

Department of Energy

Washington, DC 20585

February 1, 1999

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99-0000318

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 Secretary has asked me to respond to your letter of November 18, 1998, concerning the Department of Energy's (Department) implementation of Defense Nuclear Facilities Safety Board (Board) Recommendation 94-2, *Management of Low-Level Radioactive Waste*. Enclosed is the quarterly progress report on implementation of the Board Recommendation 94-2 for the period from October 1, 1998 to December 31, 1998. This report addresses the Recommendation 94-2 task initiatives which have not yet been completed, as well as Departmental activities closely related to the task initiatives committed to in response to the Board Recommendation 94-2.

The Department continues to work aggressively to complete all of the commitments under Recommendation 94-2. The report states that the Department has completed a significant number of activities in support of the commitments. DOE Order 435.1, *Radioactive Waste Management*, replacing DOE Order 5820.2A, has been put into the Departmental concurrence process on February 1, 1999, and is expected to be issued final for implementation by the end of March 1999. In addition to responding to comments from the Board, the Board staff, and the public, the Order Revision Team completed final edits to the Order, Manual, and associated Guidance documents to support this schedule.

Following Departmental concurrence, the Order, Manual, and Guidance is expected to be issued for immediate implementation. The Order currently out for concurrence states that from the date of issuance, Department programs and sites will have one year to comply with the Order and set up implementation programs and corrective action plans. Any requirements that have not been implemented within a year of issuance of the Order will require the Field Element Manager to obtain a waiver from the cognizant Program Secretarial Officer. All implementation and corrective action plans will be approved by the cognizant managers, as specified in the Order. It is expected that some implementation, such as having radioactive waste management basis statements approved and in place for all facilities, may require up to fiscal year 2001 to



complete. By the end of fiscal year 2001, all aspects of the Order are to be fully implemented and completed.

In September 1998, the Department completed a document entitled *Complex-Wide Strategy for Maintenance of Department of Energy Low-Level Waste Disposal Facility Performance Assessments and Composite Analyses.* This document describes the strategy for integrating the Headquarters Program Management and Field Office activities related to performance assessment and composite analysis maintenance including that research and development as necessary for low-level waste disposal. The Department is expected to complete the implementation plan for the research and development strategy by the end of March 1999, and will discuss the proposed strategy with the Board prior to its implementation.

The Department is making progress on the completion and approval of the radiological assessments and composite analyses for the Department's disposal facilities. A Low-Level Waste Disposal Facilities Federal Review Group (LFRG), established in December 1996, was chartered to ensure that low-level waste facilities are designed, constructed, operated, and closed in a manner that protects the public and environment. The Department has issued a disposal authorization statement for the Los Alamos National Laboratory Low-Level Waste Disposal Area G authorizing the continued operations of the facility subject to the conditions in the disposal authorization statement. The Review Teams continue their review activities for the other disposal facilities.

We have received the Oak Ridge Operations Office response to the LFRG regarding compliance and closure issues on the Oak Ridge Solid Waste Storage Area 6 performance assessment and composite analysis. The LFRG will review the response by the end of February 1999. There has been continued progress on the Nevada Test Site Area 3 review team final report. We have selected the review team leader and team members for the review of the Hanford 200 Area Plateau composite analysis and the Immobilized Low-Activity Tank Waste performance assessment. The Hanford site review was conducted the week of January 11-15, 1999. The Idaho review team leader was selected for the review of the Idaho *Low-Level Waste Radioactive Waste Management Complex Composite Analysis*. The review will commence in the third quarter of fiscal year 1999.

A status table in the quarterly progress report provides the status of all of the Recommendation 94-2 task initiatives. We intend to complete on schedule the radiological assessments for all of the Department sites except for the radiological assessment at the Nevada Test Area 5. The Department expects to complete the radiological assessment at the Nevada Test Area 5 by the end of calendar year 2000. However, we are confident that we will be able to meet our mutual goal of demonstrating the necessary level of commitment completion, firm scheduling and resource allocation, and organizational institutionalization to propose closure of Recommendation 94-2 by the end of 1999.

Quarterly Report

for

Implementation Plan

Defense Nuclear Facilities Safety Board

Recommendation 94-2

Conformance with Safety Standards at Department of Energy Low-Level Nuclear Waste and Disposal Sites

October 1 through December 31, 1998

Quarterly Report for Implementation Plan Defense Nuclear Facilities Safety Board Recommendation 94-2

1.0 INTRODUCTION

The Department of Energy (DOE) issued the "Implementation Plan, Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-2" in March 1995. In May 1996 DOE issued a revision to the Implementation Plan that reflected enhancements to DOE's approaches to systems engineering and the radiological assessments, and better integration and coordination of both the task initiatives and the involved organizations. In August 1996, the Department received a letter from the DNFSB accepting the revised Implementation Plan, with conditions. In a July 9, 1998 letter to the Board, the Secretary of Energy proposed revised dates for the DNFSB 94-2 commitments that had not been completed. In addition, the Department committed to reporting on a number of other activities closely related to the DNFSB 94-2 implementation tasks.

This quarterly report focuses on progress made towards completing the tasks outlined in the Secretary's July 9, 1998 letter. The attachment provided with this report provides a full report on the status of all of the remaining DNFSB Recommendation 94-2 task initiatives.

