



Department of Energy

Washington, DC 20585

January 27, 2006

The Honorable A. J. Eggenberger
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW, Suite 700
Washington, D.C. 20004-2901

Dear Mr. Chairman:

The Department of Energy (DOE) issued the Implementation Plan to respond to Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2002-3, *Requirements for Design, Implementation and Maintenance of Administrative Controls* on June 26, 2003. Commitment 4.7 of the Implementation Plan required that the Office of Environment, Safety and Health (EH) evaluate the overall success of the effectiveness of implementation of specific administrative controls (SACs) based on the issuance of additional DOE guidance and issue a report to the Secretary.

The Assistant Secretary for Environment, Safety and Health submitted the report to the Secretary on December 30, 2005. It is enclosed for your information. The report and summary table discusses the actions that are completed to enhance DOE guidance and to improve SAC implementation and maintenance at DOE defense nuclear facilities. Implementation of DOE guidance for SACs at defense nuclear facilities is effective but is not yet fully complete. Remaining actions are summarized in the attached report and table and will be tracked to closure by the applicable program office. The Department expects full field implementation to be complete by the end of 2006. DOE will provide periodic briefings to the DNFSB to report on the remaining actions.

Sincerely,

A handwritten signature in black ink that reads "Richard L. Black".

Richard L. Black
Director

Office of Nuclear and Facility Safety Policy

Enclosure

cc:

M. Whitaker, DR-1



REPORT ON THE IMPLEMENTATION OF SPECIFIC ADMINISTRATIVE CONTROLS UNDER DNFSB RECOMMENDATION 2002-3

BACKGROUND:

The Department of Energy (Department or DOE) issued the Implementation Plan to respond to Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2002-3, *Requirements for Design, Implementation and Maintenance of Administrative Controls* on June 26, 2003. It was accepted by the DNFSB. Commitment 4.7 of the Implementation Plan required that the Office of Environment, Safety and Health (EH) evaluate the overall success of the effectiveness of implementation of specific administrative controls (SACs) based on the issuance of additional DOE guidance and issue a report to the Secretary.

SUMMARY:

Implementation of DOE guidance for SACs at defense nuclear facilities is effective but is not yet fully complete. Remaining actions are summarized in the attached table and will be tracked to closure by the applicable program office. The Department expects full field implementation to be complete by the end of 2006. DOE will provide periodic briefings to the DNFSB to report on the remaining actions.

EVALUATION DISCUSSION:

Specific administrative controls are those measures that are relied upon to provide preventive and/or mitigative functions for potential accident scenarios in nuclear facilities. Examples of SACs include procedures, training, and safety programs to ensure that operators implement proper controls to prevent or mitigate facility hazards. DNFSB Recommendation 2002-3 deals with improving the requirements and guidance related to the design, implementation, and maintenance of SACs. In response to Recommendation 2002-3 and to ensure effective implementation of SACs, DOE issued final additional guidance in August 2004 through a DOE technical standard, DOE-STD-1186-2004, *Specific Administrative Controls*. In addition, the SAC guidance was incorporated into DOE-STD-3009-94, *Preparation Guide for U.S. DOE Nonreactor Nuclear Facility Safety Analysis Reports*, which is the Department's "safe harbor" for preparation of a documented safety analysis that meets the nuclear safety basis provisions of the 10 CFR 830 Nuclear Safety Management Rule. These actions firmly establish the Department's expectations and provide guidance for the derivation, implementation and maintenance of SACs.

Primary responsibility for field implementation of SACs for defense nuclear facilities resides with the DOE line managers for the National Nuclear Security Administration (NNSA) and the Office of Environmental Management (EM). In accordance with the 2002-3 Implementation Plan, NNSA and EM conducted a series of reviews to determine the extent to which requirements and guidance regarding SACs were being implemented.

