

From: Waggoner, Larry O

Sent: Thursday, March 10, 2005 12:44 PM

Subject: ALARA Center Activities for Week of March 7, 2005

Attachments: WM-05 Trip Report.doc; Safety Rail.bmp; icc.pdf

Visit our Website at www.hanford.gov/alara/

1. Personnel from 200 LEF stopped by looking for advice on the radiological controls for hot tapping a 4" diameter pipe. Rather than a glovebag, recommended they tape a glue-on sleeve to the pipe and install a drain fitting and Tygon tubing. A glue-on sleeve is shaped like a "top hat" worn with a Tuxedo. The sleeve can be taped around the drill so the drill bit and chuck rotate inside the sleeve. The drain fitting will then be installed at the low point. Recommended that if they see water dripping to immediately stop drilling until the dripping stops. Then continue drilling until breakthrough. Plan is to try it on a mockup first to ensure it works. If not, they will install a glovebag.
2. Provided tour of ALARA Center to 6 PFP persons as part of their Persons-In-Charge Training. Attended vendor demonstration downtown but most booths were related to lab work or protective clothing worn in medical industry. Labconco did have a display of very nice fume hoods and info on gloveboxes. See www.labconco.com. In addition, VWR sells vinyl tape that works well when installing gloves over the plastic rings in glovebag sleeves. See www.micronova-mfg.com or call (800) 932-5000 and look up VWR Multi Purpose Vinyl Tape 47B. Provided tour of the ALARA Center to 4 engineers from BHI that have a job removing a container from a safe that was uncovered in a burial ground. They were very interested in fixatives, GammaCam photos, nibblers, shrouded tooling and design of containment tents.
3. Forwarded info to SNF Radcon on Spot Cooling Devices. See <http://www.spot-coolers.com/> Dropped off a set OREX Disposable clothing for evaluation by SNF. They are working on trying to solve the high temperature problems that occur in K Basins each summer that result in a "sweat-thru" of protective clothing and concerns about heat stress. Read about OREX protective clothing at www.orex.com This clothing is popular at Commercial nuclear power plants and they claim a 40-60% reduction in skin and clothing contamination incidents after switching to this product.
4. FFS workers visited the ALARA Center looking for a glovebag that could be used for pipe cutting and welding in Tank Farms. Recommended designing a glovebag with a *convertible* top. The pipe cutting and piping fitup could be done in a certified glovebag. Once the fitup was complete they could decon the bag and remove the top. The remaining glovebag can be used as a catch basin and lined with fire retardant material such as Refrasil or flame guard for the welding. Since it is a socket weld, the actual welding is done on the outside of the pipe where it should be uncontaminated. Once the welding is complete, the convertible top can be replaced and the glovebag recertified, if necessary, to finish the job.
5. Received call from T Plant concerning the purchase of HEPA Filtered vacuum cleaners from Nilfisk with speed controllers. Informed them the GM-80 vacuum cleaner was tested by an NRTL and has the UL label. Recommended they only purchase the number of speed controllers actually needed. These units can be used without mounting to the vacuum cleaner so they could be reused if the vacuum cleaner is disposed as rad waste. These speed controllers cost ~\$350.00 and typically, not every vacuum cleaner needs one.
6. Received calls from two planners working different tank farms that each have similar jobs. They need a cutting tool they can lower about 12' down a pipe and cut an internal PVC liner without cutting the pipe. Contacted E.H. Wachs and they sell an internal casing cutter for 7" piping. They offered to fabricate a smaller unit for 4", if needed. See Attached product bulletin. Tri-Tool was contacted and they can also make a similar tool. See www.wachsco.com or www.tritool.com. CH2M will determine which tool to purchase.

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FOR YOUR INFORMATION

1. Forwarded info on the OSHA requirement that electrical equipment has to be tested by a Nationally Recognized Testing Lab. The Site Technical Authority on HEPA filters indicated the requirement included HEPA filtered vacuum cleaners too. Sami Merriman at 373-2248 has set up a procedure to get an Underwriter's Lab person to come to Hanford, if needed. Personnel that purchase electrical equipment and tools should look for brands that are already tested by an NRTL that is recognized in the United States. See <http://www.osha.gov/dts/otpca/nrtl/index.html> for a list.

2. Waggoner spent last week at the Waste Management Conference in Tucson and presented a paper on Innovative ALARA Techniques used at Hanford and other DOE Sites. See attached Trip Report. He then traveled to Los Alamos and presented five papers over two days to managers, engineers, and Radcon personnel. Los Alamos is in the process of assembling tools and equipment to open their own ALARA Center and much of the discussion was related to the lessons learned from opening Centers at Hanford and SRS. Roger Wishau at (505) 665-8771 is the Point of Contact. Forwarded packet of ALARA Awareness posters received from Owen Berglund to LANL.

The 2101-M Warehouse has received a shipment of Ten Drum Overpack (TDOP) DOT 7A Type A bolted containers. They can be used for shipping and storage of ten 55-gallon waste drums. A 163 page report on this container can be found at http://www.osti.gov/bridge/product.biblio.jsp?osti_id=807592 A step-by-step Guide for Waste Handling at WIPP can be found at <http://returnrvn.com/wippsteps.htm>

INDUSTRIAL SAFETY

See attached photo of Safety Rail 2000 from Bluewater Manufacturing. It is being used by the Hanford Refrigeration Services group and they really like it. It goes up quick and is very sturdy. The ALARA Center has a sample of this portable handrail if you're interested. It can be purchased through National Safety at (509) 884-7999 or <http://www.nationalsafetyinc.com/>

VENDOR DEMONSTRATIONS AND OTHER VISITORS

On the afternoon of April 4th, International Climbing Machines will demonstrate their wall-walking robot on a concrete enclosure outside the ALARA Center. This platform is held to the wall by a vacuum cleaner. It can climb metal, concrete, brick, highly uneven spaces and can climb over electrical conduit and obstacles. A laptop controller is used to "drive" the tool. It also works on ceilings. Various tool packages can be attached to the platform to vacuum, decontaminate, video, scabble, survey, and hydrolyze surfaces. PFP is looking at this tool to help with D&D of Building 241-Z. See www.icmachines.com or call (607) 288-4001 for additional info.

N. Clyma from Everest Visual Inspection Technologies will be visiting on April 5 and 6th to meet with several Hanford Contractors concerning remote visual inspection techniques. See www.everestvit.com.

W. Geyer, the RCT Division Head at Puget Sound Naval Shipyard will visit the Hanford ALARA Center on March 21. He will be acting as a judge in DOE's Field Team Olympics later in the week.