2.0 OVERVIEW

2.1 General Progress

During this reporting period the Department completed a significant number of interim activities in support of the commitments in the Implementation Plan. In September 1998, the Department completed a document entitled *Complex-Wide Strategy for Maintenance of Department of Energy Low-Level Waste Disposal Facility Performance Assessments and Composite Analyses.* This document describes the strategy for integrating the Headquarters Program Management and Field Office activities related to performance assessment and composite analysis maintenance including that research and development as necessary for low-level waste disposal. The Department is expected to complete the implementation plan for the research and development strategy by the end of March 1999, and will discuss the proposed strategy with the Board prior to its implementation.

The Low-Level Waste Disposal Facilities Federal Review Group and its review teams have made progress on reviewing radiological assessments. The Oak Ridge Operations Office reviewed the Low-Level Waste Disposal Facilities Federal Review Group's issues regarding compliance and closure of the Solid Waste Storage Area 6 performance assessment and composite analysis and forwarded a response to Headquarters Program Management on December 30, 1998. Headquarters Program Management and the LowLevel Waste Disposal Facilities Federal Review Group will review and provide comments on the Oak Ridge Operations Office response by the end of February 1999.

The Nevada Test Site Area 3 review team are developing a final report on their review. The review team report is expected to be completed by the end of March 1999. The review team leader and team members have been chosen for the review of the Hanford 200 Area Plateau composite analysis and the Immobilized Low-Activity Tank Waste performance assessment. The Hanford site review was conducted the week of January 11-15, 1999. The Idaho site review of the Idaho *Low-Level Waste Radioactive Waste Management Complex Composite Analysis* will commence in the third quarter of FY 1999. The Idaho team leader has been selected.

DOE Order 435.1, *Radioactive Waste Management*, replacing DOE Order 5820.2A, has been put into the Departmental concurrence process on February 1, 1999 and is expected to be issued final for implementation by the end of February 1999. In addition to responding to comments from the Board, Board staff and the public, the Order Revision Team completed final edits to the Order, Manual, and associated Guidance documents to support this schedule.

Following Departmental concurrence, the Order, Manual, and Guidance is expected to be issued for immediate implementation. The Order currently out for concurrence states that from the date of issuance, Department programs and sites will have one year to comply with the Order and set up implementation programs and corrective action plans. Any requirements that have not been implemented within a year of issuance of the Order will require the Field Element Manager to obtain a waiver from the cognizant Program Secretarial Officer. All implementation and corrective action plans will be approved by the cognizant managers, as specified in the Order. It is expected that some implementation, such as having radioactive waste management basis statements approved and in place for all facilities, may require up to FY 2001 to complete. By the end of FY 2001, all aspects of the Order are to be fully implemented and completed.

2.2 Meetings with the DNFSB and Staff

2.2.1 Meetings During this Reporting Period

During the current reporting period, the following meetings were held:

- DOE and DNFSB staff met on November 12, 1998 and December 21, 1998 to discuss resolution of comments and finalization of the draft *Radioactive Waste Management Order* revision.
- DOE met with the DNFSB on December 1, 1998 to discuss resolution of comments and finalization of the draft *Radioactive Waste Management Order* revision.

2.2.2 Meetings in Future Reporting Periods

The following meetings between the Department and the DNFSB and staff are anticipated for the next reporting period:

- DOE and DNFSB staff will meet as necessary to discuss resolution of comments and finalization of the draft *Radioactive Waste Management Order* revision.
- DOE will brief the DNFSB on the final version of the *Radioactive Waste Management Order* and proposed actions to support the closure of Recommendation 94-2 by the end of 1999.

3.0 SUMMARY OF COMMITMENTS DUE

The following tables summarize the status of the remaining DNFSB Recommendation 94-2 commitments and the additional low-level waste-related task initiatives on which the Department is reporting.

For those commitments that were included in the Implementation Plan, there are at least two indicators provided in the first column. Those listed in the format "VIII.B.1.b.2" are task numbers as listed in the Implementation Plan. Those in the format "R94-02 033" are identification numbers as reported in the Department's Safety Issues Management System (SIMS). A full copy of the SIMS report is included as an appendix to this report. The Status column provides a brief description of the status of the task initiative. Substantive changes in status since the previous report are presented in bold.

<u>IP Task #</u> SIMS ID #	Title or Description	Due Date	Status
FISCAL YEA	R 1998		
<u>IX.B.4</u> R94-02 039	Prepare Strategy to Address LLW R&D Needs.	08/31/98	Partially completed. A strategy for addressing R&D needs through the maintenance of radiological assessments was transmitted to the Board on 10/1/98. A process for implementing the strategy will be shared with DNFSB staff by the end of March 1999.
<u>VII.B.5.b.2/3</u> R94-02 030-012 R94-02 031-009	Complete Headquarters' review of Savannah River Site composite analysis. Issue Saltstone disposal authorization statement.	09/30/98 09/30/98	In progress. In June 1998, the review team submitted its report to the LLW Disposal Facilities Federal Review Group (LFRG). The LFRG has evaluated the report and approved the composite analysis with conditions. A letter was sent to SRS on January 13, 1999.
<u>VII.B.5.b.2/3</u> R94-02 031-008	Issue E-Area Vaults disposal authorization statement.	09/30/98	In progress. In June 1998, the review team submitted its report to the LFRG. The LFRG has evaluated the report and approved the composite analysis with conditions. A letter was sent to SRS on January 13, 1999.

