

**From:** Eby, Jerald L

**Sent:** Monday, December 18, 2006 7:46 AM

**Subject:** ALARA Center Activities for Week of December 11, 2006

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

1. Conducted PHMC ALARA Council Meeting for December, 2006. Conducted tour of the ALARA Center for Fluor's ES&H manager and his staff. Forwarded change request to Safety to add several models of the Hex Armor gloves to HNF-PRAC-30471 on Personal Protective Equipment. Made presentation at the WSCF safety meeting on cut and puncture resistant gloves. Conducted training on Basic Containment Installation and Certification for five CH2M Hill personnel. ES&H Vice President held his staff meeting at the ALARA Center. A number of his folks took a short tour of the Center.

2. The PFP Process Equipment Removal team and Cellular Bioengineering Inc. (808-772-7543) conducted an cold (non-rad) test of the Decon 80 and Decon 188 polymer strip coats for use in gloveboxes at the Center. The test established that these products both work well in glove box applications from an ergonomics standpoint. The polymer strip coat is very thin (minimal waste generation), fast to apply and remove, and peels in long sheets so it is better for worker ergonomics than latex peels. The Decon 188 is a water based polymer had a slight preference with the operators using both products.

The product has other benefits for use in fissile plants since it does not ball up like current peel or strippable coatings. The next step in testing should be to determine the effectiveness (decontamination factor) in a contaminated glove box. For further information, contact Michael Minette, Project Manager 232-Z, Process Equipment Removal and Lay-up Plutonium Finishing Plant Phone 373-9677 or Pager 85-4354.

3. Two CH2M Hill RadCon Engineers visited the Center looking for a means of decon and fixing loose surface contamination on a sample holder used on an x-ray machine for determining sample quantity. The Center loaned them a bottle of Tagaway, website: [www.tagaway.com](http://www.tagaway.com), a product that is sold by Columbia Basin Hotsy, website: [www.cbhotsy.com](http://www.cbhotsy.com) or 943-6022 in Richland. Also gave them 500 mls bottle of PBS, a fixative sold by Bartlett Services, Inc, website: [www.bartlettinc.com](http://www.bartlettinc.com).

4. During the training one student discussed a containment they just installed at 222-S labs. The containment did not have any good way for RCTs to get their smear surveys out of the work section. Loaned them a glue-on swipe box and a quart of HH-66 Vinyl Cement. Note: The ALARA Center usually has a small number of glue-on devices to add to containments if they weren't installed during fabrication. These include glue-on sleeves from 2" to 12" diameter, 24" diameter, 24" square, tool pockets, Velcro strap hose holders, inlet filter pockets for adding make-up air and swipe boxes. These devices are usually shaped like a "top hat". The flat portion (or brim of the top hat) is glued to the containment. A hole is then cut inside the glue-on device and within minutes the worker has modified the containment to better suit the work. Facilities/contractors who do a lot of work in containments are encouraged to develop their own supply of glue and glue-on devices rather than rely on the ALARA Center. Recommend contacting Lanc's Industries (425-823-6634) for the glue and glue-on devices or the PFP Plastic Shop at 373-2668.

5. Discussed the work practices and machines built by E.H. Wach's Company with the Bill Pence, the sales rep. See [www.wachsco.com](http://www.wachsco.com). Wachs has built some very special machines for cutting open old chemical warfare munitions. We will be meeting with personnel from the Army Depot in Umatilla, OR in January to discuss the "contamination control work practices" used when workers are "demilitarizing" these munitions.

A call from Los Alamos RadCon manager on vegetation survey program. Forwarded the individual to Ray Johnson, FH.

6. Two personnel from WCH visited the Center, gathering information on containments and glove bags. Center gave them a 40 CFM HEPA filter (excessed) and a Lancs catalog.

7. Mike Schmoltdt, who is the new Site Technical Authority on Respiratory Protection, is setting up a display at the Center of some respiratory equipment. His office has been moved to 2420 Stevens and he can be reached at 373-5116. The Center will have future information from Mike in the Center Activity Report.

