

From: Waggoner, Larry O
Sent: Monday, July 25, 2005 6:21 AM
Subject: ALARA Center Activities for Week of July 18, 2005

Attachments: Ultrasonic.doc
Visit our website at www.hanford.gov/alara/

1. Held PHMC ALARA meeting for July. Provided training class for three 300 Area Nuclear Process Operators and their manager on Basic Containment Installation and Certification. Attended weekly staff meeting and discussed findings from a recent assessment of contamination controls. The findings revealed some weaknesses in the methods used to plan radiological work. As a result, ALARA Center personnel will be taking a more active role in training Fluor Hanford radiological work planners. Forwarded lesson plans/handouts on the ALARA Managers Worksheet, Post ALARA Reviews and A Simplified Approach to Mock-up Training to Wayne Walker who will be developing a new course for radiological work planning personnel and ALARA technical support personnel.

2. PFP Operations called and said they had up to 15 operators they wanted to attend the training class offered by Tri-Tool on cutting machines. Contacted Tri-Tool and they agreed to put on an extra training class on August 9. So... the Tri-Tool training class will be on August 9 from 1200-1600 and August 10 and 11 from 0700-1100 and 1200-1600 at the ALARA Center. About 48 personnel have signed up for the "free" training class and we have closed registration. Any more personnel wanting to attend the course will be placed on a waiting list. Read about Tri-Tool at www.tritool.com.

3. T-Plant planner stopped by looking for a tool that could be used to cut an ~ 8" diameter twisted sleeve during removal of a standard waste box from a containment enclosure. Plan is to section gloveboxes and other components and lower the waste/debris into a waste box. When full, the waste box will be rotated to twist the sleeve, banding and tape will be installed to secure the sleeve, and the sleeve will be cut in the middle of the twisted portion. Recommended he look on the internet for "hot knives" used for cutting rope and foam. Usually these tools will cut the plastic sleeve and seal the cut at the same time. We are trying to locate a company that makes a "hot knife" that has ~12" blade and is shaped like a C-Clamp or "coping" saw. Found a smaller brand of PVC cutters that would seem to work well on smaller diameters. See <http://www.rothenberger-usa.com/15.html>

4. Provided info on fixatives used at Hanford to CH2M project engineer. Loaned gloves and other glovebag accessories to BHI instructor to use in a glovebag training course at 100N. Received call from Savannah River Engineer concerning the aerosol fogging solution sold by Encapsulation Technologies. They were applying the ETGS Invisible Blue fixative in a Contamination Area and were unable to see any fluorescence from the fixative with a black light after it was applied. They had contacted Encapsulation Technologies and were told the blue would not show up under a black light unless they used a black light that had a short wave length. Searched and found a company that sells black lights with short wave lengths at <http://www.mxindustrial.com/> Passed the info to SRS.

5. Bechtel Engineer called looking for a communication system for personnel working on masks. Suggest they contact COBALT Audio and Video, web site: www.cobaltav.com, old Comtronics company. This Company has solved a number of communication problems at Hanford. Also suggested the contact Safety and Supply at www.safetyandsupply.com. Tom Bester has worked with a number of communication companies, such as CavCom, resolving communication problems at Energy Northwest. Gave ALARA Center tours to CH2M Managers, Engineers, Work Planners and RadCon folks. Also making tours of the Center were engineers from the WTP Project.

6. Ground Water RadCon Engineer visited the Center to discuss use of HEPA filters and negative ventilation on special sampling glove bag. Suggested using a Nilfisk GM-80 vacuum cleaner with a speed controller, web site: www.pa.nilfisk-advance.com for the negative ventilation. This will reduce the

chance of damaging the sample if the flow rate is too high. Provided additional recommendations on placement of the glovebag HEPA filter and ventilation suction to prevent damage to the sample.

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FOR YOUR INFORMATION

1. Got steel to cut? Check <http://www.industrialdex.com/topics/cut-steel.html>.

Need to dismantle something? Check <http://www.osti.gov/bridge/servlets/purl/656734-E5dgYh/webviewable/656734.pdf>

Trying to decide how to decontaminate something? Check <http://www.osti.gov/bridge/servlets/purl/565632-1abeKG/webviewable/565632.pdf>

Got heat stress concerns? Check <http://www.pp.okstate.edu/ehs/links/heat.htm>

Need a diamond concrete cutting saw? Check http://www.sak.com.sa/diamond_cutting_systems.htm

Need a website that will lead you to lots of resources? See <http://www.umich.edu/~radinfo/professional/index.htm>

2. The International Union of Operating Engineers has a National Hasmat Program website that has reports on different tools and equipment used for radiological or hazardous material work. It is located at <http://www.iuoieitc.org/Technology%20Reports.htm>. Double-Click on Type I, Type II or Type III reports. Type I has reports on worker protection and covers much of the technology we are using to mitigate heat stress. Type II has 9 pages of reports on unique tools and equipment. Type III concerns three pages of reports on robotic or remotely operated systems. The website is filled with good information and we recommend that you make it a favorite. Also recommend looking at a Radwaste website at <http://www.radwaste.org/service.htm> This is another website with lots of information.

2, Sue Garrett from PNNL forwarded a fact sheet about an Ultrasonic instrument they are using to detect liquid levels in pipes and vessels before opening. Document is attached.

3. Last weeks report described an upcoming conference on Environmental Monitoring and Modeling to be held in Richland, WA from September 18-20. The contact info was incorrect. The conference is actually being sponsored by the Nuclear Suppliers Assn and info can be obtained at www.nuclearsuppliers.org.

LESSONS LEARNED

The May issue of the Operational Radiation Safety magazine had an article written by INEEL ALARA personnel concerning the cleaning of High Level Waste Tanks. After evaluating the existing technology, they chose a remotely operated high-pressure water system to wash the contaminants and debris in the bottom of the tanks to a location where it could be transferred to another tank. The tank cleaning was practiced in a mockup and the lessons learned applied to the final design. The major components on their system includes an automatic rotating wash ball and remotely operated directional spray nozzle for washing the tanks, decontamination spray rings to wash components as they are removed from the tanks, access interface devices for the remote control aspects of the system, and video monitoring equipment. The tank cleaning consisted of three basic steps. Step one is the actual cleaning, and step two comprises sampling and analysis of tank residues. The last step to grout the tank has been placed

on hold until the waste classification is resolved. The article goes on to describe more details of the cleaning and sampling. Contact Steve Aitken at (208) 526-3174 if you have questions and the ALARA Center if you want a copy of the article.