Status of Remaining DNFSB Recommendation 94-2 Task Initiatives

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<u>IP Task #</u> SIMS ID #	Title or Description	Due Date	Status
FISCAL YEA	R 1999		
<u>VII.B.5.b.1/2/3</u> R94-02 029-008	Complete Headquarters' review of Oak Ridge Solid Waste Storage Area 6 performance assessment.	10/15/98	In progress. Review team has submitted its report to the LFRG. The LFRG reviewed the review team report and on August 19, 1998 sent a letter to
R94-02 030-008	Complete Headquarters' review of SWSA-6 composite analysis.	10/15/98	the site requiring a plan to address compliance and
R94-02 031-005	Issue disposal authorization statement.	10/15/98	closure issues. The site prepared a response on December 30, 1998. The LFRG will review the response by the end of February 1999.
<u>VII.B.5.b.1/2/3</u> R94-02 029-006	Complete Headquarters' review of the Nevada Test Site Area 3 performance assessment/ composite analysis.	10/31/98	In progress. Review team has completed its review and are developing a report. Review team report is expected to be
R94-02 031-004	Issue disposal authorization statement.	10/31/98	completed by the end of March 1999.
<u>VII.B.5.b.2</u> R94-02 030-010	Complete Headquarters' review of Hanford composite analysis; document conclusion relative to Environmental Restoration Disposal Facility.	03/31/99	In progress. Review team leader and team members has been selected. Review conducted the week of January 11-15, 1999.
<u>VII.B.5.b.2/3</u> R94-02 031-006	Issue 200 West Area burial grounds disposal authorization statement.	03/31/99	Pending. Dependent on review of Hanford composite analysis.

Status of Remaining DNFSB Recommendation 94-2 Task Initiatives

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Status of Remaining DNFSB Recommendation 94-2 Task Initiatives

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<u>IP Task #</u> SIMS ID #	Title or Description	Due Date	Status
<u>VII.B.5.b.2/3</u> R94-02 031-007	Issue 200 East Area burial grounds disposal authorization statement.	03/31/99	Pending. Dependent on review of Hanford composite analysis.
<u>VII.B.5.b.2/3</u> R94-02 030-004	Complete Headquarters' review of Idaho composite analysis.	05/15/99	Pending. Review team leader has been selected; review will
R94-02 031-002	Issue disposal authorization statement.	05/15/99	commence in the third quarter of FY 1999.
<u>VII.B.5.b.2</u> R94-02 030-005	Submit Nevada Test Site Area 5 composite analysis to Headquarters for review.	09/30/99	In progress. Work is underway to complete the composite analysis before the end of the second quarter of FY 1999.
FISCAL YEA	R 2000		
<u>VII.B.5.b.2/3</u> R94-02 030-006	Complete Headquarters' review of Nevada Test Site Area 5 composite analysis.	06/30/00	Pending. Task will start upon receipt of the composite analysis.
R94-02 031-003	Issue disposal authorization statement.	06/30/00	

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Status of Related Low-Level Waste Management Initiatives Not Included in Implementation Plan

Title or Description	Proposed Due Date	Status								
FISCAL YEAR 1998										
Complete revision of Radioactive Waste Management Order, Manual, and guidance.	09/30/98	In progress. Draft Order, Manual, and Contractor Requirements Document have been revised based on comments from DNFSB, the Department and the public. The Order has been put into the Departmental concurrence process on February 2, 1999 and is expected to be issued final for implementation by the end of March 1999.								
FISCAL YEAR 1999	· ·									
Complete Headquarters' review of the Hanford LLW Glass Disposal Facility performance assessment and issue disposal authorization statement.	03/31/99	In progress. Review team leader and team members has been selected. Review held the week of January 11-15, 1999.								

4.0 TASK AREA STATUS

4.1 Regulatory Structure and Process

The draft order, DOE O 435.1, *Radioactive Waste Management*, the accompanying manual, DOE M 435.1, *Radioactive Waste Management Manual*, guidance, and technical basis documentation were issued for DOE, DNFSB and staff review on February 28, 1997. Issuance of the draft documents completed the DNFSB Recommendation 94-2 commitments in this task area. For purposes of continuity, finalization of the *Radioactive Waste Management* directives, which address high-level and transuranic waste as well as low-level waste, is being tracked under this task area.

DOE Order 435.1, *Radioactive Waste Management*, replacing DOE Order 5820.2A, has been put into the Departmental concurrence process on February 1, 1999 and is expected to be issued final for implementation by the end of February 1999. In addition to responding to comments from the Board, Board staff and the public, the Order Revision Team completed final edits to the Order, Manual, and associated Guidance documents to support this schedule.

Following Departmental concurrence, the Order, Manual, and Guidance is expected to be issued for immediate implementation. The Order currently out for concurrence states that from the date of issuance, Department programs and sites will have one year to comply with the Order and set up implementation programs and corrective action plans. Any requirements that have not been implemented within a year of issuance of the Order will require the Field Element Manager to obtain a waiver from the cognizant Program Secretarial Officer. All implementation and corrective action plans will be approved by the cognizant managers, as specified in the Order. It is expected that some implementation, such as having radioactive waste management basis statements approved and in place for all facilities, may require up to FY 2001 to complete. By the end of FY 2001, all aspects of the Order are to be fully implemented and completed.

