



Department of Energy

Washington, DC 20585

November 21, 1997

97-0003885

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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 July 1, 1997, to September 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 and the research and development studies to support disposal activities. The Department is continuing to progress toward completion of those task initiatives that are outstanding. The Department is also continuing the development of criteria, procedures, and protocols for the Low-Level Waste Disposal Facility Federal Review Group's use in conducting reviews of the performance assessments and composite analyses. 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,

Alvin L. Alm
Assistant Secretary for
Environmental Management

Enclosure

cc: Mark B. Whitaker, Jr., 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

July 1 through September 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 eighth 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 July 1, 1997 to September 30, 1997.

2.0 OVERVIEW

2.1 General Progress

During this reporting period the Department completed two commitments. Completion of three other commitments due during this reporting period has been delayed into the next reporting period as discussed below.

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. Most of the work was on the manual which contains the specific technical requirements for managing low-level, high-level, and transuranic waste.

In the Radiological Assessments task area, the Oak Ridge Operations Office submitted the performance assessment and the composite analysis (separate documents) for the Solid Waste Storage Area 6 to Headquarters for review. Submission of the Savannah River Site composite analysis, also due during this reporting period, was delayed after the Savannah River Operations Office identified an issue requiring resolution prior to submittal for Headquarters review.

Work in the Waste Projections task area focused on the analysis of waste and disposal site data that were collected to update the 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. The report currently under preparation includes consideration of radiological constraints in addition to the volumetric constraints originally considered. The revised low-level waste disposal capacity report, which was due September 30, was under review as of the end of the reporting period, and will be delivered during the next reporting period.

Work in the Research and Development task area did not progress as originally planned. There is a realization that this task area needs to be re-evaluated and the task re-focused on those research and development needs important to ensuring adequate, safe long-term disposal. The strategy for low-level waste research and development, due this reporting period, has been delayed into the next quarter.

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 was, however, a meeting 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 September 4 to discuss the status of DNFSB 94-2 implementation and the Radioactive Waste Management Order revision. Specific subjects discussed included the development of the LLW Disposal Facility Federal Review Group performance assessment and composite analysis review process, effects of DOE reductions in force on performance assessment and composite analysis reviews, and the need to focus the research and development task efforts.

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 anticipates providing a draft of the LLW Disposal Facility Federal Review Group guidance manual to the DNFSB staff. The draft guidance manual will

provide a basis for a meeting to discuss the criteria and protocol for conducting performance assessment and composite analysis reviews.

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. 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 July 1, 1997 - September 30, 1997

<u>IP Task #</u> <u>SIMS ID #</u>	Title or Description	Due Date	Status
<u>VII.B.5.b.1</u> R94-02 029-007	Submit Oak Ridge Solid Waste Storage Area 6 Performance Assessment to Headquarters for Review	09/30/97	Completed. The performance assessment was transmitted to Headquarters on September 30; DNFSB was notified by letter on October 16, 1997.
<u>VII.B.5.b.2</u> R94-02 030-007	Submit Oak Ridge Solid Waste Storage Area 6 Composite Analysis to Headquarters for Review	09/30/97	Completed. The composite analysis was transmitted to Headquarters on September 30; DNFSB was notified by letter on October 16, 1997.

Status of Task Initiatives Due July 1, 1997 - September 30, 1997

<u>IP Task #</u> 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	Pending. Site review of the composite analysis identified an issue which requires additional work. The site submitted submission of the composite analysis on October 30, 1997.
<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 being reviewed. Projected completion is November 1997.
<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, 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.

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, work continued on developing and documenting resolution of DOE comments received on the Order, manual, and guidance. Work also continued on revision to the Order, manual, and guidance in response to comments. Progress on revising the Order and associated documents has been slowed by the loss of staff and diversion of remaining resources to higher priority tasks. These impacts have affected the schedule for the Order revision effort,

but are being mitigated with the completion of the other tasks and the reassignment of additional DOE staff to the Order Revision Team.

The Department expects to complete a second draft of the Order, manual, guidance, and technical basis documentation during the next reporting period.

4.4 Radiological Assessments

During the current reporting period, the Department completed two commitments in the Radiological Assessments task area. The Oak Ridge Operations Office submitted the *Performance Assessment for Continuing and Future Operations at Solid Waste Storage Area 6, Revision 1* (ORNL-6783/R1) and the *Composite Analysis for Solid Waste Storage Area 6* (ORNL-6929) on September 30, 1997. The performance assessment evaluates projected long-term performance of Solid Waste Storage Area 6, the active disposal facility at the Oak Ridge Reservation, for compliance with the DOE Order 5820.2A radiological performance objectives. The composite analysis presents an analysis of the combined long-term impacts of the low-level waste disposal facility and other radioactive sources expected to remain at the Oak Ridge Reservation versus the Department's standard for radiation protection of the public. The LLW Disposal Facility Federal Review Group will be assigned responsibility for conducting a technical and compliance review of these two documents. Following the review, the group will make a recommendation to the Deputy Assistant Secretary for Waste Management regarding acceptance of the documents and issuance of a disposal authorization statement.

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. Information submitted to Headquarters by site personnel during the last reporting period has been reviewed and final action on the review of this performance assessment is underway.

