



Department of Energy

Washington, DC 20585

July 31, 1997

97-0002494

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DNF SAFETY BOARD

The Honorable John T. Conway  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, NW  
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 from April 1, 1997, to June 30, 1997.

The report shows that the Department has completed most of the task initiatives to which it committed with the exception of the longer-term commitments to complete and approve radiological assessments for low-level waste disposal sites. The Department is continuing to progress toward completion of those task initiatives that are outstanding. The Department is also continuing to make progress in developing the criteria, procedures, and protocols for the Low-Level Waste PA/CA Review Group to conduct its reviews of the performance assessment and composite analysis documents. The body of the progress report contains a status table on the task initiatives that were due during the current reporting period. A status table on all of the task initiatives is included as an appendix.

Sincerely,

*James M. O'Connell*  
for

Alvin L. Alm  
Assistant Secretary for  
Environmental Management

Enclosure

cc: Mark Whitaker, S-3.1



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DNF SAFETY BOARD

**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**

**April 1 through June 30, 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 seventh 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 April 1, 1997 to June 30, 1997.

## **2.0 OVERVIEW**

### **2.1 General Progress**

During this reporting period most of the effort was dedicated to doing the ground work and follow-up work associated with commitments rather than in completing commitments. However, one commitment, the Headquarters review of a performance assessment, was completed.

In February 1997, a draft revised Order on Radioactive Waste Management, with accompanying Manual, guidance, and technical basis, was made available for review. During the current reporting period, Headquarters and Field organizations, and an external review group under contract to DOE, completed their reviews and provided comments to the Order Revision Team.

The Order Revision Team initiated the process of developing resolutions to the comments and revising the documents.

In the Radiological Assessments task area DOE completed the review of the Hanford Site *Performance Assessment for the Disposal of Low-Level Waste in the 200 East Area Burial Grounds*. In addition, information was provided by Savannah River Site personnel that will allow Headquarters to complete its action on the Saltstone Disposal Facility performance assessment during the next reporting period. The recently established Federally-staffed Low-Level Waste PA/CA Review Group that is now responsible for the review of performance assessments and composite analyses met and began the work of developing the process they will use to conduct their activities. The group also initiated the review of the Los Alamos National Laboratory Material Disposal Area G performance assessment/composite analysis.

Work in the Waste Projections task area was focused on the collection and verification of data for inclusion in an updated waste disposal capacity assessment. The original assessment, issued in September 1996 assessed the volumetric capacity of DOE sites for disposing of projected low-level waste. This report is being updated to include consideration of radiological constraints in addition to the volumetric constraints originally considered. A draft analysis of the radiological capacity at the various DOE disposal sites was also developed during this reporting period.

In the Research and Development task area, work with the Site Technology Coordination Groups continued with the goal being the identification of the low-level waste research and development needs of the Department. Through interactions with the Office of Technology Development and the Site Technology Coordination Groups approaches to accomplishing the goals of the Implementation Plan commitments are being developed. The commitment due at the end of June will be addressed in a letter and report to the DNFSB during the next reporting period.

## **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. There were, however, meetings between the staffs of the two organizations at which the activities related to the management of low-level waste were discussed:

- DOE staff met with DNFSB staff on May 9 to solicit comments on the February 28, 1997 draft of the Order on Radioactive Waste Management and the accompanying Manual, guidance documents, and technical basis document.

- On June 26, DNFSB staff met with DOE staff in Germantown to discuss the organization, function, responsibilities, and operation of the Low-Level Waste PA/CA Review Group which will be conducting future reviews of performance assessments and composite analyses.

### 2.2.2 Meetings in Future Reporting Periods

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

- The Department staff anticipates meeting with the DNFSB staff to discuss the draft DOE Order 435.1, *Radioactive Waste Management*, which is being revised based on comments received on the February 28, 1997 draft.

