



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

98-SCD-139

OCT 29 1998

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

Dear Mr. Chairman:

TRANSMITTAL OF THE DEFENSE NUCLEAR FACILITIES SAFETY BOARD (DNFSB)
RECOMMENDATION 93-5 IMPLEMENTATION PLAN (IP) QUARTERLY REPORT FOR
JULY THROUGH SEPTEMBER 1998

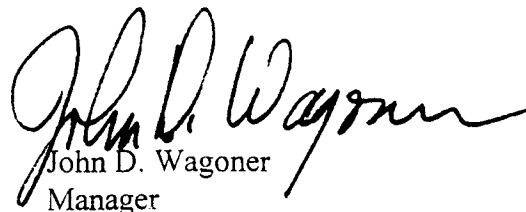
The DNFSB Quarterly Report for July through September 1998 is attached. This quarterly report addresses issues and milestones as presented in Recommendation 93-5 IP, Revision 1.

The U. S. Department of Energy (DOE), Richland Operations Office (RL) staff has proposed closure of one deliverable this quarter, Milestone 5.3.6.1h, "Letter Reporting Completion of Tank-by-Tank Safety Status Evaluation." Additionally, DNFSB held a public meeting on August 5, 1998, in which RL staff discussed the path forward to closing the issues raised in Recommendation 93-5. RL and its contractors will be developing a document to show that the information collected is sufficient to show that all safety needs have been met, and a system is in place to respond to future needs.

RL staff worked closely with DOE Headquarters staff to secure authorization for the use of PAS-1 shipping casks. These casks are currently being used to ship large volume tank samples from Hanford to Savannah River for BNFL, Incorporated, in support of the Privatization Project.

If you have any questions, please contact me or your staff may contact Jackson Kinzer, Assistant Manager for Tank Waste Remediation System, on (509) 376-7591.

Sincerely,


John D. Wagoner
Manager

SCD:NCW

Attachment

cc: see page 2

The Honorable John T. Conway
98-SCD-139

-2-

OCT 29 1998

cc w/attach:

J. M. Owendoff, EM-2

C. A. Peabody, EM-4

R. E. Lightner, EM-38

K. T. Lang, EM-38

J. W. Hales, FDH

M. A. Payne, LMHC (w/o attach)

W. E. Ross, LMHC (w/o attach)

M. B. Whitaker, S-3.1

DNFSB 93-5 QUARTERLY REPORT, JULY 1 TO SEPTEMBER 30, 1998**EXECUTIVE SUMMARY**

The highlights for this quarter were the continued successful operation of the Rotary Mode Core System in several tank farms, continuing progress toward issuing both the Organic Solvent and Organic Complexant Topical Reports, completing the certification inspections of the PAS-1 shipping cask, starting the shipment of waste samples to the Privatization Contractor, the FY 1998 sampling successes, and the public meeting on closure of Recommendation 93-5. One Implementation Plan milestone was proposed as complete during this quarter. The current issues discussed are the status of the two milestones related to the High Heat Safety Issue, the status of the Final Safety Analysis Report (FSAR), and the resumption of work at the 222-S Laboratory following their suspension for conduct of operations concerns.

DNFSB 93-5 QUARTERLY REPORT, JULY 1 TO SEPTEMBER 30, 1998

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DNFSB 93-5 QUARTERLY REPORT, JULY 1 TO SEPTEMBER 30, 1998**1 PURPOSE**

This quarterly report covers High Level Waste Tank Characterization activities at the Hanford Site related to the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-5 during the period July 1 to September 30, 1998. The Recommendation dealt with insufficient technical information to ensure safe storage, operation, retrieval, and disposal of the Hanford high-level tank wastes in both single-shell tanks (SST) and double-shell tanks (DST). An Implementation Plan responding to Recommendation 93-5 was transmitted to the DNFSB by the Secretary of Energy in January 1994. The plan was accepted by the DNFSB on March 25, 1994. On June 17, 1996, Revision 1 to the Implementation Plan was submitted to the DNFSB. Revision 1 was accepted by the DNFSB on September 4, 1996 with comments.

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2. QUARTERLY HIGHLIGHTS

2.01 Milestone Submitted:

5.6.3.1h, Letter reporting completion of tank-by-tank safety status evaluation, July 22, 1998. This milestone was due July 1998 and was completed on schedule.

2.02 Status of Rotary Core Drilling - Modifications to the second Rotary Mode Core System (RMCS) Exhauster to meet the major stack requirements were completed. A revised Toxic Air Pollutant Notice of Construction for the RMCS Exhauster was approved by the State of Washington Department of Ecology. This revision allows operation of the RMCS Exhauster on all of the remaining tanks that require rotary drilling. Six tanks were sampled using rotary mode drilling this quarter. Sample recovery on cores started in the rotary mode has been significantly better than expected. Based on very limited experience with RMCS rotary mode core sampling in 1995, recovery of 25% or lower was expected. Since deploying the RMCS systems in December 1997 following modifications for sampling in flammable gas tanks, sample recovery on cores started in the rotary mode has averaged 45%.

