

CHAPTER 2

SMART Cleanup Goals, Policies, Programs and Workgroups

To achieve site closeout in a rapid and effective manner, the Environmental Restoration program has established specific goals to focus the Navy's site cleanup efforts. DON creates policies to achieve those goals through consistent application of restoration and analysis methods; works with existing Navy organizations to implement cleanup technologies, methods and partnerships; and develops workgroups to focus content experts on specific technical issues pertaining to environmental restoration. Working together, these initiatives allow remediation efforts to be versatile enough to handle the wide range of issues encountered at DON cleanup sites but consistent enough to ensure timely completion of tasks without duplication of effort. Chapter 2 summarizes several of these areas and explains their role in DON's cleanup process.

DON's Environmental Cleanup Goals

With over two decades of effort and billions of dollars spent, the DON environmental cleanup program is moving toward site closeout at the majority of sites and installations. Initially, the program focused on the following four areas:

1. **Site Identification:** locating the sites that require cleanup
2. **Analysis and Remedy Selection:** deciding how to handle cleanup at the sites
3. **Risk-Based Prioritization:** determining which sites to clean up first
4. **Remediation Design and Construction:** beginning the actual cleanup process

Today, the Navy's progress can be measured by the number of remedies in place (RIP) and the number of sites categorized as response complete (RC), indicating that sites are reaching the last milestone in the often lengthy cleanup process.



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The DON Cleanup Policy

Congress's codification of the Defense Environmental Restoration Program (DERP) in 10 U.S.C. has increased management attention to cleanup programs at all levels of the Navy. The DON has developed a number of goals for implementation of our cleanup efforts.

DON IR SMART Cleanup Goals

- Involve the community
- Eliminate imminent threats immediately
- Commit to action and expedite cleanup
- Use risk management approach to prioritize site cleanup
- Consider future land use
- Partner with involved agencies
- Comply with all regulations

More Cleanup, Less Study

We continue to spend a larger portion of our Environmental Restoration, Navy (ER,N) budget on actual cleanup. We accomplished this through early identification of cleanup sites, wise use of our cleanup contracts, and the support of regulators and the community. However, studies remain an integral part of the cleanup process, helping us to understand the types, locations, severity and geophysical characteristics of contaminants before deciding what actions to take, if any. After careful analysis, we proceed to active remediation only where protection of human health and the environment require it. The goal is to make intelligent decisions for safe site closeout.

Technology Innovation

The DON actively encourages the development of new environmental technologies. These initiatives support our business approach to cleanup by allowing us to meeting environmental standards faster and at lower cost, while maintaining our commitment to preserving human health and the environment. For example, refer to the "SMART Cleanup Technologies" section of this report.



BRAC Environmental Program

The DON strategy for Base Realignment and Closure (BRAC) sites focuses on achieving operational closure at each selected site as quickly as possible. The military mission at the closure site will cease, and all mission equipment and personnel, with the exception of a small caretaker staff, will be disbanded or relocated. The DON then seeks to fast-track cleanup and transfer of the BRAC property in order to support local communities in their redevelopment efforts. The DON is implementing four rounds of BRAC closure as directed by law. The first was in 1988 under the Defense Base Closure and Realignment Act of 1988 (Public Law 100-526). Three additional rounds followed in 1991, 1993, and 1995 under the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510). As a result of these decisions, the DON is implementing a total of 178 actions consisting of 46 major closures, 89 minor closures and 43 realignments.

Community Revitalization Plan

Rapid operational closure also provides affected communities with early opportunities for economic redevelopment. Effective community involvement and planning are central to the conversion and redevelopment of DON bases and the retention of a skilled labor force in base closure communities. These efforts are guided by the Administration's Plan for Revitalizing Base Closure Communities as follows:

- Job-centered property disposal as economic incentive
- Fast-track environmental cleanup to facilitate reuse
- Base transition coordinators to reduce red tape
- Ready access to redevelopment assistance
- Larger redevelopment planning grants

Supporting Economic Redevelopment

In implementing BRAC closures, we want to convey property to communities quickly to advance their economic recovery by ensuring that the property is safe for its intended use. We are also required by law to consider the impact of property disposal on wetlands, coastal areas, endangered species, and archeological/historic sites. A final, approved reuse plan from the Local Redevelopment Authority (LRA) is critical to the process, since the reuse plan will provide guidance on how to proceed with the cleanup.



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“Finding of Suitability” Documentation

The DON can provide interim leases of base closure property to promote redevelopment. The first step in this process is the preparation of a Finding of Suitability to Lease (FOSL). To accelerate this process, DON is working with LRAs to identify the most attractive leasing prospects and prepare the documentation ahead of time. We also prepare the required “Finding of Suitability to Transfer” (FOST) as soon as the property is environmentally suitable to convey title.

