

[DOE LETTERHEAD]

November 8, 1993

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, N.W.
Suite 700
Washington, D.C. 20004

Dear Mr. Conway:

On June 16, 1993, the Defense Nuclear Facilities Safety Board transmitted to the Department of Energy Recommendation 93-4 which addresses health and safety factors associated with the Fernald Environmental Management Project and the management and oversight of environmental restoration contracts. On August 6, 1993, I accepted the Recommendation.

In accordance with 42 U.S. Code 2286d(e), I am pleased to forward to you the enclosed Implementation Plan for Recommendation 93-4. As specified in the Plan, the Department will keep the Board apprised of our progress by providing the documentation associated with the deliverables for each action specified in the Plan as they are completed.

Sincerely,

Hazel R. O'Leary

Enclosure

IMPLEMENTATION PLAN FOR DEFENSE NUCLEAR FACILITIES SAFETY BOARD RECOMMENDATION 93-4

I. Introduction

The purpose of the Implementation Plan is to outline the steps to be taken in response to the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-4 relating to how the Environmental Restoration Office will ensure adequate protection of the health and safety of the public, on-site workers involved in the cleanup of sites, and the environment.

This plan will encompass the Department of Energy (DOE) facilities that currently or will have Environmental Restoration Management Contractors performing restoration-type activities. This covers activities currently under the purview of the Fernald Field Office and the Richland Operations Office.

Weaknesses have been identified in DOE's technical direction of contractor performance, including contractor implementation of conduct of operations and the level of knowledge and technical competency of contractor, field office, and headquarters personnel. This plan will consist of six actions that were identified in the Secretary's letter of acceptance of Recommendation 93-4. The plan will address environmental restoration management activities that are contractor specific, complex wide, and Fernald specific.

II. DOE Response to Recommendation 93-4

The implementation of this recommendation will provide a cohesive approach to the activities necessary to ensure the safety of the public and on-site workers at DOE facilities and sites involved in environmental restoration. This structured approach will allow for:

timely identification and commitment of adequate technical resources to manage contracts and projects;

up front identification for DOE technical managers of expectations deriving from DOE's responsibilities for protection of health and safety of workers and the public; and

assurance that DOE's technical line management and safety oversight organizations are involved in the contracting process.

This section has been divided into seven actions. The first six correspond to the recommendations accepted in the Secretary's August 6, 1993, letter. The seventh action is to provide a quarterly status report to the DNFSB. Several of these actions have been initiated and are proceeding based on schedules resulting from other DNFSB Recommended actions or DOE initiatives. To implement Recommendation 3 of DNFSB Recommendation 93-4, we are making use of several activities already in progress, namely the Contract Restructure Committee sponsored by the Secretary and the task force revising DOE Order 4700.1, Project Management System. To help track the status of the

activities in the Implementation Plan, a matrix is attached that will be updated in the quarterly status report and includes points of contact for further clarification.

A. Recommendation 1

1. Stated Recommendation

DOE develop and implement a technical management plan for Fernald and all future Environmental Restoration Management Contracts. For Fernald, the technical management plan should be developed and implemented expeditiously. For future ERMC contracts, such a plan should be readied prior to contractor selection, and should be implemented at the initiation of contracted services.

2. Course of Action

The Department will develop and implement a technical management plan for Fernald and future Environmental Restoration Management Contracts. The technical management plan for Fernald is currently being developed and will be implemented in an expeditious manner since the contractor is already performing. The technical management plan for Hanford is also currently in development and will be in place prior to completion of transition to the Environmental Restoration Management Contract (ERMC) to allow for a timely implementation. For application to future ERMC contracts, a generic technical management plan will be developed and made available for consideration by the task force rewriting DOE Order 4700.1 as part of the project management plan specified in that Order.

