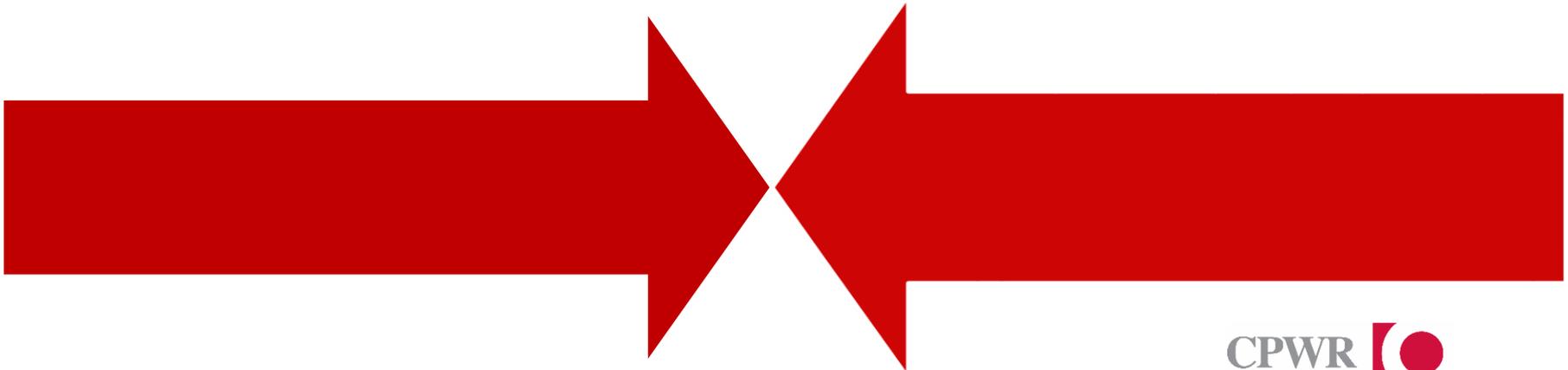




TRU-Net:
Trainers & Researchers United Network

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Executive Director

March 30, 2017
NIEHS WETP Workshop





TRU-Net: Trainers & Researchers United Network

Purpose:

Connecting Training and Research to advance r2p by formalizing the link between safety and health researchers and trainers in order to give both groups ready access to each other's experience and expertise.

NIOSH's National
Construction Center

One of the largest construction
safety & health training systems

Goals

Improve the quality and relevance of health and safety research and advance the use of research-based solutions in the field by:

- ❑ Expanding the role of trainers and trainees in research.
- ❑ Encouraging trainers to identify existing and emerging safety and health concerns (**p2r**).
- ❑ Raising awareness and supporting adoption of research findings (**r2p**).

TRU-Net - Informal & Formal Components

Formal: Contributing to & Assisting with Research

Informal: Online Forum for Trainers & Researchers

Online Forum Purpose

- Ask questions, suggest research ideas, find out about new research, training, and ways to become involved

Online Forum Developments

- Surveyed trainers on use of forum
- Revised the Forum to address trainer concerns, increase use, and expand reach
- Re-launched and promoting participation - emails announcing posts, new materials for trainers, outreach to researchers

[forum home](#) » [your input needed](#)

Support for upcoming sampling of nano-enabled coatings

CPWR is measuring exposure to man-made nanoparticles and would like your expert opinion, particularly painters and carpenters. We've already looked at nanoparticle exposure while cutting a smog-eating roofing tile in a



controlled chamber (see photo).

In two weeks, we will test wood coatings that contain nanoparticles. We plan to measure exposure during initial spray application and during electric sanding once the coatings have dried.

Please follow these steps if you're willing to help:

1. Click the links below to check out the products on our website.
2. Read the questions below.
3. Share your thoughts on TruNet by clicking "add new comment."

