

SCP TRIBUNE

Electrical Insulation Fires

Around the worksite, it is common to see various certificates posted from the Competent Person and, occasionally, from the Marine Chemist.

Whenever the phrase "Safe for Hot Work" turns up on these certificates, it causes stress. There is a lot of stuff out there to catch fire.



And here's some news to add to the stress:

Some of the stuff we used to trust is turning out not to be so trustworthy.

We're talking about electrical insulation: It both burns with enthusiasm, and also, because it is strung out in wireways, can easily spread a fire from its starting point to another space, especially when the wires run vertical.

We all know we have to be careful around insulating foam. But there are a lot of machinery spaces and living spaces that have the added fire danger of the plastic insulation wrapped around every wire.

Check out the picture: About 30% of the cross-sectional area is plastic, and plastic burns.

There have been at least two recent machinery space fires started by fuel leaks. They were quickly controlled except that, in each case, nearby wireways then spread the fires by their burning insulation.

Our salvation in this business is that none of us is too dumb to learn. So, let's take that the lesson that electrical insulation is sometimes an unrecognized danger.

SCP Training with New Hands-On Focus

We've all heard the wisdom: "The half-life of unused knowledge is 6 months!"

That means, if you don't do Competent Person duties routinely, your book-learning will evaporate like MEK on a hot day. And knowledge of regulations flees faster than that!

To combat this, we're working on a new focus on real-life training.

Subpart D tells the SCP to test "soft, greasy coatings" for how they'll behave in a cutting torch flame. What's to prevent us doing just that during our hourly class break?

We all know every blower has a "cubic-foot/minute" rating. Why not measure the air-flow to see how it behaves in real life?

Every boilermaker knows that super-oxygen readings in the workplace may spell disaster. Instead of memorizing the details, why not show in real life how your basic flame-resistant cotton shirtsleeve behaves when saturated with oxygen?

Of course, this means the lecture part of our sessions will have to be done more efficiently. Maybe better pictures and less downloaded text will do the trick. We'll see!



With Many Tanks!

Second Annual Customer Appreciation Party

Friday, August 2, 2013 • From 2:30PM until 5:30PM

Food! Beverages! Door Prizes!

In the Sound Testing Parking Lot at 2992 SW Avalon Way.

Please RSVP so we have adequate food and drink: admin@soundtestinginc.com
or 206-932-0206.

All are welcome!

USCG Releases Preliminary Findings from Tank Barge Explosions

On April 24th, 2013, in Mobile, Alabama, (see “SCP Tribune”, May 2013) two natural gas barges located pier side at the Oil Recovery Company facility were undergoing tank cleaning operations when they exploded, critically injuring three people.

First a little background on natural gasoline. Crude oil is separated into the different components that provide us specific products like petroleum, kerosene and diesel. The separation process (distillation) uses the components’ different boiling points to separate them out. Natural gasoline comes from the first part of the distillation process and requires further processing. It will most likely be blended with other hydrocarbons to become finished products like the commercial gasoline we put into our vehicles. Natural gasoline is extremely flammable with vapors that can travel and be ignited at remote locations and flash back.

On the barges in question, tank cleaners had set up ventilation to control the flammable vapors coming from the residue and were in the process of pumping out as much of that residue as possible when one of the blowers malfunctioned. Operations were put on hold while all of the blowers were shut down to repair the problem to get the critical ventilation back on line. Because the vapor density of natural gasoline is heavier than air, all the flammable vapors from those tanks settled on the water’s surface next to the barge.

At the same time, a towing vessel had pulled up to the same pier as the Oil Recovery Company facility. As the vessel got closer to the barges, the flammable vapors got sucked into the towing vessel’s engine room ventilation and into the main engines and engine space. As described by natural gasoline’s Material Data Safety Sheet, those vapors built up, ignited from a source in the towing vessel and spread fire across the cloud of vapors all the way back to the tank barges causing the initial explosion followed by many more. The explosions injured a Oil Recovery Company worker along with two persons aboard the towing vessel. The towing vessel sustained heavy fire damage and the tank barges are destroyed.

The Coast Guard is conducting their investigation to identify contributing factors that led to the incident. They will be turning their findings over to the National Transportation Safety Board for a final report.