The following steps will be taken to complete this action:

- (1) A Technical Management Plan will be developed for Fernald by:
 - a. reviewing the Environmental Restoration Program, EM-40 Management Plan (DOE/EM/RM/02), and the Project Management Plan outline from DOE Order 4700.1 Project Management System to develop a model for the Technical Management Plan;
 - b. establishing an outline of contents for the Technical Management Plan; and
 - c. identifying qualified key personnel at the DOE Fernald Field Office and Headquarters for technical direction, monitoring, and oversight of contractor performance for inclusion in the Technical Management Plan, including necessary training to meet current performance expectations.

- (2) A Technical Management Plan for Richland will be developed.
- (3) The initial compliance of Fernald with the Technical Management Plan will be assessed; a corrective action/implementation plan, including the schedule, will be developed as required.
- (4) A generic Technical Management Plan will be developed for future contracts.
- (5) Interface with and provide input for rewriting of DOE Order 4700.1 Project Management System to incorporate the requirements for implementation of a technical management plan.

3. Deliverables/Milestones

This action will generate the following deliverables at the dates shown:

- | | | |
|----|---|---------------------|
| a. | Outline of Technical Management Plan | October 30, 1993 |
| b. | Technical Management Plan for Fernald, including identification of key personnel and training needs | December 18, 1993 |
| c. | Technical Management Plan for Hanford | January 18, 1994(1) |
| d. | Complete initial assessment of Fernald and document results | March 30, 1994 |
| e. | Generic Technical Management Plan | December 18, 1993 |
| f. | Submit Technical Management Plan to DOE Order 4700.1 revision task force | January 15, 1994 |

B. Recommendation 2

1. Stated Recommendation

Each plan for technical management of contracted services includes as a minimum:

- a. a clear statement of functions and responsibilities of those in DOE assigned to the tasks of technical direction, monitoring, or oversight of the contracted efforts, both at headquarters and the relevant operations offices;
- b. definitions of the technical and managerial qualifications required of DOE's

technical management staff at each level of responsible DOE line and oversight units;

- c. identification of the principal interfaces with the non-technical DOE personnel involved in the contract management;
- d. identification, by name, of the key technical personnel selected to perform the requisite technical direction, monitoring, and oversight functions;
- e. identification of policies, practices, orders, and other key instructions that represents a basic framework to be used in DOE technical management of the contractor in ensuring public and worker safety and adequate environmental protection; and
- f. a detailed program to ensure compliance with applicable statutes and DOE Orders, standards, rules, directives, and other requirements related to public and worker safety and environmental protection.

2. Course of Action

The technical management plan will include all of the above stated elements identified by the DNFSB and as discussed in the previous action.

3. Deliverables/Milestones

This action will generate no additional deliverables other than those identified in Recommendation 1.

C. Recommendation 3

1. Stated Recommendation

DOE consider the insights gained from addressing recommendations 1 and 2 above for ERMC contracts in pursuing the broader initiatives for reforming contract management you recently announced.

2. Course of Action

DOE will include those insights gained as a result of addressing Recommendations 1 and 2 in our planned review of contracting mechanisms and practices.

There are committees currently evaluating aspects of contracting mechanisms and technical management plans that apply directly to this recommendation. The first is a committee sponsored by the Secretary on Contracting Reform. The second is a task force to rewrite DOE Order 4700.1, Project Management System

(additional discussion is included in Recommendation 1).

The Contract Reform Committee is chaired by the Deputy Secretary. The Team is comprised of 17 principal members and their alternates, of which 14 are DOE personnel and three are from the Office of Management and Budget. The purpose of the Team is to conduct a top-to-bottom review of the Department's contracting mechanisms and practices and to recommend specific administrative, financial, and legislative improvements to contracting mechanisms and practices that will increase accountability, stimulate competition, and simplify administration. A draft report is to be issued November 1, 1993, and a final report by December 31, 1993. A Stakeholder meeting was held at the Forrestal Building on September 23, 1993, which was one of nine scheduled around the country. Testimony (oral and written) was given by members of the public on ways to improve specific contracts, including environmental restoration management and management and operating contracts. More information on this Team is included in Attachment A.

