

Department of Energy

Washington, DC 20585 February 7, 1997



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 October 1, 1996, to December 31, 1996.

The report shows that the Department has continued to make good progress in implementing the task initiatives to which it has committed. 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 Whitaker, S-3.1

97/411: = RECEIVED

ONE 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

October 1 through December 31, 1996

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 (IP), Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-2" in March 1995. In May 1996 DOE issued a revision to the IP that reflected enhancements to DOE's approaches to the 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 IP, with conditions.

The revised IP follows the same general approach as the original IP, 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 fifth report on the status of task initiatives as described in the IP that DOE is undertaking to improve its management of low-level waste (LLW). This report covers the period from October 1, 1996, to December 31, 1996.

2.0 OVERVIEW

2.1 General Progress

During this reporting period DOE continued to make very good progress on implementing the activities committed to in the revised DNFSB 94-2 Implementation Plan. The Department completed commitments in three task areas; one in Regulatory Structure and Process, two in Radiological Assessments, and two in Waste Volume Projections. A document providing guidance on integrating DOE Order 5820.2A, "Radioactive Waste Management," with onsite remediation disposal actions was also prepared. Guidance was also provided on the process and criteria for review of low-level waste disposal facility composite analyses and for the preparation and review of disposal facility performance assessments. These three documents will be incorporated into the DOE Order 5820.2A revision efforts.

A mixed low-level waste minimization evaluation and strategy was prepared to augment a similar document prepared during the last reporting period which focused on non-hazardous low-level waste. In addition, documentation was issued on the development of low-level waste projections.

Much of the effort in this reporting period was focused on the development of two documents that are key to the low-level waste management program. Work is underway on the Low-Level Waste Program Management Plan, the culminating document in the Systems Engineering task area. To enhance the integration of DOE's low-level waste management activities across DOE sites, this Plan is being prepared with participation from Headquarters and field organizations.

Similarly, the development of essential requirements for the management of low-level waste is being conducted with input from Headquarters, field, and contractor staff. This effort is part of the DOE Order 5820.2A revision effort. Two workshops were held during this reporting period during which staff performed analyses that will form part of the technical basis for requirements to be included in the revised Order. The revised Order will also incorporate a number of the deliverables that have been undertaken as part of the implementation of DNFSB Recommendation 94-2. These include the interim policy on regulatory structure for low-level waste management, and the policy and guidance on DOE Order 5820.2A compliance for onsite disposal of remediation waste. In addition, other DNFSB 94-2 implementation commitments will be used as is, or with minor modification, as guidance to the revised Order.

In December the DNFSB held a public meeting on the DOE directives system. This meeting addressed DOE rulemaking and Order development. A senior official from the Office of Waste Management provided comment on the DOE Order 5820.2A revision at the meeting.

2.2 Meetings with the DNFSB and Staff

2.2.1 Meetings During this Reporting Period

In this reporting period DOE staff had the following interactions with staff from the DNFSB to discuss implementation activities:

 DOE staff and DNFSB staff met on October 28 at the DOE Order revision workshop in Las Vegas to discuss status and progress of Regulatory Structure and Process activities. Specifically, the process being used to revise the DOE Order on Radioactive Waste Management was reviewed. DOE staff met with DNFSB staff on December 3, 1996 to discuss how decontamination and decommissioning activities are to be addressed and to discuss the integration of the Order on Radioactive Waste Management with the proposed 10 CFR 834, "Radiation Protection of the Public and the Environment."

2.2.2 Meetings in Future Reporting Periods

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

 DOE anticipates meeting with the DNFSB staff to discuss the draft DOE Order 435.1, Radioactive Waste Management, which will be distributed for review during the next reporting period.

3.0 SUMMARY OF COMMITMENTS DUE IN THE CURRENT REPORTING PERIOD

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

Status of Task Initiatives Due October 31, 1996 - September 30, 1996

		The Burgary of the Committee of the Comm	AND THE RESIDENCE AND ADDRESS OF THE PROPERTY
<u>IP Task #</u> SIMS ID #	Title or Description	Due Date	Status
VI.B.3.b.2 R94-02 018	Policy and Guidance Document Issued for RCRA Sites	12/31/96	Completed. A guide for complying with DOE Order 5820.2A for onsite management and disposal was submitted to DNFSB on January 9, 1997.
VII.B.3 R94-02 026	Process and Criteria for Headquarters' Review of Composite Analyses	10/31/96	Completed. A guide was submitted to DNFSB on November 1, 1996.
VII.B.4.b.2 R94-02 028	PA Format and Content and Standard Review Plan	01/31/97	Completed. An interim guide was submitted to DNFSB on November 1, 1996.
VIII.B.2 R94-02 034	DOE Low-Level Waste Projections Program Documentation	12/31/96	Completed. The program description was submitted to DNFSB on December 26, 1996.
Supplemental Commitment	Mixed Low-Level Waste Minimization Evaluation and Strategy	12/31/96	Completed. The document was submitted to DNFSB on December 26, 1996.

