

SCP Tribune[®]

Tank Cleaners Have Standing!



Often the Marine Chemist is called to check the work of the Tank Cleaners. Because we have a phobia that expensive ship repair projects will grind to a halt if we're late, we usually show up a bit early.

And as we find the cleaners finishing up their work, we are reminded again that the Tank Cleaners deserve tremendous respect because they do the hardest of jobs. They work in the most dangerous confined spaces (fuel and chemical tanks) BEFORE they've been cleaned. As they pump out fuel, remove scale and muck, and clean the whole tank interior, their pressure-washers at first make the tank even more dangerous because pressure washing blows residues into the air.

Tank cleaners, please take the time to protect yourselves as you make the tank safe for everyone else.

For instance, a just-opened diesel tank with a Puget Sound temperature of ~55°F reliably has 400-500 ppm diesel vapor. It is nasty. (During July in Louisiana, count on a thousand!) But the recognized exposure limit for diesel vapor is only 15 ppm!

Then we must remember how OSHA says we deal with gassy hazards. (1) We ventilate the tank, (2) We make sure the tank cleaner's Shipyard Competent Person does tests to make sure the ventilation is good and (3) The Employer has to equip Cleaners with a Respiratory Protection Program.

While making tanks safe for everyone else it's important that Tank Cleaners protect themselves. Cleaning tanks requires testing, ventilation, and proper personal protective gear--sometimes even after removing the hazard.

TRAINING

Shipyard Competent Person

3-Day Initial

October 22-24

November 5-7



1-Day Updates

October 8

October 23

November 3 (Bremerton)

November 6

November 19

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 our office (932-0206) for the next class date.



Pull Back? What's That?

Aside from a shoe-shine stand, not many jobs are as temporary as a ship repair project. The owner always wants his boat back quick, which is fine with the Shipyard because their dry-dock is scheduled tight. Everyone wants the job completed yesterday, and often there is just no time for ordinary industrial standards of cleanliness and order.

Housekeeping is a constant battle. "Old Timers" remember that there used to be a scheduled "Pull-Back" once a week or so. Production would stop at, say, 2:30 on a Thursday afternoon. Then the crafts would get all the hydraulic, compressed air, fuel transfer, tank cleaning, pressure-wash, electrical, welding, cutting torch, ventilation, lighting and other service leads out of the walkways. Garbage was collected and supplies stored properly so the production work could be done more efficiently and, above all, more safely.

But modern Ship Repair is a tough, capital-intensive business. There aren't as many shipyards as there used to be. With the in-one-day-out-the-next nature of the work you can see why scenes like this one are unfortunately all too common.

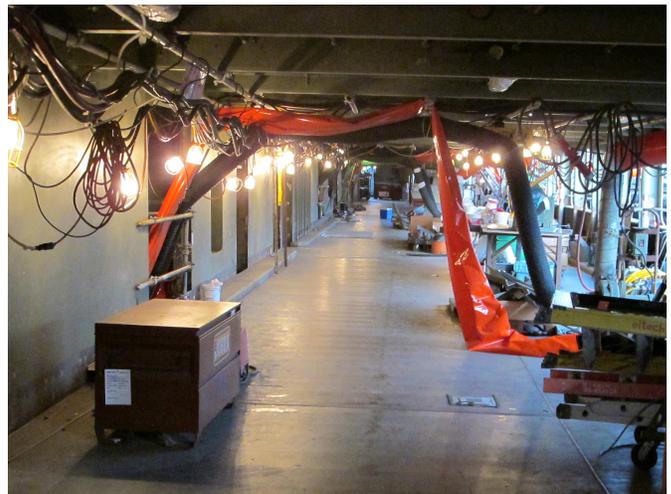
Some of the ways that we safety types might combat these battles are thoughtful preplanning, thinking through the dangers of the job and effective use of crossovers, line trees and hangers. Every resourceful ship repair worker should carry twine in their pocket to bundle the sloppy leads and hang ventilation that the "Greenhorns" have left behind.

The first photo highlights the temporary nature of our work in ship repair. The second illustrates the ideal care of service leads and equipment that is more possible when the job site is stable.

The Shipyard Competent Person should watch out for the safety problems (slips & trips, combustible debris, housekeeping etc.) that come from the disorder we Ship Repair people run into.



Disorder versus Order in the walk way



Thanks!

Thank you to everyone attended our Annual Customer Appreciation Party last month. It was a great time and we missed those of you that couldn't make the event.
Thanks for making 35 years of service possible!

Ask a Chemist

Question: When a tank has been inerted and the repairs are complete, what happens to the inert gas?

Answer: What a great question! When inert gas (usually carbon dioxide) is pumped into an oil tank it makes the tank “Safe” for exterior hot work. But at the same time it makes the tank not just unpleasant to enter, but a deathtrap! The tank has virtually no oxygen! The inerted tank is Not Safe for Workers.

So, how the shipyard deals with a tank’s inert gas is important. Usually the tank is kept closed up and later, when the tank takes on fuel the inert gas is harmlessly forced out the vent.



If workers have to enter an inerted fuel tank right away after repairs are complete, it must be force-ventilated and tested by the Marine Chemist.

When the inert gas must be vented through an enclosed space, the Marine Chemist may give specific instructions and may even stand by to make sure the venting is safely done. A recent inert required that the carbon dioxide be vented through a machinery space. The gas was captured and exhausted safely outside, while the Chemist monitored the machinery space.

Congrats to **Paul Vierela** of **TOTE**, the winner of September’s random drawing amongst the correct answers to the Newsletter Question. Thank you, Paul, for donating the \$25 award to the Food Bank at St Mary’s!

Last Month's Quiz:

Q: What is the difference between a fuel’s flash point and its fire point?

A: The fuel’s *flash point* is the lowest temperature at which it can vaporize to form an ignitable mixture in air. The *fire point* is a little higher temperature than the flash point, and means that point where, because that higher temperature makes vapor faster, the flash cannot use up all the fuel and continues burning as a fire instead of going out as a flash.

This Month's Question:

Your meter’s photoionization detector (PID) says a tank has 230ppm diesel vapor. The sensor’s “correction factor” of 0.7 lowers the reading to 165ppm. What measures would you use to protect a worker entering the tank to inspect it?

Send your answers to newsletter@soundtestinginc.com before October 25, 2014. All correct answers will be entered into a random drawing and one person will win a \$25 gift card! One entry per person, please.