2.03 Organic Complexant Topical Report - Comments received from reviews by the U.S. Department of Energy (DOE), Richland Operations Office (RL), DNFSB staff, and the Chemical Reactions Sub-Tank Advisory Panel (SubTAP) were incorporated into the topical report by the contractor, and it was resubmitted to DOE RL on August 17, 1998. This submittal includes an authorization basis amendment that will do the following once approved: (1) close the condensed-phase organic nitrate Unreviewed Safety Question; (2) resolve the organic complexant safety issue; and (3) allow for removal of the organic tanks from the Watch List. The topical report will also complete DNFSB 93-5 milestone 5.4.3.3b, "Letter reporting results of testing completion (using real waste samples) to confirm safe storage criteria, and organic solubility and aging effects on fuel content. If models are confirmed, an assessment of tank wastes compared to safe storage criteria will be scheduled." This assessment is included in the topical report. This submittal is under review by DOE RL.

2.04 PAS-1 Cask Certification - The DOE certification of the PAS-1 shipping cask for transporting tank waste samples was reported last quarter. The cask inspections required by the certification have been satisfactorily completed. The first shipment of waste samples to the privatization contractor using the PAS-1 cask will be made in early October 1998.

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- 2.05 Waste Sample Shipments to Privatization Contractor - The shipment of waste samples to the privatization contractor (BNFL, Incorporated) was started this quarter. Samples from tanks AN-103, AN-107, and AW-101 were shipped during August and September using the Hanford "Hedge-Hog" Type A container system.
- 2.06 Fiscal Year (FY) 1998 Sampling and Analysis Successes - The sampling accomplished during FY 1998 exceeded the sampling planned by the Multi-Year Work Plan for both core samples and grab samples: 28 cores were planned and 31 cores were accomplished; 30 grabs were planned and 34 grabs were accomplished; and 10 vapor samples were planned and 10 were accomplished. In addition, four auger samples, one additional grab sample, and 26 additional vapor samples were accomplished in response to requests and funding from other organizations. Analytical Services exceeded the planned 20.0 Analytical Equivalent Units (AEUs) by accomplishing 23.6 AEUs of analysis with a 6% reduction in the unit cost of services.
- 2.07 Tanks Sampled - During this quarter five tanks were core sampled, eight tanks grab sampled, three tracer gas vapor samples were taken, and monthly vapor grab samples at the Standard Hydrogen Monitoring System (SHMS) cabinets were taken.
- 2.08 Public Meeting on Path to Closure of DNFSB Recommendation 93-5 - On August 5, 1998, DNFSB conducted a public meeting in Richland, Washington. A two hour presentation was made to the full Board on the current status of the Implementation Plan for Recommendation 93-5, and the path forward to closing the issues raised on Recommendation 93-5. A major portion of the presentation focused on the results of tank characterization to support safe storage and closure of tank safety issues. Also discussed were support to the tank waste retrieval and disposal programs, and the institutional improvements made to improve the characterization planning and data dissemination process.

3 CURRENT ISSUES

- 3.01 High Heat Safety Issue Milestones - Initiating the retrieval of tank C-106 continues to be on schedule for November 1998. Waste transfers are scheduled to commence during October 1998. Resolution of the High Heat Safety Issue is estimated to be completed in December 1999.
- 3.02 FSAR Milestone - Milestone 5.4.3.1d, Approved FSAR, was due in June 1997. Tier II review, including preparation of the Safety Evaluation Report, will be completed late October to early November 1998. Tier III is undergoing review in parallel with Tier II.

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Final Tier III review is to begin November 2, 1998, with anticipated RL approval by the January 1999 completion date.

- 3.03 222-S Laboratory Restart - The suspension of 222-S Laboratory activities due to a recent increase in the number of Radiation Work Procedures infractions and related conduct of operations issues was reported last quarter. A plan for restarting the laboratory was issued in early July. Many key analytical processes were restarted within two weeks and the laboratory was fully restarted by the end of July.

4. STATUS OF REVISION 1 MILESTONES OVERDUE, DUE WITHIN SIX MONTHS, OR COMPLETED DURING THE REPORTING QUARTER

- 4.01 Safe Storage of Tank Wastes and Safe Operation of Tank Farms

**Commitment
Number**

5.4.3.1.1 TWRS Manage Tank Waste Function Authorization Basis

Statement: Upgrade the Authorization Basis for the TWRS Manage Tank Waste Function

Responsible Manager: Assistant Manager, TWRS

Applicable facilities and programs: TWRS

Milestone deliverables/due dates:

d. Approved FSAR.

Due Date: June 1997

Status: Overdue. The estimated completion date (ECD) is January 1999. Tier II review (preparation of the Safety Evaluation Report) is being completed behind schedule.

5.4.3.1.2 Organic Complexants

Statement: Complete testing and evaluation confirming simulant results with real waste.

Responsible Manager: Assistant Manager, TWRS

Applicable facilities and programs: TWRS

Milestone deliverables/due dates:

- b. Letter reporting results of testing completion (using real waste samples) to confirm safe storage criteria, and organic solubility and aging effects on fuel content. If models are confirmed, an assessment of tank wastes compared to safe storage criteria will be scheduled.**

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Due Date: November 1998

Status: On Schedule.

