John T. Conway, Chairman A.J. Eggenberger, Vice Chairman Joseph J. DiNunno John E. Mansfield Jesse Hill Roberson

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

RFETS Site Rep., T115A, 10808 Hwy 93, Unit A, Golden CO 80403 (303) 966-2185 www.dnfsb.gov



February 20, 2001

RFETS "State of the Flats"

DNFSB Perspective on Rocky Flats Environmental Technology Site FY2000 Performance

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

What does the DNFSB do at RFETS? The DNFSB provides 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 Issues at RFETS in 2000

Plutonium Stabilization. In response to DNFSB Recommendation 94-1, *Improved Schedule for Remediation in the Defense Nuclear Facilities Complex*, DOE is stabilizing and packaging several tons of plutonium in various forms. With encouragement from the DNFSB, RFETS has repackaged various plutonium residues into robust pipe overpack containers to accelerate residue disposition. RFETS has also drained plutonium solutions in piping systems in Building 771 and is finalizing preparations to stabilize the inventory of plutonium metal and oxide and package that material for long-term storage. While completion of certain interim Recommendation 94-1 commitments have been delayed, RFETS should be able to complete plutonium processing by about May 2002.

Integrated Safety Management. In response to DNFSB Recommendation 95-2, *Safety Management*, RFETS has continued to improve integration of safety into its work planning, and has focused on using hazard analysis to develop effective safety controls for specific hazardous activities and properly implementing those controls on the floor. This is particularly important for short-duration, often one-of-a-kind decommissioning activities. In April 2000, the DNFSB forwarded observations on these efforts noting that successful implementation will depend on effective training and mentoring of key work planning personnel. Efforts by RFETS continue in this regard.

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. RFETS has developed and deployed two generations of "Inner Tent Chambers" in Building 771. 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. The basic Inner Tent Chamber concept is planned to be used to support decommissioning of the other major RFETS nuclear facilities.