

**From:** Waggoner, Larry O  
**Sent:** Thursday, August 24, 2006 2:19 PM  
**Subject:** ALARA Center Activities for Week of August 21, 2006

**Attachments:** 2006-RL-HNF-0032.pdf

Visit our Website at [www.hanford.gov/rl/?page=974&parent=973](http://www.hanford.gov/rl/?page=974&parent=973)

1. Forwarded an invitation from Canberra to attend a Seminar in Richland on August 29 at the Red Lion Motel. Seminar will include discussion of the Canberra systems and new instruments/software packages. Contact [jbarstow@canberra.com](mailto:jbarstow@canberra.com) if you're interested in attending this presentation. Forwarded info on glovebags and containment tents to Energy Northwest Radcon. SWSD called wanting info on Instacote polyurea spray coating. Recommended he talk to Rick Largent from Master-Lee at 943-2949 and look at [www.instacote.com](http://www.instacote.com). Loaned SWSD ALARA Chairperson three Hex-Armor gloves to evaluate. We are expecting a shipment of the 10 of the most popular Hex-Armor glove styles that we can pass around for evaluation. We received several calls from managers and workers telling what a great video clip on demonstrating the puncture and cut resistance there is on the Hex-Armor website. See [www.hexarmor.com](http://www.hexarmor.com).

2. Provided recommendations to FFTF engineer concerning the venting and shielding of 55 gallon drums that will contain HEPA filters removed from their hot cells. One recommendation was to have SWSD personnel pre-punch Nuc-Fil filters into their drum lids before they're installed. If they purchase drums with threaded connections, they could remove the plug and replace it with a threaded HEPA filter. Forwarded info on companies that sell shielded drums or temporary shielding for the outside of drums to FFTF. Loaned the Desco FX surface shrouded tool to IH person from Closure Services to show workers how to scabble concrete and control dust emissions. Gave 40 CFM filter and sleeve to WCH engineer. They are preparing to add grout to a 1,000 gallon underground tank and want to vent the displaced air through a HEPA filter. The filter had been donated to the ALARA Center after the D&D on Building 233-S was complete. They also borrowed a 5 gallon poly bottle and filter assembly to show their engineering personnel another product that could be used for venting or collecting liquids.

3. Met with Chris Helm from Cellular Bioengineering Inc concerning their strippable decontamination product that can be used to decontaminate surfaces. The product is similar to strippable decontamination paint but dries clear, seems to be more easily removed, doesn't smell and may collect more contamination. Recommended their company make a presentation at the Waste Management Symposium in Tucson, AZ and the Health Physics Society Mid-year meeting in Knoxville, TN. The company will return to Hanford to talk more about decontamination techniques for gloveboxes and D&D of buildings. If the product lives up to their claims, it seems it would make decontamination a more viable alternative when considering options on whether a piece of equipment, component or building can be decontaminated. Provided him copies of handouts on contamination control techniques and use of fixatives. Call Chris at (808) 949-2208, ext 128 or cell (808) 284-6502. PFP indicated an interest in using this product during future decontamination of gloveboxes. They will discuss with PNNL personnel responsible for bringing new technology on site to see if testing can be performed. The ALARA Center will provide assistance.

4. Loaned CH2M Radcon a 5 gallon poly bottle and filter assembly to use during spill drills for HPTs. Received call for assistance from M. Minette from PFP. They are trying to decontaminate a glove box that has contamination imbedded in several layers of paint. Recommend he call the 3-M rep, J. Stout at (503) 757-1389 and look at 3-M Products at <http://www.3m.com/product/>. Also recommended purchasing a swirl-off tool which is supposed to remove paint twice as fast as other tools. See at <http://www.swirloff.com/>.

Also recommended reading reports at <http://www.osti.gov/bridge/servlets/purl/756981-WT1mwP/webviewable/756981.PDF>, <http://www.paintshaver.com/>, and <http://www.osti.gov/bridge/servlets/purl/760117-HSVtrA/webviewable/760117.PDF>

5. Met with D. Gunderson from 222-S labs concerning the removal of a large lead cave that may be contaminated due to an americium spill that occurred years ago. The cave contains many lead bricks that have to be removed one-at-a-time. After examining photos I recommended they use a containment tent manufactured by Inflatable Abatements. The framework is made from electrical conduit and the containment is then placed inside the framework. Air is used to inflate the tent. As it rises, tieoffs are secured around the framework. The zipper door is then cut and the containment can now be entered. Total time to inflate the tent would be less than 10 minutes. Once it is up, they will cut a section out of the floor and wall the size of the lead cave. Two or three workers can then carry the containment into the room and tape it around the cave. Total cost is a few hundred dollars. Gave them brochures and a videotape to show the workers to see if they're interested in using an Inflatable Abatement. These tents have been used at Building 325 and WRAP and the workers were very impressed with how easy they were to install.

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#### FOR YOUR INFORMATION

1. 3M and Norco are sponsoring a 1/2 day seminar on protection measures for welding and weld preparation. There is no charge for this training. It will be September 14 from 9:00 to 1:00 at the AmeriSuites Hotel next to TRAC in Pasco. Register by Sept 5 by phoning (509) 543-2022 or email at [benjaming@norco-inc.com](mailto:benjaming@norco-inc.com). Class will cover Hazards, fume litigation, respiratory plans, respirators, and head and face protection.

2. In case you missed it: Attached is a Lesson Learned on "Respiratory Protection Equipment Recurring Issues". Over the last 13 months there have been several incidents involving respiratory protection. 40% of the incidents concerned inadequate assembly and verification of the respiratory equipment that led to dislodging the filters and disconnection of the hose. 60% failed due to worker's bumping into equipment. Please read the attachment if you work with respiratory equipment.

3. Last week's ALARA Center Report showed photos of "transparent" breathable protective clothing that was being used at Oak Ridge by a few individuals. We appreciate Myra Long for sharing the photos with us and it appears that each Site is taking a close look at what's being worn and whether it will prevent workers from becoming contaminated. Dave Andrews reports that T-Plant did a test with fluorescent powder about two weeks ago to see if the powder would penetrate OREX and the cotton-blend launderable protective clothing normally worn. The clothing was placed on a table and a small amount of powder was placed on the fabric. A worker stroked the area 15 times applying a lot of pressure with his finger to see if he could push the powder through the fabric. The fabric was then lifted and a blacklight was used to detect the presence of the fluorescent powder. Equal "trace" amounts of the powder were found under the OREX and new and used sets of the cotton-blend protective clothing. Each product had a small amount and T plant intends to do further testing with cocoa, non-dairy creamer and very fine dirt. Call Dave at 373-0815 for more info. Henry Doolittle, a field engineer forwarded the following websites that contain information about some of the protective clothing used by WCH.

<http://www.kcprofessional.com/us/download/Technical%20Data%20Sheets/A30%20SS.pdf>

<http://www.kcprofessional.com/us/Resource-Center/Technical-Data-Sheets/Technical-data-sheets.asp>

[http://www2.dupont.com/Personal\\_Protection/en\\_US/](http://www2.dupont.com/Personal_Protection/en_US/)

<http://www.orex.com/>

4. Found this report on Rockwell International Hot Lab D&D Report at <http://www.osti.gov/bridge/servlets/purl/762749-ggPxo1/webviewable/762749.pdf> It contains a lot of info about the ALARA Protective Measures and photos of the equipment used. For a report on the electrochemical decon of painted and heavily corroded metals, see <http://www.osti.gov/bridge/servlets/purl/760117-HSVtrA/webviewable/760117.PDF>