DISTRIBUTION		SHEET			
To	From	Page 1 of 1			
DISTRIBUTION	STATION 22	Date			
Project Title/Work Order		EDT No.			
FFTF		ECN No. 619699			
Name	MSIN	Text With All Attach.	Text Only	Attach./Appendix Only	EDT/ECN Only

TECHNICAL REFERENCE CENTER

N2-12 X

J A Seawans

N2-33 X

Central Files (2) orig

L8-04 X

Osti (2)

L8-07 X

MASTER

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

COMPLETE

ENGINEERING CHANGE NOTICE

Page 1 of 3

1. ECN No 619699

Proj.
ECN

2. ECN Category (mark one) Supplemental ☐ Direct Revision ☒ Change ECN ☐ Temporary ☐ Standby ☐ Supersedure ☐ Cancel/Void ☐	3. Originator's Name, Organization, MSIN, and Telephone No. J. A. Seamans, Compliance Integration, N2-33, 376-4788	3a. USQ Required? ☒ Yes ☐ No	4. Date 03/27/95
11a. Modification Work ☐ Yes (fill out Blk. 11b) ☒ No (NA Blks. 11b, 11c, 11d)	11b. Work Package No. N/A	11c. Modification Work Complete N/A _____ Cog. Engineer Signature & Date	11d. Restored to Original Condition (Temp. or Standby ECN only) N/A _____ Cog. Engineer Signature & Date
12. Description of Change Updates QAPP to incorporate editorial changes and delete obsolete references. Deletes the wording "This program includes both gaseous, liquid and solid effluents from the facilities", leaving low level, solid waste as the focus of this program.			
13a. Justification (mark one) Criteria Change ☒ Design Improvement ☐ Environmental ☐ Facility Deactivation ☐ As-Found ☐ Facilitate Const ☐ Const. Error/Omission ☐ Design Error/Omission ☐			
13b. Justification Details Change required to meet the requirements of the 1994 annual Waste Management Audit.			
14. Distribution (include name, MSIN, and no. of copies) See attached distribution.		RELEASE STAMP OFFICIAL RELEASE 43 BY WHC DATE JUN 08 1995 Sta 22	

[illegible]

APPENDIX B

UNREVIEWED SAFETY QUESTION SCREENING FORM

REFERENCE ITEM # ECN 619699

TITLE WHC-SD-FF-QAPP-005, Rev 0A

QUESTIONS

Does the referenced item:

- A. Make PROPOSED CHANGES to the facility or procedures which differ from conditions described in the AUTHORIZATION BASIS?

N/A_____ No XXX Yes/Maybe_____

Basis: The FSAR does not address the requirement for a Quality Assurance Program Plan (QAPP) dealing with low level or solid waste. The change to the QAPP does not change the facility nor any facility procedures.

- B. Describe an ISSUE which differs from those described events or conditions in the AUTHORIZATION BASIS? N/A XXX No_____ Yes/Maybe_____

Basis: _____

- C. Describe tests or experiments which differ from those described in the AUTHORIZATION BASIS? N/A XXX No Yes/Maybe

Basis: _____

NOTE: This form is not to be used for PHYSICAL PLANT MODIFICATIONS.

QUSQE #1 P. C. Miller
(print name)

Signature

Date 03/22/95

QUSQE #2 M. E. Eby
(print name)

(print name)
MEU
Signature

Date 03/22/95

RELEASE AUTHORIZATION

Document Number: WHC-SD-FF-QAPP-005, Rev. 1

Document Title: QUALITY ASSURANCE PROGRAM PLAN FOR FFTF EFFLUENT CONTROLS

Release Date: 6/2/95

**This document was reviewed following the
procedures described in WHC-CM-3-4 and is:**

APPROVED FOR PUBLIC RELEASE

WHC Information Release Administration Specialist:

C. Willingham

6/2/95

TRADEMARK DISCLAIMER. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors.