Cleanup in Progress

Some communities have expressed concern about the pace at which the DON is able to clean up contamination on closing bases. The Navy and Marine Corps have occupied these bases for 50 to 100 years or more, and many are industrial areas. Disposal methods that were acceptable in the past for both military and private industry are no longer practiced because of the environmental contamination they leave behind. However, environmental problems that pose an imminent risk to human health are rare. These problems are given immediate priority in our cleanup efforts. Cleanup associated with BRAC bases will be both time-consuming and expensive—an estimated cost of \$1.5 billion. The DON goal is to have all BRAC sites cleaned up and available for transfer by the end of fiscal year 2005.

Active Efforts

The DON created BRAC cleanup teams comprised of Navy/Marine Corps personnel and environmental regulators to assess, prioritize, and perform necessary cleanup quickly. Through cooperative efforts with communities and regulators, we work to establish cleanup standards that match the nature of the planned reuse. This makes cleanup faster, saves money, and still protects human health and the environment. Detachments of former shipyard workers are trained to do cleanup work, providing local jobs and new skills for these hard-working professionals. Local and national contracting authority is also put into place to perform the work.

Reuse and Funding Considerations

Even with these initiatives in place, budget constraints limit our ability to complete cleanups that do not pose an imminent threat but still must be performed before the property can be conveyed. As a result, our goal is to use cleanup dollars for those sites that have the most immediate prospects for reuse. Sites with approved reuse plans will therefore get top priority for cleanup funds. We are also working with EPA and state regulators to use the new section 344 amendments to CERCLA, which permit the transfer of property before cleanup is completed unless such a conveyance would impact human health or the environment.

A Business Approach to Cleanup

Our nation needs a strong Navy and Marine Corps and a protected environment. While it is imperative that we comply with environmental standards, we have the responsibility to do so in a businesslike manner. We will continue to identify, evaluate, and select the most cost-effective methods for establishing cleanup goals, tracking progress, setting benchmarks, and achieving results.



BRAC Success: Cleanup Complete!

Removal Action Accomplished at Former Landfill NSWC White Oak, EFA CHES

Naval Surface Warfare Center (NSWC) White Oak was a Navy-owned and operated laboratory for surface warfare research. Covering approximately 712 acres, the facility is located approximately five miles north of Washington, D.C., in Silver Spring, Maryland. NSWC White Oak was established in 1944 as the Naval Ordnance Laboratory (NOL), with a mission to carry out research on military guns and explosives. In 1974, the facility combined with Naval Weapons Laboratory, Dahlgren, Virginia, and was eventually renamed Naval Surface Warfare Center, Dahlgren Division in 1988. Since that time, it functioned as a principal Navy research, development, test, and evaluation center for surface warfare weapon systems, ordnance technology, strategic systems, and underwater weapons systems.



Transfer Underway

NSWC White Oak was identified as a Base Realignment and Closure (BRAC) facility and was closed in 1997. Approximately 662 acres were transferred to the General Services Administration (GSA) in the fall of that year. GSA is currently investigating plans for reuse and development of the property, and has named the facility the Federal Research Center at White Oak. The Food and Drug Administration (FDA) and other Federal agencies have been identified as potential tenants. The remaining acreage was transferred to the U.S. Army in February 1998. This property will be used in conjunction with ongoing activities at the adjacent Adelphi Laboratory Center (ALC).

RAB Established

Upon White Oak's identification as a BRAC facility, a Restoration Advisory Board (RAB) was formed. The RAB consists of community members, representatives from Engineering Field Activity Chesapeake (EFACHES), the U.S. Environmental Protection Agency (EPA), Maryland Department of the Environment (MDE), Prince George's County Health Department, Montgomery County Department of Environmental Protection, Maryland National Capital Park and Planning Commission, GSA, the FDA, U.S. Army ALC, and the National Treasury Employees Union. RAB meetings are held bimonthly and have provided a forum for the public, Navy, and the regulatory community to discuss and exchange information about cleanup activities occurring at the former NSWC White Oak.



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Landfill Area Issues

The Pistol Range Landfill (Site 3) is located in the eastern half of the NSWC White Oak property. The landfill is approximately 1.1 acres in size with a stream flowing to the south along its western edge. The site was operated as a landfill from the late 1940s until the mid-1970s. Fill materials such as construction debris, shop turnings, drums, and soil were pushed into the stream valley of Westfarm Branch. Wastes reportedly disposed in the landfill included solid wastes, ordnance cases, solvents, oils possibly containing PCBs, sodium nitrate, and miscellaneous metallic objects. An estimated 8,000 gallons of solvents and oils were reportedly disposed at the site during a 30-year period. The landfill was estimated to contain 25,000 cubic yards of waste/fill. Inorganic and volatile organic contamination was identified in groundwater in the vicinity of Site 3, with concentrations exceeding Federal and state drinking water standards and/or levels used for determining risks to human health.



