

From: Eby, Jerald L

Sent: Friday, July 06, 2007 2:39 PM

Subject: ALARA Center Activities for the Weeks of June 25th and July 2, 2007

Attachments: Drum Ring Tool.JPG; Purex Rail Car.jpg; June07 Activity Report.pdf; HSS Safety Bulletin 2007-03 Lead Safety Awareness.pdf

Visit our web site at: www.hanford.gov/rl/?page=974&parent=0. SRS ALARA Center web site is available at: www.irmv35.srs.gov/general/program/alara/

This report will cover two weeks, June 25th and July 2, 2007 because of the holiday.

1. Groundwater personnel visited the Center looking for a camera system to look inside tank # CX72. They have the availability to enter the tank through a small hole in a plywood cover. Showed the General Electric Inspection Technologies, web site: www.geinspectionstechnologies.com, unit that the Center has on display. Gave them the local reps business card and contact information. Also suggested they contact Dan Neibuhr, CH2M Hill for information on their use of remote cameras in the Farms. Dan has been associated with a number of projects using remote cameras for inspections and other tasks.
2. (PPE) Received 10 sets of Q-Gard Comfortwear from Quest Environmental and Safety. See www.questsafty.com. They claim the clothing is strong and has been reinforced in high stress areas; shoulders, crotch, and seat. It is reported to breathe as well or better than OREX. Contacted CH2M ALARA Coordinator and they will evaluate. Contacted Neptune Research looking for a patching system that could be used to seal holes in piping or waste drums. This company sells a corrosion protection tape coating system that may have application in plugging leaks in drums or piping. See www.neptuneresearch.com
3. Savannah River ALARA Center called requesting info on what tools are used a Hanford to loosen the bolted drum ring on waste drums so they can be opened easily. Called facilities and some use a pneumatic air ratchet and if that doesn't work, they cut the bolt with a reciprocating hack saw. Found a website at http://www.magbit.com/saws_732salvage_metal_blades.php that sells heavy-duty saw blades designed for demolition work. Forwarded website to WCH and Fluor facilities that use these saws. Once the waste drum bolts are cut, T Plant then uses an expanding tool they developed to remove the clamping ring from the waste drum. See Attached Photo. Contact Dave Andrews at (509) 373-0815 for more info on this tool.
4. The Center gave three classes at HAMMER facility for the RCT/HPT Continuing Training on "Radiological Containments". In the classes were seven students from CH2M Hill and fifteen students from Fluor Hanford. PFP personnel have started mock-up training at the ALARA Center for work on the HC 13 MD glove box at PFP. The students are preparing to remove attachments to the glove box and remove material inside as part of the D&D at PFP. The ALARA Center holds a Basic Glove Bag class (#020729). Two classes are scheduled in July, the 17th and the 24th. One space is open on each day. If you have an installer and/or certifier, the class is required. Contact Jerry at 372-8961 for further information.
5. Provided vender information and photos of the fog cannon to Jay Decker of Washington Closure. Washington Closure is considering demolition options for a chemical storage tank at 100 BC.
6. The monthly D&D ZAC meeting was held at the Center on June 28. Twelve personnel were present and all were given a short tour of the ALARA Center before the meeting. The Center has a meeting area, Room 222 at 2101M, that has space for ~ 30 people. Please contact Jerry at 372-8961 for your next meeting.

7. The monthly Site ALARA Chair meeting has been moved from Thursday, July 5th, to the following Thursday, July 12th at 2420 Steven because of the 4th of July holiday. Hope to see everyone at 2:00, 2420 Stevens, room 126 on July 12th.
8. Received inquiry about a product called Dsolvtech from M. Long at Oak Ridge. This is a new product sold by the Unitech laundry made from dissolvable Poly Vinyl Alcohol (PVA) material. They are making scrub clothing and bags from the PVA material. We have scheduled a laundry tour for July 12 and will find out more info and determine if there is any interest by Hanford personnel.
9. Responded to questions from C. Armstrong at SWSD on the design of a scoop needed to capture airborne contamination that could result when corroded drums are removed from burial grounds. Recommended a scoop with a narrow slot that would draw a suction at the top of the drum. Recommended they keep the hose as short as practical and keep it straight without sharp bends. In addition, recommended they look at the website www.nfsrps.com at the FM-48 HEPA filtered vent unit and accessories such as in-line prefilter. The FM-48 draws 1,000 CFM, runs on 110 volts and is certified by Underwriter's Lab. Suggested that SWSD mockup the system and measure the airflow to determine if capture velocity is present across the top of the drum.

