From: Waggoner, Larry O
Sent: Thursday, May 17, 2007 10:58 AM
Subject: ALARA Center Activities for Week of May 14, 2007

Attachments: diamondcut2.doc; GEIT-65016EN_rovver-scoop2.pdf; dia wire wall cut.gif
Visit the ALARA Center Website at www.hanford.gov/rl/?page=974&parent=973 THE ALARA CENTER WILL BE CLOSED MAY 22-24 SO THE STAFF CAN RUN A BOOTH AT THE HANFORD HEALTH & SAFETY EXPO. Call (360) 801-6322 or (509) 528-3094 for assistance. Many of the vendors that display their tools and equipment at the ALARA Center will be at EXPO. Please check them out on Tuesday or Wednesday from 7:00 AM to 7:00 PM.

1. Received call from WCH engineer assessing methods that could be used to remove the B Hot Cell from Building 324. This hot cell still has thousands of curies of radioactive contamination. Plan would be to fix the contamination and then demolish the hot cell. One option is to remove the building and then D&D the hot cells. WCH is considering adding several feet of grout to the hot cell floor where contamination levels are the highest before demolition starts. Another consideration is the contamination levels may be too high for the ERDF Trench and the debris might have to be handled as TRU waste and shipped off-site. Forwarded our copies of CDs with all the presentations given at the 2004 and 2005 Waste Management Conferences and the presentations given at the Health Physics Society Meeting on D&D. Recommended they subscribe and read the articles in the Concrete Sawing and Drilling Association Website, See www.csda.org. They offer a free magazine that has lots of info related to demolishing structures. Sent him the attached article that describes diamond wire cutting. Attached a schematic showing a diamond wire cutter. *A hole is drilled through the top and bottom of the wall and the diamond wire routed through the two holes and connected to the machine. The machine pulls the continuous loop of wire through the holes and keeps constant tension on the wire. The wire has to be cooled with water or liquid nitrogen. If water is used, there won't be much dust, but you'll have to deal with the water. If liquid N2 is used there will be dense clouds of dust that may require the unit to be placed in a containment.*

Forwarded the following reports to WCH that concern Hot Cell Demolition.
http://www5.hanford.gov/pdwdocs/fsd0001/osti/2001/I0000309.pdf,
http://www.osti.gov/bridge/servlets/purl/803646-HrGqaP/webviewable/803646.pdf,
http://www.osti.gov/bridge/servlets/purl/211599-a3t4oo/webviewable/211599.pdf,
http://www.osti.gov/bridge/servlets/purl/656734-E5dgYh/webviewable/656734.pdf
http://www.osti.gov/bridge/servlets/purl/67617-cqIZf3/webviewable/67617.PDF

2. Forwarded info on Protech 2000 protective clothing to D. Ekstrom. See www.unitech.ws Loaned a 5 gallon poly bottle, adaptor and 2 CFM HEPA filter to WCH Radcon Manager for use in draining piping. Tried to find a very small diameter HEPA filter that could be used to eliminate the cross contamination of drill-string equipment that will be used to bore underneath a crib. The only thing I found was a website listing 50 vendors that sell micro filters. Recommended he look at http://www.micromagazine.com/company/category/Environmental_Health_and_Safety_SystemsComponentsServices/PipingTubing.html and if any of these vendors manufacture a filter that could be mounted in the drilling equipment.

3. CH2M and GE inspection Technologies have developed a robotic sampling tool that samples sludge from the underground tanks.

The robotic sampler has the ability to get a sample from somewhere other than directly below a riser...It is lowered through the riser to the bottom of the tank. It then can be driven remotely around the tank and find the waste deposits, grab some and bring it back to a holder that allows it to be withdrawn from the tank. Anyone with questions should contact Mike Jennings at (509) 372-1502 or Dan Niebuhr at (509) 373-4639 or (509) 438-1362. See Attachment Nick Clyma is the point of contact at GE Inspection Technologies at (425) 391-4036 or www.geinspectiontechnologies.com.

3. Jerry taught three two-hour sessions on glove bags to 23 RCTs as a part of their continuing training. Class was one hour presentation and a one hour practical exercise working with four glove bags. Each glovebag was set up on a different mockup and had several things wrong. Students were asked to pretend they were certifying the glove bag and to write a list of the deficiencies they found. Focus of the class was directed at what an RCT needs to know about glove bags. Class will be taught each Wednesday to three RCT classes per day over the next nineteen weeks.

4. Received our first message for info as the D&D Hotline. A consultant from Project Time and Cost Inc in Atlanta, GA wanted info on building demolition to help prepare a proposal for DOE. Forwarded him info on demolition techniques. He will call back on Monday and provide more details

Larry Waggoner / Jerry Eby

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FOR YOUR INFORMATION

1. Found the following websites that might interest anyone doing D&D Work.

http://www.hss.energy.gov/CSA/CSP/hepa/lessons.cfm Lessons Learned about HEPA filters (9 pages)

http://www.ohio.doe.gov/oh_seb/docs/MoundTechSolWorkShopDraft6.pdf Mitigation of Fugitive Emissions During Building D&D (Discusses Best Available Strategies & Technologies for Minimizing Radioactive Emissions during D&D of 5 Buildings at Mound.

http://www.haifire.com/presentations/fp_features_and_procedures_for_hepa.pdf; Fire Protection Features of HEPA Filter Plenums, a History of Fires in the Vent Systems at Rocky Flats.

http://www.joelkohler.com/samples_writing/Fast_Track.pdf Fast Tracking or Back Tracking (The risks that Project Managers Face)

http://www.joelkohler.com/samples_writing/Technical_Aspects.pdf Hydrolasing versus Conventional Decon Methods.

http://www.em.doe.gov/DandD/methods.aspx Environmental Management: Methods and Practices Handbook

2. At the request of Fluor Hanford SWSD, Fen Simmons of Environmental Technical Support is adding the Euroclean WD-215H vacuum cleaner to the list of "approved" vacuum cleaners. See http://www.entechsupply.com/euroclean/215.htm This list is maintained as a part of Notice of Construction (NOC) DOE/RL-97-50, which contains a section on HEPA filtered vacuum cleaners and shrouded tools that are approved for use. A facility/project that needs to use a HEPA filtered vacuum cleaner outside a radiological work facility needs an approved NOC. They can use NOC DOE/RL-97-50 if they use the vacuum cleaners and/or shrouded tools that are already on the list. Note: there are a few restrictions on contamination levels in the NOC. As long as the estimated contamination levels for the job meet the criteria, NOC DOE/RL-97-50 can be used. If the facility/project decides to use a vacuum cleaner or shrouded tool that isn't on the list, they may have to write a separate NOC. Work inside a radiological work facility with its own monitored building vent system doesn't require the use of vacuum cleaners from the approved list.

3. A new document has been made available on the HSS Web Site: Preparation of Safety Basis Documents for Transuranic (TRU) Waste Facilities Technical Standard. Please go to http://www.hss.energy.gov/NuclearSafety/techstds/standard/std5506/doe-std-5506-2007.pdf to view this new posting. **This document has some interesting sections that concern incidents involving TRU radioactive material.**