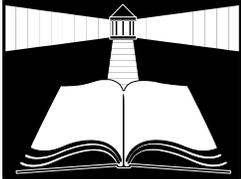


# HTIS



azardous Technical Information Services

## BULLETIN

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### OSHA Targets High-Hazard Workplaces Under 2004 Inspection Plan

By Abdul H. Khalid,  
Chemical Engineer, HTIS

Recently, the U.S. Occupational Safety and Health Administration (OSHA) announced that the Agency would target about 4,000 high-hazard workplaces under its site-specific targeting (SST) plan for compliance inspection during 2004. The unannounced inspections will be comprehensive in the areas of safety and health.

According to the OSHA Administrator, Mr. John Henshaw, the main purpose for the SST is to enforce safety and health rules and regulations at places of employments by conducting **fair, strong and effective inspections**. This year the agency will focus on workplaces where the safety and health risks are high and ultimately will be of great help to workers and

employers. By implementing the 2004 SST plan, OSHA expects results that will bring beneficial changes to workplaces, based on the types and gravity of the alleged violations found during the course of inspections. The OSHA is committed to save lives, prevent injuries, and illnesses among the American workers at worksites, thus, increasing business opportunities and overall production. **A healthy work force and worksite usually means more production.**

This year's program will not be site-specific targeting inspections based on injury and illness data but will be based on the agency's Data Initiative for 2003, which surveyed approximately 80,000 employers to attain their injury and illness numbers for 2002. The 2004 SST program has been effective since April 19, 2004 and will initially cover about 4,000 individual worksites on the primary list that reported 15 or more

The HTIS Bulletin is designed to keep DOD personnel informed of technical and regulatory developments on the environmentally safe management of hazardous materials and wastes. For technical inquiries, call **DSN 695.5168** or commercial **804.279.5168** or toll free **800. 848.4847**

injuries or illnesses resulting in days away from work, restricted work activity, or job transfer for every 100 full-time workers (known as the DART rate).

**Nursing homes and personal care facilities are included in the 2004 SST program. Hazards, such as ergonomic stressors relating to resident handling, blood borne pathogens, slips, trips, and falls, will continue to be the primary focus of inspections in nursing and personal care facilities.**

The OSHA 2004 SST program will provide guidance to DOD safety and health officials who are responsible for implementing the occupational safety and health rules and regulations at DOD facilities. The SST program will be helpful in safety and health official's efforts to avoid safety and health risks, eliminating occupational injuries, and illnesses. In addition, the SST program is thought to be instrumental in saving lives and in increasing the value of business.

For more information on this 2004 SST program, DOD personnel can visit OSHA's web site at: <http://www.osha.gov>, or contact Bill Wright at phone: 202-693-1999.

Reference: OSHA Trade Release April 12, 2004.

## **Domestic Use of HazMat "Air Eligible" Mark Compliance Date Extended**

By Tom McCarley, Chemist, HTIS

On July 31, 2003, the Department of Transportation published a major final rule in the Federal Register under Docket 215E in its continuing update of U.S. hazardous materials shipping regulations to be in "harmonization" with international standards. One aspect of rulemaking 215E was that hazardous materials shipped by air in non-bulk packages must mark the package as "Air Eligible". The mark is a picture of an airplane inside a circle – see (49 CFR 172.321(b)(3)). In addition the words "Air Eligible" may be placed under the mark. Compliance with the use of the Air Eligible mark was to have been mandatory by October 1, 2004, however, that compliance date has been extended by two years until October 1, 2006.

49 CFR 172.321 now has a paragraph (e) as follow:

(e) Transition Date. Compliance with the requirements of this section is not mandatory until October 1, 2006.

Since publication of the July 31, 2003 final rule, the International Civil Aviation Organization (ICAO) approved an amendment to the 2005-2006 ICAO Technical Instructions that will replace the air eligibility mark with a shipper's certification on the shipping paper and approved an addendum to the 2003-2004 edition of the ICAO Technical Instructions that revises the air eligibility marking requirement by making it optional rather than mandatory during the interim period leading up to the effective date of the 2005-2006 ICAO Technical Instructions. Based on ICAO's action, DOT re-evaluated the marking requirement. The DOT will re-address the Air Eligible marking requirement in a new Notice of Proposed Rulemaking to be issued under Docket HM-215G.

References: 1. Federal Register, Vol. 69, No. 75, pp 20831-20833, April 19, 2004  
2. 49 CFR 172.321.

