



The Secretary of Energy

Washington, DC 20585

July 9, 1998

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

Dear Mr.  Chairman:

We are enclosing a progress report that addresses the Department of Energy's activities related to the management of low-level waste during the first quarter of 1998. The report describes the Department's progress in implementing commitments in the Implementation Plan (Plan) for the Defense Nuclear Facilities Safety Board (Board) Recommendation 94-2. The report also includes a list of the Plan's remaining open commitments, proposed revisions to commitment deliverable dates, and a summary of commitment status. We propose that the revised dates for completing our remaining commitments serve as an addendum to the current Implementation Plan for Recommendation 94-2.

The Department has made significant improvements in the area of low-level waste management and has completed 44 of 68 commitment deliverables. However, delays have made it necessary to propose revisions to the Plan's remaining commitment deliverable dates. These delays are attributable to unforeseen events, as well as downsizing activities, lawsuits, and other competing priorities that have taxed our ability to act effectively on the remaining initiatives in the Plan.

The Department is confident that the proposed revised commitment deliverable dates can be met. Specifically, additional personnel have been assigned to implementing the initiatives outlined in the Plan, the Department has received a favorable ruling in the Waste Control Specialists lawsuit, and the development of the Low-Level Waste Disposal Facilities Federal Review Group has progressed to the point that productivity gains are expected for future reviews of performance assessments and composite analyses.

In addition to the proposed revised completion dates, the enclosed progress report reflects the Department's proposed revised approach to the research and development activities conducted in support of low-level waste management. Discussions between our staffs have led to a mutual agreement that the efforts in this regard did not adequately address the Board's recommendation and the Department's low-level waste research and development needs.

**PROPOSED ADDENDUM TO IMPLEMENTATION PLAN
FOR DOE'S RESPONSE TO RECOMMENDATION 94-2**

Enclosure 1

Status of Remaining DNFSB Recommendation 94-2 Task Initiatives

IP Task # SIMS ID #	Title or Description	Original Due Date	Proposed Due Date	Status
FISCAL YEAR 1998				
<u>VII.B.5.b.2</u> R94-02 030-009	Submit Hanford Site composite analysis to Headquarters for review.	12/31/97	06/30/98	In progress. The site submitted the composite analysis to Headquarters in March 1998. DNFSB notification will occur in conjunction with notification of receipt of the Hanford LLW Glass Performance Assessment.
<u>VII.B.5.b.2</u> R94-02 030-003	Submit Idaho Radioactive Waste Management Complex composite analysis to Headquarters for review.	01/31/98	06/30/98	In progress. The composite analysis has been prepared and is being reviewed by the Field Office.

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Status of Remaining DNFSB Recommendation 94-2 Task Initiatives

IP Task # SIMS ID #	Title or Description	Original Due Date	Proposed Due Date	Status
<u>VII.B.5.b.1/2/3</u> R94-02 029-002	Complete Headquarters' review of LANL performance assessment.	12/31/97	08/31/98	In progress. Review team has completed its review report and briefed the Low-Level Waste Disposal Facilities Federal Review Group. The compliance evaluation and disposal authorization statement are being prepared.
R94-02 030-002	Complete Headquarters' review of LANL composite analysis.	03/31/98	08/31/98	
R94-02 031-001	Issue disposal authorization statement	04/30/98	09/30/98	
<u>VIII.B.1.b.2</u> R94-02 033	Issue Low-Level Waste Disposal Capacity Report, Revision 1.	09/30/97	08/31/98	In progress. Analyses based on the final review comments are being performed and revisions made to the report
<u>IX.B.3</u> R94-02 038	Determine Outstanding LLW R&D Needs.	06/30/97	09/30/98	In progress. The R&D task area has been refocused to emphasize studies related to improving the confidence in the long-term performance of low-level waste disposal facilities.
<u>IX.B.4</u> R94-02 039	Prepare Strategy to Address LLW R&D Needs.	09/30/97	09/30/98	

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Status of Remaining DNFSB Recommendation 94-2 Task Initiatives

IP Task # SIMS ID #	Title or Description	Original Due Date	Proposed Due Date	Status
<u>VII.B.5.b.2/3</u> R94-02 030-012 R94-02 031-009	Complete Headquarters' review of Savannah River Site composite analysis. Issue Saltstone disposal authorization statement.	12/31/97 03/31/98	09/30/98 09/30/98	In progress. Review team has completed a site visit and is evaluating the composite analysis.
<u>VII.B.5.b.2/3</u> R94-02 031-008	Issue E-Area Vaults disposal authorization statement.	03/31/98	09/30/98	In progress. Review team has completed a site visit and is evaluating the composite analysis.