4.0 TASK AREA STATUS

4.1 Systems Engineering

During this reporting period, the systems engineering effort made the transition from the development of the DOE Low-Level Waste System Description Document to development of the Low-Level Waste Program Management Plan. The Low-Level Waste Steering Committee, comprising representatives from Headquarters and DOE field organizations, has taken responsibility for preparation of the plan. The Steering Committee met in November to review and revise the proposed outline of the plan. The Plan will address the low-level waste system configuration, decision criteria for disposal of low-level waste, and describe how ongoing Departmental activities, such as re-engineering, are being integrated with the low-level waste program. Writing assignments for the various sections of the plan were made and individuals have begun preparing their sections

During the next reporting period, the Low-Level Waste Program Management Plan is to be completed. A draft will be compiled by early February and distributed for review. During the review, an audience of Headquarters and field staff broader than the Steering Committee will provide input on the plan. This will also include a review for consistency with the DOE Order 5820.2A revision effort. Comments will be evaluated and addressed and the LLW Program Management Plan will be issued by the end of March.

4.2 Complex-Wide Review

The Final Complex-Wide Review (CWR) Report was transmitted to the DNFSB on May 17, 1996. This completed all CWR task initiatives. DOE-wide and site-specific corrective actions in response to the CWR were completed as part of the Systems Engineering task initiative.

4.3 Regulatory Structure and Process

During the current reporting period, DOE completed the "Guidance for Complying with DOE Order 5820.2A, Radioactive Waste Management, for Onsite Management and Disposal of Low-Level Waste Resulting from Environmental Restoration Activities." This guidance addresses onsite disposal of waste derived from Resource Conservation and Recovery Act cleanups and supplements an earlier policy addressing onsite disposal of waste from Comprehensive Environmental Response, Compensation, and Liability Act activities. The policy and guidance from these memoranda will be incorporated in the DOE Order 5820.2A revision documentation.

The DOE Order 5820.2A revision low-level waste team met at two workshops in conjunction with the Order revision effort. The first workshop was held in Las Vegas, NV in October. Using the low-level waste system functional breakdown developed under the Systems Engineering task as a starting point, the team conducted a hazard and safety analysis. Each function was operationally described, then scenarios were developed by which a failure could develop. These were then analyzed to identify the weaknesses that contributed to the failure. At the second workshop, held in Rosslyn, VA in December, the hazard and safety analysis was used as the basis for a requirements analysis. Various sources of information, including DOE Orders, external regulations, and international guidance, were used to identify requirements that would mitigate the weaknesses found in the hazard and safety analysis.

In the next reporting period, the requirements identified from the requirements analysis will be evaluated and combined to provide the basis for the low-level waste chapter of the DOE Order 5820.2A revision. The initial set of requirements will be reviewed for regulatory gaps and supplemented to add administrative requirements. A draft low-level waste chapter will be ready for review by the end of February.

4.4 Radiological Assessments

During the current reporting period, the Department completed two commitments in the Radiological Assessments task area. The Department issued the Interim Review Process and Criteria for Department of Energy Low-Level Waste Disposal Facilities Composite Analyses. This document establishes the process that will be used for the review of composite analyses which evaluate the combined potential radiological impact of a low-level waste disposal facility and other sources of radiation present at a DOE site.

In response to a DNFSB condition of acceptance of the May 1996 revision of the 94-2 Implementation Plan, the Department accelerated the issuance of the Interim Format and Content Guide and Standard Review Plan for U.S. Department of Energy Low-Level Waste Disposal Facility Performance Assessments. The guidance document was originally scheduled to be completed by the end of January 1997. However, since the Department was involved in the review of performance assessments during the summer and fall of 1996, it was agreed that it made sense to complete this document as soon as possible to build from and support those reviews. The document provides guidance for both the preparers and reviewers of performance assessments. Specifically, it describes the sections and types of information that should be included in performance assessments and addresses topics that have been the source of uncertainty and confusion for the preparers and reviewers of performance assessments. The guidance was issued as interim in

recognition of the need for consistency with the Department's proposed 10 CFR 834, "Radiation Protection of the Public and the Environment," and the DOE Order 5820.2A revision. Key topics on which the staff is working towards resolution include the point of evaluation for compliance with the dose objectives and the time period over which compliance is to be evaluated.

A second DNFSB condition of acceptance of the revised Implementation Plan was that the Department should not drop the task in the original plan to evaluate ways of diversifying the Performance Assessment Peer Review Panel. Consistent with the spirit of this commitment, DOE Headquarters has taken steps to establish a DOE-staffed group that will have the responsibility for the review and recommending approval of performance assessments and composite analyses. As currently conceived, the group would be co-chaired by staff from the Offices of Waste Management and Environmental Restoration with the balance of the members coming from the DOE field organizations. The Peer Review Panel would continue to provide technical review at the request of the DOE review group. In December a memorandum was sent to the field requesting nominees to serve in the group.

During the next reporting period, DOE will proceed with its review of the Hanford Site 200 East Area low-level waste burial ground performance assessment. The DOE review group and the Peer Review Panel will both be involved in the review.

4.5 Low-Level Waste Projections

During this reporting period, DOE completed two waste projection commitments from the DNFSB 94-2 Implementation Plan. On December 26, 1996, the low-level waste projections program guidance was transmitted to the DNFSB. This document establishes a framework for developing projections of volumes and characteristics of low-level waste which is consistent with projections work that has evolved over the last few years, such as the Baseline Environmental Management Report, the Ten-Year Plan, and the Core Data Bases. The intent is to provide improved, routine projections.