This report has been reproduced from the best available copy. Available in paper copy and microfiche. Printed in the United States of America. Available to the U.S. Department of Energy and its contractors from:

U.S. Department of Energy
Office of Scientific and Technical Information (OSTI)
P.O. Box 62
Oak Ridge, TN 37831
Telephone: (615) 576-8401

Available to the public from:

U.S. Department of Commerce
National Technical Information Service (NTIS)
5285 Port Royal Road
Springfield, VA 22161
Telephone: (703) 487-4650

MASTER

SUPPORTING DOCUMENT		<i>6/18/95</i> 1. Total Pages <i>17</i>
2. Title Quality Assurance Program Plan for FFTF Effluent Controls	3. Number WHC-SD-FF-QAPP-005	4. Rev No. 1
5. Key Words Environmental Specifications, Waste Certification, Low Level Waste, Effluent, Monitoring	6. Author Name: J. A. Seamans (requestor) <i>J. A. Seamans</i> Signature Organization/Charge Code 18340/B12EC	
7. Abstract This Quality Assurance Program Plan is specific to environmental related activities within the FFTF Property Protected Area. The activities include effluent monitoring and Low Level Waste Certification.		
8. RELEASE STAMP <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> OFFICIAL RELEASE BY WHC DATE JUN 08 1995 <i>Sta 22</i> </div>		

Page 1

CHANGE CONTROL RECORD

A-7320-005 (08/91) WEF168

QUALITY ASSURANCE PROGRAM PLAN FOR FFTF EFFLUENT CONTROLS

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED ⁸⁵

MASTER

QUALITY ASSURANCE PROGRAM PLAN FOR
FFTF EFFLUENT CONTROLS

	Table of Contents	Page
1.0	INTRODUCTION	1
1.1	Purpose	1
1.2	Scope	1
2.0	QUALITY ASSURANCE PROGRAM REQUIREMENTS	2
2.1	Requirement 1, Organization	2
2.2	Requirement 2, Quality Assurance Program	3
2.3	Requirement 3, Design Control	4
2.4	Requirement 4, Procurement Document Control	4
2.5	Requirement 5, Instructions, Procedures and Drawings	4
2.6	Requirement 6, Document Control	4
2.7	Requirement 7, Control of Purchased Items or Services	5
2.8	Requirement 8, Item Identification and Control	5
2.9	Requirement 9, Control of Processes	6
2.10	Requirement 10, Inspection	6
2.11	Requirement 11, Test Control	7
2.12	Requirement 12, Calibration & Control of Measuring & Test Equip	7
2.13	Requirement 13, Handling, Storage and Shipping	8
2.14	Requirement 14, Inspection, Test and Operating Status	8
2.15	Requirement 15, Control of Nonconforming Items	8
2.16	Requirement 16, Corrective Actions	8
2.17	Requirement 17, Quality Assurance Records	9
2.18	Requirement 18, Audits.	9
3.0	RESPONSIBILITIES	9
4.0	REFERENCES	10
FIGURE 1.	FFTF Operations Organization Chart	2

QUALITY ASSURANCE PROGRAM PLAN FOR FFTF EFFLUENT CONTROLS

1.0 INTRODUCTION

1.1 Purpose

This Quality Assurance Program Plan (QAPP) describes the way the Fast Flux Test Facility (FFTF) and the Maintenance and Storage Facility (MASF) conducts its effluent monitoring program. This program pertains to low level, solid waste from these two facilities. Low-level waste (LLW) operations which contribute to one of the effluent streams from the facility are also specifically addressed to assure that the waste generated meets the Westinghouse Hanford Company (WHC) Hanford Site 200 Area Storage and Disposal Facility waste acceptance criteria. This waste acceptance criteria is documented in WHC-EP-0063, Hanford Radioactive Solid Waste Acceptance Criteria.