## FOR YOUR INFORMATION

1. The 2007 ISOE International ALARA Symposium & ERPI Radiation Protection Conference is scheduled for January 15-17, 2007 in Fort Lauderdale, FL. Cost is \$550 for non ISOE members To register, go to [www.ToPlanAhead.com](http://www.ToPlanAhead.com). The user name is "tpa" and the password is "meeting". See <http://www.nea.fr/html/jointproj/isoe.html> to learn about ISOE.

2. The American Glove box Society (AGS) Annual Conference & Expo 2007 is scheduled for July 23-25, 2007 at Lake Tahoe, NV. For additional information and registration, see web site: [www.gloveboxsociety.org](http://www.gloveboxsociety.org).

3. Lesson ID: 2006-NTC-SQA-0001

Originator: Charles Carson ES&H Specialist DOE National Training Center Statement: The potential for Exert ional Heat Illness in physically fit young people performing vigorous prolonged physical activities in a hot dry climate.

Discussion: On 15 June 2006, while competing in the Department of Energy's 2006 SPOTC Super Team Event at the National Training Center Live Fire Range on Kirtland Air Force Base, Albuquerque, New Mexico, three competitors suffered from Exert ional Heat Illness.

One competitor from Savannah River Site was the most seriously ill. He was ultimately diagnosed with Rhabdomyolysis, requiring hospitalization, and surgical intervention to correct the accompanying Compartment Syndrome. The two other competitors from PANTEX Plant exhibited symptoms of heat exhaustion, suffered much milder consequences, and were treated and released the same day.

Twelve teams comprising sixty competitors completed the Super Team Event prior to the Savannah River Site (SRS) Team without any competitors requiring treatment for heat illness. Competition officials believed the SRS competitor illness to be an isolated occurrence, and the Chief Range Officer decided to continue the Super Team Event while the SRS competitor received treatment from on-site paramedics. After SRS, three more teams completed the event without incident. The PANTEX Team was the last team to attempt the event.

The PANTEX Team and the SRS Team had been in close competition for first place for the duration of the four-day SPOTC, and team members from both teams were determined to push themselves as hard and as far as they could to prevail. The Class B Accident Investigation Board Report noted that "...it was no coincidence that all three heat illness cases came from these two teams."

To the recollection of SPOTC organizers and planners, in the more than 20 years of SPOTC no occurrences of Exert ional Heat Illness had ever been reported.

4. Below is a link to the December 2006 River Corridor Closure Contractor (RCCC) Project Monthly Lessons Learned Bulletin:

[http://www.washingtonclosure.com/about/safety/docs/Lessons\\_Learned\\_Monthly\\_Bulletin\\_December\\_2006.doc](http://www.washingtonclosure.com/about/safety/docs/Lessons_Learned_Monthly_Bulletin_December_2006.doc)

The December bulletin features excerpts from four (4) separate *Lessons Learned* or safety-related articles with the following titles:

- List of Holiday Safety Tips from CSPC and AARP
- Freeze Protection during Extreme Temperature Excursions
- Inclement Weather Leads to Multiple Falls
- Be Aware of Hidden Hazards! Injury Occurs When Employee Steps on Nail Hidden within Insulation Panel

5. The American Conference of Governmental Hygienists publish several manuals that concern the conduct of work. The one we use the most is "Industrial Ventilation, A Manual of Recommended Practice". A new revision, #26, will be issued in early 2007. Recommend purchasing this manual if you work with HEPA filtered ventilation. Cost is \$109.95. See [www.acgih.org/store/ProductDetail.cfm?id=1905&printable=yes](http://www.acgih.org/store/ProductDetail.cfm?id=1905&printable=yes) There is also a ventilation workbook you can purchase at the same store that teaches how to use ventilation. Cost for the workbook is <\$60.00. They also advertise they have two more manuals that may help. These are: "Industrial Ventilation, A Manual of Recommended Practice for Operation and Maintenance" (\$99.95), and "Handbook of Ventilation for Contaminant Control" (\$79.95

#### **VENDOR INFORMATION**

Quest Environmental and Safety Products, will be at the Center to present some of their products, January 23rd, 2007, 9:00 to 1:00. The company was involved with the Fernald DOE D&D project.

#### **Jerry Eby**

Fluor Hanford ALARA Center of Technology  
Technology  
509-372-8961 fax 509-376-7717

#### **Larry Waggoner**

Fluor Hanford ALARA Center of  
509-376-0818 fax 509-376-7717