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

The following table summarizes the status of commitments that were due to be completed during the current reporting period. 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 Due April 1, 1997 - June 30, 1997

IP Task # SIMS ID #	Title or Description	Due Date	Status
<u>VII.B.5.b.1<sup>1</sup></u> R94-02 029-011	Complete Headquarters Review of the Hanford 200 East Area Burial Grounds Performance Assessment	04/30/97	Completed. The performance assessment compliance evaluation was transmitted to the DNFSB on June 30, 1997.
<u>IX.B.3</u> R94-02 038	Identify Outstanding Low-Level Waste Research and Development Needs	06/30/97	Pending. A report on the LLW R&D needs and the method used to identify them is being prepared for transmittal to the DNFSB in early August.

#### 4.0 TASK AREA STATUS

##### 4.1 Systems Engineering

The *Low-Level Waste Program Management Plan*, outlining the programmatic strategies, policy 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.

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<sup>1</sup>Completion of this item only partially completes the full commitment in the Implementation Plan which involves not only the performance assessment, but the composite analysis and the disposal authorization statement.

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 as part of the Systems Engineering task initiative.

## **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 justification 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 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 a cleanup activity), 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, the Order and associated documents were reviewed and commented on by the DOE Offices and Field organizations. In addition, review comments were received from a Senior Review Panel of external experts with government, industry, and academic backgrounds.

The Order Revision Team has commenced revising the documents and developing responses to comments. The initial focus was on making revisions to the Order and Manual to achieve more consistency among the subjects and level of detail addressed for each waste type. Headquarters and Field personnel attended a May workshop at which these initial changes to the Order and Manual were presented for consideration and work on the reviewing and responding to comments was initiated.

During the next reporting period, work will continue on responding to comments and revising the Order, Manual, guidance, and technical justification. The Department expects to have another draft of all of the documents ready for review in September.

#### **4.4 Radiological Assessments**

During the current reporting period, the Department completed one commitment in the Radiological Assessments task area. Headquarters completed the compliance evaluation of the Hanford Site's *Performance Assessment for the Disposal of Low-Level Waste in the 200 East Area Burial Grounds* (WHC-SD-WM-TI-730, Rev. 0). The Performance Assessment Peer Review Panel conducted its technical adequacy review of the performance assessment during the current and previous reporting periods. Based on the DOE staff review of the performance assessment and the report issued by the Peer Review Panel, Headquarters issued a compliance evaluation and conditionally accepted the performance assessment. A conditional acceptance memorandum and a copy of the compliance evaluation were transmitted to the DNFSB on June 30, 1997.

The Department had previously reported (July 1996) that the compliance evaluation for the Savannah River Site Saltstone Disposal Facility performance assessment was completed with the exception of an issue regarding compliance with the groundwater performance objective. During this reporting period, site personnel submitted to Headquarters the information necessary to close this issue. Headquarters will complete its action on this performance assessment during the next reporting period.

The DOE-staffed group that now has responsibility for reviewing and recommending approval of performance assessments and composite analyses (LLW PA/CA Review Group) held its initial meeting during this reporting period. One of the initial items being addressed by the group is the process by which they will discharge their responsibilities. In addition to using the guidance prepared for performance assessments and composite analyses by the Department, the group is also evaluating the Nuclear Regulatory Commission-issued NUREG-1200, *Standard Review Plan for the Review of a License Application for a Low-Level Radioactive Waste Disposal Facility*. The group also designated a subgroup to perform the task of evaluating the *Performance Assessment and Composite Analysis for Los Alamos National Laboratory Material Disposal Area G* (LA-UR-97-85) for technical adequacy. The subgroup is to report back to the entire group who will develop a compliance evaluation and disposal authorization statement, if appropriate. The disposal authorization statement constitutes approval of the performance assessment and establishes certain conditions for the continued operation of the burial ground.

During the next reporting period a number of radiological assessments are due to be submitted to Headquarters for review. Oak Ridge Operations Office is to submit a revised performance assessment for the Solid Waste Storage Area 6 at Oak Ridge National Laboratory as well as a



composite analysis for the same facility. Savannah River Operations Office is to submit a composite analysis that addresses the impacts from both the E-Area Vaults and the Saltstone Disposal Facility.