1.2 Scope

This plan covers only those activities associated with effluent monitoring and solid LLW operations at FFTF and MASF. These activities include:

1. Waste reduction (minimization and volume reduction).
2. Methods used to identify and segregate hazardous materials from LLW.
3. Characterization methods used (e.g., material certification, assay, etc.) to determine material content (both radioactive and chemical) of the waste.
4. Characterization methods used to determine the physical and Chemical properties of the waste.
5. Waste handling and packaging activities from waste generation through shipment.

This plan is established to meet the requirements of NQA-1-1989, Quality Assurance Program Requirements for Nuclear Facilities, WHC-CM-4-2, Quality Assurance Manual, DOE Order 5700.6C, "Quality Assurance," DOE Order 5820.2A, "Radioactive Waste Management," and WHC-EP-0063.

This plan was developed to be representative of the eighteen basic requirements specified in Section II of NQA-1. Each of the eighteen requirements is discussed in a subsection of Section 2 of this QAPP document.

This QAPP is responsive to the hierarchy of quality documents and supplements presented in this plan. This QAPP includes all elements of WHC-CM-4-2 and specifies the requirements and responsibilities related to the control of FFTF/MASF solid LLW operations. Supplementing this QAPP will be a series of detailed administrative and work procedures which address the basic requirements of this plan but are separate from it. Their relationship to the QAPP's eighteen requirements is shown in the attached Quality Assurance Program Index (QAPI).

2.0 QUALITY ASSURANCE PROGRAM REQUIREMENTS

2.1 Requirement 1, Organization

The FFTF/MASF organization is shown in Figure 1. Detailed disciplines of job functions are listed in Administrative Procedure A-3, "Operations Organization and Responsibilities."

Figure 1. FFTF Operations Organization Chart

The FFTF Operations management has the responsibility to see that personnel are trained and follow procedures that define their duties in regard to waste generation handling. The FFTF Transition Technical Support tracks personnel training in FFTF Operations.

FFTF Transition Technical Support also has overall responsibility for assisting Waste Systems Management in assuring that all building waste disposal activities are adequate and properly performed.

Quality Assurance/Quality Control (QA/QC) organization oversight responsibilities will be provided by the QA representative assigned to FFTF Operations in accordance with WHC-CM-4-2. The QA/QC organization is responsible for verification of quality achievement. They review procedures and perform surveillances associated with LLW operations activities. Surveillances are scheduled and performed in accordance with the FFTF QA Surveillance Program.

2.2 Requirement 2, Quality Assurance Program

The Quality Assurance Program for solid LLW activities in the FFTF and MASF facilities directly follow the requirements of WHC-CM-4-2, Section 2, "Quality Assurance Program." Planning, implementation, and maintenance of the QA Program shall be in accordance with WHC-CM-4-2. All QA Program controls shall be applied to waste management items and activities in accordance with the approval designator system as defined in WHC-CM-3-5, Document Control and Records Management Manual, Section 12.7, "Approval of Environmental, Safety, and Quality Affecting Documents," to an extent consistent with their importance, complexity and the consequence of an incorrect/inappropriate waste management activity. The Facilities Transition organization determines and identifies the extent to which QA controls are to be applied to specific items and activities according to the requirements of WHC-CM-4-2, QI 2.2, "Quality Assurance Program Planning." To assure that waste management activities meet the requirements of WHC-EP-0063, the program shall provide for any special controls, processes, test equipment, tools, and skills to attain the required quality and verification of quality.

The training program for effluent monitoring and solid LLW activities in the FFTF Operations organization follows the requirements of WHC-CM-7-5, "Environmental Compliance" to assure that the waste management personnel involved are properly qualified and trained. Cognizant managers shall be responsible for the qualification and training of the personnel associated with effluent monitoring and solid waste management and operations. In addition, those personnel associated with nondestructive examination of waste packages shall be qualified and certified in accordance with WHC-CM-4-2, QI 2.6, "Qualification and Certification of Nondestructive Examination Personnel." Other training would include training for any special process identified under Requirement 9, "Control of Processes." Even though not specifically linked to the certification process, those skills necessary for job performance such as radiation safety shall be part of the qualification and training process.

