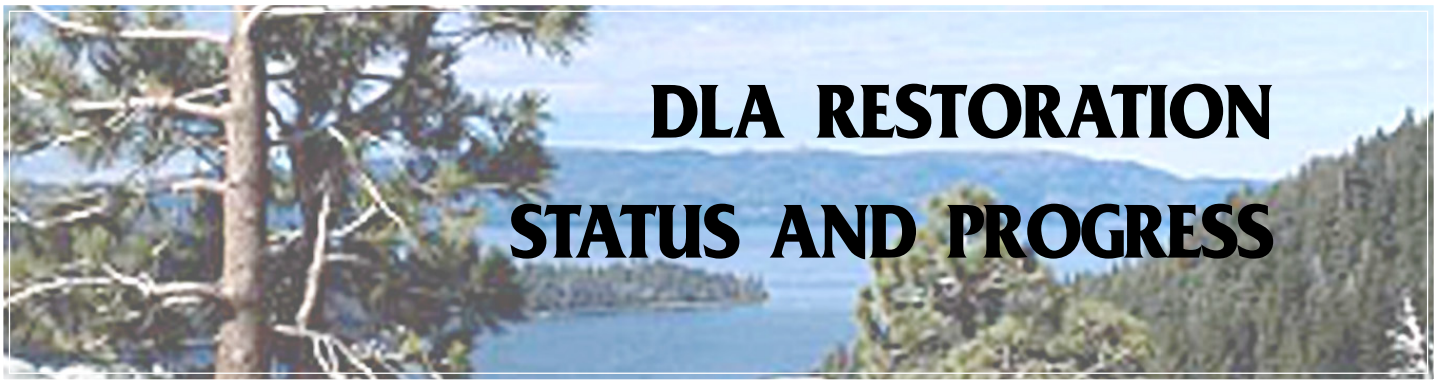


DLA RESTORATION STATUS AND PROGRESS

2002 was a year of continuing progress for DLA's environmental restoration program. In our BRAC program, all operable units at the former Defense Depot Ogden, Utah, have achieved response complete or have final remediation systems in place. EPA Region VIII has issued an operating properly and successfully document for each operable unit. The former Depot has been returned to the Army for disposition with the ultimate goal of economic reuse for the community. Our remedial process optimization program has identified in excess of $70 million in cost avoidance, resulting in increased efficiencies of our remediation systems and, ultimately, faster cleanup of our remaining clean up sites. We are on track to meet all of the restoration program goals for both the BRAC and active installation programs.

—Vice Admiral Keith W. Lippert, Supply Corps, United States Navy, Director, Defense Logistics Agency

The Defense Logistics Agency (DLA) is a combat support agency headquartered at Fort Belvoir, Virginia. DLA is responsible for providing the Department of Defense (DoD) and other federal agencies with a variety of logistics, acquisition, and technical services, including:

- Inventory management, procurement, warehousing, and distribution of spare parts, food, clothing, medical supplies, construction materials, and fuel
- Reutilization and disposal of material that is obsolete, worn out, or no longer needed.

Associated with some of these services is the responsibility for environmental compliance and cleanup. The primary contaminants of concern at DLA sites are fuels, solvents, polychlorinated biphenyls, and heavy metals. Under DLA's Defense National Stockpile program, unique environmental issues arise in relation to storage; disposal;

and sale of materials such as asbestos, lead, mercury, and thorium nitrate. DLA also is involved in the cleanup process at 29 active third-party sites where contamination has resulted from improper disposal or transfer of DoD hazardous wastes.

Program Execution

DLA has a staff of 314 environmental specialists located throughout the world. DLA's hierarchy is illustrated in the organizational structure on page 168. DLA's specialists ensure that the agency's activities are conducted in full compliance with applicable environmental requirements. Two hundred sixty-one DLA staff members work on Defense Reutilization and Marketing Service missions. This logistics mission gives the agency special opportunities to provide services and support that are critical to the environmental programs of DLA's military service customers.

The goal of DLA's environmental restoration program is to reduce risk to human health and the environment by expediting remediation of sites where hazardous materials were managed in the past. DLA is progressing in its environmental restoration program and is meeting DoD cleanup goals on time and, in some cases, ahead of schedule. These goals and DLA's progress at active and Base Realignment and Closure (BRAC) installations for remedy in place, response complete (RC), and interim actions are summarized in the bar charts on pages 169 and 170. The U.S. Army Corps of Engineers assists the DLA restoration program with administrative contracting support and provides technical oversight at several key DLA locations. Other offices, such as the Air Force Center for Environmental Excellence, also assist the DLA restoration program by providing peer reviews of DLA remediation systems through implementation of a remedial process optimization (RPO) program. Performance-based contracting is used at all DLA sites; promoting innovative approaches to cleanup and improved cost-effectiveness. The Defense Environmental Restoration Account funds DLA cleanup efforts at active installations while closing installations are funded from the BRAC account.

