



# SCP TRIBUNE<sup>®</sup>

## “Used to be Rectangular!”

It's our ship repair culture: When we wish to do hot work on a tank...any space, really...which contains something that will burn, that space has to be either cleaned, or INERTED. This “inerting” is particular to the maritime world. It is hardly known or mentioned in the General Industry Standard.

We Chemists prefer cleaning because a cleaned tank is stable and reliable and real-time safe. But in our world, because so many vessels use steel not just for strength and structure, but also to carry fuels and oils inside that structure, sometimes the cleaning can be difficult and costly. So, we have figured out a way to avoid having to clean every tank we weld or burn on. That is, we may in special cases INERT them.

What does that mean? Well, knowing that hydrocarbon fuel needs air to burn, we replace the space's air with some gas (there are several we can choose from) which itself cannot burn. Then, both the fuel and the vapor above it will behave themselves, even in the heat of a cutting torch.



## TRAINING SCP CLASSES

### Full 3-Day Courses

OCT 7-9 @ Fishermen's Terminal  
OCT 28-30 ONLINE  
NOV 2-4 @ Fishermen's Terminal  
DEC 7-9 @ Fishermen's Terminal  
2021 Dates Coming Soon!

### 1-Day Update Courses

OCT 14 @ Fishermen's Terminal  
OCT 15 ONLINE  
NOV 12 @ Fishermen's Terminal  
NOV 19 ONLINE  
DEC 10 @ Fishermen's Terminal  
DEC 17 ONLINE  
2021 Dates Coming Soon!

### **Fishermen's Terminal:**

Nordby Conference Room

### **NOW Available as a WEBINAR!**

OSHA 10 Maritime

OSHA 30 Maritime: NOV 2020

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 for details.

## “Used to be rectangular”, Cont.

Inerting is so tricky and dangerous that it isn't any mystery why both OSHA and the insurance industry (through the N.F.P.A.) demand that a Marine Chemist be called. Say the regulators: "The Marine Chemist shall supervise the introduction of the inerting medium..." We don't have room here to go through all the possible problems inerting can bring with it. But this story may do the job for us.

A ~300-gallon gasoline tank on an aluminum skiff needed repairs to a crack near the vent. So the welder pumped out the gasoline and filled the tank with water till it flowed out the vent. Next he cut out the cracked plate with a "sawzall". Then some of the water had to be pumped out to get a proper weld. Figuring the water had displaced all the gasoline vapor and air, the welder decided to tack the new aluminum insert.

Unknown to the welder, a baffled space in the tank had retained a bubble of gassy air. The tank exploded and the aluminum insert flew into his weld hood with such force that medics took the welder to the hospital with 2nd degree burns and a concussion.



A bystander observed, "Gee! That tank used to be rectangular!"

## Team Members' New Faces

We want to say goodbye to Mike Schmitt who resigned to pursue other opportunities. Mike joined Sound Testing in 2013 and has been a valuable and respected Marine Chemist. We wish him well in his new ventures.

With the changing season you may see some new and old faces. Craig and Amy are being joined by Marine Chemists Joseph Trettevik and Lucas Kuebler. (Don is officially retired)

Joseph has been a familiar face around the waterfront for over 5 years and we welcome him back this year for more ship repair fun. Lucas Kuebler is new to



**Lucas Kuebler**

Seattle, but not to the Marine Chemist world. Lucas has been working in Texas for several years. His experience with chemical barges and salvage projects means he has a lot to teach us locals.

Sound Testing will start it's second 40 years by giving our ship repair friends the very best, most reliable Marine Chemist service.



**Joseph Trettevik**

## Give Us a Brake!

Because so many repair processes involve cleaning tanks and equipment, solvents are a central part of ship repair. When the carpenters wipe up glue, the painters wipe up overspray, the boilermakers wipe up die penetrant, the electricians clean an armature, the machinists wipe up cutting fluid, they all reach for a can of solvent.

But, like all chemicals used in ship repair, solvents can be a problem. Actually, 2 problems.

The problems are: First, all solvents (except water...) are toxic when they evaporate. Most are oil-based, and because we humans have evolved without them, we have no natural defense to airborne solvent vapor.

And second, solvents tend to burn with enthusiasm. These stories illustrate:

Vessels afloat, unlike trucks, trains and cars, have no brakes But when a skipper at Fishermen's Terminal thought two young crew members needed solvent to muck out a day tank he reached for cans of brake cleaner. True, it dissolved the diesel sludge. Brake cleaner's chlorinated solvent also dissolves the liver and other internal organs.

And when looking for a crankcase crack in a 12-cylinder CAT, engineers on Pier 90 shot off several cans of...brake cleaner, wiping inside from the top down. A broken light bulb put 2 mechanics in the Ballard Swedish with flash burns.

Each accident was a straightforward OSHA violation. Subpart B's section on "Cleaning" starts out: "Requirements for performing cleaning...."

1915.13(b)(2) "Testing shall be conducted by a competent person..." Why? Because the Competent Person can measure the airborne solvent, and because the SCP understands effective ventilation. But no Shipyard Competent Person attended either job. Without a Competent Person on the job, solvents in confined spaces will surely hurt workers.



Congratulations to Jack Hagey winner of September's quiz.

**Q:** A Labor Issue: A journeyman pipefitter works with his apprentice helper during repairs to the sewage tank pictured to left. Which will have the task of removing the pneumatic pipe-plug as the job is complete after a week's work? And why? **A:** The apprentice may be tasked with

removing the plug, however it is the journeyman's responsibility to ensure the plug is removed. He's in charge!

**October's Question:** (note image to right)

No, that's not a fire ax!

That's a \_\_\_\_\_



Please send your answers to [newsletter@soundtestinginc.com](mailto:newsletter@soundtestinginc.com) or [admin@soundtestinginc.com](mailto:admin@soundtestinginc.com) before October 25<sup>th</sup>, 2020. The winning answer will be picked randomly from amongst other correct entries by Mr. Adam and Mr. Evan Liu.