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Status of Remaining DNFSB Recommendation 94-2 Task Initiatives

IP Task #. SIMS ID #	Title or Description	Original Due Date	Proposed Due Date	Status
FISCAL YEAR 1999				
<u>VII.B.5.b.1/2/3</u> R94-02 029-008	Complete Headquarters' review of Oak Ridge Solid Waste Storage Area 6 performance assessment.	01/21/98	10/15/98	In progress. Review team has completed a site visit and is evaluating the performance assessment and composite analysis.
R94-02 030-008	Complete Headquarters' review of SWSA-6 composite analysis.	12/31/97	10/15/98	
R94-02 031-005	Issue disposal authorization statement.	06/30/98	10/15/98	
<u>VII.B.5.b.1/2/3</u> R94-02 029-006 R94-02 031-004	Complete Headquarters' review of the Nevada Test Site Area 3 performance assessment/composite analysis. Issue disposal authorization statement.	11/30/98 02/28/99	10/31/98 10/31/98	In progress. Review team has completed a site visit and is evaluating the performance assessment and composite analysis.

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FOR DOE'S RESPONSE TO RECOMMENDATION 94-2**

Enclosure 1

Status of Remaining DNFSB Recommendation 94-2 Task Initiatives

IP Task # SIMS ID #	Title or Description	Original Due Date	Proposed Due Date	Status
<u>VII.B.5.b.2</u> R94-02 030-010	Complete Headquarters' review of Hanford composite analysis; document conclusion relative to Environmental Restoration Disposal Facility.	05/31/98	03/31/99	Pending. Review team leader has been selected; review will commence in August 1998.
<u>VII.B.5.b.2/3</u> R94-02 031-006	Issue 200 West Area burial grounds disposal authorization statement.	06/30/98	03/31/99	Pending. Review team leader has been selected; review will commence in August 1998.
<u>VII.B.5.b.2/3</u> R94-02 031-007	Issue 200 East Area burial grounds disposal authorization statement.	07/31/98	03/31/99	Pending. Review team leader has been selected; review will commence in August 1998.
<u>VII.B.5.b.2/3</u> R94-02 030-004 R94-02 031-002	Complete Headquarters' review of Idaho composite analysis. Issue disposal authorization statement.	04/30/98 05/31/98	05/15/99 05/15/99	Pending. Review team and leader will be selected to support review of the document which is to be delivered in June 1998.

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Enclosure 1

Status of Remaining DNFSB Recommendation 94-2 Task Initiatives

<u>IP Task #</u> <u>SIMS ID #</u>	Title or Description	Original Due Date	Proposed Due Date	Status
<u>VII.B.5.b.2</u> R94-02 030-005	Submit Nevada Test Site Area 5 composite analysis to Headquarters for review.	09/30/99	09/30/99	In progress. Work has begun on defining the boundaries of the area to be included in the composite analysis.

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IP Task # SIMS ID #	Title or Description	Original Due Date	Proposed Due Date	Status
FISCAL YEAR 2000				
<u>VII.B.5.b.2/3</u> R94-02 030-006	Complete Headquarters' review of Nevada Test Site Area 5 composite analysis.	12/31/99	06/30/00	Pending. Task will start upon receipt of the composite analysis.
R94-02 031-003	Issue disposal authorization statement.	01/31/00	06/30/00	

**PROPOSED ADDENDUM TO IMPLEMENTATION PLAN
FOR DOE'S RESPONSE TO RECOMMENDATION 94-2**

Enclosure 1

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

Title or Description	Proposed Due Date	Status
FISCAL YEAR 1998		
Complete guidance manual for the Low-Level Waste Disposal Facilities Federal Review Group	08/31/98	In progress. Comments received from the Low-Level Waste Disposal Facilities Federal Review Group are being resolved and incorporated into manual.
Complete revision of Radioactive Waste Management Order, Manual, and guidance.	09/30/98	In progress. Guidance is being prepared and reviewed; data on cost of implementation are being developed and compiled.
FISCAL YEAR 1999		
Complete Headquarters' review of the Hanford LLW Glass Disposal Facility performance assessment and issue disposal authorization statement.	03/31/99	Pending. Review team leader has been selected, performance assessment review will commence in August 1998.

**Quarterly Report
and Proposed Completion Schedule**

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**

January 31 through March 31, 1998

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

1.0 INTRODUCTION

The Department of Energy (DOE) issued the "Implementation Plan, Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-2" in March 1995. In May 1996 DOE issued a revision to the Implementation Plan that reflected enhancements to DOE's approaches to systems engineering and the radiological assessments, and better integration and coordination of both the task initiatives and the involved organizations. In August 1996, the Department received a letter from the DNFSB accepting the revised Implementation Plan, with conditions.

This report serves two purposes. First, it provides an overview description of the progress the Department has made in implementing commitments in the DNFSB Recommendation 94-2 Implementation Plan through the end of March 1998. Second, it proposes revised dates for completing the remaining commitments in the Implementation Plan along with a discussion of the activities necessary to propose closure of the Implementation Plan commitments. If accepted by the Board, these revised dates for completing the remaining commitments would become an addendum to the existing Implementation Plan for the Department's response to Recommendation 94-2. Along with the schedule for completing Implementation Plan commitments, the Department will report and track related initiatives via the Recommendation 94-2 quarterly reports.