5.4.3.6 High Heat

Statement: Retrieve wastes from tank C-106

Responsible Manager: Assistant Manager, TWRS

Applicable facilities and programs: TWRS

Milestone deliverables/due dates:

c. Letter reporting initiation of tank C-106 waste retrieval.

Due Date: October 1997

Status: Overdue. ECD is November 1998.

d. Letter reporting completion of topical report to resolve the High Heat Safety Issue.

Due Date: May 1998

Status: Overdue. ECD is December 1999.

4.02 Technical Basis for Characterization

5.6.3.1 Complete Tank Waste Characterization Basis Sampling and Analysis

Statement: Complete the sampling and analysis specified by the Tank Waste Characterization Basis (approximately 28 tanks) to provide the highest priority information requested by the programmatic DQOs.

Responsible Manager: Assistant Manager, TWRS

Applicable facilities and programs: TWRS

Milestone deliverables/due dates:

h. Letter reporting completion of tank-by-tank safety status evaluation.

Due Date: July 1998

Status: Complete. Letter reporting completion of this milestone was submitted to DNFSB on July 22, 1998.

i. Update Tank Content Models or define limitations of the models.

Due Date: December 1998

Status: On Schedule.

5. REFERENCES

None.

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6. APPENDICES

6.01 Tanks Sampled during Fourth Quarter FY 1998 (July through September 1998)

| Sample | Actual Start | Actual Finish |
|--|---------------------|----------------------|
| U-107 Rotary Samples 2 Segments 8 High Priority | 6/4/98 | 7/15/98 |
| SX-102 Rotary Samples 2 Segments 11 | 6/15/98 | 7/7/98 |
| A-244 Vapor Tracer Gas Study | 6/30/98 | 7/2/98 |
| AY-102 Grab Sample | 7/7/98 | 7/7/98 |
| S-244 Vapor Tracer Gas Study | 7/8/98 | 7/10/98 |
| BY-105 Rotary Samples 1 Segments 8 High Priority | 7/10/98 | 8/6/98 |
| Vapor SHMS Grab Samples - Jul | 7/15/98 | 7/16/98 |
| AN-102 Grab Sample 3 Privatization | 7/20/98 | 7/24/98 |
| C-104 Rotary Sampling Samples 3 Segments 5 | 7/21/98 | 8/10/98 |
| BX-244 Vapor Tracer Gas Study | 7/21/98 | 7/24/98 |
| S-304 Grab Sample - Compatibility | 7/29/98 | 7/29/98 |
| ER-311 Grab Sample - Compatibility | 8/4/98 | 8/5/98 |
| AN-102 Grab Sample 3 Privatization | 8/10/98 | 8/14/98 |
| BY-105 Rotary Sample 1 Segments 9 High Priority | 8/11/98 | 9/4/98 |
| Vapor SHMS Grab Samples - Aug | 8/19/98 | 8/21/98 |
| SX-106 Grab Sample | 8/26/98 | 8/26/98 |
| W-320 SHMS Grab (C-106/AY-102) | 8/31/98 | 9/30/98 |
| S-103 Grab Sample - Compatibility (Saltwells) | 9/4/98 | 9/4/98 |
| Vapor SHMS Grab Samples - Sep | 9/14/98 | 9/22/98 |
| SY-102 Grab Sample (99-2 Compatibility) | 9/22/98 | 9/22/98 |

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6.02 Sampling Schedule for First Quarter FY 1999 (October through December 1998)

| Sample | Early Start | Early Finish |
|---|--------------------|---------------------|
| Cone Penetrometer Cold Test #2 | 9/1/98 | 10/30/98 |
| TX-113 Rotary Samples 2 Segments 11 | 9/14/98 | 10/15/98 |
| AZ-102 Rotary Sample 1 Segments 17 | 9/16/98 | 10/1/98 |
| Vapor SHMS Samples - Oct | 10/1/98 | 10/21/98 |
| U-105 Grab Sample Compatibility | 10/6/98 | 10/8/98 |
| SY-101 Push Sample 2 Segment 22 | 10/6/98 | 11/2/98 |
| W-320 SHMS Sample (C-106/AY-102) | 10/13/98 | 10/13/98 |
| S-102 Grab Sample Compatibility (SW) | 10/26/98 | 10/28/98 |
| Z-361 Vapor Sample | 10/27/98 | 11/2/98 |
| TX-116 Rotary Samples 2 Segments 12 | 10/30/98 | 12/4/98 |
| AY-102 Grab Sample C-106 Retrieval | 10/31/98 | 10/31/98 |
| AW-102 Grab Sample 1.3 (99-1 Campaign) | 11/2/98 | 11/4/98 |
| Vapor SHMS Samples - Nov | 11/2/98 | 11/20/98 |
| AY-102 Grab Sample C-106 Retrieval | 11/15/98 | 11/15/98 |
| S-106 Grab Sample Compatibility (SW) | 11/16/98 | 11/18/98 |
| BY-105 Grab Sample Compatibility (SW) | 12/1/98 | 12/3/98 |
| AP-106 Grab Sample (99-2 Compatibility) | 12/1/98 | 12/3/98 |
| Vapor SHMS Samples - Dec | 12/1/98 | 12/21/98 |
| TX-118 Rotary Sample 2 Segments 8 High Priority | 12/2/98 | 1/13/99 |
| AY-102 Grab Sample C-106 Retrieval | 12/3/98 | 12/3/98 |
| AY-102 Grab Sample C-106 Retrieval | 12/15/98 | 12/15/98 |
| S-101 Grab Sample Compatibility (SW) | 12/15/98 | 12/17/98 |

