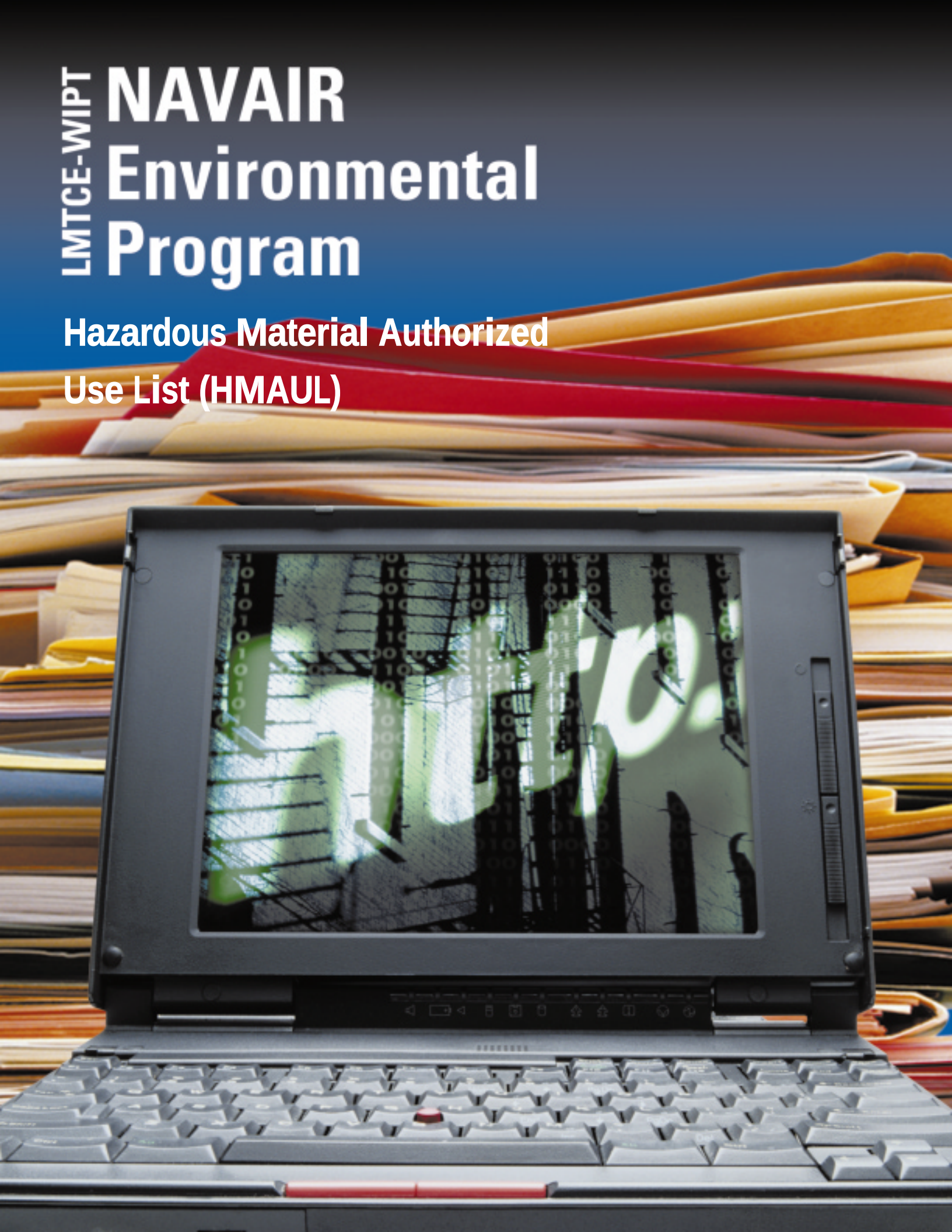
LMTCE-WIPT

NAVAIR Environmental Program

Hazardous Material Authorized Use List (HMAUL)



A product of the
Lead Maintenance Technology
Center for the Environment (LMTCE)
Working Integrated Product Team (WIPT)
(904) 542-0516, x-117

NAVAIR Hazardous Material Authorized Use List (HMAUL)