In the previous reporting period, the Department completed the Low-Level Radioactive Waste Minimization Evaluation and Strategy. Through staff discussions, it was agreed that a complementary document, a Mixed Low-Level Waste Minimization Evaluation and Strategy, would also be prepared. The report was transmitted to the DNFSB on December 26, 1996. The report evaluated waste minimization practices at selected production and cleanup sites, identified common mixed low-level waste generating activities, and recommended minimization practices. The document is one element supporting the 1996 Pollution Prevention Program Plan.

There are no near-term commitments in the Waste Volume Projections task area. Work is continuing on the development of a method to evaluate the radiological capacity of DOE=slow-level waste disposal facilities. This is a September 1997 deliverable.

4.6 Research and Development

The Department is in the process of establishing centers of excellence at field locations for key waste management activities. The Idaho Operations Office will be the Low-Level Waste Center of Excellence. Discussions are ongoing between the site and Headquarters regarding the division of roles and responsibilities. It is contemplated that the DNFSB 94-2 research and development activities will be one of the first activities for which the Center takes responsibility. The Department expects to finalize arrangements and initiate work during the next reporting period.

Appendix

Safety Issues Management System
Report for Recommendation 94-2
October 1, 1996 - December 31, 1996

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

Rec#	Cmt #	Act#	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
94-02	001		The Project Management Plan (PjMP) will be updated to	Updated Project Management	IP dated 4/96,	Complete		06/30/1996
			manage the task initiatives and commitments described in this	Plan (PiMP).	Commitment		•	
			Implementation Plan.		III.C.1, pg. III-9		. 1	
f						06/27/1996		
94-02	002		The Low-Level Waste Management Task Group (LLWMTG)	Quarterly Progress Reports.	IP dated 4/96.	Open		
	002		will establish a regular report format and provide quarterly	Quarterly Frogress Reports.	Commitment	Open		
			reports to the Board on progress on the commitments described		III.C.2, pg. III-10			-
			in this Implementation Plan.	- 1	111.C.2, pg. 111-10			
		-	in this implementation i land					Desir dia
				1				Periodic -
				·				Quarterly, 30
	1			,				days after the
								end of each
							1	calendar year
A 00					<u> </u>			quarter.
94-02	002	001	The LLWMTG will establish a regular report format and	Quarterly Progress Report	IP dated 4/96,	Complete	Quarterly Report for period of	07/31/1996
		İ	provide quarterly reports to the Board on progress on the	(April-June 1996).	Commitment		April through June 1996	
			commitments described in this Implementation Plan.		III.C.2, pg. III-10		delivered 7/29/96.	
						07/29/1996		
94-02	002	002	The LLWMTG will establish a regular report format and	Quarterly Progress Report	IP dated 4/96,	Complete		10/31/1996
			provide quarterly reports to the Board on progress on the	(July-September 1996).	Commitment			
			commitments described in this Implementation Plan.		III.C.2, pg. III-10			
						11/01/1996		
94-02	002	003	The LLWMTG will establish a regular report format and	Quarterly Progress Report	IP dated 4/96,	Open		01/31/1997
			provide quarterly reports to the Board on progress on the	(October-December 1996).	Commitment	Open		0113111397
			commitments described in this Implementation Plan.	(300301 200011001 1990).	III.C.2, pg. III-10		` · ·	
	1							,
94-02	003		The Department will complete and document a systems	DOUBLEW	In 122.3 1mr			
74-02	003		engineering evaluation to accomplish the mission of the LLW	DOE LLW management system	IP dated 4/96,	Complete		06/30/1995
				engineering evaluation report.	Commitment			* *
		1	program.		IV.B.1, pg. IV-3	00000000		0.200
		<u> </u>				06/30/1995		*
94-02	004		The Department will compile and document LLW program	LLW program requirements	IP dated 4/96,	Complete		04/30/1996
			system requirements including goals and assumptions.	document.	Commitment			1,000
					IV.B.2, pg. IV-3			
						04/26/1996		
94-02	005		The Department will analyze the requirements to determine	LLW system description	IP dated 4/96,	Complete	Deliverable letter of 10/7/96 for	09/30/1996
			what functions (activities) are necessary to accomplish the	document.	Commitment		the SDD states intent to update	
			requirements and identify any additional requirements and		IV.B.3, pg. IV-4	4.0	the SDD once the Waste	
			functions needed to integrate the program.				Management Order is revised.	
						10/07/1996		
94-02	006	ļ	A study will be performed to evaluate the safety merits and	Privatization guidelines.	IP dated 4/96,	Complete	Deliverable letter of 10/2/96 for	09/30/1996
	1		demerits of using a privately operated facility away from DOE	Titalization Baiderines.	Commitment	Complete	the Privatization Guidelines	03/30/1330
			sites for the exclusive disposal of DOE LLW.		IV.B.4, pg. IV-4		Report commits to include in	
			The state of the s		14.D,7, pg. 14-4		the PMP guidance and criteria	
	1						for sites to use when	
							considering disposal options.	
	1					10/02/1996	considering disposar options.	
	I	1			1	10/02/1990		f

