

SOLUTIONS



A weekly publication of highlights and progress of the Hanford Tank Operations Contractor

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WRPS gets ready to support the DOE ISMS Review

An 11-member Department of Energy (DOE) team will begin its review of WRPS' implementation of its Integrated Safety Management System (ISMS) on Aug. 23. The team, made up of reviewers from DOE-Idaho, DOE-RL, and DOE-Headquarters, along with a safety representative from the WRPS nuclear chemical operators, will spend two weeks reviewing documents, interviewing employees and observing work activities in the field.

The team will initially focus on:

- Work control
- Radiological control
- Emergency planning (including operations drills)
- Corrective action management
- Environmental management
- Commercial grade dedication
- Conduct of operations

"This ISMS review by DOE goes beyond ensuring that we have a documented ISMS program," says Ray Skwarek, manager of Environment, Safety, Health and Quality.

"The DOE review team will assess how we plan and execute our work, including how procedures and work packages are implemented in the field.

"We are looking to demonstrate to DOE that many of the corrective actions and improvement opportunities that have been implemented across WRPS have improved our safety culture. And we want to show the reviewers that we have a competent workforce that follows procedures, stops work when necessary to revise the direction, and applies our corrective action program when appropriate."

Members of the WRPS senior management team are personally involved in completing ISMS improvement actions prior to the arrival of the DOE review team. Skwarek also stresses that every WRPS employee must understand and demonstrate effective implementation of the ISMS.

A poster titled "Expectations for Implementation of the Integrated Safety Management System" and the ISMS Employee Handbook were provided to all WRPS employees and contractors at the July 2010 Safety Meeting discussion. These documents can also be found on the WRPS intranet at <http://tfc.rl.gov/rapidweb/chg/chgism/index.cfm?PageNum=1>.



New decontamination trailers and safety showers improve tank farm safety

Washington River Protection Solutions has purchased three new decontamination trailers and eight modular safety showers that will greatly improve worker safety in the tank farms. The trailers are scheduled for delivery by the end of September, and the safety showers already on site are being readied for deployment in the field. All were purchased with money provided by the Recovery Act.

“The new trailers improve our ability to decontaminate workers who have been exposed to radioactive contamination,” said Terry Laney, Project & Maintenance Engineer for the Decontamination Trailer Project. “We’ve also purchased modular safety showers that will be staged at specific tank farms and job sites. Locating the safety showers closer to the field work provides better access to shower facilities if workers are contaminated by chemicals or tank waste.”

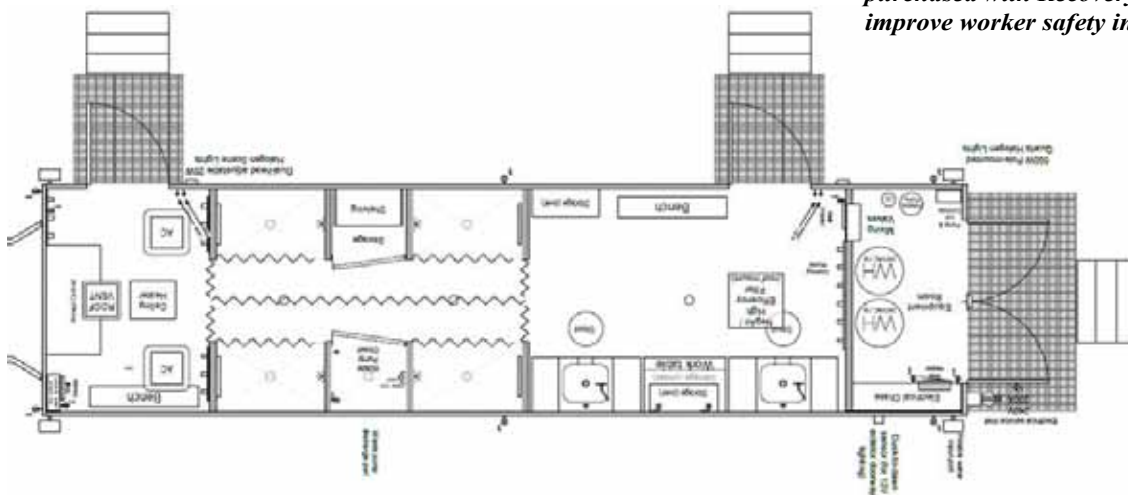
The trailers being replaced are riddled with problems: the showers are small and prone to leaks, the interior walls are buckling, the diesel-fired water heaters frequently fail or don’t work during low-flow conditions, and black-water conditions often occur when the system has been idle for long periods of time.

