

SECRETARY OF DEFENSE

ENVIRONMENTAL AWARDS 2003

ENVIRONMENTAL QUALITY – TEAM

**Defense National Stockpile Center
Defense Logistics Agency**



Introduction

The Defense National Stockpile Center (DNSC), a part of the Defense Logistics Agency (DLA), has recently completed and received accreditation for its implementation of the ISO 14001 Environmental Management System. Since implementation in September 2003, noticeable improvements in operations have already been realized.

The team responsible for the successful implementation is led by Stephen Surface, Chief, DNSC Environmental Management Division and Kevin Reilly, Director, Safety, Health & Environmental Management. Working under an ambitious schedule, the effort was completed in six months—two years ahead of the deadline set by an April 2000 executive order.

Surface brought his experience in systems analysis and knowledge of environmental management systems, specifically ISO 14001, to DNSC from his work for the Defense Logistics Agency Executive Study Program in 2000 at the Potomac Electric Power Company in Aquasco, Md.

ISO 14001 Team

| Team Member | Organization | Title | Role |
|-------------------|------------------------|--|-----------------------------------|
| F. Kevin Reilly | DNSC Headquarters | Director, Safety, Health & Environmental Mgt | Project Manager |
| Stephen Surface | DNSC Headquarters | Chief, Environmental Management Division | Team Leader, ISO 14001 initiative |
| Mary Davidson | DNSC, Binghamton Depot | Environmental Protection Specialist | Data Manager |
| Susan Cooper | DNSC, Binghamton Depot | Administrative Support Assistant | Training Liaison |
| Dennis Wesolowski | DNSC, Scotia Depot | Depot Manager | Operations Liaison |
| Jean Shorett | DLA Headquarters | DLA EMS Manager | DLA Liaison |

The mission of the DNSC was to stockpile materials critical to national defense and to decrease the dependence upon foreign sources of supply during national emergency. Congress has since authorized the DNSC to sell commodities that are excess to Department of Defense needs. Since 1993, the DNSC sales have totaled approximately \$4.4 billion. Sales produce revenues that support a variety of Department of Defense programs as well as funding DNSC operations to make it a self-sustaining operation.

Within the United States Government, the DNSC is among the few activities that is economically self-sustaining and one of the very few that can claim to be a profit center.

The DNSC currently stores 50 commodities at 45 locations throughout the United States that have a current market value of \$1.7 billion. Commodities range from base metals such as zinc, lead, cobalt and chromium to the more precious metals such as platinum, palladium, and industrial diamonds. Mercury is stored at three depots and one non-DNSC storage facility.

There is no private sector entity in the world that sells as wide a range of commodities or materials as does the DNSC.



Locations of EMS certified depots. DNSC has an additional 39 unstaffed storage locations throughout the United States.

Goals

Judging Criteria: Program Management, Orientation to Mission

DNSC initiated the planning and implemented an Environmental Management System (EMS) under the ISO 14001 standard with the intent to incorporate the standard into its business-oriented mission and gain DNSC and possibly DLA system-wide efficiencies.

Key Accomplishments of the DNSC ISO 14001 Program

- Implementation of ISO 14001 by the Defense National Stockpile Center is the first instance of an environmental management system within the Defense Logistics Agency.
- The enterprise approach taken by the DNSC in implementation of the 14001 EMS has assisted the field operations and headquarters in examining and subsequently modifying areas and activities where substantial efficiencies and savings have been realized.
- Evidence suggests that implementation of the ISO 14001 EMS has significantly improved morale at the nine stockpile depots and at DNSC headquarters.

Fast Track Implementation Beats Planned Schedule

Judging Criteria: Program Management, Technical Merit

Executive Order 13148 said Federal Agencies must implement an EMS for every appropriate facility by December 2005. This order included DNSC. Through an aggressive compressed six-month schedule, DNSC met the requirements to establish the ISO 14001 EMS two years ahead of schedule. Additionally, the program integrated the BSI-OHSAS 18001 occupational health and safety management system specification. The implementation team initially met in February 2003, shortly after the DNSC environmental, safety and occupational health policy statement was distributed throughout the organization. Drawing on the expertise of two companies with strong EMS backgrounds—Parsons and Paragon Business Solutions—a series of workshops were held, each of which included a Registration Accreditation Board-certified EMS auditor. A schedule was set to have the conformance audit in July 2003 with two internal assessments done by Paragon and the Huntsville Army Corps of Engineers in April and May. These assessments focused on corrective actions that had to be completed prior to the conformance audit. Coaching sessions by Parsons/Paragon were also done at each depot in May 2003, which included: review of ESOH aspects of job, review of policy, and anticipated questions from auditors.

The expedited schedule kept all actively focused on getting the system in place.

With an internationally recognized standard, every person working for DNSC at McNamara Headquarters Complex as well as at nine depots operating under the National Defense Stockpile (NDS) program is responsible for understanding and using these standards.