EOSH Concerns

The Lead Maintenance Technology Center for the Environment (LMTCE) Working Integrated Product Team (WIPT) is committed to reducing, replacing or eliminating the use of hazardous materials and toxic chemicals. To help meet regulatory requirements, NAVAIR's Environmental Acquisition Support Team (AIR-8.4) sponsors a number of programs and projects that offer technical alternatives to environmental, occupational safety and health (EOSH) concerns. One of these projects has been the electronic conversion of General Series (GS) technical manuals, particularly those that call for the use of a large number of hazardous materials, or specify processes that result in significant amounts of hazardous waste.

Document Conversion

Over the past two years, the LMTCE WIPT has coordinated with the Naval Air Technical Data and Engineering Service Command (NATEC) and NAVAIR's Logistics Technical Data Department (AIR-3.3) to convert thirty-one GS manuals into electronic form. Updating and providing users with electronic manuals is significantly less costly than maintaining hardcopy documentation. These manuals now reside on NATEC's web site (http://www.natec.navy.mil). Access to this Web site is restricted, so you will need to be issued a user ID and password by NATEC. Each publication can now be easily viewed, searched and printed using Adobe Acrobat Reader.

Creating HMAULs

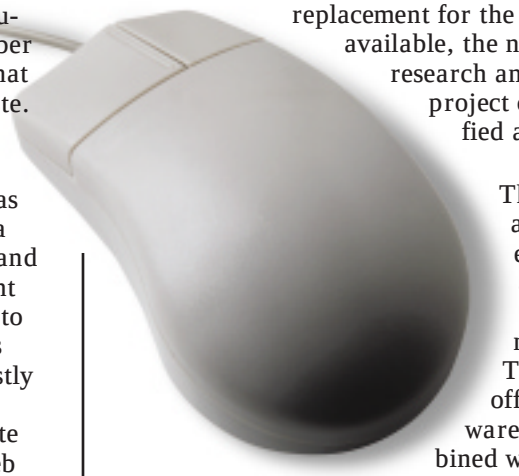
The primary reason for converting the GS manuals into electronic form was to generate an electronic Hazardous Material Authorized Use List (HMAUL). The HMAUL database contains information about all of the hazardous materials and processes used for mainteance and identifies the users of the processes. The database currently contains over 150,000 entries. The entries consist of common material and chemical names, military and commercial specifications, and national stock numbers.

Benefits

How does having digitized manuals and an HMAUL database help? It is now possible to make the connection between hazardous materials and specifications; the manuals that call for their use; and the associated EOSH risks. In fact, material and specification "terms" are being indexed so that a search reveals every manual in which that term is found. For example, if cadmium needs to be replaced, it would be possible to use the HMAUL to find out where cadmium is referenced in each electronic manual. Not only would the search reveal which manuals specify cadmium use, but it would list the page numbers as well.

Another distinct benefit of the HMAUL is the ability to easily perform an impact analysis. By discovering the type and quantity of hazardous materials used, sound business decisions can be made to reduce or eliminate the use of those materials based upon regulatory issues or cost.

It is also easy to determine what other changes are needed to replace targeted materials. One example is a listing of the publications that reference the material that will need to be changed. Also, in those instances where a suitable replacement for the material is not available, the necessary research and development project can be identified and funded.



These benefits are not restricted to hazardous materials or maintenance manuals. The commercial off-the-shelf software package combined with a user-defined data dictionary can be useful for other applications. You can search for a particular component - metal washer - to identify its many applications if it is slated for replacement or modification. It would also be convenient to use this tool to perform similar automated tasks with Local Process Specifications, Local Engineering Specifications, or type/model/series manuals.

Summary

The combination of electronic GS manuals and an interactive HMAUL database provides the LMTCE WIPT with a means to plan cost-effective and timely EOSH changes. These recent changes will help usher naval aviation maintenance into the new millennium in a tuly "environmentally conscious" fashion.

Gordon Ingmire
Lead Maintenance Technology
Center for the Environment
(904) 542-0515 x-117
DSN 942-0515 x-117
IngmireGD@navair.navy.mil