SRS ALARA CENTER (AC) DECEMBER 2007 ACTIVITY REPORT

ASSISTANCE, DEMONSTRATIONS, RESEARCH, AND TOURS

The external SRS ALARA Center website is posted at <u>http://irmsrv35.srs.gov/general/programs/alara/</u> The internal SRS ALARA Center website is available in ShRINE at the ES&H Regulatory and Radiological Technologies web-site. <u>www.srs.gov/general/programs/alara/</u>

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

The ALARA Center provided the Waste Management Area Project (WMAP) Organization information concerning the Nilfisk VT-60 HEPA vacuum system designed for liquid or dry pick-up with no filter change or adjustment. The filter areas include a foam impact filter to protect the float valve from clogging debris, polyethylene tubes, a microfilter, and HEPA filter. The system is rated at 117 inches of water lift and an airflow rate of 99 CFM. www.pa.nilfisk-advance.com/ProductDetail.aspx?m=88



Personnel from Liquid Waste in the Defense Waste Processing Facility contacted the ALARA Center searching for tools to cut jumpers. Some jumpers have mounting plates attached which make the task more difficult. The E.H. Wachs Model C Electric Guillotine Saw, on display in the ALARA Center, was loaned to the facility to conduct a mock-up cutting a jumper/mounting plate. The Mega-Tech Blade Plunging Cutters were evaluated in the ALARA Center on 12/19/2007. The results are documented in the vendor section below.

The ALARA Center provided F/H Laboratory Maintenance with a Nilfisk GM-80 HEPA vacuum system with a variable speed controller used as an exhauster for the Temporary High Activity Drain Tank being installed in the chase of L-174 in F-Area Laboratory. A system was ordered to replace the one taken from the ALARA Center. www.pa.nilfisk-advance.com/ProductDetail.aspx?m=100

The ALARA Center provided D&D Operations with the Nilfisk VT-60 Mercury HEPA Vacuum complete motor cover assembly part number (01787790) which needed to be ordered. <u>www.pa.nilfisk-advance.com/ProductDetail.aspx?m=96</u>

The ALARA Center made 5 gallons of Bartlett PBS Fixative available to HTF Liquid Waste to recoat outdoor burm area at Tank 13. <u>www.bartlettinc.com</u>

The ALARA Center provided H-Completion Radiological Engineer with information concerning Ecomass non-hazardous shielding material in pellet form (product number 1700TU96). See below. This type shielding may be needed to shield tank containment prior to disposal. Below is shielding data of Ecomass pellet form compared to lead. www.ecomass.com

The ALARA Center was asked by both H-Completion and WMAP organizations for a ventilation system that could be used in place of the traditional copus blower and HEPA filter box assembled at SRS. The NFS SP1000 LV 1000 CFM Low Voltage HEPA Fitration Unit was recommended. There is one on display in the ALARA Center. www.nfsrps.com/fm48.html

VENDOR INFORMATION AND VISITS

John Bowen with Mega-Tech Services visited the ALARA Center on 12/17/07 to conduct a cutting demonstration of the Blade Plunging Cutter BPC-4HD and BPC-6. A Task Specific Plan (TSP) was written to identify the hazards and controls/safeguards used to mitigate the hazards. Liquid Waste Safety Engineer John Gantt was present and approved the demonstration. Liquid Waste provided samples of 3 inch diameter schedule 40 hastelloy jumper. The BPC-6 easily cut the jumper but the BPC-4HD would not quite cut the jumper. The BPC-6 also cut a 3 inch diameter schedule 80 stainless steel pipe. The BPC is a portable hydraulic power cutting tool. It has a blade and is a piston forced plunging cutter that operates through the recess in the anvil, severing the pipe in a guillotine fashion rather than cutting the pipe in a reciprocating manner. This technology actually separates the metal and does not produce any debris. It has a "dead man" switch for safe operations. It utilizes a 220V/20 amp hydraulic power unit (HPU) which powers the tool with an operating pressure up to 10,000 PSIG. Below is a picture of the HPU and the BPC-4HD attempting to cut the 3 inch SCH40 hastelloy.





John Shannon with NFS visited the ALARA Center on 11/20/07 to discuss ventilation systems, containments, and shielding. Shielded booths and caves were discussed in detail with the F-Area Tank Farm Rad Engineer. <u>www.nfsrps.com</u>

Trip McGarity and Ray McCullers were in the ALARA Center on 12/04/07 from 10:00 AM to 1:00 PM and conducted a demonstration of products available from Frham Safety Products. A new PPE item is the OREX Xtreme coverall. They are a new OREX tri-laminate fabric that is waterproof.

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