Focus on the Facts DLA

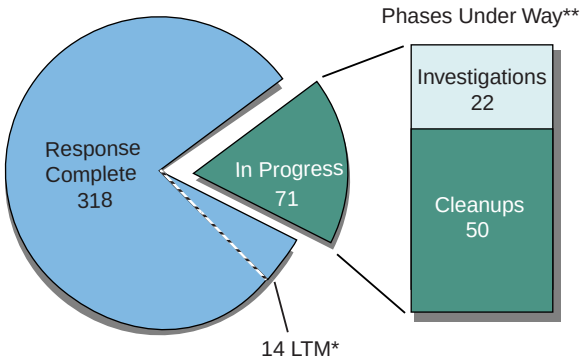
In Fiscal Year 2002 (FY02)…

- DLA has 656 sites at 21installations.
- Three hundred eighty-nine of DLA's 656 sites are active-installation sites and 267 are BRAC sites (see Active and BRAC Site Status pie charts below).
- Investigations are complete at 602 sites and under way at 54 sites.
- DLA has completed 138 interim actions at 80 sites; 8 interim actions are under way at 4 sites.
- RC status has been achieved at 547 sites; 24 sites have remedial action operations under way.

DLA also provides Components and the nation with several environmental services, including—

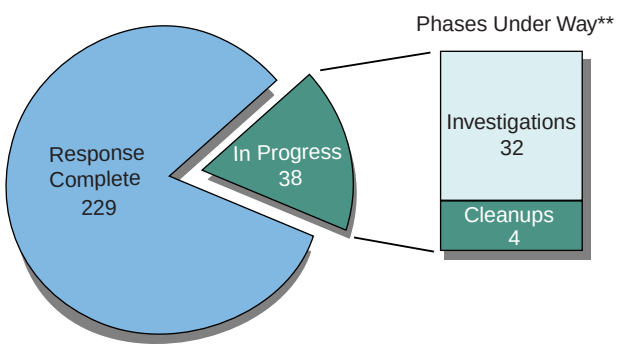
- Hazardous waste disposal
- Technical information on hazardous waste
- Fuel services
- Management of the ozone-depleting substances reserve
- Storage and maintenance of stockpiles of strategic and critical materials for national defense.

Active Site Status
(as of September 30, 2002)



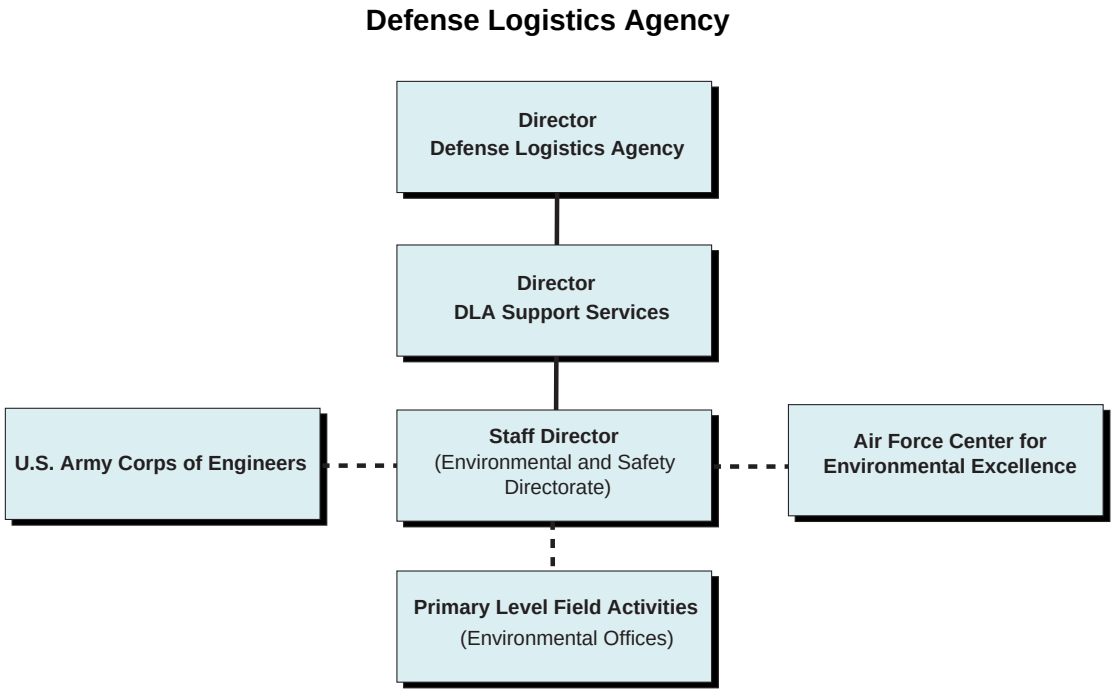
Total Sites: 389

BRAC Site Status
(as of September 30, 2002)



Total Sites: 267

*LTM is a subset of Response Complete.
**Phases Under Way may not add up to Sites in Progress because some sites have multiple phases under way.