The minimum requirements for qualification and training of personnel involved in the solid LLW process are covered in Radiation Safety Training and Radiation Safety - Job Specific Orientation courses and FFTF/MASF Hazardous Waste Training Plan G015.

2.3 Requirement 3, Design Control

Activities associated with engineering and design, such as development of technical specifications for effluent controls, monitoring or waste management equipment or facilities, shall be in accordance with WHC-CM-4-2, Section 3.0, "Design Control," WHC-CM-6-1, Standard Engineering Practices. If at a future date there are design activities that are the responsibility of FFTF Operations, additional implementing procedures may be required and will be prepared and implemented prior to performing any quality affecting activities. Planned FFTF and MASF facility repair and construction or deactivation will be controlled by DOE contract requirements on outside contractors doing the work.

2.4 Requirement 4, Procurement Document Control

Quality affecting activities associated with procurement shall be in accordance with WHC-CM-4-2, Section 4.0, "Procurement Document Control," WHC-CM-2-1, Procurement Manual. Quality requirements for procurement specific to waste management for FFTF/MASF shall be identified by the responsible manager who then shall assure that they are addressed, either through existing procurement procedures or by preparing and implementing facility specific procedures. Waste drums are store stock items, inspected upon receipt. Waste boxes are manufactured on site to DOT specs.

2.5 Requirement 5, Instructions, Procedures and Drawings

The instructions, procedures and design documents associated with solid LLW shall be in accordance with WHC-CM-4-2, Section 5.0, "Instructions, Procedures, and Drawings," WHC-CM-6-1. Those work activities affecting quality shall be prescribed by and performed in accordance with documented instructions, procedures or design documents of a type appropriate to the circumstances.

In addition, acceptance criteria, appropriate to the activity, for determining if those work activities are satisfactorily completed shall be included or referenced.

2.6 Requirement 6, Document Control

The instructions, procedures and design documents affecting quality shall be controlled in accordance with WHC-CM-4-2, Section 6.0, "Document Control." Document control activities provide assurance that documents are reviewed for adequacy, approved for release by authorized personnel, and distributed to and used at the location where the prescribed activity is to be performed. Quality affecting documents, including all revisions, shall be reviewed for adequacy and approved in accordance with the approval designator system defined in WHC-CM-3-5,

Document Control and Records Management Manual, Section 12.7, "Approval of Environmental, Safety, and Quality Affecting Documents."

2.7 Requirement 7, Control of Purchased Items or Services

The quality affecting items that are procured or services that are subcontracted to outside vendors shall be controlled in accordance with WHC-CM-4-2, Section 7.0, "Control of Purchased Items and Services." Control of procurement activities shall be provided through various procedures and manuals. The major controlling document is WHC-CM-2-1 along with WHC-CM-4-2, Section 4, "Procurement Document Control." Anticipated items that are quality affecting include waste containers and radionuclides characterization instrumentation. Laboratory analysis of wastes for radiological and chemical characterization are expected to be performed by the PNL Analytical Laboratory which operates in accordance with an approved Quality Assurance Program.

2.8 Requirement 8, Item Identification and Control

Those items which affect Environmental, Safety or Quality (E, S, or Q) activities as defined by WHC-CM-3-5, Document Control and Records Management Manual, Section 12.7, "Approval of Environmental, Safety, and Quality Affecting Documents," shall be identified and controlled in accordance with

WHC-CM-4-2, Section 8.0, "Identification and Control of Items." The effluent monitoring and solid LLW operations involve use of items such as samples, smears, procured material, equipment, test equipment, wastes and waste containers. The identification and control of these items shall be accomplished according to specific procedures prepared and issued by FFTF Operations. Additional requirements may be imposed by WAC 173-303, 40 CFR and 49 CFR. Waste boxes and drums shall receive identification (ID) numbers prior to start of filling per SN-24-2.

