

**From:** Eby, Jerald L

**Sent:** Monday, June 13, 2005 8:30 AM

**Subject:** ALARA Center Activity Report for week of June 6, 2005

**Attachments:** Flex jump nozzle stopper insertion tool.doc

Visit the ALARA Center of Technology web site at: [www.hanford.gov/alara/](http://www.hanford.gov/alara/)

1. The Center held a Basic Glove Bag Class #020729, attended by three RCT/HPT and three operators.

The Center was visited by two CH2M Rad Planners, looking for tooling to cut up staging planks in a very small restricted space. The Center suggest a 12" miter saw or a saws-all. The area is not large enough for a HEPA filter vacuum unit to use a shrouded tool. The Center sent a mix of OREX clothing to CH2M, 222-S lab for a trial use. Web site: [www.orex.com](http://www.orex.com) . Additional set of PPE from OREX are available at the Center if anyone has interest in a trial use. This clothing is very little weight, can be washed or used as a disposable.

2. The Center visited a split spoon sampling operation by Fluor Hanford Ground Water Group at well site A-8. Both of the Center personnel have had no field experience in the Ground Water operations and were invited by Ground Water RadCon to visit a medium risk well sampling operation to get a better understanding of the Ground Water's work. Jerry took a number of pictures at A-8 well.

The Center visited a vendor, ARA, at the Richland Airport Industrial Park. This company has been using their well sampling equipment on site in conjunction with other well sampling techniques, such as split spoon sampling. The vendor has a trailer that he was demonstrating, which contains a controlled enclosed ventilation system, EAPS Air Handling Equipment. The system has a collection drum for spoils, a bag filter/dust separator, a HEPA filter and other devices to filter the air and material from the well casing during the sampling process. This ventilation system would allow the vendor to sample higher levels of radioactive contaminated wells at Hanford using the vendor smaller bore wells.

Ground Water Operations Manager visited the Center looking for means of adapting a vacuum cleaner hose to a HEPA vac unit. No vendor supplied attachment was available. The Center determined a piece of 1-1/2" PVC pipe would fit into the I.D. of the 2" hose and vacuum cleaner port. Gave the individual enough PVC to complete his task.

3. Discussed the possibility of inheriting some of the heavy equipment and other D&D Tools from Rocky Flats with Hanford D&D personnel. Turns out most of the remaining equipment is leased and will be returned to the owners.

4. PFP engineer stopped by to look at CS Unitec Saws-Alls and the Prolube lubricant. They have to cut out a section of a glove box and need a short saws-all. He took brochures and a saw blade. See [www.csunitec.com](http://www.csunitec.com). He reported that PFP Operators are continuing to use a sequence of 3-M sanding discs to improve visibility in old gloveboxes that have damaged windows. This technique has saved many thousands of dollars and eliminated the need to replace these windows. For info, contact Larry Brist at (509) 373-5992 or Dave Bruce at 372-2119.

5. Forwarded copy of presentation given at the Waste Management Conference on "Underwater Coatings for Contamination Control" to Rad Engineer at SNF. This document discussed how 7 coatings were tested at INEEL and a proprietary two-part underwater epoxy owned by S.G. Pinney and Associates was chosen to coat 4 pools. The coating was applied by divers using a special powered roller with two separate heated hoses. After coating, the water was removed from the pools with no detectable airborne releases.

6. Forwarded copies of a presentation from the Waste Management Conference to PFP Managers working on the decontamination of gloveboxes. Paper is titled "Modern Strippable Coating Methods" and was given by R. Demmer from INEEL. It compares several modern-day coatings and their effectiveness in removing fixed and loose contamination. A new method developed at INEEL is featured. ADA

Technologies ElectroDecon uses an electrical current passed through the coating to draw contaminants from the surface. Results show a significant reduction in fixed and removable contamination. These results are comparable with routine mechanical and chemical decon methods and are easy to use and create minimum waste.

7. The Center received three packages of pictures denoting tools that have been developed by CH2M Hill employees for use at the transfer pits associated with the storage tanks. This week, the subject is: "Flex Jumper Nozzle Stopper Insertion Tool". The tool remotely inserts a nerf ball into a jumper opening (could be a pipe end, also) to give some closure of the system during D&D. See attached file for the story. Thanks to David Iceberg for sharing the information.

