



**Department of Energy**

Washington, DC 20585

May 21, 1998

98-0001737

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DNF SAFETY BOARD

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:

Enclosed is the quarterly progress report on implementation of Defense Nuclear Facilities Safety Board Recommendation 94-2 for the period October 1, 1997, through December 31, 1997.

The quarterly progress report contains a status table on the task initiatives that were due or overdue during the October 1, 1997, to December 31, 1997, reporting period. The status table shows that the Department is behind schedule in completing a number of commitments. These delays are largely due to unforeseen events including downsizing, lawsuits, and new and competing priorities which have taxed our ability to make progress on a number of the Task Initiatives. However, the fundamental approaches to addressing the Task Initiatives and the deliverables have not changed.

The Department is committed to meeting the 94-2 commitments and working with you and your staff to reach closure on all of the 94-2 commitments by the end of this fiscal year. By May 29, 1998, the Department will submit a Quarterly Report for the period from January 1, 1998, through March 31, 1998. This Quarterly Report will provide detailed information on all of the late deliverables and our proposed plan and schedule to complete each of the deliverables. I would then like to meet with you and the other members of the Board to discuss our progress, answer your questions, and understand any further concerns you may have. If you have any questions concerning this information, please contact me at (202) 586-7710 or Mark Frei at (202) 586-0370.

Sincerely,

James M. Owendoff  
Acting Assistant Secretary for  
Environmental Management

Enclosure

cc: Mark B. Whitaker, Jr., S-3.1



**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, 1997**

**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.

The revised Implementation Plan follows the same general approach as the original, identifying initiatives in six task areas:

- Systems Engineering
- Complex-Wide Review
- Regulatory Structure and Process
- Radiological Assessments
- Low-Level Waste Projections
- Research and Development

This is the ninth report on the status of task initiatives as described in the Implementation Plan that DOE is undertaking to improve its management of low-level waste (LLW). This report covers the period from October 1, 1997 to December 31, 1997.

## **2.0 OVERVIEW**

### **2.1 General Progress**

Progress on completion of *94-2 Implementation Plan* commitments continued during this quarter albeit at a slower pace. Two factors were primarily responsible for the slower pace. First, there have been competing priorities which have affected progress in some task areas. Secondly, the use of the LLW Disposal Facilities Federal Review Group and review teams for reviewing radiological assessments is a fairly new process which is not yet operating at an optimal level.

During this reporting period the Department completed two commitments, one overdue from the previous quarter and the other a year ahead of the Implementation Plan schedule. Four other commitments due during this reporting period were not completed.

Work continued on the resolution of comments received on the February 1997 draft of the revised Order on Radioactive Waste Management (DOE O 435.1) and its accompanying manual,

guidance, and technical basis. Work on the Manual included a review and comments from the Senior Review Panel of external experts employed to support this effort.

In the Radiological Assessments task area, the Savannah River Operations Office submitted the composite analysis for the E-Area Vaults and Saltstone Disposal Facilities to Headquarters for review. The Nevada Operations Office submitted the performance assessment/composite analysis for the Nevada Test Site Area 3 disposal facility. Reviews of radiological assessments continued or were initiated for the Los Alamos National Laboratory, the Oak Ridge Reservation, and the Savannah River Site. The LLW Disposal Facilities Federal Review Group identified team leaders and approved teams for conducting a number of the reviews.

Work in the Waste Projections and Research and Development task areas was essentially on hold pending availability of key personnel. Actions that were impacted by the unavailability of staff were the final review of the waste disposal capacity report and effort to re-assess the research and development task needs and develop a revised approach. Proposed completion dates for all of the overdue commitments will be addressed in the Quarterly Report for the period from January 1, 1998 through March 31, 1998 that will be submitted to the DNFSB by May 29, 1998.

## **2.2 Meetings with the DNFSB and Staff**

### **2.2.1 Meetings During this Reporting Period**

During this reporting period there were no face-to-face meetings between DOE management and the DNFSB to specifically address DNFSB Recommendation 94-2, nor were there any staff level meetings.

### **2.2.2 Meetings in Future Reporting Periods**

The following interactions with the DNFSB or staff are anticipated during the next reporting period:

- A meeting will be held between DOE and DNFSB to discuss the progress and schedule for the revised *Radioactive Waste Management Order* and associated documents.
- A meeting will be held to discuss the status and plans for completing commitments in the *94-2 Implementation Plan*.