D&D WORLD

Received a message from Chuck Negin of Project Enhancement Corp., Germantown, MD, looking for some photos or a video of glove box section separation with poly sleeve and horsetails. He had previously contacted Mike Minette, at PFP, and was told the Center had some information. Forwarded information from the SRS ALARA Center monthly report on a sleeving crimping tool, Dover Advance Crimping System, see attached report. Watch a video on how this works at www.ilcdover.com. Forwarded info to C. Negin concerning bag outs, and glove box dismantling. See <http://www.osti.gov/bridge/servlets/purl/266621-yN95fP/webviewable/266621.pdf> which shows how fluorescent powder is used to test bagout procedures. I have info on this powder if this test appeals to you. See <http://www.osti.gov/bridge/servlets/purl/766299-dhJ6FV/webviewable/766299.pdf>. This report tells how to predict worker exposure if the glove box leaks contamination. See <http://www.osti.gov/bridge/servlets/purl/781642-yQMTqK/webviewable/781642.PDF> Found this link from a report in 1993 <http://www.osti.gov/bridge/servlets/purl/10177019-PT6rwM/10177019.PDF> (Dismantling) See <http://www.wmsym.org/abstracts/2003/pdfs/39.pdf>, <http://www.osti.gov/bridge/servlets/purl/761551-R608Eh/webviewable/761551.pdf>, <http://www.wmsym.org/Abstracts/2002/Proceedings/14/246.pdf>, and <http://www.osti.gov/bridge/servlets/purl/198694-ndXm36/webviewable/198694.pdf>, on dismantling Gloveboxes.

FOR YOUR INFORMATION

1. DOE has funded a summer intern to construct a website for D&D personnel. Alex Henao has an office in Room 224 at the ALARA Center and his phone number is 373-7556. Alex is a Junior at Florida International University studying chemistry. He will also be working on improving the D&D Hotline being advertised through DOE and the Energy Facilities Contractors Group (EFCOG).
2. (D&D) Contacted Linda Gaudet at Americover to discuss plastic sheeting that was purchased by D&D personnel. D&D thought they were purchasing Bear-acade "contact" paper that could be used to cover complex areas before work starts to keep them from becoming contaminated. Plan was to quickly cover the work area before starting a job and peel it up after the job was complete. D&D received a plastic film that wasn't sticky, was easily punctured, and attracted radon contamination. Apparently, the product received wasn't what D&D thought they were ordering. Talked to the company and looked at their website at www.americover.com. They sell a lot of fire retardant products that appear useful to companies doing D&D. They said they could make plastic static-free products that won't attract radon if

that's what the contractors want. So... recommend D&D personnel checkout their website so they can learn about the products and communicate with them when placing an order.

3. (Project M-91) Received call from engineering concerning Project M-91. This project involves the digging up of all waste buried before 1970 and separating it into low level and TRU waste. Part of the job will require removal of the railcars that were backed into an underground tunnel behind PUREX. Records reveal the train has 8 railcars containing very highly radioactive equipment that was used to process radioactive materials before the equipment failed. **Car #7 has the highest recorded dose rate of 25 Rem/h at a distance of 150'**. Found an old engineering study where eight different options were compared to determine how to dispose of the train. The preferred option of the eight was "to retrieve and process the equipment in the PUREX Plant in order to clean and close the railroad tunnel. The volume of mixed waste is reduced through mechanical processing and segregation, with the majority of the waste disposed of in a Low-Level Radioactive Burial Ground and TRU waste at WIPP." Attached is a copy of one of the railcars containing processing equipment. This project should be very interesting.

4. The American Nuclear Society is sponsoring a Topical meeting on Decommissioning, Decontamination and Reutilization in Chattanooga, TN on September 16-19. The preliminary program can be found at <http://www.ans.org/meetings/docs/2007/ddr07-prelim.pdf> Reading the titles suggests there should be some excellent presentations related to D&D work.

