

QUARTERLY REPORT ON DEFENSE NUCLEAR FACILITIES SAFETY
BOARD RECOMMENDATION 92-4 FOR THE PERIOD
JULY 1 - SEPTEMBER 30, 1995

TABLE OF CONTENTS

1.0 INTRODUCTION	1
1.1 PURPOSE	1
1.2 QUARTERLY HIGHLIGHTS	1
1.3 REPORT FORMAT	1
1.4 TABLE OF COMMITMENTS	2
2.0 STATUS: COMMITMENTS DUE/OVERDUE DURING THIRD QUARTER 1995 AND FORECAST FOR FOURTH QUARTER 1995.	7
2.1 SITEWIDE COMMITMENTS	7
2.2 TWRS PROGRAM COMMITMENTS	8
2.3 TWRS PROJECT COMMITMENTS.	9

QUARTERLY REPORT ON DEFENSE NUCLEAR FACILITIES SAFETY
BOARD RECOMMENDATION 92-4 FOR THE PERIOD
JULY 1 - SEPTEMBER 30, 1995

1.0 INTRODUCTION

1.1 PURPOSE

This report provides a status of the activities underway from July 1 to September 30, 1995, at the Hanford Site and at Department of Energy - Headquarters regarding the topics contained in the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 92-4, Revision 1.

1.2 QUARTERLY HIGHLIGHTS

- The DOE-RL submitted the draft TWRS SRR action plan on July 27, 1995, to DOE-HQ.
- The Site Systems Engineering Implementation Plan (SEIP) is delayed due to ongoing changes at Hanford. Changes include role of integration contractor, approval of the sitewide Systems Engineering process by the DOE-RL Site Management Board and funding uncertainties. A site-wide SE Policy Document and associated SEIP are planned to be issued by January 31, 1996.

1.3 REPORT FORMAT

The report documents the progress of activities initiated in response to the DNFSB Recommendation 92-4, Revision 1. The report is arranged in the same order as the DNFSB Recommendation 92-4 Implementation Plan, Attachment B (DOE 1994.) i.e., Sitewide Commitments, Tank Waste Remediation System (TWRS) Program Commitments, and TWRS Project Commitments. Each commitment that was due or overdue during the July through September 1995 quarter and the next quarter (October through December 1995) is identified and followed by a description of the status of each commitment. Topics for each reported commitment are:

- Completion status of commitments due during quarter and date deliverable was submitted to the DNFSB
- Forecast completion for commitments due in the subsequent quarter
- Other information as required to explain commitment status

In addition to this information, a Table of Commitments lists all DNFSB commitments contained in the plan. Shading on commitments indicate those commitments that have been submitted to the DNFSB.

1.4 TABLE OF COMMITMENTS

TABLE OF COMMITMENTS

SITEWIDE COMMITMENTS

Commitment Number	Commitment/Deliverable Title	Plan Completion Date	Date Submitted to DNFSB	Status Note
2.2.a	(1) Draft Site Functions and Requirements (dated 01/10/94) and Addendums 1, 2, and 3 (2) Draft Architecture Synthesis Basis for the Hanford Cleanup System (3) Draft Systems Engineering Product Description Report for the Hanford Cleanup Mission	6/30/94	7/12/94	
2.2.b(1)	(1) Systems Engineering Implementation Plan based on FY 1995 Multi-Year Program Plan (MYPP) logic and planning for the site	11/15/94		1
2.2.b(2)	(2) Letter of direction to affected site participants to include use of systems engineering in accordance with DOE policy to develop the technical baselines that will be used as the basis for MYPP updates	3/31/95	7/14/95	
3.6.a	Hanford Site Management System Directives	7/12/94 (Updates thru 7/14/95)	7/12/94	
3.7.d	Draft Site Systems Engineering Management Plan	3/31/94	7/12/94	
3.7.e	Final Site Systems Engineering Management Plan	Pending completion of External Review		1
3.7.f	Draft Site SEMP Implementing Procedures	2/14/95		1