### 3.0 SUMMARY OF COMMITMENTS DUE IN THE CURRENT REPORTING PERIOD

The following table summarizes the status of commitments that were either due or completed during the current reporting period and overdue commitments. Appendix A provides a listing of all task initiatives committed to in the 94-2 Implementation Plan and their status, as reported in DOE's Safety Issues Management System (SIMS). Two indicators are provided in the first column of the following table. The first correlates with the commitment as numbered in the Implementation Plan. The second number corresponds to the numbering system used in SIMS.

#### Status of Task Initiatives: October 1, 1997 - December 31, 1997

IP Task # SIMS ID #	Title or Description	Due Date	Status
<u>VII.B.5.b.2</u> R94-02 030-011	Submit Savannah River Site Composite Analysis to Headquarters for Review.	09/30/97	Complete. The site submitted the composite analysis in October 1997; notification of DNFSB is pending.
<u>VII.B.5.b.2</u> R94-02 030-012	Complete Headquarters' Review of Savannah River Site Composite Analysis.	12/31/97	Pending. Review team has been convened and review is underway. Proposed due date will be addressed in the Quarterly Report for the period from January 1, 1998 through March 31, 1998 that will be submitted to the DNFSB by May 29, 1998.
<u>VII.B.5.b.2</u> R94-02 030-001	Submit Los Alamos National Laboratory Composite Analysis to Headquarters for Review.	12/31/97	Completed. DNFSB was notified by April 3, 1997 letter that the composite analysis was included in the performance assessment.

**Status of Task Initiatives: October 1, 1997 - December 31, 1997**

<u>IP Task #</u> <u>SIMS ID #</u>	Title or Description	Due Date	Status
<u>VII.B.5.b.1</u> R94-02 029-002	Complete Headquarters' review of LANL Performance Assessment.	12/31/97	Pending. Being done in conjunction with composite analysis; review report in preparation. Proposed due date will be addressed in the Quarterly Report for the period from January 1, 1998 through March 31, 1998 that will be submitted to the DNFSB by May 29, 1998.
<u>VII.B.5.b.2</u> R94-02 030-008	Complete Headquarters' Review of Oak Ridge Solid Waste Storage Area 6 Composite Analysis.	12/31/97	Pending. Review team has been convened and review is underway. Proposed due date will be addressed in the Quarterly Report for the period from January 1, 1998 through March 31, 1998 that will be submitted to the DNFSB by May 29, 1998.
<u>VII.B.5.b.2</u> R94-02 030-009	Submit Hanford Site Composite Analysis to Headquarters for Review.	12/31/97	Submittal date was impacted by a change in approach involving a more complex analysis. Proposed due date will be addressed in the Quarterly Report for the period from January 1, 1998 through March 31, 1998 that will be submitted to the DNFSB by May 29, 1998.

**Status of Task Initiatives: October 1, 1997 - December 31, 1997**

IP Task # SIMS ID #	Title or Description	Due Date	Status
<u>VII.B.5.b.2</u> R94-02 029-005	Submit NTS Area 3 Performance Assessment/ Composite Analysis to Headquarters for Review.	3/31/98	Pending. The performance assessment/ composite analysis was submitted to Headquarters in November; notification of DNFSB is pending.
<u>VIII.B.1.b.2</u> R94-02 033	Issue Low-Level Waste Disposal Capacity Report, Revision 1	09/30/97	Pending. As of the end of this reporting period the report was in review. Proposed due date will be addressed in the Quarterly Report for the period from January 1, 1998 through March 31, 1998 that will be submitted to the DNFSB by May 29, 1998.
<u>IX.B.3</u> R94-02 038  <u>IX.B.4</u> R94-02 039	Determine Outstanding LLW R&D Needs  Prepare Strategy to Address LLW R&D Needs	06/30/97  09/30/97	Pending. Following discussions with the DNFSB staff, it was decided that the R&D task area was not correctly focused on R&D important to disposal. DOE is reevaluating the tasks necessary to adequately address LLW R&D

**4.0 TASK AREA STATUS**

**4.1 Systems Engineering**

The *Low-Level Waste Program Management Plan*, outlining the programmatic strategies, policies, initiatives, and assumptions that form the basis for evolving to an integrated low-level waste program, was issued on March 31, 1997. This completed all of the Systems Engineering task initiatives in the Implementation Plan. The Department intends to revise the plan as necessary to provide the top-level direction for DOE in low-level waste management.