[Defy Extreme Clear Wood Stain](#)

[Seal-Once™ Waterproof Wood Protector](#)

Your input will make our experiment as realistic as possible. All thoughts are welcome, but please consider the following:

1. What type of wooden structure would you use to realistically apply these coatings in the chamber shown in the photo?

Comments

 Add New Comment

Nano Coatings

[Permalink](#)

Submitted by [Gary Von Behren](#) on Wednesday, 10/12/2014 - 11:44am

Both products seem to be primarily for exterior work. I would probably mock up a fence and deck for the project. I would use a combination of cedar and treated lumber. I would also pre-coat some of the lumber to see what hazards are produced when sawing and sanding. Normally on an exterior jobs like decks, fences and siding we would use a garden sprayer depending upon the viscosity of the material and overspray concerns. If the material is thick and we choose to spray it would most likely be an airless unit. Airless spray has it's own hazard such as but not limited to: atomized particles, injection wounds, travel distance of atomized particules to surrounding area and the possibility of working in containment. If products such as these are used in re-work the old coatings usually need to be removed. Usually removal is done with chemical removers and then pressured washed then sanded. Large area decks are usually sanded by floor sanders (large belt sanders) For smaller areas small belts sanders and palm sanders are used. Hand, eye and respiratory protection are advised. (You will probably want a "TYVEK" on to keep the potentially toxic dusts off) The one coating mentioned being derived from aliphatic polyurethane which I would then suspect isocyanates. We only have filtration down to .3 microns, if you produce smaller particulate sizes than that you may want to consider SARs.

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reply

Great comments, Gary!

[Permalink](#)

Submitted by [Bruce Lippy](#) on Wednesday, 10/12/2014 - 5:04pm

Gary, thanks so much for your responses to our questions. They were quite timely. We reviewed them in a project conference call today. We are going to purchase a Graco Magnum X-5 airless sprayer to apply the coating and a belt sander, as you recommended, to approximate reworking the wood for another application.

Do you have a grit recommendation for the sandpaper we should use?

Also, what has been your experience with dust capture techniques with belt sanders? Do the bags work? What about local exhaust ventilation from a vacuum?

Thanks so much. You have helped us a great deal. Regards, Bruce Lippy

Trainer Experiences

Trainers share their experiences with safety and health hazards early in their careers.

Not the Happiest Place on Earth

I was fortunate to work on the Disney Aulani Resort on the westside of Oahu. On this occasion I was assigned to work on an underground crew running conduit for the feeders that tied into the utility. The day's task was to pick up four 4 inch pvc conduit and tie them into the next handpull box. The trench we were in was 16 feet deep in type C soil. The trench was roughly 60 feet long and rose up to 4 feet deep over the course of the trench. The entire length of the trench was completely unshored and unsloped. According to the foreman there was no time to p

[Read more](#)

Fork lift propane leak

Its ok just go back to work. That's what my supervisor told be when I told him I smelled mercaptan. We were using a propane powered forklift inside our shop while building wooden burrial boxes. I was driving the forklift when I smelled the mercaptan and told my supervisor. He called a mechanic in the check the lift. After the mechanic had finished the inspection he said the lift was so old that it was saturated with the odorant. I was then told to ignore the smell.

[Read more](#) [1 comment](#)

Shaky ground

Shaky Ground

As an apprentice I was told to get on the scaffold and receive tubs for an apartment building that was under construction. First I was told to remove the cross bars from the third floor scaffolding. Then I was told to get a harness. Strange as I look back, I thought maybe put the harness on and mount my yoyo to a structural beam first. Well I had no idea that I should check with scaffold guys first. So off I went to do my tasks.

[Read more](#)

Formal: New Research

- Work with researchers, review and field surveys, help interpret results, and evaluate new materials, tools, and work practices

Noise Project

- Testing approach, reach and document research protocol
- Gathering information on awareness of the hazard, training and challenges, and use of controls

NOISE  

75%

of ALL CONSTRUCTION WORKERS are exposed over the NIOSH recommended exposure limit



Source: The Construction Chart Book, p. 33, chart 33f, CPWR.
<http://www.cpw.com/sites/default/files/publications/CB%20page%2033.pdf>

CPWR  THE CENTER FOR CONSTRUCTION RESEARCH AND TRAINING

CPWR 

TRU-Net – Formal Noise Research

Trainer Survey

- 9 unions; 1,200 trainers; 21% response rate
- Analyzed and shared results with Trainers, NIOSH and OSHA

Trainer Support -- Workers Survey

- 7 Unions; 49 Trainers; 5,674 surveys distributed
- 4,195 completed surveys/74% response rate

TRU-Net: Noise Research

Contribution to r2p & p2r

- Developing new noise training program & contest on use of new NIOSH Noise App
- Support a proposed NIOSH Study on Noise and the Buy Quiet effort
- Provide information for an OSHA RFI on Noise (OSHA's regulatory agenda)