Summary Recommendation Report - Key Commitment and Action Information

Recommendation #

R94-02

Conformance with Safety Standards at Low-Level Nuclear Waste Disposal Sites

Resp. Mgr. Mr. Martin Letourneau

DR Contact Mr. Joe Arango

Rec#	Cmt#	Act#	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
194-02	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	Open	•	03/31/1997
								•
194-02	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
	·			÷	1 V.D.O.U.1, pg. 1 V-0	07/31/1996		
194-02	009		Site-specific corrective action plans prepared as a result of the Complex-Wide Review constitute the initial site improvement	Initial site-specific corrective action plans.	IP dated 4/96, Commitment	Complete		07/31/1996
			activities.		IV.B.6.b.2, pg. IV-6	07/31/1996		
94-02	010	ļ	The Assessment Working Group members are selected to	Individuals to staff the	IP dated 4/96,	Complete	Complete membership	02/29/1996
			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.	Assessment Working Group and Working Group Assessment Teams are assigned.	Commitment V.B.1, pg. V-12	Complete	delivered to the Board in an EM-30 letter dated 3/4/96.	02/29/1990
	-	1.3	Assessment reams to perform evaluations of the 36 facilities.	reams are assigned.		03/04/1996		
394-02	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	Completed site surveys.	IP dated 4/96, Commitment V.B.2, pg. V-12	Complete		11/30/1995
,	-		sites, beginning June 1, 1995.		V.D.2, pg. V-12	11/30/1995		
194-02	012	*	Independent evaluations are completed for the 38 facilities and an assessment report for these sites is issued.	Preliminary Report	TP dated 4/96, Commitment V.B.3, pg. V-12	Complete		04/12/1996
					V.B.5, pg. V-12	04/12/1996		
94-02	013		Independent evaluations are completed for the 38 facilities and an assessment report for these sites is issued.	Final Report.	IP dated 4/96, Commitment	Complete	CWR results were briefed to the Board on 4/16/96.	05/17/1996
					V.B.3, pg. V-12	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	Office of Waste Management Directive.	IP dated 4/96, Commitment	Complete		05/31/1995
			radioactive contamination.		VI.B.1, pg. VI-5	05/31/1995		
194-02	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
			memorandum entitled, "Interim Policy on Regulatory Structure for Low-Level Radioactive Waste Management and Disposal."		VI.B.2.b.1, pg. VI-6	07/21/1995	Management Task Group and issued jointly by EM and EH.	
94-02	016	-	A revision to the interim policy will be issued that clarifies the first policy on regulatory structure for LLW management and	Revised interim policy statement.	IP dated 4/96, Commitment	Complete		07/31/1996
			the policy to include pre-1988 LLW in performance assessments.		VI.B.2.b.2, pg. VI-6			
						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	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

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

Rec#	Cmt#	Act #	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
			low-level waste requirements for such activities and					
			specify actions necessary to demonstrate protection of human	j		•		
			health consistent with the requirements of Order 5820.2A.					
						05/31/1996	·	
94-02	018		Recognizing that RCRA disposal and storage sites are also	Policy and guidance issued for	IP dated 4/96,	Open	RCRA deliverable drafted and	12/31/1996
			regulated by EPA and in some cases the states, a policy and	RCRA sites.	Commitment	•	in review. Expect final	
			guidance document will be developed to identify the applicable		VI.B.3.b.2, pg. VI-7		signature by 1/6/97.	
			low-level waste requirements for such activities and			* 1		
			specify actions necessary to demonstrate protection of human					
			health consistent with the requirements of Order 5820.2A.					
						-		
194-02	019		Complete a report comparing 10 CFR 61 and Agreement State	Report comparing DOE and	IP dated 4/96,	Complete	· · · · · · · · · · · · · · · · · · ·	12/29/1995
			requirements plus license conditions and waste acceptance	non-DOE requirements and	Commitment			12/25/1555
			criteria with those of the Department.	standards.	VI.B.4.b.1, pg. VI-8			
						12/29/1995		
194-02	020	-	International efforts such as the IAEA RADWASS program are	Report comparing DOE and	TP dated 4/96.	Complete	Report submitted to DNFSB 19	06/30/1996
		-	being considered, along with information specific to the LLW	international requirements and	Commitment	Complete	days early.	00/30/1990
			management programs in Canada, the United Kingdom,	standards.	VI.B.4.b.2, pg. VI-8		dhys chiry.	
			France, and Sweden, in a report.		1.1.2.1.2.1.0		•	
						06/11/1996		
94-02	021		The Department will undertake a process to identify essential	Report identifying essential	IP dated 4/96,	Open	Ongoing.	02/28/1997
			requirements to be included in the Low Level Waste Chapter of	Low-Level Waste Management	Commitment	Орен	ongoing.	02/26/1777
			the revised Order on Radioactive Waste Management. A	requirements.	VI.B.5, pg. VI-8			
	- 1	1	major component of the process will be the					the second second
			development and documentation of the bases for any essential					-
	- '		requirements to be incorporated into the Order revision.					
194-02	022	+	As part of the identification and development of requirements	Implementation guidance and	IP dated 4/96,	Open	Ongoing.	02/28/1997
	1 .	,	for LLW management, implementation guidance will be	technical standards to support	Commitment	~pv	ongoing.	02/20/1///
			developed, and necessary documentation will be provided in	essential LLW management	VI.B.6, pg. VI-10			
			time to support the Radioactive Waste Management Order	requirements.				
			revision.					
	ļ							
194-02	023	+	The approval process for radiological assessments (i.e.,	Radiological assessment approval	IP dated 4/96	Open	Ongoing. In response to the	02/28/1997
	1 :		performance assessments and composite analyses) will be	process modified and formally	Commitment	Орен	Board's IP revision acceptance	02/20/1997
	1	. [formalized in order to make the process consistent with the	developed for inclusion in	VI.B.7, pg. VI-10		condition, Department will	- '
			commitments made in this Implementation Plan and will	Radioactive Waste Management	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		strengthen recusal process and	
			become part of the Order revision for Radioactive Waste	Order revision.			evaluate ways to diversify PRP	
	-	1	Management.			, ·· ·	as part of this deliverable.	
94-02	024		The Department will issue interim direction addressing the	Policies addressing critical	IP dated 4/96,	Open		01/31/1997
1		1	critical aspects of conducting a performance assessment.	assumptions and clarifications for	Commitment	~p*		051(1))/
				performance assessments.	VII.B.1, pg. VII-5			f 1.
					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	- 1		
94-02	025		DOE will prepare and provide to the sites a document	Guidance for conducting	IP dated 4/96,	Complete		05/31/1996
		1	providing guidance on the preparation of the composite	composite analyses.	Commitment	Complete		03/3/1/1770
			analyses.	tomposite unury ses.	VII.B.2, pg. VII-6			
	1	. 1	mercary ovo.		*11.D.2, pg. *11-0	04/30/1996		* *.