The Department prepared corrective action plans as a Systems Engineering task in response to the Complex-Wide Review. The Low-Level Waste Management Program continues to monitor implementation of the commitments made in the DOE-wide and site-specific corrective action plans.

## **4.2 Complex-Wide Review**

The Final Complex-Wide Review Report was transmitted to the DNFSB on May 17, 1996. This completed all Complex-Wide Review task initiatives. DOE-wide and site-specific corrective actions in response to the Complex-Wide Review are being completed under the Systems Engineering task area.

## **4.3 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 and DNFSB review on February 28, 1997. The draft Order includes overarching requirements for managing radioactive waste to protect the public, workers, and the environment, and to comply with applicable laws, regulations, and DOE directives. The draft Manual addresses essential management and implementation requirements for safe management of low-level waste and other waste types. The draft guidance documents include a number of products previously prepared as part of the implementation of DNFSB Recommendation 94-2 (e.g., performance assessment guidance documents, policy on management of waste generated as part of cleanup activities), portions of existing guidance documents, and newly-developed material. In issuing the draft Order, Manual, and guidance documents for review, DOE completed the Regulatory Structure and Process task initiatives in the Implementation Plan.

During this reporting period, most of the effort was focused on developing revised drafts of the Manual chapters and preparing initial drafts of guidance that matched one-for-one with the requirements in the Manual. The revised set of guidance was provided to select members of the Order Revision Team for cross-chapter review and integration, and additional work. There was also a review of an interim draft of the Manual by the Senior Review Panel of external experts. The Panel reviewed how previous comments on the Manual were incorporated and provided their input on further improvements.

During the next reporting period, the staff will continue to revise the guidance and to resolve issues identified through the process of guidance development. The Department expects to complete a second draft of the Order, Manual, and guidance documentation during the next reporting period and to distribute it for DOE and DNFSB review during April.



#### 4.4 Radiological Assessments

During the current reporting period, radiological assessments in support of two commitments were completed and submitted to Headquarters. The Savannah River Operations Office submitted the *Composite Analysis, E-Area Vaults and Saltstone Disposal Facilities, Revision 0* (WSRC-RP-97-311), completing an analysis that was due at the end of the previous reporting period. The composite analysis presents an evaluation of the potential future impacts to the public of the Saltstone Disposal Facility, the E-Area Vaults disposal facility, and other radiological sources that potentially add to the projected doses from the two disposal facilities. The Nevada Operations Office submitted the *Performance Assessment/Composite Analysis for the Area 3 Radioactive Waste Management Site at the Nevada Test Site, Nye County, Nevada, Revision 2.0* (DOE/NV-491). The Nevada Test Site Area 3 performance assessment and composite analysis evaluates projected long-term performance of the Area 3 disposal facility relative to the performance objectives of DOE Order 5820.2A, as well as the potential off-site impacts from the disposal facility and other radioactive source terms that may add to the dose projected for the disposal facility.

A number of commitments due during this reporting period were not completed as scheduled. Submittal of the Hanford Site composite analysis, scheduled for December 31, 1997, is behind schedule. A re-assessment of the approach to the composite analysis led to a decision to perform a more complex assessment. The change in approach and the more complex assessment both contributed to the schedule slip. The reviews of radiological assessments have also been impacted, due principally to instituting a review process different than that envisioned when the *94-2 Implementation Plan* was developed. Rather than using an established organization (the Peer Review Panel comprising contractors), the LLW Disposal Facilities Federal Review Group, comprising DOE representatives from Headquarters and sites, was formed to administer the reviews. For each radiological assessment, a review team composed of member(s) of the Group and others selected for their expertise is assembled to conduct the review. The fact that this is a new process plus the details of the process itself contribute to the delays in longer time frames for completing these reviews. A revised schedule for completing the radiological assessments and their reviews will be proposed to the DNFSB in the next quarterly progress report.

Although there have been slips in the schedules for completing reviews, the LLW Disposal Facilities Federal Review Group has been active in moving the reviews and review process forward. During this review period, the Group was provided a copy of the guide being prepared to direct the teams commissioned to conduct the technical reviews of the performance assessments and composite analyses. Comments were requested by early January.

The review team assembled to conduct an evaluation and develop a report on the *Performance Assessment and Composite Analysis for Los Alamos National Laboratory Material Disposal Area G* (LA-UR-97-85) continued its efforts. A draft report to be submitted to the LLW Disposal Facility Federal Review Group was being prepared as of the end of the reporting period. Following the review, the LLW Disposal Facility Federal Review Group will make a recommendation to the Deputy Assistant Secretary for Waste Management regarding acceptance of the document and issuance of a disposal authorization statement.

