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**Sent:** Monday, April 18, 2005 7:22 AM

**Subject:** ALARA Center Activities for Week of April 11, 2005

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1. PFP visited the Center looking for information on vacuum cleaners (HEPA) high value units, scabbling tools, nibblers and the chemical decon foam process. In some of the glove box work, PFP are not able to get access to all the material that needs to be removed. Looked at Nilfisk vacuum cleaners, web site: [www.pa.nilfisk-advance.com](http://www.pa.nilfisk-advance.com). Nilfisk has a vac unit 3997W, HEPA filtered, that draws 1442 cfm. Looked at Trumpf nibblers, web site: [www.Trumpf.com](http://www.Trumpf.com), look under products, hand tools, enter nibbler in search. Talked about scabbling tools, Desco tool roto-pinger unit, web site: [www.descomfg.com](http://www.descomfg.com), and also the ICM wall walker unit that was demonstrated at the Center last week, web site: [www.icmachines.com](http://www.icmachines.com). The foam decon process was from EAI, web site: [www.eai-inc.com](http://www.eai-inc.com), applied by Intelagard, web site: [www.intelagard.com](http://www.intelagard.com).

PFP held training on glove change outs on glove boxes for four NCO's at the Center's training area. PFP held a meeting at the Center with K-Basin personnel to discuss use of RAD-Pro chemical process on some applications at the Basins. The group also looked at the Intelagard foam applicator that the Center has on loan from National Safety (See Vendor Section below for further information), to see if the unit has application at the Basins and PFP.

Attended meeting concerning the planned removal of Vent Ducting in Building 291-Z at PFP. Ducting was inspected by a tractor robot and a video tape reveals the ducting has up to 2" of an unknown substance and activity levels of 18 million dpm/100cm<sup>2</sup> or more. Ducting will be surveyed using NDA and Non-Destructive Test Techniques. Plan is to install a blank at one end and that should provide a sample for analysis.

Received info on a composite material used to shield neutrons in containers with spent nuclear fuel or nuclear waste. Forwarded the info to PFP Radcon Engineering. Product is called Talbor and is sold by Talon Composites LLC who also sell Boralyn, a neutron absorbing material made from aluminum and boron carbide. For more info, contact the ALARA Center or <http://www.taloncomposites.com/> Received call from David Sanders who is the new Radcon Manager for Groundwater at Savannah River. He wanted a point of contact at Hanford so referred him to Steve Landsman.

2. K-Basins RadCon visited the Center looking for a method of draining buoyancy cylinders on long handled basin tools. The cylinders have to be opened to ensure all liquid is removed. K-Basins have tried to drill holes into the stainless steel cylinders, but have encountered a number of problems. The Center suggested taking a Unitec saw, web site: [www.csunitec.com](http://www.csunitec.com) that have a pipe chain vice for holding the cutter and cut an opening into the cylinder. If the cylinder needs to be open to allow filling with kitty litter or grout, use the saw to cut through the entire cylinder. More discussion is planned at the Center on disposal of the cylinders.

3. ALARA Center attended a tour of the (North Load out Pit) NLOP sludge grouting equipment at the Parson's Fab Facility in Pasco. The NLOP sludge grouting equipment is a T-Plant operation for NLOP sludge from K-Basins. The initial equipment was built at PNNL's PPL, then sent to Parson where modification were made to complete the process equipment as it is today. The equipment will be disassembled ~4/19 and shipped to T-Plant. After reassembly at T-Plant, additional checkout will continue until a system ORR will be performed in July 2005.

4. Nancy Kirner passed along an old lessons learned from 222-S concerning CO<sub>2</sub> Decon of concrete. Apparently the blasting technique worked well at removing the contamination but it was suspended in the air above the concrete creating high concentration levels and contaminating the equipment. PFP is looking at this technique to help with D&D.

## FOR YOUR INFORMATION

1. New ALARA Contact at Los Alamos is Julio Castro at email [jcastro@lanl.gov](mailto:jcastro@lanl.gov) or (505) 667-9317. Julio is in the process of obtaining tools, equipment and material for the Los Alamos ALARA Center.
2. Operating Summary 2005-06 has an article about how a researcher damaged a radioactive source trying to remove it from its container. See web site: <http://www.eh.doe.gov/paa/oesummary/oesummary2005/oe2005-06.pdf> They tried beating it apart with a hammer and finally used a torch. If you work with sources, this is a "must read".

## VENDOR DEMONSTRATIONS AND VISITS

1. American Boiler Works (ABW) of Everett, Washington will be visiting FFTF on April 18th with specific information on the Interim Storage Casks that ABW fabricated for Fluor for FFTF. ABW will be visiting the Center 1 PM TO 3 on the 18<sup>th</sup> for anyone interested in discussing the company products'. Web site: [www.americanboilerworks.com](http://www.americanboilerworks.com)
2. Global Matrechs and Dow have a foam (EKOR) that was developed at Chernobyl for encapsulation high dose material. The presentation and demonstration is being set up for next week (4/21/05) at Hammer (Rm 31) from 8 a.m. to noon. If your interested stop by the Hammer facility. EKOR was presented to the Hanford site back in 2001, then distributed by EUROTECH LTD.
3. The Center received a decon foam application machine from National Safety, web site: [www.nationalsafetyinc.com](http://www.nationalsafetyinc.com) marketed as Intelagard Merlin Handicart foam system, web site: [www.intelagard.net](http://www.intelagard.net) . This system applies the foam for decontamination of materials like the radioactively contaminated floor decon that was noted in the Centers weekly report of March 28, 2004, at the old Hanford ATG facility.
4. Set up a demo of the NuCut battery powered shear for FFS. They had the vendor cut piping in a realistic mockup and the workers were impressed. They are looking for funding. Read about this tool at [www.trutechllc.com/nucut.htm](http://www.trutechllc.com/nucut.htm).

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