



MARINE Field Service

Spring/Summer 2006 Report

ACGIH 2006 TLV® Guide is Available

The American Conference of Governmental Industrial Hygienists (ACGIH) 2006 Threshold Limit Values (TLV®) and Biological Exposure Indices (BEI®) Guide is now available. The TLV Guide is available for purchase from the ACGIH website.

Notice of Intended Change (NIC) – Two substances found in the 2006 NIC list where a change in the adopted value is proposed are highlighted in this Marine Field Service Newsletter.

Hydrogen Sulfide - The proposed TLV change for Hydrogen Sulfide is 1 ppm (TWA) and 5 ppm STEL versus the current TLV for Hydrogen Sulfide of 10 ppm (TWA) and 15 ppm STEL.

Toluene – The adopted value for Toluene is proposed to change from 50 ppm (TWA) to 20 ppm (TWA).

Chemical Substances Under Study – The ACGIH lists more than 100 chemical substances that are under study. The published list is accurate as of January 01, 2006. Two substances on the “Under Study” list that may be of interest to the marine industry are:

Diesel fuel - individual TLVs for vapor and aerosol.

Gasoline - all formulations.

By July 31, 2006 list of substances under study will be updated. Refer to the ACGIH website for more information. (www.acgih.org/TLVStudies.htm)

MARINE CHEMIST DIRECTORY – 2006 EDITION

The 2006 edition of the Marine Chemist Directory is published. If you would like a printed copy, please contact the NFPA Marine Field Service. An electronic version is available for down loading from the NFPA website. Go to www.nfpa.org, and then click the *Learning* tab. Next, hit button for *Professional Development* and then *Marine Chemists* in the drop-down list. We will update the Directory periodically as Marine Chemists' contact information changes.

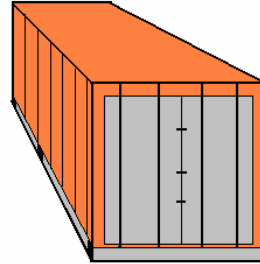
Unknown Source of High Seas Fire is Cause for Concern

(Compiled from various web news reports) On March 21, 2006 in the Gulf of Aden (approx. 50 mi. off the coast of Yemen) a massive fire occurred on the ten-year old container ship *Hyundai Fortune*. 27 crewmen were evacuated by a Royal Netherlands naval ship that also provided firefighting and medical assistance. The evacuation was conducted amidst numerous hazards including explosions and falling containers. Graphic photographs of the damage to the vessel and cargo may be seen in several internet sites.

The 5,551 TEU container ship was en route to France from Singapore with a reported 4,000 shipping containers including seven in which fireworks were stowed. The exact source and location of the fire remains unknown at this time. According to some reports, the fire spread quickly through the engine room and accommodation house. The aft section of the ship was destroyed by the inferno. Photographs show the after cargo holds burned to the waterline. The fire was finally brought under control on April 8, 2006.

Initial theories suggest an explosion occurred below deck near the stern. Speculation of the cause of the fire has included terrorism and external sources such as the vessel striking a mine. However there is suspicion in industry circles that the practice of mislabeling cargo (apparently common in the Asia to Europe trades) may be a causal factor.

What is really inside shipping containers?



Bill of Lading

Description of Goods

?

Wrongly-marked hazardous cargo (such as chemicals or fireworks) may have been loaded into a hold rather than on deck. Such fraudulent cargo declaration is believed to be behind a fire that occurred in 2002 on the vessel *Hanjin Pennsylvania*. An insurance underwriter has expressed concern about problems of knowing exactly what was loaded in the containers on the *Hyundai Fortune*. Investigators are examining more than 7,000 bills of lading.

As of April 20, 2006 the *Hyundai Fortune* was towed to the port of Salalah, Oman where salvors successfully removed 2,249 shipping containers. Insurance claims for lost freight are anticipated to be the highest ever recorded. If the ship is declared a total loss, that could make this incident the world's largest containership casualty.

