ENGINEERING CHANGE NOTICE

1. ECN 650577

Proj. ECN

2. ECN Category (mark one)	3. Originator's Name, Organization, MSIN, and Telephone No.	4. USQ Required?	5. Date
Supplemental [] Direct Revision [X] Change ECN [] Temporary [] Standby [] Supersedure [] Cancel/Void []	J. Freeman-Pollard, COGEMA, R3-47,372-0927	[] Yes [X] No	September 14, 1998
	6. Project Title/No./Work Order No.	7. Bldg./Sys./Fac. No.	8. Approval Designator
	TWRS: Infrastructure	N/A	N/A
	9. Document Numbers Changed by this ECN (includes sheet no. and rev.)	10. Related ECN No(s).	11. Related PO No.
	HNF-2199, Rev 0	624199 & 624121	N/A

12a. Modification Work	12b. Work Package No.	12c. Modification Work Complete	12d. Restored to Original Condition (Temp. or Standby ECN only)
[] Yes (fill out Blk. 12b) [X] No (NA Blks. 12b, 12c, 12d)	N/A	N/A Design Authority/Cog. Engineer Signature & Date	N/A Design Authority/Cog. Engineer Signature & Date

13a. Description of Change

13b. Design Baseline Document? [] Yes [X] No

HNF-2199 was revised per dispositioned DOE-RL and Waste Integration Team RCR Comments.

14a. Justification (mark one)

Criteria Change	[X]	Design Improvement	[]	Environmental	[]	Facility Deactivation	[]
As-Found	[]	Facilitate Const	[]	Const. Error/Omission	[]	Design Error/Omission	[]

14b. Justification Details

HNF-2199 needed to be revised to include final negotiated terms and conditions associated with award of the Phase 1B TWRS privatization contract to BNFL, Inc.

15. Distribution (include name, MSIN, and no. of copies)

See Distribution Sheet

RELEASE STAMP

SEP 16 1998

DATE: RELEASE ID. 73

STA: 4

A-7900-013-2 (05/96) GEF095

ENGINEERING CHANGE NOTICE

1. ECN (use no. from pg. 1) 650577

16. Design Verification Required	17. Cost Impact						18. Schedule Impact (days)	
	ENGINEERING			CONSTRUCTION				
[] Yes	Additional	[N/A]	$	Additional	[N/A]	$	Improvement	[N/A]
[X] No	Savings	[N/A]	$	Savings	[N/A]	$	Delay	[N/A]

19. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 13. Enter the affected document number in Block 20.

SDD/DD	[]	Seismic/Stress Analysis	[]	Tank Calibration Manual	[]
Functional Design Criteria	[]	Stress/Design Report	[]	Health Physics Procedure	[]
Operating Specification	[]	Interface Control Drawing	[]	Spares Multiple Unit Listing	[]
Criticality Specification	[]	Calibration Procedure	[]	Test Procedures/Specification	[]
Conceptual Design Report	[]	Installation Procedure	[]	Component Index	[]
Equipment Spec.	[]	Maintenance Procedure	[]	ASME Coded Item	[]
Const. Spec.	[]	Engineering Procedure	[]	Human Factor Consideration	[]
Procurement Spec.	[]	Operating Instruction	[]	Computer Software	[]
Vendor Information	[]	Operating Procedure	[]	Electric Circuit Schedule	[]
OM Manual	[]	Operational Safety Requirement	[]	ICRS Procedure	[]
FSAR/SAR	[]	IEFD Drawing	[]	Process Control Manual/Plan	[]
Safety Equipment List	[]	Cell Arrangement Drawing	[]	Process Flow Chart	[]
Radiation Work Permit	[]	Essential Material Specification	[]	Purchase Requisition	[]
Envitonmental Impact Statement	[]	Fac. Proc. Samp. Schedule	[]	Tickler File	[]
Environmental Report	[]	Inspection Plan	[]		[]
Environmental Permit	[]	Inventory Adjustment Request	[]		[]

20. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision	Document Number/Revision	Document Number Revision
N/A		

21. Approvals

	Signature	Date		Signature	Date
Design Authority			Design Agent		
Cog. Eng. J. R. Freeman-Pollard		9/14/98	PE		
Cog. Mgr. R. W. Root	for R. Root	9/14/98	QA		
QA			Safety		
Safety			Design		
Environ.			Environ.		
Other			Other		
(See ECN Page #3 for additional signatures)					

DEPARTMENT OF ENERGY

Signature or a Control Number that tracks the Approval Signature

ADDITIONAL

~~ENGINEERING DATA TRANSMITTAL~~

1. EDT ~~625690~~ rev 9.15.98

2. To: (Receiving Organization)	3. From: (Originating Organization)	4. Related EDT No.:
See Distribution Sheet	COGEMA Engineering	624119 & 624121
5. Proj./Prog./Dept./Div.: TWRS: Infrastructure	6. Design Authority/ Design Agent/Cog. Engr.: J. R. Freeman-Pollard	7. Purchase Order No.: N/A
8. Originator Remarks: This document supersedes "Privatization Feed Tank Requirements and Turnover Procedure, HNF-SD-WM-DB-037".		9. Equip./Component No.: N/A 10. System/Bldg./Facility: N/A
11. Receiver Remarks: N/A 11A. Design Baseline Document? [] Yes [X] No		12. Major Assm. Dwg. No.: N/A 13. Permit/Permit Application No.: N/A 14. Required Response Date N/A

15. DATA TRANSMITTED

(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	(F) Approval Desig-nator	(G) Reason for Trans-mittal	(H) Origi-nator Dispo-sition	(I) Receiv-er Dispo-sition
1	HNF-2199	-	~~X0~~ rev 9.15.98	Feed Tank Transfer Requirements Document	N/A	1		

16. KEY

Approval Designator (F)	Reason for Transmittal (G)	Disposition (H) & (I)
E, S, Q, D or N/A (see WHC-CM-3-5, Sec.12.7)	1. Approval 2. Release 3. Information 4. Review 5. Post-Review 6. Dist. (Receipt Acknow. Required)	1. Approved 2. Approved w/comment 3. Disapproved w/comment 4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged

17. SIGNATURE/DISTRIBUTION
(See Approval Designator for required signatures)

(G) Reason	(H) Disp.	(J) Name (K) Signature (L) Date (M) MSIN	(G) Reason	(H) Disp.	(J) Name (K) Signature (L) Date (M) MSIN
1		Design Authority N/A	1	/	S. M. O'Toole for T.K. Huerkor 9/1/98
1		Design Agent N/A	1	1	G. M. Ramin
1	/	Cog.Eng. J. R. Freeman-Pollard	1	/	B. A. Reynolds per telecon w/ JR F-P 8/31/98
1	/	Cog. Mgr. R. W. Root	1	1	O.G. BAIDE (OSTE) 9-8-98
1	/	QA J. F. Bores 8/31/98	1	1	R.A. Dudd (Retrieval Support Dept) 9/8
1	1	~~Safety~~ NUCLEAR SAFETY & LICENSING, C Roach 9/8/98	1	1	R. L. Treat (WFD) 9/10/98
1	/	Env. ~~REA~~ 9/8/98			

18.	19.	20.	21. DOE APPROVAL (if required) Ctrl. No.
J. R. Freeman-Pollard 8/31/98 Signature of EDT Originator Date	Authorized Representative for Receiving Organization Date	R. W. Root 8/31/98 Design Authority/ Cognizant Manager Date	[x] Approved [] Approved w/comments [] Disapproved w/comments

BD-7400-172-2 (05/96) GEF097

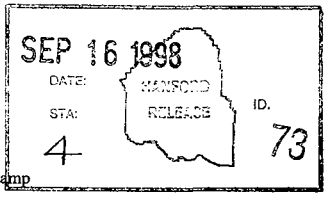
Feed Tank Transfer Requirements

J. R. Freeman-Pollard
COGEMA Engineering Corporation, Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-96RL13200

EDT/ECN: ~~625690~~ 650577 UC: 2020
Org Code: SS180000 Charge Code: D6303
B&R Code: EW3130010 Total Pages: ~~63~~ 61 9/16/98

Key Words: Feed Tank, Transfer, Requirements, Nuclear Safety, Environmental, Engineering, Reporting, AP-106, BNFL, privatization contractor, PC,

Abstract: This document presents a definition of tank turnover; DOE responsibilities; TWRS DST permitting requirements; TWRS Authorization Basis (AB) requirements; TWRS AP Tank Farm operational requirements; unreviewed safety question (USQ) requirements; records and reporting requirements, and documentation which will require revision in support of transferring a DST in AP Tank Farm to a privatization contractor for use during Phase 1B.



Release Approval 9/14/98 Date Release Stamp

Approved for Public Release

RECORD OF REVISION	(1) Document Number HNF-2199	Page 1

(2) Title

Feed Tank Transfer Requirements

CHANGE CONTROL RECORD

(3) Revision	(4) Description of Change - Replace, Add, and Delete Pages	Authorized for Release	
		(5) Cog. Engr.	(6) Cog. Mgr. Date
A	(7) EDT 624119 March 28, 1998		
0	EDT 624121 June 09, 1998		
1 RS	ECN 650577: Document revised per dispositioned DOE-RL and Waste Integration Team RCR Comments.	J. R. Freeman-Pollard 9/14/98	R. W. Root 9/14/98 9/14/98 for R. Root

HNF-SP-2199
Revision 1

Feed Tank Transfer Requirements

Date Published
September 1998

Prepared for the U.S. Department of Energy

FLUOR DANIEL HANFORD, INC.
Richland, Washington

Hanford Management and Integration Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

CONTENTS

CONTENTS (cont'd)

ACRONYMS

AB	authorization basis
AOP	Air Operating Permit
BIO	Basis for Interim Operation
BNFL, Inc.	British Nuclear Fuels Limited, Incorporated
DOE	U.S. Department of Energy
DST	double-shell tank
Ecology	Washington State Department of Ecology
FDH	Fluor Daniel Hanford, Inc.
HGET	Hanford General Employee Training
ICD	Interface Control Description
IPT	Integrated Product Team
ISB	Interim Safety Basis
LAW	low-activity waste
M&I	management and integration
PHMC	Project Hanford Management Contractor
RCRA	*Resource Conservation and Recovery Act of 1976*
RL	Richland Operations Office
RU	regulatory unit
SAB	Safety Authorization Basis
TSD	treatment, storage, and disposal
TWRS	Tank Waste Remediation System
USQ	unreviewed safety question
WAC	Washington Administrative Code
WMH	Waste Management Federal Services of Hanford, Inc.

FEED TANK TRANSFER REQUIREMENTS

1.0 INTRODUCTION

As part of the contract to acquire Hanford Site tank waste treatment services on a privatization basis, the U.S. Department of Energy (DOE) will transfer double-shell tank (DST) 241-AP-106 with associated equipment (i.e., pump pits, waste piping, and instrumentation) and land to British Nuclear Fuels Limited, Incorporated (BNFL, Inc.). 241-AP-106 will serve as the Low-Activity Waste (LAW) Feed Tank to the BNFL, Inc.'s waste treatment facility. LAW feed envelopes will be delivered to 241-AP-106 and then transferred to BNFL, Inc.'s waste treatment facility[1].

The transfer of 241-AP-106 will permit BNFL, Inc. to accomplish the Phase 1 Privatization Waste Treatment Mission as specified in the Tank Waste Remediation System (TWRS) Privatization contracts *TWRS Privatization - BNFL Inc. Contract #DE-AC06-RL3308.* Phase 1 is divided into Parts A and B. Part A consisted of a 20-month development period to establish the technical, operational, regulatory, business, and financial elements required by a privatization contractor to provide tank waste treatment services on a fixed-unit price basis. Part B consists of BNFL Inc. demonstrating that it can provide tank waste treatment services at a fixed-unit price.

BNFL, Inc. will provide primary and annulus ventilation systems, instrumentation, equipment, waste piping, instrument, control buildings, and all other items needed to operate 241-AP-106 independently of the AP Tank Farm while accomplishing the waste treatment mission. BNFL, Inc.'s operational readiness will be determined by the Regulatory Unit (RU) with input from TWRS. The RU will have full authority in determining when BNFL, Inc. is ready to operate 241-AP-106 as a waste feed tank. Before completion of BNFL, Inc.'s mission, DOE, if deemed necessary, may require BNFL, Inc. to restore 241-AP-106 to its original design configuration.

The DOE will operate 241-AP-106 during the transition period (i.e., the time duration required for the operational control of 241-AP-106 to transfer from DOE to BNFL, Inc.), the reconfiguration of AP Tank Farm (i.e., the time duration required for TWRS to reconfigure and operate the remaining seven AP Tank Farm DSTs), and the re-establishment of AP Tank Farm (i.e., the time duration required to reconfigure 241-AP-106, if deemed necessary, back into AP Tank Farm at the conclusion of Phase 1).

1.1 PURPOSE

The purpose of this document is to define tank turnover; present DOE feed tank transfer responsibilities; identify the TWRS DST permitting requirements; identify the TWRS

[1]Waste streams generated by BNFL, Inc. during waste treatment operations, are not included in this document.

Authorization Basis (AB) requirements; identify TWRS AP Tank Farm operational requirements; identify unreviewed safety question (USQ) requirements; identify records and reporting requirements, and provide a preliminary overview of the various AP Tank Farm operating procedures and documents which may require revision in support of feed tank modification and turnover activities[2].

The primary assumptions used to develop the requirements stated in this document are as follows: First, all BNFL Inc's. waste tank modification activities (i.e, non-intrusive and intrusive work) will be performed in accordance with the DOE-RL TWRS nuclear safety AB. Second, DOE-RL will be responsible for the enforcement of the DOE-RL TWRS nuclear safety AB during BNFL Inc's. non-intrusive and intrusive waste feed tank modification activities. Third, operational control of the waste feed tank will not transfer to BNFL until approximately February 2005.

If ongoing DOE and BNFL Inc. contract negotiations should result in agreements which affect the assumptions used to prepare this document, this document will be modified as needed.

1.2 REPORT ORGANIZATION

This document consists of the following sections and appendices in addition to the background:

Section 2.0, Tank Turnover Definition and Interface Responsibilities, provides a definition of tank turnover and the DOE feed tank transfer responsibilities.

Section 3.0, TWRS DST *Resource Conservation and Recovery Act of 1976* (RCRA) Permitting Requirements, provides RCRA interim and final status requirements BNFL, Inc. must meet before assuming operational responsibility of 241-AP-106.