The team to revise DOE Order 4700.1 is being chaired by the Office of Field Management and is organized as a Process Improvement Team. The Process Improvement Team will consist of 10-12 members with representatives from Headquarters, field elements, and contractors. The Process Improvement Team will compile all the relevant issues, conduct a comprehensive review of the project management system, and develop a strategy for resolution. The Process Improvement Team will then rewrite the current order into a 15-20 page "summary level" policy order and identify areas requiring supplemental flow-down guidance. The Office of Field Management will then develop subsequent flow-down functional manuals to supplement the summary level policy of the order. Examples of areas requiring flow down guidance are: 1) project control system; 2) key decision review and approval; 3) configuration/baseline management; 4) project management certification; and 5) systems engineering and analysis requirements. DOE Order 4700.1 will be revised and submitted for formal coordination by May 31, 1994. The supplementary manuals for the revised Order will be developed and tentatively approved by April 30, 1995, depending upon the extent of the manuals required. These dates are tentative due to the moratorium on revisions to orders and directives. The process to officially identify the Process Improvement Team after the moratorium is lifted. More information on the Process Improvement Team is included in Attachment B.

Both committees have been contacted and will consider inclusion of the applicable parts of DNFSB Recommendation 93-4 as part of their actions. The committee contacts have been added to the status reports currently being generated during the implementation of this recommendation. The following steps will be taken to complete this action:

- a. interface with the committees during preparation of the technical management plans;

- b. present completed technical management plans to the committees;
 - c. work with the committees to incorporate lessons learned from this process into their activities; and
 - d. provide copies of committees reports to the DNFSB.
3. Deliverables/Milestones

Copies of committee reports will be provided to the DNFSB when they are available.

- a. Contract Reform Team final report December 31, 1993
- b. Revised DOE Order 4700.1 May 31, 1994

D. Recommendation 4

1. Stated Recommendation

DOE headquarters complete an independent review of the recent incidents and the corrective actions required to remedy the underlying problems, and translate the Fernald findings into lessons learned applicable to other facilities.

2. Course of Action

DOE/Headquarters will conduct an independent review of the corrective actions taken subsequent to the recent incidents (misroute of UNH and spill of UNH) at Fernald and will communicate lessons learned to other DOE facilities, as appropriate. The corrective actions detailed in the Type B Investigation Report will be the basis for the independent review. The following steps will be taken to complete this action:

- a. The Office of Environment, Safety and Health will complete their review of the Type B Investigation;
- b. The Office of Environmental Restoration Deputy Office Director will lead the independent assessment;
- c. The Fernald site will be assessed on how they are addressing the corrective actions recommended in the Type B Investigation;
- d. The assessment and recommendations for Fernald will be documented; and
- e. The corrective action plan will be developed and monitored.

3. Deliverables/Milestones

This action will generate the following deliverables at the dates shown:

- | | | |
|----|---|-------------------|
| a. | Initiate assessment | November 1, 1993 |
| b. | Submit assessment report to Fernald and DNFSB | December 18, 1993 |

E. Recommendation 5

1. Stated Recommendation

DOE establish a clear process with an appropriate set of requirements and clear definitions of the line authority for approval to start the UNH stabilization project. The set of requirements should identify the type and scope of readiness reviews DOE will require for the start of the UNH stabilization runs. For the type and scope of reviews, consideration should be given to the standards set forth in previous Board recommendations on this subject (i.e., 90-4, 91-3, 91-4, 92-1, 92-3 and 92-6) and account for the known safety considerations for this operation. This process should also include identification of the appropriate DOE Official(s) responsible for ensuring that public and worker health and safety are adequately protected and for giving final start-up approval.

2. Course of Action

Formalize a clear process and line of authority for restart of the Uranyl Nitrate Hexahydrate Stabilization Project. The process for ensuring readiness to start-up is being prepared and a study to ensure the tank integrity is adequate to ensure worker and environmental safety and health is in progress, due to the protracted time expected before restart of the process.