Fire Extinguisher Safety Recall

The United States Coast Guard published a safety alert on its website (Alert 1-06) on March 2, 2006. The advisory notes that certain USCG approved fire extinguishers manufactured by Strike First Corporation are included in a voluntary safety recall notice. According to the company's website, Strike First has determined that the valve stem seats in a number of its 2.5 and 5 lb dry chemical extinguishers assembled between December 2002 and February 2004 may prevent the extinguisher from discharging properly when the lever is activated. As a result of this condition, Strike First has initiated a fire extinguisher retro-fit program for the affected models. Retro-fit kits are available free of charge by contacting a Strike First distributor or by contacting Strike First Corporation directly.

The affected extinguishers are designed for commercial, industrial, multi-residential and vehicle applications. The vast majority may be found in businesses and other commercial spaces that require service by a fire extinguisher service company.

Affected First Strike Model Numbers	Affected Serial Numbers
WBSF-ABC110AP	TC101566- TC108819
WBSF-ABC210AP	TC114969- TC135000 VV822001- VV832000 WH161001- WH167622
WBSF-ABC340AP	TC135894- TC142345

To find the serial number, look at the label of the fire extinguisher, below the "UL" mark.

It is recommended that vessel operators/owners and facilities verify the manufacturer of their fire extinguishers and if applicable take appropriate action as recommended by the manufacturer. Strike First's website is: www.strikefirstusa.com. The toll-free telephone number is: 1-800-255-5515.

SHIPYARD FIRE PROTECTION FAQs



The Occupational Safety and Health Administration (OSHA) Assistance for the Maritime Industry webpage (www.osha.gov/dts/maritime/index.html) has many links to provide employers and maritime workers with information and assistance to help in complying with OSHA standards and in ensuring a safe workplace. One of these aids is the Shipyard Fire Protection Frequently Asked Questions (FAQs).

This ten-page document provides general guidance about OSHA's shipyard fire protection standard (29 CFR Part 1915, Subpart P). The questions and answers in this document do not themselves impose enforceable obligations - those obligations are imposed by the standard. The FAQs are divided into three sections: general questions, fire watch questions and questions about fuel gas and oxygen supply lines.

Anyone engaged in shipyard employment is encouraged to check out this webpage and in particular look at the Shipyard Fire Protection FAQs. The Subpart P requirements were made effective in December 2004. Unfortunately incidents involving hot work and/or apparently ineffective fire watches continue to occur. An unscientific survey by the Marine Field Service revealed there is a surprising number of individuals involved in shipyard employment who are unfamiliar with the fire prevention requirements of 1915 Subpart P. Take a moment and review this important information.

Maritime Confined Space Safe Practices Seminars Return to the Louisiana Gulf Coast

NFPA Marine Field Service recently presented contracted and open-registration Maritime Confined Space Safe Practices seminars in the New Orleans area. Enrollment was very good and perhaps an indication that area shipyards are rebounding from the devastation caused by the 2005 hurricane season. Participants in the Maritime Confined Space Safe Practices Seminar are given knowledge and skills to develop and implement practices and procedures essential to safely entering and working within confined spaces.



NFPA Instructor, Lamar Labauve, demonstrates use of colorimetric detector tubes.

NFPA Marine Field Service is scheduling seminars for the second half of 2006. If you would like additional information or want to schedule a seminar for your organization please contact us at: marine@nfpa.org or 617-984-7948.

Comment from recent attendee, *"This program really changed my perspective regarding safety in confined spaces. Thank you very much!"*

Contacting NFPA

For general information, advisory service, or to request NFPA Technical Committee applications, copies of the Report on Proposals (ROP) or Report on Comments (ROC) for any NFPA document:

NFPA Website: www.nfpa.org
NFPA Customer Service: (800) 344-3555

NFPA's Maritime Standards Committees

News regarding NFPA's marine-related Codes and Standards.