2.9 Requirement 9, Control of Processes

Effluent monitoring and solid LLW processes that affect quality shall be controlled in accordance with WHC-CM-4-2, Section 9.0, "Control of Processes." These procedures establish the requirements for controlling product quality where in-process control is more appropriate than final inspection or test. ALARA (As Low As Reasonably Achievable) concerns are incorporated into the decision as to whether in-process control is to be used to assure that product quality requirements are met. Typical processes that are to be controlled include such activities as:

1. Waste minimization - FFTF waste compaction performed in accordance with MASF operating procedure MN-24-2, OPERATION OF THE MASF WASTE COMPACTOR
2. Waste reduction
3. Waste segregation
4. Radioactive waste packaging - SN-24-2, PACKAGING, STORAGE AND SHIPMENT OF LOW LEVEL RADIOACTIVE ITEMS AND SOLID WASTE
5. Sample collection and analysis - SN-85.1-1, SN-24-1, WHC-CM-4-13

Individual procedures prepared by FFTF Operations personnel shall be developed, approved and issued to control the special processes that are identified.

2.10 Requirement 10, Inspection

Inspections that are required to assure that a product or an activity meets the specifications or requirements shall be in accordance with WHC-CM-4-2, Section 10.0, "Inspection." These quality requirements apply to inspections and/or surveillances by WHC Quality Assurance personnel who are required to verify conformance of an item or activity to specified requirements. Nondestructive examinations are considered inspections. All inspections shall be performed by personnel other than those who performed or directly supervised the work being inspected. Any person who is responsible for inspections or verification of work activities shall be qualified and/or certified. The detailed work procedures controlling the effluent monitoring or solid LLW operations shall include appropriate inspection activities. The work procedures shall identify characteristics, methods and acceptance criteria. Procedures shall also establish suitable documentation for recording evidence of inspection results. In-process inspections shall be indicated by witness and hold points in the work procedures. Required final inspections shall be incorporated into the detailed work procedures to include such activities as verification of completeness, identification markings and calibration. Inspection personnel shall be trained to the specific work procedure insofar as they have a basic understanding of the work that is accomplished and to have detailed knowledge of the required inspection and documentation.

Operations personnel shall inspect waste containers prior to placing waste in them and again prior to shipment.

2.11 Requirement 11, Test Control

Testing associated with solid LLW shall be controlled in accordance with WHC-CM-4-2, Section 11.0, "Test Control." Test procedures are written in compliance with WHC-CM-6-1. Testing that is covered by this QAPP involves only that testing designed to collect waste characterization data performed by WHC personnel in accordance with specific test procedures. Test procedures and instructions shall identify acceptance criteria and any inspections. Test procedures shall include the following information as applicable:

1. Sampling requirements
2. When tests are to be performed
3. ALARA and safety considerations
4. Data requirements including precision and accuracy
5. Training and personnel qualification requirements
6. Test prerequisites
7. Test instructions
8. Inspections, hold, witness and verification points
9. Test monitoring
10. Data analysis methodology
11. Documentation

Wherever possible, test procedures shall reference, but not necessarily repeat in the text, nationally accepted test standards and methods (e.g., American Society for Testing and Materials methods). If such test methods are specified, then those test procedures are to be considered quality records and are to be controlled in accordance with 2.6 of this plan. Appropriate training shall be required for all test procedures. Governing requirements to consider for test control are DOE Orders, WAC 173-303, 40 CFR (EPA), 49 CFR (DOT), and DOT container evaluation documents.