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

Previously, DOE completed a disposal capacity analysis based on volumetric capacity and projections of the waste. Current efforts are directed at updating this analysis to include consideration of the radiological constraints of the DOE disposal sites. During the current reporting period, the DOE Field organizations provided data on projected radiological characteristics of their wastes. These data were reviewed for completeness at Headquarters, and as of the end of the reporting period, gaps in the data had been identified and Field personnel were working to provide the additional data. An initial draft of the revised disposal capacity report was also prepared during this reporting period. The draft includes estimated radiological disposal capacity for the DOE sites.

During the next reporting period, work will continue on updating the assessment of DOE disposal site capacity by combining the Field-provided waste characteristics data with the draft estimates of radiological capacity. The assessment of low-level waste disposal capacity, including consideration of radiological characteristics, is scheduled to be completed in September 1997.

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

During this reporting period, the Idaho Operations Office Low-Level Waste Center of Excellence personnel continued their work on evaluating the research and development needs for low-level waste management. Based on a review of the research and development needs identified through earlier DNFSB 94-2 implementation efforts and through additional interfacing with the efforts of the Office of Technology Development, approaches for addressing the low-level waste research and development strategy are being developed. Rather than employing an independent gap analysis (what are the needs versus what is already done or being done), the Department will use needs already identified by the Office of Technology Development and Site Technology Coordination Groups as the point of departure for the analysis. These Site Technology Coordination Groups represent each site and function as a clearinghouse for site-specific research and technology development needs identification.

During the next reporting period, a report will be prepared describing approaches for identifying the low-level waste research and development needs. A low-level waste strategy report will be prepared to guide this portion of the Low-Level Waste Management Program and to meet the commitment in the Implementation Plan.

# **Appendix**

**Safety Issues Management System**

**Report for Recommendation 94-2**

**April 1, 1997 to June 30, 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. Joe Arango

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 6/27/96		
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		
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 7/29/96	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 11/1/96		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 2/7/97	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 5/1/97		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	Open		07/31/1997
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 6/30/95		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 4/26/96		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 10/7/96	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

Periodic - Quarterly, 30 days after the end of each calendar year quarter.

**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. Joe Arango

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
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  10/2/96		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  3/31/97	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.	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  7/31/96		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  7/31/96		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  3/4/96	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  11/30/95		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  4/12/96		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 V.B.3, pg. V-12	Complete  5/17/96	CWR results were briefed to the Board on 4/16/96.	05/17/1996
R94-02	014		Issue an Office of Waste Management Directive on inclusion of pre-1988 waste and consideration of other sources of radioactive contamination.	Office of Waste Management Directive.	IP dated 4/96, Commitment VI.B.1, pg. VI-5	Complete  5/31/95		05/31/1995
R94-02	015		Issue an interim policy improving the regulatory structure and process for LLW disposal facility performance assessments in a memorandum entitled, "Interim Policy on Regulatory Structure for Low-Level Radioactive Waste Management and Disposal."	Interim Policy Statement.	IP dated 4/96, Commitment VI.B.2.b.1, pg. VI-6	Complete  7/21/95	Interim Policy will be prepared by the Low-Level Waste Management Task Group and issued jointly by EM and EH.	07/21/1995
R94-02	016		A revision to the interim policy will be issued that clarifies the first policy on regulatory structure for LLW management and	Revised interim policy statement.	IP dated 4/96, Commitment	Complete		07/31/1996