## **MSDS for Ammunition Items**

Reprint submitted by Muhammad Hanif, Chemist

The Defense Ammunition Center/US Army Technical Center for Explosives Safety, USATCES, is frequently asked to help locate Material Safety Data Sheets (MSDS) for explosives or

ammunition items. The US Department of Labor, 29 CFR 1910.1200, Hazard Communication Standard (HCS), Appendix E - Guidelines for Employer Compliance says that employees have both a need and a right to know the hazards of the materials they are using and what measures should be employed to protect themselves from the adverse effects of these materials. An MSDS is a document that contains this information. The HCS requires chemical manufacturers, importers, and distributors of hazardous chemicals to provide the appropriate labels and MSDS to users when they ship the chemicals.

Executive Order 12196 - Federal Civilian Personnel, and 29 CFR Part 1960 - Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters indirectly exclude creating an MSDS for DOD ammunition items; only the hazardous materials they contain would have one. The best source of MSDS for ammunition components is the plant that makes them. The manufacturer can be determined by checking the Ammunition Data Card. For the MSDS on High Explosive (HE) items, you can contact Holston Army Ammunition Plant (AAP), at DSN 748-6286 or comm. 423-578-6286. For

propellants, contact Radford AAP, at DSN 931-2705 or comm. 540-639-2705.

Hazard determination is the responsibility of the producers and importers of the chemicals. This doesn't mean the local Safety Specialist/Manager doesn't have to evaluate the hazards of using chemicals locally. It just means they don't have to make their own MSDS unless they are actually producing their own chemicals. Every container of hazardous chemicals you receive must be labeled, tagged, or marked with the required information. Suppliers must also send a properly completed MSDS at the time of the first shipment of the chemical, and with any shipment after the MSDS is updated with new and significant information about the hazards.

Even though creating an MSDS for ammo end items is exempt, I still received many queries on where to find MSDS for military ammunition and explosives. To become more familiar with MSDS sites that provide MSDSs, I decided to access and review several web sites that might offer MSDS for explosives or the chemical ingredients contained in ammo end items. Since ammo end items do not require an MSDS, I chose trinitrotoluene (TNT) as my standard because it is one of

the most common bulk explosives that require a MSDS.

There are many web sites available on the Internet for MSDS of hazardous chemicals. Most of the web sites offering MSDS are available to anyone, although some require a paid subscription. The official DOD web site for MSDS, Hazardous Material Information Resource System (HMIRS), requires a User ID for "Read only Access". The User ID can be obtained by submitting a completed Registration Form to HMIRS Program Manager and the Registration Form is available on the HMIRS webpage. Although, I am sure there are probably other web sites where you could find an MSDS for TNT, I searched web sites for the MSDS by using only the abbreviation and found it on the following web sites:

<http://www.dlis.dla.mil/hmirs>. (Click on "Connect to HMIRS". Although I found the MSDS for TNT on the HMIRS webpage, I could not find it by searching for TNT. I had to search by FSC and then look through all the MSDSs listed.)

<http://www.setonresourcecenter.com/MSDS/index.htm> (generally extracts MSDS information from HMIRS)

<http://siri.org/msds/index.php> (generally extracts MSDS information from HMIRS)

<http://ull.chemistry.uakron.edu/erd/> (no excess w/o subscription or paid download database)

<http://www.msds.com/> (limited access without subscription)

<http://163.1.219.1/MSDS/#MSDS> (European Standard Data Sheets based on risk/safety phrases)

<http://msds.pdc.cornell.edu/msdssrch.asp> (generally extracts MSDS information from HMIRS)

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COMMENTS: Military ammunition (ammo) end items are manufactured utilizing high explosives (primary and/or secondary explosive chemicals) that are capable of detonating when used as intended. Examples of HE include **primary explosives** such as nitroglycerin that can detonate with little or no stimulus, and **secondary explosives** such as dynamite (TNT) that require a strong shock (from a detonator such as a blasting cap). The ammo end items do not release or otherwise result in exposure of hazardous chemicals under normal

conditions of use, storage, installation, packaging, or in transit, and are considered a manufactured article. Any product that meets the definition of an "article," is exempt from the HCS requirements. On the other hand, if the handling of a HE, during the manufacturing process, may result in employees' exposure (to quantities other than minute or trace amounts), an MSDS is required for primary and/or secondary explosives. In order to interrogate the HMIRS web site for an MSDS for hazardous chemicals other than ammo end items, HTIS Bulletin readers are advised to use either a chemical name (with wild card of \* (asterisk) before and after the chemical name) in the Product Identity block and/or Chemical Abstracts Service (CAS) number in the CAS # field of the HMIRS for a specific MSDS or an MSDS that represent a product in which the chemical is contained.

Reference: Explosives Safety Bulletin, U.S. Army Technical Center for Explosives Safety (USATCES), McAlester, OK 74501, Vol. 15, Issue 3, June 2004.