The Savannah River Site composite analysis, addressing both the E-Area Vaults and the Saltstone Disposal Facility, was also due during this reporting period. An issue was identified during the final review by the Savannah River Operations Office which required additional work by the analysts. The additional work has been initiated and the composite analysis was delivered at the end of October 1997.

The review team commissioned by the LLW Disposal Facility Federal Review Group 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) proceeded with its efforts. Members of the review team made a site visit to the Los Alamos National Laboratory to familiarize themselves with the disposal facility, environmental setting, location of other potential interacting radioactive source terms, and to interview site personnel. The review team members also developed their individual inputs for the evaluation report.

During the next reporting period Headquarters will complete the review of information regarding groundwater protection as reported in the Saltstone Disposal Facility performance assessment and issue a memorandum to the site. The Savannah River Operations Office will complete its review of the composite analysis and submit it to Headquarters for review.

Submittal of the Hanford Site composite analysis, scheduled for December 31, 1997, will be delayed into the next reporting period. 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 have both contributed to the delay.

Activities of the LLW Disposal Facility Federal Review Group will increase during the next reporting period. The Group will begin review and comment on a draft guidance manual which is to provide the framework for the Group's review of radiological assessments. The review team evaluating the Los Alamos National Laboratory performance assessment and composite analysis will develop a draft report and provide it to the Group for review also. In early November, the Group will also evaluate personnel qualifications and select team leaders for the reviews of the Oak Ridge and Savannah River Site radiological assessments. The review team leaders will coordinate the assembly of review teams and initiate reviews of the documents.

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 is a September 1997 deliverable in the Implementation Plan. During the current 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 which was under review as of the end of this reporting period. Final comments are due in the middle of October and the report is projected to be complete in November 1997.

4.6 Research and Development

During this reporting period, the Idaho Operations Office Low-Level Waste Center of Excellence and Headquarters personnel began a reassessment of the research and development task area. It became apparent that the focus of the effort was not addressing the concerns originally identified by the DNFSB in Recommendation 94-2. The need to re-focus the research and development tasks on those items relevant to ensuring safe disposal of waste was discussed with the DNFSB staff.

During the next reporting period, DOE will develop a revised approach to the low-level waste research and development commitments. The revised approach is to be more detailed than the that currently described in the Implementation Plan. It is expected to provide a time line of specific activities or studies to be pursued based on integration of the Office of Technology Development Mixed Waste Focus Group needs combined with needs identified by the organizations responsible for low-level waste disposal facilities radiological assessments.

Appendix

Safety Issues Management System Report for Recommendation 94-2 July 31, 1997 to September 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 06/27/1996		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 07/29/1996	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 11/01/1996		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 02/07/1997	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 05/01/1997		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 07/31/1997	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			10/31/1997
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 06/30/1995		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 04/26/1996		04/30/1996

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?	Descriptive Status	Due Date
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 10/07/1996	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 10/02/1996		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 03/31/1997	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 07/31/1996		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 07/31/1996		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 03/04/1996	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 04/12/1996		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 V.B.3, pg. V-12	Complete 05/17/1996	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 05/31/1995		05/31/1995
R94-02	015		Issue an interim policy improving the regulatory structure and process for LLW disposal facility performance assessments in a	Interim Policy Statement.	IP dated 4/96, Commitment	Complete	Interim Policy will be prepared by the Low-Level Waste	07/21/1995

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	016		memorandum entitled, "Interim Policy on Regulatory Structure for Low-Level Radioactive Waste Management and Disposal." A revision to the interim policy will be issued that clarifies the first policy on regulatory structure for LLW management and the policy to include pre-1988 LLW in performance assessments.	Revised interim policy statement.	VI.B.2.b.1, pg. VI-6 IP dated 4/96, Commitment VI.B.2.b.2, pg. VI-6	07/21/1995 Complete	Management Task Group and issued jointly by EM and EH.	07/31/1996
R94-02	017		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.	IP dated 4/96, Commitment VI.B.3.b.1, pg. VI-7	07/31/1996 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	05/31/1996 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	01/09/1997 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	12/29/1995 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	06/11/1996 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	02/28/1997 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	Radiological assessment approval process modified and formally developed for inclusion in Radioactive Waste Management	IP dated 4/96, Commitment VI.B.7, pg. VI-10	02/28/1997 Complete	Included with draft Order 435.1 documents which were delivered to the Board on 2/28/97. In response to the	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

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DR Contact Mr. Joe Arango

Board Contact Mr. Steve Stokes

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			become part of the Order revision for Radioactive Waste Management.	Order revision.			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.	
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	02/28/1997 Complete	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	03/07/1997 Complete		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	04/30/1996 Complete		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	11/01/1996 Complete		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	10/01/1996 Complete	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	11/01/1996 Open	The last PA reviewed by November 30, 1998.	11/30/1998

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

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Resp. Mgr. Mr. Martin Letourneau

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Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
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		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	PA submission will be reported in a letter to the Board in early October.	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

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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	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 06/27/1996		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 08/30/1996		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 06/30/1997	(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 07/31/1996	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 04/03/1997	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

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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		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	Open	CA submission will be reported in a letter to the Board in early october.	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

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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
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

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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
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	It is not expected to be submitted until October.	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 RDFT, 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	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 October.	06/30/1997

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			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.					
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	Report is being finalized and is expected to be delivered in October.	09/30/1997