The development effort was not just a top down initiative. Stephen Surface built on the strength of the existing programs and the enthusiasm of all of the employees involved to integrate the various policies of the new standards. “That’s the beauty of the finished product,” Surface said. “In the end you see how everyone pulled together to link every part of EMS into the organization.”



Frequent planning sessions kept the program on track.

Management Controls Maintain a Secure System

Judging Criteria: Program Management

With 17 elements, the numerous ISO 14001 EMS documents can be difficult to control. This is why strict control is held on an electronic system with data from each installation available only as hard copy. Thus, there is only one point where data may be changed, with the system gatekeeper and Parsons. All changes to the EMS go through a data manager located at the Binghamton, New York Depot.

Enterprise Approach Saves Money and Improves Training

Judging Criteria: Program Management, Program Breadth

The enterprise approach within the DLA simply says that all services within an organization will look at areas where activities may be done more efficiently. Implementation of the ISO 14001 EMS Standard and the BSI-OHSAS 18001 Occupational Health and Safety Management Specification have allowed DNSC facilities to realize substantial savings in one area in particular—that of health and safety training. Prior to the implementation of the new system, this training was held in three locations throughout the country with one depot in each area serving as the host. Personnel were brought in from the other depots at considerable expense. Additionally, a fourth meeting was usually held to accommodate those who for one reason or another were unable to attend one of the other three meetings.

Under the new system, initiated under the ISO 14001 implementation, this training has now devolved to the individual locations—the nine depots and headquarters. The training has been rolled into the agenda of each installation's monthly staff meetings. Substantial savings have accrued by eliminating the travel to meetings at the remote locations in addition to the time lost from travel days. A 75% savings to the Department of Defense and the taxpayers was realized when costs were reduced from approximately \$120,000 to approximately \$30,000.

“We have learned that we can't take big chunks of time for training,” Surface said, “even though a lot of training was involved for our employees. We began to integrate the training into our monthly safety meetings by using CD-ROMs to save time and expenses. It helped us to maintain the schedule I had set.” He also notes, “The quality of the training has improved since the CD-ROM based training has been specifically tailored to Depot operations.”

Web Based System Provides Single Source of Information

Judging Criteria: Program Management, Technical Merit, Orientation to Mission, Transferability

A one-stop web based system contains all files relevant to the environmental management system as it relates to the DNSC. The system enables all employees, regardless of position, the opportunity to



Web site home page at <http://www.iamthekey.com>

access all documents related to the DNSC's Environmental, Safety and Occupational Health processes. Included on the site are training materials, user guides and other relevant material in an easily accessed format on the web site. It is www.iamthekey.com.

With the help of training materials on the web site and CD-ROMs, training time has been reduced while the quality of training has been enhanced. Training is now integrated into monthly safety meetings with resulting savings of both time and expenses.

Morale Improves

Judging Criteria: Orientation to Mission

Implementation of ISO 14001 has noticeably improved morale at the depots. The new EMS, through its emphasis on integrating all levels of the organization, has given employees a new sense of empowerment. According to Dennis Wesolowski, depot manager in Scotia, New York, "We are very proud of our organization. As we down-size, we are faced with the difficulties associated with the circumstance of doing more-with-less and its impact on our people-oriented mission objectives." Wesolowski steadfastly maintains that ESOHMS has given his depot a channel to assure that there is program synergy. "Dedication to being exemplary environmental stewards stays in the forefront of our day to day activities," he said.

Through this integration, the operations staff now acts as proactive partners with supervisors and management in addressing concerns and suggestions in day-to-day and long-term operations to assure implementation and maintenance of these environmental, safety and occupational health standards. DNSC officials say opening broader communication between staff and management contributes to lowering overall liabilities at these DNSC facilities by leveling the accountability of each employee. Every employee is responsible for the success of DNSC operations.

“I think the best thing about the implementation and the audit,” Surface said, “was the response of those in the field and how they react to the system now. These workers feel good about themselves and their work under the new system. Even with DNSC downsizing, the morale was very good among the activities. For example, a mechanic or a forklift operator is now an active part of EMS. It makes everyone feel important.”

Team Addresses Mercury Issue

Judging Criteria: Program Management, Orientation to Mission

In collaboration with the DNSC Public Affairs staff, Kevin Reilly and Steve Surface, team leaders for the ISO 14001 initiative, led the effort to develop management strategies and the public outreach program for handling the DNSC’s mercury stockpile.

DNSC currently stores 4,890 tons of elemental mercury in warehouses at four sites in the United States. Because the mercury—a commodity valued at \$35 million—has been declared excess to national defense needs, DNSC must decide on a strategy for the long-term management of this excess commodity.