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## FAA Evaluating a New Breed of Oxygen Generators for Aircraft Passenger Use

By Tom McCarley, Chemist, HTIS

The Department of Transportation's Federal Aviation Administration (FAA) has been evaluating a new breed of medical devices that can supply airline passengers with therapeutic oxygen without the use of chlorates and other hazardous materials. Two specific commercial units are under review with the *AirSep LifeStyle Portable Oxygen Concentrator* being proposed for use in a Federal Register of July 14, 2004. The concentrator uses pulse-flow technology that provides oxygen on demand from the air by concentrating and separating oxygen from nitrogen and other gases in ambient air. The concentrator is a medical device regulated by the Food and Drug Administration. Further information on the unit can be obtained from a brochure available at [http://www.airsep.net/Products Online/Concentrators/MK172\\_1\\_Brochure.pdf](http://www.airsep.net/Products Online/Concentrators/MK172_1_Brochure.pdf)

The Department of Transportation has greatly tightened regulations regarding oxygen cylinders

and oxygen generating devices in the aftermath of the crash of ValuJet 596 in the Florida Everglades on May 11, 1996.

The FAA has proposed a number of conditions that would need to be met before even the non-hazmat AirSep Concentrator can be used aboard an aircraft.

The aircraft operator (i.e. the airline) would need to ensure the following:

- “The device does not cause interference with the electrical, navigation or communication equipment on the aircraft on which the device is to be used;
- The unit must be turned off if the nasal cannula is not positioned for oxygen delivery to the user;
- The user must be capable of seeing the alarm indicator lights, hearing the various warning alarms, and taking the appropriate action should the unit fail to detect the user's breathing or a general malfunction occurs, or is traveling with someone who is capable of performing those

functions for the user;

- No smoking or open flame is permitted within 10 feet of any person using a portable oxygen concentrator;
- The air intake/gross particle filter or the air outlet must not be blocked during use;
- The unit must either be stowed under the seat in front of the user, or in another approved stowage location, so that it does not block the aisle way or the entryway into the row;
- No person using a portable oxygen concentrator is permitted to be seated in an exit row;
- The portable oxygen concentrator must be free from oil, grease or other petroleum products and be in good condition free from damage or other signs of excessive wear or abuse;
- The number of hours before maintenance must be below 3,000 at the end of the

scheduled flight time for that flight leg; and

- The pilot in command must be apprised when a passenger is using a portable oxygen concentrator.”

The passenger using such an oxygen concentrator must ensure that

- “The user must be capable of hearing the unit's alarms, seeing the alarm light indicators, and taking the appropriate action in response to the various alarms and alarm light indicators, or be traveling with someone who is capable of performing those functions;
- In the event the warning alarm sounds, the portable oxygen concentrator unit must be turned off if the warning alarm and the associated alarm light indicator detects a general malfunction of the unit;
- The passenger must have a statement signed by a licensed physician that

specifies the use of the portable oxygen concentrator and establishes the maximum flow rate corresponding to the pressure in the cabin of the aircraft under normal operating conditions;

- Only lotions or salves that are oxygen approved may be used by persons using the portable oxygen device; and
- The user must obtain from the aircraft operator the duration of the planned flight, including any anticipated delays. The user must provide a sufficient number of batteries to power the device for the duration of the flight, including any reasonable delays”

The FAA is also evaluating a unit called the One POC from Inogen Inc. but that unit is not included in the proposed rule of July 14, 2004 for inclusion in the Special Federal Aviation Regulation # XX.

References: 1. Federal Register, Vol. 69, No. 134, pp42324-7, July 14, 2004  
2. Information on the *AirSep LifeStyle Portable Oxygen*

*Concentrator* – <http://www.AirSep.com>

## National Environmental Methods Index

By Tom McCarley, Chemist, HTIS

The National Environmental Methods Index (NEMI) is an interagency effort to; as their web site at: <http://www.nemi.gov/> states, “provide a mechanism to compare and contrast the performance and relative cost of analytical, test, and sampling methods for environmental monitoring”. As DOD environmental managers know, all too well, the sampling and analysis of contaminated sites is a major, major, expense.

With the movement towards Performance Based Test Methods, it is more important than ever to be able to use a tool like NEMI to select a laboratory or field test method that will be acceptable to your regulatory agency and your other stakeholders. NEMI, which is primarily funded by the EPA and the Water Resources Division of the US Geological Survey, is a way for those involved in analytical work to compare test methods based on several criteria:

- Analyte – the chemical or

biological contaminant of concern (search by name or chemical abstracts (CAS) number

- Media – air/soil/water/sediment - most methods listed are currently water methods
- Regulatory - search methods for drinking and wastewater. A browse feature retrieves all methods in the database.