2.12 Requirement 12, Calibration & Control of Measuring & Test Equip

Measuring and test equipment associated with solid LLW management test and monitoring activities shall be calibrated and controlled in accordance with WHC-CM-4-2, Section 12.0, "Control of Instruments." Measuring and test equipment includes devices or systems used to calibrate, measure, gage, test, inspect or to acquire test data used in the management and characterization of solid LLW. Instruments shall be calibrated following approved procedures or instructions.

2.13 Requirement 13, Handling, Storage and Shipping

Handling, storing and shipping of solid LLW shall be in accordance with WHC-CM-4-2, Section 13.0, "Handling, Storage and Shipping." Handling and storage include only those activities that are performed by FFTF Operations personnel. Permanent storage activities within the Hanford Site Waste Storage and Disposal Facility are not covered. Specific procedures for handling and storage of samples and LLW within FFTF and MASF shall insure that the waste segregation activities are maintained (e.g., waste containers identified for solid LLW are not filled or adulterated with hazardous waste or TRU waste). Shipping procedures in the plan cover only those activities concerning shipping documentation of solid LLW packages.

2.14 Requirement 14, Inspection, Test and Operating Status

The inspection, test and operating status of items associated with management of solid LLW shall display an indication of the status in accordance with WHC-CM-4-2, Section 14.0, "Inspection, Test and Operating Status." Status shall be controlled by stickers, tags, markings, stampings, segregation by physical location and notations in controlled log books in accordance with approved procedures. Status indicators may be used for such items as:

1. Samples taken
2. Characterization complete
3. Waste container acceptance
4. Waste package acceptance
5. Shipping documentation complete

Status indicators shall show that the item or activity is:

1. Acceptable (passed inspection)
2. Conditionally accepted (for a specific disposition)
3. Hold (probable significant inspection problem)
4. Nonconforming (failed inspection)

2.15 Requirement 15, Control of Nonconforming Items

Nonconforming items shall be controlled in accordance with WHC-CM-4-2, Section 15.0, "Control of Nonconforming Items." Wherever appropriate, items that have been identified as nonconforming shall be tagged and segregated until properly dispositioned. When segregation is impractical or impossible, then precautions shall be taken to assure that inadvertent use, shipment or other activities are precluded. Nonconformances shall be reported in accordance with WHC-CM-4-2, QI 15.1, "Nonconforming Item Reporting."

2.16 Requirement 16, Corrective Actions

Activities to disposition nonconforming items shall be in accordance with WHC-CM-4-2, Section 16.0, "Corrective Action." If a nonconformance is found on a solid LLW package already shipped to the

waste storage site, the receiving organization(s) shall be informed promptly and supplied with all available documents to facilitate appropriate action to bring the system back into conformance. Corrective actions are generated from Occurrence Reports at FFTF and tracked on Job Control System (JCS) and Hanford Action Tracking System (HATS).

2.17 Requirement 17, Quality Assurance Records

A quality assurance record system, for waste management documents shall be in place to manage QA affecting records associated with the FFTF Facility solid, low-level waste organization in accordance with the requirements of the WHC Quality Assurance Manual, WHC-CM-4-2, Section 17.0, "Quality Assurance Records," "Document Control and Records Management Manual," WHC-CM-3-5, Section 9, and "Hanford Site Solid Waste Acceptance Criteria," WHC-EP-0063, Section 3.3 and procedures identified in the QAPI. The Plant Policy Manual CM-6-14 implementing procedures shall identify methods of control, specify the types of records to be generated, purchased and maintained, define organizational responsibilities, specify methods and schedules for purging the records, and a description of the specific records generated. To assure record retention, dual records will be kept, the originals in the facility waste management office and copies in a separate building as a responsibility of the Quality Assurance organization. Permanent records will be microfilmed and the record copy stored in accordance with IRM rules. (Included in the discussion of Criteria 17 will be a table of those LAW certification records that are to be retained and the duration of retention.)