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6.03 List of Tank Sampling and Analysis Plans Issued during the Quarter

| Tank | Number | Rev | Date |
|-------------|---|-------------------|----------------------------------|
| AN-102 | HNF-2158 (Privatization Grab) | 1-A | 09/30/98 |
| AN-107 | HNF-2413 (Privatization Grab) | 0-A | 09/30/98 |
| AY-102 | HNF-2958 (Grab) | 0 | 07/02/98 |
| AZ-102 | HNF-3421 (Push Mode) | 0 | 09/28/98 |
| TX-113 | HNF-3039 (Rotary Mode) | 0 | 08/04/98 |
| TX-116 | HNF-3120 (Rotary Mode) | 0 | 08/12/98 |
| TX-118 | HNF-SD-WM-TSAP-123 (Push Mode) | 1-A | 08/10/98 |
| * | HNF-SD-WM-TSAP-150 (Compatibility Grab Sampling and Analysis Plan for FY 1998) | 1-A 1-B 1-C | 07/23/98 09/03/98 09/17/98 |

6.04 List of Tank Characterization Reports Issued during the Quarter

| Tank | Number | Rev | Date |
|-------------|------------------|------------|-------------|
| A-101 | HNF-SD-WM-ER-673 | 0-B | 09/18/98 |
| A-102 | WHC-SD-WM-ER-597 | 0-B | 09/28/98 |
| A-103 | HNF-SD-WM-ER-709 | 0-A | 09/28/98 |
| A-104 | HNF-SD-WM-ER-666 | 0-A | 09/28/98 |
| A-105 | HNF-SD-WM-ER-667 | 0-A | 09/28/98 |
| A-106 | HNF-SD-WM-ER-721 | 0-A | 09/24/98 |
| AN-101 | WHC-SD-WM-ER-578 | 0-B | 08/27/98 |
| AN-102 | WHC-SD-WM-ER-545 | 1-B | 08/27/98 |
| AN-103 | HNF-SD-WM-ER-702 | 0-C | 08/05/98 |
| AN-104 | HNF-SD-WM-ER-690 | 0-A | 09/11/98 |
| AN-105 | HNF-SD-WM-ER-678 | 0-C | 09/11/98 |
| AN-106 | WHC-SD-WM-ER-569 | 0-B | 07/23/98 |
| AN-107 | WHC-SD-WM-ER-600 | 0-B | 09/11/98 |
| AP-101 | HNF-SD-WM-ER-357 | 1-B | 09/14/98 |
| AP-102 | HNF-SD-WM-ER-358 | 1-B | 09/18/98 |
| AP-103 | HNF-SD-WM-ER-359 | 1-B | 09/18/98 |

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| Tank | Number | Rev | Date |
|-------------|-------------------------------|------------|----------------------|
| AP-104 | WHC-SD-WM-ER-596 | 0-B | 09/24/98 |
| AP-105 | HNF-SD-WM-ER-360 | 2-A | 09/18/98 |
| AP-106 | HNF-SD-WM-ER-361 | 1-B | 09/18/98 |
| AP-107 | HNF-SD-WM-ER-362 | 1-B | 09/18/98 |
| AP-108 | WHC-SD-WM-ER-593 | 0-B | 09/18/98 |
| AW-101 | HNF-SD-WM-ER-470 | 0-B 1 | 08/03/98 08/25/98 |
| AW-102 | HNF-SD-WM-ER-363 | 1-C | 09/18/98 |
| AW-103 | WHC-SD-WM-ER-455 | 1 1-A | 09/03/98 09/10/98 |
| AW-104 | WHC-SD-WM-ER-453 | 1 | 09/16/98 |
| AW-105 | HNF-SD-WM-ER-364 | 2 | 09/01/98 |
| AW-106 | HNF-SD-WM-ER-365 | 1-B | 09/18/98 |
| AX-101 | HNF-SD-WM-ER-649 | 0-A 1 | 08/03/98 08/25/98 |
| AX-102 | WHC-SD-WM-ER-472 | 0-D | 09/24/98 |
| AX-103 | HNF-SD-WM-ER-685 | 1 | 09/14/98 |
| AX-104 | HNF-SD-WM-ER-675 | 1 | 08/26/98 |
| AY-101 | WHC-SD-WM-ER-605 | 0-B | 09/28/98 |
| AY-102 | WHC-SD-WM-ER-454 | 0-C | 09/28/98 |
| AZ-101 | WHC-SD-WM-ER-410 | 0-B | 08/03/98 |
| AZ-102 | WHC-SD-WM-ER-411 | 0-C | 07/29/98 |
| B-101 | WHC-SD-WM-ER-528 | 0-B | 09/18/98 |
| B-102 | WHC-SD-WM-ER-405 | 0-D | 09/18/98 |
| B-103 | WHC-SD-WM-ER-488 | 0-D | 09/18/98 |
| B-104 | WHC-SD-WM-ER-552 | 0-B | 09/18/98 |
| B-105 | HNF-SD-WM-ER-722 | 0-A | 09/24/98 |
| B-106 | WHC-SD-WM-ER-601 | 0-B | 09/15/98 |
| B-112 | WHC-SD-WM-ER-466 | 0-D | 09/24/98 |
| B-201 | PNL-10100 HNF-SD-WM-ER-550 | 1-B | 09/24/98 |
| B-202 | WHC-SD-WM-ER-371 | 0-B | 09/28/98 |
| B-203 | WHC-SD-WM-ER-587 | 0-B | 09/24/98 |