Groundwater cleanup site, operable Unit 1

Water Ecosystem Protection Needed

A RCRA Facility Investigation completed for Site 3 determined that action was needed to remove sources of contamination from the landfill to prevent damage to Westfarm Branch. Flood events associated with two tropical storms in the fall of 1999 (“Dennis” and “Floyd”) hastened erosion of the landfill slope and required that immediate action be taken to limit the exposure of buried contaminants that could rapidly contaminate the stream and its sediments. As Westfarm Branch is a tributary to Paint Branch, which has been designated by the State of Maryland as a Class III stream that may support a natural trout population, contamination of Westfarm Branch could have adverse ecological impacts.

Two Remedy Options

An Engineering Evaluation/Cost Analysis (EE/CA) was developed for Site 3 to evaluate the means to best mitigate the threatened release. The preferred action was determined to be excavating and removing the landfill. An alternative action of capping the landfill would effectively shield aquatic receptors in the stream from landfill contamination, but would require the installation of a permanent retaining wall on the eastern bank of Westfarm Branch. The retaining wall would adversely alter flow patterns in the stream and prevent the future growth of natural vegetation.

The preferred action was presented to the RAB for discussion prior to implementation. Members of the RAB, including the regulatory community, concurred with the selection of the removal action alternative as the best solution to mitigate site hazards. Removal would provide a permanent, low maintenance solution, facilitating future unrestricted land use and minimizing potential adverse impacts to high quality surface water.

Rapid Removal

Based upon the quick response of EFACHES, working in conjunction with the regulatory community, a removal action was undertaken at Site 3. The removal began in March 2000 and was completed in September 2000. With removal of the landfill wastes complete, the soils underlying the landfill are now being characterized, and risks to human health and the environment resulting from the presence of the residual contamination are being further evaluated. In addition, the portion of Westfarm Branch bordering the site will be restored, and wetlands impacted by the removal action will be replaced. The need for groundwater treatment at Site 3 will be addressed during completion of other NSWC White Oak investigations. Treatment plans to address groundwater contamination (if any) will be developed during 2001.



The Navy's Restoration Process

Step One: Assess the Risks

The process usually begins with a preliminary assessment by the Naval Facilities Engineering Command Engineering Field Divisions and Activities (NAVFAC EFD/As) that identifies potentially contaminated sites at Navy/Marine Corps bases. Information on operations and disposal practices is reviewed to determine whether those sites may require cleanup.

Step Two: Inspect the Sites

Once a site is identified as potentially contaminated, a Site Inspection (SI) is conducted. If necessary, additional sampling of field data is taken to determine whether further action or study is needed. EPA then uses the preliminary assessment and site inspection data as part of a Hazard Ranking System. Sites that rank above a certain threshold are placed on the National Priorities List (NPL), a compilation of nationwide sites that pose the greatest threat to human health and the environment. If a Navy/Marine Corps site is placed on the NPL, the DON enters into a Federal Facilities Agreement with EPA in accordance with Department of Defense (DoD) policy. This agreement specifies the roles and responsibilities of the regulatory agencies and the Navy/Marine Corps, as well as setting the scheduled milestones for cleanup. Even if an installation is not placed on the NPL, DON still carries out the restoration process as part of our cleanup commitment.