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

Rec#	Cmt#	Act#	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
94-02	026		DOE will prepare a documented description of the process for Headquarter's review of the composite analyses and the criteria	Description of the process and criteria for Headquarter's review	IP dated 4/96, Commitment	Complete		10/31/1996
	٠.		for evaluating the acceptability of the analyses.	of composite analyses.	VII.B.3, pg. VII-7	11/01/1996		
94-02	027		The guidance on performance assessment maintenance program will specify criteria for periodic review of the	PA maintenance guidance document.	IP dated 4/96, Commitment	Complete		09/30/1996
			performance assessments to ensure that the waste acceptance criteria and design and operational requirements derived from		VII.B.4.b.1, pg. VII-8			1±
			the performance assessments remain viable, as well as provide criteria for determining when revisions to the performance assessments are necessary.					
			•			10/01/1996		1.6
94-02	028		The guidance on performance assessment format and content will provide an annotated outline of the matters to be addressed	PA format and content, and standard review plan documents.	IP dated 4/96, Commitment	Complete	In response to the Board's IP revision acceptance condition,	01/31/1997
			in a performance assessment, including incorporation of performance assessment results into waste acceptance criteria.		VII.B.4.b.2, pg. VII-8		completed this deliverable early.	
			The Standard Review Plan will include technical criteria for the findings that must be made to determine that a performance assessment is technically acceptable.					
						11/01/1996		
94-02	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	IP dated 4/96, Commitment	Open	The last PA reviewed by November 30, 1998.	11/30/1998
			with the requirements of the Order.	technical review and documentation.	VII.B.5.b.1, pg. VII-9			
94-02	029	001	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance	Submit LANL TA-54, Area G, performance assessment to	IP dated 4/96, Commitment	Open		03/31/1997
			with the requirements of the Order.	Headquarters for review.	VII.B.5.b.1, pg.			
94-02	029	002	Sites with LLW disposal facilities operating under DOE Order	Complete the Headquarters	IP dated 4/96,	Open		12/31/1997
			5820.2A will prepare performance assessments in accordance with the requirements of the Order.	technical review and documentation of the LANL	Commitment VII.B.5.b.1, pg.	op.		12/31/192/
				TA-54, Area G, performance assessment.	VII-9			
V4-02	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	TP dated 4/96, Commitment VII.B.5.b.1, pg.	Complete	PRP recommended approval at July meeting. PA accepted with conditions.	08/31/1996
	- :			Radioactive Waste Management Complex performance assessment.	VII-9			
4-02	029	004	Sites with LLW disposal facilities operating under DOE Order	Complete the Headquarters	ID dated 4/04	08/30/1996		00/111/07/
7-02	U47	004	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	IP dated 4/96, Commitment VII.B.5.b.1, pg.	Complete	PA accepted with conditions.	08/31/1996