TABLE OF COMMITMENTS

TWRS PROGRAM COMMITMENTS

Commitment Number	Commitment/Deliverable Title	Plan Completion Date	Date Submitted to DNFSB	Status Note
2.4.a	Initial TWRS Systems Analysis Report reflecting the systems engineering work done to 10/31/93	10/31/93	4/1/94	
2.4.b	TWRS Detailed Preliminary Functional Analysis Report	1/18/94	4/1/94	
2.4.c	TWRS Top-Level Systems Requirements Review Report	1/31/95	4/95	
2.4.d	TWRS Technical Requirements Review Report	3/31/95		2
3.2.a	TWRS Integrated Technology Plan	6/10/94	9/28/94	
3.3.a	DOE-RL and Hanford Contractor Staff Qualification and Training Process (Consistent with 93-3, Commitment 4.3)	10/31/94	11/17/94	
3.3.b	Hanford Performance-Based Training and Qualification Process (REF: 93-3 Commitment 4.3)	10/31/94	11/17/94	
3.3.c	DOE-RL Qualification and Training Evaluation and Assessment Process	10/31/94	11/17/94	
3.3.d	Report of Independent Assessment of RL and WHC TWRS Qualification and Training Process	10/21/94	10/21/94	
3.4.a	DOE-HQ (EM-36) Preliminary Staff Analysis Report	3/31/94		
3.4.b	RL TWRS Preliminary Staff Analysis Report	8/26/94		
3.4.c	DOE-HQ (EM-36) Individual Development Plans	10/31/94		
3.4.d	RL TWRS IDPs (Training Requirements Matrix)	10/31/94	11/17/94	
3.4.e	RL TWRS Orientation Report documenting status and initiation of orientation	10/31/94	11/17/94	

TABLE OF COMMITMENTS

TWRS PROGRAM COMMITMENTS

Commitment Number	Commitment/Deliverable Title	Plan Completion Date	Date Submitted to DNFSB	Status Note
3.4.f	HQ (EM-36) Orientation Report documenting status and initiation of orientation	10/31/94	11/17/94	
3.4.g	Final Staff Analysis Document	90 days after 93-3 Qualify Standards Delivery	RL: 9/9/95 HQ:	3
3.4.h	Report documenting completion of required technical training identified in IDPs and TRMs	RL: 8/31/95 HQ: 10/31/95		4
3.5.a	WHC TWRS Staffing Analysis and WHC Position Qualification Standards	1/27/95	4/25/95	
3.5.b	WHC TWRS Individual Qualification and Training Plans	2/28/95	4/25/95	
3.5.c	WHC TWRS Selection Process Report documenting status and completion	3/17/95	4/25/95	
3.6.b	TWRS Management Systems Description (MSD) document and Policy Annexes	11/30/94	12/13/94	
3.6.c	Schedule for development and issuance of the WHC TWRS Management Plan and associated documentation	12/30/94	3/30/95	
3.7.a	TWRS Industry/Government Standards Review Report	12/14/93	4/1/94	
3.7.b	A letter report summarizing the SE Comparison Analysis	10/31/94	11/10/94	
3.7.c	DOE-FM Report on DOD Systems Engineering Standard Review	3/31/95	6/19/95	
3.7.g	Draft TWRS Systems Engineering Management Plan	3/31/94	3/31/94	
3.7.h	TWRS SEMP Implementing Procedures Schedule	Included in Commitment 3.6.c		2

TABLE OF COMMITMENT

TWRS PROGRAM COMMITMENTS

Commitment Number	Commitment/Deliverable Title	Plan Completion Date	Date Submitted to DNFSB	Status
3.7.i	Revised TWRS SEMP Schedule	Included in Commitment 3.6.c		2
3.8.a	Draft Configuration Management Plan that describes technical configuration control within the TWRS program	1/31/94	4/1/94	
3.9.a	TWRS Multi-Year Work Plan	9/30/94	10/94	
3.10.a	TWRS Quality Management Policy Annex	11/30/94	12/13/94	
3.10.b	TWRS Health and Safety Management Policy Annex	11/30/94	12/13/94	