5. [Additional Work Planning Aspects Learned From the 105 Fission Product Trap](#) (Dated 6/27/07)

Lessons Learned Statement: To ensure that the work planning documents include appropriate work controls to minimize contamination spread and worker exposure, it is critical for the project work planning team to effectively consider and evaluate the source term(s) being disrupted, engineered ventilation controls and facility specific hazard controls associated with the planned work. If you have any questions regarding this Lessons Learned document, please call the contact identified in the document. Please share this information with others as appropriate. To view all RCCC Lessons Learned, please visit our external website: <http://www.washingtonclosure.com/about/safety/Lessons.html>. RCCC personnel can also view Lessons Learned on our intranet at: <http://wch.erc.rl.gov/sh/LESSONS/Lessons.htm>.

6. SRS monthly report has been attached to this report. There are a couple of items of interest.

7. (Lesson Learned) An incident occurred last week when air samples were taken during asbestos removal on the third floor of the Federal Building. Air samples showed the presence of asbestos fibers outside the posted boundaries. Work was secured. Investigation revealed the asbestos project contractor was using an unusual method for the final step in removing the asbestos fireproofing on steel beams. The contractor was using a machine that "blasted" the beam surface with tiny balls of dry ice carried in a stream of air. This "ice blast" method appears to have created a small breach in the containment and provided enough air pressure to overwhelm the negative air ventilation in the area where the ice blasting machine was used. A vent in the facility ductwork immediately behind the breach allowed some asbestos-containing dust to enter the ventilation system and escape into two rooms on the third floor. Blasting surfaces with dry ice pellets is an effective way to clean/decontaminate surfaces but airborne particulate has to be controlled. If you're considering using dry-ice, synthetic sponges, carbon dioxide, high pressure water or abrasive grit to clean or decontaminate surfaces, please remember this lesson and the actions needed to ensure any airborne particulate is captured.

8. Attached is a lessons Learned on Lead Safety Awareness. At Hanford we have locations where bare lead shielding is used in either temporary or permanent installations. For example, lead bricks are used to shielded radiation detectors to reduce the background radiation. These bricks can be wrapped in a protective material, painted or dipped in plastisol to reduce the chance that workers will get lead particles on their skin or clothing. One product that works well is Polymeric Barrier System (PBS) coating sold by Bartlett Services at web site: www.bartlettinc.com. See the ALARA Center for a sample, if you're not familiar with this product. In some facilities, bare lead shielding is part of the permanent plant shielding. The PBS works well at sealing the lead and stopping the oxidation that takes place over many years.

Recommend that facilities that have lead blankets or batts that have torn covers should patch the cover, install a bag over the existing shielding, or replace it.

VENDORS CORNER

1. Received a catalog from NEWAGE Industries, web site: <http://www.newageindustries.com/> at the Center. Looking for tygon or plastic tubing for peristaltic pumps or other uses, take a look at NEWAGE Industries.

2. NFSRPS (AEC Pharma) placed a new enclosure at the Center a couple of months ago. There recently been some interest in the unit. The following web site has information and the second web site has a photo gallery of the enclosures. <http://www.simplexstripdoors.com/crenclosures.htm> <http://www.simplexstripdoors.com/gallery.htm> NFSRPS web site is: www.rpsct.com and will have additional information on the product on the next web update. You can contact Ann Williams, 860-446-1889-office Ext: 273, 860-884-9172-cell, akwilliams@aecpharma.com, web site: www.aecpharma.com.

RESPIRATORY PROTECTION PROGRAM

The third vendor has started setting up his product display at the ALARA Center. The company, Scott, will complete the display in the next couple of weeks. Bullock and MSA already have their display completed at the Center. The idea of the display is to show the latest and best technology each company has available to show the workers at Hanford in respiratory protection. A fourth vendor, Bacou-Dalloz will be supplying their DELTA Suit- Anti-Contamination Suit, that is an encapsulating, one piece, single use, supplied air, positive pressure bubble suit. They advertise a Protection Factor of 2000 for the suit. Their display should be completed in about three weeks. Additional vendors are welcome.

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