# 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. Joe Arango

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	017		the policy to include pre-1988 LLW in performance assessments.  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 specify actions necessary to demonstrate protection of human health consistent with the requirements of Order 5820.2A.	Policy and guidance document issued for CERCLA sites.	VI.B.2.b.2, pg. VI-6  IP dated 4/96, Commitment VI.B.3.b.1, pg. VI-7	7/31/96  Complete	Discussed in meeting with Board Staff on 5/3/96.	05/31/1996
R94-02	018		Recognizing that RCRA 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 specify actions necessary to demonstrate protection of human health consistent with the requirements of Order 5820.2A.	Policy and guidance issued for RCRA sites.	IP dated 4/96, Commitment VI.B.3.b.2, pg. VI-7	5/31/96  Complete		12/31/1996
R94-02	019		Complete a report comparing 10 CFR 61 and Agreement State requirements plus license conditions and waste acceptance criteria with those of the Department.	Report comparing DOE and non-DOE requirements and standards.	IP dated 4/96, Commitment VI.B.4.b.1, pg. VI-8	1/9/97  Complete		12/29/1995
R94-02	020		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.	Report comparing DOE and international requirements and standards.	IP dated 4/96, Commitment VI.B.4.b.2, pg. VI-8	12/29/95  Complete	Report submitted to DNFSB 19 days early.	06/30/1996
R94-02	021		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 any essential requirements to be incorporated into the Order revision.	Report identifying essential Low-Level Waste Management requirements.	IP dated 4/96, Commitment VI.B.5, pg. VI-8	6/11/96  Complete	Requirements are identified in draft Order 435.1 documents which were sent to the Board on 2/28/97.	02/28/1997
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	2/28/97  Complete	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	2/28/97  Complete	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	02/28/1997

**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 Lejourneau

DR-Contact Mr. Joe Arango

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
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	2/28/97 assessments. The Board was notified of these actions in a 4/30/97 letter from EM-1. 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	3/7/97	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	4/30/96	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	11/1/96	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 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.	PA format and content, and standard review plan documents.	IP dated 4/96, Commitment VII.B.4.b.2, pg. VII-8	Complete	10/1/96 In response to the Board's IP revision acceptance condition, completed this deliverable early.	01/31/1997
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	11/1/96 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

# 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. Joe Arango

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete? 4/3/97	Descriptive Status	Due Date
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		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		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
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	Open		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		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		06/30/1996

***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. Joe Arango

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete? 6/27/96	Descriptive Status	Due Date
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		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	(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	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
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		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	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open		04/30/1998



**Safety Issues Management System**  
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Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	030	005 <sup>a</sup>	The sites will prepare a composite analysis.	Complex composite analyses. 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	Open		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		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		12/31/1997
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	Open		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		12/31/1997

Data Current as of: 7/ 1/97

S-3.1 Contact: Debra Abraham @ (202) 586-1706

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**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

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DR>Contact Mr. Joe Arango

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
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		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
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		03/31/1998

Data Current as of: 7/ 1/97

S-3.1 Contact: Debra Abraham @ (202) 586-1706

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## 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. Joe Arango

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
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		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	7/31/96	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 reducing LLW.	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 LLW minimization was sent to the Board on 12/26/96.	08/31/1996
R94-02	036		A survey will be conducted to identify those R&D activities where results are applicable to LLW management program improvements.	Preliminary LLW management R&D activities catalog for initial needs identified by the Board.	IP dated 4/96, Commitment IX.B.1, pg. IX-4	Complete	Revised version was resubmitted along with the needs assessment on 4/18/97.	06/30/1995
R94-02	037		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.	LLW R&D needs statement.	IP dated 4/96, Commitment IX.B.2, pg. IX-5	Complete	Ref: EM97-01721	03/31/1997
R94-02	038		To evaluate outstanding needs, DOE intends to perform a systematic crosswalk between needs 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 LLW management program with recommendations on how to assimilate their results.	Identification of outstanding R&D needs.	IP dated 4/96, Commitment IX.B.3, pg. IX-5	Open	Report is being finalized and is expected to be delivered in early July.	06/30/1997

# 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 Leclourneau

DR Contact Mr. Joe Arango

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	039		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.	Strategy to address outstanding LLW technical and R&D needs.	IP dated 4/96, Commitment IX.B.4, pg. IX-6	Open		09/30/1997