

CHAPTER 4

ENVIRONMENTAL RESTORATION PROGRAM MANAGEMENT INITIATIVES

FY95 marked significant changes in the DON cleanup program. DON placed a greater emphasis on innovative approaches to program management with an overall goal to reduce risk, accomplish quicker cleanups and, at closing bases, accelerate the return of land to local communities for economic reuse and redevelopment. More than ever before, communities surrounding Navy and Marine Corps installations are taking an active interest in the DON environmental restoration program. The addition of 5 new installations to the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL) resulted in increased regulatory oversight. Clearly, the way ahead cannot be business as usual. In response to these challenges, the DON developed a number of new program management initiatives in FY95.

4.1 DATA ELEMENTS UPDATE

In the spring of 1995, representatives from the Naval Facilities Engineering Command Headquarters and the Naval Facilities Engineering Service Center visited Remedial Project Managers located at the Naval Facilities Engineering Field Divisions/Activities. The purpose of the visit was to conduct a detailed review and update of the site data contained in DON's master site data base (DSERTS). Management controls were instituted to enhance the accuracy of site data in the database and to promote integration of site data contained in various DON databases. However, it was acknowledged that management controls would not be sufficient to ensure integration of various databases. An effort was launched to develop a database integration system (NORM). NORM will link site data with relative risk and financial databases.

4.2 DON ENVIRONMENTAL CLEANUP ASSESSMENT

On 31 August 1995, the Naval Facilities Engineering Command completed an assessment of the DON portion of the Defense Environmental Restoration Program for the FY97 Future Years Defense Plan (FYDP), as directed by the Assistant Secretary of the Navy (Installations and Environment). The purpose of the assessment was to determine DON's ability to structure a national environmental restoration program at the level of funding contained in the FY97 FYDP, by entering into discussion with regulators and other affected and concerned stakeholders.

The Naval Facilities Engineering Command contacted 8 of the 10 U.S. Environmental Protection Agency (EPA) regions, 14 states and the territory of Guam. Based on feedback from the regulators, the Naval Facilities Engineering Command determined that it was not possible for the DON to structure a national program within the FY97 FYDP funding levels and receive regulator concurrence.

The assessment identified four significant barriers to restructuring the DON cleanup program:

- Identification of total requirements to Congress - regulators felt that the Navy has not adequately identified its full requirements to Congress. Without such identification, regulators are reluctant to renegotiate agreements or adjust schedules.
- Policy to only fund legal agreements - regulators voiced the concern that the program needs to address all high risk sites rather than only those identified in legal agreements.
- Regulators' perception that Navy is not bringing anything to the negotiations - regulators expect that the DON will provide something in return for their relaxation of requirements in existing agreements, otherwise the regulators will be reluctant to renegotiate existing agreements.
- Defense State Memorandum Of Agreement (DSMOA) funding concerns - proposed reductions in the level of DSMOA funding provided to states for their assistance in reviewing and commenting on proposed cleanup actions is of concern to the regulators. If funding is reduced, they will not be able to provide sufficient oversight.

The assessment concluded that based on the DON's current cooperative relationship with the regulators and the DON's willingness to communicate regulator's concerns, a significantly restructured national program is possible if the following items are adequately addressed:

- Change the funding prioritization process from the current use of legal agreements as the primary funding element to a risk management approach.
- Fund the program at a stable level in excess of the FY97 FYDP.
- Resolve the regulatory agency concerns regarding identification of total program requirements to DOD and Congress during the budget process.
- Continue close coordination and partnering with regulators.

Actions which have occurred in response to the assessment include:

- Use of a risk management strategy as the primary funding element for planning, programming and budgeting. Risk management considers a variety of factors including site relative ranking, legal agreements, mission impacts, contracting issues, economic reuse and community concerns to establish funding priorities.
- DON support of a stable funded program.
- Continued close coordination and partnering with the regulators. DON met with the regulators to explain the planning, programming and budgeting process and probable future funding levels. As a result of these meetings, the regulators have a much better understanding of the budgeting process.

4.3 RELATIVE RISK SITE EVALUATION

The DON used the DOD Relative Risk Site Evaluation Model to evaluate sites in the Environmental Restoration Program to determine each site's relative risk. DON used the site's relative risk, in conjunction with other risk management concerns, to plan, program and budget remedial work at DON installations. In general, sites with a greater relative risk will be addressed prior to sites with a lower relative risk; however, as discussed below, other risk management factors may influence the prioritizing of future work.

