

SRS ALARA CENTER (AC)

Engineered Solutions for Radiological, Safety & Industrial Hygiene Applications.

JUNE 2010 ACTIVITY REPORT

ASSISTANCE, 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 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

The D&D Knowledge Management Information Tool (D&D KM-IT) is a web-based knowledge management information tool custom built for the D&D community. The system was developed by Florida International University – Applied Research Center (FIU-ARC) in collaboration with the Department of Energy (DOE EM20), EFCOG, and the ALARA Centers at Hanford and Savannah River. <http://dndkm.arc.fiu.edu/dndkm/>

DOE 2009 Occupational Radiation Exposure draft statistical data has been posted on REMS web site at www.hss.energy.gov/csa/analysis/remms/remms.htm. No individuals exceeded 2 rem administrative limit or the 5 rem regulatory limit or any other regulatory limit. Summary of 2009 radiation dose data is as follows:

Total Effective Dose Equivalent (TEDE) up 5%
 Deep Dose Equivalent (DDE) photon up 7%
 Deep Dose Equivalent (DDE) neutron up 7%
 Committed Effective Dose Equivalent (CEDE) down 13%
 Average Measurable dose up 2%

Note: DDE is component of external dose equivalent derived from external radiation at a depth of 1 cm in tissue; CEDE is internal radiation dose resulting from radioactive material taken into the body, TEDE = DDE + CEDE

The ALARA Center provided H-Area Tank Farm Radiological Protection Department (PRD) personnel with a G/O Corp Magnet Mount Swing Gate with retractable arm for doorways (part number GZ1917) to determine if it could be affixed to a concrete wall without drilling holes in the concrete. They glued a metal plate to the concrete wall then attached the magnetic mount swing gate to the metal plate. The swing gate was originally black but they painted it purple. Results were positive and fifteen additional swing gates were ordered. Below is a picture.



The ALARA Center representatives visited L-Area, K-Area, HTF, DWPF, Saltstone, FTF, ACP, SWMF, and F/H Lab in order to perform the Pre and Post Job ALARA Review assessment scheduled to be completed by 7/31/10.

The ALARA Center continues to support SRS in efforts to reduce worker heat stress. Information was provided to the Saltstone Facility, F-Area Tank Farm, Spent Fuels Program and the Savannah River National Laboratory (SRNL). Three hundred and nine items (combination of shorts, pants, and short sleeve shirts) of CoolTech modesty clothing were ordered for SRNL as well as twenty-eight TempVest.

http://www.unitech.ws/literature/CoolTech_Scrubs.pdf

The ALARA Center provided SRNL with two cases (25 per case) of Quest Environmental & Safety Products prototype Barrierwear lab coats. The labcoat will be evaluated and feedback communicated to the ALARA Center.

The ALARA Center provided H-Area Tank Farm with information to purchase a case (200/case) of Orex skull caps. They are part number CS1511.

The ALARA Center provided the Spent Fuels Program (SFP) with information to purchase Shafer Enterprises Cooling Ponchos. The SFP has used the Ponchos in the past with positive results. The Poncho is made from material containing a network of channels that cooled water flows through. The Poncho is connected to a compact cooling unit via insulated hose with quick, dry disconnects. The cooling unit contains ice, water and an internal pump that supplies cool water to the Poncho. Eighteen Ponchos were ordered and will be used to cool workers before and after work in 105-C. SRNL ordered twelve Cool-Shirts and three Coolers that utilize the same technology as the Poncho. www.coolshirt.net

The ALARA Center provided The Saltstone Facility personnel with information to purchase five cases of Keystone white disposable hats to be worn in a Contamination Area. http://www.keystonecap.com/catalog/utility_paint_surg_caps/pc_01.html

Personnel from the Saltstone Facility visited the ALARA Center and obtained information regarding dust-free coating removal tools. The job requires paint to be removed from concrete vault walls and floors. The Desco FX Tool with roto-peen cutter hub has been used at SRS for similar type work.

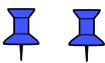
http://www.descomfg.net/index.php?page=shop.product_details&flypage=shop.flypage&product_id=19&category_id=1&manufacturer_id=0&option=com_virtuemart&Itemid=1

The Eletech Electronics Self Talker is a motion detector activated device that replays a recorded message. They have been used at facility entrances to communicate information to workers prior to entering the area. The model used at SRS (IR200BE-4) has been discontinued but they still have approximately fifteen in stock.

http://www.eletech.com/Products/SelfTalker_Displays/IR/ir.htm



AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) SUPPORT

F-Area TRU Remediation personnel ordered twenty-two pair of Hexarmor Piercan USA HOG0408 Overglove. www.piercanusa.com/0901-3184-HOG0408.pdf. They also ordered twelve pair of the new yellow ACN1115 nitrile glove. The specification and chemical data sheets are attached. 

The ALARA Center supported “H” Canyon TRU work with the design of a Radiation Protection System (RPS) Perma-Con structure. Below is the structure description.

- All panels are sheathed with 22-gage 304 stainless steel on the interior. Panel frames will be painted blue.
- Dimensions of walled structure to be 8’x8’x8’.
- The floor will be a lifting floor unit welded as one base. Overall size of lifting floor unit will be 9’-6” x 8’-6” x 6” high incorporating a 6”x6” tubing perimeter with a lifting lug at each corner.
- Perma-Con structure will include one personnel door with window.
- Perma-Con structure will include one 26”x26” Type “A” Transfer Panel.
- Perma-Con structure will include three steel framed fire retardant F2100 lexan windows
- Perma-Con roof will be comprised of two 4’x8’ sections hinged on the outer long side. The roof sections will be opened and closed via a manual crank. Both roof sections will be sheathed with 0.25 inch thick fire retardant lexan.

UPCOMING VENDOR VISITS

Hexarmor and Piercan USA, July 15, 2010, 766-H Rm 1024, 2 PM – 4 PM

ALARA CENTER POINTS OF CONTACT

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