2.0 OVERVIEW

2.1 General Progress

The Department committed to 68 deliverables in the Recommendation 94-2 Implementation Plan. Through the end of March 1998, the Department had completed 44 of the commitments made in the Implementation Plan, with 24 commitments remaining. All of the commitments in the Systems Engineering, Complex-Wide Review, and Regulatory Structure and Process task areas have been completed. Twenty-one of the remaining 24 commitments relate to the preparation and review of radiological assessments of the potential future impacts of low-level waste disposal facilities and the issuance of disposal authorization statements for the facilities. The remaining three commitments deal with evaluation of low-level waste disposal capacity and research and development in support of low-level waste disposal. Eleven of the remaining 24 commitments will be completed by the end of fiscal year 1998. Eleven more will be completed by the end of fiscal year 1999. The last two commitments, review of the Nevada Test Site Area 5 composite analysis and issuance of a disposal authorization statement, will be completed in fiscal year 2000.

In addition to the specific Recommendation 94-2 commitments, three additional commitments are identified in this report and will be reported in subsequent quarterly progress reports:

1) Preparation of a guidance document for the Low-Level Waste Disposal Facilities Federal Review Group by August 31, 1998; 2) finalization of the *Radioactive Waste Management Order* revision September 30, 1998, and 3) issuance of a disposal authorization statement for a new disposal facility for the vitrified low-level waste resulting from treatment of Hanford tank wastes will be completed by March 31, 1999

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.

Departmental and DNFSB staff held the following meetings during the reporting period:

- DOE and DNFSB staff met in January and February to discuss the status and schedule for completing DNFSB Recommendation 94-2 commitments and the *Radioactive Waste Management Order* revision.

2.2.2 Meetings in Future Reporting Periods

The following are proposed meetings between the Department and the DNFSB/staff:

- DOE will meet with DNFSB staff in May to address completion of Recommendation 94-2 commitments.
- DOE will meet with DNFSB in June to address completion of Recommendation 94-2 commitments and to discuss the draft *Radioactive Waste Management Order* revision.
- DOE will brief the DNFSB on the final revision of the *Radioactive Waste Management Order* in late September.

3.0 SUMMARY OF COMMITMENTS DUE

The following tables summarize the status of commitments that were not completed at the end of the January through March 1998 reporting period. This includes the three new commitments that were not included in the DNFSB Recommendation 94-2 Implementation Plan, but are identified above and will be reported in subsequent quarterly progress reports.

For those commitments that were included in the Implementation Plan, there are at least two indicators provided in the first column. Those listed in the format "VIII.B.1.b.2" are task numbers as listed in the Implementation Plan. Those in the format "R94-02 033" are identification numbers as reported in the Department's Safety Issues Management System (SIMS). A commitment listed in this table may have two IP Task or SIMS ID numbers because the initiative represents activities that previously were listed and reported separately. For example, the Headquarters review of a radiological composite analysis and issuance of a disposal authorization statement for a disposal facility were previously planned to be completed in sequence. The current process for completing these actions results in them both being considered complete at the same time so they are reported together.

The second column in the table describes the commitment or deliverable that still must be completed. For the activities that were included in the Implementation Plan, the title or description can be correlated to the task initiatives as described in the Plan or in SIMS.

The third column lists the original due dates. The fourth column lists the Department's proposed new dates for completing the task initiatives. The revised dates for the radiological assessment task initiatives reflect the Department's revised process for reviewing performance assessments and composite analyses. In the Implementation Plan, the review of performance assessments and composite analyses, and the issuance of disposal authorization statements were planned as discrete, sequential actions. The current process results in these activities essentially being completed concurrently.

The last column provides a brief description of the status of the task initiative. More information on the progress and plans for completing the task initiative are provided in Section 4 of this report.

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FISCAL YEAR 1998				
<u>VII.B.5.b.2</u> R94-02 030-009	Submit Hanford Site composite analysis to Headquarters for review.	12/31/97	06/30/98	In progress. The site submitted the composite analysis to Headquarters in March 1998. DNFSB notification will occur in conjunction with notification of receipt of the Hanford LLW Glass Performance Assessment.
<u>VII.B.5.b.2</u> R94-02 030-003	Submit Idaho Radioactive Waste Management Complex composite analysis to Headquarters for review.	01/31/98	06/30/98	In progress. The composite analysis has been prepared and is being reviewed by the Field Office.

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<u>VII.B.5.b.1/2/3</u> R94-02 029-002	Complete Headquarters' review of LANL performance assessment.	12/31/97	08/31/98	In progress. Review team has completed its review report and briefed the Low-Level Waste Disposal Facilities Federal Review Group. The compliance evaluation and disposal authorization statement are being prepared.
R94-02 030-002	Complete Headquarters' review of LANL composite analysis.	03/31/98	08/31/98	
R94-02 031-001	Issue disposal authorization statement	04/30/98	09/30/98	
<u>VIII.B.1.b.2</u> R94-02 033	Issue Low-Level Waste Disposal Capacity Report, Revision 1.	09/30/97	08/31/98	In progress. Analyses based on the final review comments are being performed and revisions made to the report.
<u>IX.B.3</u> R94-02 038	Determine Outstanding LLW R&D Needs.	06/30/97	09/30/98	In progress. The R&D task area has been refocused to emphasize studies related to improving the confidence in the long-term performance of low-level waste disposal facilities.
<u>IX.B.4</u> R94-02 039	Prepare Strategy to Address LLW R&D Needs.	09/30/97	09/30/98	