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| Tank | Number | Rev | Date |
|--------|---------------------------------|-----|----------|
| B-204 | WHC-SD-WM-ER-581 | 0-B | 09/28/98 |
| BX-101 | WHC-SD-WM-ER-408 | 0-D | 09/30/98 |
| BX-102 | HNF-SD-WM-ER-724 | 0-A | 09/24/98 |
| BX-103 | WHC-SD-WM-ER-535 | 0-B | 09/28/98 |
| BX-104 | WHC-SD-WM-ER-599 | 0-B | 09/24/98 |
| BX-105 | WHC-SD-WM-ER-406 | 0-D | 09/24/98 |
| BX-106 | WHC-SD-WM-ER-570 | 0-B | 09/28/98 |
| BX-107 | WHC-EP-0739 HNF-SD-WM-ER-539 | 1-B | 09/24/98 |
| BX-108 | WHC-SD-WM-ER-407 | 0-D | 09/24/98 |
| BX-109 | WHC-SD-WM-ER-572 | 0-C | 09/30/98 |
| BX-110 | WHC-SD-WM-ER-566 | 1 | 09/21/98 |
| BX-112 | WHC-SD-WM-ER-602 | 0-B | 09/24/98 |
| BY-101 | HNF-SD-WM-ER-647 | 0-A | 09/14/98 |
| BY-102 | HNF-SD-WM-ER-630 | 0-B | 09/28/98 |
| BY-103 | HNF-SD-WM-ER-663 | 0-A | 09/14/98 |
| BY-105 | WHC-SD-WM-ER-598 | 0-B | 09/15/98 |
| BY-106 | WHC-SD-WM-ER-616 | 0-B | 09/15/98 |
| BY-107 | HNF-SD-WM-ER-637 | 0-B | 09/15/98 |
| BY-108 | WHC-SD-WM-ER-533 | 0-C | 09/16/98 |
| BY-110 | WHC-SD-WM-ER-591 | 0-B | 09/16/98 |
| BY-111 | HNF-SD-WM-ER-687 | 0-B | 09/17/98 |
| BY-112 | HNF-SD-WM-ER-701 | 0-A | 09/30/98 |
| C-101 | WHC-SD-WM-ER-473 | 0-D | 09/24/98 |
| C-102 | HNF-SD-WM-ER-651 | 0-A | 09/24/98 |
| C-103 | WHC-SD-WM-ER-558 | 0-B | 09/25/98 |
| C-104 | HNF-SD-WM-ER-679 | 0-B | 09/28/98 |
| C-105 | WHC-SD-WM-ER-489 | 0-D | 09/28/98 |
| C-106 | WHC-SD-WM-ER-615 | 0-B | 09/30/98 |
| C-107 | WHC-SD-WM-ER-474 | 0-D | 09/25/98 |
| C-108 | WHC-SD-WM-ER-503 | 0-B | 09/29/98 |
| C-109 | WHC-EP-0668 HNF-SD-WM-ER-402 | 1-C | 09/30/98 |