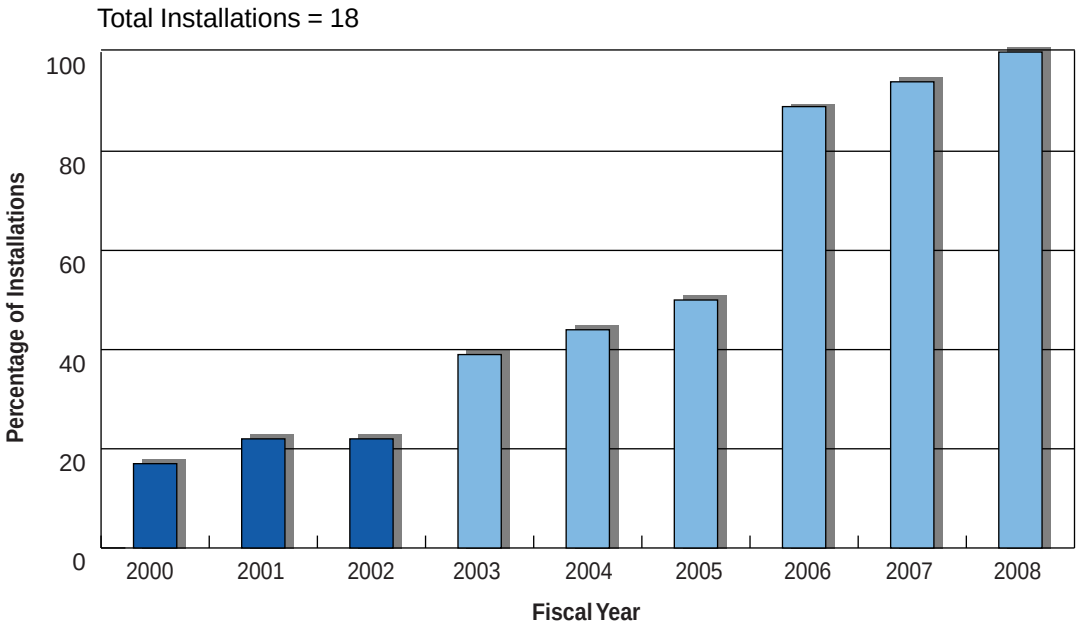
Program Accomplishments

The accomplishments of the DLA cleanup program reflect the program's complexity and its many diverse goals. In particular, these achievements illustrate how DLA advances and harmonizes the competing needs of conserving limited funds, reusing property at closing installations, and above all, safeguarding human health and the environment. DLA continues to perform relative-risk ranking at its active and BRAC installations (see pie charts on page 171). Several initiatives illustrate DLA's success in these areas.

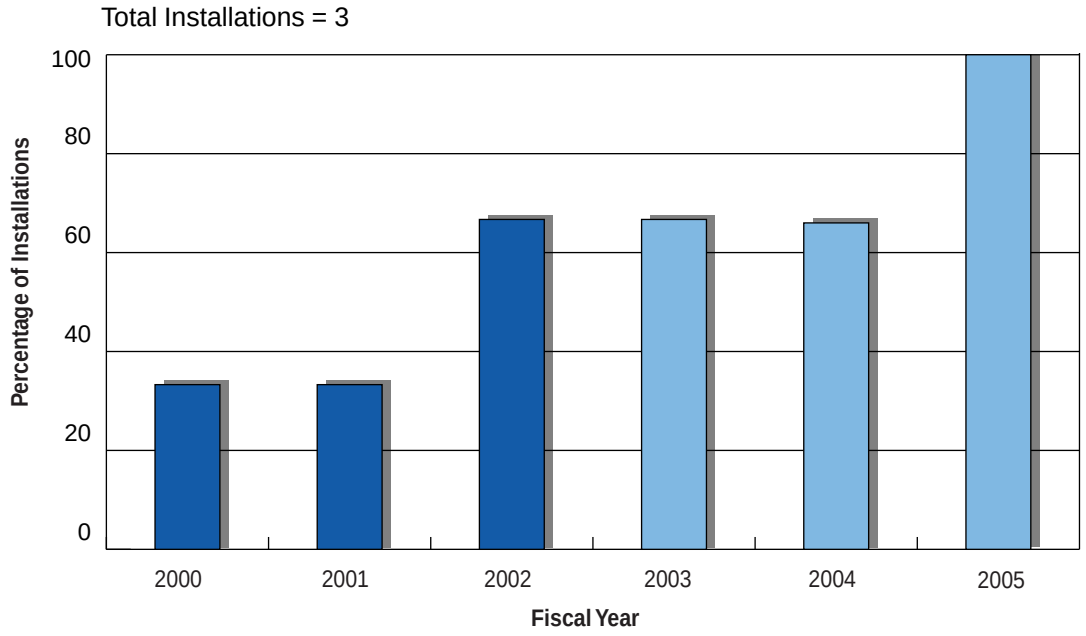
Remedial Process Optimization Initiative

DLA initiated its RPO program in FY00 to review the agency's pump-and-treat systems and all other remedial systems that require long-term management (LTM). This initiative is a systematic, iterative process for technically evaluating existing or planned remediation systems, with the goal of improving effectiveness and reducing overall site cleanup costs.