Section 4.0, TWRS Authorization Basis Requirements, provides the nuclear safety AB requirements BNFL, Inc. (or TWRS acting in behalf of BNFL, Inc. - depending on under whose auspices the modifications are performed) must meet before commencing tank modification activities and before returning the tank to DOE at the conclusion of the Phase 1 waste treatment mission.

Section 5.0, TWRS AP Tank Farm Operational And Engineering Requirements, provides the TWRS AP Tank Farm operational and engineering facility access; work authorization, resource availability, design approval, work priority, and waste disposal requirements BNFL, Inc. (or TWRS acting in behalf of BNFL, Inc. - depending on under whose auspices the modifications are performed) must meet before commencing tank modification activities.

Section 6.0, Records and Reporting Requirements, provides the recording and data reporting requirements BNFL, Inc. must meet and the possible pathways to transmit the data.

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[2] This document supersedes the document titled "Privatization Feed Tank Requirements and Turnover Procedure, HNF-SD-WM-DB-037".

Section 7.0, AP Tank Farm Documentation Required for Tank Transfer, provides an provide an preliminary overview of the various AP Tank Farm operating procedures and documents which may require revision in support of feed tank modification and turnover activities.

Section 8.0, References, lists the references for this report.

Appendices are used to present additional data from Section 7.0 used to prepare this report. To avoid redundancy, such information is incorporated by reference, rather than appended, whenever it is published and readily available to data users.

2.0 TANK TURNOVER REQUIREMENTS

2.1 DEFINITION OF FEED TANK TURNOVER

Although DOE has committed to turning the operational control of 241-AP-106 over to BNFL, Inc., the TWRS Privatization contract did not define what is meant by tank turnover.

The definition of feed tank turnover was not originally believed to be a significant issue because the intent was to make the feed tank totally independent of the balance of the AP Tank Farm. In practice, this will not be happening for three primary reasons. First, Washington State Department of Ecology (Ecology) has made a "determination" that tank 241-AP-106 should not be removed from the current RCRA permit[3]. Second, the nuclear safety AB in effect at the time the contract was written (Interim Safety Basis [ISB]) has been superseded by the DOE-RL TWRS nuclear safety AB currently in effect (list of AB documentation given in HNF-IP-0842, Volume IV, Section 5.4, Attachment A [Gibson and Hamm 1997]). However, the requirement documents cited in the TWRS Privatization contract were derived from the ISB and may now be obsolete under the new nuclear safety AB (of which the Basis for Interim Operation [BIO] constitutes the majority). Third, it was expected that the feed envelopes would be staged well in advance of BNFL, Inc. needs date, and in advance of when BNFL, Inc. needs to begin modifications to 241-AP-106. However, the first batch of conforming waste feed is scheduled to be transferred to BNFL, Inc. no earlier than February 2005 and no later than July 2006 which is potentially after BNFL, Inc. has assumed operational control of 241-AP-106[4].

Due to the three reasons mentioned above, the definition of feed tank turnover will be determined by the implementation path chosen by DOE and BNFL, Inc. The implementation path and associated tank turnover definition will be as follows:

- Implementation Path: Operational turnover of 241-AP-106 will occur by approximately February 2005.

- Definition: Operational turnover of 241-AP-106 will occur after BNFL, Inc. has completed all feed tank modifications, installed associated ancillary equipment (i.e., ventilation system, transfer piping), performed hot tie-in activities and can demonstrate operational readiness to utilize 241-AP-106 as a waste feed tank independent of the AP Tank Farm.

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[3] It is possible that this determination, which was presented verbally at Washington Department of Ecology Unit Manager meetings, is not a hard and fast requirement and could be reconsidered if compelling reasons exist.

[4] The dates are in accordance with the TWRS Privatization - BNFL, Inc. Contract #DE-AC06-RL3308 and as interpreted from the BNFL, Inc ICD 21 - dated July 15, 1998. However, If BNFL, Inc. assumes operational control of 241-AP-106 prior to the transfer of conforming waste feed, BNFL, Inc. would be operating outside of the TWRS Privatization contract (i.e., storing waste outside of their [DOE] approved envelopes).

2.2 DOE FEED TANK TRANSFER RESPONSIBILITIES

The following is a brief overview of DOE's feed tank transfer responsibilities. The responsibilities were obtained from Interface Control Document (ICD) 21.

2.2.1 DOE Feed Tank Transfer Responsibilities

The following is a summary of DOE's responsibilities associated with turning over operational control of 241-AP-106 (waste feed tank) to BNFL Inc.:

- Provide, as requested by BNFL, Inc., necessary, as-built design information on waste feed tank and auxiliary systems.
- Monitor, maintain and operate the secondary containment leak detection system (i.e., Leak Detection Well and associated pit) and cathodic protection system.
- Maintain monitoring (overview) interface during transfer of waste envelopes to BNFL, Inc. This interface will consist of, as a minimum, leak detectors and tank level.
- Provide storage capacity to receive emergency transfer of tank waste.
- Allow BNFL, Inc., access to the DOE-controlled site to perform repairs and maintenance of BNFL, Inc.,-controlled systems.
- Interface with BNFL, Inc., during preparation of Air Notices of Construction, RCRA, and Safety Authorization Basis (SAB) Dangerous Waste Permits to ensure required feed tank transfer interfaces/requirements are identified and integrated with the DOE and RCRA, Clean Air Act, DOE-RL TWRS nuclear safety AB requirements, and other joint requirements as identified.
- Develop protocol and administrative control procedures for integrating the operation of the AP Tank Farm with BNFL, Inc., under DOE-RL TWRS DST RCRA Permit and nuclear safety AB.
- Review and comment on feed tank permit modification(s) to the Hanford Site Dangerous Waste (RCRA) Permit (RCRA Permit WA7890008967) .
- Sign and transmit the DOE-approved request for feed tank permit modification(s) to Ecology.
- Concur or comment on feed tank permit modification(s) BNFL, Inc. performs in response to regulator comment(s).
- Provide support to BNFL, Inc., -led feed tank permitting and compliance activities.

- Coordinate calibration of instruments that will be overview monitored.
- Turn over operations of the waste feed tank by February 2005.
- Receive the waste feed tank from BNFL, Inc., at the end of the contract.

3.0 TWRS DST PERMITTING REQUIREMENTS

3.1 TANK TURNOVER

Since the feed tank (241-AP-106) is to remain part of the existing DST System RCRA permits, the interim or final status requirements detailed below will apply to the co-operator (BNFL, Inc.) having operational responsibility for this tank after modification, hot tie-in, and operation readiness to proceed activities are completed.

At the time the feed tank is turned over, BNFL, Inc. will be identified as co-operator in the RCRA permitting documents. This will require BNFL, Inc.'s certification of permitting documentation associated with 241-AP-106 prior to tank turnover. This action needs to occur no later than 90 days prior to the transfer of operational control.

3.2 DST RCRA PERMIT INTERIM VS FINAL STATUS

The DST System is currently operating under interim status. The DST system is scheduled to be incorporated into the Hanford Facility RCRA Permit (final status) in the second half of calendar year 2000.

The preferred alternative for accomplishing the tank modifications is to conduct these activities under interim status. Depending on the nature and extent of the modifications to the tank, a revision to the DST Part A, Form 3, could be required. Regardless of the extent of modifications, it is recommended that Ecology be kept informed of the tank modifications. This will help facilitate future permitting efforts.

Tank modifications conducted after the DST System final status permit is issued will involve a more complex permit modification and approval process than would tank modifications conducted during interim status. However, the time and effort for completing a final status permit modification process can be greatly reduced if the proposed tank modifications can be adequately anticipated in the DST System final status permit. The type and extent of information available at the time the DST System final status permit application is prepared will significantly influence the degree to which the final status permit can provide coverage for future tank modifications. Generally, either a final status permit or interim status modification (whichever is applicable) must be completed before major tank modification work can begin. While interim status is preferred, the BNFL, Inc. schedule for tank modification and design availability may preclude implementation under interim status. One strategy for remaining under interim status is to revisit the separation of the feed tank from the DST system RCRA permits.

Summarized below are the tank modification RCRA permitting requirements for interim and final status.

3.2.1 Interim Status Requirements

- A revised Part A permit application, Form 3, must be submitted to Ecology no later than 90 days prior to transfer of operational control.

- If waste management capacities are to be increased or different processes are to be implemented, a notice of intent will be required followed by submittal of a revised DST system Part A, Form 3, for Ecology approval prior to implementing the modifications.

- If the existing DST System capacities or processes are not changed, the DST System Part A, Form 3, may need to be revised to reflect the changes in operator and the tank modification design information would be incorporated into the DST system Part B permit application with little or no differentiation between the existing system and modifications for BNFL, Inc. These activities could be conducted concurrently with the tank modifications and be subject to the same review and public comments as the rest of the DST system. Ecology's review of tank modification information is recommended in order to prevent problems with Ecology's approval of the Part B permit.

- Depending on the nature of the tank modifications, a tank integrity assessment could be required by the RU.

3.2.2 Final Status Requirements

- A revised Part B permit application must be submitted to Ecology no later than 90 days prior to transfer of operational control.

- If a permitted facility expands (i.e., capacities increase or different processes are added) during final status, a notice of intent will be required before submittal of the revised DST System Part B permit application: Ecology must approve the notice of intent before modifications can begin.

- Proposed tank modifications that will impact information required to be included in the Part B Permit will require that a permit modification be requested. This permit modification will need to be finalized prior to implementing the tank modifications.

- Depending on the nature of the tank modifications, a tank integrity assessment could be required by the RU.

3.3 DST RCRA TANK TURNOVER REQUIREMENTS

The following summarizes the RCRA interim and final status requirements that must be met prior to DOE turning operational control of the feed tank over to BNFL, Inc.

3.3.1 Interim Status Requirements

If the transfer of the feed tank occurs while the DST system is under interim status, the following is required:

- A revised Part A must be submitted to Ecology no later than 90 days prior to transfer of operational control.

- BNFL, Inc. must adopt the existing DST interim status documents or develop their own documents to meet the applicable standards of Washington Administrative Code (WAC) 173-303-400.

3.3.2 Final Status Requirements

If the transfer of the feed tank occurs while the DST system is under final status, the following is required:

- A revised Part B must be submitted to Ecology no later than 90 days prior to transfer of operational control.

- BNFL, Inc. must adopt the final status documents or develop their own documents to meet the applicable standards of WAC 173-303-600.

3.4 AIR OPERATING PERMIT REPORTING REQUIREMENTS

Under the provisions of the Hanford Site Air Operating Permit (AOP), BNFL, Inc. will be required to contribute to at least three AOP reports each year. These reports are the two semiannual reports and the annual compliance certification, as described below. Additional BNFL, Inc. reporting requirements are located in Section 6.0.

3.4.1 Semiannual Reports

The semiannual reports will be submitted by March 15th and August 15th of each year. The semiannual report submitted by March 15th will contain information for the period from the previous July 1 through December 31. The semiannual report submitted by August 15th will contain information for the period from the previous January 1 through June 30. The semiannual reports will be in addition to the currently submitted reports. There are no reporting requirements for insignificant emission units identified by WAC 173-401-530. Each semiannual report will be consistent with WAC 173-401-520.

Each semiannual report will contain the following information for the applicable reporting period (January 1 through June 30 or July 1 through December 31).

1. Each semiannual report will provide a reference to reports submitted to the regulatory agencies as required by AOP General Conditions Section 4.5, Permit Deviation Reporting.

2. Each semiannual report will reference source test(s) and/or monitoring reports (required by any regulatory order, e.g., Notice of Construction) that have been issued during the reporting period.

3. Each semiannual report will contain a summary of any air emission compliant investigation(s) required in Attachment 1, Table 2-3 of the Hanford Site AOP and issued during the reporting period.

4. For all minor radioactive emission points (potential to emit <0.1 mrem to the maximally exposed individual) listed in Attachment 2, Tables 2.1, 2.2, or Section 2.3 of the Hanford Site AOP, each semiannual report will contain confirmation that any required periodic confirmatory measurements were conducted to verify low emissions during the reporting period.

5. Each semiannual report will list any new regulatory order, (e.g., Notice of Construction) approval conditions imposed during the reporting period by Ecology, the Washington State Department of Health, or the U.S. Environmental Protection Agency, Region 10.

3.4.2 Annual Compliance Certification

The annual compliance certification will be submitted by March 15th for the preceding calendar year. The compliance certification will consist of the following:

a. The identification of each term or condition of the Hanford Site AOP that is the basis of the certification.
b. The compliance status.
c. Whether compliance was continuous or intermittent.
d. The method(s) used to determine the compliance status of the source over the reporting period consistent with WAC 173-401-615(3)(a).

No certification is required for insignificant emission units according to WAC 173-401-530(2)(d). The annual report will be certified consistent with WAC 173-401-520.

3.4.3 Transfer of Data

The AOP team within the Air and Water Services Group of Waste Management Federal Services of Hanford, Inc. (WMH) is responsible for coordinating and integrating input from the various Hanford Site contractors to compile the semiannual reports and the annual compliance certification. To ensure timely completion of these reports, all Hanford contractors with input to the semiannual reports or the annual compliance certification must adhere to the following schedule for submittal of information and review of the compiled reports:

- A Call Letter with a request for information appropriate to each report will be issued to participating contractors eight weeks before March 15th and August 15th report deadlines.

- Each contractor will have two weeks to assemble information and submit the information to WMH.

- WMH will prepare the first draft of each report and distribute each draft to the contractors for review within one week of receiving all information from the contractors.

- The contractors will have one week to review the initial drafts of the reports and forward any comments they may have to WMH.

- WMH will resolve contractor comments within one week and return the reports to the contractor for certification.

- The contractors will have one week to certify the final draft of the reports and return their certifications to WMH.

- WMH will then have one week to prepare the final report package and deliver this package to the DOE Richland Operations Office (RL).

- RL will have one week to transmit the reports to the regulators.

3.4.4 Data Quality and Format

All data and information transmitted from BNFL, Inc. to WMH for inclusion in AOP semiannual reports or the AOP annual compliance certification must be a quality that allows certification by BNFL, Inc. in accordance with WAC 173-401-520. This regulation addresses certification and includes the following requirements:

> "Any application form, report, or compliance certification submitted pursuant to this chapter shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this chapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."

Regarding format, information required for completion of AOP reports will be provided both electronically and by paper copy using the Hanford Site standard unless otherwise specified.

4.0 TWRS AUTHORIZATION BASIS REQUIREMENTS

According to the TWRS Privatization Phase 1 contract, BNFL, Inc. will provide ventilation systems, instrumentation, equipment, piping, control systems, and other items required to operate 241-AP-106 (the feed tank) independent of the rest of the AP Tank Farm.