## VENDORS CORNER

1. [Please forward this message to your pipe fitters, other crafts, engineers, or other personnel that may be interested.](#)

Tri Tool is a leading designer and manufacturer of precision portable machine tools for [pipe beveling](#), tube [squaring](#) and [severing](#), [clamshells](#) for in-line cutting, and [flange facing](#) equipment. Daryl Anderson from Tri-Tool has offered to visit Hanford in mid-to-late July and put on a hands-on training class on the use of split-frame cutting machines and other types of machines used to machine metal. The purpose is to learn to use this technology, not sell Tri-Tool machines. The class is open to the workers who actually use these machines and the engineers and other personnel who want to learn more about them.

[This class is being offered at no charge to attendees.](#) Each organization will have to account for the students time. Class will last from 4-8 hours depending on the number of tools students want to learn about.

This class will upgrade the knowledge of your workers and familiarize attendees with the latest technology. The ALARA Center staff will assist and discuss the radiological control requirements for using this tooling on radioactive systems. Daryl can be reached at (800) 345-5015 if you have questions or suggestions on how to make this training more valuable.

Tri-Tool classifies their tools in several categories:

- Inside diameter mounted pipe bevellers
- Tube squaring machines
- Keyway cutters
- Flange facers
- Tube severing machines
- Outside diameter mounted severing/beveling
- Specialty machines

We need to know the approximate number of personnel that would be attending and what type of machines, other than the split-frame lathe, that personnel would be interested in learning about. See the Tri-Tool website at [www.tritool.com](http://www.tritool.com). So... if you're interested, [please send the approximate number of attendees and the tools they want to learn about to Larry Waggoner at the Fluor Hanford ALARA Center.](#) Dates and times for the training will be announced in early July.

2. The Center toured the Plastic Injection Molding Inc. manufacturing facility in Richland on Battelle Blvd. They have made shielded sample holder for 222-S labs and filter paper holders for lapel samplers for Bechtel and CH2M Hill and a number of items for PNNL.

3. John McDonnell from NFS/RPS will be on-site Wednesday, June 15 and Thursday, June 16. He can be reached on cell phone (860) 884-5521. NFS/RPS sells portable vent equipment, Permacon containment buildings, temporary shielding, and other products to the nuclear industry.

## FOR YOUR INFORMATION

The DOE Operating Summaries is a Report that is distributed every two weeks by DOE outlining incidents that have occurred at DOE Sites. Report 2005-008 at <http://www.eh.doe.gov/paa/oesummary/> concerns taking radiological surveys under suspended loads. A copy is attached for your information. The ALARA Center has had good experience using EZ-Reacher II tools for taking surveys under suspended loads. A tennis ball, or equivalent, can be picked up using the rubber grippers and a smear attached to the tennis ball. Info on these inexpensive tools can be found at: <http://arcoa.com/>. These tools can extend your reach up to 72" and some models contain a light if you need to reach into dark places. They also have a "pruning" model that could be used to cut something at a distance. In the past, Hanford contractors have purchased these tools with lengths up to 20' to reach across barriers for surveys or to help guide highly radioactive items suspended from a crane.

The Radiochemistry Society has some classes coming up that may be of interest.

- \* **Fundamentals of Nuclear Forensic Science**, July 18 - 21  
[http://www.radiochemistry.org/courses/rc\\_forensic.html](http://www.radiochemistry.org/courses/rc_forensic.html)
- \* **Fundamentals of Radiochemistry**, June 22 - 24, Richland, WA  
[http://www.radiochemistry.org/courses/rc\\_fundamentals.html](http://www.radiochemistry.org/courses/rc_fundamentals.html)
- \* **Fundamentals of Actinide Chemistry**, July 5 - 7, Richland, WA  
[http://www.radiochemistry.org/courses/rc\\_actinide.html](http://www.radiochemistry.org/courses/rc_actinide.html)
- \* **Fundamentals of Gamma Spec**, July 13 - 15, Richland, WA  
[http://www.radiochemistry.org/courses/rc\\_gammaspec.html](http://www.radiochemistry.org/courses/rc_gammaspec.html)
- \* **Data Validation & Laboratory QA**, July 28-29 in Richland, WA  
[http://www.radiochemistry.org/courses/rc\\_datavalid.html](http://www.radiochemistry.org/courses/rc_datavalid.html)

## **Jerry Eby**

ALARA Center of Technology  
509-372-8961 fax 509-376-7717

## **Larry Waggoner**

ALARA Center of Technology  
509-376-0818 fax 509-376-7717