

When former installations are transferred and developed, institutional or engineering controls may be used to prevent exposure to contamination that remains in soil. These controls can take several forms, such as long term monitoring and maintenance, soil or asphalt cover, and/or land use restrictions. The Navy inspects protectiveness measures regularly, and whenever problems are identified, they are corrected.

How is the Navy accounting for events like sea level rise and earthquakes?

For applicable sites, the remedy will be designed to withstand potential sea level rise and earthquakes. To account for sea level rise, measures used include revetment (below and above-ground walls that prevent water and soil movement to limit erosion) and increasing shoreline elevation. To protect the public from exposures due to earthquakes, geotechnical testing is performed where contamination is being left in place and site conditions dictate. If applicable, final cleanup solutions are designed and constructed to withstand earthquakes.

Cleanup & Remedial Actions

How does the Navy ensure that dust generated by cleanup work does not degrade air quality or migrate into the communities outside of the former base?

For sites with soil excavation or other earth moving activities, Navy contractors employ extensive dust control plans to protect the surrounding community during construction and cleanup efforts. Specific measures include specialized maintenance of soil stockpiles, watering during construction activities, and air monitoring to assess air quality on an ongoing basis. Trucks that enter the cleanup site are covered and tires are washed to keep soil and debris from being transported off-site. Based on site-specific requirements, the Navy collects data on dust and chemicals in the air to ensure control measures are working adequately. This air monitoring is subject to regulatory oversight and agencies may decide to collect their own samples to verify the Navy's results.

Are the air monitoring reports available to the public?

Yes. For specific sites with air quality monitoring requirements, the Navy provides air quality data monitoring reports on the BRAC website at www.bracpmo.navy.mil.

Who provides oversight of the Navy's work?

Regulatory agencies that oversee the Navy's work to ensure public safety may include the U.S. EPA, U.S. Nuclear Regulatory Commission (NRC), state regulatory agencies, state and local health departments, and city governments. They provide oversight and input throughout the cleanup process.

How can the Navy be certain that all contamination is identified?

Identifying contamination is a comprehensive and ongoing process; it relies on multiple documents, studies and a collaborative effort among regulatory agencies that oversee the Navy's cleanup work. Assessment and testing are repeated; the cleanup work is guided by rigorous studies that are reviewed by regulatory agencies. Additional sampling and testing, including independent verification of results, is conducted as needed. The Navy conducts a review to confirm that the property is suitable for its proposed future use before transfer is complete.