This section discusses the strategy for developing and maintaining nuclear safety AB requirements during the modification and testing of the feed tank, the operation of 241-AP-106 as a waste feed tank for the Phase 1B privatization waste treatment mission and the return of 241-AP-106 to the DOE at the conclusion of the waste treatment mission.

The assumptions used to develop this section were as follows:

- The PHMC Team will maintain responsibility of the DOE-RL TWRS nuclear safety AB for the feed tank until operational turnover.
- DOE-RL will be the regulatory approval authority for the feed tank until operational turnover.
- The privatization RU will be the regulatory approval authority for the waste feed tank after operational turnover.
- Modification and testing of the waste feed tank for utilization by BNFL, Inc. will occur prior to operational turnover.
- Identification of the physical interfaces between the PHMC Team and BNFL, Inc. will not be addressed in this document. However, the information will be included in an interface control document.

4.1 BNFL, INC. MODIFICATION ACTIVITIES OCCUR BEFORE TANK TURNOVER

With modification activities occurring before operational control of the feed tank is turned over to BNFL, Inc., the feed tank modification, construction, and testing activities shall be conducted within the requirements of the DOE-RL TWRS nuclear safety AB (DOE-RL AB). The following activities will be required to maintain the DOE-RL AB for the feed tank.

- The design for the tank modifications shall, to the extent practical, incorporate design features that provide the capability for the system to be operated and maintained in accordance with the requirements of the DOE-RL AB. It is recognized that the modifications may involve safety systems for the tank. BNFL, Inc. will be responsible for obtaining any waivers to DOE Orders and Standards and Directives necessary for the modification and testing of the waste feed tank and related systems.

- BNFL, Inc. will provide hazard and accident information and technical support for the identification and evaluation of potential hazards for the modification, testing, and operation of the waste feed tank and BNFL, Inc.'s waste treatment facility. The PHMC Team will evaluate the potential hazards through the USQ process for a possible modification to the DOE-RL AB.

- The DOE-RL AB may have to be revised by the PHMC Team prior to BNFL, Inc. performing feed tank modifications, construction, and testing activities. The process for revision to the DOE-RL AB is outlined in the *Tank Waste Remediation System Retrieval Authorization Basis Amendment Task Plan* (Goetz 1998). The revised DOE-RL AB will provide the basis for the modifications and testing of the waste feed tank and will address the potential hazards associated with operation of the waste feed tank and BNFL, Inc.'s waste treatment facility on the other TWRS facilities. The revised DOE-RL AB will not provide the authorization basis for the operation of the tank as a waste feed tank for the waste treatment facility and will not be subject to review and approval by the RU. (NOTE: BNFL Inc., may request that the TWRS contractors prepare and maintain a RU DST SAB for the operation of the waste feed tank.) Areas related to the waste feed tank which may need to be addressed in the amendment include:

  - Revised responsibilities for the waste feed tank.

  - Identification and evaluation of any new hazards to TWRS operations related to the modification, testing, maintenance and operation of the waste feed tank and associated systems (the DOE-RL AB for other facilities onsite and the other waste feed tank and waste treatment facility may also be impacted).

  - Identification and evaluation of any new hazards to TWRS operations related to construction testing and operation (and decommissioning) of the Phase I waste treatment facility (the DOE-RL AB for other facilities onsite and the other waste feed tank and waste treatment facility may also be impacted).

  - Interface agreements with BNFL, Inc. regarding operation and emergency response.

- BNFL, Inc. will prepare a DST SAB for operation of the waste feed tank in support of the waste treatment mission (or as noted above, BNFL, Inc. may contract with the TWRS contractors for preparation and maintenance of the RU DST SAB).

4.2 EMERGENCY RESPONSE PROCEDURES AND TRAINING

The TWRS contractor will provide training to BNFL, Inc. and it's contractor personnel on TWRS emergency response procedures. BNFL, Inc. will provide training to facility and on-site personnel (i.e., collocated workers) on BNFL, Inc. emergency response procedures. TWRS

personnel involved in the operation of the AP Tank Farms shall be considered facility personnel for the purposes of the accident analysis for the waste feed tank. Other onsite personnel shall be considered as collocated workers for the purpose of the accident analysis for the waste treatment facilities. BNFL, Inc. and contractor personnel involved in the modification, testing, and operation of the waste feed tank shall be considered facility personnel for the purposes of the TWRS accident analysis. BNFL, Inc. and contractor personnel involved in the construction, testing, operation, and decommissioning of the waste treatment facilities shall be considered as collocated workers for the purpose of the TWRS accident analysis. Any AP Farm occurrence reports generated between BNFL, Inc. and the PHMC team will be distributed to all potentially-affected parties.

4.3 WASTE TREATMENT OPERATIONS

BNFL, Inc. will provide the DOE any information related to any safety issue identified in the operation of the waste feed tank or the waste treatment facility that could impact the operation of other DOE facilities onsite. Similarly, the management and integration (M&I) contractor will provide the DOE/BNFL, Inc. any information related to any safety issue identified in the TWRS facilities or other site facilities which could impact the BNFL, Inc. waste treatment operations. The TWRS contractors and BNFL, Inc. will have responsibility for performing the USQ determinations and any necessary revisions to the AB for their respective facilities.

4.4 RETURN OF THE FEED TANK TO THE DOE

On completion of Phase 1 of the TWRS privatization contract, the following nuclear safety authorization requirements will need to be met prior to return of the waste feed tank to DOE:

- BNFL, Inc. will provide the TWRS contractor with the current RU DST SAB and identify any needed changes based on the tank configuration and operation.
- The TWRS contractor will revise the DOE-RL AB, as necessary, for the return of 241-AP-106.
- The TWRS contractor will prepare a compliance implementation plan if necessary to address any areas (i.e., design and operation of the waste feed tank) which are not in accordance with the requirements of the existing DOE-RL AB.

5.0 TWRS AP TANK FARM OPERATIONAL AND ENGINEERING REQUIREMENTS

This section provides the TWRS AP Tank Farm operational and engineering facility access, work authorization, field staffing, design approval, work priority, and waste disposal requirements that must be met by either BNFL, Inc., DOE, or PHMC.

The assumptions used to develop this section are as follows:

- All feed tank modification activities (i.e., non-intrusive and intrusive) will be conducted in accordance with the DOE-RL TWRS AB and the existing TWRS AP Tank Farm operating and engineering procedures.
- 241-AP-106 will remain under the operational control of DOE-RL until approximately February 2005.

5.1 BNFL, INC. MODIFICATION ACTIVITIES OCCUR BEFORE TANK TURNOVER

With modification activities occurring before BNFL, Inc., assumes operational control of the feed tank, the following access, work authorization, AP Tank Farm field support, design approval, work priority, and waste disposal requirements must be either performed or addressed by BNFL, Inc., DOE and/or PHMC.

5.1.1 Facility Access Requirements

The following facility access requirements (i.e., control, training and dosimetry) must be performed by BNFL, Inc., DOE and/or PHMC.

PHMC Operations will require a single facility access point to ensure adequate control of their facility boundaries and activities. Single point facility access equates to 1) BNFL, Inc. not having individual unique access gates, 2) BNFL Inc. will have to obtain keys from the PHMC Tank Farm Shift Manager to enter the facility and 3) BNFL Inc. will only be provided keys as long as BNFL, Inc.'s activity do not result in operational or safety conflicts with other work in the facility and the work has been authorized via the work authorization process identified below. It should be noted that, the above PHMC Operations facility access requirements/restrictions may be modified via the development/approval of DOE/BNFL, Inc. AP Tank Farm Access Protocol agreements and procedures. Also, it is anticipated that resolution of access related conflicts will be resolved via the Program Management IPT process.

5.1.1.1 Facility Access Training Requirements. Current training requirements for entry into 241-AP Tank Farm for intrusive work performance include Hanford General Employee Training (HGET) including Tank Farm specific training, Tank Farm Facility Orientation, Radiological Worker II, 40 hour Hazardous Material Worker training, Tank Farm Building Emergency Plan, and Waste Handling and Segregation courses. Documentation of this training or its equivalent

must be provided prior to permission being granted to enter 241-AP to perform work. There are currently no procedures or policies in place with guidance on proof of equivalency.

5.1.1.2 Dosimetry Requirements. Currently, there are no policies or procedures developed to specify the differences or equivalency of BNFL, Inc. dosimetry requirements to the existing PHMC AP Tank Farm dosimetry requirements. If BNFL, Inc's. dosimetry requirements are determined to not be equivalent, BNFL, Inc. will have to obtain the level of additional dosimetry required for access into AP Tank Farm.

5.1.2 Work Authorization

The following work authorization requirements (i.e., document preparation, review/approval and release; lock and tag and excavation and other permits) must be performed by BNFL, Inc., DOE and/or PHMC.

5.1.2.1 Document Preparation. BNFL, Inc. generated work authorization documentation associated with feed tank transfer activities will need to be prepared and formatted in accordance with PHMC document preparation procedures and polices.

5.1.2.2 Document Review/Approval. BNFL, Inc. generated work authorization documentation associated with feed tank transfer activities will need to be reviewed and approved by PHMC Team (TWRS AP Tank Farm Operations and Engineering). Design changes reflecting BNFL, Inc./PHMC Team interface details will need to be generated to maintain PHMC configuration control integrity.

5.1.2.3 Document Release. BNFL, Inc. generated work authorization documentation associated with feed tank transfer activities will be released per PHMC procedures and polices.

5.1.2.4 Lock and Tag Boundary Issues. BNFL, Inc. feed tank transfer modification activities will be conducted in accordance with the PHMC lock and tag program.

5.1.2.5 Excavation and Other Permits. BNFL, Inc. feed tank transfer modification activities will be conducted in accordance with the PHMC procedures and policies on preparation of excavation and other permits.

5.1.3 AP Tank Farm Field Support

The following AP Tank Farm field personnel (i.e., essential AP Tank Farm staff and support staff) requirements must be met by BNFL, Inc.

5.1.3.1 Field Personnel. Since it is unknown how much support BNFL, Inc. will require during the feed tank transfer modification non-intrusive and intrusive activities; the following is the minimum AP Tank farm field support requirements BNFL, Inc. must adhered to in order to perform work within AP Tank Farm:

- Nuclear Chemical Operator (NCO) - a nuclear chemical operator is required to support AP Tank Farm field activities.

- Operations Engineer - an operational engineer dedicated to coordinating the communication and work process flow between PHMC Team, DOE and BNFL, Inc. is required to support AP Tank Farm field activities.

- Health Physics Technician - PHMC health physics support, or the DOE approved equivalent, is required to support AP Tank Farm field activities.

- Bargaining Unit Support - The existing bargaining unit contract provides the union halls with a near exclusive rights to work (craft) activities (i.e, electrical) in the AP Tank Farm. Note: BNFL, Inc. may be able to re-negotiate the terms and conditions of the bargaining unit support contract.

5.1.4 Design Approval

The following design approval and USQ requirements must be performed by BNFL, Inc., DOE and/or PHMC.

5.1.4.1 Review and Approval Personnel. The PHMC Team must review and approve all aspects of BNFL, Inc's. non-intrusive and intrusive design drawings associated with feed tank modification and construction activities within the 241-AP Tank Farm fence. In addition, those aspects of BNFL, Inc's. non-intrusive and intrusive design drawings which affect DOE/PHMC interface points will have to be incorporated into the PHMC configuration control process in such a manner that the information will remain with the PHMC after turnover of 241-AP-106.

5.1.4.2 USQ Review. Concurrent with the design review and approval will be the performance and approval of USQ Screenings and Determinations. In some instances, it may become necessary to convene the PHMC Plant Review Committee for decisions concerning specific design attributes. The potential exists that there may need to be modifications and/or additions to the DOE-RL AB to adequately bound the BNFL, Inc. feed tank and waste treatment facility configurations.

5.1.5 Work Area Congestion

The following work priority requirement must be addressed by the DOE and/or PHMC, and BNFL, Inc.

5.1.5.1 Policy for Number of Simultaneous Operations Within AP Tank Farm. There is the real potential that as many as six different organizations could be attempting simultaneous work in the 241-AP facility, after award of the Phase 1B contract. The organizations could include 241-AP-106 PC, W-211 project, W-314 project, waste characterization personnel (waste sampling activities), and tank farms operations personnel (surveillances, maintenance, transfers, etc.). The current policy provides Shift Managers with discretionary control over which activities and how many activities can be performed simultaneously in a given facility. This is based on interferences with activities in the specific facility and other interfacing facilities. However, it is anticipated that the resolution of BNFL, Inc. prioritization conflicts will not be resolved by the Shift Manager but rather via the Program Management IPT process.

In conjunction with the Program Management IPT process, a procedure or policy identifying the organization which will resolve prioritization conflicts must be prepared. Failure to develop a guideline for establishing work priorities and resolving prioritization conflicts could result in potential safety hazards to the workers, the environment, and, in the event of an operational upset, the public.

5.1.6 Waste Disposal/Segregation

For identification of the waste disposal/segregation requirements which BNFL, Inc., DOE and/or PHMC would have to perform, the following assumptions were applied:

- DOE-RL/PHMC will not be required to inspect, manage or dispose of any dangerous or hazardous waste which BNFL, Inc. generates while performing feed tank modification (i.e, non-intrusive and intrusive) activities.

- All radioactive solid waste, which BNFL, Inc. generates while performing feed tank modification (i.e, non-intrusive and intrusive) activities, will be dispositioned per ICD 03 "Radioactive Solid Wastes".

- BNFL, Inc. will have it's own polices and procedures for establishing and managing how waste generated during feed tank modification activities is handled (i.e., segregated and stored).

Based upon the above assumptions, the only waste disposal/segregation requirement which BNFL, Inc. will be required to meet is laundry services.

5.1.6.1 Laundry Services. Policies and procedures, if not already established, will need to be established to determine how laundry and respirators, used by BNFL, Inc. within the 241-AP Tank Farm fence line, will be segregated. This may include directing BNFL, Inc. to establish BNFL, Inc. specific entry locations for their facilities and have laundry and respirator storage and pick-up from the specific entry locations. BNFL, Inc. would then pay for the treatment of its own laundry and respirators. However, If this concept is not implemented, direction should be provided to identify the method for determining reimbursement of PHMC for treatment of BNFL, Inc. generated laundry and respirators.

6.0 RECORDS AND REPORTING REQUIREMENTS

On the transfer of 241-AP-106, BNFL, Inc. will assume responsibility for recording and providing data necessary for the development of several reports which are required by various Hanford Site specific regulations and environmental permits.