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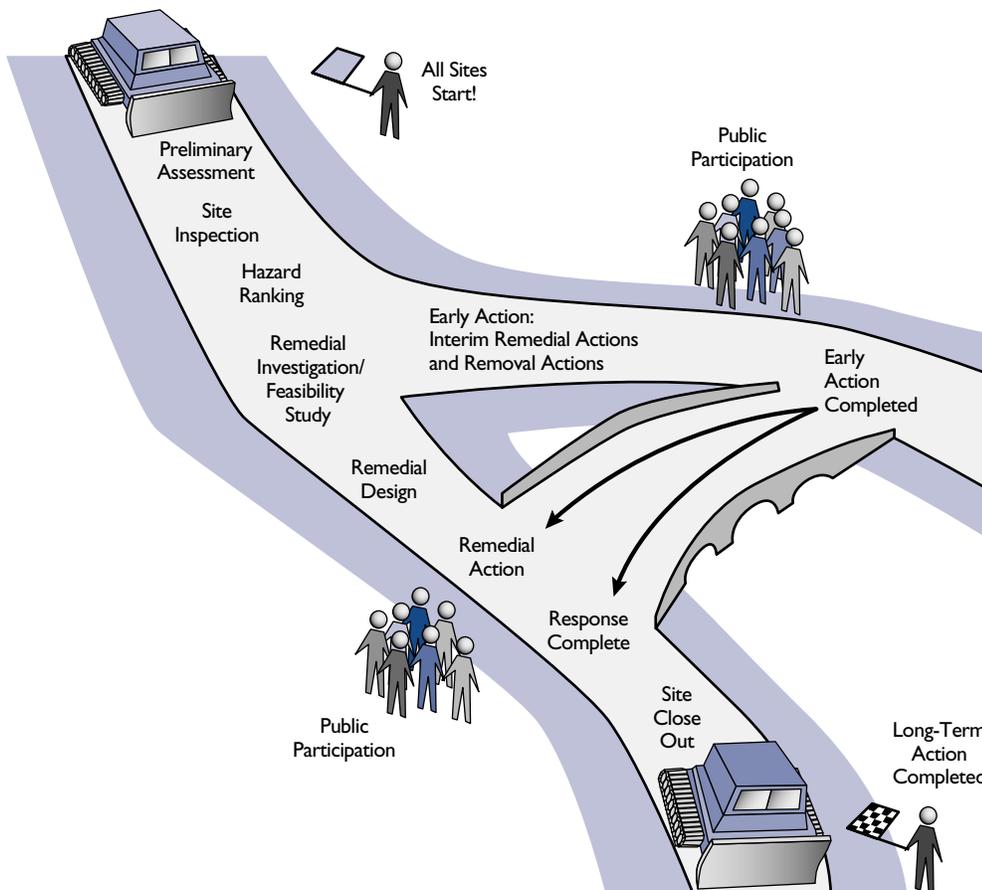
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Step Three: Remedial Investigation, Feasibility Study, and Remedy Selection

If the site inspection is inclusive, or verifies that the site poses a risk to humans or the environment, the DON proceeds to the Remedial Investigation/Feasibility Study phase. Here the specific nature and extent of threat posed by a release is determined, and possible remedies are evaluated. The remedial investigation itself is a detailed study involving diverse sampling and analysis tasks. Soil, water, sediment and other samples are collected to determine contaminant characteristics, hazards, and routes of exposure. The feasibility study uses that information to identify potential cleanup actions. Alternatives are developed and evaluated, and comments from the public and regulatory agencies are considered. Step three concludes with a selection of a remedy or a recommendation for no further action.

Interim Remedial Actions and Removal Actions (IRAs/RAs) can be done at any time during site investigation or cleanup for any of the following purposes:

- To remedy a release that could present an imminent, substantial threat to human health or the environment
- As a measure to reduce a site's overall risk
- To stabilize a site until cleanup can be finished

DON frequently uses interim remediation to respond quickly to site contamination, reduce study costs, and complete cleanup more rapidly.

If a site is identified for cleanup, the next requirement is Remedial Design, which involves preparing the technical drawings and specifications for the chosen action. The remedial design provides the blueprint for Step 4.

Step Four: Remedial Action

This is the actual cleanup step, where a variety of treatment tools are used to restore a site. Because of the Navy's commitment to getting the job done, approximately 60 percent of our Environmental Restoration, Navy funds are spent on cleanup each year.

Step Five: Response Complete

As each cleanup effort reaches the end, two critical milestones are targeted:

Remedy in Place (RIP): The long-term cleanup/treatment system is constructed and is operating as planned.

Response Complete (RC): Based on the DON's stringent standards, the cleanup work is complete.

Finally, when no further actions are needed because a site poses no threat to human health or the environment, and when regulator consent is received if required, the site is considered "Site Closed Out." At National Priority List (NPL) sites, the Environmental Protection Agency (EPA) must concur with the Navy's decision. A site may be closed out at any time during the assessment or cleanup phase when sufficient information has been gathered to support that decision.