4.2 Radiological Assessments

During the current reporting period, the Low-Level Waste Disposal Facilities Federal Review Group and its review teams have made progress on reviewing radiological assessments at four of the six DOE sites with low-level waste disposal facilities requiring disposal authorization statements.

The Oak Ridge Operations Office reviewed the Low-Level Waste Disposal Facilities Federal Review Group's issues regarding compliance and closure of the Solid Waste Storage Area 6 performance assessment and composite analysis and forwarded a response to Headquarters on December 30, 1998. Headquarters and the Low-Level Waste Disposal Facilities Federal Review Group will review and provide comments on the Oak Ridge Operations Office response by the end of February 1999.

The Low-Level Waste Disposal Facilities Federal Review Group met on July 23 and 24, 1998 at the Savannah River Site to complete its review of the site's composite analysis and determine a course of action with respect to the E-Area Vaults and Saltstone disposal authorization statements. The Group determined that a schedule for a maintenance plan would be requested of the site. The schedule for a maintenance plan would indicate how the performance assessment/composite analysis' technical inadequacies would be addressed by the site. Based on development of an acceptable schedule for a performance assessment/composite analysis maintenance plan, the Group would develop disposal authorization statements basis for the two disposal facilities. During this period, the LFRG prepared a letter summarizing the findings of their review and recommendations. The letter was sent to SRS on January 13, 1999.

The Nevada Test Site Area 3 review team are developing a final report on their review. The review team report is expected to be completed by the end of March 1999. The review team leader and team members have been chosen for the review of the Hanford 200 Area Plateau composite analysis and the Immobilized Low-Activity Tank Waste performance assessment. The Hanford site review was conducted the week of January 11-15, 1999. The Idaho site review of the Idaho *Low-Level Waste Radioactive Waste Management Complex Composite Analysis* will commence in the third quarter of FY 1999. The Idaho team leader has been selected.

During the next reporting period, the Low-Level Waste Disposal Facilities Federal Review Group will continue to work towards making recommendations on the outstanding radiological assessments. There will be discussions with the Savannah River and Oak Ridge Operations Offices regarding the actions and commitments they need to make in response to the Department's memoranda regarding their respective radiological assessments.

The Nevada Test Site Area 3 review team will submit its report to the Low-Level Waste Disposal Facilities Federal Review Group which is planning to meet during the next reporting period to complete its review of the Nevada Test Site Area 3 performance assessment and composite analysis. The Low-Level Waste Disposal Facilities Federal Review Group is expected to make a recommendation to the Deputy Assistant Secretary for Waste Management and the Deputy Assistant Secretary for Environmental Restoration regarding acceptance of the radiological assessment and issuance of a disposal authorization statement following the meeting.

4.3 Research and Development

In September 1998, the Department completed a document entitled *Complex-Wide Strategy for Maintenance of Department of Energy Low-Level Waste Disposal Facility Performance Assessments and Composite Analyses.* This document describes the strategy for integrating the Headquarters Program Management and Field Office activities related to performance assessment and composite analysis maintenance including that research and development as necessary for low-level waste disposal. The Department is expected to complete the implementation plan for the research and development strategy by the end of March 1999, and will discuss the proposed strategy with the Board prior to its implementation.

> 94-2 Qtrly December 31, 1998

Appendix

Safety Issues Management System

Report for Recommendation 94-2

October 1 to December 31, 1998

94-2 Qtrly December 31, 1998

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Summary of Recommendation Report(s) - Key Commitment and Action Information

RECOMMENDATION # R94-02 Conformance with Safety Standards at Low -Level Nuclear Waste Disposal Sites Resp. Manager: Mr. Martin Letourneau Resp. Org: EM

DR Contact: Mr. Michael Worley

Board Contact: Mr. Steve Stokes

Total number of records: 83

Current Date: 1/26/99

Rec#	Cmt#	Act#	Commitment Statement	Affected Site	Deliverable	Reference Document	Complete	Status	Due Date
<u>R94-02</u>	1		The Project Management Plan (PjMP) will be updated to manage the task initiatives and commitments described in this Implementation Plan.	ALL	Updated Project Management Plan (PjMP).	IP dated 4/96, Commitment III.C.1, pg. III-9	Complete 6/27/96	Accepted for closure Conway ltr dated 7/29/98.	6/30/96
<u>R94-02</u>	2 .		The Low-Level Waste Management Task Group (LLWMTG) will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.	ALL	Quarterly Progress Reports.	IP dated 4/96, Commitment III.C.2, pg. III-10	Open		
<u>R94-02</u>	2	1	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.	ALL	Quarterly Progress Report (April-June 1996).	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete 7/29/96	Quarterly Report for period of April through June 1996 delivered 7/29/96.	7/31/96
<u>R94-02</u>	2	2	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.	ALL	Quarterly Progress Report (July-September 1996).	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete 11/1/96		10/31/96
<u>R94-02</u>	2	3	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.	ALL	Quarterly Progress Report (October-December 1996).		Complete 2/7/97	Ref: EM97-00433	1/31/97
<u>R94-02</u>	2	4	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.	ALL	Quarterly Progress Report. (January - March 1997)	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete 5/1/97		4/30/97