The following steps will be taken to complete this action:

- a. develop a restart procedure based on the new DOE Order 5480.31 and Operational Readiness Review Standard. This procedure will define the set of requirements to identify the type and scope of readiness reviews. It will also establish the line of authority for safe start of operations, including the final start-up approval;
- b. complete a study of integrity of Uranyl Nitrate Hexahydrate tanks and, as appropriate, factor those results into the start-up procedure and schedule; and

- c. obtain approval by the Assistant Secretary for Environmental Restoration and Waste Management for restart of the Uranyl Nitrate Hexahydrate Process.

3. Deliverables/Milestones

This action will generate the following deliverables at the dates shown:

- a. Restart procedure December 31, 1993
- b. Review tank integrity report March 31, 1994
- c. Receive approval for restart from the Assistant Secretary start-up requirements Upon completion of

F. Recommendation 6

1. Stated Recommendation

DOE immediately establish a group of technically qualified Facility Representatives at Fernald to monitor the ongoing activities of daily operations at the site. DOE's "Guidelines for Establishing and Maintaining a facility Representative Program at DOE Nuclear Facilities," issued in March 1993, may be a useful basis for quickly establishing such a program at Fernald.

2. Course of Action

DOE will accelerate ongoing efforts to fully implement the Facility Representative Program at Fernald in accordance with the Action Plan for DNFSB Recommendation 92-2.

As part of acceleration of the facility representative program, the Fernald Field Office has identified and dedicated four personnel to the program based on experience and performance (Letter DOE-2470-93, dated July 20, 1993, and Letter DOE-2545-93, dated July 30, 1993). The Fernald site is not an operating facility and the only identified controlled area is the Boiler Plant. Therefore, the personnel have been assigned based on current activity/process requirements as opposed to specific facilities, except for the Boiler Plant. The personnel identified and their assignments are as follows:

| | |
|----------------|--|
| Doug Maynor | Plant 2/3 (UNH Restart), Plant 8 (Restart) |
| Bill Lancaster | Safe Shutdown |
| Gordon Brown | Plant 9 (Minimum Additive Waste Stabilization) |
| Richard Farr | Building 10A (Boiler Plant), Plant 1 (Ore Silos) |

These assignments are based on an analysis of the activities and operations ongoing at the site and may be modified based on safety concerns and lessons learned from other sites.

In addition, five personnel requisitions have been submitted to DOE-Headquarters for the hiring of permanent facility representatives. These positions are considered critical hires.

These activities are being worked in conjunction with the actions identified in the Implementation and Action Plans for DNFSB Recommendation 92-2. This group reports to the Assistant Manager for Environmental Restoration Support, who in turn reports to the Field Office Manager. This team has been assigned responsibility to institute a facility representative program.

The facility representatives have been conditionally approved by the Field Office Manager as provisionally qualified based on the following training: completion of General Employee Training, Radiation Worker II, Site Worker Training, and respirator fit training at Fernald, and their prior job experience and education. In addition, the training plans for these personnel shall be modified to reflect the training needed for qualification and certification as a Facility Representative.

Fernald is currently using a phased training approach to qualify people using three stages. Additional training for qualifying the personnel listed above will be by attendance at a 1-week training course on Performance-Based Inspection to be conducted at Fernald (September 20-24, 1993) by Stone and Webster.

The following steps will be taken to complete this action:

- a. continue training and implementation of the proposed requirements for the Facility Representative Program as they are developed; and
- b. develop procedure for Fernald Facility Representative program and training and qualifications using elements generated from DNFSB Recommendations.

3. Deliverables/Milestones

This action will generate the following deliverable at the date shown:

- | | | |
|----|--|------------------|
| a. | Fernald Facility Representative Program and training and qualification procedure | October 31, 1993 |
| b. | Fully qualify Facility Representatives for Fernald | October 31, 1994 |

G. DOE Initiative 1

Submit quarterly status reports from the Fernald Environmental Management Project Division to DNFSB starting 15 days after the close of the quarter, with initial report to be issued January 15, 1994.