The new trailers have four large showers with adjustable-height heads, safety seating, two sinks for cleaning head and hair contamination, and eyewash stations that can be pivoted into place when needed. Additional comforts include warm water under all flow conditions, plenty of storage space for decontamination supplies and clothing, and easier maintenance.

The trailers are a direct response to employee safety concerns. An accident prevention task team recommended that new equipment be purchased to better respond to incidents involving corrosive chemicals or radioactive contamination. The task team spent several months listening to employee concerns and researching requirements before making its recommendation.



New decontamination trailers and safety showers, purchased with Recovery Act funding, will greatly improve worker safety in the tank farms.



Level rise modification project increases tank storage space

Construction crews recently completed work on six of the eight tanks in AP Farm that will lead to an increase in the operating level of the tanks by about 100,000 gallons per tank. This roughly equates to adding an additional million gallon tank to the AP Farm. This work had previously been completed for the other two tanks.

The level rise modification project, paid for with funding provided by the Recovery Act, increases tank space to allow additional retrieval and storage of waste from the single-shell tanks until it can be sent to the Waste Treatment Plant (WTP). The change in maximum operating level of the tanks will also enable Waste Feed Delivery operations to provide an uninterrupted feed of waste in 150,000-gallon batches flowing to the WTP once hot operations begin.

The project faced several challenges before crews could guide it to a successful completion. A new construction contractor was hired to perform the work, high radiological and contamination risks were evident, and this particular type of work had not been performed for several years. Because of those risks, it was decided that mock-up demonstration training was needed to minimize the threat to workers.

After the mock-up exercises were thoroughly reviewed with all members of the work crew, changes were made to the work packages based on the lessons learned. Members of the joint review group also observed these mock-ups which enabled them to see firsthand the issues and resolutions to the work procedures.

"This was truly a team effort," said Project Manager Todd Erickson. "RadCon, Operations, Engineering and Industrial Safety/Hygiene all played vital roles in getting this job safely completed in the field."



Employees of Federal Engineers & Constructors (FE&C), a locally based small business, modify instruments on a tank in AP Farm that will significantly increase the operating level of the tanks.

New work planners 'an investment in the future'

A group of new work planners are undergoing training, readying themselves to help tank farm workers comply with the safety basis and environmental laws while ensuring safe work practices.

According to Cheryl Salinas, Base Operations Work Control manager, work planners are an integral part of implementing WRPS' Integrated Safety Management System (ISMS). The planners gather vital information from subject-matter experts and funnel it into a document that ensures the safe execution of work in the field.

"The increased workload with Recovery Act projects has strained our work control resources," Salinas says. "And we are losing some employees to retirement. The company is investing in the future by hiring and training new work planners who will be here for the long haul."

Sixteen new planners were hired in the past month and 10 of those are undergoing their initial three months of training, including tank farms access, supervisor fundamentals and facility systems training. Following their classroom training, they will spend up to several months being mentored by a qualified planner. Fred Tausch, a senior member of the Base Ops Work Control team, will be the primary mentor.

"This was a unique opportunity for us to hire and train a group of new planners as a block and get them working in the tank farms," says Lloyd Keith, Training manager. "Planners are in high demand, so we created a new training program and hired people from various backgrounds. We looked for people with organizational skills who know how to put together technical documents that explain how to do a job.

The new planners have very diverse backgrounds, including construction management, civil engineering, the automotive industry, business, electrical and health physics. But they all share some common traits.



"I believe that everyone in this group has effective communications and interface skills," Salinas says. "Those are critical skills for someone who has to interface with management, safety, engineering, craft workers, the environmental group and Quality Assurance.