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<u>R94-02</u>	2	5.	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.		ALL	Quarterly Progress Report. (April - June 1997)	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete 7/31/97	Ref: EM97-03482	7/31/97
<u>R94-02</u>	2	6	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.		ALL	Quarterly Progress Report. (July - September 1997)	IP dated 4/96, Commitment III.C.2, pg. III-10		Ref: Alm/Conway ltr dated 11/21/97.	10/31/97
<u>R94-02</u>	2	7	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.	▲	ALL	Quarterly Progress Report (October - December 1997)	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete 5/21/98	Ref: Owendoff/Conway ltr dated 5/21/98.	1/31/98
<u>R94-02</u>	2	8	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.		ALI.	Quarterly Progress Report (January - March 1998)	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete 7/9/98	Ref: Owendoff/Conway ltr dated 7/9/98.	4/30/98
<u>R94-02</u>	2	9	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.		ALL	Quarterly Progress Report (April - June 1998)	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete 7/27/98	Ref: Owendoff/Conway ltr dated 7/27/98.	7/31/98
<u>R94-02</u>	2	10	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.		ALL	Quarterly Progress Report (July - September 1998)	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete 10/23/98	Ref: Owendoff/Conway ltr dated 10/23/98.	10/31/98
<u>R94-02</u>	2	11	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.		ALL	Report (October -	IP dated 4/96, Commitment III.C.2, pg. III-10	Open		1/31/99
<u>R94-02</u>	3		The Department will complete and document a systems engineering evaluation to accomplish the mission of the LLW program.					Complete 6/30/95		6/30/95

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<u>R94-02</u>	4	The Department will compile and document LLW program system requirements including goals and assumptions.	ALL	LLW program rcquirements document.	IP dated 4/96, Commitment IV.B.2, pg. IV-3	Complete 4/26/96	Accepted for closure. Conway ltr dated 7/29/98.	4/30/96
<u>R94-02</u>	5	The Department will analyze the requirements to determine what functions (activities) are necessary to accomplish the requirements and identify any additional requirements and functions needed to integrate the program.	ALL	LLW system	IP dated 4/96, Commitment IV.B.3, pg. IV-4	Complete 10/7/96	Deliverable letter of 10/7/96 for the SDD states intent to update the SDD once the Waste Management Order is revised. Accepted for closure Conway Itr dated 7/29/98.	9/30/96
<u>R94-02</u>	6	A study will be performed to evaluate the safety merits and demerits of using a privately operated facility away from DOE sites for the exclusive disposal of DOE LLW.	ALL	Privatization guidelines.	IP dated 4/96, Commitment IV.B.4, pg. IV-4	Complete 10/2/96	Accepted for closure. Conway ltr dated 7/24/98.	9/30/96
<u>R94-02</u> -	7	The Department will prepare and maintain a Program Management Plan.	ALL	LLW Program Management Plan		3/31/97	The PMP includes the guidance and criteria for sites to use when considering disposal options which was specified as part of Task IV.B.4. Accepted for closure Conway ltr dated 7/29/98.	3/31/97
R94-02 8	8	A complex-wide corrective action plan will be prepared to correct the vulnerabilities common across the complex.	ALL	Initial complex-wide corrective action plan.		Complete 7/31/96		7/31/96
<u>R94-02</u> g	9	Site-specific corrective action plans prepared as a result of the Complex-Wide Review constitute the initial site improvement activities.	ALL	corrective action		Complete 7/31/96		7/31/96
<u>R94-02</u>	10	The Assessment Working Group members are selected to develop the complex-wide review process. The Assessment Working Group identifies and selects the Working Group Assessment Teams to perform evaluations of the 38 facilities.	ALL	Group and Working		Complete 3/4/96	Complete membership delivered to the Board in an EM-30 letter dated 3/4/96.	2/29/96

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<u>R94-02</u>	1 I	LLW sites to be surveyed are identified and a survey instrument is prepared. Individuals are trained on survey contents and survey methods, and perform surveys at their sites, beginning June 1, 1995.	ALL	Completed site surveys.	IP dated 4/96, Commitment V.B.2, pg. V-12	Complete 11/30/95		11/30/95
<u>R94-02</u>	12	Independent evaluations are completed for the 38 facilities and an assessment report for these sites is issued.	ALL	Preliminary Report.		Complete 4/12/96		4/12/96
<u>R94-02</u>	13	Independent evaluations are completed for the 38 facilities and an assessment report for these sites is is is and	ALL	Final Report.		Complete 5/17/96	CWR results were briefed to the Board on 4/16/96.	5/17/96
<u>R94-02</u>	14	Issue an Office of Waste Management Directive on inclusion of pre-1988 waste and consideration of other sources of radioactive contamination.	HAN	Office of Waste Managcment Directive.		Complete 5/31/95	· · · · ·	5/31/95
<u>R94-02</u>	15	Issue an interim policy improving the regulatory structure and process for LLW disposal facility		Interim Policy Statement.		Complete 7/21/95	Interim Policy will be prepared by the Low-Level Waste Management Task Group and issued jointly by EM and EH.	7/21/95
<u>R94-02</u>	16	A revision to the interim policy will be issued that clarifies the first policy on regulatory structure for LLW management and the policy to include pre-1988 LLW in performance assessments.	HAN	Revised interim policy statement.		Complete 7/31/96		7/31/96
<u>R94-02</u>	17	Recognizing that CERCLA disposal and storage sites are also regulated by EPA and in some cases the states, a policy and guidance document will be developed to identify the applicable low-level waste requirements for such activities and	ALL	Policy and guidance document issued for CERCLA sites.			Discussed in meeting with Board Staff on 5/3/96.	5/31/96
<u>R94-02</u>	18	Recognizing that RCRA disposal and storage sites are also regulated by EPA and in some	ALL	Policy and guidance issued for RCRA sites.		Complete 1/9/97		12/31/96