Attachment A
CONTRACT REFORM COMMITTEE

Introduction

The Secretary of Energy, in her May 26, 1993, testimony before the House Energy and Commerce Committee's Subcommittee on Oversight and Investigations, acknowledged that the Department had fundamental weaknesses in its contractor management of such significance that the very nature of DOE's contracting must change. She concluded that the essence of the problem is that "DOE is not adequately in control of its contractors and as a result the contractors are not sufficiently accountable to the Department." The Secretary committed the Department to aggressively changing its approach to contracting to ensure that:

- (1) clear expectations for contractor performance and meaningful measurement criteria to assess performance exists;
- (2) financial accountability and the efficient use of taxpayer dollars are achieved;
- (3) sufficient trained Federal staff exist to monitor contractor performance;
- (4) systems are implemented which properly hold a contractor accountable for misconduct; and
- (5) clear separation exists between Federal workers and contractor employees so that inherently governmental responsibilities are performed only by Federal employees.

The Secretary also announced a series of short- and long-term initiatives to improve contract management in the Department. The short-term initiatives are aimed at producing real cost savings of public funds and increasing fiscal responsibility. They are:

- (1) reduce the use of support services contracts by 10 percent in Fiscal Year 1994;
- (2) increase contractor accountability for civil penalties;
- (3) control contractor indirect costs;
- (4) freeze contractor salaries; and
- (5) improve DOE Acquisition Regulations.

The objectives of the long-term initiatives are to implement functional and structural improvements in the Department's contracting practices. They are:

- (1) establish a Contract Reform Team to review contracting mechanisms and practices;
- (2) implement a departmental realignment to improve contractor management;
- (3) work with organized labor to control contract costs;
- (4) examine the potential to increase the level of the Federal work force in exchange for reductions in contract funding; and
- (5) provide quality training to improve contract management.

Contract Reform Team

Team Structure and Composition

The Team is chaired by the Deputy Secretary. The Team consists of 17 principal members and their alternates, of which 14 are DOE personnel and three are from the Office of Management and Budget. The listing of personnel on the Team is on the last page of this attachment.

The purpose of the Team is to conduct a top-to-bottom review of DOE's contracting mechanisms and practices and to recommend specific administrative, financial, and legislative improvements to contracting mechanisms and practices that will increase accountability, stimulate competition, and simplify administration.

Approach to Analysis

The Team identified nine major issue areas for detailed examination. Certain Team members were assigned lead responsibility to analyze the issues and develop recommendations. These nine areas and the Responsible Team Members are:

| Issue Areas | Responsible Team Members |
|-------------------------------------|--------------------------|
| Performance Criteria and Measures | William White |
| Competition/Extension Policy | William White |
| Non-Profit Contractors | Donald Pearman |
| Indirect Costs | Thomas Grumbly |
| Indemnification of Contractors | Robert Nordhaus |
| Financial Management | Elizabeth Smedley |
| Federal Oversight of Contractors | Archer Durham |
| Use of Support Services | Archer Durham |
| Litigation and Outside Counsel Fees | Robert Nordhaus |

Working Groups, consisting of individuals with multi-disciplined technical and administrative skills and backgrounds, were established for each issue area. Each Working Group is responsible for identifying areas of investigation related to the specific issue, developing an analytical approach and schedule, and preparing a final report detailing their findings and making specific recommendations. The recommendations of each Working Group will be assessed and prioritized by the Team and included in the Team's report to the Secretary.

The major milestones for the team include that a draft report will be issued on November 1, 1993, and the final report will be provided on or before December 31, 1993.