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IP Task # SIMS ID #	Title or Description	Original Due Date	Proposed Due Date	Status
<u>VII.B.5.b.2/3</u> R94-02 030-012 R94-02 031-009	Complete Headquarters' review of Savannah River Site composite analysis. Issue Saltstone disposal authorization statement.	12/31/97 03/31/98	09/30/98 09/30/98	In progress. Review team has completed a site visit and is evaluating the composite analysis.
<u>VII.B.5.b.2/3</u> R94-02 031-008	Issue E-Area Vaults disposal authorization statement.	03/31/98	09/30/98	In progress. Review team has completed a site visit and is evaluating the composite analysis.
FISCAL YEAR 1999				

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Status of Remaining DNFSB Recommendation 94-2 Task Initiatives

<u>IP Task #</u> <u>SIMS ID #</u>	Title or Description	Original Due Date	Proposed Due Date	Status
<u>VII.B.5.b.1/2/3</u> R94-02 029-008	Complete Headquarters' review of Oak Ridge Solid Waste Storage Area 6 performance assessment.	01/21/98	10/15/98	In progress. Review team has completed a site visit and is evaluating the performance assessment and composite analysis.
R94-02 030-008	Complete Headquarters' review of SWSA-6 composite analysis.	12/31/97	10/15/98	
R94-02 031-005	Issue disposal authorization statement.	06/30/98	10/15/98	
<u>VII.B.5.b.1/2/3</u> R94-02 029-006	Complete Headquarters' review of the Nevada Test Site Area 3 performance assessment/composite analysis.	11/30/98	10/31/98	In progress. Review team has completed a site visit and is evaluating the performance assessment and composite analysis.
R94-02 031-004	Issue disposal authorization statement.	02/28/99	10/31/98	
<u>VII.B.5.b.2</u> R94-02 030-010	Complete Headquarters' review of Hanford composite analysis; document conclusion relative to Environmental Restoration Disposal Facility.	05/31/98	03/31/99	Pending. Review team leader has been selected; review will commence in August 1998.

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Status of Remaining DNFSB Recommendation 94-2 Task Initiatives

<u>IP Task #</u> <u>SIMS ID #</u>	Title or Description	Original Due Date	Proposed Due Date	Status
<u>VII.B.5.b.2/3</u> R94-02 031-006	Issue 200 West Area burial grounds disposal authorization statement.	06/30/98	03/31/99	Pending. Review team leader has been selected; review will commence in August 1998.
<u>VII.B.5.b.2/3</u> R94-02 031-007	Issue 200 East Area burial grounds disposal authorization statement.	07/31/98	03/31/99	Pending. Review team leader has been selected; review will commence in August 1998.
<u>VII.B.5.b.2/3</u> R94-02 030-004 R94-02 031-002	Complete Headquarters' review of Idaho composite analysis. Issue disposal authorization statement.	04/30/98 05/31/98	05/15/99 05/15/99	Pending. Review team and leader will be selected to support review of the document which is to be delivered in June 1998.
<u>VII.B.5.b.2</u> R94-02 030-005	Submit Nevada Test Site Area 5 composite analysis to Headquarters for review.	09/30/99	09/30/99	In progress. Work has begun on defining the boundaries of the area to be included in the composite analysis.

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<u>IP Task #</u> SIMS ID #	Title or Description	Original Due Date	Proposed Due Date	Status
FISCAL YEAR 2000				
<u>VII.B.5.b.2/3</u> R94-02 030-006	Complete Headquarters' review of Nevada Test Site Area 5 composite analysis.	12/31/99	06/30/00	Pending. Task will start upon receipt of the composite analysis.
R94-02 031-003	Issue disposal authorization statement.	01/31/00	06/30/00	

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

Title or Description	Proposed Due Date	Status
FISCAL YEAR 1998		
Complete guidance manual for the Low-Level Waste Disposal Facilities Federal Review Group	08/31/98	In progress. Comments received from the Low-Level Waste Disposal Facilities Federal Review Group are being resolved and incorporated into manual.
Complete revision of Radioactive Waste Management Order, Manual, and guidance.	09/30/98	In progress. Guidance is being prepared and reviewed; data on cost of implementation are being developed and compiled.
FISCAL YEAR 1999		
Complete Headquarters' review of the Hanford LLW Glass Disposal Facility performance assessment and issue disposal authorization statement.	03/31/99	Pending. Review team leader has been selected, performance assessment review will commence in August 1998.

4.0 TASK AREA STATUS

4.1 Systems Engineering

Status

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

Remaining Actions

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

Status

The Final Complex-Wide Review Report was transmitted to the DNFSB on May 17, 1996. This completed all Complex-Wide Review task initiatives.

Remaining Actions

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

Status

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. Issuance of the draft documents completed the DNFSB Recommendation 94-2 commitments in this task area. For purposes of continuity, finalization of the *Radioactive Waste Management* directives, which address high-level and transuranic waste as well as low-level waste, is being tracked under this task area.

