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ENGINEERING CHANGE NOTICE

Page 1 of 2

1. ECN 660080

Proj. ECN

2. ECN Category (mark one)	3. Originator's Name, Organization, MSIN, and Telephone No.	4. USQ Required?	5. Date
Supplemental ☐ Direct Revision ☒ Change ECN ☐ Temporary ☐ Standby ☐ Supersedure ☐ Cancel/Void ☐	WR Weir, Engineering Config & Processes, R1-31, 373-2189	☐ Yes ☒ No	4/18/2000
	6. Project Title/No./Work Order No. Configuration Management Plan for the Tank Farm Contractor	7. Bldg./Sys./Fac. No. N/A	8. Approval Designator N/A
	9. Document Numbers Changed by this ECN (includes sheet no. and rev.) ~~HEA~~ HNF-1900, Rev. 0	10. Related ECN No(s). N/A	11. Related PO No. N/A

12a. Modification Work	12b. Work Package No.	12c. Modification Work Completed	12d. Restored to Original Condition (Temp. or Standby ECNs only)
☐ Yes (fill out Blk. 12b) ☒ 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 ☒ No

General changes due to name changes, program changes, and corporation changes.

14a. Justification (mark one)	14b. Justification Details
Criteria Change ☒ Design Improvement ☐ Environmental ☐ Facility Deactivation ☐ As-Found ☐ Facilitate Const. ☐ Const. Error/Omission ☐ Design Error/Omission ☐	

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

See Distribution

RELEASE STAMP

APR 21 2000

DATE

STA 4

ID 4

A-7900-013-2 (10/97)

A-7900-013-1

ENGINEERING CHANGE NOTICE

1. ECN (use no. from pg. 1): 660080

16. Design Verification Required	17. Cost Impact		18. Schedule Impact (days)
	ENGINEERING	CONSTRUCTION	
☐ Yes	Additional ☐ $ N/A	Additional ☐ $ N/A	Improvement ☐ N/A
☒ 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	☐
Environmental Impact Statement	☐	Fac. Proc. Samp. Schedule	☐	Tickler File	☐
Environmental Report	☐	Inspection Plan	☐	None	☒
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	N/A	N/A

21. Approvals

	Signature	Date		Signature	Date
Design Authority			Design Agent		
Cog. Eng. WR Weir		4-19-00	PE		
Cog. Mgr. ER Hamm		4/19/00	QA		
QA			Safety		
Safety			Design		
Environ.			Environ.		
Other			Other		

DEPARTMENT OF ENERGY

Signature or a Control Number that tracks the Approval Signature: N/A

ADDITIONAL: N/A

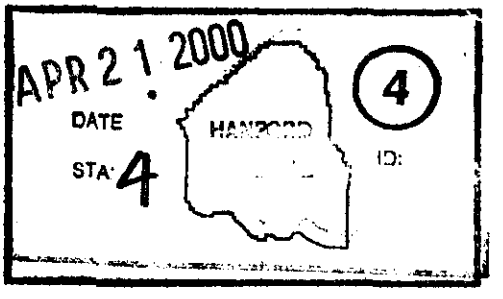
Configuration Managment Plan for the Tank Farm Contractor

W. R. Weir
CH2M HILL Hanford Group, Inc.
Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-99RL14047

EDT/ECN: 660080 UC: 2030
Cost Center: 74A00 Charge Code: 108521/AA30
B&R Code: EW3130010 Total Pages: 46

Key Words: River Protection Project, configuration management, technical baseline

Abstract:
The Configuration Management Plan for the Tank Farm Contractor describes configuration management the contractor uses to manage and integrate its technical baseline with the programmatic and functional operations to perform work.



Release Approval — Date — Release Stamp

Approved For Public Release

RECORD OF REVISION

(1) Document Number: HNF-1900

(2) Title: Configuration Management Plan for the Tank Farm Contractor

Change Control Record

(3) Revision	(4) Description of Change - Replace, Add, and Delete Pages	Authorized for Release	
		(5) Cog. Engr.	(6) Cog. Mgr. Date
0	(7) Per EDT 62284 1/8/98	SH Rifaey	RE Raymond
RS 1	Per ECN 660080 4/19/00	WR Weir	ER [illegible]

HNF-1900
Revision 1

Configuration Management Plan for the Tank Farm Contractor

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

CH2MHILL
Hanford Group, Inc.

