



MARINE

Field Service News

Winter 2008 Edition

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Amy Sly - First Woman Certified as NFPA Marine Chemist

On November 1, 2007 Amy Elizabeth Sly of Seattle, Washington made history when she became the first woman to be certificated as an NFPA Marine Chemist.

With a Bachelor's of Science Degree Chemistry from Seattle University, Amy registered as a Marine Chemist trainee in April 2003 and then completed the comprehensive NFPA Marine Chemist Training program in just 4 ½ - years while also finishing her Master's Degree in Industrial Hygiene from the University of Washington in 2006. "What she has accomplished is pretty remarkable", says NFPA Assistant Vice President, Guy Colonna. "She is now a member of a small group of professionals dedicated to the health and safety of shipyard and maritime industry personnel". Presently there are 95 NFPA Marine Chemists.



NFPA Marine Chemist – Amy Sly

Marine Chemist Trainees are required to complete a 4-year academic degree program with six specific chemistry courses. They must have three years of work experience with at least one year in a laboratory setting. The remaining experience may be in a shipyard or other marine industrial environment. Each candidate must satisfactorily complete an 18 module training curriculum administered by the NFPA and spend a minimum of 300 hours training with at least three NFPA Certificated Marine Chemists performing all of the tests and inspections required prior to the issuance of the *Marine Chemist's Certificate* on board all types of the vessel covered by the standard, NFPA 306, *Standard for the Control of Gas Hazards on Vessels*.

"Ms. Sly's accomplishments are very impressive and the

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Amy Sly – 1st Woman Marine Chemist



MCQB Chair Tim O'Connor congratulates Amy Sly

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Board is very pleased to certify her as Marine Chemist, Number 706”, said Marine Chemist Qualification Board (MCQB) Chairman Timothy O’Connor.

So what made this 26 year-old choose crawling through dark and muddy double-bottom tanks as a career rather than her childhood ambition to enter the retail fashion industry? Amy says that her interest in the inspection and survey of confined spaces on marine vessels was sparked when she accompanied NFPA Marine Chemists: Philip Dovich, Tom Govey, Craig Trettevik, and her father, Don Sly on jobs at shipyards and repair facilities in and around Seattle, WA. While in college Amy found the typical path taken by many chemistry majors to be a bit dull, on the other hand, the work performed by NFPA Marine Chemists is diverse, challenging and directly beneficial to marine industry workers.

Amy is employed at Sound Testing, Inc. in Seattle, WA and recently commented, “It’s a job I never imagined doing when I was little and I’m enjoying it very much.”

OSHA Proposes Revisions to Shipyard General Working Conditions

OSHA is accepting public comments on a Notice of Proposed Rulemaking (NPRM) on General Working Conditions in Shipyard Employment. (Federal Register 72:72451-72520)

The proposal updates and clarifies provisions in the shipyard employment standards (29 CFR Part 1915 subpart F) that have largely gone unchanged since OSHA adopted them in 1972. OSHA proposes to revise and update existing provisions and to add new provisions, including the control of hazardous energy (lock-out, tag-out) in shipyards.

The agency will be accepting public comments on the proposed rule until March 19, 2008 (Docket No. OSHA-S049-2006-0675). For more information see the news release on the OSHA website: www.osha.gov.

Brief History of the NFPA Marine Chemist

1922 - "Regulations Governing Marine Fire Hazards," including Appendix A published and first chemists known as, "Gas Chemists", are certificated by American Bureau of Shipping (ABS).

1947 - Appendix A completely revised and issued as NFPA 306

1963 - NFPA assumes responsibility for certificating Marine Chemists and establishes the Marine Field Service.

1975 - Marine Chemist Qualification Board (MCQB) is reorganized and given more authority.

2007 – 95 NFPA Marine Chemists issue nearly 35,000 Marine Chemist Certificates.

Accident Review:

Apparent Failure to Follow Marine Chemist Instructions & Lack of a Fire Watch Results in Tank Barge Fire

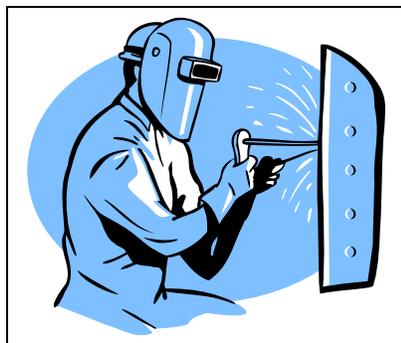
A small fire occurred during repair work to a tank barge. The previous cargo on this barge was vacuum gas-oil (VGO) and Number-6 fuel oil. The vessel had been in the repair yard for several months. Local cleaning in the vicinity of the hot work was done and remaining cargo residue beyond the cleaned area was covered with a fire retardant barrier.

The Marine Chemist certified the space with the Standard Safety Designation: "Safe for Limited Hot Work", in accordance with the requirements of NFPA 306, *Standard for the Control of Gas Hazards on Vessels*. The use of a fire retardant barrier was noted on the Marine Chemist's Certificate. The Marine Chemist also wrote instructions for the fire from the cutting torch to be directed away from the cargo residues and to use a fire watch during the hot work.

Apparently the fire retardant barrier was not maintained in the cargo tank, the worker was acting as his own fire watch and he cut the tank bulkhead in a manner that slag and splatter was directed onto exposed cargo residue in the tank.

The consequences of not properly following the instructions, restrictions or limitations documented on the Marine Chemist's Certificate and not following OSHA fire prevention requirements (29 CFR 1915, Subpart P, Fire Protection in Shipyard Employment) can be deadly and/or cause significant property loss. Fortunately this fire was quickly extinguished and there were no injuries or damage to the vessel.