There is another guidance document that is being tracked under this task area that was not a commitment in the Implementation Plan. A condition in the Board letter (August 20, 1996) accepting the Implementation Plan, was that the Department retain an earlier commitment to "expand the performance assessment peer review panel." In response, the Department has established a Low-Level Waste Disposal Facilities Federal Review Group charged with reviewing

low-level waste disposal facility performance assessments and composite analyses for technical adequacy and projections of compliance, and recommending action to the Environmental Management Deputy Assistant Secretaries. A guidance document for the reviews administered by this group is also being tracked under this task area.

During this reporting period, the Order revision effort was focused on revising drafts of guidance to complement the *Radioactive Waste Management Manual*, DOE M 435.1. The structure of the guidance is to provide a one-for-one match with the requirements in the Manual. The DOE Order Revision Team is also resolving outstanding and newly-identified issues related to the requirements contained in the Order and Manual. The Department also initiated the cost impacts analysis that is to be completed for any new directives. The Cost Impacts Team comprising representatives from Headquarters offices and the field developed an approach for estimating the costs associated with the Order to within plus or minus 40%. The sites are in the process of developing their cost estimates and providing a first draft to Headquarters for a DOE-wide roll-up.

The guidance document for performance assessment and composite analysis reviews was provided to the Low-Level Waste Disposal Facilities Federal Review Group in the previous quarter. During this quarter comments were received from the group members and evaluated to identify comments that may require discussion with the originator of the comment.

Remaining Actions

The Department intends to complete the Order revision by the end of fiscal year 1998. This entails completion of the Order, the Manual, a guidance document, a technical basis document, and an estimate of implementation costs. Each of these documents is currently being prepared. Key activities currently planned to support completion of the Order revision include:

- distribute draft Order, Manual, guidance, technical basis and cost estimate for Departmental and DNFSB review;
- briefings/discussions with the DNFSB/staff regarding the draft directives;
- briefings/discussions with Senior DOE Headquarters and Field management;
- make Departmental-approved draft available for public comment;
- resolve comments and revise directives;
- brief Senior management and DNFSB/staff; and
- issue directives.

The final set of directives to be issued include the Order, the Manual, and the guidance document. The technical basis and cost of implementation will be available as backup material

The Department intends to complete the guidance document for the Low-Level Waste Disposal Facilities Federal Review Group by August 31, 1998. Comments received from the Group members will be resolved and incorporated into the document as appropriate. The next draft of the document will be provided to the Group members to ensure that their comments have been adequately addressed. Resolution of any outstanding issues will be resolved and the document finalized and issued.

4.4 Radiological Assessments

Status

Task initiatives under this heading have been targeted at developing guidance for the preparation, review, and maintenance of low-level waste disposal facility radiological assessments (performance assessments and composite analyses), and completion and approval of the assessments for six DOE sites (it was previously determined that the disposal cell at the Fernald Site met the Department's commitment in the Implementation Plan). The guidance documents committed to in the Implementation Plan have been completed. With the exception of two composite analyses, field organizations have completed all of the radiological assessments and submitted them to Headquarters for review. Headquarters has completed reviews and accepted with conditions performance assessments for five disposal facilities at three DOE sites (Hanford, Nevada, and Savannah River).

The Low-Level Waste Disposal Facilities Federal Review Group has been assigned responsibility for the review of the radiological assessments. To accomplish this, the Federal Review Group assigns review teams to conduct the technical and compliance reviews of the performance assessments and composite analyses and prepare a review report. The Federal Review Group uses the review teams reports combined with its own evaluation to develop a compliance evaluation which is provided to the Waste Management (EM-30) or Environmental Restoration (EM-40) Deputy Assistant Secretary with a recommendation on whether or not to approve continued operation of the facility and issue a disposal authorization statement.

Reviews of radiological assessments are currently underway for four of the six DOE sites with low-level waste disposal facilities. The review team for the Los Alamos National Laboratory performance assessment and composite analysis presented its draft report to the Federal Review Group in April 1998. The Group accepted the report and is proceeding with the development of a compliance evaluation and a draft disposal authorization statement.

The review teams for the Oak Ridge Solid Waste Storage Area 6, the Savannah River Site Saltstone Disposal Facility and the E-Area Vaults, and the Nevada Test Site Area 3 radiological assessments have been established and have each conducted visits to the respective sites.

Remaining Actions

To meet the commitments made in the Implementation Plan, the Department must complete the remaining radiological assessments and issue disposal authorization statements based on reviews of the radiological assessments (performance assessments and composite analyses). The Idaho Operations Office and the Nevada Operations Offices will complete composite analyses for their

respective facilities. Headquarters, through the efforts of the Low-Level Waste Disposal Facilities Federal Review Group, will complete the review and evaluation of the radiological assessments, prepare compliance evaluations for those they review, draft disposal authorization statements, as appropriate, and recommend appropriate action (approve, approve with conditions, or disapprove) to the Deputy Assistant Secretary for EM-30 or EM-40. Since reviews for four sites are currently in progress, reviews of radiological assessments for two other sites (Idaho and Hanford) are being deferred to later this summer. Proposed completion dates for submitting the radiological assessments to Headquarters and for completing Headquarters review and action are presented in the table in Section 3.0.