Lesson learned:

Ventilation is an important concept but it must be thoroughly thought through. Setting up blowers and hose is only the first step. Always determine where you are putting the “bad stuff” so that it doesn’t create more of a problem somewhere else. In most cases highly flammable vapors are more dense than air and are rapidly off-gassing (evaporating) at room temperature to create clouds of flammable vapors that can travel long distances and, as demonstrated in this horrible accident, be ignited and flash back to the source. These scenarios and more are why operations associated with flammable and combustible liquids are so heavily regulated

ASK A CHEMIST!

Looking for clarification?

Ever wonder why rules are written they way the are?
Ask away! Every month a worthy question will be answered here!



Question:

Does the SCP need to physically enter a tank when maintaining a marine chemist certificate?

Answer:

The answer is...Yes, at least when the SCP can physically enter the space.

OSHA 1915.15(c) states that the SCP shall visually inspect and test each space certified as “Safe for Workers” or “Safe for Hot Work,” as often as necessary to ensure that atmospheric conditions within that space are maintained within the conditions established by the certificate after the certificate has been issued.

“Visual” inspection is a bit misleading. Visual inspections of confined spaces, (i.e. fuel tanks, ballast tanks, voids) require physical entry into the spaces. That is, the SCP, after meter tests, uses their eyes and sense of smell, as well as their trained awareness, to detect any changes to the worksite the meter didn’t pick up.

And how often does he have to “visually” inspect? “As often as necessary.”

Physically entering a tank can catch problems that can go undetected when only drop-tested. Frequently, pipelines or valves can leak product, such as diesel fuel, into the deep spot of a tank. Also, debris or other combustibles, unscheduled paint touch-up, fuel transfers, changes in the scope of work, etc. can create unexpected fire hazards.

These are just a few of the many reasons that it’s imperative for you, the SCP, to visually/physically enter tanks when maintaining safe conditions. And that’s why the Shipyard Competent Persons are so important in the world of ship repair.

A Fond Farewell

A NEW PATH

It was not an easy decision, but I have decided to depart Sound Testing and pursue a Master's Degree in Fire Protection Engineering at the University of Maryland. In mid-July, I will be packing up and moving to the East Coast with my wife to begin my



coursework. I wanted to take this opportunity to say thank you to all of you for welcoming me into the world of ship repair and providing an experience that I will never forget. I learned an unfathomable amount, saw some incredible sights, and met a multitude of interesting people. I have learned so much and will take this knowledge with me as I walk into the future.

I also wanted to give a sincere thank you to Sound Testing. Sound Testing has been a fantastic company to work for and I will truly miss everyone I had the opportunity to work with while employed with the company.

Stay safe and all the best,
Kevin Korver
CMC #717

Editor's Note: Sound Testing wants to take this opportunity to say a heartfelt thanks to Kevin. He has truly been an asset to us and to our customers. Kevin, you will be missed! We look forward to your return to the Pacific Northwest!

Please Welcome Joseph Trettevik!



Joseph is joining Sound Testing's team as a Marine Chemist Trainee. Please introduce yourselves when you see him out in the field.

SCP QUIZ

Congrats to Ross Magill of Wounded Warrior Project who won a \$25 Cabela's gift card for last month's quiz!

Last Month's Answers:

1) Class A fires involve burning materials that leave an ash residue. Examples are (choose all correct answers):

- a. Ropes
- b. Cardboard
- c. Plastics
- d. Diesel fuel

2) Heavy paint on a bulkhead must be needle-gunned away a minimum of 4 inches from the line planned for a torch-cut. [True] or [False]

3) An example of a Class B fire extinguisher is a Carbon Dioxide (CO₂) extinguisher. [True] or [False]

This Month's Question:

1) Name 3 pieces of information needed on a product's Safety Data Sheet (SDS)?

2) If a product contains a toxic ingredient that is less than 1%, will it show up on the products Safety Data Sheet (SDS)? [True] or [False]

Submit your answers to newsletter@soundtestinginc.com (or "reply" to this e-mail) before July 25, 2013. All correct answers will be entered into a random drawing and one person will win a \$25 gift card! One entry per person, please. The correct answer and the winning entry will be published in next month's issue.

Sound Testing, Inc.

GAS FREE INSPECTIONS, INERTING, CHLORINATION,
SAFETY TRAINING

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TRAINING

Shipyard Competent Person



Seattle

3-Day Initial
July 9-11

1-Day Update
July 24

3-Day Initial
Aug 7-9

OSHA 10 Hour Training



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.

Strengthen your workplace safety and health today by calling Sound Testing for the next scheduled class.