Advanced search options allow for search refinement based on detection level, method source, and instrumentation. Search retrievals are presented in matrix format with columns as follows:

- Method number
- Method source
- Method descriptive name
- Detection level
- Detection level type
- Accuracy
- Precision
- Percentage false positive

- Percentage false negative
- Spiking level
- Instrumentation
- Relative cost

Using the available version 2 interface, allows for the retrieval hit list to be sorted by method number, method source, method descriptive name, or instrumentation.

The primary focus of NEMI is on water methods reflecting its oversight Methods Board that is chartered under the National Water Quality Monitoring Council (NWQMC). The Methods and Data Compatibility Board (<http://wi.water.usgs.gov/methods/>) is a “partnership of water-quality experts from Federal agencies, States, Tribes, municipalities, industry, and private organizations”

Another index source of analytical methods is that developed by EPA Region I at: <http://www.epa.gov/epahome/index/>.

There are currently over 650 chemical, physical and biological methods in NEMI. As an aftermath of 9-11, a specialized database based on NEMI and called NEMI-CBR (for chemical biological radiological

agents) is being developed under the auspices of the EPA Office of Water Security. This database will be undergoing beta testing and the primary user is intended to be water utilities and health labs. It is not known at this time whether the NEMI-CBR database and accompanying expert system will ever be made available to the public.

References: 1. National Environmental Methods Index (NEMI) <http://www.nemi.gov/> 2. National Environmental Monitoring Conference, July 2004, Washington, D.C.

### NESHAP for Stationary Reciprocating Internal Combustion Engines

By Abdul H. Khalid, Chemical Engineer, HTIS

On June 15, 2004, the Environmental Protection Agency (EPA) issued a final rule that would put into action the National Emission Standards for Hazardous Air Pollutants (NESHAP) for stationary reciprocating internal combustion engines (RICE) with a site rating of more than 500 brake horsepower (BHP). The EPA has identified stationary RICE as major sources of hazardous air pollutants

(HAP) emissions such as formaldehyde, acrolein, methanol, and acetaldehyde. Section 112 (d) of the Clean Air Act (CAA) requires a listing of categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. The Stationary RICE source category was listed as a major source category on July 16, 1992. **According to this rule, the major sources of HAP are those that have the potential to emit greater than 10 tons per year (tpy) of a single HAP or 25 tpy of any combination of HAP.**

The EPA anticipates that once the final rule is implemented, it will protect public health by reducing exposure to air pollution, by reducing total national HAP emissions by an estimated 5,600 tpy in the 5th year after implementation. The emissions reductions achieved by these standards will provide protection to the public and achieve a primary goal of the CAA. The rule sets forth applicability; emissions and operating limits; compliance provisions; and notification, recordkeeping, and reporting requirements. **The final rule became effective on August 16, 2004.**

HTIS Bulletin readers interested in further

information concerning applicability and rule determinations, may contact the appropriate State or contact Mr. Sims Roy, Combustion Group, Emission Standards Division (MD-C439-01), U.S. EPA, Research Triangle Park, North Carolina 27711, phone: 919-541-5263; FAX 919-541-5450, or e-mail at: [roy.sims@epa.gov](mailto:roy.sims@epa.gov).

Reference: Federal Register, June 15, 2004, Vol. 69, No. 114, pages 33473-33522.

## **EPA's Final NESHAP for Surface Coating of Miscellaneous Metal Parts and Products**

By Tom McCarley, Chemist, HTIS

Military maintenance, rework depots, and other large facilities that are covered under Clean Air Act standards for controlling emissions for hazardous air pollutants should be aware of the final rule of January 2, 2004 which covers the release of organic pollutants from their surface coating operations for metal parts and products. The rule is part of the continuing promulgation of air emission control regulations pursuant to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for

Surface Coating of Miscellaneous Metal Parts and Products. These regulations will comprise Subpart MMMM of the NESHAP at 40 CFR 63.3880 et. seq.

Of the extensive list of operations that may be covered under the new rule, a few that may be applicable to military operations are:

Surface coating of metal components of aerospace vehicles that meet the applicability criteria for aerospace manufacturing and rework (40 CFR part 63, subpart GG),

The application of specialty coatings defined in appendix A to 40 CFR part 63, subpart GG to a metal aerospace vehicle or component,

Surface coating of metal components of ships that meet the applicability criteria for shipbuilding and ship repair (40 CFR part 63, subpart II),

Surface coating of metal using a web coating process that meets the applicability criteria for paper and other web coating (40 CFR part 63, subpart JJJ),

Surface coating of metal using a coil coating process that meets the applicability criteria for metal coil coating (40 CFR part 63, subpart SSSS,

Surface coating of boats or metal parts of boats (including, but not limited to, the use of assembly adhesives) where the facility meets the applicability criteria for boat manufacturing facilities in the NESHAP for boat manufacturing (40 CFR part 63, subpart VVVV), except where the surface coating of the boat is a metal coating operation performed on personal watercraft or parts of personal watercraft,