The OSHA Standard says, a worker performing hot work, such as welding or burning, **MAY NOT** act as his or her own fire watch. A person who is performing



hot work is concentrating on his or her own work, and may be too distracted to quickly observe a fire as it ignites. Therefore, another properly trained employee or employees must be assigned the fire watch duty.

It is also important to note that physical or atmospheric changes affecting the Standard Safety Designation assigned to any space listed on the Marine Chemist's Certificate voids the Certificate.

2008 ACGIH TLV's available soon

The American Conference of Governmental Industrial Hygienists (ACGIH) 2008 Threshold Limit Values (TLVs®) and Biological Exposure Indices (BEIs®) will be available soon. TLVs® and BEIs® are not standards but rather, guidelines for making decisions regarding safe levels of exposure to various chemical substances and physical agents found in the workplace.

Threshold Limit Value (TLV®) occupational exposure guidelines are recommended for more than 700 chemical substances and physical agents.

Under the 2008 Notice of Intended Change (NIC) list are the following chemical substances including but not limited to: Ethanol, Hydrogen Sulfide, Methyl isobutyl ketone, α -Methyl styrene and Toluene-2,4- or 2,6-diisocyanate. VM&P Naphtha is withdrawn from the NIC List.

The 2008 "Under Study List" includes but is not limited to: Ethyl benzene, Gasoline, all formulations, Methanol and Vinyl Acetate.

More information may be found on the ACGIH website: www.ACGIH.org.

OSHA Publishes Directive for Hexavalent Chromium Standard

On January 24, 2008 the U. S. Department of Labor, Occupational Safety and Health Administration (OSHA) published a compliance directive for the Hexavalent Chromium Standard, Directive Number: CPL 02-02-074, Inspection Procedures for the Chromium (VI) Standards.

This instruction applies OSHA-wide and addresses enforcement procedures for the new Chromium (VI) standards published in the Federal Register (FR) on February 28, 2006. On that date, OSHA issued three standards for hexavalent chromium or Chromium (VI) (abbreviated Cr(VI), adding three new sections to the Code of Federal Regulations (CFR) as Sections 29 CFR 1910.1026 (General Industry); 29 CFR 1926.1126 (Construction) and 29 CFR 1915.1026 (Shipyards). All three standards were effective on May 30, 2006

The Directive provides policy and guidance for enforcement of all three Cr(VI) standards and implementation of these enforcement procedures shall begin effective January 24, 2008. Special policies are also provided for enforcement until May 31, 2010 when employers must comply with requirements for feasible engineering and workplace controls. The new Cr(VI) standards have lowered the permissible exposure limit (PEL) to 5µg/m³ and established an action level of 2.5 µg/m³.

For more information see the following website:
http://www.osha.gov/OshDoc/Directive_pdf/CPL_02-02-074.pdf



2008 Maritime Confined Space Safe Practices Open Registration Schedule

NFPA is pleased to announce its Maritime Confined Space Safe Practices Open Registration Seminar Schedule for 2008. These are 3-day seminar programs intended for persons working in confined spaces in maritime employment. Seminars will be held on:

- May 13 – 15 in New Orleans, LA
- June 17-19 in Jacksonville, FL
- September 16 – 18 in Quincy, MA (NFPA Headquarters)
- November 18 - 20 in Houston, TX

Pre-registration is required. Registration forms may be obtained by contacting the NFPA Marine Field Service at 617-984-7950.

NFPA also provides confined spaces safety training to individual companies or organizations upon request. Please contact the NFPA Marine Field Service for more information by telephone at 617-984-7950 or email address: marine@nfpa.org.

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



**Transportation
Security
Administration**

TWIC Update

The Transportation Worker Identification Credential (TWIC) is a vital security measure that will ensure individuals who pose a threat do not gain unescorted access to secure areas of the nation's maritime transportation system.

TWIC was established by Congress through the Maritime Transportation Security Act (MTSA) and is administered by the Transportation Security Administration (TSA) and U.S. Coast Guard. TWICs are tamper-resistant biometric credentials that will be issued to workers who require unescorted access to secure areas of ports, vessels, outer continental shelf facilities and all credentialed merchant mariners.

On January 23, 2008 the Subcommittee on Coast Guard and Maritime Transportation of the House Transportation and Infrastructure Committee held a hearing on the status of the TWIC roll-out process.

Chairman Elijah Cummings (D-MD) commented that since the beginning of the TWIC enrollment process in October 2007

approximately 50,000 enrollments have been completed and approximately 12,000 cards issued.

As of January 11, 2008 forty-nine of the 147 permanent enrollment centers have opened and 20 mobile enrollment centers have been established. Gulf coast ports have the highest number of applicants. Some ports such as Baton Rouge, LA have reported lengthy waiting times for obtaining cards. Efforts are underway to improve these problems.

The deadline for mariners to obtain a TWIC card is September 25, 2008.

Enrollment center information is available on the TWIC Deployment website. Go to <http://twicinformation.tsa.dhs.gov> for more information.

The editor thanks the American Waterways Operators for allowing us to use information from, AWO Letter, "House Coast Guard Subcommittee Holds Update Hearing on TWIC", printed January 25, 2008.

2008 NFPA Marine Chemist Directory Available

The 2008 edition of the Marine Chemist Directory is now available. Printed copies are available to the public and may be obtained by request. The Directory is also available online. Go to: NFPA Home page > Learning > Training & Professional Development > Marine Chemists. This electronic version of the Directory is updated periodically during the year.

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:

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