

SRS ALARA CENTER (AC)

Engineered Solutions for Radiological, Safety & Industrial Hygiene Applications.

AUGUST 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/>

The ALARA Center provided information to the Northrop Grumman Shipbuilding Nuclear Engineering Department concerning laboratory and field testing of polyester cotton blend anti-contamination coveralls. The use of an outer layer of disposable coveralls instead of polyester cotton coveralls was also suggested. Contact information was also provided of a textile industry subject matter expert who is familiar with fabric test methods.

H-Area Canyon personnel completed their evaluation of materials to cover railroad tracks in Railroad Tunnel. The material of choice was G/O Corp nine inch wide tack roll (tacky inside like tape), 108 ft. long, non perforated part number GJ1251. It will be used to protect the tracks from contamination and to also remove contamination. Forty rolls were recently ordered.

The ALARA Center provided HB-Line with a G/O Corp Magnetic Mount Wall retractable Tape Unit with yellow and magenta striped tape. A replacement unit was ordered for the ALARA Center.

The ALARA Center provided the Solid Waste facility Radiological Engineer with information concerning the Radiation Protection Systems (RPS) SP-1000LV Ventilation System. The duct often used is 8 inch diameter by 10 ft. long. SRS Stores 5-7385.00 MATERIAL: FLEX-DUCT W/WIRE REINFORCEMENT NEOPRENE COATED. END FINISH: PLAIN CUT.

On 8/23/10 ALARA Center personnel and a member of the Site Ventilation & Filtration Committee met with a representative from Hazard Technology for a demonstration of The Containment Vacuum System. It utilizes a dual HEPA filter system. Particulate are collected into a 22 square foot primary HEPA filter. This filter is changed with the motor running. The secondary HEPA filter is located downstream of the motor. SRS organizations can contact the ALARA Center if they are interested in this system. Below are pictures of the HEPA filter removal procedure. A brochure is attached. 



With plug ready & vac still running, remove vac top



Insert cap into HEPA filter opening. Shut off motor.



Remove the entire HEPA filter and store or dispose properly

The ALARA Center ordered the following Minuteman X829 U.L.P.A (Ultra Low Particulate Air) Filtered X829 Vacuum System for Spent Fuels Project.

Item	Part No.	Qty.	Description
1	C82915-05	1	Includes ULPA filter, pre-filter, filter protector, cloth filter, and disposable bag

2	490022-1	1	20C Tool Kit, Dry
3	110030PKG	1	Pre-filter sleeve (6)
4	805038PKG	1	Paper Filter Protector (12)
5	760598PKG	1	Paper Filter Collection Bag (10)
6	805057	1	Cloth Filter Bag with Frame

H-Area Canyon Outside Facilities Operations personnel visited the ALARA Center in search of a HEPA Filtered Mercury Vacuum System. The ALARA Center and Site Ventilation & Filtration Committee recommended the Minuteman MRS-3 Critical Filter Vacuum, part number C83015-01, (116 lbs./53 kg) 115V, 50/60 Hz, 15 Gal. (57 liter), Stainless Steel, Dry Only, Dry Capacity - .82 cu. ft. (.02m³). The standard features and part numbers are:

255115 - Lid Assembly, 115V, 50/60 Hz	750610 - Tank Assembly, Stainless Steel
750494 - Charcoal Filter Assembly	750489 - Mercury Separator (2 jars)
380049PLT - Bag Frame	805005 - Dacron Bag
805038PKG - Paper Filter Protector (12)	762237PKG - Plastic Bags (10)
805062 - Cloth Bag Assembly	750081 - 1:1 Adapter, Stainless Steel, 15 Gal. (57 liter)
490011 - #30J Tool Kit	750493 - U.L.P.A. Filter Module Assembly
110030PKG - Pre Filter Sleeve (6)	760598PKG - Paper Filter Collection Bag (10) for use with down tube

The ALARA Center provided assistance to H-Area Tank Farm in the selection and procurement of the following G/O Corp rubber mat Step-Off Pads (SOP's).

Product #	Qty	Product Description
GJ1226	45	Step-Off Pad, 140 mil rubber nitrile 20" X 30", non-skid surface on both sides, white background with black print "REMOVE ALL PROTECTIVE CLOTHING BEFORE STEPPING HERE" and two stop signs.

The ALARA Center ordered three G/O Corp Magnet Mount Doorway Swing Gates with retractable arm (part number GZ1917) for the K-Area Radiological Protection Department (PRD).

The Site Personnel Protective Equipment Oversight Council (PPEOC) approved the Tritium Facility to pilot test the following Piercan USA gloves.

- UY1214-10.5UA, blue/white hypalon/polyurethane, 14 inches long to be evaluated as an overglove for butyl glove box glove.
- 5YU1518-1019LC13, yellow polyurethane, 18 inches long, to be evaluated as an overglove for butyl glove box glove.
- ACN111510, yellow nitrile glove, 15 inches long, to be evaluated as a worker outer glove when working in butyl glove box glove

Solid Waste Management contacted the ALARA Center in need of several rolls of 4 inch diameter transparent sleeving. The ALARA Center recommended LANCS Industries 8 mil thick, 4 inch diameter, 100 ft. per roll, double polish clear sleeving.

AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) SUPPORT

The ALARA Center coordinated use of several Tank Farm Encapsulation Technology Passive Aerosol Generators (PAG's) to fog E-Area Pad 16 following a contaminated liquid leak from a culvert during TRU remediation work. The PAG's worked intermittently and since the units and replacement parts are no longer available, the ALARA Center investigated alternative fogging equipment. The following Curtis Dyna-Fog equipment has been ordered to determine fogging effectiveness.

Qty	Part No.	Description
1	Model 3000 Fogger	Cyclone Ultra Flex w/ 3 ft. Flex Hose, 110V
1	Model 2895 Fogger	Tornado Flex w/ 3 ft. Flex Hose, 110V

<http://www.dynafog.com/ulv/ecf/>

UPCOMING VENDOR VISITS

Radiation Protection Services (RPS), 10/11/10, 766-H, Room TBD, 9 AM – 12 PM

ALARA CENTER POINTS OF CONTACT

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