Surface coating of assembled on-road vehicles that meet the applicability criteria for the assembled on-road vehicle subcategory in the NESHAP for the surface coating of plastic parts and products (40 CFR part 63, subpart PPPP), and

Surface coating of metal components of automobiles and light-duty trucks that meet the applicability criteria for automobiles and light-duty trucks surface coating (40 CFR part 63, subpart III). Those performing surface coating of metal parts or products that meet the applicability criteria for both the Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII and this surface coating NESHAP may comply with the requirements of the automobiles and light-duty trucks NESHAP for the surface coating of all your metal parts used in automobile or light-duty

truck manufacturing in lieu of complying with each subpart separately.

Other operations cited in the rule include work with appliances and furniture.

The new NESHAP and compliance with it depends on which of the following five subcategories your operation falls under:

- General use coating (if the operation does not fit into any of the other four categories).
- High performance coating.
- Magnet wire coating.
- Rubber-to-metal coating.
- Extreme performance fluoropolymer coating.

The hazardous air pollutants (HAPS) of concern with this new rule are xylenes, toluene, methyl ethyl ketone (MEK), phenol, cresols/cresylic acid, glycol ethers (including ethylene glycol monobutyl ether (EGBE)), styrene, methyl isobutyl ketone (MIBK), and ethyl benzene. Facilities that are major source emitters of HAPS will be required to meet the maximum achievable control technology (MACT) standards covered under this rule if you do the surface

coating operations outlined in the rule effective on January 2, 2004. The EPA hopes to achieve a 48% reduction in the emissions of these chemicals, which have been linked to a number of adverse human health effects to the liver, heart, lungs, skin, mucous membranes, and central nervous system.

Reference: Federal Register, Vol. 69, No. 1, pp 129-192, January 2, 2004

### **EPA's Updated Policy on Residues and Rinsates from "Empty" Hazardous Waste Containers**

By Tom McCarley, Chemist, HTIS

40 CFR 261.7 describes the conditions under which residues in empty containers may be considered non-hazardous and thereby exempted from the normal hazardous waste regulations. In general, these conditions are:

All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, *e.g.*, pouring, pumping, and aspirating, *and*

No more than 2.5 centimeters (one inch) of residue remain on the bottom

of the container or inner liner, *or*

No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size, *or*

No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons in size.

#### Conditions for Hazardous Compressed Gas Containers (Cylinders / Aerosols etc.)

A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.

#### Conditions for Acute Hazardous Wastes ('P' listed wastes; F020-F023; F026-F027)

A container or an inner liner removed from a container that has held an acute hazardous waste listed in §§261.31, 261.32, or 261.33(e) is empty if:

The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

The container or inner liner has been cleaned by another

method that has been shown in the scientific literature, or by tests conducted by the generator to achieve equivalent removal; or

In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.

The EPA has clarified that when residues are removed from a RCRA "empty" container, those residues may become a newly generated and managed hazardous waste. Rinsates used to remove residues from "empty" containers may be hazardous wastes, this is especially true in the case of the use of solvents like those that constitute the F001-F005 listed hazardous wastes when the solvent is used or "spent". In an April 12, 2004 letter from the EPA's Robert Springer, Director Office of Solid Waste to Casey Coles of Hogan and Hartson, L.L.P. in Washington, D.C., the EPA effectively set new policy on the subject of residues and rinsates. The complete letter is available at <http://yosemite.epa.gov/osw/rcra.nsf/Documents/323448DF727E539785256E9E005E4949>; this letter supersedes the policies on this issue set forth by the EPA on earlier interpretive memoranda. The April 12, 2004 letter states, in part,

"Even though rinse water from an "empty" container may often times be non-hazardous, 40 CFR 261.7 does not exempt rinse water from Subtitle C regulation because rinse water is not a waste "remaining in" an "empty" container. Indeed, while 40 CFR 261.7 clearly exempts residue remaining in an "empty" container from Subtitle C regulation. The EPA also has made it clear that when a residue is removed from an "empty" container the residue is subject to full regulation under Subtitle C if the removal or subsequent management of the residue generates a new hazardous waste that exhibits any of the characteristics identified in Part 261, Subpart C (see 45 FR 78529, November 25, 1980, where it states "container cleaning facilities which handle only "empty" containers are not currently subject to regulation unless they generate a waste that meets one of the characteristics in Subpart D").

Finally, it also should be noted that if the rinsing agent includes a solvent (or other chemical) that would be a listed hazardous waste when discarded, then the rinsate from an "empty" container would be considered a listed hazardous waste. This is not due to the nature of the waste being rinsed from the "empty" container, but

rather, because of the nature of the rinsing agent."