In the Relative Risk Site Evaluation Model, information regarding contaminants and their toxicity, migration pathways and the existence of human or ecological receptors that may be affected by exposure to contamination, is analyzed to group sites into "high", "medium" and "low" relative risk categories. As part of the risk management process, DON seeks regulatory and community input concerning a site's relative risk and other factors which need to be considered when budgeting for future site cleanups.

Of the 2,718 DERA and BRAC sites which the DON has evaluated with the Model, 1,382 have a "high" relative risk, 621 have a "medium" relative risk and 715 have a "low" relative risk. By the end of FY96, DON plans to obtain the necessary data to determine the relative risk of the remaining unranked sites currently categorized as not evaluated.

4.4 COMPREHENSIVE PROGRAM COST EVALUATION

A vital part of managing the cleanup program is the accurate portrayal of program costs. Not only is it important to know what work needs to be done, it is equally important to be able to identify the costs associated with that effort.

A comprehensive program cost evaluation continued to be undertaken by the Naval Facilities Engineering Command (NAVFAC) during FY95. Sites at Navy and Marine Corps installations have been evaluated resulting in a detailed site work breakdown structure that describes what work is to be performed, the time period necessary for completion of each work task and all associated costs. Costs are aggregated for work to be accomplished in each fiscal year to determine a life cycle cost for the site. These site costs, in turn, are aggregated to develop cleanup costs over the life of the cleanup program.

DON uses these annually calculated cost estimates for planning and programming purposes. DON based its submission of the DERA budget for FY97, in part, on costs derived from the comprehensive program cost evaluation.

4.5 SITE MANAGEMENT PLANS

Since 1990, the DON has been entering into Federal Facility Agreements (FFAs) with the U. S. Environmental Protection Agency (EPA) for DON installations placed on the NPL. Frequently, state environmental regulatory agencies are third parties to an FFA. FFAs are legal documents that describe the responsibilities of each of the parties to the agreement, set forth what work products are required as part of the cleanup process, and established milestones for their accomplishment. To date, DON has signed 27 FFAs, two in FY95,

Over the last two years, the DON has developed a new approach to negotiating FFAs. Through a partnering process with EPA Region III that identified common objectives, the DON was able to streamline the FFA and produce a model agreement that optimizes the required number of primary documents. All deadlines are taken out of the FFA and placed in a separate Site Management Plan (SMP). The SMP is a primary document that describes all operable units and a life cycle schedule for all actions. SMPs contain enforceable deadlines for the current fiscal year (following Congressional appropriation of DERA funds) and are updated annually.

The DON site management plan approach fosters trust between DON and its regulators, simplifies the FFA process, and provides all parties with the flexibility needed to effectively manage environmental cleanup at NPL installations. DON requires that new and renegotiated FFAs include SMPs.

4.6 INCREASED USE OF REMOVALS AND INTERIM REMEDIAL ACTIONS

In FY92, only 14% of DON's share of Defense Environmental Restoration Account (DERA) was spent to clean up sites. By FY95, that had risen to 59%. The DON continues to place emphasis on reducing the amount of studies performed and moving to quicker cleanups. An important tool that allows that to happen is increased use of removals and Interim Remedial Actions (IRAs).

Removals and IRAs are early cleanup actions taken at a site to reduce risk and stabilize contamination. For sites with well defined contamination, IRAs are often conducted early in the study phase and, after coordination with regulators, may constitute the final remedial action. The DON's bias for action encourages increased use of removals and IRAs whenever practical. During FY95, IRAs represented 30% of DON funding spent on cleanups.

4.7 CONTRACTING

DON has adequate contracting agreements in place to accomplish the foreseeable needs for the Environmental Restoration Program. These include 15 Comprehensive Long Term Environmental Action, Navy (CLEAN) contracts (totaling \$2.75 billion in capacity) to investigate and design site cleanups and 10 Remedial Action Contracts (RAC) (with a total capacity of \$2.25 billion) for cleaning up sites.

