

SCP Tribune.®

Making a Better Workplace

Cutting steel with a torch or carbon arc has always been troublesome because the processes tend to make the workplace air so filthy. How filthy? Fairhaven Shipyard Quality Assurance/Competent Person/All-Around Technical Person Jay Mueller did a very neat study to measure one toxic. Here's what he found:

"One morning, while tinkering with a Gas Alert Micro 5, I noticed the SD card inside and became curious about the sort of information it stores. As it turns out, the SD card contains in Excel format all of the levels for CO in 5-second intervals, dating back to 2010. This inspired me to see if I could use the Gas Alert Micro 5 for something besides just gas freeing spaces." (Continued)

TRAINING

Shipyards Competent Person

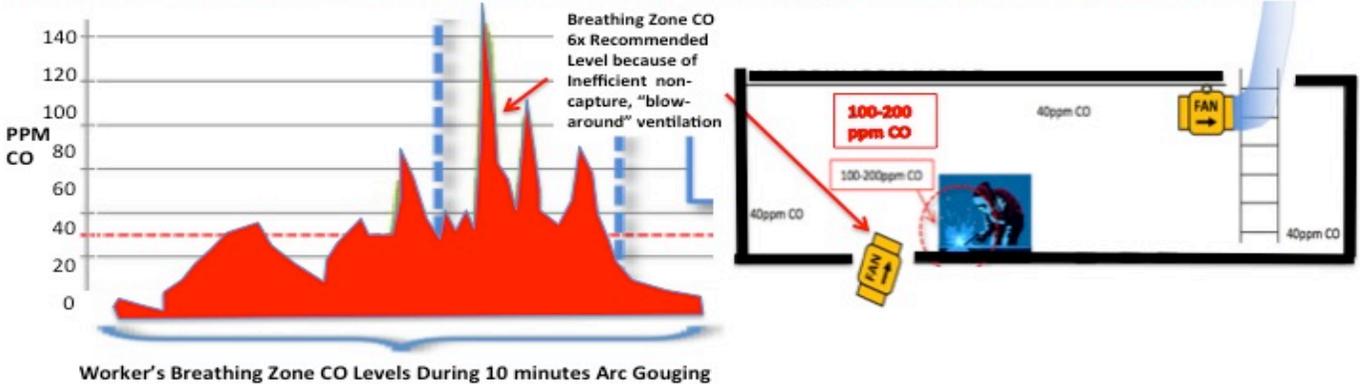
3-Day Initial
November 5-7
December 3-5

1-Day Updates
November 6
November 19
December 4
December 17

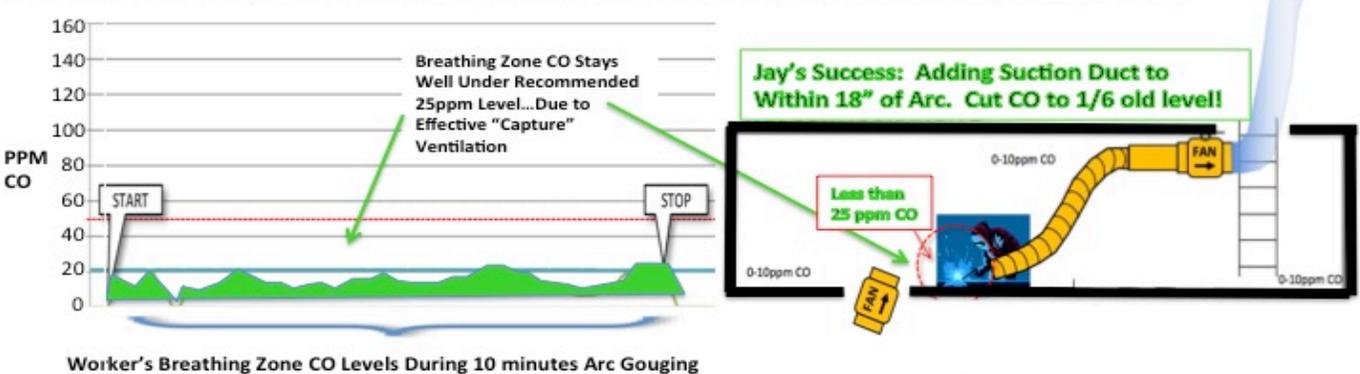
Please call our office for the next OSHA 10 class date.