2.18 Requirement 18, Audits.

Audits of the FFTF and MASF Quality Assurance program shall be performed in accordance with WHC-CM-4-2, Section 18.0, "Audits." If surveillance activities indicate a problem, interim audits may be scheduled. The Compliance Assurance audit group generates an audit schedule and audits are performed throughout the Hanford Site based on this schedule.

3.0 RESPONSIBILITIES

FFTF Operations management has the responsibility to see that personnel are trained and follow procedures that define their duties in regard to waste generation and handling. FFTF Training and the individuals managers will track personnel training.

The FFTF operating crews and the Examination and Decontamination Services (EDS) operating crews have responsibility for quality assurance in the waste certification program. They are the people who can best plan their work so as to reduce waste generation. The responsibilities include: (1) characterizing and segregating the waste while being packaged, (2) visually inspecting the waste for free liquids and other undesired items, and (3) packaging solid LLW for shipment to the appropriate radioactive solid waste treatment, storage and disposal facility.

The Quality Assurance/Quality Control organization is responsible for verification of quality achievement. They review procedures and documentation, perform surveillance for procedure compliance and verify waste documentation. The Compliance Integration organization is responsible for preparing procedures, providing technical support to waste generators and handlers, and for certifying concentration of the radionuclides in solid LLW.

4.0 REFERENCES

4.1	NQA-1-1989	Quality Assurance Program Requirements for Nuclear Facilities.
4.2	DOE Order 5700.6C	Quality Assurance.
4.3	DOE Order 5820.2A	Radioactive Waste Management.
4.4	WHC-EP-0063	Hanford Site Solid Waste Acceptance Criteria.
4.5	WHC-CM-4-2	Quality Assurance Manual.
4.6	WHC-CM-2-1	Procurement Manual and Procedures.
4.7	WHC-CM-3-5	Document Control and Records Management Manual.
4.8	A-3	Operations Organization and Responsibilities.
4.9	WHC-CM-6-1	Standard Engineering Practices.
4.10	WHC-CM-4-8	Quality Assurance Instructions.
4.11	WHC-CM-7-5	Environmental Compliance

**FFTF EFFLUENT CONTROLS
QUALITY ASSURANCE PROGRAM PLAN**

QUALITY ASSURANCE PROGRAM INDEX

NQA-1 CRITERIA	TITLE	IMPLEMENTING PROCEDURES
BR-1	1. ORGANIZATION	CM-4-2 (1.0) CM-1-3 (5.2) A-3
1S-1	Multiple Organizations	
1S-1	Organization Responsibilities	
BR-2	2. QUALITY ASSURANCE PROGRAM	CM-4-2 (2.0)
	QA Program planning/Project Type Activities	(2.1)
	QA Program Planning	(2.2)
2S-4	QA Indoctrination and Training	CM-4-8 (2.1)
2S-1	Qualification of QA Inspection & Test Personnel	(2.2)
2S-3	Qualification of Audit Personnel	(2.3)
2S-2	Qualification of NDE Personnel	CM-4-2 (2.6)
2S-2	Management Assessments	(2.7)
BR-3	3. DESIGN CONTROL	CM-4-2 (3.0) CM-6-1 (Section 2)
3S-1	QA Verification & Evaluation of Design Activities	CM-4-8 (3.1) CM-6-1 (2.1, 4.1, 4.2)
3S-1	Change Control	(2.2, 2.4)
	Changes to Non-WHC Design Documents	(2.2)
BR-4	4. PROCUREMENT DOCUMENT CONTROL	CM-4-2 (4.0) CM-1-3 (5.20) CM-2-1 CM-2-2
4S-1	Procurement Document Control	CM-4-2 (4.1)
	External Services Control	(4.2)