TWRS PROJECT COMMITMENTS

2.4.e	MWTF Baseline Comparison Report	9/30/95		8
2.4.f	MWTF Independent Critical Design Review Report	Prior to start of construct		8
2.4.g	Aging Waste Transfer Line Baseline Comparison Report	11/30/95		5
2.4.h	Cross-site Transfer Line Baseline Comparison Report	11/30/95		6
2.4.i	Initial Retrieval Demonstration Baseline Comparison Report	11/30/95		2
2.4.j	Initial Pretreatment Baseline Comparison Report	11/30/95		7
2.4.k	Scheduled dates for each Project Independent Design Review	1/31/95	2/13/95	
2.4.l	Summary Report for each Standdown Review	1/13/94	4/1/194	

TABLE OF COMMITMENTS

92-4 CONTINUING COMMITMENTS

Commitment Number	Commitment/Deliverable Title	Plan Completion Date	Date Submitted to DNFSB	Status Note
4.a	Quarterly Status Reports	Quarterly		
5.a	Revised 92-4 Implementation Plan	As required		
5.b	Discussions in Quarterly Status Reports	As required		

NOTES:

1. See Section 2.1.
2. The schedule for a number of TWRS commitments is uncertain pending DOE-HQ approval of the TWRS Systems Requirements Review (SRR).
3. RL portion closed out by letter from John Wagoner to the Honorable John T. Conway dated September 9, 1995. HQ to request a delay, due to Office of Environmental Management reorganization, in a separate letter.
4. The RL report will be produced in accordance with DNFSB Implementation Plan for 93-3 as stated in the September 9, 1995, letter to the Honorable John T. Conway. Correspondence regarding HQ report will be provided separately.
5. This project was canceled on July 21, 1995. A letter formally notifying HQ of the cancellation was transmitted November 6, 1995.
6. Formal notification to HQ regarding the status of the cross-site was transmitted on December 1, 1995.
7. All work on this project was suspended by July 1, 1995. The Alternative Acquisition Strategy for privatization will provide pretreatment of tank waste within TWRS. A formal request to cancel this project will be made upon agreement with the Washington State Department of Ecology.
8. MWTF is being phased out. A formal request to delete this commitment was transmitted to DOE-HQ on December 18, 1995.

2.0 STATUS: COMMITMENTS DUE/OVERDUE DURING 3RD QUARTER 1995 AND FORECAST FOR 4TH QUARTER 1995.

2.1 SITEWIDE COMMITMENTS

- 2.1.1 COMMITMENT 2.2.b(1): SYSTEMS ENGINEERING IMPLEMENTATION PLAN BASED ON FY 1995 MULTI-YEAR PROGRAM PLAN (MYPP) LOGIC AND PLANNING FOR THE SITE. (DUE: November 15, 1994)

STATUS: The Systems Engineering Implementation Plan (SEIP) continues to be delayed due to ongoing changes at Hanford, current status of SEIP is given in section 1.2.

- 2.1.2 COMMITMENT 2.2.b(2): LETTER OF DIRECTION TO AFFECTED SITE PARTICIPANTS TO INCLUDE USE OF SYSTEMS ENGINEERING IN ACCORDANCE WITH DOE POLICY TO DEVELOP THE TECHNICAL BASELINES THAT WILL BE USED AS THE BASIS FOR MULTI-YEAR PROGRAM PLAN (MYPP) UPDATES. (DUE: March 31, 1995)

STATUS: This direction is part of the Fiscal Year Work Plan (FYWP) 1996 direction to the contractors. The FYWP Direction Letter is complete and a copy was transmitted to the DNFSB on July 14, 1995.

- 2.1.3 COMMITMENT 3.6.a: HANFORD SITE MANAGEMENT SYSTEM DIRECTIVES. (DUE February 1, 1995)

STATUS: This commitment required completion of a set of Site Management System (SMS) Directives. Subsequent to this commitment the RL Site Manager required a review of all directives to reduce the amount of unnecessary requirements being imposed on the site work. As a result of that review four SMS directives were retained. These are:

- RLID 5000.1 Baseline Execution and Management Process
- RLPD 5000.1 Richland Operations Office - Site Management System
- RLID 5000.2 Richland Operations Office - Long Range Planning Process
- RLP 5000.6A Richland Operations Office Procedure - Change Control

These directives were transmitted to the DNFSB on July 14, 1995.