4.5 Low-Level Waste Projections

Status

Under this task initiative, the Department committed to an ongoing program of evaluating projected disposal inventories (volume and radionuclides) versus available disposal capacity and to the preparation of waste minimization guidance for low-level waste. An initial assessment of volumetric disposal capacity has been prepared which indicates that there is adequate space for the disposal of projected low-level waste volumes (September 1996). A document providing guidance and lessons-learned case studies on low-level waste minimization was prepared and transmitted to the DOE sites. The remaining commitment in this task area is to revise the disposal capacity report to consider radiological capacity in addition to volumetric capacity.

Data on projected radiological inventories has been collected, analyzed, and presented in a draft of the Disposal Capacity Report, Revision 1. The draft report has undergone a review which concluded that additional work was necessary to make the document consistent with Environmental Management's *Accelerated Cleanup: Paths to Closure*.

Remaining Actions

Commitments in this task area will be completed by the revision and issuance of the Disposal Capacity Report, Revision 1. To complete the report the projected waste inventories are to be made consistent with the *Accelerated Cleanup: Paths to Closure* and extended to reflect the life-cycle of the generating activity or to 2070. Once the inventories have been revised, volumetric and radiological disposal capacity versus the inventories will be reanalyzed and the discussion revised to reflect the new analysis. The proposed date for completing this commitment is August 31, 1998.

4.6 Research and Development

Status

The Department completed three documents, a "Preliminary LLW Research Management R&D Activities Catalog," a "DOE Research and Development Activities Assessment" and a "DOE Research and Development Needs Assessment" as commitments in this task area. While these documents provide useable data related to research and development associated with low-level

modeling and predictive capabilities of radionuclide migration, (2) enhancing the stability of buried waste forms, (3) enhancing the deterrence of intrusion, (4) inhibiting the migration of radionuclides, and (5) reducing the volume of waste to be disposed. A static approach to the Research and Development Task also fails to recognize that an integrated systems-based low-level waste management program will continue to identify additional issues and concerns through its feedback and continuous improvement processes. Consequently, in order to better address the issues identified by the Board and better serve the low-level waste management program's continued improvement processes, the Department is reassessing its research and development strategy.

Remaining Actions

The Research and Development Task will focus on addressing the issues outlined above through a maintenance program for the low-level waste disposal facility performance assessments and composite analyses. Long-term performance of low-level waste disposal facilities and potential threats to the public and the environment are projected based on assumptions and modeling. By focusing on the issues identified above, the research and development tasks will address uncertainty in assumptions used in modeling long-term performance relative to these issues. The result will be improved confidence in the assurances that facilities will meet the radiological performance objectives.

The Research and Development Task will also focus on building the research and development strategies into the low-level waste management program systems and processes and will be reflected through updates to the Program Management Plan and other systems documents to ensure continued improvement efforts apply the research and development strategies when new issues and concerns are identified.

The principal source of research and development needs will be the performance assessments and composite analyses, and the results of the Headquarters reviews of these documents. The performance assessments, composite analyses, and the reviews identify activities, including research studies, that should be addressed as part of the maintenance programs for the radiological assessments. The range of topics that may be identified for study include better information on waste characteristics, improved understanding of the chemical and physical processes affecting migration, and enhanced performance as a result of waste treatment.

The research and development task initiative will address development of the maintenance programs to address these issues, evaluation of existing or related data that meets those needs, coordination among the various sites, prioritization of the research and development, and dissemination of results among users. The Low-Level Waste Management Program will be responsible, through the Low-Level Waste and Mixed Low-Level Waste Center of Excellence,

for implementing and maintaining the maintenance program for low-level waste disposal facility performance assessments and composite analyses. By September 30, 1998, the Center will prepare revision 0 of the strategy for low-level waste disposal facility performance assessment and composite analysis maintenance. This strategy will be based on the information available from the performance assessments, composite analyses, and reviews performed to date, as well as consideration of the previous material developed under this task area.

Appendix

Safety Issues Management System

Report for Recommendation 94-2

January 31, 1998 to March 31, 1998

Safety Issues Management System

Summary Recommendation Report - Key Commitment and Action Information

DRAFT

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

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	001		The Project Management Plan (PjMP) will be updated to manage the task initiatives and commitments described in this Implementation Plan.	Updated Project Management Plan (PjMP).	IP dated 4/96, Commitment III.C.1, pg. III-9	Complete		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		
						6/27/1996		
							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	Quarterly Report for period of April through June 1996 delivered 7/29/96	07/31/1996
						7/29/1996		
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		10/31/1996
						11/ 1/1996		
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	Ref: EM97-00433	01/31/1997
						2/ 7/1997		
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		04/30/1997
						5/ 1/1997		
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	Ref: EM97-03482	07/31/1997
						7/31/1997		
R94-02	002	006	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.	Quarterly Progress Report. (July - September 1997)	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete	Ref: Alm/Conway ltr dated 11/21/97	10/31/1997
						11/21/1997		
R94-02	002	007	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.	Quarterly Progress Report (October - December 1997)	IP dated 4/96, Commitment III.C.2, pg. III-10	Complete	Ref: Owendoff/Conway ltr dated 5/21/98	01/31/1998
						5/21/1998		
R94-02	002	008	The LLWMTG will establish a regular report format and provide quarterly reports to the Board on progress on the commitments described in this Implementation Plan.	Quarterly Progress Report (January - March 1998)	IP dated 4/96, Commitment III.C.2, pg. III-10	Open	Report is under review.	04/30/1998

