

From: Waggoner, Larry O

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Subject: ALARA Center Activities for Weeks of November 13, 20 and 27, 2006

Attachments: K-29 D&D.doc; Aging Facility.doc; SOP15-69R3.pdf; Tell-Tales.htm; Utility Room 11-02-06004.JPG; Dyna fogger.doc; Corroded TRU Drum.JPG

Visit our Website at <http://www.hanford.gov/rl/?page=974&parent=973> This weekly report covers a three week period due to the short week at Thanksgiving.

1. Visited 200 Liquid Effluent Facility and made two presentations on cut and puncture resistant gloves. Provided tour and briefing to two BWXT personnel from Shippingport, PA who were onsite trying to learn information about containment tents. They purchase their glovebags from Fab-Ohio but need a vendor for containments and have decided to use Lanc's Industries. They came here to learn about containment design and the use of HEPA filtered ventilation. Provided a briefing, showed them what we have and looked at installed containments in Tank Farms.
2. Worked on a poster presentation for the 07 Waste Management Conference. Poster will be on the ALARA Center. Mike Schmoldt at 373-5116 has been chosen to be the new PHMC Technical Authority on Respiratory Protection. Joel Millsap has moved to Central Radcon and is the Program Manager for Radiological Release of Real Estate and can be reached at 376-3676.
3. Visited HAMMER Training Facility and watched a demonstration of hand-foggers made by Dynafog. Tom Haan from Waste Stabilization arranged for Encapsulation Technologies to demonstrate the Hurricane and the Mini- Pro foggers. There was a very positive response by operations personnel who indicated there were impressed with the amount of fog generated by this equipment. Plan is to purchase up to ten of these units for use in the burial grounds during the discovery and handling of corroded waste drums. See the attached report of the test results.
4. Gave tour of the ALARA Center to four WCH personnel who were very interested in the use of expandable foam, application of fixatives, and cutting tools, especially the Wach's Guillotine saw. Loaned them a ventilation scoop that was developed at Rocky Flats and used at PFP to improve the collection of airborne particulate. The scoop fits a 1.5" or 2" vacuum cleaner hose. Contact Columbine Plastics Corp. at 303-442-0051 to purchase these scoops. Also provided them a Lanc's catalog so they could order containment devices.
4. Made 2.5 hour presentation in Bremerton, WA, near Puget Sound Naval Shipyard, to 15 Radcon Supervisors and Health Physicists on "What I Learned About Health Physics since I Left the Shipyard. Discussed the differences between work on nuclear ships and the work being done at Hanford. Discussed the Innovative ALARA techniques the Hanford contractors are using to put the facilities in a safe condition and deactivate, decommission, decontaminate and demolish many of the buildings. Purpose of the presentation was to broaden the knowledge of the Radcon staff.
5. D&D Radcon Supervisor called concerning information on who sells a mobile personnel decontamination facility. Recommended she talk to Owen Berglund and Mark Sims who have been involved with similar facilities for 222-S Labs and Tank Farms. Forwarded info on aerosol fogging to the Radcon Manager at Pacific Eco Solutions who is looking for an inexpensive method to apply a fixative in a room used for radiological work. Talked to R. Wright of CH2M concerning improving the long-handled tools used in the valve transfer pits in Tank Farms. They are working with Chris Smith of Intellegation LLC who designed many of the ergonomic long tools used at K Basin.
6. Began discussions with personnel from DOE HQ concerning the possibility of conducting a one-day workshop on D&D the day before the start of the American Nuclear Society meeting in Chattanooga, TN scheduled for September, 2007. Initial thinking is to break the day up into four two-hour sessions and

have each session concentrate on one phase of D&D work, for example, one session on demolition methods. Recommended finding four "experts" from the DOE Complex and let them organize their own session. They could bring in additional presenters or arrange to have vendors demonstrate their tools, equipment, and technology. More on this workshop later

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FOR YOUR INFORMATION

1. 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 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) Yes, they take a P-card or your own credit card.

2. There is a training class on "Cleanup Site Closure" being offered in Richland on December 12 and 13th. Cost is \$790 and the training is being provided by Resource Training Institute. Call (706) 951-5685 for more info. The online form for Health Physics Society Annual meeting abstracts is available at <http://www.birenheide.com/hps/2007AM/abstracts/>. The 2007 Annual Meeting will be held in Portland, Oregon, July 8-12, at the Portland Convention Center. **Deadline for receipt of abstracts is January 26, 2007.** **If you plan to attend, recommend you do a presentation.**

3. REMINDER: The website that is used to obtain FREE Hanford Excess material can be found at <http://apweb02.rl.gov/rapidweb/phmc/procweb/EPBulletinBoard/viewCategory.cfm> Need at 26' X 50' tent that is 20' tall? See "Construction Materials">

LESSONS LEARNED

1. Congratulations to the waste recovery team that completed removal of 9,960 waste containers from Burial Trench #4. The suspect transuranic waste consisted of contaminated debris, tools, clothing, and other materials generated in the 1970s and 1980s. Many corroded drums were encountered and workers developed innovative ways of handling these containers. A "silver bullet" technique was developed to wrap sheet metal around the degraded drums before they could be moved. Larger drums, called "Overpaks" were lowered over fragile drums. Another innovation called a "Clam-Shell" was used to enclose corroded drums before they were moved. A Nuc-Fil HEPA filter is used to vent the clam-shell. A photo of a corroded drum is attached. During hot weather, a portable shelter was setup with misting equipment installed to provide a "cool-down" location. The shelter also provided protection from the wind and reduced the spread of dust and contamination. Workers also wore "Camel-Bak" type backpacks with two liters of water/Gatorade so they could stay hydrated in the work area. This equipment has a tube that attaches to the shirt collar that the worker can bite and obtain a drink. Lessons learned from previous waste retrieval operations were implemented which enabled the workers to handle the drums safely.

2. The latest Operating Summary and all the ones previously issued in 2006 from DOE can be found at <http://www.eh.doe.gov/paa/oesummary/oesummary2006.html>. See the additional attachments on the Completion of the K-29 facility at the East Technological Park and a lesson on working at aging facilities.

3. Russ Lauber from Bechtel National forwarded some info on the "hot taps" used at the West Valley Site to drain and/or depressurize piping prior to cutting. See Attachments on SO-15, "Tell-Tales", and the photo of their hot tap in use in "Utility Room". In the Tell-Tales attachment, they describe the use of a nasal swab to survey pipe internals and spraying a syringe filled with PBS (Polymeric Barrier System) through the hole at the cut location to "fix" contamination just prior to cutting. The SO-15 procedure is a step-by-step procedure with the radiological controls included. Note these Tell-Tales have 2 valves; these are used to drill into the pipe and then be able to take a controlled sample through the tygon tubing and once you have results it is drained through the same valve, all under control. The other valve is opened while drilling and closed as the drill bit is being removed. At the drill end of that valve is a nylon compression fitting so you can snug it around the drill bit, preventing leaks. If you have questions call Russ Lauber at (509) 371-3786.