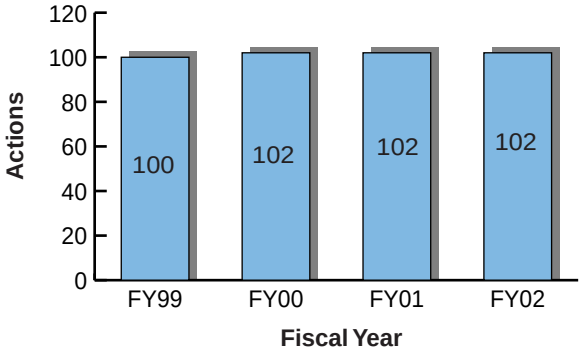
Active Installations Achieving Final Remedy in Place or Response Complete
(cumulative and projected, FY00 through completion)



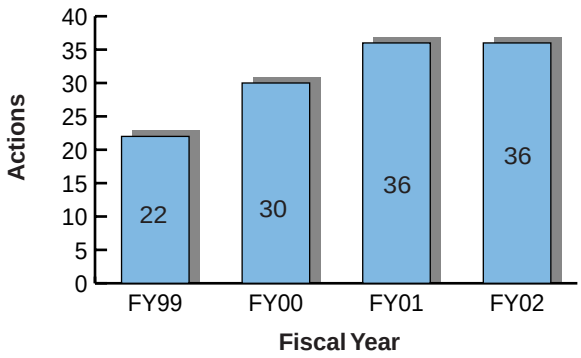
BRAC Installations Achieving Final Remedy in Place or Response Complete
(cumulative and projected, FY00 through completion)



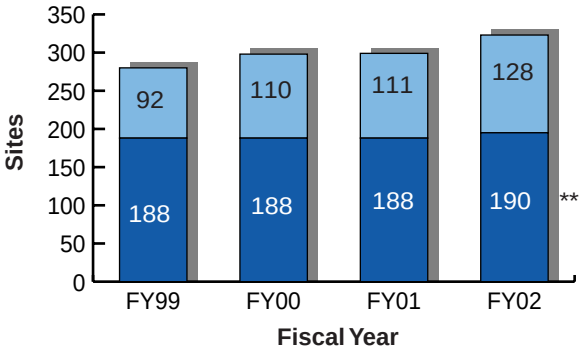
Cumulative Interim Actions Completed at Active Sites*



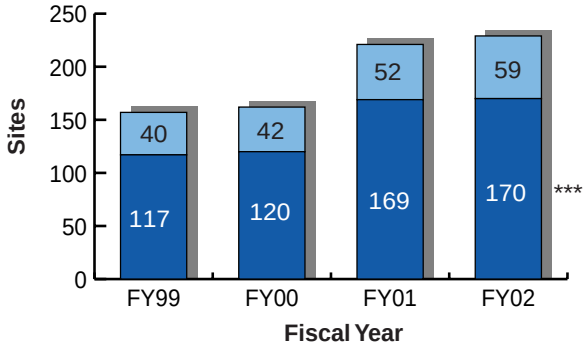
Cumulative Interim Actions Completed at BRAC Sites*

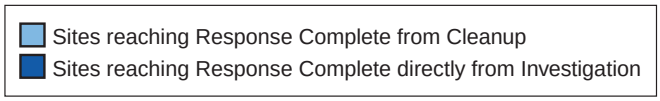


Active Sites with Response Complete*



BRAC Sites with Response Complete*

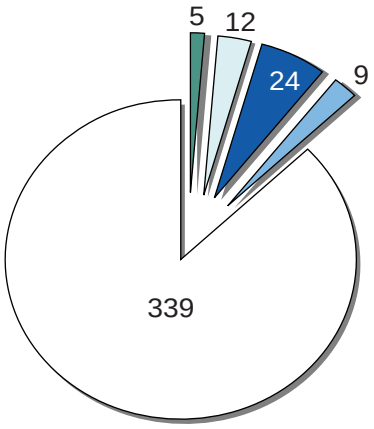




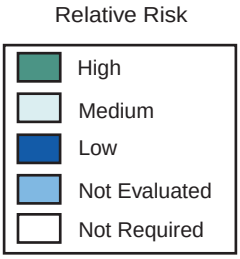
*FY99 through FY01 totals have been updated since the previous Annual Report to reflect new and revised data as of FY02.
**Includes 2 sites that had IRAs conducted prior to the completion of the studies.