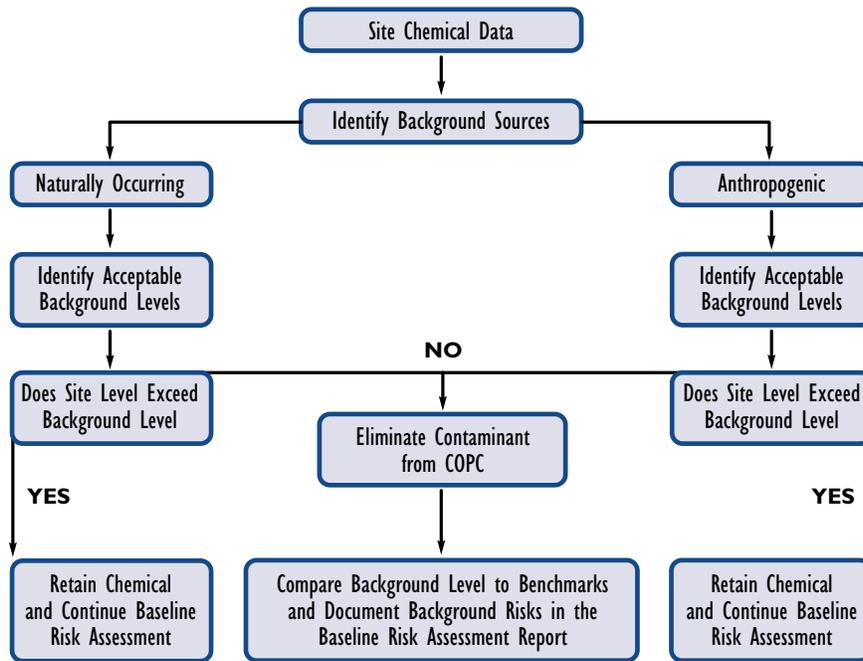


SMART Policies

Background Policy

Navy has issued an interim final policy on the consideration of background chemical levels, or “background,” as part of the site risk assessment process. To assist Environmental Restoration personnel in performing accurate background assessments, the policy describes procedures to (1) identify chemicals that are in the environment due to releases from the site; (2) eliminate from the baseline risk assessment process any naturally occurring and anthropogenic chemicals that are present at levels below background; (3) ensure documentation and discussion of potential risk from elevated chemicals that are close to the background; and (4) develop remediation levels that are not below background.

Use of Background Chemical Levels



Natural Resource Injury Policy

“Natural Resource Injury” (NRI) refers to a measurable adverse change in the viability of a natural resource, caused by the release of a hazardous substance. The Department of Defense (DoD) interim NRI policy requires that (1) Environmental Restoration personnel identify NRI at cleanup sites and correct it whenever possible as part of site assessment, investigation and implementation processes; (2) Environmental Restoration personnel may collect additional appropriate information during the Ecological Risk Assessment in order to minimize NRI during hazardous substance cleanup, and avoid delays in cleanup completion; and (3) restorative measures for NRI be coordinated with the other stakeholders for each site. The Department of Navy will provide specific guidelines for using NRI at IR sites.



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Human Health Risk Assessment Policy

In September 2000, the Chief of Naval Operations issued a draft Human Health Risk Assessment Policy, outlining a three-tiered approach for evaluating sites to determine the appropriate level of remedial action to ensure that sites do not pose a significant risk to human health and the environment. The draft policy has been reviewed and commented on by the Risk Assessment Workgroup. CNO is now incorporating those changes, and the final policy will be issued in FY 2001.

Range Policy

For decades, ranges across the United States have been used for vital military training and weapons testing to prepare for wars and other conflicts. As the Navy and other military services have downsized and adjusted their training practices over the years, many ranges have been closed, transferred or are in the process of being transferred (CTT).

Navy participates in the Range Response Subcommittee of the Operational Environmental Executive Steering Committee for Munitions (OEESCM). The subcommittee is currently working on a draft of a Department of Defense (DoD) directive. The directive establishes policy for evaluating and responding to both military munitions, including unexploded ordnance (UXO), and other constituents on CTT military ranges. The directive also requires the development and maintenance of an inventory of DoD CTT ranges. DoD plans to issue the final directive in early 2001.

Underwater UXO Policy

The Underwater UXO workgroup recently completed a draft Underwater UXO policy, establishing a consistent approach for underwater UXO risk assessments and appropriate response actions. The document will be posted online at <http://erb.nfesc.navy.mil/> Navy Support – Policies and Regulations, and the final version will be issued in FY 2001.

Sediments Policy

Most Naval installations are bordered or surrounded by water. As a result, the protection of sediments within those bodies of water is a great concern for the Navy. Current remedial investigations and cleanup technologies have the potential to be harmful to ecological systems and habitats. DON recently engaged with the National Environmental Policy Institute (NEPI) to tackle numerous sediment issues. In January 2000, NEPI held a meeting with experts in the field of sediments, including EPA, Navy, the Army Corps of Engineers, private and public sectors, port authorities, academia, and others. During the meeting, participants narrowed the issues to focus on the most prevalent sediment concerns for the Navy. Those issues included the following:

- 1) Site Investigation/Data Collection
- 2) Human Health and Ecological Risk Assessment
- 3) Risk-Based Management Priorities and:
- 4) Remediation: Considerations, Options & Remedy Selection

These issues will be developed into policy for Navy/Marine Corps installations.