The LLW Disposal Facilities Federal Review Group also identified team leader candidates and initiated the selection of review teams for recently submitted composite analyses. Team leaders were confirmed and team member selection was completed for the Oak Ridge and Savannah River review teams in January. Team leaders were also identified for reviews of the Nevada Test Site and Hanford radiological assessments.

In the last reporting period it was projected that the final action on the Savannah River Site Saltstone Disposal Facility performance assessment would be completed during this reporting period. The remaining action was to document the resolution of an issue regarding compliance with the groundwater performance objective in the compliance evaluation and transmit the compliance evaluation to the site and the DNFSB. Resource constraints have hampered this effort, but as of the writing of this report, the compliance evaluation is undergoing final review for approval by the Deputy Assistant Secretary for Waste Management.

During the next reporting period Headquarters expects to receive comments from the LLW Disposal Facilities Federal Review Group on the performance assessment and composite analysis review guidance document. A revised draft of the document reflecting resolution of the comments will be prepared during the reporting period. The LLW Disposal Facilities Federal Review Group plans to meet to review the team's report and make a decision on the acceptability of the Los Alamos performance assessment/composite analysis, and to approve a review team for the Hanford Site composite analysis. The Richland Operations Office expects to submit the Hanford Site composite analysis for review. A review team will be selected for conducting the review of the Nevada Test Site Area 3 performance assessment/composite analysis and the review will be initiated. Review team activities will continue for the Savannah River Site and Oak Ridge Reservation radiological assessments with review team reports projected for the following quarter.

#### **4.5 Low-Level Waste Projections**

Previously, DOE reported the results of a disposal capacity analysis based on volumetric capacity and projections of the waste (September 1996). A revision to the report to include consideration of the radiological constraints of the DOE disposal sites was a September 1997 deliverable in the Implementation Plan. During the last reporting period, data on the waste characteristics, including projected radiological characteristics, were compiled and an analysis of the capacity relative to these wastes was performed. The results of the data and analysis have been compiled into a draft report, review of which has been impacted by resource constraints at Headquarters. A revised completion date will be proposed to the DNFSB.

#### **4.6 Research and Development**

The previous status reported that DOE had begun a reassessment of the research and development task area to better focus the effort on addressing the concerns originally identified by the DNFSB in Recommendation 94-2. In that report it was projected that a revised approach would be developed during this reporting period. Resource constraints, specifically, the

availability of key personnel to direct this effort, prevented significant action from being taken on this activity. A revised approach and completion dates will be proposed to the DNFSB.

# **Appendix**

**Safety Issues Management System**

**Report for Recommendation 94-2**

**October 1, 1997 to December 31, 1997**

***Safety Issues Management System***  
**Summary Recommendation Report - Key Commitment and Action Information**

**Recommendation # R94-02 Conformance with Safety Standards at Low -Level Nuclear Waste Disposal Sites**

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	001		The Project Management Plan (PjMP) will be updated to manage the task initiatives and commitments described in this Implementation Plan.	Updated Project Management Plan (PjMP).	IP dated 4/96, Commitment III.C.1, pg. III-9	Complete  6/27/1996		06/30/1996
R94-02	002		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.	Quarterly Progress Reports.	IP dated 4/96, Commitment III.C.2, pg. III-10	Open		Periodic - Quarterly, 30 days after the end of each calendar year quarter.
R94-02	002	001	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.	Quarterly Progress Report (April-June 1996).	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete  7/29/1996	Quarterly Report for period of April through June 1996 delivered 7/29/96.	07/31/1996
R94-02	002	002	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.	Quarterly Progress Report (July-September 1996).	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete  11/1/1996		10/31/1996
R94-02	002	003	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.	Quarterly Progress Report (October-December 1996).	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete  2/7/1997	Ref: EM97-00433	01/31/1997
R94-02	002	004	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.	Quarterly Progress Report (January - March 1997)	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete  5/1/1997		04/30/1997
R94-02	002	005	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.	Quarterly Progress Report (April - June 1997)	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete  7/31/1997	Ref: EM97-03482	07/31/1997
R94-02	002	006	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.	Quarterly Progress Report (July - September 1997)	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete  11/21/1997	Ref: AIm/Conway ltr dated 11/21/97.	10/31/1997
R94-02	002	007	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.	Quarterly Progress Report (October - December 1997)	IP dated 4/96, Commitment III.C.2, pg. III-10	Open	Report is under review.	01/31/1998
R94-02	002	008	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.	Quarterly Progress Report (January - March 1998)	IP dated 4/96, Commitment III.C.2, pg. III-10	Open	Report is under review.	04/30/1998