DNSC Mercury Stockpile

| Location | Quantity in Storage | No. of Flasks | No. of Drums |
|---|---|----------------|---------------|
| New Haven Depot near New Haven, Indiana | 614 tons (557 metric tons) | 16,151 | 2,692 |
| Somerville Depot in Hillsborough, New Jersey | 2,885 tons (2,617 metric tons) | 75,880 | 12,647 |
| Warren Depot near Warren, Ohio | 621 tons (563 metric tons) | 16,355 | 2,726 |
| Y-12, U.S. Department of Energy’s National Security Complex in Oak Ridge, Tennessee | 770 tons (699 metric tons) | 20,276 | 0 |
| Total | 4,890 tons (4,436 metric tons) | 128,662 | 18,065 |

Safety the Key Consideration

Judging Criteria: Technical Merit

The mercury has been safely stored in the National Defense Stockpile for more than 50 years. To further enhance safe storage of the mercury, DNSC took great measures to provide redundant protection for the mercury by over-packing the 76 pounds flasks in 30-gallon sealed drums. Without doubt, the over-packing project provides levels of protection that are unmatched in industry. For

instance, several additional layers of protection were added inside the drums. The drums were lined with an epoxy-phenolic coating. A cushioning material that doubles as an absorbent mat was placed in the bottom of each drum. The flasks were separated by a cardboard divider for additional cushioning and sealed in a thick plastic bag. Finally, each drum lid was equipped with a half-inch rubber gasket and a steel-locking ring that is bolted to seal the drum. The drums are now very secure and both airtight and liquid-tight.

Public Education a Key to Outreach Program

Judging Criteria: Community Interaction, Orientation to Mission

The pernicious health effects of mercury are well documented and widely publicized by the media. Therefore, it is no surprise that the storage of elemental mercury at four DNSC storage locations has caused concerns among local residents.

The DNSC team hosted numerous public meetings for the Mercury Management Environmental Impact Statement (MMEIS) and participated in a myriad of small group public meetings near the depot mercury storage sites in order to explain the mercury program. In developing and finalizing the MMEIS, the DNSC environmental team formed an Interagency Working Group that included EPA, the Department of Energy (DOE), the Public Health Service, the Department of Commerce, the U.S. Geological Survey, and the Tennessee Valley Authority. EPA is a cooperating agency on the MMEIS, the first time EPA has partnered with an activity in this manner. DNSC's Draft MMEIS achieved the highest possible EPA rating "Lack of Objections."

Under Reilly, the Defense National Stockpile Center completed a Draft Environmental Impact Statement after evaluating three alternatives: (1) consolidation of the mercury at one site; (2) sale of the mercury; and (3) no action (status quo). Consolidated storage of the commodity is currently the DNSC preferred alternative.

DNSC is continuing to work with EPA in issuance of the final EIS, which will be published in March 2004.



Public meetings are an important part of the outreach effort.

DNSC Manned Depots Implement Public Outreach Initiatives

Judging Criteria: Community Interaction

As part of its Installation Restoration Program, the Defense National Stockpile Center has prepared Community Relations Plans for all but one of its manned depots. The team is a critical part of the installation and community relations plan development and implementation. The IRP is part of a nationwide effort to identify and resolve environmental impacts that may have resulted from past operations, practices or mishaps on our depots. Currently, seven Community Relations Plans have been implemented and three Community Advisory Boards established.



DNSC took measures to provide redundant protection for the mercury by over-packing the 76 pound flasks in 30-gallon sealed drums.

Conclusion

To obtain a rigorous assessment of EMS, the Army's Center for Health Promotion and Preventive Medicine was chosen to audit three of the depots as well as DLA headquarters in July. The Registrar Accreditation Board certified EMS auditors and found DNSC in conformance with ISO 14001. Three depots will be audited in July 2004 during the surveillance audits that occur annually.

In an article appearing in *The Corps Environment* newsletter, published by the U.S. Army Corps of Engineers, the exercise of planning and implementing the DNSCs successful EMS system were featured. Titled, "Greening the Government Through Leadership in Environmental Management," the article iterated several important lessons learned:

- Developing a positive EMS team for efficient implementation;
- Keeping the program simple and build the program around existing effective programs
- Maintaining focus
- Fast tracking to maintain EMS implementation at a higher priority over other programs
- Providing sufficient time for personnel to adopt EMS into their work routines; and
- Adapting the contract to meet unforeseen tasks.

It is likely that the DNSC's model will become the template and center of expertise for the entire Defense Logistics Agency.

Additionally, the environmental team has repeatedly demonstrated their expertise and ability to successfully work through contentious public issues associated with mercury storage and Installation Restoration Program activities at seven DNSC storage locations.

Finally, the DNSC can point to a very significant achievement—they can claim that as of September 30, 2003, their 10 EMS accreditations represent nearly half of the total of 21 certified ISO 14001 Environmental Management Systems implemented within the Department of Defense.