



The Under Secretary of Energy
Washington, DC 20585

October 22, 1996

MEMORANDUM FOR VICTOR H. REIS
ASSISTANT SECRETARY FOR
DEFENSE PROGRAMS

ALVIN L. ALM
ASSISTANT SECRETARY FOR
ENVIRONMENTAL MANAGEMENT

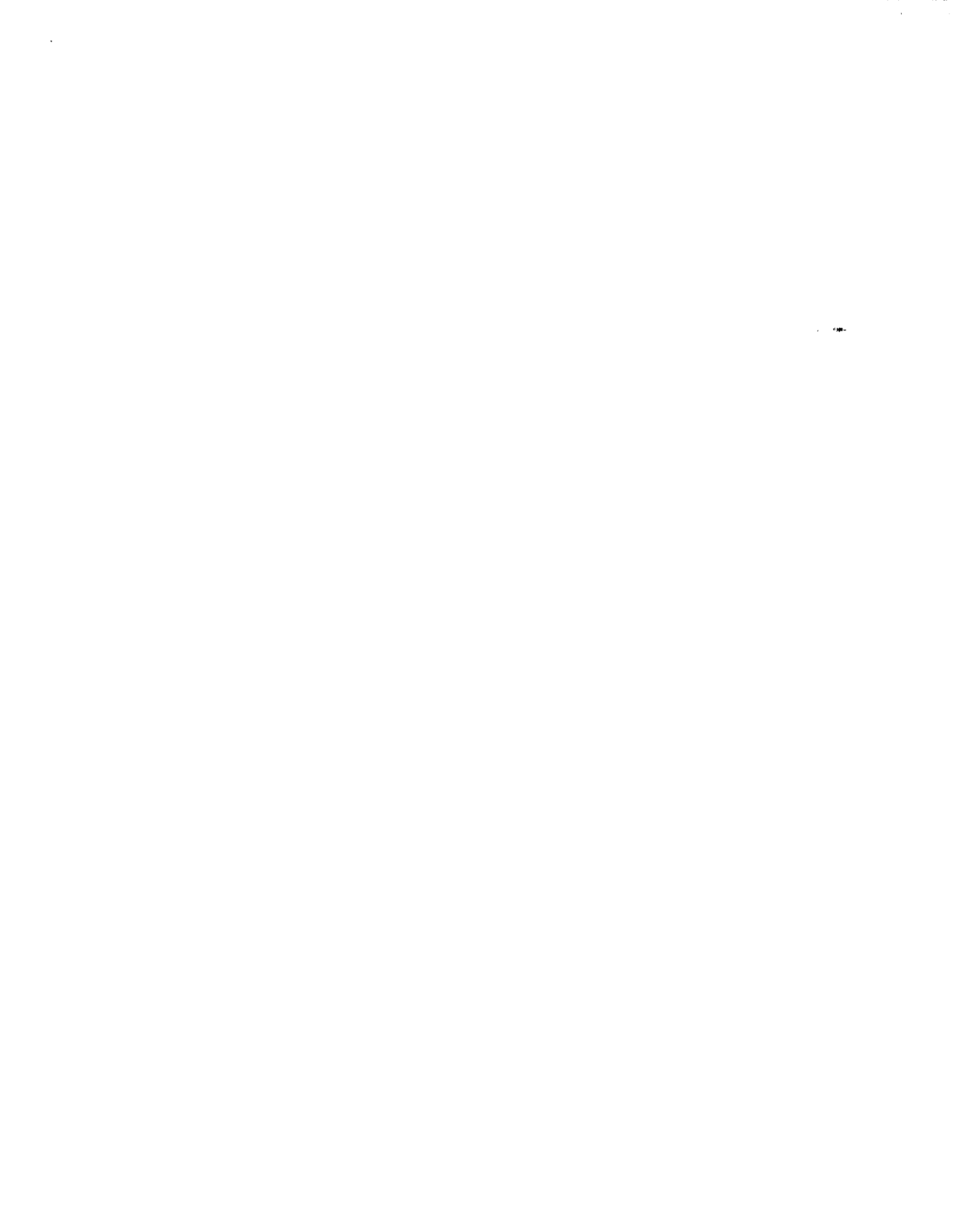
FROM: THOMAS P. GRUMBLY 

SUBJECT: Implementation of the Integrated Safety Management System at Remaining
Facilities of Interest to the Defense Nuclear Facilities Safety Board

The Department of Energy's Implementation Plan for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 95-2 and the Secretary's letter forwarding that Plan commit the Department to implementation of an Integrated Safety Management System (SMS).

This memorandum requests your assistance in developing schedules for SMS implementation at those nuclear facilities of interest to the DNFSB that were not included in the initial ten priority facilities as part of DNFSB Recommendation 95-2, Commitment 3.1. To help facilitate this effort, please identify to Frank McCoy, Director, Safety Management Implementation Team, the Program and Field Elements leads to assist with this task by November 8, 1996, for us to move ahead in a timely manner. My goal is to prepare schedules for presentation to the DNFSB in the third quarter of fiscal year 1997. A sample schedule format, similar to that used in developing schedules for the initial ten priority facilities, is provided as Attachment 1.