4.8 TECHNOLOGY DEVELOPMENT AND TRANSFER

In order to promote faster, less expensive site cleanups, DON supports development of innovative technologies. DON also supports efforts to share information concerning these technologies. In FY95, DON supported the following technology development and transfer projects:

- **SCAPS** - The Site Characterization Analysis and Penetrometer System (SCAPS), developed as a tri-service initiative, uses laser induced fluorescence to detect petroleum hydrocarbons through a probe pushed into the ground. SCAPS is intended as a field screening tool. The DON has used the SCAPS to locate migrating plumes of petroleum hydrocarbons. The SCAPS includes a standard 20-ton testing truck with a cone penetrometer, modified to detect subsurface petroleum hydrocarbon contamination in-situ. SCAPS is fully self-contained and includes soil/groundwater sample retrieval capabilities, a grouting system to seal the investigation hole upon probe withdrawal, and a remote decontamination system. SCAPS gathers, processes, and displays real-time geotechnical and contamination data. The user is able to quickly delineate a contamination plume without time consuming iterations typically involved with traditional sampling and laboratory analysis. Use of SCAPS results in the saving of time and money.
- **In-Situ Bioremediation** - As an example of DON's application of this technology, at MCAS Beaufort, intrinsic bioremediation is being employed to naturally attenuate and degrade organic compounds. If the treatment is successful, the installation could save as much as \$2 million in cleanup costs.

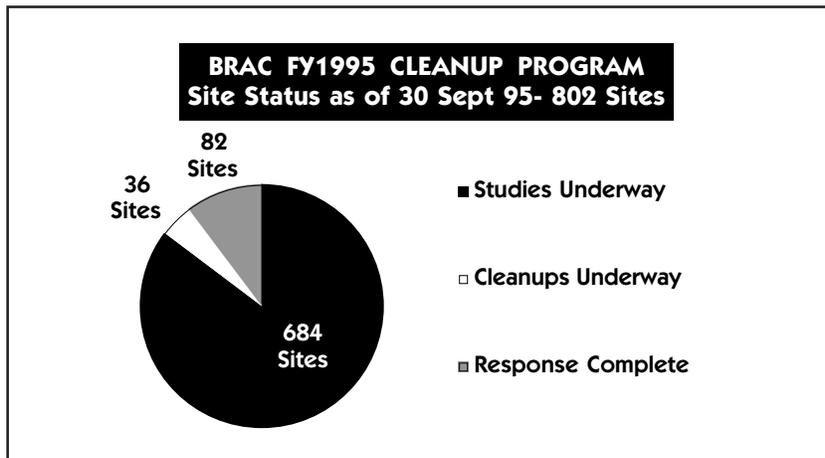
- **National Petroleum Hydrocarbon Test Site** - The Naval Facilities Engineering Service Center (NFESC) operates the Hydrocarbon National Test Site (HNTS) at NCBC Port Hueneme, CA. The HNTS, part of the Tri-Service and EPA Department of Defense National Environmental Technology Demonstration Program, provides a well-characterized site for applied research, demonstration, and evaluation of promising cleanup and monitoring technologies.
- **Technology Application Team** - NFESC formed Technology Application Teams (TATs) to provide the tools necessary for the Naval Facilities Engineering Command Engineering Field Division/Activities (EFD/EFAs) to use new and innovative technologies to reduce site cleanup costs. The TATs identify the need for a remedial technology, identify the barrier(s) for its routine use, identify tools to remove those barriers, and develop those tools. Examples include brochures, technical data sheets, videos, standard statements of work, standard design guidance, specialty contracts, in-house technical consultation and training seminars.
- **Tiger Teams** - A Tiger Team is a peer review team composed of members of the Naval Facilities Engineering Command, industry and academia who visit EFD/EFAs to review cleanup plans and recommend cost efficient remediation technologies. Implementation of Team suggestions have the potential of achieving significant cost and time reductions.

4.9 BASE CLOSURE PROGRESS

The DON made significant progress in the Base Realignment and Closure (BRAC) arena over the past year. Navy and Marine Corps personnel are committed to “Fast-Track” cleanup at closing bases as demonstrated by the following accomplishments:

- Completing environmental baseline surveys at BRAC I-III installations to determine the environmental condition of property and the status of the cleanup program.
- Forging alliances with regulators to develop cleanup cost estimates and schedules.
- Completing Base Closure Plans (BCPs) for BRAC I-III installations.
- Integrating study and design work efforts between CLEAN and RAC contract personnel to accelerate cleanup.

Site status - As of the end of FY95, DON had identified 802 sites on BRAC installations. DON has completed all necessary cleanup response actions at 82 sites and cleanup is underway at an additional 36 sites. The following chart demonstrates the current status:



Environmental Condition of Property - As of the end of FY95, DON identified a total of 35,429 acres available for transfer from BRAC I, II and III installations, of which 4,651 acres have been transferred to other federal agencies and 244 acres have been transferred to communities for economic reuse.