6.1 TRANSMITTAL PATHWAY

Currently, information for the majority of the Hanford Site specific reports is submitted either directly to a Prime Contractor (i.e., Fluor Daniel Hanford [FDH]) or to a subcontractor responsible for compiling the information for the report (i.e.,WMH). Depending on the terms of the TWRS Privatization contract, BNFL, Inc. could transmit data a number of ways. The following is a summary of the various pathways BNFL, Inc. could transmit data.

6.1.1 Direct Submission to the Subcontractor Responsible for the Report

This is the current method for compiling the necessary data. Also, this is the most direct method and would avoid delays in transmitting the data through various channels to the appropriate subcontractor.

6.1.2 Submission to DOE Who Would Then Provide the Information to the Prime Contractor

The Prime Contractor would then supply the data to the subcontractor responsible for compiling the data. Although this option provides the maximum control of the flow of data, it could create significant delays in providing the data to the subcontractor responsible for compiling the report. Also, this option has a high probability for mis-communication of data.

6.1.3 Submission to the Prime Contractor Who Would Then Provide the Information to the Appropriate Subcontractor

This option would fulfill the requirement for tracing data submittals. However delays in the transmittal of information from the Prime Contractor to the subcontractor could result in completion delays.

6.1.4 Submission of BNFL, Inc. Collected Data to the TWRS Subcontractor (i.e., WMH) Who Would Submit the Data along With Its Own Information to Appropriate Parties

This option would best accommodate BNFL, Inc.'s inclusion in the TWRS DST System Dangerous Waste Permit which is to be issued by Ecology in November 1999. All TWRS RCRA related reporting and record keeping must be maintained as one treatment, storage, and disposal (TSD) unit. Therefore, the responsibilities and coordination for the submittal of

required reports and upkeep of the DST Unit Operating Record would need to be a joint effort between BNFL, Inc. and the TWRS subcontractor (WMH)[5].

6.2 DATA NEEDS

The following table lists the reports and data required by various regulations, permits and DOE Orders that need input from BNFL, Inc. The table is organized at follows: report title, brief description of the information needed, types of certifications required, if any, and approximate due dates to the PHMC Team, RL, and the regulatory agency, as required. The certification requirement is further described as to whether it is an internal certification, i.e., one that does not require that it accompany the document to the regulator, or as a certification that does accompany the document to the regulator.

[5]The current understanding is that BNFL, Inc. will be co-operator with RL and FDH thus, 7.1.1 or 7.1.4 are the two most likely paths of data transmittal.

Report	Information Needed From Private Contractors	Required by Contract or Regulations	Certifications	Approximate Due Dates
Annual LDR Report	Waste inventories and narrative descriptions of TSD units storing mixed LDR waste	Tri-Party Agreement milestone M-26-01	None	To FDH 4/1 To RL 4/15 To EPA/ Ecology 4/30
Hanford Site Environmental Report	Compliance with environmental regulations, current site activities, accomplishments and issues. Releases of radionuclides in air/water, hazardous substances, unplanned environmental releases, inventories of chemicals effluent monitoring activities and environmental surveillance activities	DOE Order 5400.1 (PNNL coordinates collection of information)	None	To RL by 7/31 of each year
EPCRA Tier II Emergency and Hazardous Chemical Inventory	Provide periodic input on inventory of hazardous materials with annual verification/certification of information	40 CFR 370	Contractors- Internal Certification RL - Certification	To PHMC 1/13 To RL 1/31 To Regulator 3/1
EPCRA Toxic Chemical Release Inventory Report	Annual input on use and releases of toxic chemicals	40 CFR 372	Contractors- Internal Certification RL - Certification	To PHMC 4/14 To RL 6/1 To Regulator 7/1
Annual Dangerous Waste Report	Provide information on waste generation and waste management activities	WAC 173-303	Contractors- Internal Certification RL - Certification	To PHMC 1/13 To RL 1/31 To Regulator 3/1
PCB Annual Document Log	Information on TSCA regulated PCB waste is required for the document log including waste weights and descriptions, container ID numbers, manifest information for PCBs sent off-site for disposal and date of disposal.	40 CFR 761.180 (TSCA)	None (Not sent to regulators)	To FDH 4/15 To RL 6/15

Report	Information Needed From Private Contractors	Required by Contract or Regulations	Certifications	Approximate Due Dates
PCB Annual Status Report on Storage of PCBs	Report requires container ID numbers, PCB waste weights and descriptions, PCB out of service dates, and programmatic information on current or alternative PCB disposal technologies and data on TSCA regulated PCB waste that contains radioactive constituents and PCB waste that contains both radioactive and RCRA constituents.	Federal Facility Compliance Agreement with EPA	None	To RL 11/4 To HQ 12/31 To EPA 2/8
RCRA Section 3016 Biennial Report	Data on environmental monitoring, hydrogeologic site characterization, environmental contamination, and response actions is required. Also information on RCRA TSD Facilities that managed hazardous waste on or after November 19, 1980, including programmatic data and facility descriptions.	WAC 173-303	None	To RL 12/15 To HQ 1/15 To EPA 1/31
Effluent Information System-Onsite Discharge Information System	DOE requires its sites to annually compile and send radionuclide release data, for both liquid and airborne discharges by April 1 of each year.	DOE Order 5400.1	None	Submitted to INEL (INEL has no funding at this time to evaluate this data.
Environmental Releases	This report presents data for radioactive and non-radioactive substances released into the environment during each calendar year. Information includes general descriptions of facilities, summary of non-routine releases and spills.	DOE Order 5484.1	None	To RL - 10 days after the end of quarter. Internal document only.

Report	Information Needed From Private Contractors	Required by Contract or Regulations	Certifications	Approximate Due Dates
Radionuclide Air Emissions Report	This report includes information on radionuclides emitted to the atmosphere from Hanford Site Facilities, an assessment of the offsite dose to any member of the public and descriptions of point sources	WAC 246-247-080	FDH - certification RL - certification	To RL 6/14 To EPA 6/30 To DOH 6/30
Nonradioactive Air Emission Inventory Information	Annually transmit a report on nonradioactive air emissions to Ecology containing information on operations having the potential to emit combustion products from fossil fuels.	WAC 173-400	None	Submitted to Ecology 105 days after January 1st.
Hanford Facility RCRA Permit General	Requirements for periodic submittals include: quarterly permit documentation modifications, Updates to the permit handbook, annual noncompliance report, annual permitting status report. Maintain each TSD unit's operating log and employee dangerous waste training records	HF RCRA Permit Section II HF RCRA Permit Section II	subcontractor - Internal Cert. Prime - Certification RL - Certification None	As required in the permit NA
Hanford Facility RCRA Permit Condition II.U & V.	Requires TSD units to mark and submit maps of underground dangerous waste pipelines that are subject to WAC regulations. Includes all underground pipes at a TSD that have carried dangerous waste at any time since January 1, 1980. If these lines are located outside of the major fenced areas, these lines must be marked	HF RCRA Permit Condition II.U and V.	None	NA

Report	Information Needed From Private Contractors	Required by Contract or Regulations	Certifications	Approximate Due Dates
Document DOE/RL-96-50	Report for the Mapping and Marking of Dangerous Waste Underground Pipelines submitted to Ecology to meet conditions II.U & V described above. Private contractors will need to comply with the detailed methods identified	HF RCRA Permit Condition II U and V.	None	Document submitted in 1996. Will be updated on an as needed basis
Hanford Facility RCRA Part A Permit Applications	Submittal of Part A permit application documentation for inclusion into the HF RCRA Permit for interim status. All Part A Permit application documentation will be required for incorporation into DOE/RL-88-21	WAC 173-303	Subcontractor - Internal Certification Prime - Certification RL - Certification	Negotiated with Ecology and RL.
Hanford Facility RCRA Part B Permit Applications	Submittal of Part B permit application documentation for inclusion into the HF RCRA Permit for final status	WAC 173-303	Subcontractor - Internal Certification Prime - Certification RL - Certification	Negotiated with Ecology and RL.
Hanford Facility Air Operating Permit	Sitewide air operating permit for Facilities on the Hanford Site. Data needs include: permit modification and renewal information and copies of air permits (NOCs, PSD). Reports submitted semiannually and compliance report submitted annually.	WAC 173-401	Contractors - internal certification RL- Certification	To DOH/EPA 7/11

Report	Information Needed From Private Contractors	Required by Contract or Regulations	Certifications	Approximate Due Dates
Projections of Anticipated Costs for Closure and Postclosure	Annual information required for any TSD unit in final status, undergoing closure, has been closed or is in postclosure care during the preceding fiscal year. Detailed cost estimates for closure or postclosure care, including any monitoring or maintenance being performed or anticipated.	Permit Section II.H	Subcontractors-Internal Certification. Prime contractors - Certification RL - Certification	TWRS will not have a TSD units incorporated in the HF RCRA Permit until 1999 in accordance with Permit Modification Schedule, Rev. 3.0

7.0 241-AP-106 DOCUMENTATION REQUIRED FOR TANK TRANSFER

The operational procedures and documents will be managed in accordance with the PHMC Team's Configuration Management Plan (Vann et al. 1998). All information, in any form, provided to BNFL, Inc. by the PHMC Team or other government contractors, including and not limited to drawings, specifications, electronic files, letter reports, calculations, analysis reports, etc., BNFL, Inc. will be responsible for maintaining configuration control over changes to such information as appropriate, using BNFL, Inc.'s established configuration management policies and procedures. Implementation of a configuration management system will enable BNFL, Inc. to provide the PHMC Team with timely and accurate documentation (i.e., permits, design drawings, etc.) upon return of the waste feed tank (i.e., 241-AP-106) at the conclusion of the mission.

7.1 241-AP-106 DESIGN DRAWINGS

A condition of the TWRS privatization contract is the transmittal of design drawings (i.e., as-builts) when 241-AP-106 is turned over to BNFL, Inc. A total of 353 design drawings have been identified by PHMC Team as needing to be transmitted to BNFL, Inc. Of these, 274 drawings need to be converted from manual to AutoCAD. Also all the drawings will require outstanding engineering change notice incorporation[6]. See Appendix A for a list of the design drawings to be transmitted to BNFL, Inc. The list is comprised of the drawings number, the sheet number, the title and an indication (i.e., Y) if the drawing has already been converted to AutoCAD.

7.2 AP TANK FARM PROCEDURE AND DOCUMENT REVISIONS

Another condition of the TWRS privatization contract is the identification and revision of TWRS AP Tank Farm operational procedures and documents that will be affected when BNFL, Inc. activities (i.e., tank modification, pipeline construction, etc.) commence. Appendices B, C, D and E provide an preliminary overview of the various AP Tank Farm operating procedures and documents which may require revision in support of feed tank modification and turnover activities. The following is a breakdown by category of the operational procedures/documents and the appendices they are located in[7]:

- 45 Plant Operating Procedures (Appendix B)
- 2 Operator Routine Surveillance Procedures (Appendix B)
- 9 Alarm Response Procedures (Appendix B)
- 8 Preventative Maintenance Procedures (Appendix B)
- 9 Functional Test Procedures (Appendix B)

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[6] Detailed facility configuration drawings which support interface, connection and BNFL, Inc. modifications are not included. These drawings will be identified upon award of the Phase 1B contract and captured in ICD 21, HNF-SP-1225.

[7] PHMC administrative, operating, maintenance and engineering procedures/documents not directly related to the operational transfer of 241-AP-106 to BNFL, Inc. are excluded from the scope of this document.

- 2 Operating Specification Documents (Appendix B)
- 1 Criticality Specification Procedure (Appendix B)
- 161 Preventative Maintenance System Component History Files (Appendix C)
- 162 Calibration Data Sheets (Appendix D)
- 34 Essential Facility Electrical and Piping and Instrumentation Drawings (Appendix E).

8.0 REFERENCES

Gibson and Hamm, 1997, *TWRS Administration*, HNF-IP-0842, Rev. 0, Lockheed Martin Hanford Company, Richland, Washington.

Goetz, T. G., 1998, *Tank Waste Remediation System Retrieval Authorization Basis Amendment Task Plan*, HNF-1722, Rev. 0, Lockheed Martin Hanford Company, Richland, Washington.

Noorani, Y.G., 1997, *Tank Waste Remediation System Basis for Interim Operation*, HNF-SD-WM-BIO-001, Rev. 0F, DS&H Hanford, Inc., for Fluor Daniel Hanford, Inc., Richland, Washington.

Strehlow, J. P., 1997, *Unclassified Operating Specifications for the 241-AN, AP, AW, AY, AZ, and SY Tank Farms*, OSD-T-151-00007, Lockheed Martin Hanford Company, Richland, Washington.

Vann, J. M., E. R. Hamm, and R. D. Crips, 1998, *Tank Waste Remediation System Configuration Management Plan*, HNF-1900, Rev. 0, Fluor Daniel Hanford, Inc., January 1998.