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<u>R94-02</u>	19	Complete a report comparing 10 CFR 61 and Agreement State requirements plus license conditions and waste acceptance criteria with those of the Department.	ALL	DOE and non-DOE requirements and	IP dated 4/96, Commitment VI.B.4.b.1, pg. VI-8	Complete 12/29/95		12/29/95
<u>R94-02</u>	20	International efforts such as the IAEA RADWASS program are being considered, along with information specific to the LLW management programs in Canada, the United Kingdom, France, and Sweden, in a report.	ALL	DOE and international requirements and		Complete 6/11/96	Report submitted to DNFSB 19 days early. Accepted for closure. Conway ltr dated 7/29/98.	6/30/96
<u>R94-02</u>	21	The Department will undertake a process to identify essential requirements to be included in the Low Level Waste Chapter of the revised Order on Radioactive Waste Management. A major component of the process will be the development and documentation of the bases for \checkmark	ALL	essential Low-Level Waste Management	IP dated 4/96, Commitment VI.B.5, pg. VI-8	Complete 2/28/97	Requirements are identified in draft Order 435.1 documents which were sent to the Board on 2/28/97.	2/28/97
<u>R94-02</u>	22	As part of the identification and development of requirements for LLW management, implementation guidance will be developed, and necessary documentation will be provided in time to support the Radioactive Waste Management Order revision.	ALL	essential LLW	Commitment	Complete 2/28/97	Order 435.1 on 2/28/97.	2/28/97
<u>R94-02</u>	23	The approval process for radiological assessments (i.e., performance assessments and composite analyses) will be formalized in order to make the process consistent with the commitments made in this Implementation Plan and will become part of the Order revision for	HAN	formally developed for inclusion in		Complete 2/28/97	Included with draft Order 435.1 documents which were delivered to the Board on 2/28/97. In response to the Board's IP revision acceptance condition, Department diversified the PRP by establishing a federally-staffed group to review the radiological assessments. The Board was notified of these actions in a 4/30/97 letter from EM-1. Deliverable sent to the	2/28/97
							Board on 3/7/97 (Ref: EM97-0832). This	

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<u>R94-02</u> 24	The Department will issue interim direction addressing the critical aspects of conducting a performance assessment.	HAN	Policies addressing critical assumptions and clarifications for performance assessments.		Complete 3/7/97	deliverable was deferred until the end of February consistent with the Order revision effort. A letter to the Board informing them of the deferred delivery was sent on 2/2/97. Ref: EM96-04920.	1/31/97
<u>894-02</u> 25	DOE will prepare and provide to the sites a document providing guidance on the preparation of the composite analyses.	HAN	Guidance for conducting composite analyses.	IP dated 4/96, Commitment VII.B.2, pg. VII-6	Complete 4/30/96		5/31/96
<u>R94-02</u> 26	DOE will prepare a documented description of the process for Headquarter's review of the composite analyses and the criteria for evaluating the acceptability of the analyses.	ALL	Description of the process and criteria for Headquarter's review of composite analyses.	IP dated 4/96, Commitment VII.B.3, pg. VII-7	Complete 11/1/96		10/31/96
<u>R94-02</u> 27	The guidance on performance assessment maintenance program will specify criteria for periodic review of the performance assessments to ensure that the waste acceptance criteria and design and operational requirements derived from the performance assessments remain	ALL .	PA maintenance guidance document.	IP dated 4/96, Commitment VII.B.4.b.1, pg. VII-8	Complete 10/1/96		9/30/96
<u>R94-02</u> 28	The guidance on performance assessment format and content will provide an annotated outline of the matters to be addressed in a performance assessment, including incorporation of performance assessment results into waste acceptance criteria. The Standard Review Plan	IIAN		IP dated 4/96, Commitment VII.B.4.b.2, pg. VII-8		In response to the Board's IP revision acceptance condition, completed this deliverable early.	1/31/97
<u>R94-02</u> 29	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	HAN	Submit performance assessment to Headquarters for review; complete the Headquarters technical review and documentation.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Open	The last PA reviewed by October 31, 1998.	10/31/98
<u>R94-02</u> 29	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	LANL	Submit LANL TA-54, Area G, performance assessment to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete 4/3/97	Ref: EM97-01409.	3/31/97