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

Rec#	Cmt#	Act#	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Det-
		-		Site performance assessment.		Compiete:	Descriptive Status	Due Date
,			·			08/30/1996		
R94-02	029	005	Sites with LLW disposal facilities operating under DOE Order	Submit NTS Area 3 Radioactive	1P dated 4/96,	Open		03/31/1998
	Ì		5820.2A will prepare performance assessments in accordance	Waste Management Site	Commitment		1	
			with the requirements of the Order.	performance assessment	VII.B.5.b.1, pg.			
				(including composite analysis) to	VII-9			
				Headquarters for review.	·	8		
94-02		000						
34-02	029	006	Sites with LLW disposal facilities operating under DOE Order 5820.2A will prepare performance assessments in accordance	Complete the Headquarters	IP dated 4/96,	Open		11/30/1998
			with the requirements of the Order	technical review and	Commitment			
			what the requirements of the Officer.	documentation of the NTS Area 3 Radioactive Waste Management	VII.B.5.b.1, pg. VII-9			5
				Site performance assessment.	V11-9			
		1		Site performance assessment.				
194-02	029	007	Sites with LLW disposal facilities operating under DOE Order	Submit ORNL Solid Waste	1P dated 4/96.	Onan		0072041005
		1	5820.2A will prepare performance assessments in accordance	Storage Area-6 performance	Commitment	Open	1	09/30/1997
	i		with the requirements of the Order.	assessment to Headquarters for	VII.B.5.b.1, pg.		,	
				review.	VII-9			
194-02	029	008	Sites with LLW disposal facilities operating under DOE Order	Complete the Headquarters	IP dated 4/96,	Open		01/21/1998
			5820.2A will prepare performance assessments in accordance	technical review and	Commitment			02
			with the requirements of the Order.	documentation of the ORNL	VII.B.5.b.1, pg.			
				Solid Waste Storage Area-6	VII-9			
				performance assessment.				
R94-02	029	009	Sites with LLW disposal facilities operating under DOE Order	Complete the Headquarters	TP dated 4/96,	Complete		06/30/1996
		1	5820.2A will prepare performance assessments in accordance	technical review and	Commitment			:
			with the requirements of the Order.	documentation of the Hanford 200-W Burial Ground	VII.B.5.b.1, pg.			
				performance assessment.	VII-9			
	1			performance assessment.].	06/27/1996		
R94-02	029	010	Sites with LLW disposal facilities operating under DOE Order	Submit the Hanford 200-E Burial	IP dated 4/96,		11-1-110-1-11-1	00/21/1007
	027	010	5820.2A will prepare performance assessments in accordance	Ground performance assessment	Commitment	Complete	Under HQ review at this time.	08/31/1996
			with the requirements of the Order.	to Headquarters for review.	VII.B.5.b.1, pg.		t en	
				to riemodulitors for fortow.	VII-9			
						08/30/1996		
194-02	029	011	Sites with LLW disposal facilities operating under DOE Order	Complete the Headquarters	IP dated 4/96,	Open	Under HQ review at this time.	04/30/1997
	1.		5820.2A will prepare performance assessments in accordance	technical review and	Commitment	. Орон	onder rig review at una title.	. 07/30/199/
			with the requirements of the Order.	documentation of the Hanford	VII.B.5.b.1, pg.			
				200-E Burial Ground	VII-9	e e		
				performance assessment.				
194-02	029	012	Sites with LLW disposal facilities operating under DOE Order	Complete the Headquarters	IP dated 4/96,	Complete	PA found technically	07/31/1996
			5820.2A will prepare performance assessments in accordance	technical review and	Commitment		acceptable except for	
			with the requirements of the Order.	documentation of the SRS	VII.B.5.b.1, pg.		groundwater analysis - more	
				Saltstone Disposal Facility	VII-9		analysis is being requested.	
	1			performance assessment.			Formal closure with the Board	
	i	1	1	1			will be proposed when the	

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

Rec#	Cmt#	Act#	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
			i gir		-	07/31/1996	additional groundwater analysis information is received and reviewed.	
194-02	030		The sites will prepare a composite analysis.	Submit composite analyses to	TD detect 410c	1		
	030		The sites will prepare a composite analysis.	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
194-02	030	001	The sites will prepare a composite analysis.	Submit LANL TA-54, Area G,	IP dated 4/96,	Open		12/31/1997
				composite analyses to Headquarters for review.	Commitment VII.B.5.b.2, pg. VII-9			
R94-02	030	002	The sites will prepare a composite analysis.	Complete the Headquarters technical review and documentation of the LANL	IP dated 4/96, Commitment VII.B.5.b.2, pg.	Open		03/31/1998
,				TA-54, Area G, composite analyses-	VII-9			· -
94-02	030	003	The sites will prepare a composite analysis.	Submit INEL Radioactive Waste	TP dated 4/96,	Open		01/31/1998
				Management Complex composite analyses to Headquarters for review.	VII.B.5.b.2, pg.			•
				IEVIEW.	VII-9			
94-02	030	004	The sites will prepare a composite analysis.	Complete the Headquarters	IP dated 4/96.	Open		04/30/1998
				technical review and documentation of the INEL	Commitment VII.B.5.b.2, pg.	J Span		04/30/1996
				Radioactive Waste Management Complex composite analyses.	VII-9			
194-02	030	005	The sites will prepare a composite analysis.	Submit the NTS Area 5	IP dated 4/96,	Open		09/30/1999
N .				Radioactive Waste Management Site composite analyses to	Commitment VII.B.5.b.2, pg.			
				Headquarters for review.	VII-9			
94-02	030	006	The sites will prepare a composite analysis.	Complete the Headquarters technical review and	IP dated 4/96, Commitment	Open		12/31/1999
				documentation of the NTS Area 5 Radioactive Waste Management	VII.B.5.b.2, pg. VII-9			
				Site composite analyses.			•	
94-02	030	007	The sites will prepare a composite analysis.	Submit the ORNL Solid Waste Storage Area-6 composite	IP dated 4/96, Commitment	Open		09/30/1997
				analyses to Headquarters for review.	VII.B.5.b.2, pg. VII-9			

