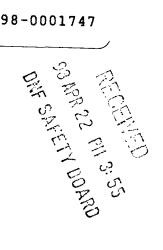
98-0001747



Department of Energy

Washington, DC 20585

APR 21 1998



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

Dear Mr. Chairman:

The Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 97-2 requires a quarterly status report. Enclosed is the Department of Energy's quarterly status report for the second quarter, Fiscal Year 1998.

Sincerely,

Ruli Sh

Robin Staffin Deputy Assistant Secretary for Research and Development **Defense Programs**

Enclosure



QUARTERLY STATUS OF THE IMPLEMENTATION PLAN

3 APR 22 PH 3: 55 FUK HIF SAFETY EDAR DEFENSE NUCLEAR FACILITIES SAFETY BOARD RECOMMENDATION 97-2

RECEIVED

The Department of Energy began implementation of Defense Nuclear Facilities Safety Board (Board) Recommendation 97-2 in January 1998 by formally establishing the Nuclear Criticality Safety Program Management Team (NCSPMT) and the Criticality Safety Support Group (CSSG). Both the NCSPMT and the CSSG met several times during the quarter and are performing their respective chartered functions in supporting the Response Manager's execution of the Implementation Plan (IP).

Accomplishments and key issues addressed during the period are as follows:

- Charters for both the NCSPMT and the CSSG were developed and provided to the Board in February 1998 (IP Commitment 6.9 Deliverable 1, and IP Commitment 6.8).
- The following Criticality Safety Information Resource Center (CSIRC) pilot program activities were completed: An experiment was identified for archiving (Commitment 6.2.1 Deliverable 1), logbooks for that experiment were archived at Los Alamos (Commitment 6.2.1 Deliverable 2); a videotape of the original experimenter was located (Commitment 6.2.1 Deliverable 3); and data from that experiment were digitized (Commitment 6.2.1 Deliverable 4).
- The Criticality Safety Web site is being developed and should be operational in April 1998.
- The NCSPMT conducted a Criticality Safety Program review in Oak Ridge, Tennessee. EM is assessing the level of funding for activities at Argonne and Oak Ridge National Laboratories.
- Two three-day criticality safety courses were conducted at the Los Alamos National Laboratory. A total of 27 people attended this training.

There are three attachments to the quarterly report which provide a concise IP status and the names of current NCSPMT and CSSG members. Attachment A contains a complete IP commitment and deliverable/milestone status. Attachment B provides a summary of deliverables/milestones due during the next quarter. Attachment C contains current NCSPMT and CSSG members.

The Department has made significant progress in implementing Recommendation 97-2, thereby maintaining important criticality safety infrastructure. The NCSPMT will continue to assure timely completion of IP commitments. During the next quarter, the NCSPMT will work closely with the Department's budget staff to formally select a budget strategy for Fiscal Year 2000 and beyond which institutionalizes the Department's cross-cutting criticality safety program.

ATTACHMENT A: IP COMMITMENT AND DELIVERABLE/MILESTONE STATUS

| Commitment | | Deliverable/Milestone | | Due Date | Status | |
|------------|--|-----------------------|--|----------------|---|--|
| 6.1 | Reexamine the experimental program in criticality research | 1. | Assessment report of criticality research program | March 1998 | Overdue: Per letter from DP- 10 to Board dated March 30, 1998, this deliverable will be completed by May 31, 1998. A draft priority experiments list will be provided to the Board staff by April 30, 1998 | |
| 6.2.1 | Perform CSIRC pilot program | 1. | Identify an experiment to archive | November 1997 | Completed | |
| | | 2. | Archive logbook(s) and calculation(s) for that experiment | December 1997 | Completed | |
| | | 3. | Videotape the original experimenter | January 1998 | Completed | |
| | | 4. | Digitize data and calculations | February 1998 | Completed | |
| | | 5. | Publish data and calculations | April 1998 | On Schedule | |
| 6.2.2 | Continue to implement the CSIRC program | 1. | Collocate logbooks (copies or originals) from all U.S. critical mass laboratories | December 1998 | On Schedule | |
| | r | 2. ⁻ | Screen existing logbooks with original author/experimenter | December 1998 | On Schedule | |
| | | 3. | CSIRC program plan | December 1998 | On Schedule | |
| 6.3 | Continue and expand work on ORNL sensitivity methods development | 1. | Technical program plan | July 1998 | On Schedule | |
| | | 2. | Document initiation of priority tasks from the program plan in the quarterly report to the Board | January 1999 | On Schedule | |
| 6.4 | Make available evaluations, calculational studies, and data by establishing searchable databases accessible through a DOE Internet web site | 1. | DOE criticality safety web site | March 1998 | Overdue: Should be completed in April 1998 | |
| | | 2. | Y-12 evaluations on DOE web site | June 1998 | On Schedule | |
| | | 3. | Calculations compiled by the Parameter Study Work Group on DOE web site | September 1998 | On Schedule | |
| | | 4. | Nuclear Criticality Information System Database on DOE web site | March 1999 | On Schedule | |