I suggest that you consider implementation of the SMS at all facilities identified in Attachment 2 as of interest to the DNFSB in their Annual Report of 1996. I also recognize that changing missions may possibly create a justification for the elimination of some facilities listed in Attachment 2 from your implementation plans. As it is appropriate to plan for a SMS to be implemented at new facilities as they approach startup, please include any new nuclear facilities in your proposed schedules. I note that, in some cases, facilities of interest to the DNFSB have made significant progress in upgrading operations in a manner consistent with the recommendations of 95-2. This includes some of our priority facilities, such as F Canyon at Savannah River, Pantex cells and bays, and the TA-55 Plutonium Facility at Los Alamos National Laboratory. Additionally, some other than priority facilities, such as the Defense Waste Processing Facility at Savannah River, are currently being operated in a manner consistent with 95-2. Such accomplishments should be reflected in your prioritized facility schedules.



The commitment to negotiate contract revisions to require implementation of the SMS alleviates a need for specific prioritization guidance and criteria. I recommend that your proposed schedule and negotiations take into account factors that may impact your mission and budget, such as hazards to personnel, the public, the environment, and property. I note that your current focus on the ten priority facilities provides your organization and Field Elements managers with examples by which you might model the remaining effort.

For your information, a workshop is planned for November 19-21, 1996 in Denver, Colorado to share lessons learned in SMS implementation at the ten priority facilities and to address the future implementation path. I request that designated management personnel, including site contractor personnel, as appropriate, attend this workshop to facilitate the implementation of the evolving SMS throughout the Department.

I appreciate your cooperation and support in the Department's Integrated SMS implementation efforts. If you have any questions or if you wish to discuss this subject further, please contact Mr. Frank McCoy at (202) 586-1418 or (803) 725-8600.

- Attachments:
1. Integrated Safety Management System Implementation Schedule (Sample Format)
 2. List of Priority Facilities and Activities from the DNFSB Annual Report, 1996

cc:

NE-1

FE-1

ER-1

EE-1

EH-1

FM-1

Frank McCoy, Director, 95-2 Safety Management Implementation Team

Manager, Albuquerque Operations Office

Manager, Amarillo Area Office

Manager, Chicago Operations Office

Manager, Idaho Operations Office

Manager, Kansas City Area Office

Manager, Los Alamos Area Office

Manager, Nevada Operations Office

Manager, Oak Ridge Operations Office

Manager, Oakland Operations Office

Manager, Ohio Operations Office

Manager, Richland Operations Office

Manager, Rocky Flats Operations Office

Manager, Savannah River Operations Office

INTEGRATED SAFETY MANAGEMENT SYSTEM IMPLEMENTATION SCHEDULE

SITE: _____

FACILITY: _____

EVENT	SCHEDULE	STATUS
1) Define Scope of Work		
2) Develop Authorization Basis		
A. Hazard Analysis Complete		
B. Categorize Hazards		
C. FSAR/BIO		
3) Hazard Controls		
A. Identified		
B. Approved		
C. Develop Controls		
D. Implement Controls		
4) Confirm Readiness		
5) Perform Work		
6) Authorization Agreement Signed		

Directions for completing this form:

- 1) **Define Scope of Work:** This is a combined action of DOE and contractor that results in budgeted tasks. This initial step sets the stage for all follow-on events.
- 2) **Develop Authorization Basis:** This involves the hazard analysis, hazard categorization and approval of an Authorization Basis. For Nuclear Facilities DOE 5480.22 and .23 apply.
- 3) **Hazard Controls:** This involves five steps: (1) the identification and (2) the selection of a set of standards (S/RIDS, "Work Smart" standards, etc.), along with (3) the development of appropriate safety controls, (4) the development of procedures to implement the standards and controls, and (5) the actual implementation of those controls/procedures that apply to the intended work and its associated hazards.
- 4) **Confirm Readiness:** The event is the action scheduled prior to authorization of operations, for example an ORR or RA, if required.
- 5) **Perform Work:** This event is the commencement of program work.
- 6) **Authorization Agreement Signed:** This event includes any required modification to the site contract, the DOE approval of the SMS description, and the approval of any required authorization agreements to formalize the ISMS.

