

SCP TRIBUNE[®]

Vessel Owner Causes Grief

50 years' statistics documenting ship repair's disastrous (1920-1970) safety record have demanded that since the 1970's that Shipyard Competent People be central to OSHA's Maritime Standard. We Marine Chemists can't do business without that corps of trained Competent People.

So, not long ago, as is common practice, an SCP and a Chemist together inspected a fishing vessel for safe hot work on the process deck and in the confined spaces below.

As the inspection proceeded the veteran Competent Person suddenly exclaimed, "What the (mild profanity) is THAT??"



A deafening din had arisen from a "live tank" directly beneath their feet.

A quick inspection showed two contract painters scaling the tank's rusty deck with a gasoline-powered "Growler." (note image above) The Competent Person was extremely upset. For at least three reasons:

First, the "growler" was powered by a 2-cycle lawnmower engine, which was pumping clouds of toxic smoke and carbon monoxide into the unventilated ~50,000-gal live tank and endangering everyone's lives (and hearing), including those of the painters.

Second, though the Competent Person had a permit process for all subcontractors, the painters and their growler, were a total surprise. (They had been ordered up by the vessel's skipper without any notice to anyone.)

Third, those painters were dangers to themselves and the shipyard because they lacked that basic ship repair training that OSHA demands (**SUBPART B, §1915.12(d)**) be given to every ship repair worker. And such training is not merely a matter of opinion, but a straightforward OSHA requirement. (Continued)

TRAINING

Shipyard Competent Person



3-Day Initial

Mar 2-4 @ SSC

1-Day Updates

Feb 17 @ Fremont

Mar 3 @ SSC

Mar 16 @ Fremont

Fremont @ Fishermen's Terminal
(SSC: Georgetown Campus Just off I-5: Corson Ave)

OSHA 10 Maritime & General Industry

10-hour training on 29 CFR 1915 or 1910 provides methods on recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces specific to the maritime or general industries.

Vessel Owner, Cont.

Within 15 minutes the two painters, their truck and the offending “growler” were all (see image) outside the shipyard gate.

This happening reminds us that workers who might be competent at buffing floors at the Banana Republic or striping a parking lot somewhere are a ship repair hazard until they have been given proper baseline training in the importance of safety.

After all, ship repair employers invest great effort and expense in their safety programs and culture. And these investments are wasted when front line workers don't take a Competent Person's instructions and requests seriously.



“Hazardous Materials” Complicate Repairs



Chemist measures fuel vapor/inert vented during inerting

hazardous stuff around the workplace under pressure can be dangerous. That's why the Coast Guard says ALL hot work in the area must be STOPPED while pumping ANY hazardous material. (Continued)

Some 6 months back the SCP TRIBUNE mentioned an elegant solution to an emergency: When time or other pressures mean a fuel tank can't be cleaned for repairs, have the Marine Chemist Inert it!

"Inerting" means pumping enough CO₂ or other “inert” gas into the airspace above a tank's fuel to prevent a fire. (As we know, without air fuel can't burn or explode.) So inerting is a useful, routine ship repair strategy.

But, say the Coast Guard and the Fire Department, we must be very aware of worksite safety during this inerting. Why should we be concerned?

Because processes like inerting use piping and pressure to move Hazardous Materials.

(Yes, CO₂ and fuel vapor are both classed as “Hazardous Materials!”) And moving such

Hazardous, Cont.

So, besides CO₂ inerting, what other projects might cause Hot Work to grind to a quick halt because they transfer “hazardous materials”?

Tank cleaning is a good example: Oil and oily water are pumped from ship to shore through temporary connections. And that, say regulators, is not ideal. Bilge washings and fuel residues must be properly managed.

Though pumping bilge waste using suction is less dangerous than with pressure, the regulations don't distinguish between the two.



Ask a Chemist

Question: We're getting set to weld on the deck above a fuel tank. We need it inerted. Should we fill the tank with fuel before the Chemist comes so he uses less inert gas?

Answer: Carbon Dioxide Inert Gas is CHEAP! Not 2 cents a gallon. The money saved by a full tank won't pay the time it takes you to fill the tank!

But the big reason not to fill a fuel tank before inertion is that a tiny volume of inert gas above the fuel will be easily diluted as the tank “breathes”...cooling at night, warming by day. That inert gas is unstable and must be monitored constantly. And THAT costs money. Better to have a bunch of dense carbon dioxide reliably sitting above the fuel of a largely empty tank.

Another worry: when the fuel is high in the tank it is close to the vent. Then the inerting process becomes stressful as Chemists worry about venting some fuel with the vapors.

Congrats to **Michael Santini** of **Crowley Petroleum**: Winner of January's quiz.

January's Question:

Q: Complete this Limerick:

A gap between pipes lets out pressure
That's a problem for the Pipeshop Professor
Oily! Not Safe to weld it...
Might be better if we held it
In place with a coupling from **DRESSER!**

February's Question: Organic oils (olive, vegetable, sesame) are common in the kitchen. What oil of plant origin, with tremendous lubricity, might you find in the toolbox of the Outside Machinist?

Send your answer to newsletter@soundtestinginc.com before February 25, 2016.

All correct answers will be entered into a random drawing and one person will win a **\$50** gift card!
One entry per person, please.