Case #1 BAD DEAL: High CO from Carbon-Arc in Confined Space with Supply, "blow-around, non-capture" Ventilation



Case #2 MUCH BETTER: Much Less CO from Carbon-Arc in Confined Space with Efficient Capture Ventilation



Making a Better Workplace, Cont.

So, what real-life workspace did Jay Test?

A worker was full-time arc-gouging in a cramped steering gear room. The ventilation (Case #1) seemed good, so Mueller quietly took some random CO readings. Then, "I set the Micro 5 behind the worker and left the space for awhile."

At lunch time, Mueller downloaded the SD card info and made a line chart with the Excel data. "I was surprised how well it worked." He was also surprised that the ventilation left so much CO (spikes above 150ppm) for the workers to breathe.

So, after lunch Jay did another experiment: He rigged an 8" suction duct from a blue blower to within 18" of the carbon arc (Case #2).

"The result was surprising, as CO levels dropped extremely low at the site of carbon arc, and were virtually zero throughout the rest of the space. What an unbelievable difference!"

At the next safety meeting Mueller got everyone's attention when he explained his findings to welders and pipefitters. They saw his graphs (see front page) and immediately used his specs to set up suction ducts at their work sites. "A week or so later I received comments from workers about how they have fewer headaches, less fatigue, and didn't taste metal at the end of the day."

Not only did Jay Mueller have the curiosity to investigate his workers' job safety, he also used his new information to make the workplace a lot safer! (Note the graphic on the first page)

Well done Jay and Fairhaven Shipyard!

Editorial: Some Fears Come True

What many of us industry types feared and fought against has, in fact, happened: October 15, the State sent out their scheme for issuing "Vessel Deconstruction General Permits."

A little history: Two years ago a couple of Washington State Senators got irritated because it costs so much to get rid of derelict vessels found here and there in Washington waterways.

To anyone familiar with OSHA's Maritime Standard, the cost of demolition is no mystery: Shipbreaking is the most dangerous activity the Standard regulates. The tank cleaning/disposal of fuel, solvents, crankcase oil, paint residues, and sewage; fire/explosion prevention; fall protection; a respirator program; and a Shipyard Competent Person program, often in isolated places, are all expensive. And very, very, necessary to keep workers safe.

So, the Senators enlisted the State Department of Ecology to make shipbreaking cheaper.
(Continued)



Editorial, Cont.

In their introductory Powerpoint the first thing D.O.E. noted was how dangerous ship demolition is. But because safety drives up the cost (and a D.O.E. focus was low cost), it isn't surprising that for the next two years worker safety was not mentioned again.

Instead of shipyards that know their business, we now have a "General Permit" protocol that ignores the OSHA Maritime safety regulations. (No lawyers here at Sound Testing, so we admit we don't understand how a state program can completely ignore the OSHA rules that help keep us safe.)

All we can say to those who drive up with a pickup, burning gear and a couple chainfalls to do a ship yard's work on a derelict hull is: Watch Yourself!
-Don Sly

Ask a Chemist

Question:

What does the phrase "as often as necessary" mean in practice?



Answer:

That depends on which regulation you read more closely. There are two: NFPA 306 and 29CFR1915 (OSHA's Shipyard Standard).

National Fire Protection Association (NFPA) regulations are mentioned in insurance policies. Not only that, State and City agencies like the Fire Department refer to NFPA Standards. The NFPA requires spaces that the Marine Chemist has certified be rechecked at least every day to find unsafe conditions. This check needs to be done early in the day, and is necessary only

when there is work in those spaces.

SCP's are OSHA people and they pay more attention to the OSHA regulations. OSHA, in its Subpart B section on "Maintenance of Safe Conditions" merely tells us to check certified spaces "As often as necessary."

Company procedures usually follow the NFPA's lead, but that daily check may not be enough. Some jobs, like repairs to a gasoline barge, are so dangerous that the SCP should check spaces often each day, not just once in the morning. How often? That's up to the Competent Person's good judgment. Some factors to consider: the last product, the type of vessel, the types of repairs and what subcontractors are doing in the work area.

Congrats to **Donald Gamble** for winning last month's quiz and a \$25 gift card!

Last Month's Quiz:

Q: 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?

A: Ventilate the tank until there is less than 15 ppm of diesel and then post it safe for entry.

This Month's Question:

Rumors we hear at the water cooler are referred to as "scuttlebutt." What is the nautical origin of the term "scuttlebutt?"

Submit your answers to newsletter@soundtestinginc.com before November 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.