In FY02, DLA completed detailed Phase II RPO evaluations at two BRAC locations, four active installations, and at one third-party site. The BRAC installations included the former Defense Distribution Depot Memphis, Tennessee (DDMT), and the former Defense Distribution Depot Ogden, Utah (DDOU). The active installations included the Sharpe and Tracy facilities at Defense Distribution Depot San Joaquin, California (DDJC), the Defense Supply Center Richmond, Virginia (DSCR), the Defense Distribution Depot Susquehanna, Pennsylvania (DDSP), and the Arctic Surplus Salvage Yard Fairbanks, Alaska. The Phase II evaluations assessed the technical-effectiveness and cost-effectiveness of remedial programs, systems, and environmental monitoring plans.

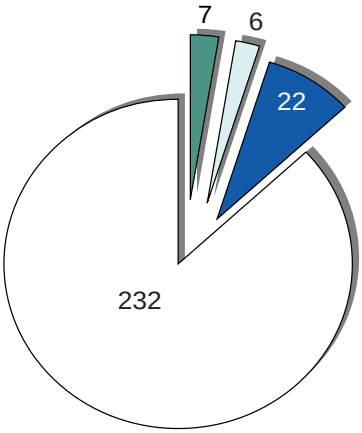
Relative-Risk Ranking for Active Sites in Progress



Total Sites = 389



Relative-Risk Ranking for BRAC Sites in Progress

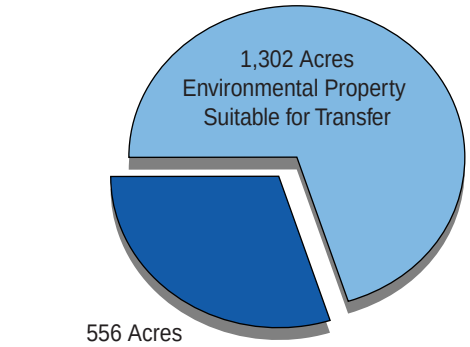


Total Sites = 267

RPO recommendations for each installation were prepared. In addition, potential cost savings associated with implementation of the recommendations were identified, and implementation plans were outlined. As part of the RPO evaluation at DSCR, an installation-wide conceptual site model (CSM) was developed. The CSM provides a basis for understanding the location and movement of groundwater and contaminants at the site, as well as incorporating the geologic and hydrologic information necessary to guide site investigations and subsequent remediation activities.

Significant optimization opportunities have been identified at each of the DLA installations evaluated under the RPO program. DLA is currently implementing the RPO recommendations to realize the greatest possible benefit from each dollar spent on environmental programs.

Environmental Condition of BRAC Property



Former Defense Distribution Depot Memphis, Tennessee—Transferring Land to Local Community

During 2002, two new deeds were signed officially transferring Parcel 1 at the former Memphis Depot to the local community. Through a finding of suitability to transfer received in 2001, the deed transfer occurred smoothly and quickly, making the property available for reuse for the first time since the installation closed in 1997.

Through the use of innovative technologies recommended by the RPO program review, the installation is moving efficiently towards complete transfer and reuse. These technologies included a pilot of enhanced bioremediation treatment at the main installation and a soil vapor extraction treatability study at Dunn Field. A Technical Assistance for Public Participation (TAPP) grant was awarded and completed in 2002 to assist community members on the Restoration Advisory Board (RAB) understand technical input on the remaining remediation .

Other technical milestones that were completed at DDMT in FY02 included completion of the engineering evaluation and cost analysis action memorandum with a responsiveness summary for Site 60 at Dunn Field, completion of the main installation remedial design work plan, and the Dunn Field remedial investigation report.

Defense Distribution Depot San Joaquin, California—Tracy Site Final Removal Action Initiated

During 2002, DDJC initiated a removal at the final contaminated soil site at the Tracy Facility. Ten thousand cubic yards of soil associated with a former burn pit was removed, characterized for disposal, and sent to the appropriate disposal facility based on the concentrations of pesticides and volatile organic compounds (VOCs) present in the excavated soil. The backfill of the site with clean soil is planned for completion early in 2003. This final removal action means that only two ongoing treatment systems remain at DDJC Tracy—a soil vapor extraction (SVE) system entering the final phases of operation and a groundwater treatment system using air strippers to remove VOCs and pesticides.

Focus on the Field

DLA

Scotia Depot, New York
Soil Remediation Success

The Defense National Stockpile Center has been investigating contamination caused by the long term outdoor storage of metal ores at stockpile depots. At Scotia Depot, contamination from the leaching of metals from storage of ferrochrome ore on concrete pads was considered likely. A remedial investigation determined that metals had migrated to soil immediately adjacent to the pads and the levels exceeded New York regulatory standards. The studies indicated approximately 600 tons of metal-contaminated soil would have to be removed and replaced with clean soil. Additionally, the concrete pads would require cleaning. It was determined that the work could most efficiently be conducted with installation resources.

Trenches were dug at the Scotia Depot to remove contaminated soil.

