

Worker experience highlighted at ALARA workshop

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“2001 — An ALARA Odyssey” — the third annual Hanford workshop for the As Low As Reasonably Achievable radiological work safety program — drew more than 150 participants to the Richland Red Lion May 22-24. Focus of the workshop was on tools, equipment, work practices and lessons learned needed to accomplish radiological work.

“I think this was the most successful of the three ALARA workshops we’ve held, according to evaluation comments from participants,” said Owen Berglund of Fluor Hanford. Berglund was on the workshop committee and is head of the Analytical Services ALARA program at the 222-S Laboratory.

While most participants are employed at Hanford, out-of-towners represented several DOE sites including New Mexico’s Los Alamos, Rocky Flats in Colorado, West Valley in New York and the Idaho National Engineering and Environmental Laboratory. The Puget Sound Naval Shipyard also was represented, as were companies that supply products or equipment for the safe accomplishment of radiological work.

Workshop committee chairman Jerry Eby of the Fluor Hanford ALARA Center of Technology welcomed the audience. Opening the workshop was Ed Parsons, DOE-RL senior technical advisor for Safety and Engineering. Dr. Antone Brooks of Washington State University delivered a keynote address on “DOE Low Dose Radiation Research Program: Impact on ALARA,” and Steve DeMers of Bechtel Hanford discussed “Worker Involvement in the ALARA Process.”

Twenty-four different presentations were repeated the first day, with four in session at all times throughout the day. The sessions typically focused on practical experience and lessons learned from actual radiological jobs.

“My favorite aspect of the workshop was the grassroots approach to performing ALARA,” Berglund said. “The workers did the presentations and provided the workers’ perspective on ALARA performance in the field.”

Topics included:

- Old and new ways of operations at the Plutonium Finishing Plant
- Benefits of a strong self assessment program
- Flame cutting cross supports at K East
- Use of ventilation and enclosures at 233-S
- West Valley Demonstration Project overview
- Program to reduce and control biology-related radioactive contamination spread at the Hanford Site
- Using a small-diameter geophysical logging system for cost-effective characterization, waste minimization and reduction of worker exposure
- High-risk contaminated equipment removal and disposal, using mock-up
- W-314 Project for pit refurbishment using polyurea.



Forty-three ALARA workshop participants lunched at the ALARA Center of Technology during their tour of the Hanford Site. The bus tour included demonstrations of technologies such as the “Pit Viper” and HAMMER training opportunities designed to increase on-the-job safety for radiological workers.

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“It’s interesting to hear that other sites have similar exposure problems,” said Allen Ostby of Fluor Hanford. Ostby has developed numerous ALARA devices and techniques for the Plutonium Finishing Plant. He delivered the presentation on old and new ways of operating at PFP. “It’s a good feeling, after you give a presentation and a number of people tell you they liked what they heard,” he said. “These ALARA workshops are a good way to share information within the DOE complex.”

On Wednesday, as triple-digit temperatures broke records for May, a busload of 43 workshop participants toured the Hanford site. Stops included the Volpentest HAMMER Training and Education Center, the CH2M HILL mock-up for the “Pit Viper” robotic tool, the Columbia Power Generating Station Visitor Center and the ALARA Center of Technology.

A new set of two-hour workshops filled the agenda Thursday:

- Contamination control techniques
- Procurement, handling and use of HEPA filters
- Radiation exposure reduction
- Capturing airborne contamination
- Incorporating usable ALARA work practices in radiological work plans
- Dr. Deming’s “Red Bead Experiment” and RadCon.

Parallel with the workshops, a commercial vendor show on ALARA products was held at the hotel and the Columbia Health Physics Chapter convened for its monthly meeting.

“I learned about new shielding applications from vendor demonstrations,” Berglund commented. “We had been progressing toward some of these applications and will now consider various uses for them at the facility.”

Eby concluded, “We established several goals in preparing for this event — having an external Web site on the ALARA workshop, having presentations from other DOE sites, having more presentations given by Hanford operations and maintenance personnel and increasing the number of participants from Hanford and other facilities. All goals were accomplished. Feedback from the participants revealed they felt their time was well spent on the presentations and that they’d like to attend future Hanford ALARA workshops.”

Eby gave special thanks to the workshop subcommittee chairs, including Berglund (logistics), Pat Barajas of FH (registration), Joel Hoyt of PNNL (publicity), John Stamper of FH (Web site), Bud Evans of DynCorp (equipment), Christine Bullock of FH (topics/presentations), Pete Seilhymer of CH2M HILL (site bus tour), Terry Milham of FH (administration) and Vern Shockley of BHI.

Sponsors for the third annual ALARA workshop were Fluor Hanford and other companies of Fluor Project Hanford, plus CH2M HILL Hanford, Bechtel Hanford, Pacific Northwest National Laboratory, the DOE Richland Operations Office and the Office of River Protection. The event was approved for 32 continuing education credits from the American Academy of Health Physics and eight maintenance points from the National Registry of Radiation Protection Technologies. ♦