Reference: EPA Policy on the Management of Rinsate from Empty Containers, April 12, 2004 Letter from Robert Springer, Director Office of Solid Waste to Casey Coles of Hogan and Hartson, L.L.P. in Washington, D.C.

## **EPA's New Guidance on Interpretation of Revised CCA Wood Preservative Label**

By Abdul H. Khalid,  
Chemical Engineer, HTIS

On June 16, 2004, the U.S. Environmental Protection Agency (EPA) released a new guidance document entitled, "Supplemental Guidance on Interpretation of Revised Chromated Copper Arsenate (CCA) Wood Preservative Label".

This document provides clarification on the allowed and prohibited uses of CCA. CCA is a mixture of known pesticides compounds of chromium, arsenic, and copper. As of December 31, 2003, CCA cannot be used for treating wood intended for virtually all-residential settings. The EPA has concern about the possibility of such treated wood being used in the residential market and the resulting potential

for exposure. There are a number of alternatives to CCA-treated wood currently available on the market for use in retaining walls, including other wood preservatives, such as ammoniacal copper quat (ACQ) and copper azole, as well as durable woods such as western red cedar, yellow cypress, eastern white cedar, redwood, and alternatives to lumber, such as synthetic materials and wood composites.

This guidance document also provides stakeholders, EPA Regional offices, consumers, public interest groups, wood treaters, and registrants with a reference tool to help determine what types of wood may continue to be treated with CCA. A reference table is provided that contains the American Wood-Preservers' Association (AWPA) commodity standards related to CCA, with key examples of some of the uses, which are permitted and disallowed (AWPA is an international, non-profit, association established to exchange technical information between industry, researchers and users of treated wood). EPA has revised this guidance recently following comments from the wood-treating industry, environmental groups, and other stakeholders.

The agency also released a second document, Questions

& Answers to support the Guidance Document for Revised CCA Label, providing additional clarification to the public and stakeholders on the issue. EPA posted both documents on June 18, 2004.

Now, the EPA has a new compliance strategy and its Office of Enforcement and Compliance Assurance (OECA) will soon issue a CCA Compliance Strategy to detail plans for compliance monitoring, targeting inspections, and to provide the public and others on how to report tips and complaints of inappropriate CCA use. The compliance strategy will be published on the EPA Web site soon.

For detailed information on this document and supplemental guidance on the interpretation of "Revised (CCA) Wood Preservative Label" including questions & answers, DOD personnel can visit the following online at:

- Chromated Copper Arsenate (CCA) and Its Use as a Wood Preservative at: <http://www.epa.gov/pesticides/factsheets/chemicals/1file.htm>.
- Guidance Document for Revised CCA Label: [Supplemental Guidance on Interpretation of Revised CCA Wood](#)

[Preservative Label](#) (165 KB, 16 pages, PDF).

- [http://www.epa.gov/pesticides/factsheets/chemicals/awpa\\_table.htm](http://www.epa.gov/pesticides/factsheets/chemicals/awpa_table.htm)
- [Guidance for Uses of CCA Referencing AWPA Commodity Standards:](#)
- [Questions & Answers at: http://www.epa.gov/pesticides/factsheets/chemicals/cca\\_guidance\\_q\\_a.htm](#)

Reference: [Supplemental Guidance on Interpretation of Revised CCA Wood Preservative Label](#), Final June 16, 2004.

## **Extensive List of Questions and Answers on 112r Regulation Posted**

By Tom McCarley, Chemist, HTIS

Past HTIS Bulletin Issues (see <http://www.dscr.dla.mil/htis/novdec99.htm>) have alerted our readers to the ongoing development of regulations and reporting requirements stemming from section 112r of the Clean Air Act Amendments of 1990. Chief among the reporting requirements is that facilities storing large amounts of

toxic and flammable substances submit Risk Management Plans (RMP) to the EPA. On April 9, 2004, the EPA tightened some of the RMP requirements in light of current homeland security concerns.

The EPA has issued several pages of Questions and Answers concerning current 112r requirements. The Questions and Answers are in 10 sections and are found at

<http://yosemite.epa.gov/oswe/r/ceppoweb.nsf/content/caa-faqs.htm>:

- General Duty
- Applicability
- Program Level Screening
- Hazard Assessment
- Prevention Program
- Emergency Response Program
- Risk Management Plan
- Enforcement
- Implementation
- Miscellaneous

In addition to the 10 sections of Questions and Answers above, there are 19 Questions and Answers posted at:

<http://yosemite.epa.gov/oswe/r/ceppoweb.nsf/content/2004-FAQ.htm>, that address the April 9, 2004 Amendments to the 112r requirements and RMPs. The 112r requirements are codified at 40 CFR 68.