**FFTF EFFLUENT CONTROLS
QUALITY ASSURANCE PROGRAM PLAN**

QUALITY ASSURANCE PROGRAM INDEX

NQA-1 CRITERIA	TITLE	IMPLEMENTING PROCEDURES
BR-5	5. INSTRUCTIONS, PROCEDURES, AND DRAWINGS Preparation, Revisions, and Control of QRs, QIs	CM-4-2 (5.0) CM-6-1 (1.2, 1.3) CM-2-14 CM-8-8 A-28 CM-4-2 (5.1)
BR-6	6. DOCUMENT CONTROL QA Document Control	CM-4-2 (6.0) CM-3-5 (12.7) CM-6-1 (Section 1) CM-4-2 (6.1)
BR-7	7. CONTROL OF PURCHASED ITEMS AND SERVICES	CM-4-2 (7.0) CM-2-1 CM-2-2
7S-1	Procurement Planning and Control	CM-4-2 (7.1)
7S-1	Supplier Qualification	(7.2)
7S-1	Source Inspection	(7.3)
7S-1	Receiving Inspection	CM-4-8 (7.1) CM-6-1 (5.5)
BR-8	8. IDENTIFICATION AND CONTROL OF ITEMS	CM-4-2 (8.0)
BS-1	Material Identification and Control	CM-4-2 (8.1)
BR-9	9. CONTROL OF PROCESSES Control of Nondestructive Examinations Control of Welding and Brazing	CM-4-2 (9.0) CM-7-5 CM-4-3 CM-4-38 CM-4-39 CM-6-10

FFTF EFFLUENT CONTROLS
QUALITY ASSURANCE PROGRAM PLAN

QUALITY ASSURANCE PROGRAM INDEX

NQA-1 CRITERIA	TITLE	IMPLEMENTING PROCEDURES
BR-10	10. INSPECTION	CM-4-2 (10.0)
10S-1	Inspection Instruction for Operations, Maintenance, and Modifications	CM-4-8 (10.1)
	Inspection Instruction for Manufacturing & Fabrication	CM-4-2 (10.2)
	Surveillance	(10.4)
	Selection & Interpretation of Readings from Variable Reading Gages & Instruments	(10.5)
BR-11	11. TEST CONTROL	CM-4-2 (11.0) CM-6-1 (4.2)
	Test Verification	CM-4-8 (11.1)
BR-12	12. CONTROL OF MEASURING AND TEST EQUIPMENT	CM-4-2 (12.0)
12S-1	Acquisition & Calibration of Measuring and Test Equipment	(12.1)
	M&TE Calibration by Users	(12.2)
BR-13	13. HANDLING, STORAGE, AND SHIPPING	CM-4-2 (13.0)
	Lifting	CM-4-8 (13.1) CM-6-4
	Radioactive Materials Packaging	CM-4-8 (13.2) CM-1-3 (5.20) CM-2-14 SN-24-2 MN-24-2 MN-24-9
BR-14	14. INSPECTION, TEST, AND OPERATING STATUS	CM-4-2 (14.0)
	Inspection and Test Status	(14.1)

FFTF EFFLUENT CONTROLS
QUALITY ASSURANCE PROGRAM PLAN

QUALITY ASSURANCE PROGRAM INDEX

NQA-1 CRITERIA	TITLE	IMPLEMENTING PROCEDURES
BR-15 15S-1	15. CONTROL OF NONCONFORMING ITEMS Nonconforming Item Reporting Nonconforming Item Control	CM-4-2 (15.0) (15.1) CM-1-3 (5.14) CM-4-2 (15.2)
BR-16	16. CORRECTIVE ACTION Analysis and Trending Corrective Action Reporting	CM-4-2 (16.0) (16.1) (16.2)
BR-17 17S-1	17. QUALITY ASSURANCE RECORDS Records Control	CM-4-2 (17.0) CM-1-3 (5.20) CM-6-12 (P12) CM-4-2 (17.1)
BR-18 18S-1 18S-1	18. AUDITS Audit Programming and Schedule Planning, Conducting, Reporting and Follow-up of Quality Audits	CM-4-2 (18.0) (18.1) CM-4-2 (18.1)