***Safety Issues Management System***  
**Summary Recommendation Report - Key Commitment and Action Information**

**Recommendation # R94-02 Conformance with Safety Standards at Low -Level Nuclear Waste Disposal Sites**

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	003		The Department will complete and document a systems engineering evaluation to accomplish the mission of the LLW program.	DOE LLW management system engineering evaluation report.	IP dated 4/96, Commitment IV.B.1, pg. IV-3	Complete  6/30/1995		06/30/1995
R94-02	004		The Department will compile and document LLW program system requirements including goals and assumptions.	LLW program requirements document.	IP dated 4/96, Commitment IV.B.2, pg. IV-3	Complete  4/26/1996		04/30/1996
R94-02	005		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.	LLW system description document.	IP dated 4/96, Commitment IV.B.3, pg. IV-4	Complete  10/ 7/1996	Deliverable letter of 10/7/96 for the SDD states intent to update the SDD once the Waste Management Order is revised.	09/30/1996
R94-02	006		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.	Privatization guidelines.	IP dated 4/96, Commitment IV.B.4, pg. IV-4	Complete  10/ 2/1996		09/30/1996
R94-02	007		The Department will prepare and maintain a Program Management Plan.	LLW Program Management Plan.	IP dated 4/96, Commitment IV.B.5, pg. IV-5	Complete  3/31/1997	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.	03/31/1997
R94-02	008		A complex-wide corrective action plan will be prepared to correct the vulnerabilities common across the complex.	Initial complex-wide corrective action plan.	IP dated 4/96, Commitment IV.B.6.b.1, pg. IV-6	Complete  7/31/1996		07/31/1996
R94-02	009		Site-specific corrective action plans prepared as a result of the Complex-Wide Review constitute the initial site improvement activities.	Initial site-specific corrective action plans.	IP dated 4/96, Commitment IV.B.6.b.2, pg. IV-6	Complete  7/31/1996		07/31/1996
R94-02	010		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.	Individuals to staff the Assessment Working Group and Working Group Assessment Teams are assigned.	IP dated 4/96, Commitment V.B.1, pg. V-12	Complete  3/ 4/1996	Complete membership delivered to the Board in an EM-30 letter dated 3/4/96.	02/29/1996
R94-02	011		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.	Completed site surveys.	IP dated 4/96, Commitment V.B.2, pg. V-12	Complete  11/30/1995		11/30/1995
R94-02	012		Independent evaluations are completed for the 38 facilities and an assessment report for these sites is issued.	Preliminary Report.	IP dated 4/96, Commitment V.B.3, pg. V-12	Complete  4/12/1996		04/12/1996
R94-02	013		Independent evaluations are completed for the 38 facilities and an assessment report for these sites is issued.	Final Report.	IP dated 4/96, Commitment	Complete	CWR results were briefed to the Board on 4/16/96.	05/17/1996



**Safety Issues Management System**  
**Summary Recommendation Report - Key Commitment and Action Information**

Recommendation # R94-02 Conformance with Safety Standards at Low-Level Nuclear Waste Disposal Sites

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	022		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.	Implementation guidance and technical standards to support essential LLW management requirements.	IP dated 4/96, Commitment VI.B.6, pg. VI-10	Complete  2/28/1997	Implementation guidance delivered to the Board with draft Order 435.1 on 2/28/97.	02/28/1997
R94-02	023		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 Radioactive Waste Management.	Radiological assessment approval process modified and formally developed for inclusion in Radioactive Waste Management Order revision.	IP dated 4/96, Commitment VI.B.7, pg. VI-10	Complete  2/28/1997	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.	02/28/1997
R94-02	024		The Department will issue interim direction addressing the critical aspects of conducting a performance assessment.	Policies addressing critical assumptions and clarifications for performance assessments.	IP dated 4/96, Commitment VII.B.1, pg. VII-5	Complete  3/7/1997	Deliverable sent to the Board on 3/7/97 (Ref: EM97-0832). This 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.	01/31/1997
R94-02	025		DOE will prepare and provide to the sites a document providing guidance on the preparation of the composite analyses.	Guidance for conducting composite analyses.	IP dated 4/96, Commitment VII.B.2, pg. VII-6	Complete  4/30/1996		05/31/1996
R94-02	026		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.	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  11/1/1996		10/31/1996
R94-02	027		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 viable, as well as provide criteria for determining when revisions to the performance assessments are necessary.	PA maintenance guidance document.	IP dated 4/96, Commitment VII.B.4.b.1, pg. VII-8	Complete  10/1/1996		09/30/1996
R94-02	028		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	PA format and content, and standard review plan documents.	IP dated 4/96, Commitment VII.B.4.b.2, pg.	Complete	In response to the Board's IP revision acceptance condition, completed this deliverable	01/31/1997