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<u>R94-02</u>	29	2	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	LANL	Complete the Headquarters technical review and documentation of the LANL TA-54, Area G, performance assessment.	Commitment	Complete 10/2/98	Ref: EM ltr of 10/2/98	8/31/98
<u>R94-02</u>	29	3	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	INEL		IP dated 4/96,	Complete 8/30/96	PRP recommended approval at July meeting. PA accepted with conditions. Accepted for closure. Conway ltr dated 7/29/98.	8/31/96
<u>R94-02</u>	29	4	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	NTS	Complete the Headquarters technical review and documentation of the NTS Area 5 Radioactive Waste Management Site performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete 8/30/96	PA accepted with conditions. Accepted for closure. Conway ltr dated 7/29/98.	8/31/96
<u> 894-02</u>	29	5	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	NTS	performance assessment (including composite analysis) to Headquarters for review.	VII.B.5.b.1,	5/27/98	Ref. Owendoff/Conway ltr dated 5/27/98. Accepted for closure. Conway ltr dated 7/29/98.	3/31/98
<u>R94-02</u>	29	6	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	NTS	Complete the Headquarters technical review and documentation of the NTS Area 3 Radioactive Waste Management Site performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Oman	In progress. Review team has completed a site visit and is evaluating the performance assessment and composite analysis.	10/31/98
R94-02	29	7	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	OR	performance assessment to		Complete 9/30/97	PA submission was reported in a letter to the Board on October 16, 1997.	9/30/97

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<u>R94-02</u>	29	8	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	OR	Headquarters technical review and documentation of the ORNL Solid Waste Storage Area-6 performance assessment.	IP dated 4/96,	Open	In progress. OR has responded to EM letter requesting additional information.	10/15/98	
<u>R94-02</u>	29	9	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	HAN	assessment.	μ r ualcu 4/90,	Complete 6/27/96	Accepted for closure. Conway ltr dated 7/29/98.	6/30/96	-
<u>R94-02</u>	29	10	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	HAN	Submit the Hanford 200-E Burial Ground performance assessment to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete 8/30/96		8/31/96	
<u>R94-02</u>	29	11	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	ΗΛΝ	Complete the Headquarters technical review and documentation of the Hanford 200-E Burial Ground performance assessment.	μ r ualeu 4/90,	Complete 6/30/97	(Ref: EM96-04214) Board was notified of a delay by an EM-1 letter dated 4/30/97 (Ref. EM96-04948). Accepted for closure. Conway ltr dated 7/29/98.	4/30/97	
<u>R94-02</u>	29	12	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	SRS	Complete the Headquarters technical review and documentation of the SRS Saltstone Disposal Facility performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete 7/31/96	PA found technically acceptable except for groundwater analysis - more analysis is being requested. Formal closure with the Board will be proposed when the additional groundwater analysis information is received and reviewed. Accepted for closure. Conway ltr dated 7/29/98.	7/31/96	

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<u>R94-02</u> 30		The sites will prepare a composite analysis.	<u>م</u>	HAN	Submit composite analyses to Headquarters for review; complete the Headquarters technical review and documentation.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	The last composite analysis reviewed by June 30, 2000.	6/30/2000
<u>R94-02</u> 30	1	The sites will prepare a composite analysis.	▲	LANL	Submit LANL TA-54, Area G, composite analyses to Headquarters for review.		Complete 4/3/97	Ref: EM97-01409	12/31/97
<u>R94-02</u> 30	2	The sites will prepare a composite analysis.	▲	LANL	LANL TA-54, Area G, composite analyses.	Commitment VII.B.5.b.2,	Complete 10/2/98	Ref: EM ltr of 10/2/98	8/31/98
<u>R94-02</u> 30	3	The sites will prepare a composite analysis.	•	INEL	Management Complex composite analyses to	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Complete 7/10/98	Ref: EM ltr 7/10/98	6/30/98
<u>R94-02</u> 30	4	The sites will prepare a composite analysis.	<u>ب</u>	INEL	INEL Radioactive Waste Management Complex composite analyses.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9		Review to start in the third quarter, FY99.	5/15/99
<u>R94-02</u> 30	5	The sites will prepare a composite analysis.	<u> </u>	NTS 	Management Site composite analyses to	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Ohen	In progress. Work has begun on defining the boundaries of the area to be included in the composite analysis.	9/30/99
<u>R94-02</u> 30	 6	The sites will prepare a composite analysis.		NTS	NTS Area 5	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	Pending. Task will start upon receipt of the composite analysis.	6/30/2000

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<u>R94-02</u>	30	7		OR	Area-6 composite analyses to Headquarters for review.		Complete 9/30/97	CA submission was reported in a letter to the Board on October 16, 1997.	9/30/97
<u>R94-02</u>	30	8	► •	OR	ORNL Solid Waste Storage Area-6 composite analyscs.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	In progress. OR has responded to EM letter requesting additional information.	10/15/98
<u>R94-02</u>	30	9		ΠΛΝ	Restoration Disposal Facility composite analysis to Headquarters for review.		Complete 7/10/98	Ref: EM ltr 7/10/98	6/30/98
<u>R94-02</u>	30	10		HAN	documentation of the Hanford 200-E & W	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	Pending. Review team leader has been selected; review will be conducted January 11-15, 1999.	3/31/99
<u>R94-02</u>	30	11		SRS	Facility composite		Complete 10/30/97	CA delivery reported in the quarterly report (cmt#002, act#006). Ref. Owendoff/Conway ltr dated 5/27/98. Accepted for closure. Conway ltr dated 7/29/98.	9/30/97
<u>R94-02</u>	30	12		SRS		VII.B.5.b.2,	Open	LFRG evaluation of CA is complete. DAS will be issued after site responds to conditions identified in EM letter. Expect April 1999 at earliest.	9/30/98