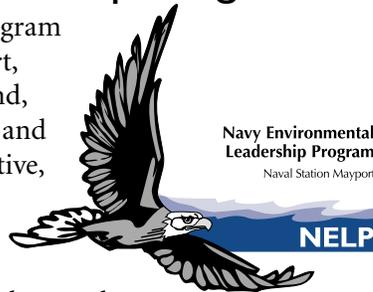
SMART Development in Programs and Organizations

Navy Environmental Leadership Program

The Navy Environmental Leadership Program (NELP), located at Naval Station Mayport, Florida and Naval Air Station North Island, California, is instrumental in developing and demonstrating cost-effective,



innovative environmental technologies and management tools that can be adopted by Defense Department installations. NELP was established to find new ways to manage Navy and Marine Corps environmental programs. For cleanup, this means getting the job done better, faster and cheaper.



Want More Information?

Visit the NELP website at www.nelp.navy.mil

Naval Facilities Engineering Service Center

Naval Facilities Engineering Service Center (NFESC) is expanding the accessibility of its technology transfer, engineering, and scientific products and services through the web. NFESC's new Environmental Restoration and BRAC website is an online resource for information on restoration, policies and regulations, BRAC sites, and contracting opportunities.



Want More Information?

Visit the NFESC website at www.nfesc.navy.mil



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Defense and State Memorandum of Agreement

The Defense and State Memorandum of Agreement (DSMOA) fosters partnerships with states and territories, providing a standardized means of reimbursement for oversight services states provide in support of investigation and cleanup efforts at active and closing installations. Navy takes a leadership role in evaluating and refining DSMOA to ensure maximum efficiency in delivery of services. For this purpose, Navy conducts regular reviews of DSMOA documentation, and over the past year began a pilot study on the program in California (four installations) to determine the most effective use of DSMOA funding.

Want More Information?

Visit the DSMOA website at <http://hq.environmental.usace.army.mil/programs/dsmoa/dsmoa.html>

Interstate Technology and Regulatory Cooperation (ITRC)

The ITRC, an organization that works with Navy, has posted an interactive resource online that can help environmental restoration personnel evaluate the potential for using phytoremediation at their cleanup sites. By filling out an online form with specific information about their site, personnel can generate a Site Applicability Report with recommendations for treatment options. The Phytoremediation Online Decision Tree can be accessed at the following web address.

<http://www.wpi.org/itrc/wwwphyto/index.htm>



Want More Information?

Visit the ITRC website at <http://itrcweb.org>

Cleanup Review Tiger Team (CURTT)

At the request of the Naval Facilities Engineering Command Southwest Division, the Naval Facilities Engineering Service Center (NFESC) established the Unexploded Ordnance Cleanup Review Tiger Team (UXO CURTT) in May 2000. The CURTT brought together UXO expertise from the Navy, Army, Department of Energy, academic professionals and private industry. From 9-12 May 2000, the team conducted extensive on-site reviews of Navy UXO cleanup projects located in California and Alaska. The reviews were conducted as interactive sessions, providing the opportunity for Remedial Project Managers (RPMs) to review lessons learned, discuss specific technical issues with the team, and benefit from recommendations for improvement.

SPAWAR Systems Center, San Diego Environmental Sciences Division

The Environmental Sciences Division at the Space and Naval Warfare Systems Center, San Diego (SSC SD) is a leader in marine environmental quality assessment, sensor development, ecological risk assessment and sediment management and remediation. The Division draws on a broad range of in-house expertise and partnerships with industry, academic institutions, Navy and other government organizations to research, develop, test and evaluate technology to support DON's environmental mission.



Want More Information?

Visit the SPAWAR website at <http://agena.spawar.navy.mil>



Ecological Risk Technical Assistance Team

The Ecological Risk Technical Assistance Team (ERTAT) works to ensure that the DON conducts consistent, technically sound, and cost-effective ecological risk assessments for IR sites. Established by Naval Facilities Engineering Command (NAVFAC), ERTAT consists of representatives from the Naval Facilities Engineering Service Center (NFESC), the Environmental Protection Agency's Environmental Response Team (ERT) and the Space and Naval Warfare Center (SPAWAR).

Want More Information?