During September and October, 2002, the Depot manager coordinated the actual cleanup, oversaw transportation and disposal of wastes, and supervised required air monitoring. The trenches that were dug out around the pads were 5-feet wide and 2-feet deep. Samples were continuously taken and analyzed to ensure the soil was acceptable to the landfill, and for the confirmation to the state that the site was clean.

The cleanup was unique in that a common sense approach was used that resulted in operations people learning environmental remediation requirements as well as a cost avoidance of approximately $40,000. The total project cost utilizing Depot personnel was $42,000.

The SVE system is currently implementing RPO recommendations by focusing on remaining "hot spots." Optimization is expected to be completed in FY03 and closure of these sites completed soon thereafter.

The groundwater treatment systems are currently undergoing improvements to optimize the electronic control system and increase efficiency of the discharge and on-site treated water disposal processes. These improvements are planned to ensure close control of the treatment train and the ability to optimize treatment of groundwater in a manner that will allow treatment of only the volume known to be contaminated above regulatory cleanup criteria. Conversion of the older interim groundwater treatment air stripper to a granular activated carbon (GAC) system implements RPO recommendations as well as record of decision requirements. A well-head system for pesticide contaminated groundwater treatment initially was planned, but the low concentrations of VOCs in the existing interim treatment train enabled the double benefit of treating for pesticides at a central treatment point and reducing operating costs for treatment of low levels of VOCs at the same time. The annual savings for VOC treatment operations is expected to be $35,000. DDJC Tracy is currently converting the GAC and expects to initiate full operation early in calendar year 2003. Additional RPO recommendations will be implemented in FY03 to ensure greater improvement in efficiency in coordination with planned system improvements.

Former Defense Supply Center Philadelphia—Streamlined Remediation through State of the Art Technologies

The approximately 86.5-acre former DSCP site is centrally located in the southern portion of Philadelphia, Pennsylvania. The former DSCP facility was once responsible for the worldwide distribution of supplies for DoD. The facility has undergone closure activities under the BRAC program, and has been transferred to the City of Philadelphia for redevelopment. Shallow groundwater underlying the former DSCP facility and the Passyunk Homes area to the south is contaminated with a large free fuel plume. The current volume of free fuel underlying the property is estimated to be approximately one to one and a half million gallons.

Two separate fixed-active remediation systems were constructed at the former DSCP site and in the Passyunk Homes area as Phase I remedial systems. The construction of these systems was completed in February 1999, and the systems began operation in March 1999.

Environmental personnel use geoprobe technology to take measurements at the Former Defense Supply Center Philadelphia.

In order to comply with a 1999 Administrative Order, and to increase the free fuel recovery operations at the former DSCP site, an expanded vacuum-enhanced skimming system is being installed. Vacuum-enhanced skimming has been selected as the most efficient and cost-effective method for remediation of free fuel in the groundwater at the former DSCP facility. Vacuum-enhancement of the existing system increases the recovery of free fuel and causes additional volatilization of VOCs present in the free fuel. This resulting air stream will be effectively destroyed by use of a thermal oxidizer for controlled release.

DLA contracted through the Defense Energy Support Center (DESC) for the cleanup because of its extensive experience with fuel recovery projects. DESC applied its unique fast track remediation approach to the DSCP project. As of the end of October 2002, over 756,366 gallons of free fuel had been removed from the site with the existing Phase I skimmer pump systems.

The DESC remediation approach applies the following concepts—corrective actions are based on state of the art remediation technologies in use at commercial fuel handling facilities; cost estimates and work plans are short and concise; there is a proactive approach to working with regulators; and reviews and renegotiation of project requirements is streamlined.

Another major aspect of the project for the former DSCP was the successful completion of a comprehensive health risk assessment (HRA) for the site. DESC's approach included major coordination efforts with the various technical, regulatory and community action groups associated with the cleanup. After completion of a fully coordinated document, DESC and DSCP conducted public outreach sessions to further assure that the public understood the results of the HRA, and how these results would be applied to any final remediation effort. The only scenarios found to pose risks that may be considered unacceptable involve a future resident in a home with a basement, or a construction worker excavating underground who comes into direct contact with the plume without wearing protective equipment. These risk assessment results will be used in the future to determine how much cleanup may be necessary at the site after free petroleum removal is complete. Any unacceptable risks found at the site will be addressed through risk management decisions to be made by DLA in conjunction with Pennsylvania Department of Environmental Protection (PADEP) and U.S. Enviornmental Protection Agency regulators.

Defense National Stockpile Center, Baton Rouge Depot, Louisiana—East Side Lead Storage Area Cleanup

The East Side Lead Storage Area (ESLSA) of the Baton Rouge Depot, Defense National Stockpile Center, was used for storage of one-ton lifts of lead ingots from 1957 to 1997. The lead ingots were stored directly on gravel areas at the ESLSA. Previous studies showed the highest lead concentration in the soil as 5,600 parts per million (ppm) and the highest level in sediments in the on-site drainage ditches as 12,000 ppm, both well above the 400 ppm screening standard for non-industrial. The non-industrial standard was required by the Louisiana Department of Environmental Quality (LDEQ) because the future use of the parcel was for a school.

