



# SCP TRIBUNE<sup>©</sup>

## Capturing Chrome

Note the TIG-welder in the photo. He's out on the process deck. Not nearly as much fume as stick-weld. So, no need for that irritating ventilation, right?

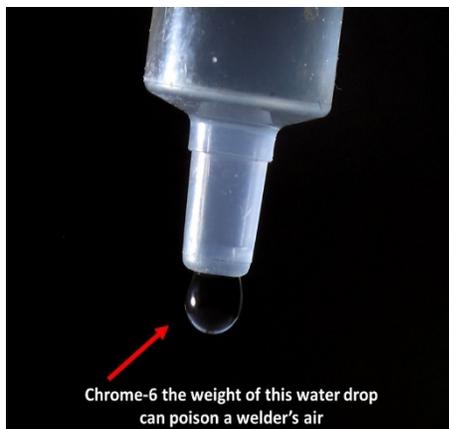


TIG Welding Stainless Pipe

Hold on! He's welding stainless! And stainless is stainless because it has chromium. And when the welder cooks off chromium, it's dangerous because breathing chrome-6...the most poisonous kind...causes cancer. It is supremely toxic. So toxic, says OSHA, a "safe" level means less

than 5 micrograms per cubic meter of workplace air. (A microgram? Just tiny. This drop of water (note image below) weighs about 50,000 micrograms.)

Suppose we're trying to protect the welder and a dozen nearby workers from chromium fume. Assume also that the total process-deck airspace is, say, 100,000 gallons. Let's do some arithmetic. How much chrome-6 (the most toxic kind) would it take to poison process-deck workers?



## TRAINING SCP CLASSES

### Full 3-Day Courses

- JAN 22-24 @ Anchorage, AK
- JAN 29-31 @ Port Angeles
- FEB 5-7 @ SSC\*
- FEB 18-20 @ Bremerton
- MAR 4-6 @ SSC\*
- APR 1-3 @ SSC\*

### 1-Day Update Courses

- JAN 24 @ Anchorage, AK
- JAN 30 @ Port Angeles
- FEB 6 @ SSC\*
- FEB 12 @ Fishermen's Terminal
- FEB 19 @ Bremerton
- MAR 5 @ SSC\*
- MAR 12 @ Fishermen's Terminal
- APR 2 @ SSC\*
- APR 9 @ Fishermen's Terminal

### DIRECTIONS:

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

Nordby Conference Room

\*SSC: *Georgetown* Campus very close to I-5, Michigan St. Exit, straight to Corson Ave. S.

#### **OSHA 10 Maritime:**

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.

## Capturing Chrome, Cont.

That 100,000 gallons equals about 400 cubic meters. (Each cubic meter has ~250 gallons.)



Suction Duct Captures Chrome Fume

So we're only allowed 2,000 micrograms (5 for each cubic meter...) in the process deck air. You can't believe what a tiny amount of chromium gets us in trouble!

So if the welder cooked off chrome-6 the weight of that raindrop he would endanger not just his nearby friends, but also everyone on the vessel.

It's clear we must keep that chrome fume from workers' lungs. How? Ventilation, of course. But, asks the Competent Person, what sort? Just turn on the vessel's installed air supply? True, that would give you an air-change in an hour or so. But during that hour workers will breathe that chrome.

Wouldn't it be better to capture and control the chrome fume completely at its source? Of course, and the only tool for toxic capture is suction (not pressure...) ventilation. When Don started as Todd Shipyard Chemist in 1976, every welder was in daily touch with the Temporary Ventilation Department. Before he struck an arc, a length of not-very-flexible 3-inch metal duct was lowered to his work. It took effort to wrestle the duct into position. But there it stayed, above the arc, sucking up the weld smoke and keeping the welder healthy.

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## Cheryl's Grommets



Many years ago, Don's friend, Foss Ship Yard boilermaker Clarence LaFontaine, asked an unusual question: "Where can I order some cotton grommets??" (Everyone knew diesel and bunker fuel, gasoline and other hydrocarbons degrade the gasket material around a manway's threaded studs. The resulting fuel leaks at the manway could be avoided when the boilermaker put grommet material around each stud before securing it with a washer and tightened nut.)

Why cotton? It's ancient knowledge: hydrocarbons don't degrade cotton. But cotton grommets were not to be had. The only source was out of business.

Stymied, Clarence finally put the question before the **Authority of Last Resort**: His Mom.

Mrs. La Fontaine, a member of the Colville Nation, had the best solution: Make those grommets, of course. Clarence and his Mom designed the manufacturing process and so was born COHO MARINE, grommet-makers extraordinaire.



## Cheryl's Own, Cont.

Years afterward Clarence sold COHO (and the grommets..) to Don's wife Cheryl. And even today the industry's premier Cotton Grommets, made locally, are sold around the world from Sound Testing's office in West Seattle. (Trump has yet to put a tariff on them...)

With Paul Newman (of "Newman's Own") as her role model, Cheryl donates proceeds to various nonprofits, from Martin DePorres Men's Shelter to Mary's Place to the Seattle Maritime School.

And that's how to this day Mrs. LaFontaine's craft is making fuel tanks tight and the world a slightly better place.

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## It's Time to Party!

**We're celebrating Don's 75<sup>th</sup> Birthday and Retirement!**

(Feb 15th is the target date for Don's (sort of...) retirement....We'll see...)

Join us on February 15th. Please RSVP today!  
<https://donsly.eventbrite.com> or just give us a call at  
206-932-0206.



Don recently found this historical photo hanging on the wall at Vigor Shipyard. A 1976 ladder with the Chemist aboard.

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Congratulations to **Joe Greinier** of **Evening Star Fisheries** winner of Last Month's quiz.

Honorable Mentions: Bryan Watts, John Richards, Michael Coates, Terry Glimm, Doug Vossbrink, Glenn Dudley, Ryan Armstrong, Chuck Shaw, John Trimble, Jack Hagey, Richard Chalker, Timothy Brorson, Amanda Dayton

**Q:** Rushing off to work, Rudolph, Communist Director of the KGB, calls his wife: "Ivanka! Quick! My longest overcoat! It's a downpour!" Ivanka replies, "Dearest Rudolph! It's only sleeting. Your regular coat will be fine." Rudolph: "Silly woman! It's a driving rainstorm!" "I see only a little sleet." "It's rain!" "Sleet!" "Rain!" Exasperated, Rudolph silences Ivanka by declaring: **RUDOLPH** the **RED** knows rain, Dear!"

**January's Question:** The lube oil line is full of inert gas. But the Chemist won't allow welding for fear the dripping crack might spread. "No Problem!" says the Port Engineer.  
"We'll just \_ \_ \_ \_ it shut and make a pass."

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

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Return Service Requested

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