Visit the ERTAT website at <http://erb.nfesc.navy.mil/support/tat/era.htm>



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SMART Workgroups

Alternative Restoration Technology Team

The Navy chartered the Alternative Restoration Technology Team (ARTT) in 1996 as an advisory group to Installation Restoration (IR) managers. The group is chaired by NFESC and comprised of representatives from the Chief of Naval Operations, Marine Corps, NFESC, Engineering Field Divisions and Activities (EFD/As). ARTT promotes the use of innovative technologies to save time and money. Through these efforts, ARTT has enhanced the cleanup program by providing the Navy with a centralized, focused and efficient approach to information and technology transfer.



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Want More Information?

Visit the ARTT website at www.nfesc.navy.mil/enviro/ps/artt/arttgallery.htm

Risk Assessment Workgroup

Combining the former Ecological Risk Assessment Workgroup and the Human Health Risk Assessment Workgroup, this group was established as an advisory group to IR Managers. The Risk Assessment Workgroup facilitates the efficient application of the risk assessment policies at Navy/ Marine Corps sites. Promoting consistency and information sharing among all members and various regulatory groups, the workgroup's ultimate purpose is to achieve protection of human health and the environment in a scientifically defensible, cost-effective and timely manner. Focus areas include chemical background concentrations, sediments, and risk-related monitoring.



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Tasks for the Risk Assessment Workgroup include proposing tools, methodologies and guidance for implementing sound risk assessments; identifying issues, barriers and strategies; sharing lessons learned with the group, risk assessors and RPMs; evaluating pertinent regulations; seeking cross-agency perspective; and integrating ecological and human health risk assessment throughout the Environmental Restoration process.

Remedial Action Operation/ Long-Term Management Optimization Workgroup

The Remedial Action Operation/Long-Term Management (LTM/RAO) Optimization workgroup was created to identify and address issues encountered by Remedial Project Managers (RPMs) during management of post Remedy-in-Place (RIP) DON cleanup sites. Specifically, the purpose of the workgroup is to develop guidance documents for RPMs and their contractors to optimize activities associated with RAO/LTM, including Long-Term Monitoring. The workgroup is also transferring optimization information to RPMs through CECOS training courses and NFESC technical seminars.

Administrative Records Workgroup

An Administrative Record is the combination of records and other materials that form the basis for remedy selection and legal review of response actions at DON cleanup sites, as required under CERCLA. The Administrative Records Workgroup was chartered in 1993 by Naval Facilities Engineering Command (NAVFAC) to investigate, develop and implement an automated administrative records management system for DON environmental field offices. The workgroup contains representatives from NAVFAC headquarters and each Engineering Field Division and Activity (EFD/A).

Underwater UXO Workgroup

Underwater unexploded ordnance (UXO) on or near many of the Navy's military installations poses a unique challenge to analyze and determine what, if any, response actions are required. The presence of underwater UXO can be linked to acts of war, handling or disposal of munitions, and operations at former ranges, training, or maneuver areas. The possibility of metal corrosion, migration of ordnance related chemical compounds into marine sediments, tidal influences, storm events, and water depths make evaluation of potential response actions much more complex than for land-based UXO.

To deal effectively with these issues, Navy formed the Underwater UXO Workgroup in July 2000. Members include technical representatives from the Naval Facilities Engineering Command (NAVFAC), the Naval Ordnance Safety and Security Activity (NOSSA), the Navy Explosives Ordnance Disposal Technical Division (NAVEODTECHDIV), the Coastal Systems Command, Panama City, Florida, and is chaired by the Chief of Naval Operations Environmental Protection, Safety and Occupational Health Division (CNO N45). When completed in 2001, the Underwater UXO policy will establish a consistent Navy and Marine Corps approach for evaluating potential risks posed by underwater UXO for sites under the Department of the Navy Environmental Restoration (ER,N) program.

Visit the Navy Environmental Restoration and BRAC website's workgroups page (http://erb.nfesc.navy.mil/support/work_grp/main.htm) for up-to-date information on many workgroups.



Cost-to-Complete Workgroup

The Cost-To-Complete (CTC) Workgroup consists of environmental professionals from each Engineering Field Division and Activity, Naval Facilities Engineering Service Center (NFESC), and Naval Facilities Engineering Command (NAVFAC). The workgroup was formed to assist in the development of a consistent, software application for IR site remedy selection during budget preparation and budget estimating. The CTC Workgroup ensures that the needs and perspectives of each field office are addressed throughout this process. Ongoing objectives for CTC are as follows:

- Improving user interface and ease of use
- Providing a solid basis for remedy selection for budget preparation
- Adding credibility for CTC cost estimates
- Documenting costs and assumptions
- Generating system reports
- Making system help available

To improve access to the system, the workgroup recently made the budget estimating database application available on the Navy Intranet. The workgroup is also in the process of developing consistent system architecture that will shorten the learning curve for new users and make the system more convenient to use.



