

SRS ALARA CENTER (AC) MAY 2007 ACTIVITY REPORT

ASSISTANCE, DEMONSTRATIONS, RESEARCH, AND TOURS

The external SRS ALARA Center website is posted at <http://www.srs.gov/general/programs/alara>. The internal SRS ALARA Center website is available in ShRINE by performing a quick search on ALARA or ALARA Center.

The FLUOR Hanford ALARA Center website is available at www.hanford.gov/rl/?page=973&parent=0

The ALARA Center ordered two Rubbermaid Utility Instrument Carts for DWPF to be used by Rad Con technicians. It is made of heavy duty plastic with rounded corners. Bottom shelf has locking doors to secure contents. www.rubbermaidwholesale.com/product_info.php?products_id=284

The ALARA Center ordered two pumps to be used in the Encapsulation Technology Passive Aerosol Generators (PAG). The site is having problems with the amplifiers and has contacted the manufacturer who is working to resolve the issue. The dyna foggers pictured below can be used to mist the ETGS Invisible Blue solution (site MSDS# 34146-1). Although better than a garden sprayer, the dyna foggers do not generate a fog like the PAG. www.dynafog.com/ulv/ecf/hurricane/
www.dynafog.com/ulv/ecf/tornado/



Hurricane



Tornado Flex

The ALARA Center ordered and received Lead Vinyl LeadX to provide additional toilet seat tool shielding used when compacting drummed TRU waste in F-Area. www.pnwx.com/Accessories/LeadProducts/Blockers-Shields/

The ALARA Center ordered Ecomass non hazardous shielding for HBL Operations to wrap around a sample container to reduce occupational radiation exposure. The tape was 2 inches wide by 16 feet long and three layers is equivalent to 0.22 inches of lead. www.ecomass.com

The two new skid resistant pebble finish step-off pads with words CAUTION REMOVE ALL OUTER PROTECTIVE CLOTHING and CAUTION REMOVE OUTER SHOE COVERS have been well received. Rad Con Mock-up training, F-Area Tank Farm and H-Area Tank Farm have ordered some with the rubber mat backing. The ALARA Center will request that they be store stocked.

The ALARA Center ordered two buckets of rad barrier chain, #2 double loop, yellow and magenta with "EVERLAST" finish from G/O Corp for outside use in F-Area Tank Farm. The product number is GZ1380. www.gocorp.com

The ALARA Center ordered samples of the following chemicals for potential use at SRS as fixatives and/or decon agents; SoilTac, and Instacote CC Fix, CC Strip, and CC Wet. Contact the ALARA Center if you are interested in trying any of these chemicals. Below is a spread sheet of fixatives compiled with assistance from the Hanford ALARA Center. 

The ALARA Center received two Nilfisk Compact HEPA Filtered Vacuum systems ordered for DWPF. This is an electrical powered system that is worn on the back of the user to provide maximum mobility. A demo system is on display in the ALARA Center.

The ALARA Center ordered two gallons of Bubble Film Solution from Sage Action, Inc. to use in the Helium Bubble Generator. The Helium Bubble Generator produces neutrally buoyant, helium filled

bubbles of controlled size for visualizing air flow patterns. H-Completion will use the machine to perform air migration studies. www.sageaction.com

Personnel from the SRS ALARA Center conducted a walkdown of Waste Management Programs 55 gallon TRU drum handling operations in E-Area to identify opportunities to reduce occupational worker radiation exposure when handling future drums with higher dose rates. Below are applications of time, distance, and shielding ALARA principles.

- Use a standard location to affix drum labels (Operations and Radiological) and banding material so that banding material does not cover label information. Extra time is sometimes needed to move banding material so labels can be read.
- Use binoculars to read label information from a distance.
- Procure and evaluate lightweight front and back protection non-lead aprons for use when working in between rows of drums in storage.
- Place a stop on the back side of the Head Space Gas Chamber that will make it faster to position a drum in the chamber. The operator could also use an EZ Reacher to slide the drum in and out of the chamber.
- Ensure sufficient number of fork lifts and grippers are available when number of higher dose rate drums increases.
- Emphasize that workers stay at arms distance when handling drums.

The ALARA Center ordered the signs below for radiological use (yellow background with magenta writing) guaranteed for 15 years against fading, chipping, peeling or cracking for outdoor use.

www.gocorp.com



Pictured below is a lead blanket cover available from NFS-RPS in a variety of sizes that can be used to prevent contaminating a lead blanket and creating mixed hazardous waste. Contact the ALARA Center if you are interested.



NEW VENDOR INFORMATION AND VISITS

On May 2, 2007 representatives from the ALARA Center, Procurement, and D&D meet with Magid Glove Manufacturer personnel to discuss potential glove purchases. D&D will get with the Safety department before discussing further. www.magidglove.com

The ALARA Center received samples of Decon Gel 1001 and 1101. Samples were provided to H-Completion and H-Area Tank Farm for testing.

On May 10, 2007 Thermo Fisher Scientific conducted a site demonstration of the LifeShirt physiological monitoring system, a lightweight chest strap with embedded sensors that measures breath rate, heat rate, activity level, posture and skin temperature. These critical data are transmitted to a command center where safety officers, using the advanced ViewPoint software system, are empowered to make informed real-time decisions concerning worker safety. The ViewPoint software can also be integrated with the Thermo Scientific EPD Mk2 personal radiation dosimeter. The ALARA Center and Liquid Waste is consulting with Industrial Hygiene Programs and Site Medical to determine if SRS pilot testing is feasible.

UPCOMING VENDOR VISITS

Novatek Dust-Free Tools, June 20, 2007, 766-H

Industrial Automation Services DMS RF Welder, June 27, 2007, 705-C

POINT OF CONTACT

Robbie Bates (803) 208-3601, Pager (803) 725-7243 ID #14550

Ellen Parrish (803) 208-3603, Pager (803) 725-7243 ID #11617

robbie.bates@srs.gov

ellen.parrish@srnl.doe.gov