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| Tank | Number | Rev | Date |
|-------------|------------------|------------|----------------------|
| C-110 | HNF-SD-WM-ER-367 | 1-B | 09/30/98 |
| C-111 | WHC-SD-WM-ER-475 | 0-D | 09/30/98 |
| C-112 | HNF-SD-WM-ER-541 | 1-B | 09/25/98 |
| C-201 | HNF-2866 | 1 0 | 09/17/98 09/17/98 |
| C-202 | HNF-2866 | 1 0 | 09/17/98 09/17/98 |
| C-203 | WHC-SD-WM-ER-478 | 0-D | 09/24/98 |
| C-204 | WHC-SD-WM-ER-479 | 0-B | 09/24/98 |
| S-101 | WHC-SD-WM-ER-613 | 0-B | 09/24/98 |
| S-102 | WHC-SD-WM-ER-611 | 0-B | 09/30/98 |
| S-103 | HNF-SD-WM-ER-668 | 0-A | 09/28/98 |
| S-104 | HNF-SD-WM-ER-370 | 1-B | 09/30/98 |
| S-105 | HNF-SD-WM-ER-669 | 0-A | 09/30/98 |
| S-107 | WHC-SD-WM-ER-589 | 0-C | 09/28/98 |
| S-108 | HNF-SD-WM-ER-641 | 0-A | 09/28/98 |
| S-109 | HNF-SD-WM-ER-627 | 0-C | 09/29/98 |
| S-110 | HNF-SD-WM-ER-642 | 0-A | 09/24/98 |
| S-111 | HNF-SD-WM-ER-638 | 0-B | 09/24/98 |
| S-112 | HNF-SD-WM-ER-670 | 0-A | 09/24/98 |
| SX-101 | HNF-SD-WM-ER-660 | 1 | 09/14/98 |
| SX-102 | HNF-SD-WM-ER-661 | 0-A | 09/24/98 |
| SX-103 | HNF-SD-WM-ER-662 | 0-A | 09/28/98 |
| SX-104 | HNF-SD-WM-ER-643 | 0-A | 09/28/98 |
| SX-105 | HNF-SD-WM-ER-644 | 0-A | 09/28/98 |
| SX-106 | HNF-SD-WM-ER-645 | 1 | 09/16/98 |
| SX-107 | HNF-SD-WM-ER-671 | 0-A | 09/24/98 |
| SX-108 | WHC-SD-WM-ER-582 | 0-B | 09/24/98 |
| SX-109 | HNF-SD-WM-ER-706 | 0-A | 09/24/98 |
| SX-110 | HNF-SD-WM-ER-681 | 0-A | 09/24/98 |
| SX-111 | HNF-SD-WM-ER-682 | 0-A | 09/28/98 |
| SX-112 | HNF-SD-WM-ER-683 | 0-A | 09/25/98 |
| SX-113 | WHC-SD-WM-ER-480 | 0-D | 09/28/98 |

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| Tank | Number | Rev | Date |
|--------|--|------------|----------------------|
| SX-114 | HNF-SD-WM-ER-707 | 0-A | 09/30/98 |
| SX-115 | HNF-SD-WM-ER-684 | 0-A | 09/11/98 |
| SY-101 | WHC-SD-WM-ER-409 | 0-B | 07/23/98 |
| SY-102 | HNF-SD-WM-ER-366 | 1 | 08/28/98 |
| SY-103 | WHC-SD-WM-ER-471 | 1-B | 07/31/98 |
| T-101 | HNF-SD-WM-ER-710 | 0-A | 09/11/98 |
| T-102 | PNL-10101 HNF-SD-WM-ER-700 | 0-B | 09/10/98 |
| T-103 | HNF-SD-WM-ER-725 | 0-A | 09/28/98 |
| T-104 | HNF-SD-WM-ER-372 | 1-B | 09/10/98 |
| T-105 | HNF-SD-WM-ER-369 | 2-A 2-B | 07/20/98 09/14/98 |
| T-106 | WHC-SD-WM-ER-544 | 0-B | 09/10/98 |
| T-107 | HNF-SD-WM-ER-382 | 1-B | 09/28/98 |
| T-108 | WHC-SD-WM-ER-554 | 0-C | 09/10/98 |
| T-109 | WHC-SD-WM-ER-559 | 0-B | 09/10/98 |
| T-110 | HNF-SD-WM-ER-686 | 1-A | 09/11/98 |
| T-111 | WHC-EP-0806 HNF-SD-WM-ER-540 | 1-B | 09/18/98 |
| T-201 | HNF-SD-WM-ER-726 (superseded by HNF-1501) HNF-1501 | 0-A | 07/14/98 |
| T-202 | HNF-SD-WM-ER-727 (superseded by HNF-1501) HNF-1501 | 0-A | 07/14/98 |
| T-203 | HNF-SD-WM-ER-728 (superseded by HNF-1501) HNF-1501 | 0-A | 07/14/98 |
| T-204 | HNF-SD-WM-ER-729 (superseded by HNF-1501) HNF-1501 | 0-A | 07/14/98 |
| TX-101 | HNF-SD-WM-ER-689 | 0-A | 09/28/98 |
| TX-102 | HNF-SD-WM-ER-654 | 0-A | 09/11/98 |
| TX-103 | HNF-SD-WM-ER-704 | 0-A | 09/28/98 |
| TX-104 | HNF-SD-WM-ER-672 | 0-A | 09/29/98 |