Cleanup strategy - In FY95, the BRAC cleanup strategy was to:

- Support the BRAC Cleanup Team (DON, EPA and state regulatory personnel) cleanup priorities.
- Fund all cleanup projects as soon as they become viable. This resulted in full execution of all available funds by May 1995.
- Finish all necessary cleanup by FY01.

For FY96, DON modified the cleanup strategy, due in part to a decrease in cleanup funding, to:

- Focus funding on cleanup projects where there is specific reuse planned for the property.
- Fund all cleanup projects where an imminent health threat has been discovered at the site.
- Fund projects based on the project's merit versus first come first serve.
- Give priority to funding actual cleanup projects versus site investigation.
- Finish all necessary cleanup by FY06. (This includes cleanup actions to be accomplished for BRAC IV installations)

Regulator involvement - In FY95, DON:

- Established east and west coast working groups (including regulators) to review cleanup criteria.
- Used regulator input to refine the scope and type of cleanup projects which should be accomplished.
- Involved BRAC Cleanup Teams in prioritizing FY96 projects to be accomplished.
- Issued future land use policy - DON Environmental Policy Memorandum 95-02 "Consideration of Future Land Use in Determining Cleanup Standards for Base Realignment and Closure (BRAC) Property" of 17 Aug 95.
- Issued guidance on transfer of property to other federal agencies - NAVFAC letter "Environmental Requirements for Federal Agency to Agency Property Transfer at BRAC Installation" of 13 Oct 95, which forwards DON Environmental Policy Memorandum 95-01 of 26 May 95.
- Issued guidance on approval for reports detailing the suitability of property for transfer or lease - DON Environmental Policy Memorandum 95-03 "Approval Authority for Finding of Suitability to Transfer (FOST), Finding of Suitability to Lease (FOSL) and Environmental Summary Documents for Federal Agency to Agency Property Transfer" of 21 Aug 95.
- Provided support to the Fast-Track Cleanup Implementation Work Group.
- Created BRAC Closure Plan Abstracts which established a baseline and metrics to assess program progress.
- Participated in and supported BRAC Cleanup Team training.
- Conducted an east and west coast OSD/Navy Community Conference to exchange ideas and update communities on cleanup issues.

BRAC Program Highlights - The DON seeks to clean up and transfer BRAC properties as soon as possible. Additional accomplishments and innovations which occurred in the BRAC cleanup program in FY95 included:

- For BRAC I, II, and III installations, 13 reuse plans have been approved, an additional 13 plans have been developed, and are awaiting approval, and seven are planned for future development.
- 34.7 acres at NAVSTA Long Beach, California and 384 acres at NAVSTA Staten Island, New York were transferred for reuse.
- 2,580 acres at NAS Chase Field, Texas were leased to the Bee County Redevelopment Authority.
- Established the Bay Area Defense Conversion Action Team for bases closing in the San Francisco, California area.

4.10 RESTORATION ADVISORY BOARDS (RABs)

In the past, the DON worked with Technical Review Committees (TRCs) which served as a conduit to provide technical information on cleanup activities to regulators and the community. An increasing need to actively involve affected members of the community in cleanup decisions led to the establishment of Restoration Advisory Boards at all closing and active installations where there is sufficient, sustained community interest. The purpose of RABs is to gain effective input from stakeholders on cleanup activities and increase installation responsiveness to community environmental concerns.

In February 1994, the Navy issued implementing guidance for all installations in the Defense Environmental Restoration Program which currently had TRCs to convert them to RABs. This conversion will be accomplished by:

- Expanding existing TRCs to include additional community representatives;
- Establishing co-chairs, one from the community members of the RAB and one from the Navy;
- Opening meetings to the public

Marine Corps guidance issued in May 1994 directed installation commanders to expand the function of the current TRCs and establish RABs if one of the following conditions is met:

- A local government requests that a RAB be formed;
- Fifty local residents sign a petition requesting that a RAB be formed;
- The installation is a base closure

DON remains committed to involving communities surrounding its installations in the environmental restoration decision making process, fostering communication and increasing the level of trust between all affected stakeholders. During FY95 significant progress was made to establish new RABs and strengthen existing RABs. To date, 80 RABs have been formed covering 101 DON installations.

RABs are becoming full partners in the cleanup process and provide a range of advice to DON decision makers, including phasing of work and selection of remedial cleanup technologies. RAB advice has resulted in the saving of both time and money. For example, the RAB at NAS Whidbey Island, Washington recently provided recommendations on cleanup alternatives which resulted in the selection of an alternative that saved the Navy \$4.5 million.

DON plans to continue its efforts to build community alliances through RABs that stress both balance and diversity of all views.