APPENDIX A

LISTING OF PRINTS NEEDED FOR TURNOVER

LISTING OF PRINTS NEEDED FOR TURNOVER

Drawing Number	Sheet	Title	CAD
H-2-00 3808	1	Tie Rod Detail Hanford & PUREX - Redox Type	
H-2-00 7249	1	Socket - Canyon Impact Wrench	
H-2-00 30600	1	Standard Square Kick-Off Plate for Male Connectors	
H-2-00 31750	1	Piping Material Code	
H-2-00 31750	2	Piping Material Code	
H-2-00 31750	3	Piping Material Code	
H-2-00 31750	4	Piping Material Code	
H-2-00 31750	5	Piping Material Code	
H-2-00 31750	6	Piping Material Code	
H-2-00 31750	7	Piping Material Code	
H-2-00 31750	8	Piping Material Code	
H-2-00 31750	9	Piping Material Code	
H-2-00 31750	10	Piping Material Code	
H-2-00 31750	11	Piping Material Code	
H-2-00 31750	12	Piping Material Code	
H-2-00 31750	13	Piping Material Code	
H-2-00 31750	14	Piping Material Code	
H-2-00 31750	15	Piping Material Code	
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H-2-00 31750	45	Piping Material Code	
H-2-00 31750	46	Piping Material Code	
H-2-00 31750	47	Piping Material Code	
H-2-00 31750	48	Piping Material Code	
H-2-00 31750	49	Piping Material Code	
H-2-00 31750	50	Piping Material Code	
H-2-00 31750	51	Piping Material Code	
H-2-00 31750	52	Piping Material Code	

LISTING OF PRINTS NEEDED FOR TURNOVER

Drawing Number	Sheet	Title	CAD
H-2-00 31750	53	Piping Material Code	
H-2-00 31750	54	Piping Material Code	
H-2-00 31750	55	Piping Material Code	
H-2-00 31750	56	Piping Material Code	
H-2-00 31750	57	Piping Material Code	
H-2-00 31750	58	Piping Material Code	
H-2-00 31750	59	Piping Material Code	
H-2-00 31750	60	Piping Material Code	
H-2-00 31750	61	Piping Material Code	
H-2-00 31750	62	Piping Material Code	
H-2-00 31750	63	Piping Material Code	
H-2-00 32420	1	Assembly - Horizontal & Vertical 2" Connector	
H-2-00 32420	2	Assembly - Horizontal & Vertical 2" Connector	
H-2-00 32420	3	Assembly - Horizontal & Vertical 2" Connector	
H-2-00 32421	1	Details - 2" Connector Installation	
H-2-00 32423	1	Details Connector Block - 2" Connector	
H-2-00 32423	2	Details Connector Block 3 Way - 2" Connector	
H-2-00 32423	3	Details Connector Block 3 Way - 2" Connector	
H-2-00 32430	1	Assembly Horiz & Vert Conn - 3" Connector	
H-2-00 32430	2	Assembly Horiz & Vert Conn - 3" Connector	
H-2-00 32431	1	Details 3" Connector Installation	
H-2-00 32433	1	Details Connector Block - 3" Connector	
H-2-00 32433	2	Details Connector Block 3 Way - 3" Connector	
H-2-00 32433	3	Details Connector Block - 3" Connector	
H-2-00 32446	1	Details - Alloy Steel Male Connector Nozzle 1", 2", 3", 4" Instrumentation Waste Tank Liquid Level Gauge Installation and	
H-2-00 36382	1	Riser Schedule	
H-2-00 38088	1	F. I. C. Sleeved Guage Liquid Surveillance	
H-2-00 38654	1	Suction Float for Transfer Pump	
H-2-00 57331	1	Mechanical Equipement Details Short and Long Dowels	
H-2-00 57332	1	Mechanical Eqpt Detail - Studs	
H-2-00 57901	1	Flexible Metal Hose Mod and Assy for Process Use	
H-2-00 63804	1	Jumper Miscellaneous Details	
H-2-00 68205	1	Hook Guide 2" Connector PUREX /REDOX Type	
H-2-00 68206	1	Hook Guide 3" Connector PUREX Type	
H-2-00 68209	1	Operating Nut 2" PUREX/REDOX Type	
H-2-00 68215	1	Skirt - Verticle 2" Connector PUREX/REDOX Type	
H-2-00 68215	2	Skirt - Verticle 2" Connector PUREX/REDOX Type	
H-2-00 68218	1	Skirt - Horizontal 3" Connector PUREX/REDOX Type	
H-2-00 68218	2	Skirt - Horizontal 3" Connector PUREX/REDOX Type	
H-2-00 68219	1	Skirt - Verticle 3" Connector PUREX/REDOX Type	
H-2-00 69897	1	Modified Pump Discharge Head	
H-2-00 69897	2	Sub-Assembly Pump Discharge Head	
H-2-00 69897	3	Pump Discharge Head Miscellaneous Details	
H-2-00 69897	4	Pump Discharge Head Miscellaneous Details	
H-2-00 70001	1	Lifting Bail Tank Farm Pump	
H-2-00 73453	1	Std Isolation Blank Assy for PUREX/Hanford Nozzle	
H-2-00 73453	2	Std Isolation Blank Assy for PUREX/Hanford Nozzle	
H-2-00 90160	1	Standard Folding Bails	
H-2-00 90161	1	Standard Rigid Lifting Bails	
H-2-00 90162	1	Standard Horiz Conn Bails	
H-2-00 90174	1	Hook 2" Connector PUREX/REDOX Type	
H-2-00 90174	2	Hook 2" Connector PUREX/REDOX Type	
H-2-00 90184	1	Male Nozzle 1" PUREX	
H-2-00 90185	1	Male Nozzle 2" PUREX	

LISTING OF PRINTS NEEDED FOR TURNOVER

Drawing Number	Sheet	Title	CAD
H-2-00 90185	2	Male Nozzle 2" PUREX	
H-2-00 90186	1	Male Nozzle 3" PUREX	
H-2-00 90186	2	Male Nozzle 3" PUREX	
H-2-00 90439	1	Structural Concrete Tank Foundation Plan & Details	
H-2-00 90440	1	Structural Insulating Concrete Plan & Details	
H-2-00 90441	1	Structural Dome Reinforcement Plan & Detail	
H-2-00 90442	1	Structural Tank Section and Haunch Reinforcement	
H-2-00 90443	1	Structural Haunch Reinforcement at Annulus ACS	
H-2-00 90444	1	Structural Leak Detection Drain Plans and Sections	
H-2-00 90444	2	Piping Leak Detection Drain Plan and Sections	
H-2-00 90444	3	Piping Leak Detection Drain Plan and Sections	
H-2-00 90446	1	Structural Annulus Pump Pits Plans and Sect	
H-2-00 90447	1	Structural Central Pump Pits Plans and Sect	
H-2-00 90447	2	Structural Central Pump Pits Plans, Sect and Det	
H-2-00 90450	1	Structural Vent Pits Plans and Sections	
H-2-00 90453	1	Arch/Strl Details Support Facilties	
H-2-00 90454	1	Structural Typical Details	
H-2-00 90454	2	Structural Typical Details	
H-2-00 90454	3	Structural Typical Details	
H-2-00 90457	3	Structural Central Exhaust Sta Sections and Det	
H-2-00 90464	1	Istn Conc Fdn Plan and Det TK-241-AP-101 Thru 108	
H-2-00 90464	2	Istn Conc Fdn Plan and Det TK-241-AP-101 Thru 108	
H-2-00 90465	1	Elec Instm Insulating Concrete Plan and Details	
H-2-00 90465	2	Elec Instm Insulating Concrete Plan and Details	
H-2-00 90465	3	Elec Instm Insulating Concrete Plan and Details	
H-2-00 90466	1	Instrumentation Concrete Shell Plan and Details	
H-2-00 90466	2	Instrumentation Concrete Shell Plan and Details	
H-2-00 90467	1	Instm Tank Conduit Routing Plan & Details	
H-2-00 90467	2	Instm Tank Conduit Routing Plan & Details	
H-2-00 90470	1	Electrical Power Distribution Plan	
H-2-00 90470	4	Electrical Power Distribution Details	
H-2-00 90470	5	Electrical Power Distribution Details	
H-2-00 90470	6	Electrical Power Distribution Sections	
H-2-00 90470	7	Electrical Power Distribution Sections	
H-2-00 90470	8	Electrical Power Distribution Details	
H-2-00 90471	1	Electrical Instm Distribution Plan	
H-2-00 90471	2	Electrical Instm Distribution Sections	
H-2-00 90472	1	Electrical Heat Trace Distribution Plan	
H-2-00 90472	2	Electrical Heat Trace Distr Plan and Details	
H-2-00 90472	3	Electrical Heat Trace Distr Details	
H-2-00 90472	4	Electrical Heat Trace Distr Details	
H-2-00 90475	2	Elec Instr Bldg 241-AP-271 Plan and Elevations	
H-2-00 90476	1	Elec Elem Diags Central Exh Station	
H-2-00 90476	2	Electrical Elementary Diag Pumps and Fans	
H-2-00 90476	3	Electrical Elementary Diagrams Annunciator	
H-2-00 90476	4	Electrical Elementary Diagrams Annunciator	
H-2-00 90476	5	Electrical Elementary Diagrams CRT Logic and Controls	
H-2-00 90476	6	Electrical Elementary Diagrams Leak Detection Intlks	
H-2-00 90476	7	Electrical Elementary Diag CRT Logic	
H-2-00 90476	8	Electrical Elementary Diag Leak Detection	
H-2-00 90476	9	Electrical Elementary Diagrams Annunciator	
H-2-00 90476	10	Electrical Elementary Diagrams Heat Trace	
H-2-00 90476	11	Electrical Elementary Diagram Shutdown Ckt & FA	
H-2-00 90476	12	Electrical Elementary Diagrams Radiation Mon	
H-2-00 90476	13	Elec Elm Diag Heater Controller	

LISTING OF PRINTS NEEDED FOR TURNOVER

Drawing Number	Sheet	Title	CAD
H-2-00 90477	1	Electrical Wire Run List	
H-2-00 90477	2	Electrical Wire Run List	
H-2-00 90477	3	Electrical Wire Run List	
H-2-00 90477	4	Electrical Wire Run List	
H-2-00 90477	5	Electrical Wire Run List	
H-2-00 90477	6	Electrical Wire Run List	
H-2-00 90477	7	Electrical Wire Run List	
H-2-00 90477	8	Electrical Wire Run List	
H-2-00 90477	9	Electrical Wire Run List	
H-2-00 90477	10	Electrical Wire Run List	
H-2-00 90479	1	Electrical Leak Detection Encl Detail & Assy	
H-2-00 90480	1	Electrical Relay Enclosures	
H-2-00 90480	2	Electrical Relay Enclosures	
H-2-00 90489	1	Instrumentation Engineering Block Diagrams	
H-2-00 90490	1	Instm LDI & LI Assembly & Details	
H-2-00 90490	2	Instm LDI & LI Assembly & Details	
H-2-00 90490	3	Instm Tank Sludge level Assy & Det	
H-2-00 90491	1	Instm Xmtr/MUX Enclosure Type A	
H-2-00 90491	2	Instm Xmtr/MUX Enclosure Type A	
H-2-00 90491	3	Instm Xmtr/MUX Enclosure Type A	
H-2-00 90491	4	Instm Xmtr/MUX Enclosure Type A	
H-2-00 90491	5	Instm Xmtr/MUX Enclosure Type A	
H-2-00 90491	6	Instm Xmtr/MUX Enclosure Type A	
H-2-00 90491	7	Instm Xmtr/MUX Enclosure Type A	
H-2-00 90492	1	Inst Multi-Thermocouple Probe Assembly	
H-2-00 90494	1	Instm Temp Display Sys Interconnection Diag	
H-2-00 90494	2	Instm Temp Display Sys Interconnection Diag	
H-2-00 90494	3	Instm Temp Display Sys Interconnection Diag	
H-2-00 90495	1	Instm Panel Fabrication Support & Finish	
H-2-00 90496	1	Instm Panel & Rack Arrangements	
H-2-00 90496	2	Instm Panel & Rack Arrangements	
H-2-00 90496	3	Instm Panel & Rack Arrangements	
H-2-00 90496	4	Instm Panel & Rack Arrangements	
H-2-00 90498	1	Instm Instrumentation Panel Arrangements	
H-2-00 90498	2	Instm Instrumentation Panel Arrangements	
H-2-00 90500	1	Instm Interconnection Diagrams Annunciators	
H-2-00 90500	2	Instm Interconnection Diagrams Annunciators	
H-2-00 90500	4	Instm Interconnection Diag Misc Radiation	
H-2-00 90501	1	Instm radiation Probe Mounting Pole	
H-2-00 90503	1	Instm Analog Rack & Loop Diagrams	
H-2-00 90503	2	Instm Analog Rack & Loop Diagrams	
H-2-00 90503	5	Instm Analog Rack & Loop Diagrams	
H-2-00 90503	6	Instm Analog Rack & Loop Diagrams	
H-2-00 90503	10	Instm Analog Rack & Loop Diagrams	
H-2-00 90507	1	Instm CASS Alarm Interface Connection Diagram	
H-2-00 90507	5	Instm CASS Alarm Interface Connection Diagram	
H-2-00 90507	6	Instm CASS Alarm Interface Connection Diagram	
H-2-00 90508	1	Instm CASS Substa "A" FIC Interface Conn Diag	
H-2-00 90510	2	Instm Rad Mon Encl Vent Pit	
H-2-00 90510	4	Instm Rad Mon Encl Vent Pit	
H-2-00 90512	1	Instm LDI & LI Tape & Drum Sub-Assy & Det	
H-2-00 90512	2	Instm LDI & LI Tape & Drum Sub-Assy & Det	
H-2-00 90512	3	Instm LDI & LI Tape & Drum Sub-Assy & Det	
H-2-00 90521	1	HVAC Air Intake Station Plans & Details	
H-2-00 90522	1	HVAC Equipment Schedules and Notes	

LISTING OF PRINTS NEEDED FOR TURNOVER

Drawing Number	Sheet	Title	CAD
H-2-00 90533	1	Engineering Flow Diagram 241-AP-106	
H-2-00 90534	1	Tank Cross Section 241-AP Tanks	
H-2-00 90536	1	Plan Tank Penetrations 241-AP-106 & 108	
H-2-00 90537	1	Tank Penetrations & Riser Details 241AP Tanks	
H-2-00 90541	1	Engineering Flow Diagram 241-AP-108	
H-2-00 90542	1	Piping Hydraulic Diagram 241-AP Tank Farm	
H-2-00 90543	1	Piping Plan #1 241-AW Tank Farm	
H-2-00 90544	1	Piping Plan #2 Waste Transfer Lines	
H-2-00 90547	1	Piping Plan #5	
H-2-00 90547	2	Piping Plan #5	
H-2-00 90548	1	Piping Plan #6	
H-2-00 90552	1	Piping Sections & Details 241-AP Tank Farm	
H-2-00 90558	1	Piping Plan Tank 106	
H-2-00 90560	1	Piping Plan Tank 108	
H-2-00 90561	1	Piping Miscellaneous Details I	
H-2-00 90561	2	Piping Miscellaneous Details I	
H-2-00 90562	1	Piping Plan Central Pump Pit 241-AP-01A Thru 08A	
H-2-00 90563	1	Piping Sect & Det Central Pump Pit 241-AP-01A Thru 08A	
H-2-00 90564	1	Piping Plan Annulus Pump Pit 241-AP-01B Thru 08B	
H-2-00 90565	1	Ppg Sect & Det Annulus Pump Pit 241-AP-01B Thru 08B	
H-2-00 90570	1	Piping Concrete Shielding Details	
H-2-00 90572	1	Piping Riser Details I	
H-2-00 90573	1	Piping Riser Details II	
H-2-00 90574	1	Piping Riser Details III	
H-2-00 90574	2	Piping Riser Details IV	
H-2-00 90576	1	Piping Pump Arrangements P-AP-1 & P-AP-2	
H-2-00 90582	1	Piping Support Plan #5	
H-2-00 90583	1	Piping Support Plan #6	
H-2-00 90585	1	Piping Expansion Void Details	
H-2-00 90585	2	Piping Expansion Void Details	
H-2-00 90585	3	Piping Expansion Void Details	
H-2-00 90585	4	Piping Expansion Void Details	
H-2-00 90585	5	Piping Expansion Void Details	
H-2-00 90586	1	Piping Exhaust Line Encl	
H-2-00 90586	2	Piping Exhaust Line Encl	
H-2-00 90592	1	Piping Support Plan TK-106	
H-2-00 90594	1	Piping Support Plan TK-108	
H-2-00 90595	1	Piping Support Details	
H-2-00 90595	2	Piping Support Details	
H-2-00 90596	1	Pit & Pit Cover Painting Diag 241-AP Tank Farms	
H-2-00 90599	1	Jumper Arrgmt Ctl Pump Pit 241-AP-01A Thru 08A	
H-2-00 90599	2	Jumper Arrgmt Ctl Pump Pit 241-AP-01A Thru 08A	
H-2-00 90600	1	Jumper Arrgmt Annulus Pump Pit 241-AP-01B Thru 08B	
H-2-00 90725	1	Jumper Assembly A-E Pump Central Pump Pit	
H-2-00 90726	1	Flex Jumper Assembly A-C, A-D Alternate	
H-2-00 90727	1	Jumper Assy B to Distributor Central Pump Pit	
H-2-00 90729	1	Flex Jumper Assembly Pump to A	
H-2-00 90750	1	HVAC Details	
H-2-00 90751	5	Electrical Details	
H-2-00 90833	1	Piping Dummy Pump Head	
H-2-00 90835	1	Piping Vent Pit #1 & #2	
H-2-00 90835	2	Piping Vent Pit #1 & #2	
H-2-00 90841	1	Piping Concrete Shielding	
H-2-00 90842	1	Piping Misc Details II	
H-2-00 90843	1	Piping Misc Details III	