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

DRAFT

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

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	002	009	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 1998)	IP dated 4/96, Commitment III.C.2, pg. III-10	Open		07/31/1998
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
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		04/30/1996
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	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		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	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
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
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	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
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	Complete		04/12/1996

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

DRAFT

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

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
					V.B.3, pg. V-12	4/12/1996		
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	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		05/31/1996
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	Interim Policy will be prepared by the Low-Level Waste Management Task Group and issued jointly by EM and EH.	07/21/1996
R94-02	016		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	IP dated 4/96, Commitment VI.B.2.b.2, pg. VI-6	Complete		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	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	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	Complete		12/29/1996
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	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 basis for any essential	Report identifying essential Low-Level Waste Management requirements.	IP dated 4/96, Commitment VI.B.5, pg. VI-8	Complete	Requirements are identified in draft Order 435.1 documents which were sent to the Board on 2/28/97.	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

DRAFT

Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
		requirements to be incorporated into the Order revision.			2/28/1997		
2	022	As part of the identification and development of requirements for LLW management, implementation guidance will be developed, and necessary documentation will be provided in time to support the Radioactive Waste Management Order revision.	Implementation guidance and technical standards to support essential LLW management requirements.	IP dated 4/96, Commitment VI.B.6, pg. VI-10	Complete	Implementation guidance delivered to the Board with draft Order 435.1 on 2/28/97.	02/28/1997
2	023	The approval process for radiological assessments (i.e., performance assessments and composite analyses) will be formalized in order to make the process consistent with the commitments made in this Implementation Plan and will become part of the Order revision for Radioactive Waste Management.	Radiological assessment approval process modified and formally developed for inclusion in Radioactive Waste Management Order revision	IP dated 4/96, Commitment VI.B.7, pg. VI-10	Complete	Included with draft Order 435.1 documents which were delivered to the Board on 2/28/97. In response to the Board's IP revision acceptance condition, Department diversified the PRP by establishing a federally-staffed group to review the radiological assessments. The Board was notified of these actions in a 4/30/97 letter from EM-1.	02/28/1997
1	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	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
1	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	3/7/1997 Complete		05/31/1996
	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	4/30/1996 Complete		10/31/1996
	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	11/1/1996 Complete		09/30/1996
					10/1/1996		

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

DRAFT

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	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	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	The last PA reviewed by November 30, 1998.	11/30/1997
R94-02	029	001	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Submit LANL TA-54, Area G, performance assessment to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete	Ref: EM97-01409.	03/31/1997
R94-02	029	002	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Complete the Headquarters technical review and documentation of the LANL TA-54, Area G, performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Open	Completion delayed. Late letter being developed.	12/31/1997
R94-02	029	003	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Complete the Headquarters technical review and documentation of the INEL Radioactive Waste Management Complex performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete	PRP recommended approval at July meeting. PA accepted with conditions	08/31/1996
R94-02	029	004	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Complete the Headquarters technical review and documentation of the NTS Area 5 Radioactive Waste Management Site performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete	PA accepted with conditions.	08/31/1996
R94-02	029	005	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Submit NTS Area 3 Radioactive Waste Management Site performance assessment (including composite analysis) to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete	Ref: Owendoff/Conway ltr dated 5/27/98.	03/31/1996
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	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Open		11/30/1998

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

DRAFT

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

rg. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
			Site performance assessment.				
029	007	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Submit ORNL Solid Waste Storage Area-6 performance assessment to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Complete	PA submission was reported in a letter to the Board on October 16, 1997	09/30/1997
					9/30/1997		
029	008	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance with the requirements of the Order.	Complete the Headquarters technical review and documentation of the ORNL Solid Waste Storage Area-6 performance assessment.	IP dated 4/96, Commitment VII.B.5.b.1, pg. VII-9	Open	Completion delayed, late letter being developed.	01/21/1998
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
					6/27/1996		
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
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
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
					6/30/1997		
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
030	001	The sites will prepare a composite analysis.	Submit LANL TA-54, Area G,	IP dated 4/96,	Complete	Ref: EM97-01409	12/31/1997