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| Commitment | Deliverable/Milestone | Due Date | Status |
|---|---|----------------|-------------|
| 6.5.1 Revise and reissue DOE-STD-3007-93 | 1. Revise DOE-STD-3007-93 | September 1998 | On Schedule |
| 6.5.2 Issue a guide for the review of criticality safety evaluations | 1. Departmental guide for reviewing criticality safety evaluations | May 1999 | On Schedule |
| 6.6.1 Expand training course at LACEF | 1. Expanded LACEF training course | July 1998 | On Schedule |
| 6.6.2 Investigate existing additional curricula in criticality safety | Assessment of additional training needs and review of available supplementary curricula | June 1998 | On Schedule |
| | 2. Initiate a program which addresses identified needs | December 1998 | On Schedule |
| 6.6.3 Survey existing contractor site- | Report on the review of site qualification programs | June 1998 | On Schedule |
| specific qualification programs | 2. Guidance for site-specific criticality safety training and qualification programs | September 1998 | On Schedule |
| | 3. Guidance to procurement officials specifying qualification criteria for contractor criticality safety practitioners | September 1998 | On Schedule |
| | 4. DOE Field will provide line management dates upon which contractors will have implemented guidance in Deliverable #2, above | March 1999 | On Schedule |
| 6.6.4 Federal staff directly performing criticality safety oversight will | 1. Qualification program for Departmental criticality safety personnel | December 1998 | On Schedule |
| be qualified | 2. DOE criticality safety personnel qualified | December 1999 | On Schedule |
| 6.7 Each site will conduct surveys to assess line | 1 Individual sites issue report of findings | June 1998 | On Schedule |
| ownership of criticality safety | | • | |
| 6.8 The Department will form a group of | 1. Charter for Criticality Safety Support Group approved by the NCSPMT | January 1998 | Completed |
| criticality safety experts | | | · · |
| 6.9 Create NCSPMT charter and program | 1. NCSPMT charter | January 1998 | Completed |
| plan | 2. NCSPMT program plan | June 1998 | On Schedule |
| | | | |
| | | | |

ATTACHMENT B: DELIVERABLES/MILESTONES DUE DURING THE NEXT QUARTER

| Commitment | | Deliverable/Milestone | Due Date | Status |
|-------------------------------|---|---|-------------------------|---|
| e | Reexamine the xperimental program n criticality research | Assessment report of criticality research program | March 1998 | Overdue: Per letter from DP-10 to Board dated March 30, 1998, this deliverable will be completed by May 31, 1998. A draft priority experiments list will be provided to the Board staff by April 30, 1998 |
| | Perform CSIRC pilot program | 5. Publish data and calculations | April 1998 | On Schedule: Digitized data from pilot archived experiment will be published on DOE criticality safety web site (see 6.4.1, below) |
| e ca au e: d t | Make available valuations, alculational studies, nd data by stablishing searchable latabases accessible hrough a DOE Internet veb site | DOE criticality safety web site Y-12 evaluations on the DOE web site | March 1998 June 1998 | Overdue: Should be completed in April 1998; Subcontract was established mid-April; Work has commenced setting up web site using a Los Alamos server On Schedule: A digitized index of the Y-12 evaluations will be placed on the web site by June 1998; Evaluations will be added as time and funding permit |
| י <u>ו</u> | nvestigate existing additional curricula in criticality safety | Assessment of additional training needs and review of available supplementary curricula | June 1998 | On Schedule: Draft report to be completed by May 31, 1998; final report published in June |
| ((| Survey existing contractor site-specific qualification programs | Report on the review of site qualification programs | June 1998 | On Schedule: DP-10 sent a memorandum on March 30, 1998, to affected sites requesting survey of existing qualification programs; data consolidation will occur in April; draft report in May, final report in June 1998 |
| 9 (| Each site will conduct surveys to assess line ownership of criticality safety | Individual sites issue report of findings | June 1998 | On Schedule: DP-10 sent a memorandum on March 30, 1998 containing criteria consistent with ISMS verification audits to Field Office Managers for use in conducting these audits |
| | Create NCSPMT charter and program plan | 2. NCSPMT Program Plan | June 1998 | On Schedule: NCSPMT will develop a draft program plan in May |

ATTACHMENT C: NCSPMT AND CSSG MEMBERS

NCSPMT (All DOE Headquarters)

NAME

ORGANIZATION

Roger Dintaman (Co-Chair) Dennis Cabrilla (Co-Chair) Jerry McKamy Ray Schwartz Richard Person Matthew Hutmaker William Lake Defense Programs Environmental Management Environment, Safety and Health Energy Research Materials Disposition Nuclear Energy Civilian Radioactive Waste Management

CSSG (DOE and Contractors)

ORGANIZATION

DOE-Idaho

Environmental Management Environment, Safety and Health Los Alamos National Laboratory Oak Ridge National Laboratory Los Alamos National Laboratory Argonne National Laboratory Westinghouse Safety Management Solutions, Inc. Oak Ridge National Laboratory Safe Sites of Colorado

NAME

Adolf Garcia (Chairman) Dennis Cabrilla Jerry McKamy Richard Anderson Calvin Hopper Thomas McLaughlin James Morman Thomas Reilly

Robert Westfall Robert Wilson