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| Tank | Number | Rev | Date |
|-------------|---------------------------------|------------|-------------|
| TX-105 | HNF-SD-WM-ER-655 | 0-A | 09/11/98 |
| TX-106 | HNF-SD-WM-ER-656 | 0-A | 09/14/98 |
| TX-107 | WHC-SD-WM-ER-584 | 0-B | 09/29/98 |
| TX-108 | HNF-SD-WM-ER-717 | 0-A | 09/29/98 |
| TX-109 | HNF-SD-WM-ER-640 | 0-A | 09/29/98 |
| TX-110 | HNF-SD-WM-ER-658 | 0-A | 09/29/98 |
| TX-111 | HNF-SD-WM-ER-659 | 0-A | 09/29/98 |
| TX-112 | HNF-SD-WM-ER-715 | 0-A | 09/14/98 |
| TX-113 | HNF-SD-WM-ER-716 | 0-A | 09/28/98 |
| TX-114 | HNF-SD-WM-ER-708 | 0-A | 09/14/98 |
| TX-115 | HNF-SD-WM-ER-657 | 0-A | 09/14/98 |
| TX-116 | HNF-SD-WM-ER-705 | 0-A | 09/14/98 |
| TX-117 | HNF-SD-WM-ER-711 | 0-A | 09/28/98 |
| TX-118 | HNF-SD-WM-ER-718 | 0-A | 09/29/98 |
| TY-101 | HNF-SD-WM-ER-646 | 0-A | 09/14/98 |
| TY-102 | HNF-SD-WM-ER-719 | 0-A | 09/14/98 |
| TY-103 | HNF-SD-WM-ER-703 | 0-A | 09/14/98 |
| TY-104 | WHC-SD-WM-ER-481 | 0-C | 09/14/98 |
| TY-105 | HNF-SD-WM-ER-652 | 0-A | 09/14/98 |
| TY-106 | WHC-SD-WM-ER-482 | 0-D | 09/14/98 |
| U-101 | HNF-SD-WM-ER-732 | 0-A | 09/29/98 |
| U-102 | HNF-SD-WM-ER-618 | 0-B | 09/25/98 |
| U-103 | HNF-SD-WM-ER-712 | 1 | 09/16/98 |
| U-104 | HNF-SD-WM-ER-650 | 0-A | 09/29/98 |
| U-105 | WHC-SD-WM-ER-617 | 0-B | 09/24/98 |
| U-106 | HNF-SD-WM-ER-636 | 0-B | 09/30/98 |
| U-107 | WHC-SD-WM-ER-614 | 0-B | 09/28/98 |
| U-108 | HNF-SD-WM-ER-639 | 0-C | 09/28/98 |
| U-109 | WHC-SD-WM-ER-609 | 0-B | 09/28/98 |
| U-110 | WHC-EP-0643 HNF-SD-WM-ER-551 | 1-B | 09/29/98 |
| U-111 | HNF-SD-WM-ER-713 | 0-A | 09/29/98 |

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| Tank | Number | Rev | Date |
|-------------|------------------|------------|----------------------|
| U-201 | WHC-SD-WM-ER-483 | 0-D | 09/25/98 |
| U-202 | WHC-SD-WM-ER-484 | 0-D 0-E | 09/25/98 09/30/98 |
| U-203 | WHC-SD-WM-ER-485 | 0-D | 09/29/98 |
| U-204 | WHC-SD-WM-ER-486 | 0-D | 09/28/98 |

6.05 List of Laboratory Analytical Reports Issued

| Tank | Title | Number | Date |
|-------------|---|---------------------------|-------------|
| AN-102 | Tank 241-AN-102 Low Activity Waste Envelope C Analytical Results for the Final Report | HNF-SD-WM-DP-310, Rev. 0 | 9/3/98 |
| AP-106 | Tank 241-AP-106, Grab Samples, 6AP-98-1, 6AP-98-2 and 6AP-98-3 Analytical Results for the Final Report | HNF-1642, Rev. 0 | 9/21/98 |
| AY-102 | Tank 241-AY-102, Grab Samples 2AY-97-1, 2AY-97-2, 2AY-97-3, 2AY-97-4 and 2AY-97-5 Analytical Results for the Final Report | HNF-SD-WM-DP-299, Rev. 0A | 8/12/98 |
| S-304 | Tank 241-S-304, Grab Samples, 304S-98-1, 304S-98-2 and 304S-98-3 Analytical Results for the Final Report | HNF-1644, Rev. 0 | 9/22/98 |
| SX-101 | Tank 241, SX-101, Cores 225 and 227, Analytical Results for the Final Report | HNF-SD-WM-DP-293, Rev. 0A | 8/10/98 |
| SX-101 | Tank 241, SX-101, Cores 225 and 227, Analytical Results for the Final Report | HNF-SD-WM-DP-293, Rev. 0B | 8/17/98 |
| SX-103 | Tank 241-SX-103, Cores 229 and 233, Analytical Results for the Final Report | HNF-SD-DP-311, Rev 0 | 9/25/98 |
| SX-106 | Tank 241-SX-106, Cores 223 and 224, Analytical Results for the Final Report | HNF-SD-WM-DP-288, Rev. 0A | 8/27/98 |
| TX-104 | Tank 241-TX-104, Cores 230 and 231 Analytical Results for the Final Report | HNF-SD-WP-DP-305, Rev. 0 | 7/7/98 |