The media impacted by lead included soils of the main storage area, soils and sediments in the on-site ditches of the area, and soils and sediments of an off-site storm water drainage ditch (east side). Groundwater was not impacted, and the studies showed the lead had contaminated less than 18 inches of the soil below ground surface.

Focus on the Field

DLA

Restoring Land and Reducing Cleanup Cost at the Arctic Surplus Salvage Yard

DLA's cleanup efforts at an Arctic Surplus Salvage Yard landfill in Fairbanks, Alaska, are transforming a contaminated junkyard into a viable industrial site. Tasked by the Cleanup Office of the Secretary of Defense to lead the cleanup at this third-party site, DLA selected an expert remediation team to visit the site and review the Record of Decision (ROD) prepared by EPA. This Remedial Process Optimization (RPO) team reviewed and evaluated the remedial actions outlined in the ROD for cost effectiveness and risk protectiveness and recommended modifications.

Formerly declared unusable, the Artic Surplus Salvage Yard will now be restored for unlimited industrial use.

The RPO team's proposal entails treating the PCB-contaminated soil, stabilizing the lead contamination, solidifying all waste, and then using the waste to cover the landfill. This proposal reduces the cleanup cost from $38 million to under $10 million, and the total time to complete the remedial action from four years to one. The original proposal rendered the property unusable for the foreseeable future. The new RPO proposal will allow for unlimited industrial use of the land with the exception of the landfill, which will require some land use controls. The RPO has recommended that the landfill be used as a parking lot or an open storage area.

A remediation work plan involving the removal of all soils and sediments with a total lead concentration of 400 ppm or greater was submitted and approved by LDEQ. The remedial project consisted of in-situ stabilization of the soils with a phosphate stabilizing compound, excavation of the stabilized soils, and off-site disposal at a non-hazardous waste landfill. Using this technology, the disposal cost savings resulting from use of a solid waste landfill compared to a hazardous waste landfill was approximately $1 million for 15 million pounds of the stabilized soil. The remaining soils and sediments and associated water from the drainage ditches were disposed at a hazardous waste landfill.

During all the soil treatment and removal operations, the air was continuously monitored for lead. The OSHA standard for lead was never reached. The total project cost was $1.8 million.

LDEQ monitored this project daily from startup on April 15, 2002 until completion on August 13, 2002. LDEQ issued a letter for No Further Action on December 4, 2002.

Defense Distribution Depot Susquehanna, Pennsylvania Optimization of Groundwater Remediation Systems Leads to Significant Operations and Maintenance Cost Savings

Recent efforts of environmental restoration personnel at DDSP New Cumberland, Pennsylvania have resulted in the temporary decommissioning of two of the installation's groundwater remediation systems, one at the Former underground storage tank (UST) 950 and one at the Aircraft Maintenance Shop Closure Site (AMSCS). The decommissioning was completed in December 2001, with the approval of the PADEP, as part of recommended changes in the overall remedial strategy for these sites and is expected to save the depot $250,000 in annual operations and maintenance costs from FY02 forward.

The Former UST 950 and surrounding soils were removed in 1981, and in 1985 a groundwater remediation system was placed in operation to address waste solvents that had leaked into the nearby groundwater. Groundwater monitoring and fate-transport modeling was performed to effectively demonstrate that the residual groundwater contamination has attenuated and that the extent of the plume is decreasing over time. The former releases to soils at the source were adequately addressed by the removal actions conducted at DDSP. On-site institutional controls restricting the use of groundwater for potable purposes were put in place by DDSP in 2002. Final closeout documentation for releases to groundwater will be prepared for PADEP approval in FY03. Once approved, groundwater monitoring and the on-site institutional controls for this site can be terminated and the existing groundwater remediation system can be permanently decommissioned.

In addition, the UST 950 remediation system is also used for the on-site treatment of purge water associated with depot-wide groundwater monitoring activities. Approximately 12,000 gallons of well purge water is treated quarterly through the system, which provides DDSP with an additional cost savings of approximately $40,000 per year in comparison to the alternative of off-site disposal.

The AMSCS remediation system began operation in 1994 as the final remedy to address solvent-contaminated groundwater associated with former aircraft maintenance activities at DDSP. Optimization of the remediation system was initiated by DDSP in 1997 in an effort to minimize the operational and maintenance costs associated with the system and included modifications to recovery wells and mechanical and electrical components. Extensive fate-transport modeling using DoD's Groundwater Modeling System was performed, verifying that monitored natural attenuation and institutional controls are a viable remedial alternative to address the residual contaminants in groundwater. This system, in conjunction with the use of institutional controls, is expected to save DDSP nearly $5 to $7 million in operations and maintenance costs over the next 40 to 50 years.