References: EPA - Office of Emergency Prevention, Preparedness and Response – 2004 Posted Questions and Answers on Clean Air Act 112r Requirements – at <http://yosemite.epa.gov/oswe/r/ceppoweb.nsf/content/caa-faqs.htm> and <http://yosemite.epa.gov/oswe/r/ceppoweb.nsf/content/2004-FAQ.htm>

### **The U.N. Montreal Protocol: Methyl Bromide Critical Use Exemption**

By Abdul H. Khalid,  
Chemical Engineer, HTIS

The International communities to the U.N. Montreal Protocol on substances that deplete the “Ozone Layer”, often review requests by participating countries on the critical-use exemptions from the ban as agreed on production and consumption of chlorofluorocarbons (CFCs), halons, and other ozone depleting substances (ODSs). Parties to the U.N. Montreal Protocol adopt amendments and adjustments

through meetings and conferences.

In the Montreal Protocol on substances that deplete the ozone layer, the international negotiators are legally committed to ban the ODSs and industrialized countries including the United States are required to reduce their use of chemicals that harm the ozone layer. Additional requirements are added to the Montreal Protocol due to the changing conditions and increased information and new technologies. The main purpose for banning ODSs is to protect human health and environment against adverse effects resulting from changes to the ozone layer. Amendments to the Montreal Protocol were adopted in 1990 (London), Copenhagen (1992), Montreal (1997), and Beijing (1999).

During an extraordinary meeting of the parties to the Montreal Protocol in (Quebec), Canada, March 24 – 26, 2004, the Technology and Economic Assessment Panel, and the Methyl Bromide Technical Options Committee approved requests for the continued use of limited quantities of the agricultural pesticide methyl bromide for the United States and eleven other countries for 2005.

Methyl bromide is a highly effective fumigant used to control insects, nematodes,

weeds, and pathogens in more than 100 crops, in forest and ornamental nurseries, and in wood products. **Its primary uses are for soil fumigation, post harvest protection, and quarantine treatments.**

Due to a lack of technically and economically feasible alternatives, which have

taken much longer than anticipated to develop, methyl bromide remains an essential pesticide for the production of a number of important crops, including tomatoes, strawberries and peppers. Because methyl bromide contributes to the depletion of the ozone layer, in 1995 developed countries agreed to phase out its use by

2005 and 2015 in developing countries, provided that technically and economically feasible alternatives could be developed and marketed by that time. The following table, Table-1, shows the control measures for the Montreal protocol.

Table-1 Control Measures of the Montreal Protocol

Substance Phase-Out	Developed Countries		Developing Countries
	Consumption	Phase-Out	Consumption
	Freeze		Freeze
Chlorofluorocarbons (CFC) January 1, 2010	July 1, 1989	January 1, 1996	July 1, 1999
Halons January 1, 2010	-----	January 1, 1994	January 1, 2002
Other Fully Halogenated January 1, 2010 CFCs	-----	January 1, 1996	-----
Carbon Tetrachloride January 1, 2010	-----	January 1, 1996	-----
Methyl Chloroform January 1, 2015	January 1, 1993	January 1, 1996	January 1, 2003
Hydrochlorofluorocarbons (HCFCs) January 1, 2040	January 1, 1996	January 1, 2030	January 1, 2016
Methyl Bromide January 1, 2015	January 1, 1995	January 1, 2005	January 1, 2002

Additional requests for limited use for 2005 and 2006 are still awaiting a decision. Those requests

were submitted to the Ozone Secretariat before the March 2004 meeting. The methyl bromide technical committee

and the assessment panel presented cases for limited use of methyl bromide for review at the Geneva

Convention before the exemption for 2005-2006 will be granted from production and use ban in 2005 and 2006.

### **EPA Notice of Solicitation**

On May 7, 2004, the U.S. Environmental Protection Agency (EPA) asked for applications for the critical use exemption from the phase-out of methyl bromide. Users of methyl bromide now have the option to provide technical and economic information to support their "critical use". From the above Table-1, methyl bromide is scheduled for complete phase-out by January 1, 2005. DOD personnel were allowed to submit applications for the “**Critical Use Exemption**” of methyl bromide on or before August 8, 2004 with information to support the critical use of this chemical pesticide.

The DOD continues to make great progress in phasing down the use of ozone depleting substances, including methyl bromide and in protecting the ozone layer, thus, protecting human health and environment.

Applications for the methyl bromide ‘Critical Use Exemption’ can be submitted to U. S. EPA, Office of Air and Radiation, Global Program Division, 1200 Pennsylvania Avenue, NW, Washington, DC 20460

or call EPA Stratospheric Ozone Information Hotline at 1-800-296-1996 or phone; 703-308-8136. For regulatory information, DOD personnel can contact Mart Montoro, EPA at: 202-343-9321.