The reviews revealed that substantial progress has been made throughout DOE in strengthening safety basis documents and particularly SACs that provide important preventive and/or mitigative safety functions. The Implementation Plan also required sites to train operators and other safety personnel on the proper implementation of SACs consistent with DOE-STD-1186-2004. Some sites have completed full implementation of DOE-STD-1186-2004 while others continue to implement corrective actions and incorporate the guidance during annual updates to safety basis documents.

As an example of the scope of effort, Los Alamos National Laboratory identified 59 controls in 21 nuclear facilities that could be considered SACs. Both Los Alamos National Laboratory and Lawrence Livermore National Laboratory indicate that additional corrective actions are necessary, but all reviews of SACs are complete and any outstanding corrective actions will be fully implemented in 2006. Several other sites such as Idaho National Laboratory, Oak Ridge National Laboratory, Richland, and Savannah River indicate that the only remaining actions are the updates of the underlying safety basis documents. Based on NNSA and EM projections, however, full implementation will be achieved during the next calendar year for their defense nuclear facilities. A summary of implementation actions and schedules is provided in the attached table.

Since developing DOE-STD-1186-2004, EH has closely monitored the progress in its interpretation and implementation. EH developed the SAC training materials and conducted the initial training sessions. EH believes that NNSA and EM are effectively managing the implementation of DOE-STD-1186-2004. Significant DOE and contractor efforts were and continue to be expended in improving the quality of safety basis documents. Since the Implementation Plan permitted full implementation of SACs to be "part of the review and approval of safety basis documents and/or annual updates thereof", EH concludes that the status of outstanding actions is acceptable at this time.

The increased rigor associated with the proper implementation of SACs has been a significant factor in improving the hazard identification and control process for nuclear facilities. EH will continue to monitor progress of committed completion schedules and actions and use lessons learned input for further revisions to DOE-STD-3009-94 and DOE-STD-1186-2004 if necessary. EH, NNSA and EM will continue to provide periodic briefings to the DNFSB to ensure proper implementation and timely completion of the DOE commitments for this recommendation.

cc: L. Brooks, NA-1
D. Garman, US-1
J. Rispoli, EM-1
R. Shearer, EH-1
R. Hardwick, EH-2
R. Black, EH-22
M. Whitaker, DR-1

**Summary of DOE Site Reviews of Implementing
DOE-STD-1186-2004, *Specific Administrative Controls***

SITE	STATUS
National Nuclear Security Administration	
Los Alamos National Laboratory	All reviews are complete. Corrective actions will be made during the 2006 annual review cycle and in conjunction with the Operational Effectiveness Program. Corrective actions will be complete by June 30, 2006
Lawrence Livermore National Laboratory	All reviews are complete. Corrective actions will be complete by September 30, 2006.
Nevada Test Site	All reviews are complete. No corrective actions are pending.
Pantex	All reviews are complete for implemented DSAs. No corrective actions are pending.
Sandia National Laboratories	All reviews are complete. No corrective actions are pending.
Savannah River Site/Tritium	All reviews are complete. No corrective actions are pending.
Y-12 National Security Complex	All reviews are complete. No corrective actions are pending.
Office of Environmental Management	
Idaho	The closure contractor is implementing the standard during the annual update of the safety basis documents, with complete implementation scheduled for May 2006.
Oak Ridge	The Implementation Verification Review (IVR) process was used to verify the flow down and implementation of the standard. Fully compliant TSRs will be in place after the next annual updates are completed in February 2006.
Portsmouth/Paducah	Reviews using the IVR process to verify the flow down and implementation of safety basis controls are complete. TSR updates will be complete in June 2006.

Richland	Reviews are complete and all active facilities are scheduled to be fully compliant during the next annual update, which will complete in December 2006.
Office of River Protection	Reviews and document revisions are complete; the standard is now fully implemented.
Savannah River Site	Reviews are complete and document revisions are in progress as part of the annual update of safety basis documents. Full implementation will be complete in December 2006.
Waste Isolation Pilot Plant	Reviews and document revisions are complete; the standard is now fully implemented.