DDSP is conducting post-remediation monitoring and performing modeling of groundwater and surface water to demonstrate that surface water criteria are being met and that off-site groundwater contaminant concentrations in the plume are decreasing over time due to natural attenuation. Once this monitoring is completed, final closeout documentation for this site will be prepared for PADEP approval. Upon approval, the existing groundwater remediation system can be permanently decommissioned.

Funding

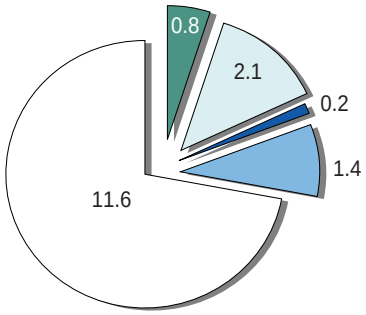
Since the devolvement of the Defense Environmental Restoration Account, funds for DoD's environmental restoration program have been distributed into five separate accounts, including one for DLA. In FY02, DLA obligated $18.8 million for environmental restoration at its active installations. It also obligated $7.3 million from the BRAC account at closing installations. The DLA Funding Profile on the following page details DLA's funding from FY01 through FY04. DLA's cost-to-complete funding trends are also shown in the bar graphs on the following page.

DLA Environmental Restoration Funding Profile

(in millions of dollars)

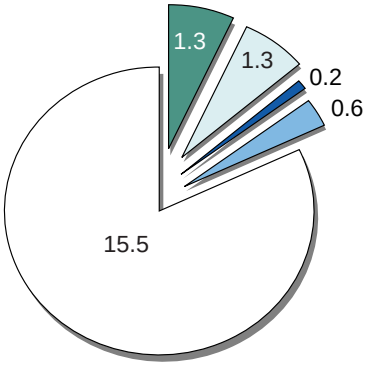
FY01 DLA Funds Obligated

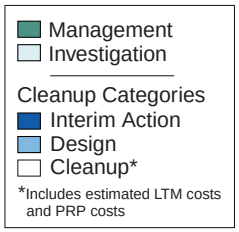
Total = $16.1 million*



FY02 DLA Funds Obligated

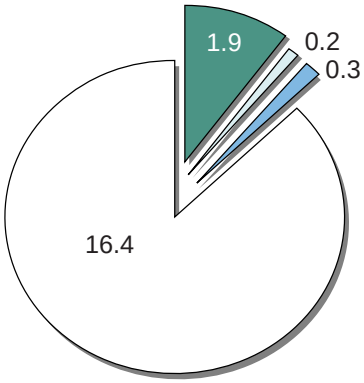
Total = $18.8 million





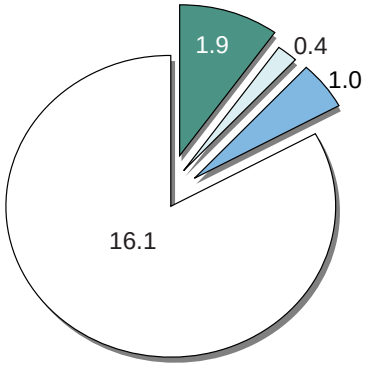
FY03 DLA Execution Planned

Total = $18.8 million



FY04 DLA Planning Estimate

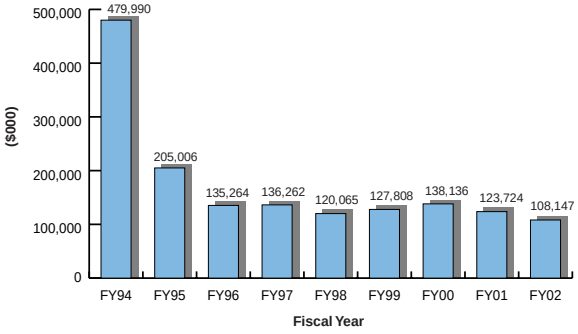
Total = $19.4 million



*Funding profile does not include $1.2 million applied against FY98 Operations & Maintenance.
Due to rounding, category subtotals may not equal fiscal year totals.

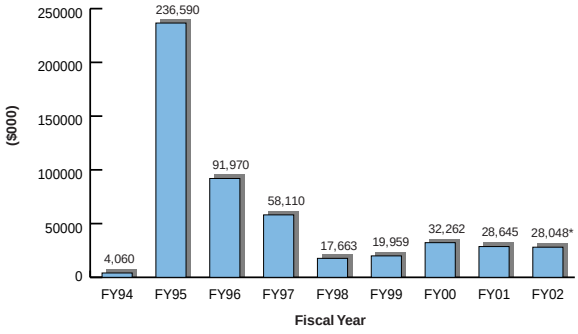
DLA ER Cost-to-Complete Trends

(in $000)



DLA BRAC Cost-to-CompleteTrends

(in $000)



Note: Funding represents site level data and does not include mangement and support or other miscellaneous costs not directly attributable to specific sites.

*Excludes DDOU Ogden which will transfer to Army in FY03