Reference: 1. EPA website <http://www.epa.gov/ozone/intpol/> 2. Federal Register, May 7, 2004, Vo. No. 69, No. 89, pages 25570-25573.

## **Ozone Aggravates Asthma**

By Abdul H. Khalid,  
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The U.S. Environmental Protection Agency (EPA) establishes air quality standards to protect public health and the environment. The EPA has set the National Ambient Air Quality Standards (NAAQS) for the six principal air pollutants to protect public health and the environment. Those pollutants include: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NOx), ozone (O3), particulate matter (PM), and sulfur dioxide (SO2). Among these pollutants ozone is of great concerns to those having asthma. An increase in ozone level can intensify asthma. Twenty million people in the U.S. are estimated to have asthma. This includes 6.3 million children. Asthma is a leading cause of school absenteeism

due to chronic illness. The number of school absences due to asthma has more than doubled during the past 20 years.

On May 4, 2004, the EPA released nationwide ozone levels for 2003. According to the EPA, the 2003 ozone levels were the lowest since 1980. Vehicle exhaust and industrial emissions are major sources of pollution that form ozone. Areas across the United States are taking actions to implement this nation's most protective ozone standard.

Asthma can develop quickly and it can range from being a mild discomfort to a life-threatening attack, if breathing stops completely. When ozone levels are high, more people with asthma have attacks that require a doctor's attention or the use of additional medication. Symptoms of an "asthma attack" can create difficulty in breathing, a tight feeling in the chest, coughing and wheezing. One reason that this happens is that after inhaling ozone there is a lesser lung capacity for oxygen, making people more sensitive to indoor and outdoor allergens such as pet dander, pollen, dust mites, mold, and pests, which are common triggers of asthmatic attacks.

The EPA's report titled, “The Ozone Report - Measuring Progress through

2003" is available online at:  
<http://www.epa.gov/airtrends/ozone.html>

For further information on this matter, DOD personnel contact Lisa Lybbert, phone: 202-564-6436 / 202-236-2426 (cell) or e-mail: [lybbert.lisa@epa.gov](mailto:lybbert.lisa@epa.gov). The full ozone report is available online at:  
<http://www.epa.gov/airtrends/>

Reference: EPA Web site at:  
<http://www.epa.gov/>

## Information On The Web

### EPA's Laboratory Compendium Online:

The EPA has developed a very handy compendium of laboratory capabilities in the U.S. at:  
<http://www.epa.gov/compendium/>. Registration is required and may be restricted to emergency responders, government employees, and others (water utilities etc.) with a need to know the analytical capabilities of our commercial and government laboratories. The EPA hopes to have some 900 entries in the dataset by the end of 2004. (tmac)

### NIOSH Launches Isocyanates Topic

**Online:** The Department of Health and Human Services (DHHS)'s National Institute

for Occupational Safety and Health (NIOSH) launched an "Isocyanates" safety and health topic online at:  
<http://www.cdc.gov/niosh/topics/isocyanates/>. The NIOSH "Isocyanates" safety and health topic provides useful information on isocyanates and widely used compounds, health hazard evaluations, analytical methods & sampling, publications, and other sources (government & non-government). (ahk)

### Europe's First Toxic Release Inventory

**Online:** Nations of the European Union (EU) have begun the process of collating and publishing pollutant emissions data similar to the U.S. Toxic Release Inventory under the Emergency Planning and Community Right-to-Know Act (EPCRA) and pollutant emissions inventory programs in Canada and Australia. There is a wealth of information available on the first EU pollutant inventory at:  
<http://www.eper.cec.eu.int/>. (tmac)

### The Army's Chemical Material Agency's

**Online:** On June 7, 2004, the U.S. Army Chemical Materials Agency (CMA) launched a redeveloped web site at:  
<http://www.cma.army.mil> where searches for information on the Army's

programs for storing, treating, and disposing or eliminating chemical weapons safely and effectively can be obtained. (ahk)

### Current List of Proposition 65

**Chemicals:** A listing of chemicals recently added to Proposition 65 Chemicals is available at:  
[http://www.oehha.ca.gov/prop65/prop65\\_list/Newlist.html](http://www.oehha.ca.gov/prop65/prop65_list/Newlist.html). On July 9, 2004, for purposes of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Health and Safety Code section 25249.5, Proposition 65), the OEHHA added "aristolochic acids" and "herbal remedies containing plant species of the genus Aristolochia" to the list of chemicals known by the State of California to cause cancer. The listing of "aristolochic acids" and "herbal remedies containing plant species of the genus Aristolochia" are the latest additions to the Proposition 65 Chemicals list for the state of California. (ahk)



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