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

NNT

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

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	030	002	The sites will prepare a composite analysis.	Headquarters for review.	VII.B.5.b.2, pg. VII-9	4/3/1997 Open		03/31/1998
R94-02	030	003	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	Completion delayed, late letter being developed.	01/31/1998
R94-02	030	004	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	Status unknown.	04/30/1998
R94-02	030	005	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		09/30/1998
R94-02	030	006	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		09/30/1998
R94-02	030	007	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		12/31/1998
R94-02	030	008	The sites will prepare a composite analysis.	Submit the ORNL Solid Waste Storage Area-6 composite analyses to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Complete 9/30/1997	CA submission was reported in a letter to the Board on October 16, 1997	09/30/1997
R94-02	030	009	The sites will prepare a composite analysis.	Complete the Headquarters technical review and documentation of the ORNL Solid Waste Storage Area-6 composite analyses.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	HQ federal review team formed. To be addressed in late letter.	12/31/1997
R94-02	030	009	The sites will prepare a composite analysis.	Submit the Hanford 200-E & W Burial Grounds & Environmental Restoration Disposal Facility composite analysis to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	On March 26, 1998, RI completed and forwarded the composite analysis to EM-30 for review. A letter to the Board is required.	12/31/1997

Safety Issues Management System

Summary Recommendation Report - Key Commitment and Action Information

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

rg. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
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
030	011	The sites will prepare a composite analysis.	Submit the SRS E-Area Vaults and the Saltstone Disposal Facility composite analysis to Headquarters for review.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Complete	CA delivery reported in the quarterly report (cmt#002, act#006) Ref. Owendoff/Conway ltr dated 5/27/98	09/30/1997
030	012	The sites will prepare a composite analysis.	Complete the Headquarters technical review and documentation of the SRS E-Area Vaults and Saltstone Disposal Facility composite analysis.	IP dated 4/96, Commitment VII.B.5.b.2, pg. VII-9	Open	Federal review team formed. To be addressed in late letter.	12/31/1997
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
031	001	The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	Issue disposal authorization statement or direction to resolve issues or concerns for LANL TA-54, Area G.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open	Status unknown.	04/30/1998
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
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
031	004	The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	Issue disposal authorization statement or direction to resolve issues or concerns for the NTS Area 3 Radioactive Waste Management Site.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open		02/28/1999

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

DRAFT

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

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
R94-02	031	005	The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	Issue disposal authorization statement or direction to resolve issues or concerns for the ORNL Solid Waste Storage Area-6.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open		06/30/1998
R94-02	031	006	The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	Issue disposal authorization statement or direction to resolve issues or concerns for the Hanford 200-W Burial Grounds.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open		06/30/1998
R94-02	031	007	The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	Issue disposal authorization statement or direction to resolve issues or concerns for the Hanford 200-E Burial Grounds.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open		07/31/1998
R94-02	031	008	The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	Issue disposal authorization statement or direction to resolve issues or concerns for the Savannah River E-Area Vaults.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open	Status unknown	03/31/1998
R94-02	031	009	The complete radiological assessment (e.g., PA and composite analysis) will be reviewed and form the basis for issuance of the disposal authorization statement to document any limits on design or operations for the facility.	Issue disposal authorization statement or direction to resolve issues or concerns for the Savannah River Saltstone Disposal Facility.	IP dated 4/96, Commitment VII.B.5.b.3, pg. VII-9	Open	Status unknown	03/31/1998
R94-02	032		Capacity, as used in this Implementation Plan, addresses the quantity of both volume and radionuclide inventory that can be accepted at a disposal facility. The initial LLW disposal capacity report will only include information on volumetric capacity.	Low-Level Waste Disposal Capacity Report, Revision 0.	IP dated 4/96, Cmt. VIII.B.1.b.1, pg. VIII-4	Complete		07/31/1996
R94-02	033		Currently available and planned baseline radiological capacity will be determined by analyzing site environmental data and utilizing pathway analysis modeling techniques. The radiological capacity and projection will be contained in the first revision of the disposal capacity report as consideration of radiological source terms are reflected in the radiological assessments	Low-Level Waste Disposal Capacity Report, Revision 1.	IP dated 4/96, Cmt. VIII.B.1.b.2, pg. VIII-4	Open	It is not expected to be submitted before May, 1998.	09/30/1997
R94-02	034		Based on low-level waste inventory and projections information and the survey of current and planned low-level waste disposal capacity (Task VIII.B.1), a DOE low-level waste projection program will be developed.	DOE Low-Level Waste Projection Program Documentation.	IP dated 4/96, Commitment VIII.B.2, pg. VIII-4	Complete		12/31/1996
R94-02	035		A survey will be conducted to determine the common LLW generating activities at major DOE sites, and identify practices, procedures, policies and techniques that are effective in	Evaluation and strategy for improvements to LLW minimization	IP dated 4/96, Commitment VIII.B.3, pg. VIII-5	Complete	Draft report was discussed with Board Staff 8/1/96. A companion report on mixed	08/31/1996

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 Site

DRAFT

Resp. Org. EM

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Michael Worley

Board Contact Mr. Steve Stokes

Rec #	Cmt #	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
			reducing LLW.			8/30/1996	LLW minimization was sent to the Board on 12/26/96.	
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 delayed. Revised approach to LLW R&D to be developed. To be addressed in late letter	06/30/1997
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 delayed. Revised approach to LLW R&D to be developed. To be addressed in late letter	09/30/1997

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