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

lec#	Cmt#	Act#	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
94-02	030	008	The sites will prepare a composite analysis.	Complete the Headquarters	IP dated 4/96,	Open		12/31/1997
		1		technical review and	Commitment	•		
		1 .		documentation of the ORNL	VII.B.5.b.2, pg.			
	İ	1		Solid Waste Storage Area-6	VII-9		-	
				composite analyses.	·,•• ·			
				Composite unaryses.				
4-02	030	009	The sites will prepare a composite analysis.	Submit the Hanford 200-E & W	IP dated 4/96,	0-2-		12/21/1000
	000	100	The sites will prepare a composite analysis.	Burial Grounds & Environmental	Commitment	Open		12/31/199
								1
				Restoration Disposal Facility	VII.B.5.b.2, pg.	10		
		1		composite analysis to	VII-9			
				Headquarters for review.	_	1		
				4				i .
94-02	030	010	The sites will prepare a composite analysis.	Complete the Headquarters	IP dated 4/96,	Open		05/31/199
				technical review and	Commitment			
				documentation of the Hanford	VII.B.5.b.2, pg.			
				200-E & W Burial Grounds &	VII-9			
		1		Env. Rest. Disp. Fac. composite	,-			·
		1		analysis.				
4-02	030	011	The sites will prepare a composite analysis.	Submit the SRS E-Area Vaults	10 4-4-4 4/04			
T-02	030	011	The sites will prepare a composite analysis.	1	IP dated 4/96,	Open		09/30/199
				and the Saltstone Disposal	Commitment			
٠.		1		Facility composite analysis to	VII.B.5.b.2, pg.			.*
				Headquarters for review.	VII-9	10.00		
4-02	030	012	The sites will prepare a composite analysis.	Complete the Headquarters	IP dated 4/96,	Open		12/31/199
				technical review and	Commitment			1.0
				documentation of the SRS E-Area	VII.B.5.b.2, pg.	The second second		
				Vaults and Saltstone Disposal	VII-9	· · ·		
				Facility composite analysis.	• • • • • • • • • • • • • • • • • • • •	j -		
					٠			
4-02	031	-	The complete radiological assessment (e.g., PA and composite	Issue disposal authorization	TP dated 4/96,			0171 000
7-02	0.51		analysis) will be reviewed and form the basis for issuance of	1		Open	The last disposal authorization	01/31/200
•				statement or direction to resolve	Commitment		statement by January 31, 2000.	
			the disposal authorization statement to document any limits on	issues or concerns.	VII.B.5.b.3, pg.			
			design or operations for the facility.		VII-9			
1 -								
4-02	031	001	The complete radiological assessment (e.g., PA and composite	Issue disposal authorization	IP dated 4/96,	Open		04/30/199
			analysis) will be reviewed and form the basis for issuance of	statement or direction to resolve	Commitment			
	·		the disposal authorization statement to document any limits on	issues or concerns for LANL	VII.B.5.b.3, pg.			·
			design or operations for the facility.	TA-54, Area G.	VII-9			
4-02	031	002	The complete radiological assessment (e.g., PA and composite	Issue disposal authorization	IP dated 4/96,	Open		05/31/199
		***	analysis) will be reviewed and form the basis for issuance of	statement or direction to resolve	Commitment	Орен		05/31/198
	ĺ .	-	the disposal authorization statement to document any limits on	i .		1		. 1
			design or energtions for the facility	issues or concerns for INEL	VII.B.5.b.3, pg.			
			design or operations for the facility.	Radioactive Waste Management	VII-9			
				Complex.	•			-
4-02	031	003	The complete radiological assessment (e.g., PA and composite	Issue disposal authorization	IP dated 4/96,	Open -	×	01/31/200
	i	1	analysis) will be reviewed and form the basis for issuance of	statement or direction to resolve	Commitment			

