

Hazardous Material

Can't do without it, so how

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The Naval Safety Center originally helped the fleet deal with problems inherent to hazardous materials, since safety surveyors knew about hazmat-associated risks. However, the issue became more complicated by the presence of too much shipboard hazmat and shipboard environmental conditions that made stowing or using hazmat too dangerous. Then, in 1989 the Chief of Naval Operations tasked the Naval Supply Systems Command with responsibility for hazmat control and management and to work with fleet and type commanders when doing so.

NAVSUP's first priority was to reduce the amount of hazmat going to ships. Secondly, it had to identify what such material safely could be used aboard ship.

Both the Naval Safety Center and NAVSUP had heard frightening tales of hazmat issues from another organization intimately involved with them: the Board of Inspection and Survey. INSURV inspections had identified concerns with hazmat storage and use, training, and using appropriate personal protective equipment (PPE) when handling hazardous material.

Other organizations such as Naval Sea Systems Command and Naval Air Systems Command are also stakeholders and play important roles when it comes to dealing with hazmat. Each prescribes what hazmat should and can be used to maintain various shipboard weapons systems and equipment. Eliminating dangerous materials or approving "greener" products is within their province. NAVSUP's Naval Inventory Control Points in Philadelphia and Mechanicsburg, Pa., also contribute to managing hazmat lists and processing additions and deletions to shipboard-authorized material.

Before 1989 there were few restrictions against what hazardous material could be acquired and used, although some chemicals quickly were prohibited when discovered to be too dangerous for use aboard ship. Nonetheless, with so few restrictions excess



Appropriate and ample warnings are evident in USS *Anzio's* (CG 68) hazmin Center.

hazmat inventories seemed to exist everywhere.

The hazardous-waste-removal industry naturally found this quite profitable. These companies were taking good hazmat and disposing of it as hazwaste at a steep cost to the Navy. The Navy Inspector General found those practices at the time annually cost the Navy \$50-100 million, most of it spent on good hazmat going to the waste stream each year.

Such waste had to be brought under control. Contributing to doing so was the Navy Occupational Safety and Health and Environmental Training Center in Norfolk, Va., and their facility at Naval Air Station San Diego, Calif. NAVOSHEN TRACEN has provided critical afloat training for hazmat handling and environmental responsibilities. They continuously update curricula to reflect changes to procedures, regulations and laws concerning not only hazardous material handling and use, but also environmental regulations and laws.

All these organizations have, for the past decade, met annually via Hazardous Material Afloat Program (HMAP) conferences. Chaired by NAVSUP's Pollution Prevention Director, HMAP has initiated numerous improvements in both hazmat material type and quantity used afloat. Injuries have steadily

in Ships:

do we minimize the risks?

declined, and environmental damage from illegal disposal actions now are rare.

Meanwhile, the Navy's mandated process of hazmat control—the Consolidated Hazardous Material Reutilization and Inventory Management Program, or CHRIMP—has been difficult to implement as a day-to-day operation. This is primarily because the Navy has no specific hazmat-dedicated job skills or rating requirements, or a primary Navy enlisted classification (NEC) dedicated to hazmat. The Navy does have a secondary NEC (SNEC 9595) but it is inadequate for the up-front controls CHRIMP requires for success.

While CHRIMP is a business practice designed to control hazmat required for operations, many other actions can be taken to minimize hazmat inventory and waste. First, there is the Ships Hazardous Material List (SHML), which is a listing of

load from the ships. The result was an enhanced CHRIMP (ECAP)—an initiative whereby contractors from a Fleet and Industrial Supply Center, or from the shore HMC in fleet concentration areas without a FISC, perform most CHRIMP functions. These contractors perform such tasks as requisitioning hazmat and delivering it to the ship, making appropriate entries into the Hazardous Inventory Control System (Windows version—HICSWIN) database, taking care of shelf-life extensions, and removing excess hazmat for redistribution. Such shore support only is available while a ship is in port.

Earlier wasteful hazmat practices included ships returning from a deployment frequently ridding themselves of good hazmat, or ships throwing away hazmat preceding a pierside or shipyard repair availability. Material also was unnecessarily disposed of before decommissionings or simply because ships

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25,432 line items authorized for shipboard use. The listing is pared for specific ship types such as CVs and FFGs, and is known as the type-Ships Hazardous Material List (T-SHML). It is very specific in designating what hazmat can be used aboard a particular type of ship. There are, however, procedures for adding to, or deleting from, this listing. Additions require NAVSEA or NAVAIR approval, depending on the equipment or system.

CHRIMP operations afloat and ashore are conducted out of a space called a hazmin center, or HMC. However, HMC manning is usually a collateral duty, and this has led to a start-and-stop organization with little continuity and obviously poor results.

A HMAP working group recommendation was to remove, as much as possible, the CHRIMP work-

sometimes had too large a load list upon commissioning. Much of the waste was really “unsold” inventory in that it could have been sold to other ships. Some of it was “end use” whereby a ship simply had procured too much. NAVSUP now has intercepted that flow towards the waste stream and has rerouted it to the FISC. A FISC can conduct a shelf-life analysis and possible extensions, and it can make the material available for free issue or sale.

HMAP has improved shipboard safety and simultaneously reduced hazmat procurement, management and storage costs. The program also has significantly reduced hazmat waste. With even more environmental restrictions and shipboard reporting requirements looming on the horizon, HMAP work will continue to be crucial to controlling hazmat cost, procurement and management. ☺