Line Management Lessons Learned During Development and Implementation of a New Authorization Basis

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The Rocky Flats Environmental Technology Site (RFETS) has been developing new authorization bases (Abs) for nuclear facilities that are nearing the end of their mission life and entering into deactivation, decontamination, and decommissioning. This paper addresses lessons learned during development and implementation of the new Building 776/777 Basis for Interim Operation (BIO) and Technical Safety Requirements (TSRs) from a line manager's perspective.

Some of the key lessons learned of things that worked well during development of the AB included: (1) establishing a well-defined AB project plan and using it to justify initial funding; (2) aggressively managing the project scope and schedule to meet milestones; (3) assigning a senior line manager with extensive plutonium processing experience at RFETS, including detailed knowledge of the facility's operations and past history; (4) establishing a diversified team of experienced AB, facility, and support personnel who were able to stay together for most of the development phase; (5) more active facility participation in the Preliminary Hazards Analysis to identify and evaluate unmitigated hazards – this was instrumental in identifying hazards associated not only with current activities, but also with previous plutonium processing operations and past accidents; and (6) more active facility participation in the subsequent accident analysis and development of TSRs – this helped to eliminate or minimize implementation issues that had occurred with recently-approved Abs due to establishing preventive or mitigative controls without the right floor-level input such that some of the new TSRs were difficult or infeasible to implement.

After DOE approval of the new AB, a vital lesson learned from previous Abs was to develop a detailed implementation plan to address hardware and administrative upgrade issues. Then an Implementation Validation Review (IVR) was performed by the

contractor and DOE to assure that the new AB would be adequately implemented. Lessons were learned when the facility failed the first IVR. The facility line management did not allow ample time to "own the AB" because they were performing numerous risk reduction activities to meet performance measures while at the same time trying to train Configuration Control Authorities and facility personnel to the new AB requirements. General knowledge of building personnel of the BIO/TSRs was basically adequate. The schedule was also compressed due to constant changes to the approved AB because the Site chose to use this facility as a pilot to develop and implement a TSR Administrative Control Template after the original BIO/TSRs were approved. For the second IVR, the facility curtailed operations to focus on the IVR preparation. They also instituted interactive training to involve the workers more, and several drills were performed to perfect performance.

Some of the other lessons learned relate to areas that could have been improved upon. These include the lack of understanding of the magnitude of the project and commitment by higher levels of management (e.g., funding was pulled after the DOE cross-table review which caused significant delays and need for a Justification for Continued Operation), and passing ownership of the new AB from the AB project leader to the rest of the facility line management. The greatest benefit for AB development and implementation came from the use of an AB project team owned and funded by the facility. This approach facilitates a strong sense of ownership and the necessary timely responses to information needs for AB development and implementation issues and timely effective project management decisions to be made.