"Our need for planners has, at times, limited our productivity. With this new group of planners, we are building a foundation of much-needed skill sets that will serve us well for years to come."



The interim barrier being installed over the TY Tank Farm in Hanford's 200 West Area was the focus of media attention last week. Project manager Dan Parker (center) explained the project to reporter Chris Holmstrom of KNDU Television. Also pictured is Tri-City Herald photographer Rich Dickin. The temporary asphalt barrier is being installed over the six tanks in the farm to prevent rain and snowmelt from percolating into the soil and driving contaminants down to the water table. Five of the six tanks are assumed to have leaked contaminants to the surrounding soil. Financed with funds from the American Recovery and Reinvestment Act, the nearly \$3 million project is being done by Fowler General Construction of Richland. It will remain in place until a decision is made about how to deal with the contaminants in the soil around and beneath the tanks. To see the KNDU news coverage, click [here](#). (This is a large file and may take a few minutes to load.)



Project manager Dan Parker (L) explains the work taking place to install an interim barrier in TY Farm to the Department of Energy's Inspector General Auditor Alan Nielson. The visit is part of a review that is under way of projects funded with American Recover and Reinvestment Act (ARRA) funds. The project is funded with nearly \$3 million in ARRA money. The temporary barrier, made of high density asphalt, will prevent rain and snow melt from percolating into the soil and driving contaminants down to the ground water. The barrier will be completed in the near future.

Tank Waste Information Network System gets update

The Tank Waste Information Network System (TWINS) database has experienced some technology updates in the last few years. The database, started in 1992, contains all the characterization of tank waste information.

"The technology used to make TWINS back in the 90s is archaic by today's standards," said Jacob Reynolds. "Today's software makes the users experience straightforward and logical compared to the old system."

According to Reynolds, the new TWINS system can upload a document into its document repository in seconds, while the old system took eight hours to upload a file.

"PNNL built us a whole new database in less than eight hours," Reynolds said

With the old TWINS, it took more than 50 software applications to generate a tank characterization report (TCR) file each time a report was needed. In the new system, TCRs are downloaded as a static Word file with a well-defined effective date. Users who need more data than the Word document can download it as a spreadsheet file in the Tank Characterization Database section of TWINS.

"A lot of parts of the TCRs were not being used," Reynolds said. "So we removed those parts to make them less confusing."

Also, TWINS is accessible at places other than Hanford. The Environmental Protection Agency (EPA), Nuclear Regulatory Commission (NRC), the Department of Ecology, the Department of Health and other labs all have access to TWINS as well.

Diabetes education program postponed

This program has been postponed until the last week of September. If you are still interested in participating, please contact Terese Meyer @ 376-5665.

PTB Transfers

Dana Braden of Base Operations has been approved for PTB transfers. Dana will be on leave while he recovers from medical treatment. If you would like to contribute PTB time to Dana, complete site form number A-6002-807, "[PTB Transfer Request](#)" and forward it to Human Resources, Tracie Lorenzen (MSIN E6-46). All time must be transferred in one-hour increments.

Van Pool riders needed

Yakima - Looking for two riders to start a small six-person vanpool. This van pool works the 6 a.m. to 3:30 p.m. shift (8-9s schedule) pickup is at Moxee park'n'ride at 5 a.m. Additional pick-up locations can be added if needed. If interested or would like more information call Ron Barry on (509) 930-1607 or (509) 833-6567.

In the community

The Columbia River Basin Chapter of the Project Management Institute (PMI) is hosting a two-day seminar October 12 and 13, 2010, from 8 a.m. to 4:30 p.m., at the Shilo Inn, Richland, WA.

Speakers Steve Hegele (www.hegele.com) and Joe Estey (www.prolepsistraining.com) will be teaching skills on effective leadership. Early-bird registration is \$399 for PMI members and \$499 for non-members, through Aug. 30. For more information and course descriptions, go to www.crb-pmi.org/?ID=94 or contact Terri Fookes at 509-528-0662.

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