Appendix A

Priority Facilities and Activities

Facility	Status (Note 1)	Hazards (Note 2)	Key Regulatory/ Oversight Bodies
SAVANNAH RIVER SITE FACILITIES			
F-Canyon/FB-Line/FA-Line H-Canyon/HB-Line/HA-Line	Operational (EM)	HIGH Plutonium, Uranium, Transuranics, HLW	DNFSB
DWPF/ITP/ESP HLW Tanks	Operational (EM)	HIGH Fission Products	DNFSB
RBOF, L-Basin, K-Basin and P-Basin	Operational (EM)	MODERATE Plutonium, Uranium, Fission Products	DNFSB
Tritium Facilities	Operational (EM)	HIGH Tritium	DNFSB
HANFORD FACILITIES			
High Level Waste Tank Farms	Operational (EM)	HIGH Fission Products	DNFSB, State, EPA
K-Reactor Area Fuel Storage Basins	Operational (EM)	MODERATE Spent Nuclear, Fuel and Sludge	DNFSB, State, EPA
Plutonium Finishing Plant	Operational (EM)	MODERATE Plutonium	DNFSB, State, EPA
Waste Encapsulation and Storage Facility	Operational (EM)	MODERATE Cesium & Strontium	DNFSB, State, EPA
ROCKY FLATS FACILITIES			
Solution processing and SNM Storage Building 771	Shutdown	MODERATE Plutonium solution, SNM, and waste	DNFSB, State, EPA
Solution processing and SNM consolidated storage Building 371	Shutdown	HIGH Plutonium solution, SNM, and waste	DNFSB, State, EPA
Residue Processing and SNM Storage Building 776, Building 779, Building 707	Shutdown	MODERATE Bldg 776 could be HIGH based on contamination. Plutonium residue SNM, and waste	DNFSB, State, EPA

Highly Enriched Uranyl Nitrate Processing Building 886	Shutdown	MODERATE Highly Enriched Uranium Solution SNM, and waste	DNFSB, State, EPA
INEL FACILITIES			
Advanced Test Reactor	Operational (NE)	HIGH Fission Products, Uranium-235	DNFSB
CPP-603 Underwater Fuel Storage	Operational (NE)	MODERATE Fission Products, Uranium, Plutonium	DNFSB
REPRESENTATIVE PANTEX FACILITIES			
Nuclear Weapon Assembly/Disassembly cells	Operational (DP)	HIGH High Explosives, Plutonium, Uranium, Tritium	DNFSB
Nuclear Weapon Assembly/Disassembly Bays	Operational (DP)	HIGH High Explosives, Plutonium, Uranium, Tritium	DNFSB
Building 12-116, SNM Staging Facility (New nuclear facility)	New Facility - Startup in FY 97 (DP)	MODERATE (at present) Plutonium, Uranium, Tritium	DNFSB
Building 12-104A, Special Purpose Bays (New nuclear facility)	New Facility - Startup in FY 95 (DP)	MODERATE Weapons hazards Radiation Generating Device (Linac)	DNFSB
REPRESENTATIVE LANL NUCLEAR FACILITIES			
TA-55, Plutonium Facility, LANL's main facility for R&D and processing of plutonium.	Operational (DP)	HIGH. Plutonium. Chemical hazards. Nuclear criticality.	DNFSB (New Mexico Environmental Department (NMED))
TA-3, Chemistry and Metallurgy Research Building, an R&D	Operational (DP)	HIGH. Plutonium, Uranium. Chemical hazards	DNFSB (NMED)
TA-18, Los Alamos Critical Experiments Facility	Operational (DP)	HIGH. Nuclear criticality.	DNFSB
TA-16, Weapons Engineering Tritium Facility	Operational (DP)	MODERATE. Tritium	DNFSB
TA-15, Dual Axis Radiographic Hydrotest (DARHT) Facility	Partially constructed (DP)	HIGH. Radiation generating device. Explosions. Depleted Uranium. Chemical Hazards	DNFSB

REPRESENTATIVE OAK RIDGE FACILITIES			
Y-12: Highly Enriched Uranium Processing.	Operational. (DP)	MODERATE, HEU Hazardous, toxic, and radioactive materials	DNFSB
Y-12: Component Assembly, Disassembly, and Evaluation	Operational. (DP)	MODERATE, HEU, Lithium Hazardous, toxic, and radioactive materials	DNFSB
Y-12 and ORNL: Material Storage	Operational. (DP)	MODERATE HEU, 233U, Hazardous, toxic, and radioactive materials.	DNFSB
K-25 Highly Enriched Uranium Remediation and Depleted Uranium Tailings Storage	Transition (EM)	MODERATE. HEU, DU, HF	DNFSB
REPRESENTATIVE LIVERMORE FACILITY			
Building 332, Plutonium Facility	Operational. (DP)	MODERATE Plutonium, Uranium	DNFSB
SANDIA NATIONAL LABORATORIES FACILITIES			
Technical Area V: - Annular Core Research Reactor (ACRR) - Sandia Pulse Reactor Facility	Operational. (DP)	MODERATE Highly enriched uranium fueled reactors.	DNFSB
REPRESENTATIVE NTS FACILITIES			
Abel Site, Area 27 (to be replaced by the Device Assembly Facility, Area 6)	Operational. (DP)	HIGH High Explosives Plutonium, Uranium, Tritium	DNFSB
Radioactive Waste Management sites in Area 5, Area 3 and the TRU Pad	Operational. (DP)	MODERATE Plutonium, Uranium	DNFSB

Notes:

1. DP=DOE Defense Programs; EM= Environmental Management
2. These are not DOE rankings. Rankings are tentative, currently under Board review.