**Safety Issues Management System**  
**Summary Recommendation Report - Key Commitment and Action Information**

Recommendation # **R94-02** Conformance with Safety Standards at Low -Level Nuclear Waste Disposal Sites

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
			performance assessment results into waste acceptance criteria. The Standard Review Plan will include technical criteria for the findings that must be made to determine that a performance assessment is technically acceptable.		VII-8		early.	
R94-02	029		Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	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 November 30, 1998.	11/30/1998
R94-02	029	001	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	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	Ref: EM97-01409.	03/31/1997
R94-02	029	002	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Complete the Headquarters technical review and documentation of the LANL TA-54, Area G, performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Open	Completion delayed. Late letter being developed.	12/31/1997
R94-02	029	003	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Complete the Headquarters technical review and documentation of the INEL Radioactive Waste Management Complex performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete	PRP recommended approval at July meeting. PA accepted with conditions.	08/31/1996
R94-02	029	004	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	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	PA accepted with conditions.	08/31/1996
R94-02	029	005	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Submit NTS Area 3 Radioactive Waste Management Site performance assessment (including composite analysis) to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Open	Completion letter is being drafted.	03/31/1998
R94-02	029	006	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	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	Open		11/30/1998

**Safety Issues Management System**  
**Summary Recommendation Report - Key Commitment and Action Information**

Recommendation # **R94-02** Conformance with Safety Standards at Low-Level Nuclear Waste Disposal Sites

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	029	007	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Submit ORNL Solid Waste Storage Area-6 performance assessment to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete  9/30/1997	PA submission was reported in a letter to the Board on October 16, 1997.	09/30/1997
R94-02	029	008	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Complete the Headquarters technical review and documentation of the ORNL Solid Waste Storage Area-6 performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Open	Completion delayed, late letter being developed.	01/21/1998
R94-02	029	009	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Complete the Headquarters technical review and documentation of the Hanford 200-W Burial Ground performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete  6/27/1996		06/30/1996
R94-02	029	010	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	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  8/30/1996		08/31/1996
R94-02	029	011	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Complete the Headquarters technical review and documentation of the Hanford 200-E Burial Ground performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete  6/30/1997	(Ref: EM96-04214) Board was notified of a delay by an EM-1 letter dated 4/30/97 (Ref: EM96-04948).	04/30/1997
R94-02	029	012	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	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  7/31/1996	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.	07/31/1996
R94-02	030		The sites will prepare a composite analysis.	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 December 31, 1999.	12/31/1999
R94-02	030	001	The sites will prepare a composite analysis.	Submit LANL TA-54, Area G, composite analyses to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Complete	Ref: EM97-01409	12/31/1997

**Safety Issues Management System**  
**Summary Recommendation Report - Key Commitment and Action Information**

Recommendation # **R94-02** Conformance with Safety Standards at Low -Level Nuclear Waste Disposal Sites

