

Documented safety analysis will assist mission acceleration

There's transition brewing in the tank farms' safety basis that will ripple changes out into CH2M HILL Hanford Group daily operations during the months ahead. The transition is a direct result of Title 10 Code of Federal Regulations 830, "Nuclear Safety Management." This regulation mandates preparation and submittal by April 10 of a documented safety analysis for applicable nuclear facilities in the Department of Energy complex.

Last April, a technical working group was commissioned by the DOE Office of River Protection to develop a documented safety analysis that is compliant with 10 CFR 830. The technical working group is made up of ORP and CH2M HILL senior personnel.

Group members started the development process by re-evaluating the previous final safety analysis report and its associated technical safety requirements that were implemented about five years ago. Their evaluation effort targeted safety basis areas that could be simplified or optimized.

Why was this necessary? During the previous five-year time frame, many of the tank-farm hazards and their associated safety issues, such as the Wyden Watch List, have either been eliminated or changed because of the new support missions of tank retrieval and closure or waste feed delivery for vitrification.

"The focus of the DSA development team and technical working group is to ensure that the resulting DSA streamlines the associated control set while providing workers with the flexibility needed to get work done in a dynamic work environment," said Brad Smith, CH2M HILL Hanford Group director of Nuclear Safety and Licensing.

"We are using Integrated Safety Management System and Voluntary Protection Program principles of worker involvement by affected tank-farm organizations," said Smith. The CH2M HILL organizations include Nuclear Operations, Maintenance, Engineering, ESH&Q, Projects, Strategic Mission Planners and others as needed for all aspects of documented safety analysis development.

Other CH2M HILL inputs considered by the development team for the documented safety analysis were problem evaluation requests and other outstanding issues. These inputs helped capture lessons learned from the previous FSAR development and implementation effort.

"This documented safety analysis belongs to all CH2M HILL and subcontractor personnel who perform work at tank farms, not just one or two select groups," said Smith. "The resulting requirements that are being developed will be easier to understand and therefore more straightforward to implement."

Implementing the documented safety analysis is expected to take the rest of fiscal year 2003 and beyond. Mike Koch of System Engineering is managing the CH2M HILL implementation project. Changes will be made in approximately 450 procedures. In addition, other engineering and safety documents will be reviewed and changed when necessary as part of the implementation process.



Brad Smith, left, and Ron Stevens of CH2M HILL Hanford Group show how documents and procedures will be streamlined and easier to understand with the development of a mandated new documented safety analysis.

Documented safety analysis will assist mission acceleration, cont.

“Developing work packages and procedures to comply with the new requirements will be easier with an emphasis on facility worker protection through the use of safety-management programs, such as radiation protection, operational safety and hazardous waste management, to name a few,” Smith said.

“By focusing the appropriate controls to protect against the hazards found in each unique work environment, workers will be able to use more streamlined documents that will enhance compliance with requirements in the field,” he said.

The documented safety analysis transition also will create new training requirements. Courses will be developed for job-specific areas in a tiered (or graded) approach for CH2M HILL personnel.

After all documented safety analysis implementation preparations have been completed later this calendar year or early next year, a management review will be conducted to demonstrate that the DSA is ready to be implemented.

“More details will be provided in the future as the documented safety analysis development and implementation proceeds,” said Smith. ■