SRS ALARA CENTER (AC)
JULY 2008 ACTIVITY REPORT

ASSISTANCE, DEMONSTRATIONS, RESEARCH, AND TOURS

The external SRS ALARA Center website is posted at www.srs.gov/general/programs/alara/alara_center.htm

The internal SRS ALARA Center website is available in ShRINE at the ES&H Regulatory and Radiological Technologies web-site. www.srs.gov/general/programs/alara/

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

Approximately thirty people toured the ALARA Center during July including Savannah River Nuclear Solutions ESH&QA Vice President Tony Umek and members of the Defense Nuclear Facility Safety Board.

The ALARA Center was contacted by DWPF who needs a non hazardous shielding material to shield eight one-gallon cans that will be used to transport and dispose of glass waste. Ecomass Compound 1002ZD96 (tungsten and poly mixture that is 91% lead equivalent) was recommended. The format is eight inches wide x 0.125 inches thick and is pliable enough to install two layers on the inner walls, top, and bottom. Forty-eight feet was ordered and will be delivered to the ALARA Center where the Ecomass will be installed in the paint cans.

A recent hail storm at the site damaged plastic yellow and magenta chain used at outdoor radiological boundaries. Many facilities are replacing the plastic chain with rad barrier metal chain, #2 double loops, yellow and magenta, 500 ft. per bucket. It has a patented process, the "EVERLAST" 2-mil ply powder coating that is baked to create a durable and long lasting finish. Part #GZ1380 is from G/O Corporation. Although rad chain cost thirty-six per cent more than plastic chain, rad chain is more cost effective. It last longer and thus doesn’t have to be replaced as often. Attached is a picture of rad chain displaying wear after one year, five years, and ten years. www.gocorp.com

The ALARA Center worked with G/O Corp and SRS Procurement to replace the yellow translucent 5 gallon poly bottle radioactive liquid collection device which is no longer available. The new caption item number is 32-22542.00. Each bottle will include “Closure Instructions” and require both a 70 mm cap and ¾ inch inner plug torque socket to ensure proper closure. A list of additional items needed is listed below.

- HEPA Filter, 32-4772.00
- HEPA Filter Adapter, 23-14197.65
- Tygon tubing, 23-18050.00
- Pinch clamp, 23-14197.60
- Hose clamp
- ½ inch drive torque wrench for 9 and 15 ft-lbs, 67-17.05 or equivalent
- Inner plug ½ inch drive torque socket, 32-22687.00
- 70 mm cap ½ inch drive torque socket, 32-22688.00

The 70 mm cap and inner plug are also store stocked in case replacements are needed. The 70 mm cap is 32-22689.00 and the inner plug is 32-22690.00. Below are pictures of the new and old bottle.

New 5 gallon bottle (32-22542.00)  Bottle no longer available (32-21894)
The SRS Ventilation & filtration Committee web-site recently added a list of HEPA vacuum cleaners approved for radiological work at SRS. There is also a list of the HEPA Filter Cognizant Technical Function (CTF) person for each facility. From ShRINE perform a quick search on ventilation, select Ventilation & Filtration Technical Committee then select documents.

The SRNL Homeland & National Security organization returned the Bullard Isotherm Cool Vest borrowed from the ALARA Center and ordered four vests for personnel working outside.

The ALARA Center provided Cellular Bioengineering Inc. Decon Gel 1101 samples to Liquid Waste Support personnel to apply to tank inspection equipment with an expectation of preventing equipment from becoming contaminated. A presentation was also made to the Savannah River National Laboratory Radiological Practices Improvement Team. The team is very interested in evaluating the product but will compile a list of questions that will be forwarded to the manufacturer.

The ALARA Center recommended and ordered sixty-two pairs of Stearns disposable chest waders for Liquid Waste personnel to wear when removing debris from seepage basins. www.maddoggear.com/dyn_prod.php?p=STRH109

The ALARA Center provided F-Canyon TRU-Repack Facility with Bar-Ray’s LeadX Lead Vinyl to be used in the glovebox to reduce occupational worker exposure. Unused Non-hazardous (Green Light) aprons were located on-site and also were provided. The ALARA Center NFS 55 gallon free standing drum hood (part no. GU17P) was also provided. It will be modified and used as an engineered contamination control when opening 85 gallon drums containing 55-gallon TRU drums. Replacement materials were ordered to replace items taken from ALARA Center to expedite work.

www.pnwx.com/Accessories/LeadProducts/Aprons/Infab/FullCoatWrap/
www.pnwx.com/Accessories/LeadProducts/Blockers-Shields/

The ALARA Center provided Rad Con in Site D&D with two disk smear tools on five foot poles for surveying under drums. Use of this tool will eliminate the safety hazard of workers placing their arms and hands under a suspended load. A picture of the tool is below.

![Disk Smear Tool](image)

The ALARA Center library has added a CD of the presentations from the 2008 Waste Management Symposia titled “Phoenix Rising: Moving Forward in Waste Management”.

**VENDOR INFORMATION AND VISITS**

On 7/23/08 Don McCarthy and Carson Anderson with Nilfisk-Advance America visited the ALARA Center and conducted a demonstration of their HEPA vacuum systems. Both an Eliminator I & II HEPA vacuum system will be on display in the ALARA Center. Since the GM625 HEPA vacuum has been discontinued the display unit was returned to Nilfisk. DWPF was provided with a Nilfisk Compact Back Pack electrical cord.

The ALARA Center added a Minuteman International Micro Vac to the ALARA Center. Attached is product literature. The site Filter Test Group successfully tested three Minuteman vacuums new to SRS on display in the Center. They are the BPV (Back Pack Vac), CRV (Clean Room Vac), and the Micro Vac. Below is literature for each.

![Minuteman Micro Vac](image)

**POINTS OF CONTACT**

Robbie Bates  
(803) 208-3601, Pager (803) 725-7243 ID #14550  
robbie.bates@srs.gov

Ellen Parrish  
(803) 952-6557, Pager (803) 725-7243 ID #11617  
ellen.parrish@srs.gov