CONTRACT REFORM TEAM

William White, Deputy Secretary
Dan Reicher, Office of the Secretary
David Hepner, Office of the Secretary
Victor Reis, Office of Assistant Secretary for Defense Programs
Donald Pearman, Associate Deputy Secretary for Field Management
Robert Nordhaus, General Counsel
Archer Durham, Assistant Secretary for Human Resources and Administration
Thomas Grumbly, Assistant Secretary for Environmental Restoration and Waste Management
Jim Decker, Principal Deputy Director, Office of Energy Research
Sue Tierney, Assistant Secretary for Policy, Planning and Program Evaluation
Jack Siegel, Office of the Assistant Secretary for Fossil Energy
Elizabeth Smedley, Chief Financial Officer
Robert San Martin, Deputy Assistant Secretary for Energy Efficiency and Renewable Energy
Stan Kaufman, Office of Federal Procurement Policy
Gary Bennethum, Office of Management and Budget
Jack Sheehan, Office of Federal Financial Management
Augie Pitrolo, Manager, Idaho Operations Office

Attachment B

DOE ORDER 4700.1, PROJECT MANAGEMENT SYSTEM PROCESS IMPROVEMENT TEAM

Objective:

To assure the application of sound management principles in achieving and sustaining a flexible, cost-effective project management system to meet the mission needs of DOE. The revised order will foster project management systems that decentralize management authority and minimize procedural requirements to facilitate control and execution of projects within the DOE.

Requirements:

The project management system, as a minimum, shall establish summary level policy for the

following:

1. Management Roles, Responsibilities, and Authority
2. Project Initiation and Planning Documentation
3. Project Budget Process
4. Cost and Contingency Estimating
5. Project Acquisition for all projects
6. Environmental Planning and Review
7. Project Transition
8. Change Control
9. System Engineering, Test, and Evaluation
10. Configuration Management
11. Quality Assurance
12. Project Control System
13. Project Termination
14. Project Status Review
15. Project Reporting and Assessment
16. Baseline Management to Total Project Cost
17. Project Manager Certification

This Order prescribes policies and procedures for implementing a project management system to plan, oversee, and execute DOE projects. It directs a cost-effective, graded approach to application of project management, providing flexibility in the application to all projects on the basis of scale, type, and unique needs of each project. A standardized approach for implementation of the project management system is not given in order that the field has maximum flexibility to implement the intent of the Order.

DOE Program Offices, Operations Offices, and contractors shall meet all the requirements of the revised order within 6 months from the date of issuance.

The tentative plan of action for development of the revised order is to issue notification to the field to identify specific issues and assemble a Process Improvement Team. The Process Improvement Team will consist of 10-12 members with representatives from Headquarters, field elements, and contractors. The Office of Field Management will lead the Process Improvement Team. The members of the Process Improvement Team have not been determined.

The Process Improvement Team will compile all the relevant issues, conduct a comprehensive review of the project management system, and develop a strategy for resolution. The Process Improvement Team will then rewrite the current Order into a 15-20 page "summary level" policy order and identify areas requiring supplemental flow down guidance.

The Office of Field Management will then develop subsequent flow-down functional manuals to supplement the summary level policy of the Order. Examples of areas requiring flow-down guidance are: 1) project control system; 2) key decision review and approval; 3) configuration/baseline management; 4) project management certification; and 5) systems

engineering and analysis requirements.

DOE Order 4700.1 will be revised and submitted for formal coordination by May 31, 1994. The supplementary manuals for the revised Order will be developed and tentatively approved by April 30, 1995, depending upon the extent of the manuals required. (This schedule is based upon the original schedule that has been delayed due to the moratorium on directives and assumes a start date of November 1, 1993, for issuance of the letter requesting the field to identify the specific issues.)

The revised Order will address and resolve key issues such as:

- (1) clarification of project management policies, including any necessary changes to existing policies;
- (2) identify and clarify program and project management responsibilities;
- (3) promote decentralization where feasible to improve efficiency and cost effectiveness;
- (4) project definition--the revised Order will provide a clear definition of a DOE "project" to ensure that all applicable activities, not only traditional construction projects, are subject to the requirements of the revised Order;
- (5) Environmental Restoration and Waste Management Projects--the revised Order will address the requirements of the environmental project, including key decisions, baselining, and management systems to accommodate the unique nature of environmental remedial action projects; and
- (6) Energy System Acquisition Advisory Board, Budget Validation, and Project Documentation Processes--the revised Order will consider re-engineering of these and similar processes as necessary to achieve efficiencies and improvements.