LISTING OF PRINTS NEEDED FOR TURNOVER

Drawing Number	Sheet	Title	CAD
H-2-00 90844	1	Piping Distribitor Assy	
H-2-00 90845	1	Jumper Misc Details III	
H-2-00 90846	1	Piping Spray Wand Assy	
H-2-00 90848	1	Piping Pit Drain Seal Assembly	
H-2-00 90849	1	Piping Pit Drain Seal Details	
H-2-00 90850	1	Piping Miscellaneous Details IV	
H-2-00 90852	1	Jumper Misc Details I	
H-2-00 90853	1	Jumper Misc Details II	
H-2-00 90853	2	Jumper Misc Details II	
H-2-00 91247	1	12" Annulus Exhaust Duct Probe Assembly	
H-2-00 91550	1	4" Drill Rod Guide Assembly and Details	
H-2-00 91550	2	4" Drill Rod Guide Assembly and Details	
H-2-00 91760	1	Dual Beta Monitor Cabinet Split Entry Assy	
H-2-00 91943	1	Process Turbine Pump-AN-AW-AP	
H-2-00 91943	2	Process Turbine Pump-AN-AW-AP	
H-2-00 91943	3	Process Turbine Pump-AN-AW-AP	
H-2-00 92447	1	Surveillance P. A. D. Assembly	
H-2-00 92448	1	Surveillance P. A. D. Main Amplifier Board Assembly	
H-2-00 92449	1	Surveillance P. A. D. Auxiliary Board Schematics	
H-2-00 92449	2	Surveillance P. A. D. Auxiliary Board Schematics	
H-2-00 92450	1	Surveillance P. A. D. Main Amplifier Board Drill & Trim	
H-2-00 92450	2	Surveillance P. A. D. Main Amplifier Board Drill & Trim	
H-2-00 92450	3	Surveillance P. A. D. Main Amplifier Board Drill & Trim	
H-2-00 92451	1	Surveillance P. A. D. Auxiliary Board Assembly	
H-2-00 92452	1	Surveillance P. A. D. Low Voltage Auxiliary Board - Silk Screen	
H-2-00 92452	2	Surveillance P. A. D. Low Voltage Auxiliary Board - Silk Screen	
H-2-00 92453	1	Surveillance P. A. D. High Voltage Auxiliary Board - Silk Screen	
H-2-00 92453	2	Surveillance P. A. D. High Voltage Auxiliary Board - Silk Screen	
H-2-00 92488	1	Generic Stack Sampler / Monitor Modified Monitor Assy	
H-2-00 92488	2	Generic Stack Sampler / Monitor Modified Monitor Assy	
H-2-00 92490	1	Generic Stack Sampler / Monitor Sample Extraction Assy	
H-2-00 92497	1	Generic Stack Sampler / Monitor Basic Cabinet Assy	
H-2-00 92497	2	Generic Stack Sampler / Monitor Basic Cabinet Assy	
H-2-00 94082	1	Cathodic Protection Piping Plan #6	
H-2-00 94083	1	Cathodic Protection Test Station Details	
H-2-00 94084	1	Cathodic Protection Test Station Details	
H-2-00 94085	1	Cathodic Protection Details Anodes, Rectifiers	
H-2-00 94086	1	Cathodic Protection Details Cables, Boxes & Jumpers	
H-2-00 94087	1	Cathodic Protection Details Connections, Miscellaneous	
H-2-00 94872	1	Liquid Level Instr. Shielding	
H-2-00 94872	2	Liquid Level Instr. Shielding	
H-2-00 94872	3	Liquid Level Instr. Shielding	
H-2-00 95260	1	Stainless Steel Flake Tank Electrode Box Assy	
H-2-00 95260	2	Stainless Steel Flake Tank Electrode Box Assy	
H-2-00 95260	3	Stainless Steel Flake Tank Electrode Box Assy	
H-2-00 95331	1	Liquid Level Reel Arrangement	
H-2-00 95331	2	Liquid Level Reel Arrangement	
H-2-00 95331	3	Liquid Level Reel Arrangement	
H-2-00 95331	4	Liquid Level Reel Arrangement	
H-2-00 95331	5	Liquid Level Reel Arrangement	
H-2-00 95331	6	Liquid Level Reel Arrangement	
H-2-00 95360	1	Flash Tank	
H-2-00 95360	2	Flash Tank	
H-2-00 95360	3	Flash Tank	
H-2-00 95365	1	Liquid Level Plummet	

LISTING OF PRINTS NEEDED FOR TURNOVER

Drawing Number	Sheet	Title	CAD
H-7-00 1275	1	Electrical Symbol	
H-9-00 1105	1	Pump Vertical Turbine Non-Corrosive Service	
H-14-00 10503	6	Dome Penetration Schedules (WST/WSTA) Tank 241-AP-106	Y
H-14-00 10503	8	Dome Penetration Schedules (WST/WSTA) Tank 241-AP-108	Y
H-14-00 20000	1	Tank Farms System P&ID Drawing Legend	Y
H-14-00 20000	2	Tank Farms System P&ID Drawing Legend	Y
H-14-00 20103	1	Ventilation Tank Primary System (VTP) O&M Sys P&ID	Y
H-14-00 20203	1	Ventilation Tank Annulus System (VTA) O&M Sys P&ID	Y
H-14-00 20203	2	Ventilation Tank Annulus System (VTA) O&M Sys P&ID	Y
H-14-00 20303	1	Service & Instrumentation Air System (SA/IS) O&M Sys P&ID	Y
H-14-00 20303	3	Service & Instrumentation Air System (SA/IS) O&M Sys P&ID	Y
H-14-00 20303	5	Service & Instrumentation Air System (SA/IS) O&M Sys P&ID	Y
H-14-00 20503	6	Waste Storage Tank Annulus Instm Sys (WSTA) O&M Sys P&ID	Y
H-14-00 20503	8	Waste Storage Tank Annulus Instm Sys (WSTA) O&M Sys P&ID	Y
H-14-00 20603	6	Waste Storage Tank Primary Instm Sys (WST) O&M Sys P&ID	Y
H-14-00 20603	8	Waste Storage Tank Primary Instm Sys (WST) O&M Sys P&ID	Y
H-14-00 20803	4	Waste Transfer System (WT) O&M Sys P&ID	Y
H-14-00 21803	1	Raw Water System (RW) O&M Sys P&ID	Y
H-14-00 30003	1	Electrical (EDS) One Line Diagram	Y
H-14-00 30003	2	Electrical (EDS) One Line Diagram	Y
H-14-00 30003	22	Electrical (EDS) Panelboard Schedule	Y
H-14-00 30003	23	Electrical (EDS) Panelboard Schedule	Y
H-14-00 30003	27	Electrical (EDS) Panelboard Schedule	Y
H-14-00 30003	28	Electrical (EDS) Equipment Power Isolation Table	Y

Number of Prints to Convert to CAD	217
Number of Prints to Needed for Turnover	261

APPENDIX B

OPERATING PROCEDURES

OPERATING PROCEDURES

Plant Operating Procedures

TO-001-180 104-AP	EMERGENCY TRANSFER FROM TK-101-AY/TK-102-AY TO TK-
TO-001-182	EMERGENCY PUMP PROCEDURE FOR AP-FARM
TO-020-005	PERFORM PIT EXAMINATIONS
TO-020-141	IN-TANK VIDEO PROCEDURE
TO-020-193	RESPOND TO LDT-48 ALARMS IN AP TANK FARMS
TO-020-270	PREPARATION FOR WORK IN DIVERSION BOXES OR PITS AND JUMPER CHANGES
TO-020-420	CLEAN, LIT TAPES, PLUMMETS AND DISPLACERS; REPLACE FIC/ROBERT SHAW TAPES
TO-020-430	REMOVE TANK SLUDGE LEVEL WEIGHTS OR MEASUREMENT PENCILS
TO-020-595 TRANSFERS	LEAK DETECTION PIT/RADIATION DETECTION DRYWELL
TO-020-755	RECORD STATUS OF FACILITY ALARM PANELS
TO-040-020	OPERATE CASS TERMINALS
TO-040-025	OPERATE CASS CENTRAL FACILITY
TO-040-035	OPERATE THE TMAC SURVEILLANCE SYSTEM FOR UGS TANKS
TO-040-180	OPERATE TANK SURFACE LEVEL MONITORING DEVICES
TO-040-501	PERFORM SURVEILLANCE/SAFETY/HOUSEKEEPING INSPECTION OF 200-EAST TANK FARMS
TO-040-540	RAW WATER SURVEILLANCE AND USAGE
T0-040-560	200 EAST/WEST TANK FARMS SLUDGE LEVEL READINGS
TO-040-590	LEAK DETECTION WELLS AND ANNULUS LEAK DETECTION SYSTEM
TO-040-650	OBTAIN/RECORD DOUBLE-SHELL TANK TEMPERATURE DATA

TO-040-740	PERFORM ROUTINE SURV OF WINTERIZED BLDG EQUIP EAST AREA
TO-060-340	OPERATE 241-AP PRIMARY VENTILATION SYSTEM
TO-060-341	OPERATE 241-AP ANNULUS VENTILATION SYSTEM
TO-100-002	PREPARING AND ISSUING WASTE CONTAINERS
TO-100-003	PERFORM CLEAN-UP OF RODENT CONTAMINATED AREAS
TO-100-010	WASTE TRUCK SUPPORT SERVICES
TO-100-040	ESTABLISH AND INSPECT ACTIVE AND SATELLITE ACCUMULATION AREA CONTAINERS
TO-100-052	PERFORM WASTE GENERATION, SEGREGATION AND ACCUMULATION
TO-100-053	PERFORM SAMPLING & REPACKAGING OF LLW, RMW AND HAZ WASTE
TO-140-170	PRESSURE TEST OF PROCESS PIPELINES AND PIPE ENCASEMENT
TO-220-027	TRANSFER FROM 244-A TO 101-AN
TO-220-096	TRANSFER FROM TK-106-AW TO TK-106-AN
TO-230-276	TRANSFER FROM TK-244-A TO TK-101-AN
TO-270-024	TRANSFER FROM TK-105-AW TO TK-108-AP
TO-270-040	OPERATE 241-AP TEMPERATURE DISPLAY SYSTEM
TO-270-140	OPERATE 241-AP-273 AIR COMPRESSOR SYSTEMS
TO-270-204	TRANSFER FROM 204-AR TO TK-106-AP
TO-270-226	TRANSFER FROM TK-101-AN TO TK-106-AP
TO-270-244	TRANSFER FROM 244-A TO TK-106-AP
T0-270-266	TRANSFER FROM TK-106-AN TO TK 108-AP
TO-270-256	TRANSFER FROM TK-102-AY TO TK-106-AP
TO-270-311	TRANSFER FROM ER-311 TO TK-106-AP

TO-270-344	TRANSFER FROM 244-BX TO TK-106-AP
TO-270-826	TRANSFER FROM B-PLANT CELL 24 TO TK-106-AP
TO-270-828	TRANSFER FROM B-PLANT CELL 24 TO TK-108-AP
TO-430-485	CROSS-SITE TRANSFER FROM TK-102-SY TO TK-104-AP

Operator Routine Surveillance Procedures

TF-OR-A-03	AP, AW TANK FARMS
TF-OR-EF-AP	AP TANK FARM ROUNDS

Alarm Response Procedures

ARP-T-271-00106	RESPOND TO PANEL 106 ALARMS AT 271-AP
ARP-T-271-00108	RESPOND TO PANEL 108 ALARMS AT 271-AP
ARP-T-271-AUX	RESPOND TO PANEL AUX ALARMS AT 271-AP
ARP-T-271-HVAC	RESPOND TO PANEL HVAC ALARMS AT 271-AP
ARP-T-271-RM	RESPOND TO PANEL RM ALARMS AT 271-AP
ARP-T-601-AB2	RESPOND TO PANEL AB2 ALARMS AT THE 242-A EVAPORATOR
ARP-T-601-081 EVAPORATOR	RESPOND TO FACEPLATE # 81 ALARMS AT THE 242-A
ARP-T-601-290 EVAPORATOR	RESPOND TO FACEPLATE # 290 ALARMS AT THE 242-A
ARP-T-601-295 EVAPORATOR	RESPOND TO FACEPLATE # 295 ALARMS AT THE 242-A

Preventative Maintenance Procedures

3-MISC-363	WINTERIZATION/DE-WINTERIZATION EAST TANK FARMS
6-TF-155AE	APPENDIX AE, 241-AP ANNULUS EXHAUSTER STACK 296-A-41 AIR FLOW TEST DATA SH
6-TF-155B	APPENDIX B, 241-AP TANK EXHAUSTER STACK 296-A-40 AIR FLOW TEST DATA SHEETS