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6.06 Table of DNFSB 93-5 Implementation Plan Revision 1 Commitments Status

| Number | Description | Due Date | Submitted to DNFSB |
|---------------|---|-----------------|---------------------------|
| 5.4.3.1a | Comprehensive Source Terms Report | 6/30/96 | 6/30/96 |
| 5.4.3.1b | Report on Lightning Evaluation | 8/31/96 | 8/30/96 |
| 5.4.3.1c | Approved BIO | 12/31/96 | 12/30/96 |
| 5.4.3.1d | Approved FSAR | 6/30/97 | |
| 5.4.3.2a | Topical Report on Resolution of Ferrocyanide Safety Issue | 1/31/97 | 9/23/96 |
| 5.4.3.3a | Supporting Technical Document on Organic Complexant Safety Issue | 12/31/96 | 6/27/97 |
| 5.4.3.3b | Confirm Safe Storage Criteria, and Organic Solubility and Aging Effects on Fuel Content | 11/30/98 | |
| 5.4.3.4a | Safety Assessment Covering Pool and Entrained Organic Solvent Fires | 10/31/96 | 10/21/96 |
| 5.4.3.4b | Organic Speciation of Core Samples for BY-108 and BY-110, and Auger Samples for C-102 | 10/31/96 | 10/31/96 |
| 5.4.3.4c | Supporting Technical Document for Organic Solvent Safety Issue | 12/31/96 | 12/23/96 |
| 5.4.3.4d | Vapor Sampling of all SSTs | 12/31/99 | |
| 5.4.3.4e | Adequate Vent Path in All SSTs Suspected of Containing Organic Solvents | 4/30/00 | |
| 5.4.3.4f | Letter Reporting Completion of Vapor Sampling of All DSTs | 12/31/00 | |
| 5.4.3.5a | Analyses to Determine If Additional Tanks Have Potential to Exceed 25% of the LFL | 6/30/96 | 6/28/96 |
| 5.4.3.5b | Gas Monitoring Instrumentation Upgrade Needs for Additional Tanks with the Potential to Exceed 25% of the LFL | 8/31/96 | 8/19/96 |
| 5.4.3.5c | Safety Assessment for Rotary Mode Core Sampling in Flammable Gas Tanks | 9/30/96 | 9/27/96 |
| 5.4.3.5d | Qualification of Rotary Mode Core Sampling System for Use in Flammable Gas Tanks | 9/30/96 | 1/7/98 |
| 5.4.3.5e | Safety Assessment for Saltwell Pumping in Flammable Gas Tanks | 10/31/96 | 10/31/96 |
| 5.4.3.5f | Letter Reporting Completion of AN Tank Farm | 11/30/96 | 1/30/97 |

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| Number | Description | Due Date | Submitted to DNFSB |
|----------|--|----------|--------------------|
| | Ventilation Upgrade | | |
| 5.4.3.5g | Flammable Gas Safety Screening of Remaining Passively Ventilated SSTs | 11/30/96 | 11/12/96 |
| 5.4.3.5h | Supporting Technical Document on Flammable Gas Safety Issue | 12/31/96 | 1/30/97 |
| 5.4.3.5i | External Equipment Spark Sources in Flammable Gas Tanks | 12/31/96 | 12/24/96 |
| 5.4.3.5j | Voidmeter and Viscometer Readings in Tanks AN-103, AN-104, and AN-105 | 12/31/96 | 12/18/96 |
| 5.4.3.5k | Retained Gas Sampling in Tanks AW-101, AN-103, AN-104, AN-105, and A-101 | 3/31/97 | 3/28/97 |
| 5.4.3.5l | Refinement of Flammable Gas Generation/Retention Models | 5/31/97 | 5/27/97 |
| 5.4.3.6a | C-106 Supernatant Sampling and Analysis | 10/31/96 | 10/30/96 |
| 5.4.3.6b | C-106 Retrieval Safety Assessment | 7/31/97 | 10/3/97 |
| 5.4.3.6c | Initiation of Tank C-106 Waste Retrieval | 10/31/97 | |
| 5.4.3.6d | Topical Report to Resolve the High Heat Safety Issue | 5/31/98 | |
| 5.4.3.7a | Topical Report to Resolve the Criticality Safety Issue | 12/31/96 | 12/18/96 |
| 5.5.6.1a | Completion of High Priority Tanks Sampling and Analysis for the Disposal Program | 3/31/98 | 3/27/98 |
| 5.6.3.1a | Comparison Between Truck and Cart Vapor Sampling Systems | 9/30/96 | 9/27/96 |
| 5.6.3.1b | Implementation of FTIR Moisture Analysis Capability in 222-S Laboratory | 11/30/96 | 11/19/96 |
| 5.6.3.1c | Proposed Content and Format of Tank-by-Tank Safety Status Evaluation | 1/31/97 | 1/30/97 |
| 5.6.3.1d | Updated HTCEs | 6/30/97 | 6/6/97 |
| 5.6.3.1e | Verification of Headspace Homogeneity | 10/31/97 | 10/22/97 |
| 5.6.3.1f | Standard Inventory Estimates for All Tanks | 11/30/97 | 10/31/97 |
| 5.6.3.1g | Completion of High Priority Tanks Sampling and Analysis | 3/31/98 | 3/27/98 |
| 5.6.3.1h | Tank-by-Tank Safety Status Evaluation | 7/31/98 | 7/22/98 |
| 5.6.3.1i | Update Tank Content Models | 12/31/98 | |
| 5.6.3.1j | Completion of Core Sampling of All Tanks | 12/31/02 | |