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<u>R94-02</u>	31		The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.		HAN	Issue disposal authorization statement or direction to resolve issues or concerns.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open	The last disposal authorization statement by June 30, 2000.	6/30/2000
<u>R94-02</u>	31	1	The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.		LANL	Issue disposal authorization statement or direction to resolve issues or concerns for LANL. TA-54, Area G.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Complete 10/2/98	Ref: EM ltr of 10/2/98	9/30/98
<u>R94-02</u>	31	2	The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.		INEL.	Issue disposal authorization statement or direction to resolve issues or concerns for INEL Radioactive Waste Management Complex.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open		5/15/99
<u>R94-02</u>	31	3	The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	▲	NTS	Issue disposal authorization statement or direction to resolve issues or concerns for the NTS Area 5 Radioactive Waste Management Site.		Open		6/30/2000
<u>R94-02</u>	31	4	The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	tannad	NTS	Issue disposal authorization statement or direction to resolve issues or concerns for the NTS Area 3 Radioactive Waste Management Site.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open		10/31/98
<u>R94-02</u>	31	5	The complete radiological assessment (c.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.		OR	Issue disposal authorization statement or direction to resolve issues or concerns for the ORNL Solid Waste Storage Area-6.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open		10/15/98

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<u>R94-02</u>	31	6	and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	HAN	Issue disposal authorization statement or direction to resolve issues or concerns for the Hanford 200-W Burial Grounds.	VII.B.5.b.3,	Open		3/31/99
<u>R94-02</u>	31	7	and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	HAN	Issue disposal authorization statement or direction to resolve issues or concerns for the Hanford 200-E Burial Grounds.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open	•	3/31/99
<u>R94-02</u>	31	8	and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	SRS	Issue disposal authorization statement or direction to resolve issues or concerns for the Savannah River E-Area Vaults.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open		9/30/98
<u>R94-02</u>	31	9	and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	SRS	Issue disposal authorization statement or direction to resolve issues or concerns for the Savannah River Saltstone Disposal Facility.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open		9/30/98
<u>R94-02</u>	32		radionuclide inventory that can be accepted at a disposal facility. The initial LLW disposal canacity report will only include information on	ALL	Low-Level Waste Disposal Capacity Report, Revision 0.		Complete 7/31/96	Accepted for closure. Conway ltr dated 7/29/98.	7/31/96
<u>R94-02</u>	33		radiological capacity will be determined by analyzing site environmental data and utilizing pathway analysis modeling techniques. The radiological capacity and projection will be contained in the first revision of the disposal	ALL	Low-Level Waste Disposal Capacity Report, Revision 1.			REF.: EM Ltr to Conway on 9/17/98.	8/31/98
<u>R94-02</u>	34		and planned low-level waste disposal capacity (Task VIII.B.1), a DOE low-level waste projection program will be developed.	ALI.	DOE Low-Level Waste Projection Program Documentation.	IP dated 4/96, Commitment VIII.B.2, pg. VIII-4	Complete 12/26/96	Accepted for closure. Conway ltr dated 7/29/98.	12/31/96
								Draft report was discussed with Board	

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<u>R94-02</u>	35	A survey will be conducted to determine the common LLW generating activities at major DOE sites, and identify practices, procedures, policies and techniques that are effective in reducing LLW.	ALL	Evaluation and strategy for improvements to LLW minimization.		Complete 8/30/96	Staff 8/1/96. A companion report on mixed LLW minimization was sent to the Board on 12/26/96. Accepted for closure. Conway ltr dated 7/29/98.	8/31/96
<u>R94-02</u>	36	R&D activities where results are applicable to LLW management program improvements.	ALL.	Preliminary LLW management R&D activities catalog for initial needs identified by the Board.		Complete 6/30/95	Revised version was resubmitted along with the needs assessment on 4/18/97. Accepted for closure. Conway ltr dated 7/29/98.	6/30/95
<u>R94-02</u>	37	LLW R&D needs will be identified by the RDTT, other 94-2 Implementation Plan task groups, and with input from other DOE-wide R&D or technology development programs.	211	LLW R&D needs statement.			Ref: EM97-01721 Accepted for closure. Conway Itr dated 7/29/98.	3/31/97
<u>R94-02</u>	38	and activities (gap analysis) and use this as a screen of the needs identified in task IX.B.2. In cases where R&D needs are being addressed, these will be documented and provided to the	ALL	outstanding K&D			Ref.: EM ltr to Conway of 10/1/98.	9/30/98
<u>R94-02</u>	39	A comprehensive strategy for meeting outstanding LLW R&D needs will be developed for the LLW Management Task Group. The strategy will be developed for inclusion, as appropriate, in the LLW Program Management Plan.	\LL	outstanding LLW technical and R&D	IP dated 4/96, Commitment IX.B.4, pg. IX-6	Open	This has been delayed.	9/30/98

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