6-TF-156AD	APPENDIX AD, 241-AP TANK FARM ANNULUS INLET FILTER AEROSOL TEST DATA SHEET
6-TF-221	INSPECTION OF CATHODIC PROTECTION SYSTEM
6-TF-225	INSPECTION OF EAST TANK FARM TRANSFORMERS
6-TF-233	OPERATING LOAD CHECK & THERMAL HEATING SUREY OF THE 241-AP AREA DISTRIBUTI
6-TF-357ET (ET)	CATHODIC PROTECTION SYSTEM TESTING EAST TANK FARMS

Functional Test Procedures

TF-EFT-279-110	PERFORM BUILDING AP-271 RADIATION MONITORING FUNCTIONAL TEST
TF-FT-049-002	PERFORM FOOD INSTRUMENT CORPORATION LIQUID LEVEL GAUGE FUNCTIONAL TEST
TF-FT-049-003	PERFORM ENRAF FUNCTIONAL TEST
TF-FT-049-004	PERFORM MANUAL TAPE FUNCTIONAL TEST
TF-FT-049-006	PERFORM LEAK DETECTION FUNCTIONAL TEST FOR SUPERNATANT AND SLURRY TRANSFER
TF-FT-279-001	PERFORM DOUBLE SHELL TANK 241-AP PRESSURE FUNCTIONAL TEST
TF-FT-279-008	PERFROM AP DST 101 THROUGH 108 ANNULUS LEAK DETECTION FUNCTIONAL TEST
TF-FT-279-016	PERFORM AP DST 101 THROUGH 108 ANNULUS CAM LEAK DETECTION FUNCTIONAL TEST
TF-ICF-020-001	PERFORM WASTE TANK DOME ELEVATION SURVEYS

Operating Specification Documents

OSD-T-151-00007	OPERATING SPECIFICATIONS FOR 241-AN,AP,AW,AY,AZ & SY TANK FARMS
OSD-T-151-00031	OPERATING SPEFICIATIONS FOR TANK FARM LEAK DETECTION

Criticality Specification Documents

CPS-T-149-00010	WASTE STORAGE IN DOUBLE-SHELL TANKS AND ASSOCIATED EQUIPMENT

APPENDIX C

CALIBRATION DATASHEETS REQUIRING MODIFICATIONS

CALIBRATION DATASHEETS REQUIRING MODIFICATIONS

Component Number	Activity Title
A-40-106-TK-PSYCH	241-AP 106 TK PSYCH
A-40-108-TK-PSYCH	241-AP 108 TK PSYCH
A-41-106-ANN-PSYCH	241-AP 106 ANN PSYCH
A-41-108-ANN-PSYCH	241-AP 108 ANN PSYCH
AI-106-1-AP	SUPERNATANT PUMP AMMETER
AI-108-1	SUPERNATANT PUMP AMMETER
AI-106-2-AP	SUPERNATANT PUMP AMMETER
AI-108-2-AP	SUPERNATANT PUMP AMMETER
AP241-VTA-FLT-222	105/106 ANN INLT FLT K2-4-3
AP241-VTA-FLT-232	107/108 ANN INLT FLT K2-4-4
AP904-WSTA-CAM-106	TK 241AP 106 ANNN EXH CAM
AP904-WSTA-CAM-108	TK 241AP 108 ANN EXH CAM
AY-AP-C	AMPERAGE TO VOLTAGE CONVRTR
AY-AP-D	AMPERAGE TO VOLTAGE CONVRTR
C8-S48	241-AP SUB STA INSP & MAINT
CVT-106-AP-1	RAN 106-1 INPUT CONVERTER MV/V
CVT-108-AP-1	RAN 108-1 INPUT CONVERTER NV/V
DPA-K2-10	INTAKE STATION D HEPA DP ALARM
DPA-K2-13	INTAKE STATION C PREFILTER DP
DPA-K2-14	INTAKE STATION D PREFILTER DP
DPA-K2-9	INTK HEPA K2-4-3 DP ALRM STA C
DPI-106-1-AP	TK-106-AP PRESSURE INDICATOR
DPI-106-2-AP	TK-106-AP ANNULUS PRESSURE-STA
DPI-108-1	TK-108-AP PRESSURE INDICATOR
DPI-108-2	TK-108-AP ANN PRESS IND-STACTC
DPIS-10-6	INTAKE STATION D HEPA DP INDIC
DPIS-13-5	INTAKE STATION C PREFILTER DP
DPIS-14-6	INTAKE STATION D PREFILTER DP
DPIS-9-5	IN HEPA K2-4-3 DP INDISW STA C
EN-RECT-301	241AP CATH. PROT RECT RI
EN-RECT-302	241AP CATH. PROT RECT R2
FA-106-AP-1	TK-106-AP ANNULUS CAM LOW FLOW
FA-108-AP-1	TK-108-AP ANNULUS CAM LOW FLOW
FAS-106-AP-A	TANK 106-AP ANNULUS CAM LOW FL
FAS-108-AP-1	TANK 108-AP ANNULUS CAM LOW FL
FI-106-1-AP	PURGE AIR ROTOMETER
FI-106-2(AP)	FLOW INDICATOR
FI-106-3-AP	FLOW TRANSMITTER
FI-106-4-AP	FLOW INDICATOR
FI-106-5(AP)	FLOW INDICATOR
FI-106-6(AP)	FLOW INDICATOR
FI-108-1	PURGE AIR ROTOMETER
FI-108-2	FLOW INDICATOR
FI-108-3	FLOW INDICATOR
FI-108-4	FLOW INDICATOR
FI-108-5	FLOW INDICATOR
FI-108-6	FLOW INDICATOR
HTA-AP-1	241-AP COMMON HEAT TRACE TROUB
HTA-AP-2	241AP COMMON HEAT TRACE TROUBL
HTTC-STA-C-1	INTAKE STA C HEAT TRACE CONTRO

CALIBRATION DATASHEETS REQUIRING MODIFICATIONS

Component Number	Activity Title
HTTC-STA-D-1	INTAKE STA D HEAT TRACE CONTRO
INSULATION/LAGGING(AP/AW)	241-AP/AW ANNUAL INSPECTION OF
LA-106-1(AP115-2)	TK-106-AP HIGH LIQ LEVEL ALARM
LA-108-1	TK-108-AP HIGH LL ALARM
LAM-106-1	P-106-1 CURRENT LIMIT ALARM MO
LAM-108-1	P-108-1 CUPPENT LIMIT ALARM MO
LDA-A-1	COMMON LEAK DETECTION ALARM-CE
LDA-A-2	COMMON LEAK DETECTION ALARM-CE
LDA-B-1	COMMON LEAK DETECTION ALARM-AN
LDA-B-2	COMMON LEAK DETECTION ALARM-AN
LDE-06A(AP173-1)	CENTRAL PUMP PIT LEAK DETECTIO
LDE-06B-1-AP	ANNULUS PUMP PIT LEAK DETECTIO
LDE-08A	CENTRAL PUMP PIT LEAK DETECTIO
LDE-08B-1	ANNULUS PUMP PIT LEAK DETECTIO
LDE-106-2	ANNULUS LK DET ELMNT TK-106-AP
LDI-106-2(AP140-2)	TK-106-AP ANNULUS LEAK DET IND
LDI-106-3(AP141-2)	LEAK DETECTOR INDICATOR
LDI-106-4(AP142-2)	LEAK DETECTOR INDICATOR
LDI-108-2	LEAK DETECTOR INDICATOR
LDI-108-3	LEAK DETECTOR INDICATOR
LDI-108-4	TK-108-AP LEAK DETEC INDICATOR
LDXA-A-1	COMMON LEAK DETECTOR FAILURE A
LDXA-B-1	COMMON LEAK DETECTOR FAILURE A
LE-06B-.1	ANNULUS PUMP PIT SUMP LEVEL EL
LE-08B-1	ANNULUS PUMP PIT SUMP LEVEL EL
LE-106-1	TK-106-AP AUTO LIQ LEV ELEMENT
LE-106-2(AP115-1)	TK-106-AP HIGH LIQ LEVEL PROBE
LE-106-3(AP123-1)	TK-106-AP MAN LIQ LEVEL ELEMNT
LE-108-1	TK 108-AP AUTO LIQ LEVEL ELMNT
LE-108-2	TK-108-AP HIGH LIQ LEVEL PROBE
LE-108-3	TK-108-AP MAN LIQ LEVEL ELEMNT
LI-106-1	TK-106-AP LEVEL INDICATOR
LI-108-1	TK-108-AP MANUAL LEVEL INDCTR
LIT-106-1(AP107-2)	TK-106-AP LEVEL IND TRANSMITR
LIT-108-1	TK-108-AP AUTO LEVEL IND XMTR
LXA-106-1	TK-106-AP HIGH LL ALARM FAILUR
LXA-108-1	TK-108-AP HIGH LL ALARM FAILUR
LXA-B-1	LEVEL FAILURE ALARM-ANNULUS PU
MS-106-1-AP	P-106-1 MANUAL SWITCH
Ms-108-1	P-108-1 MANUAL SWITCH
N/A(241AP)	241-AP PWR DIST CTR "C" INSP &
N/A(241AP)	241-AP PWR DIST CTR "D" INSP &
N/A(241AP)	241-AP DIST PNLS LOAD CK-THERM
PA-106-1(AP006-9)	TK-106-AP PRESSURE ALARM-VAC
PA-106-2(AP006-8)	TK-106-AP PRESSURE ALARM-EXCES
PA-108-1	TK-108-AP PRESSURE ALARM-VAC
PA-108-2	TK-108-AP PRESSURE ALARM-EXCES
PA-A-1	PRES ALRM VAC LOSS TKS-101-108
PA-A-2	PRES ALRM-EXC VAC TKS-101-108
PAS-106-1-AP	TK 106-AP PRES. ALM SW. LOSS 0
PAS-106-2-AP	TK 106-AP PRES. ALM SW. EXCESS

CALIBRATION DATASHEETS REQUIRING MODIFICATIONS

Component Number	Activity Title
PAS-108-1	TK 108-AP PRES. ALM SW. LOSS
PAS-108-2	TK 108-AP PRES, ALM SW. EXCESS
PI-22-5	TK-106-AP ANNULUS INLET PRESSU
PI-24-6	TK 108-AP ANNULUS INLET PRESSU
PI-IA-106	MUX ENCL. AIR PRESSURE GAUGE
PI-IA-108	MUX ENCL AIR PRESSURE GAUGE
PI-VP-108-AP	ANNULUS VENT CAM VACUUM GAUGE
PI-WP-106-AP	ANNULUS VENT CAM VACUUM GAUGE
PR-106-1(AP006-4)	TK 106-AP PRES. RECORDER-NARRO
PR-106-2(AP006-5)	TK 106-AP PRES. RECORDER-WIDE
PR-108-1	TK 108-AP PRES. RECORDER-NARRO
PR-108-2	TK 108-AP PRES. RECORDER-WIDE
PRV-IA-106	MUX ENCLOS. AIR PRESSURE REGULA
PRV- IA-108	MUX ENCLOS. AIR PRESSURE REGULA
PT-106-1(AP006-2)	TK 106-AP PRESSURE XMTR-NARROW
PT-106-2(AP006-3)	TK 106-AP PRESSURE XMTR-WIDE R
PT-108-1	TK 108-AP PRESSURE XMTR-NARROW
PT-108-2	TK 108-AP PRESSURE XMTR-WIDE R
RA-106-AP-1	TK-106-AP ANNULUS RADIATION AL
RA-106-AP-2	TK-106-AP ANNULUS RADIATION AL
RA-106-AP-3	TK-106-AP ANNULUS RADIATION AL
RA-106-AP-4	TK-106-AP ANNULUS RADIATION AL
RA-108-AP-1	TK-108-AP ANNULUS RADIATION AL
RA-108-AP-2	TK-108-AP ANNULUS RADIATION AL
RA-108-AP-3	TK-108-AP ANNULUS RADIATION AL
RA-108-AP-4	TK-108-AP ANNULUS RADIAITON AL
RR-106-AP-1	TANK 106-AP ANNULUS RADIATION
RR-108-AP-1	TANK 108-AP ANNULUS RADIATION
RXA-106-AP-1	TK-106-AP ANNULUS RADIATION AL
RXA-106-AP-2	TK-106-AP ANNULUS RADIATION AL
RXA-108-AP-1	TK-108-AP ANNULUS RADIATION AL
RXA-108-AP-2	TF-108-AP ANNULUS RADIATION AL
SDA-106-1(AP047-5)	P-106-1 SHUT DOWN ALARM
SDA-106-1-AP	P-106-1 SHUT DOWN ALARM
SDA-108-1	P-108-1 SHUT DOWN ALARM
SDA-108-2	P-108-1 SHUT DOWN ALARM
SRV-IA-106	MUX ENCH. SAFETY RELIEF VALVE
SRV-IA-108	MUX ENCL. SAFETY RELIEF VALVE
TA-106/-108-1	TK-106/108 STACK CAB TEMP ALAR
TA-3-C	INTAKE STATION C HEATER FAILUR
TA-4-D	INTAKE STATION D HEATER FAILUR
TA-K2-3	INTAKE STATION C HEATER FAILUR
TA-K2-4	INTAKE STATION D HEATER FAILUR
TC-3-C	HTR K2-2-3 TEMP CONTR STA C
TC-4-D	INTAKE STATION HEATER TEMP CO
TDS-AP-2	241-AP FARM TEMPERATURE DISPLA
TI-13	STATION C TEMPERATURE INDICATO
TI-14	STATION C TEMPERATURE INDICATO
TI-15	STATION D TEMPERATURE INDICATO
TI-16	STATION D TEMPERATURE INDICATO
TS-106/-108HI	TK-106/108-AP STACK CAB FAN SW

CALIBRATION DATASHEETS REQUIRING MODIFICATIONS

Component Number	Activity Title
TS-106/-108LOW	TK-106/108-AP STACK CAB HEATER
WT-YYC-300 CKTS 1-16	AP FARM SN/SL LINE HEAT TRACE
WT-YYC-300-CKTS-17-32	AP FARM SN/SL LINE HEAT TRACE
WT-YYC-300-CKTS-33-48	AP FARM SN/SL LINE HEAT TRAE
WT-YYC-300-CKTS-49-64	AP FARM SN/SL LINE HEAT TRACE
AP106-PRES3URE	AP106 PRESSURE FUNCTIONAL TEST
AP108-PRESSURE	AP108 PRESSURE FUNCTIONAL TEST
241-AP-XFER-SYS	FUNCTEST TRANSFER LEAK DET
241-AP-ANN-LDK	PERFORM AN LEAK DET FUNC TEST
AP241-EDS-MCC-002	AP241 ELECT MCC INSP & MAINT