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

Rec #	Cmt #	Act#	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
	1	1	the disposal authorization statement to document any limits on	issues or concerns for the NTS	VII.B.5.b.3, pg.		• • • • • • • • • • • • • • • • • • • •	
			design or operations for the facility.	Area 5 Radioactive Waste	VII-9			
	1	1		Management Site.	1			
	į			The stop			•	i i
94-02	-031	004	The complete radiological aggregation to a TIA and aggregation		100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
34-02	031	004	The complete radiological assessment (e.g., PA and composite	Issue disposal authorization	IP dated 4/96,	Open		02/28/1999
		1	analysis) will be reviewed and form the basis for issuance of	statement or direction to resolve	Commitment			
			the disposal authorization statement to document any limits on	issues or concerns for the NTS	VII.B.5.b.3, pg.	. "		
			design or operations for the facility.	Area 3 Radioactive Waste	VII-9			
		1		Management Site.				
		1				. "		1
R94-02	031	005	The complete radiological assessment (e.g., PA and composite	Issue disposal authorization	IP dated 4/96,	Open		06/30/1998
		1	analysis) will be reviewed and form the basis for issuance of	statement or direction to resolve	Commitment	ope		00/30/1998
	İ		the disposal authorization statement to document any limits on	issues or concerns for the ORNL	VII.B.5.b.3, pg.			
			design or operations for the facility.	Solid Waste Storage Area-6.	VII-9			
	1			Total Waste Storage Alica-0.	111-7			
204.00	1	one			1			1-
R94-02	031	006	The complete radiological assessment (e.g., PA and composite	Issue disposal authorization	IP dated 4/96,	Open		06/30/1998
7	1		analysis) will be reviewed and form the basis for issuance of	statement or direction to resolve	Commitment	-		
	-		the disposal authorization statement to document any limits on	issues or concerns for the	VII.B.5.b.3, pg.			
			design or operations for the facility.	Hanford 200-W Burial Grounds.	VII-9			
R94-02	031	007	The complete radiological assessment (e.g., PA and composite	Issue disposal authorization	IP dated 4/96,	O	· .	07/23/1/000
11.74-02	031	1007	analysis) will be reviewed and form the basis for issuance of	statement or direction to resolve		Open	and the second second	07/31/1998
					Commitment			
4		-	the disposal authorization statement to document any limits on	issues or concerns for the	VII.B.5.b.3, pg.			
			design or operations for the facility.	Hanford 200-E Burial Grounds.	VII-9			
٠								
R94-02	031	008	The complete radiological assessment (e.g., PA and composite	Issue disposal authorization	TP dated 4/96,	Open		03/31/1998
		1.	analysis) will be reviewed and form the basis for issuance of	statement or direction to resolve	Commitment			
			the disposal authorization statement to document any limits on	issues or concerns for the	VII.B.5.b.3, pg.			1.20
	1 .		design or operations for the facility.	Savannah River E-Area Vaults.	VII-9			
					1			
nn#:n n =-	-031	1000						
R94-02	031	009	The complete radiological assessment (e.g., PA and composite	Issue disposal authorization	IP dated 4/96,	Open		03/31/1998
			analysis) will be reviewed and form the basis for issuance of	statement or direction to resolve	Commitment			
		1	the disposal authorization statement to document any limits on	issues or concerns for the	VII.B.5.b.3, pg.			
			design or operations for the facility.	Savannah River Saltstone	VII-9			
				Disposal Facility.	***			
		1						
R94-02	032	1	Capacity, as used in this Implementation Plan, addresses the	Low-Level Waste Disposal	IP dated 4/96, Cmt.	Complete		07/31/1996
, 04			quantity of both volume and radionuclide inventory that can be	Capacity Report, Revision 0.	VIII.B. I.b.1, pg.	Complete		סצפועוכווט
		1:		Capacity Report, Revision V.	VIII-4			
*		1	accepted at a disposal facility. The initial LLW disposal		V 111-4			
			capacity report will only include information on volumetric					
			capacity.					
						07/31/1996		
194-02	033	1	Currently available and planned baseline radiological capacity	Low-Level Waste Disposal	IP dated 4/96, Cmt.	Open		09/30/1997
			will be determined by analyzing site environmental data and	Capacity Report, Revision 1.	VIII.B.1.b.2, pg.	- F		
			utilizing pathway analysis modeling techniques. The		VIII-4			
	1	-	radiological capacity and projection will be contained in the		1			-
		1	first revision of the disposal capacity report as consideration of					
		-1	radiological source terms are reflected in the radiological					
		1	LandonoRious source rettils are reflected in the landonoRical					1

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

Rec#	Cmt#	Act#	Commitment Statement	Deliverable	Reference	Complete?	Descriptive Status	Due Date
			assessments.			•	+	
R94-02	034	1	Based on low-level waste inventory and projections	DOE Low-Level Waste	IP dated 4/96,	Complete	-	12/31/1996
-			information and the survey of current and planned low-level waste disposal capacity (Task VIII.B.1), a DOE low-level	Projection Program Documentation.	Commitment			
			waste disposal capacity (Task VIII.B.1), a DOE low-level waste projection program will be developed.	Documentation.	VIII.B.2, pg. VIII-4			
		1	waste projection program with be developed.			12/26/1996		
R94-02	035	ļ	A survey will be conducted to determine the common LLW	Evaluation and strategy for	IP dated 4/96.			AA MY 11 AAZ
	002		generating activities at major DOE sites, and identify practices,	improvements to LLW	Commitment	Complete	Draft report was discussed with Board Staff 8/1/96. A	08/31/1996
			procedures, policies and techniques that are effective in	minimization.	VIII.B.3, pg. VIII-5		companion report on mixed	
	1.5		reducing LLW.		VIII.D.5, pg. VIII-5		LLW minimization was sent to	
	-	1					the Board on 12/26/96.	
						08/30/1996		
R94-02	036	1.	A survey will be conducted to identify those R&D activities	Preliminary LLW management	IP dated 4/96,	Complete		06/30/1995
4			where results are applicable to LLW management program	R&D activities catalog for initial	Commitment			
			improvements.	needs identified by the Board.	IX.B.1, pg. IX-4			
						06/30/1995		-
R94-02	037		LLW R&D needs will be identified by the RDTT, other 94-2	LLW R&D needs statement.	IP dated 4/96,	Open		03/31/1997
	:		Implementation Plan task groups, and with input from other		Commitment			
			DOE-wide R&D or technology development programs.		IX.B.2, pg. IX-5			
R94-02	038		To evaluate outstanding needs, DOE intends to perform a	Identification of outstanding	IP dated 4/96,	Open		06/30/1997
			systematic crosswalk between needs and activities (gap	R&D needs.	Commitment			
			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		IX.B.3, pg. IX-5			
	4		will be documented and provided to the LLW management					
			program with recommendations on how to assimilate their			haran ya karan a		
			results.					
R94-02	039	11.1	A comprehensive strategy for meeting outstanding LLW R&D	Strategy to address outstanding	IP dated 4/96.	Open		09/30/1997
			needs will be developed for the LLW Management Task	LLW technical and R&D needs.	Commitment	Орен		V7/JU/1771
			Group. The strategy will be developed for inclusion, as		IX.B.4, pg. IX-6			
			appropriate, in the LLW Program Management Plan.					
						-		