

From: Waggoner, Larry O
Sent: Monday, January 24, 2005 6:59 AM
Subject: ALARA Center Activities for Week of January 17, 2005

Attachments: GLOVEBOX WINDOW CLEANING with pictures.doc; Data Sheet FEVDI Fixative LP4 01062005.doc; DSCN1836.JPG
Visit our Website at www.hanford.gov/alara/

1. Received call from INEEL requesting information about the D&D of Building 233-S and other facilities currently undergoing D&D. ALARA Center will coordinate a visit by 5 INEEL personnel and arrange discussions with the key players doing D&D at Hanford. The 233-S Final Report is at <http://198.232.211.23/pdwdocs/fsd0001/osti/2004/10044820.pdf> With Bartlett Nuclear Services permission, agreed to loan Energy Northwest the Bartlett High Volume Pump on display at the ALARA Center so they can use it for training. This peristaltic pump connects to a 440 volt power supply and pumps 127 gpm. See www.bartlettinc.com
2. Gave a 24" square HEPA filter to Central Plateau D&D group for filtering incoming air into a containment. This filter had been purchased at a Government Auction in Pasco for \$0.75. Attended brain-storming meeting at 200 Liquid Effluent Facility concerning problems with contamination spread during operations in the thin-film dryer room. When liquid effluent is processed, the particulate and debris are removed from the liquid and become a powder-like product that ends up in a waste drum. Occasionally, the drum is overfilled or the powder "puffs" when the drum is lowered to a conveyor belt. In addition, when the system is flushed, they have problems with a valve and material holdup in the system. They are evaluating installation of a "doughnut-shaped" ring around the drum to reduce contamination spread if it "puffs". This ring would have inlet holes and be connected to the HEPA vent system. They are also considering a round transition piece that would contain powder if the drum is overfilled. Provided them a videotape of the Kelly Decon System and recommended they contact T-Plant who has a new, but never used unit they are trying to give away. They are looking for a better way to decontaminate the thin-film dryer room.
3. Assisted PFP personnel trying to purchase HEPA filtered vacuum cleaners with variable flow control. Concern was whether the vacuum cleaner had been tested by a Nationally Recognized Testing Lab, which is an OSHA requirement. Determined that the Nilfisk GM-80 vacuum cleaner had been tested and was UL Approved. Received call from Radcon Engineer at INEEL concerning explosive demolition of smoke stacks. Referred him to H. Doolittle at BHI and lessons learned at www.fogging.com. Provided info to PFP engineer on shrink wrapping that could be used to seal gloveboxes being sent for burial. They will contact a local boat manufacturer who seals their boats in shrink wrap before transporting.
4. PFP personnel continue to use the ALARA Center gloveboxes for training. A representative of EAI trained workers on the work techniques using the RADPRO process. Provided info to CH2M on excess metal buildings used for refueling nuclear ships at Puget Sound Naval Shipyard. CH2M is evaluating installing these buildings over some of their valve transfer pits.

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FOR YOUR INFORMATION

1. The ALARA Center sponsors vendor demonstrations on a frequent basis as a way of introducing new technology and getting people who need new technology to talk to people that sell the technology. Last year, Safety and Supply arranged for several experts from the 3-M company to spend a day at the Center

showing their product lines. Larry Brist, a PFP engineer, overheard that 3-M had found a way to improve visibility in the canopies of jet aircraft using 3-M polishing discs to remove defects. They discussed whether this same process could be used to improve visibility in glovebox windows at PFP. The gloveboxes had windows where it was impossible to see through, making D&D operations very difficult. Larry Brist and Dave Bruce worked together with 3-M to develop the window cleaning process. The attachment is a 1 mega-bite file that describes the process and contains "before" and "after" photos. This process is being used at PFP and has saved many thousands of dollars over replacing the windows. Contact Larry Brist at 373-5992 or Dave Bruce at 372-2119 for more details. The 3-M Product Catalog can be found at <http://www.3m.com/product/index.jhtml> Recommend you make this web site a "favorite".

Dave Bruce also forwarded a 12 Mega-bite report with photos showing custom designed glovebox port covers to install temporary services and reduce the size of large ports to make them more worker-friendly. Due to the report's size, it is not included in this report. Contact the ALARA Center to get a copy of this report on a Compact Disc.

2. In December, the ALARA Center sponsored a demonstration of fixatives sold by the French Company FEVDI. Personnel attending the demo were impressed with these products and Waste Retrieval Operations is purchasing 180 pounds of the fixative LP-4 to spray on TRU waste drums being recovered from burial grounds. Contact Eric Tchermitcheff at 373-2609 for questions about this product or the LP-3 (similar to LP-4, but dries clear) or the ALCATUM (sprayed on LP-3 or LP-4, causing them to soften and able to be peeled off). [Info on the LP-4 fixative is attached.](#)

3. Received PFP's new hydraulic shear and stored it in the Mockup Training room. This blade plunging cutter will be used to size-reduce debris removed from the PRF Canyon and other PFP facilities. Mega-Tech and Patton Hydraulics had demonstrated the prototype of this shear last week for Tank Farms. It easily cut 6" piping that had 3" piping inside. See www.championresuetools.com The unit weighs about 500 pounds so will be hung from a crane or left in a stationary position.

4. Within the LPCS organization waste packages are routinely added to a burial box. The past practice was to lift the lid each time and add the waste package. The lids are heavy, awkward and this practice results in a pinch point and the potential for a back injury. Attached is a picture of a plastic cover with a zipper opening now being used to eliminate the need to lift the lid of the burial box. This solution was developed by the collaborative efforts of BU staff assigned to ETF dayshift operations. This group took ownership of the problem and developed an outstanding solution.

5. Began coordination of a Site visit by 6 personnel from INEEL who are coming to Hanford to look at D&D operations. They are particularly interested in Building 233-S, BHI's work in the 100 Areas, and what's being accomplished at PFP. Team will consist of an operator, a project engineer, two construction coordinators, a heavy equipment operator and 2 Radcon personnel. They will be on-site February 8-10.

VENDOR DEMONSTRATIONS

Safety & Supply has made arrangements for Dr. James Zeigler from DUPONT to visit Hanford on January 31. He is going to spend the morning with CH2M and will be at the ALARA Center from 1:00 to 4:00 to discuss protective clothing. Dr. Ziegler is the inventor of many of DuPont's chemical protective apparel fabrics including Tychem 7500, Tychem 9400, Tychem BR, Tychem LV, Tychem 10,000, and Tychem TK. He has particular expertise in protective apparel technology, industry regulations and standards, and on matters involving weapons of mass destruction. So if you're not 100% satisfied with your protective clothing, you should consider dropping by and meeting him. Eventually the temperature will rise and we'll be concerned about heat stress. Read about DUPONT Products at <http://personalprotection.dupont.com/en/index.shtml>

UPCOMING EVENTS

The 50th Annual Meeting of the Health Physics Society will be held in Spokane, WA this summer from July 10-14. Since the Columbia Chapter of the HPS is the host, many of our members will be involved in making it a success. The HPS Summer School will be held at Gonzaga University from July 5-8. 150 students from all over the World will attend this class. Bill Thieben from MJW Corp will be conducting a User's Group Meeting for their product line of Visual Survey Data System, Graphic Dosimetry Display and Interactive Video Tours . Parts of this technology are used by PNNL, BHI and CH2M.

If you're not a member of the Columbia Chapter this is a good time to join and get involved with this conference. It's an opportunity to rub elbows with the old-timers that wrote the books you studied in high school and college. Contact Joel Hoyt at 373-0239 for info.