APPENDIX D

COMPONENT DATASHEETS REQUIRING MODIFICATIONS

COMPONENT DATASHEETS REQUIRING MODIFICATIONS

Component Number	Name
241-AP-ANN-LDK	DOUBLE SHELL TANK
241-AP-XFER-SYS	AP FARM TRANSFER SYSTEM LDKS
A-40-106-TK-PSYCH	106 TK PSYCH
A-40-108-TK-PSYCH	108 TK PSYCH
A-41-106-ANN-PSYCH	106 ANN PSYCH
A-41-108-ANN-PSYCH	107 ANN PSYCH
AI-106-1-AP	SUPERNATANT PUMP AMMETER -1.0
AI-106-2-AP	SUPERNATANT PUMP AMMETER -1.0
AI-108-1	SUPERNATANT PUMP AMMETER -1.0
AI-108-2-AP	SUPERNATANT PUMP AMMETER -1.0
AP106-PRESSURE	IOSR PRESSURE FUNCTIONAL TEST
AP106-PRESSURE	IOSR PRESSURE FUNCTIONAL TEST
AP108-PRESSURE	IOSR PRESSURE FUNCTIONAL TEST
AP241-VTA-FLT-222	105/106 ANN INLT FLT K2-4-3
AP241-VTA-FLT-232	107/108 ANN INLT FLT K2-4-4
AP904-WSTA-CAM-106	(106AP) CAM
AP904-WSTA-CAM-108	(108AP) CAM
CVT-106-AP-1	RAN 106-1 INPUT CONVERTER MV/V
CVT-108-AP-1	RAN 108-1 INPUT CONVERTER MV/V
DPA-K2-10	INTAKE STATION D HEPA DP ALARM
DPA-K2-13	INTAKE STATION C PREFILTER DP
DPA-K2-14	INTAKE STATION D PREFILTER DP
DPA-K2-9	INTAKE STATION C HEPA AP ALARM
DPI-106-1-AP	TK-106-AP PRESSURE INDICATOR
DPI-106-2-AP	TK-106-AP ANNULUS PRESSURE-STA
DPI-108-1	TK 108-AP PRESSURE INDICATOR
DPI-108-2	TK 108-AP ANNULUS PRESSURE-STA
DPIS-10-6	INTAKE STATION D HEPA DP INDIC
DPIS-13-5	INTAKE STATION C PREFILTER DP
DPIS-14-6	INTAKE STATION D PREFILTER DP
DPIS-9-5	INTAKE STATION C HEPA DP INDIC
EDS-DP-311	241AP MINI PWR CENTER (STA C)
EDS-DP-312	241AP MINI PWR CENTER (STA D)
FA-106-AP-1	TK-106-AP ANNULUS CAM LOW FLOW
FA-108-AP-1	TK-108-AP ANNULUS CAM LOW FLOW
FAS-106-AP-1	TANK 106-AP ANNULUS CAM LOW FL
FAS-108-AP-1	TANK 108-AP ANNULUS CAM LOW FL
FI-106-2(AP)	FLOW INDICATOR -2.0
FI-106-3-AP	FLOW TRANSMITTER
FI-106-4-AP	FLOW INDICATOR
FI-106-5(AP)	FLOW INDICATOR
FI-106-6(AP)	FLOW INDICATOR
FI-108-1	PURGE AIR ROTOMETER
FI-108-2	FLOW INDICATOR -2.0
FI-108-3	FLOW INDICATOR
FI-108-4	FLOW INDICATOR
FI-108-5	FLOW INDICATOR
FI-108-6	FLOW INDICATOR
HTA-AP-1	241-AP COMMON HEAT TRACE TROUB
HTA-AP-2	241AP COMMON HEAT TRACE TROUBL
HTTC-STA-C-1	INTAKE STATION C HEAT TRACE TH

COMPONENT DATASHEETS REQUIRING MODIFICATIONS

HTTC-STA-D-1	INTAKE STATION D HEAT TRACE TH
LA-106-1(AP115-2)	TK-106-AP HIGH LL ALARM
LA-108-1	TK-108-AP HIGH LL ALARM
LAM-106-1	P-106-1 CURRENT LIMIT ALARM MO
LAM-108-1	P-108-1 CURRENT LIMIT ALARM MO
LDA-106-1(AP140-4)	TK-106-AP ANNULUS LEAK DETECTO
LDA-108--1	TK-108-AP ANNULUS LEAK DETECTO
LDA-A-1	COMMON LEAK DETECTION ALARM-CE
LDA-A-2	COMMON LEAK DETECTION ALARM-CE
LDA-B-1	COMMON LEAK DETECTION ALARM-AN
LDA-B-2	COMMON LEAK DETECTION ALARM-AN
LDE-06A(AP173-1)	CENTRAL PUMP PIT LEAK DETECTIO
LDE-06B-1-AP	ANNULUS PUMP PIT LEAK DETECTIO
LDE-08A	CENTRAL PUMP PIT LEAK DETECTIO
LDE-08B-1	ANNULUS PUMP PIT LEAK DETECTIO
LDE-106-2	241-AP-106 ANN LEAK DETECTION
LDE-106-3(AP141-1)	241-AP-106 ANN LEAK DET (TAPE)
LDE-106-4(AP142-1)	241-AP-106 ANN LEAK DET (TAPE)
LDE-108-2	ANNULUS LEAK DETECTION TAPE
LDE-108-3	ANNULUS LEAK DETECTION TAPE
LDE-108-4	ANNULUS LEAK DETECTION TAPE
LDI-106-2(AP140-2)	LEAK DETECTOR INDICATOR
LDI-106-3(AP141-2)	LEAK DETECTOR INDICATOR
LDI-106-4(AP142-2)	LEAK DETECTOR INDICATOR
LDI-108-2	LEAK DETECTOR INDICATOR
LDI-108-3	LEAK DETECTOR INDICATOR
LDI-108-4	LEAK DETECTOR INDICATOR
LDXA-A-1	COMMON LEAK DETECTOR FAILURE A
LDXA-B-1	COMMON LEAK DETECTOR FAILURE A
LE-06B-1	ANNULUS PUMP PIT SUMP LEVEL EL
LE-08B-1	ANNULUS PUMP PIT SUMP LEVEL EL
LE-106-1	TK 106-AP AUTOMATIC LIQUID LEV
LE-106-2(AP115-1)	TK-106-AP HIGH LL PROBE
LE-106-3(AP123-1)	TK 106-AP MANUAL LIQUID LEVEL
LE-108-1	TK 108-AP AUTOMATIC LIQUID LEV
LE-108-2	TK 108-AP HIGH LL PROBE
LE-108-3	TK-108-AP MANUAL LIQUID LEVEL
LI-106-1	LEVEL INDICATOR -2.0
LI-108-1	LEAK DETECTOR INDICATOR -2.0
LIT-106-1(AP107-2,)	LEVEL INDICATOR TRANSMITTER
LIT-108-1	LEVEL INDICATOR TRANSMITTER
LXA-106-1	TK-106-AP HIGH LL ALARM FAILUR
LXA-108-1	TK-108-AP HIGH LL ALARM FAILUR
LXA-B-1	LEVEL FAILURE ALARM-ANNULUS PU
MS-106-1-AP	P-106-1 MANUAL SWITCH
MS-108-1	P-108-1 MANUAL SWITCH
PA-106-1(AP006-9)	TK-106-AP PRESSURE ALARM-VAC L
PA-106-2(AP006-8)	TK-106-AP PRESSURE ALARM-EXCESS
PA-108-1	TK-108-AP PRESSURE ALARM - VAC
PA-108-2	TK-108-AP PRESSURE ALARM-EXCESS
PA-A-1	PRESSURE ALARM-VACUUM LOSS +.5
PA-A-2	PRESSURE ALARM-EXCESS VACUUM +

COMPONENT DATASHEETS REQUIRING MODIFICATIONS

Component Number	Name
PAS-106-1-AP	TK 106-AP PRES, ALM SW.-LOSS 0
PAS-106-2-AP	TK 106-AP PRES. ALM SW.EXCESS
PAS-108-1	TK 108-AP PRES. ALM SW.-LOSS 0
PAS-108-2	TK 108-AP PRES. ALM SW.-EXCESS
PI-22-5	TK-106-AP ANNULUS INLET PRESSU
PI-24-6	TK 108-AP ANNULUS INLET PRESSU
PI-IA-106	MUX ENCL. AIR PRESSURE GAUGE
PI-IA-108	MUX ENCL. AIR PRESSURE GAUGE
PI-VP-108-AP	ANNULUS VENT CAM VACUUM GAUGE
PI-WP-106-AP	ANNULUS VENT CAM VACUUM GAUGE
PR-106-1(AP006-4)	TK 106-AP PRES. RECORDER-NARRO
PR-106-2(AP006-5)	TK 106-AP PRES. RECORDER-WII)E
PR-108-1	TK 108-AP PRES. RECORDER-NARRO
PR-108-2	TK 108-AP PRES. RECORDER-WIDE
PRV-IA-106	MUX ENCLOS. AIR PRESSURE REGULA
PRV-IA-108	MUX ENCLOS. AIR PRESSURE REGULA
PT-106-1(AP006-2)	TK 106-AP PRESSURE XMTR-NARROW
PT-106-2(AP006-3)	TK 106-AP PRESSURE XMTR-WIDE R
PT-108-1	TK 108-AP PRESSURE XMTR-NARROW
PT-108-2	TK 108-AP PRESSURE XMTR-WIDE R
RA-106-AP-1	TK-106-AP ANNULUS RADIATION AL
RA-106-AP-2	TK-106-AP ANNULUS RADIATION AL
RA-106-AP-3	TK-106-AP ANNULUS RADIATION AL
RA-106-AP-4	TK-106-AP ANNULUS RADIATION AL
RA-108-AP-1	TK-108-AP ANNULUS RADIATION AL
RA-108-AP-2	TK-108-AP ANNULUS RADIATION AL
A-108-AP-3	TK-108-AP ANNULUS RADIATION AL
RA-108-AP-4	TK-108-AP-ANNULUS RADIATION AL
RR-106-AP-1	TANK 106-AP ANNULUS RADIATION
RR-108-AP-1	TANK 108-AP ANNULUS RADIATION
RXA-106-AP-1	TK-106-AP ANNULUS RADIATION AL
RXA-106-AP-2	TK-106-AP ANNULUS RADIATION AL
RXA-108-AP-1	TX-108-AP ANNULUS RADIATION AL
RXA-108-AP-2	TK-108-AP ANNULUS RADIATION AL
SDA-106-1(AP047-5)	P-106-1 SHUT DOWN ALARM -.5
SDA-106-1-AP	P-106-1 SHUT DOWN ALARM -.5
SDA-108-1	P-108-1 SHUT DOWN ALARM -.5
SDA-108-2	P-108-1 SHUT DOWN ALARM -.5
SRV-IA-106	MUX ENCL. SAFETY RELIEF VALVE
SRV-IA-108	MUX ENCL. SAFETY RELIEF VALVE
TA-106/-108-1	TK-106/108 STACK CAB TEMP ALAR
TA-3-C	INTAKE STATION C HEATER FAILUR
TA-4-D	INTAKE STATION D HEATER FAILUR
TA-K2-3	INTAKE STATION C HEATER FAILUR
TA-K2-4	INTAKE STATION D HEATER FAILUR
TC-3-C	INTAKE STATION HEATER TEMP. +1
TC-4-D	INTAKE STATION HEATER TEMP. CO
TDS-AP-2	241-AP FARM TEMPERATURE DISPLA
TI-13	STATION C TEMPERATURE INDICATO

COMPONENT DATASHEETS REQUIRING MODIFICATIONS

Component Number	Name
TI-14	STATION C TEMPERATURE INDICATO
TI-15	STATION D TEMPERATURE INDICATOR
TI-16	STATION D TEMPERATURE INDICATO
TS-106/-108HI	TK-106/108-AP STACK CAB FAN SW
TS-106/-108LOW	TK-106/108-AP STACK CAB HEATER
WT-YYC-300 CKTS 1-16	AP FARM SN/SL LINE HEAT TRACE
WT-YYC-300-CKTS-17-32	AP FARM SN/SL LINE HEAT TRACE
WT-YYC-300 - CKTS - 33-48	AP FARM SN/SL LINE HEAT TRACE
WT-YYC-300-CKTS-49-64	AP FARM SN/SL LINE HEAT TRACE

APPENDIX E

ESSENTIAL FACILITY ELECTRICAL AND PIPING AND INSTRUMENTATION DRAWINGS (P&IDS)

ESSENTIAL FACILITY ELECTRICAL AND PIPING AND INSTRUMENTATION DRAWINGS (P&IDS)

Drawing Number/Sheet	Title
H-02-0090476/1-13	Electrical Elementary Diagrams
H-14-0010503/6, 8	Dome Penetration Schedules
H-14-0020103/1	Ventilation Tank Primary System
H-14-0020203/1, 2, 5	Ventilation Tank Annulus System
H-14-0020303/1, 3, 5	Service and Instrument Air System
H-14-0020503/6, 8	Waste Storage Tank Annulus Instrumentation
H-14-0020603/6, 8	Waste Storage Tank Instrumentation
H-14-0020803/4	Waste Transfer System
H-14-0021803/1	Raw Water System
H-14-0030003/1, 2, 22, 23, 27, 28	Electrical One Line Diagram and Panelboard Schedules

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LMHC-9857255

Mr. A. M. Umek, Project Director
TWRS
Fluor Daniel Hanford, Inc. S7-40
Post Office Box 1000
Richland, Washington 99352-1000

Dear Mr. Umek:

SUBCONTRACT NUMBER 80232764-9-K001, FEED TANK TRANSFER REQUIREMENTS "HNF-2199, REVISION 1"

Attached is the document Feed Tank transfer Requirements "HNF-2199, Revision 1." The document has been revised per dispositioned U.S. Department of Energy, Richland Operations Office (RL) and Waste Integration Team comments.

The attachment needs to be distributed to Neil R. Brown, Robert A. Gilbert, Thomas R. Hoertkorn, and Gil M. Ramin, of RL.

If you require additional information, please contact Ms. J. R. Freeman-Pollard at 372-0927 or Mr. Bill Root at 373-1328.

Very truly yours,

R Boston for

H. L. Boston, Vice President and Director
Tank Waste Retrieval
Tank Waste Remediation System

bgb

Attachment

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author	Addressee	Correspondence No.
J. R. Freeman-Pollard, 372-0927	Mr. A. M. Umek, FDH	LMHC-9857255

Subject: SUBCONTRACT NUMBER 80232764-9-K001, FEED TANK TRANSFER REQUIREMENTS "HNF-2199, REVISION 1"

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