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete? 4/3/1997	Descriptive Status	Due Date
R94-02	030	002	The sites will prepare a composite analysis.	Complete the Headquarters technical review and documentation of the LANL TA-54, Area G, composite analyses.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open		03/31/1998
R94-02	030	003	The sites will prepare a composite analysis.	Submit INEL Radioactive Waste Management Complex composite analyses to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	Completion delayed, late letter being developed.	01/31/1998
R94-02	030	004	The sites will prepare a composite analysis.	Complete the Headquarters technical review and documentation of the INEL Radioactive Waste Management Complex composite analyses.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	Status unknown.	04/30/1998
R94-02	030	005	The sites will prepare a composite analysis.	Submit the NTS Area 5 Radioactive Waste Management Site composite analyses to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open		09/30/1999
R94-02	030	006	The sites will prepare a composite analysis.	Complete the Headquarters technical review and documentation of the NTS Area 5 Radioactive Waste Management Site composite analyses.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open		12/31/1999
R94-02	030	007	The sites will prepare a composite analysis.	Submit the ORNL Solid Waste Storage Area-6 composite analyses to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Complete	CA submission was reported in a letter to the Board on October 16, 1997.	09/30/1997
R94-02	030	008	The sites will prepare a composite analysis.	Complete the Headquarters technical review and documentation of the ORNL Solid Waste Storage Area-6 composite analyses.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	HQ federal review team formed. To be addressed in late letter.	12/31/1997
R94-02	030	009	The sites will prepare a composite analysis.	Submit the Hanford 200-E & W Burial Grounds & Environmental Restoration Disposal Facility composite analysis to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	RL reported in a 10/15/97 letter that this commitment will not be met until 3/31/98. To be addressed in late letter.	12/31/1997

**Safety Issues Management System**  
**Summary Recommendation Report - Key Commitment and Action Information**

Recommendation # **R94-02** Conformance with Safety Standards at Low -Level Nuclear Waste Disposal Sites

Resp. Org. EM

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DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	030	010	The sites will prepare a composite analysis.	Complete the Headquarters technical review and documentation of the Hanford 200-E & W Burial Grounds & Env. Rest. Disp. Fac. composite analysis.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open		05/31/1998
R94-02	030	011	The sites will prepare a composite analysis.	Submit the SRS E-Area Vaults and the Saltstone Disposal Facility composite analysis to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Complete  10/30/1997	CA delivery reported in the quarterly report (cmt#002, act#006).  Completion letter being drafted.	09/30/1997
R94-02	030	012	The sites will prepare a composite analysis.	Complete the Headquarters technical review and documentation of the SRS E-Area Vaults and Saltstone Disposal Facility composite analysis.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	Federal review team formed. To be addressed in late letter.	12/31/1997
R94-02	031		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.	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 January 31, 2000.	01/31/2000
R94-02	031	001	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.	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	Open	Status unknown.	04/30/1998
R94-02	031	002	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.	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		05/31/1998
R94-02	031	003	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.	Issue disposal authorization statement or direction to resolve issues or concerns for the NTS Area 5 Radioactive Waste Management Site.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open		01/31/2000
R94-02	031	004	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.	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		02/28/1999

**Safety Issues Management System**  
**Summary Recommendation Report - Key Commitment and Action Information**

**Recommendation # R94-02 Conformance with Safety Standards at Low -Level Nuclear Waste Disposal Sites**

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	031	005	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.	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		06/30/1998
R94-02	031	006	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.	Issue disposal authorization statement or direction to resolve issues or concerns for the Hanford 200-W Burial Grounds.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open		06/30/1998
R94-02	031	007	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.	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		07/31/1998
R94-02	031	008	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.	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	Status unknown.	03/31/1998
R94-02	031	009	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.	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	Status unknown.	03/31/1998
R94-02	032		Capacity, as used in this Implementation Plan, addresses the quantity of both volume and radionuclide inventory that can be accepted at a disposal facility. The initial LLW disposal capacity report will only include information on volumetric capacity.	Low-Level Waste Disposal Capacity Report, Revision 0.	IP dated 4/96, Cmt. VIII.B.1.b.1, pg. VIII-4	Complete		07/31/1996
R94-02	033		Currently available and planned baseline 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 capacity report as consideration of radiological source terms are reflected in the radiological assessments.	Low-Level Waste Disposal Capacity Report, Revision 1.	IP dated 4/96, Cmt. VIII.B.1.b.2, pg. VIII-4	Open	It is not expected to be submitted before May, 1998.	09/30/1997
R94-02	034		Based on low-level waste inventory and projections information and the survey of current and planned low-level waste disposal capacity (Task VIII.B.1), a DOE low-level waste projection program will be developed.	DOE Low-Level Waste Projection Program Documentation.	IP dated 4/96, Commitment VIII.B.2, pg. VIII-4	Complete		12/31/1996
R94-02	035		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	Evaluation and strategy for improvements to LLW minimization.	IP dated 4/96, Commitment VIII.B.3, pg. VIII-5	Complete	Draft report was discussed with Board Staff 8/1/96. A companion report on mixed	08/31/1996

