

SCP Tribune.[©]

Ship or Shore?



A shipyard used a 600-gallon rectangular tank (8' long, 4' wide and 3' high, 5 baffle sections down each side) to collect used crankcase oil from customers' vessels as well as from fleet engines belonging to the shipyard.

After years of service, the tank, which had no manways or inspection ports, was clogged with sludge and had to be demolished.

A cutting torch and an oily tank? We know for vessels afloat or on drydock OSHA's maritime regulations require a Marine Chemist's certificate: "Safe for Hot Work" to such work. But, this was a shoreside, not a maritime, job. And OSHA's shoreside, "General Industry" regulations for hot work can be very complicated.

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TRAINING

Shipyard Competent Person

3-Day Initial

Mar 11-13
Apr 8-10



1-Day Update

Mar 12
Mar 25
Apr 9
Apr 22

OSHA 10 Maritime

This 10-hour training on 29 CFR 1915 provides methods on recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces specific to the maritime industry. Please call Sound Testing for more information.

Ship or Shore? (continued)



It's hard enough for a ship repairers to know about the maritime side of things; Do they have to memorize the "shoreside" regs too? No, they don't.

To make shipyard life a little simpler, OSHA declares that all shipyard confined spaces (like the waste oil tank pictured) are covered not by two sets of regulations, but by the Maritime Standard alone.

Afloat or shoreside, in the shipyard the Marine Chemist and the Shipyard Competent Person have the hot work covered.

Read After Lunch, Part 2

Among our February SCP Tribune's pleasantries was an article on Competent Persons and Sewage Systems. We promised this month some hands-on (perhaps we should re-phrase that...) suggestions for maintaining the cleaned systems. Here goes:

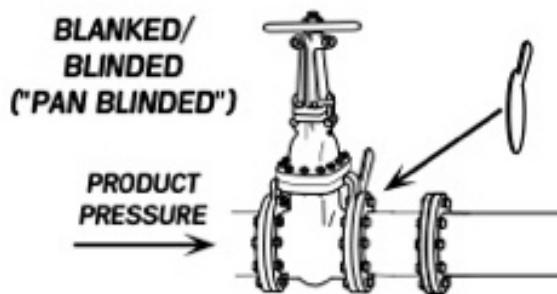
Because cleaning a sewage tank is expensive, and these tanks may have several leaking lines from different parts of a vessel, it's a good idea for the Competent Person to make sure cleaned grey water and black water tanks are kept dry by 2 means:

First, line valves should be tagged shut. And if they still drip, OSHA demands the lines be blanked.

Second, ventilate. Pathogens will not grow in dry, ventilated tanks. Of course, both these strategies assume the SCP will early-on do frequent, bright-flashlight inspections of any cleaned black water or grey water tank. Any contamination must be cleaned immediately and the tank disinfected with a spray of dilute bleach solution.

Lastly, rotting sewage in closed-up spaces like tanks or piping tends to make hydrogen sulfide, a very dangerous neuro-toxin. Because of this acute danger, the Navy's Standard Items demand a Marine Chemist must be present not only when a sewage tank is **entered**, but also when a sewage tank or pipe is even **opened**.

Not only that: rotting sewage also can make methane, to the point where sewage systems must be tested for fire and explosion danger. So, although OSHA's Shipyard Standard fails even to mention sewage, these dangers explain why local Fire Departments sometimes may require a Marine Chemist's certificate for repairs to a sewage system.



Ask a Chemist

Question: We have 3 meters in our office. We use cylinders of the 4-gas calibration standard every year. Why do those little aluminum cylinders cost about \$200 each? Is there a cheaper way to calibrate?



Answer: You are right. It is an expensive business. But the main culprit is Hydrogen Sulfide. H₂S reacts instantaneously with a whole range of elemental metals such as iron or zinc. To keep the mix stable, you need a fairly exotic alloy of aluminum to prevent the deterioration of hydrogen sulfide. And that alloy is expensive, which accounts for some of the cost.

The cal gas cylinder's legal certification and compatibility with the meter is unique. You're probably going to have to stick with your present source.

Congratulations!

The Society of Port Engineer's Man of the Year Award recipient is selected by a sub-committee and awarded to a person who is directly or indirectly associated with the Marine Industry.

He or she should have performed services of outstanding merit, above and beyond prescribed duties, resulting in significant advancement of the Science of Marine Engineering; or

Their years of meritorious services, honorable good conduct and dedication to duty must have bestowed honor and prestige upon the Industry, the Science of Marine Engineering and the Society; and they have therefore earned the unanimous respect and acclaim of the Membership.

In February the Society of Port Engineers honored Don Sly. Congratulations!

Congrats to **Al Rainsberger** from **Foss Maritime** for winning last month's quiz and a \$25 gift card!

Last Month's Quiz:

Q: What does a "LEL" reading of 50% tell us about the air space?

A: The reading means that there is 50% of the amount of fuel vapor needed to explode.

This Month's Question:

The journeyman pipefitter on a sewage repair project has an apprentice helper. Who gets to move the pneumatic plug pictured to the right when repairs are complete? And why?

Submit your answers to newsletter@soundtestinginc.com **before March 25, 2015.** All correct answers will be entered into a random drawing and one person will win a \$25 gift card! One entry per person, please.