- 2.1.4 COMMITMENT 3.7.e: FINAL SITE SYSTEMS ENGINEERING MANAGEMENT PLAN.

STATUS: WHC will prepare and issue a Management Plan for site-wide Systems Engineering by March 31, 1996.

- 2.1.5 COMMITMENT 3.7.f: DRAFT SITE SEMP IMPLEMENTING PROCEDURES. (DUE: February 14, 1995)

STATUS: Development of these procedures was not included in the current FY 1996 work scope. However, TWRS is continuing to develop systems engineering procedures based on the existing TWRS SEMP. These procedures will be incorporated into a single set of Westinghouse Hanford

Company/Kaiser Engineering procedures. These procedures will form the basis for a set of Hanford Site procedures that incorporate the principles of system engineering, and which will be issued to Projects/Programs for guidance by February 28, 1996.

2.2 TWRS PROGRAM COMMITMENTS

2.2.2 COMMITMENT 2.4.d: TWRS TECHNICAL REQUIREMENTS REVIEW REPORT. (DUE: March 31, 1995)

STATUS: The schedule for the TWRS Technical Requirements Review is uncertain pending approval of the TWRS System Requirements Review (SRR) Action Plan submitted to DOE-HQ. The SRR Action Plan was submitted to DOE-Headquarters for approval on July 27, 1995. Upon approval of the action plan the schedule for the TWRS Technical Requirements Review will be revised and the DNFSB will be notified as required by section 5 of the implementation plan. In the interim, work is continuing to develop the technical baseline with supporting analysis and with the goal to complete Technical Requirements Specifications (TRS) in FY 1996.

2.2.3 COMMITMENT 3.4.g: FINAL STAFF ANALYSIS DOCUMENT. (DUE: 90 days after 93-3 Qualification Standards Delivery)

RL STATUS: This commitment was completed as described in the letter to Chairman John T. Conway dated September 9, 1995.

HQ STATUS: Report to be submitted to Chairman John T. Conway under separate cover.

2.2.4 COMMITMENT 3.4.h: REPORT DOCUMENTING COMPLETION OF REQUIRED TECHNICAL TRAINING IDENTIFIED IN IDPs AND TRMs. (Due: August 31, 1995)

STATUS: The original schedule for this Commitment was one year from the completion of the TWRS Individual Development Plans (IDPs) (ref. Commitment 3.4.c and 3.4.d). These IDPs were submitted to the DNFSB but the Training Coordinator and Assistance Program (TCAP) Assessment subsequently found them inadequate. They are currently being revised under the 93-3 Implementation Plan work scope. The completion of the upgraded IDPs and the required training identified will follow the schedule in the 93-3 Implementation Plan. The intent to follow the 93-3 Implementation plan schedule was formalized in the September 9, 1995, letter to Chairman John T. Conway.

HQ STATUS: Report to be submitted to Chairman John T. Conway under separate cover.

2.2.6 COMMITMENT 3.7.h: TWRS SEMP IMPLEMENTING PROCEDURES SCHEDULE. (DUE: Included in Commitment 3.6.c)

STATUS: The TWRS System Requirements Review (SRR) impacted the schedule for the TWRS SEMP and its implementing procedures. The SRR Action Plan was submitted to DOE-HQ for approval on July 27, 1995, and again on September 18, 1995, due to receipt of comments from DOE-HQ. The review and comment cycle for the Action Plan is continuing while planning work

for the SEMP is also underway. This planning work takes advantage of those details of the Action Plan which are tentatively already approved related to the SEMP. Upon final approval of the SRR Action Plan, a verification of the planning for completion of the TWRS SEMP and its implementing procedures will be performed and the DNFSB will be provided this finalized schedule.

2.2.7 COMMITMENT 3.7.i: REVISED TWRS SEMP SCHEDULE.

(DUE: Included in Commitment 3.6.c.)

