

SRS ALARA & SAFETY COMMODITY (A&SC) CENTER
Engineered Solutions for Radiological, Respiratory, Safety & Industrial Hygiene Applications.

AUGUST 2011 ACTIVITY REPORT

ASSISTANCE, RESEARCH, AND TOURS

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

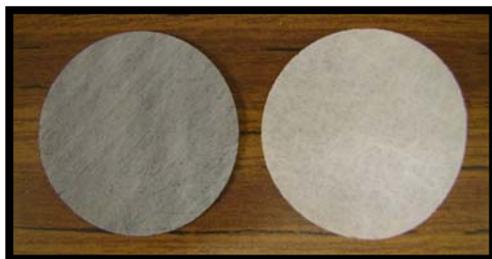
The internal SRS A&SC Center website is available in InSite at the ESH&QA Regulatory and Radiological Technologies web-site. www.srs.gov/general/programs/alara/

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

Visit the D&D Knowledge Management Information Tool (D&D KM-IT) at www.dndkm.org to see the new features and enhancements that are being integrated and incorporated into this free tool developed to promote the exchange of D&D knowledge throughout the DOE complex. The website will soon be sporting a new look with even more user interaction; the result is a fresher appearance and more intuitive navigation. Also coming soon to the D&D KM-IT is a vendor management module that will provide a directory of commercial vendors who provide D&D related technologies, supplies, and services. While not a comprehensive directory of all the D&D vendors in the marketplace, the new module will provide an excellent starting point for researching the vendors who provide D&D products and services. The D&D KM-IT system has been developed by the Applied Research Center at Florida International University in collaboration with the Department of Energy (DOE EM-44), the Energy Facility Contractors Group, and the ALARA Centers at Hanford and Savannah River.

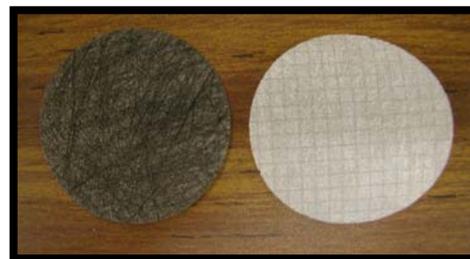
Personnel from Central Warehouse Operations (CWO) visited the A&SC Center to determine the best glove for insulators working in 713-2N. The task is to install insulation over sharp pre-hung hanger pins and then to use your hands to push the insulation to find the pins. Dexterity is required to install a retainer and cap onto each pin. Hexarmor's first choice was the Level Six Series 9011 glove which offers protection and dexterity. www.hexarmor.com/products/detail/level-six-series-9011/. CWO decided to use the Hexarmor HOG Short Cuff glove, available from site inventory, for installing the insulation and use a different glove with better dexterity when installing the retainer and cap onto the pins. www.hexarmor.com/products/detail/hexarmor-overglove-hog-short-cuff/. There is an old saying "the right tool for the job" but I contend that it is the right job for the task. A job may consist of many tasks and each can present unique and different hazards. The A&SC Center recommended the use of a tool or object, such as a 4 inch diameter PVC coupler to push the insulation to find the pins.

There is a change in appearance of the black backed 5 um Fluoropore FTFE (polytetrafluorethylene) filter paper used per SRS Manual 5Q1.7 Procedure 236, *Operation of the Canberra Alpha Continuous Air Monitoring System*. The new filter paper is white, has a gridded backing, is identical in composition to the black backing and is made by the same supplier. The active side of the filter paper is still the dull smooth side. Below is a picture.



old filter front

new filter front



old filter back

new filter back

The A&SC Center provided two disk smear heads to Spent Fuels Project Radiological Protection Department (RPD) for performing radiological surveys.

The A&SC provided HB-Line RPD personnel with three Kestrel 1000 anemometers. SRS Manual 5Q1.2 Procedure 496, *Radiological Containments*, states that the Kestrel 1000 is the preferred vane anemometer for site Radiological Control use and is available from the ALARA Center. The Kestrel 1000 calibration is good for two years from the date it is placed into service. Due to the low cost they are discarded after two years rather than maintaining a calibration program. The ALARA Center applies a calibration expiration label to each Kestrel 1000 at the time of issuance.

The A&SC Center was contacted by personnel in the Savannah River National Laboratory (SRNL) in need of anti-fatigue safety mats to be used in lab modules. Mats currently used are porous and difficult to decontaminate. The Wearwell Diamond-plate SpongeCote No. 415 was recommended and is available from MSC Industrial (a site strategic supplier).

The A&SC met with the Site Welding subject matter expert to discuss products to combat heat stress for welders. An HTFx High Temperature Aluminized Fire Retardant Cool Vest and a Pro Vest Cooling vest product specifications were reviewed and a demonstration unit of each was loaned for evaluation. The High Temperature Aluminized Fire Retardant Cool Vest is recommended for applications requiring heat reflectivity, fire entry, proximity, approach suits and molten metal splash resistance.

Researchers at Idaho National Laboratory (INL) have developed a foam-clay decontamination process that removes radioactive and concentrated metals from various surfaces that they call Rad-Release. Rad-Release is non destructive, reduces workers' exposure to contaminated materials, and minimizes waste costs and volume. Rad-Release is tailored to remove specific radiological and metal contaminants on a wide variety of substrates. The foam-clay process is effective with up to a 99 percent removal rate. The technology utilizes a chemical process that involves topical application of the foam. This application can remove 50 percent of contamination in just two hours. If necessary, a second, more saturated clay substance can be applied to the surface for six weeks and will remove up to 95 percent of contamination. For more information and to view a demonstration video visit <http://www.inl.gov/rd100/2011/rad-release>

Inflatable Concrete Canvas Shelters utilize a concrete cloth cement impregnated fabric that could be useful during field remediation and D&D as containment for high hazard items or as a low dose staging area. Concrete canvas strips might find application as shielding for above ground transfers lines. A demonstration video showing a concrete canvas containment installation is available at <http://www.wimp.com/concretetents/>. Contact US Shelter at ccinfo@cavesystems.com if you would like more information about concrete canvas containments.

The Site ALARA Committee (SAC) met on August 23rd in 735-2B to review the second quarter performance indicators, +/- 25% discrepancies between the 2nd quarter cumulative dose and established goals, and the Administrative Control Level (ACL) increases within SWM and Saltstone. LWO reviewed the recent injuries that have occurred in several LWO facilities. The next SAC meeting will be held in late October or in November.

AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) SUPPORT

The A&SC Center was contacted by the E-Area Radiological Engineer concerning ventilation for a PVC Glove Hood 4'Lx3'Dx3'H used to remove highly radioactive contaminated prohibited items from bags. The glove hood is basically a glove bag with an opening like a hood rather than glove ports. The plan is to use coppus blowers when the hood portion is open and work is performed. When work is completed each day the hood will be sealed shut and negative ventilation applied to the glove hood. A Nilfisk GM-80I HEPA vacuum system was being considered to provide negative ventilation but continuous operation over an extended period of time is an issue. The A&SC recommended a Radiation Protection Systems (RPS) Glove Bag Ventilation Unit designed for continuous operation. Both a GM-80I and RPS Glove Bag Ventilation Unit were loaned to the Burial Ground for mock-up.

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