NFPA 301

The Technical Committee on Merchant Vessels met in Baltimore, MD for the Report on Proposals (ROP) for NFPA 301, *Code for Safety to Life from Fire on Merchant Vessels*. In addition to its review of 17 public proposals the committee generated several proposals including the addition of requirements for a performance based approach to fire protection and a revision of the chapter for towing vessels. Representatives of the commercial fishing industry advised the committee that fire is the second leading cause of death on fishing vessels. Currently there are no fire protection standards for these vessels. American Waterways Operators representatives provided the committee with information and advice concerning the practical application of code requirements for towing vessels. The ROP will be published on June 23, 2006. Members of the public are requested to comment on the proposals for the revision of NFPA 301. Instructions for submitting comments may be found on NFPA's website. The comment closing date is September 01, 2006.

NFPA 306

NFPA 306, *Standard for the Control of Gas Hazards on Vessels*, will be entering the Annual 2008 revision cycle. The closing date for public proposals for this document is November 22, 2006. Instructions for submitting proposals may be found on NFPA's website.

Terry Guidry's MCQB Service Recognized

Terry Guidry, Corporate Safety and Environmental Manager for Bollinger Shipyards, was presented with a flame safety lamp to thank him for six years of active participation representing the shipyard industry on the Marine Chemist Qualification Board. MCQB members are appointed by the NFPA Board of Directors and may serve two consecutive 3-year terms.



Marine Chemist Qualification Board meets in St. Petersburg, FL on July 12-14, 2006.

St. Pete, Florida to Host the 48th Annual Marine Chemist Association National Seminar

The Marine Chemist Association (MCA) will hold its 48th annual seminar from July 10 to 12, 2006 at the Grand Plaza Hotel Resort and Conference Center in St. Petersburg, FL. For further details contact Marine Chemist Association Secretary, Ed Willwerth at www.marinechemist.org.

Cruise Ship Fire Prompts Recommendations for Exterior Fire Protection

The United Kingdom Marine Accident Investigation Branch (MAIB) and International Council of Cruise Lines (ICCL) have issued safety notices to highlight specific safety issues as a result of the recent fire on the cruise ship Star Princess. The United States Coast Guard strongly supports the actions proposed by the MAIB and ICCL (USCG Safety Alert 2-06).

The safety notices alert ship owners/operators of the potential fire risk on external areas, particularly balcony areas from the use of combustibile materials. These areas typically lack smoke/heat detectors and difficulty of access potentially makes fire fighting in these areas problematic. These issues combine to raise the risk of a high intensity fire spreading rapidly.

The cause of the March 23rd fire is yet to be determined. The seat of the fire was an external stateroom balcony. The fire spread rapidly along adjacent balconies. Within ten minutes the fire progressed up two decks and onto balconies in two adjacent fire zones. Heat shattered glass balcony doors but was contained by interior fixed extinguishing systems within the staterooms. Combustible materials on the balconies and polycarbonate balcony partitions generated dense black smoke hindering passenger evacuation. One passenger died from an apparent heart attack and 13 others were hospitalized for smoke inhalation. The crew extinguished the fire in 1.5 hours. The fire destroyed 79 cabins and another 204 suffered smoke and water damage in three vertical fire zones on 5 decks.

The incident illustrates the risk of a serious fire starting and spreading in areas not covered by regulations. Current SOLAS regulations (Chapter II-2 Construction-Fire Protection, Fire Detection and Fire Extinction) do not prescribe combustibility of materials used on external balcony areas since these are not included in the vessel's fire zones. Balcony areas are also not required to be fitted with fixed fire detection or suppression systems as in interior areas.

USCG Safety Alert 2/2006 is available on the website: www.uscg.mil/hq/g-m/moa/safea.htm
MAIB Safety Bulletin 1/2006 is available on the website: www.maib.gov.uk
ICCL Safety Notice, April 13, 2006 is available on website: www.iccl.org

Questions or Comments Any questions or comments regarding this newsletter or the Marine Field Service should be directed to Marine Field Service Newsletter Editorial Staff. Additionally if you would like to contribute to the MFS Newsletter please send articles, pictures, announcements, etc. to the Newsletter Staff care of: NFPA Marine Field Service, National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471
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