STATUS: The TWRS System Requirements Review (SRR) impacted the schedule for the TWRS SEMP and its implementing procedures. The SRR Action Plan was submitted to DOE-HQ for approval on July 27, 1995, and again on September 18, 1995, due to receipt of comments from DOE-HQ. The review and comment cycle for the Action Plan is continuing while planning work for the SEMP is also underway. This planning work takes advantage of those details of the Action Plan that are already tentatively approved related to the SEMP. Upon final approval of the SRR Action Plan, a verification of the planning for completion of the TWRS SEMP and its implementing procedures will be performed and the DNFSB will be provided this finalized schedule.

2.3 TWRS PROJECT COMMITMENTS.

2.3.1 COMMITMENT 2.4.e: MWTF BASELINE COMPARISON REPORT.

(DUE: September 30, 1995)

STATUS: As previously identified in numerous staff visits and in the quarterly report for the first quarter of calendar year 1995, the Multi-Function Waste Tank Facility (Project W-236A) is being phased out. The review and approval process for formally closing out this project includes a Tri-Party Agreement change package and a Major System Acquisition change package. The Tri-Party Agreement change request was signed and approved December 1, 1995, and the RL Manager approved the Baseline Change Proposal to cancel the MWTF project on December 11, 1995. As required by section 5 of the Implementation Plan, a memorandum was transmitted to DOE HQ on December 18, 1995, regarding cancellation of MWTF.

3.2 COMMITMENT 2.4.f: MWTF INDEPENDENT CRITICAL DESIGN REVIEW REPORT.

(DUE: November 30, 1995)

STATUS: See Status of 2.4.e above.

2.3.3 COMMITMENT 2.4.g: AGING WASTE TRANSFER LINE BASELINE COMPARISON REPORT. (DUE: November 30, 1995)

STATUS: This project was canceled by DOE-RL on July 21, 1995. The DNFSB staff were informally notified of the cancellation on August 15, 1995. Formal notification of the cancellation was provided to DOE-HQ on November 6, 1995.

2.3.4 COMMITMENT 2.4.h: CROSS-SITE TRANSFER LINE BASELINE COMPARISON REPORT.

(DUE: November 30, 1995)

STATUS: The Technical Requirements Review Report (Commitment 2.4.d), and the Design Requirements Document (DRD) that would have evolved out of it, were delayed by the SRR and the time required to gain approval of the SRR Action Plan; consequently no DRD for the project was developed. As a work-around, the project developed a Preliminary Design Requirements Document for comparison against the existing baseline information. A copy of this Preliminary Design Requirements Document was requested by DNFSB staff and has been provided. The Baseline Comparison Report (BCR) was completed on August 30, 1995. A memorandum documenting this work-around approach was transmitted to DOE-HQ on December 1, 1995. An Independent Design Review for the project was completed October 16, 1995.

2.3.5 COMMITMENT 2.4.i: INITIAL RETRIEVAL DEMONSTRATION BASELINE COMPARISON REPORT. (DUE: November 30, 1995)

STATUS: The schedule for preparation of the Baseline Comparison Report is dependent on the approval of the SRR Action Plan. Therefore, this commitment is delayed and will be renegotiated upon approval of the SRR Action Plan. Title II activities were initiated based on waste consolidation requirements resulting from cancellation of Multi-Function Waste Tank Facility (W-236A).

2.3.6 COMMITMENT 2.4.j: INITIAL PRETREATMENT BASELINE COMPARISON REPORT. (DUE: November 30, 1995)

STATUS: All work on this project was suspended July 1, 1995, per DOE-RL directive. Funding is not allocated to the project in FY 1996; work will not be resumed and therefore the baseline comparison report is no longer required. The Alternative Acquisition Strategy using privatization now provides the means for pretreatment of tank waste within TWRS. A formal request will be made to cancel the project upon agreement with the Washington State Department of Ecology with respect to the Hanford Federal Facility Compliance Agreement (Tri-Party Agreement). The DNFSB will be notified when the cancellation has been approved.