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RFETS "State of the Flats Annual Meeting"

DNFSB Perspective on Rocky Flats Environmental Technology Site

What is the Defense Nuclear Facilities Safety Board? The DNFSB is an independent executive branch agency, comprised of four Board Members and staff, that provides advice and recommendations to the Secretary of Energy regarding public health and safety issues at Department of Energy defense nuclear facilities, and to the President, if necessary.

What does the DNFSB do at RFETS? The DNFSB provides independent safety oversight of nuclear operations at RFETS. This oversight is performed by a full-time site representative as well as site visits and other interactions by Board Members and staff.

Major DNFSB Areas of Interest at RFETS in 2001

Plutonium Stabilization. In response to DNFSB Recommendation 94-1, *Improved Schedule for Remediation in the Defense Nuclear Facilities Complex*, RFETS has been stabilizing and packaging several tons of plutonium in various forms. Stabilization of the inventory of plutonium metal and oxide and packaging that material for long-term storage has begun in the Plutonium Stabilization and Packaging System. With encouragement from the DNFSB, RFETS is repackaging various plutonium residues into robust pipe overpack containers to accelerate residue disposition. RFETS has also completed removal of plutonium solutions in piping systems in Building 771. RFETS should be able to complete plutonium processing by late 2002.

Integrated Safety Management. RFETS continued efforts responding to DNFSB Recommendation 95-2, *Safety Management*, to improve integration of safety into work planning. These efforts are reflected in the Kaiser-Hill Site Safety Improvement Plan responding to safety concerns raised by DOE-RFFO in January 2001 and in a set of actions responding to DNFSB observations on plutonium thermal stabilization activities provided to DOE in March 2001. These efforts aim at improved work planning for individual activities using hazard analysis to identify effective safety controls and properly implementing those controls on the floor. This is particularly important for the short-duration, often one-of-a-kind, decommissioning activities common at RFETS.

Engineered Controls for Decommissioning Activities. The DNFSB has been urging the use of engineered controls to greatly reduce the airborne contamination hazards faced by workers rather than relying on personal protective equipment. Such controls are especially needed to allow safe size-reduction of plutonium-contaminated gloveboxes and related processing equipment in preparation for disposal. Through 2001, RFETS has developed and deployed three generations of "Inner Tent Chambers" in Building 771 and Building 776. These chambers allow workers to perform size reduction operations through openings/gloveports in the ventilated chamber, resulting in a greatly reduced airborne contamination environment for the workers. Separately, engineered controls that greatly reduce the airborne hazard of small component disassembly in Building 771 and tank clean-out efforts in Buildings 371 and 771 have been developed in 2001.