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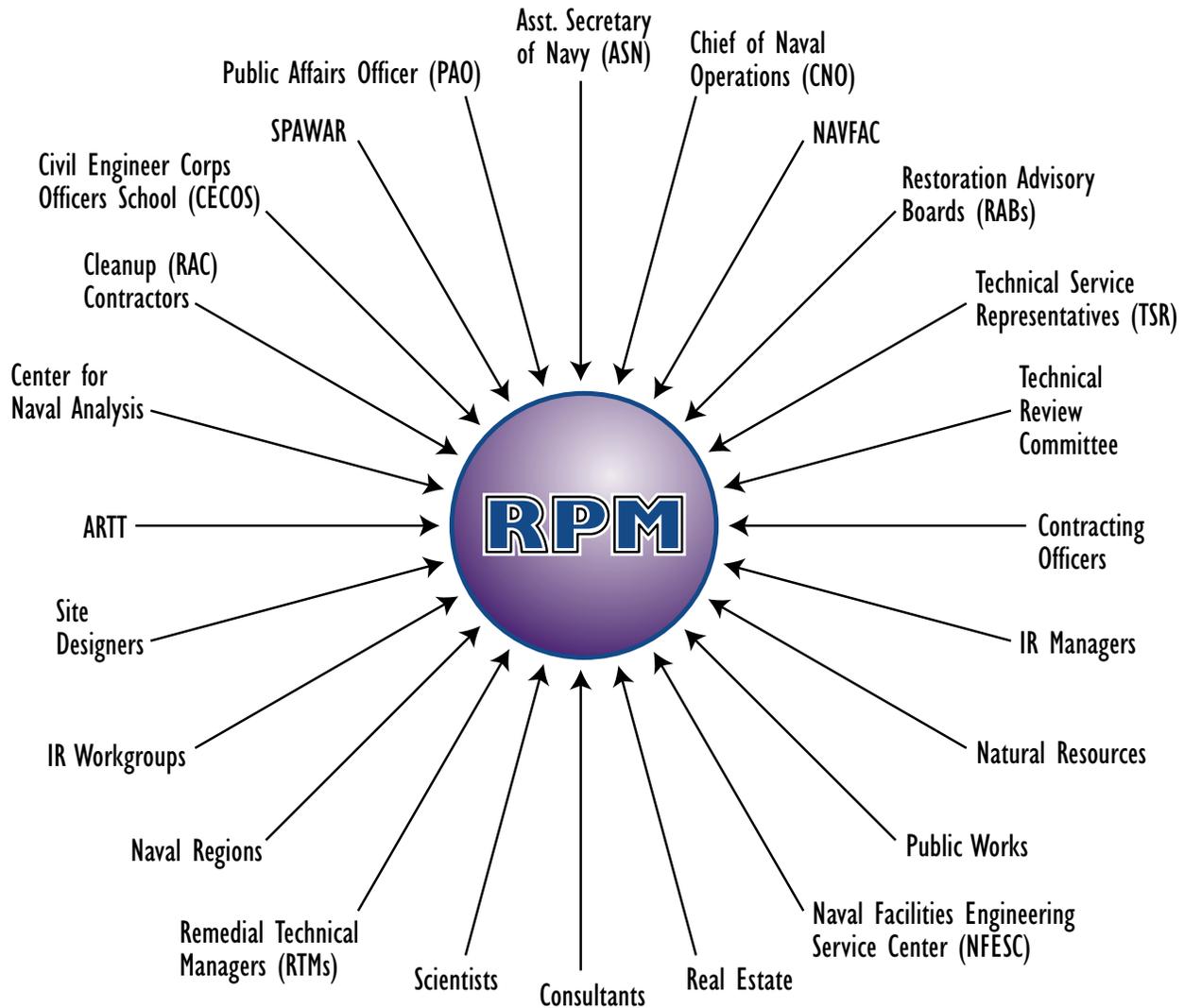


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Special Thanks to the Many Contractors and Agencies That Make Cleanup Happen!



Other contractors and organizations

ABB Environmental
 Ecology & Environment, Inc.
 Tetra Tech (Brown & Root)
 Halliburton (NUS)
 IT (OHM Remediation)
 Neptune & Co.
 CH2M Hill

FWS
 J.A. Jones
 NOAA
 Argon National Labs
 University of Maryland
 Dames & Moore, Inc.
 Newfields

Battelle
 EMI
 ECO
 USGC
 Other colleges and universities
 ERT Emergency Response Team (EPA)