Richland, Washington

Contractor for the U.S. Department of Energy
Office of River Protection under Contract DE-AC06-99RL14047

HNF-1900
Revision 1

Configuration Management Plan for the Tank Farm Contractor

Prepared by:

W. R. Weir
CH2M HILL Hanford Group, Incorporated

Date Published
April 2000

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

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Contractor for the U.S. Department of Energy
Office of River Protection under Contract DE-AC06-99RL14047

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Document Title: Configuration Management Plan
for the Tank Farm Contractor

Approved by:

4/20/00

J. E. Ferguson, Manager Date
Systems Engineering and Integration
CH2M HILL Hanford Group, Inc.

4/20/00

R. S. Popielarczyk, Chief Engineer Date
Technical Operations and Engineering
CH2M HILL Hanford Group, Inc.

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EXECUTIVE SUMMARY

The Configuration Management Plan for the Tank Farm Contractor presents how the discipline of configuration management supports the technical mission objectives of CH2M HILL Hanford Group, Inc. Configuration management ensures a systematic integration of procedures, plans, and processes for controlling and preserving the integrity of the technical baseline. This plan identifies the methodology used to control the technical baseline and the interfaces with the programmatic baselines that ensures baseline accuracy, traceability, and retrievability, and provides users with the ability to make timely and informed decisions. As defined in this plan, configuration management establishes the necessary technical and administrative controls for a safe, economic, and environmentally sound management of products, processes, structures, systems, and components; and associated information throughout the Tank Farm Contractor life cycle. The Tank Farm Contractor will transition from the current mission of safe storage to that of an aggressive waste retrieval and disposal effort in which diverse functions of engineering, construction, and operations are performed to support mission objectives. As defined, the mission will use the best industry practices, applied through a graded approach, to execute the principles of configuration management that identify, control change, provide status, and verify the accuracy of information for the established technical baseline.

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CONTENTS

LIST OF ATTACHMENTS

LIST OF ACRONYMS

BHI	Bechtel Hanford, Inc.
BNFL	BNFL Inc. (Privatization Contractor)
CEIS	cost-estimating input sheet
CHG	CH2M HILL Hanford Group, Inc.
CNS	Correspondence Numbering System
CVI	certified vendor information (database)
DOE	U.S. Department of Energy
EDMS	Engineering Document Management System
FH	Fluor Hanford
FY	fiscal year
HDCS	Hanford Document Control System
ICD	interface control document
ISMS	Integrated Environment, Safety and Health Management System
JCS	job control system
MEL	master equipment list
MYWP	multi-year work plan
ORP	Office of River Protection
P3	Primavera Project Planner
PNNL	Pacific Northwest National Laboratory
RAM	reliability, availability, and maintainability
RIM	Records Information Management
RMIS	Records Management Information System
RPP	River Protection Project
SDF	Site drawing file
SEL	safety equipment list
SSC	structures, systems, and components
TBR	Technical Basis Review
TBSD	Technical Baseline Summary Description
TFC	Tank Farm Contractor
TWRS	Tank Waste Remediation System
USQ	unreviewed safety question
WBS	work breakdown structure

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CONFIGURATION MANAGEMENT PLAN FOR THE TANK FARM CONTRACTOR

1.0 INTRODUCTION

The *Configuration Management Plan for the Tank Farm Contractor* supports the management of the project baseline by providing the mechanisms to identify, document, and control the technical characteristics of the products, processes, and structures, systems, and components (SSC). This plan is one of the tools used to identify and provide controls for the technical baseline of the Tank Farm Contractor (TFC). The configuration management plan is listed in the management process documents for TFC as depicted in Attachment 1, *TFC Document Structure*. The configuration management plan is an integrated approach for control of technical, schedule, cost, and administrative processes necessary to manage the mission of the TFC. Configuration management encompasses the five functional elements of: (1) configuration management administration, (2) configuration identification, (3) configuration status accounting, (4) change control, and (5) configuration management assessments.

The TFC configuration management requirements are prescribed in RPP-POL-CONFIG, *Configuration Management Policy*. This plan implements those requirements and is responsive to the guidance presented in GPG-FM-012, *Configuration and Data Management* of DOE O 430.1A, *Life Cycle Asset Management*. The configuration management architecture presented in this plan is based on industry-proven practices presented in the EIA Standard ANSI/EIA-649, *National Consensus Standard for Configuration Management*, and the DOE Standard, DOE-STD-1073-93, *Guide for Operational Configuration Management Systems, Including the Adjunct Programs of Design Reconstitution and Material Condition and Aging Management*.

2.0 PURPOSE

This plan provides clear traceability to procedures, plans, and processes that implement the principles of configuration management. The success for the execution of the configuration management principles is demonstrated in the implementing procedures and processes identified in this plan. This plan does not provide a stand-alone doctrine for configuration management, but provides a clear and practical roadmap to the procedures, plans, activities, and controls for sound configuration management. Fundamentally, configuration management is not a program or process, but rather a discipline that provides an administrative structure for the necessary controls, either existing or required, of TFC=s procedures, plans, and processes.

The configuration management approach presented in this plan is consistent with the commercial sector and has proven to work effectively and efficiently. A primary result of this plan will be to identify the TFC mission products, processes, SSCs, and associated information within the technical baseline, determine the rigor of control, and identify the mechanisms for that control.

3.0 CONFIGURATION MANAGEMENT

This plan executes the configuration management requirements as defined in RPP-6017, *Draft Project Execution Plan for the Tank Farm Contractor* (Halverson 2000), which establishes policies and requirements for implementing the TFC mission. This plan directs and monitors the effective application of configuration management principles and practices. The plan identifies the principles for the configuration management scope; defines concepts and terminology; identifies and controls baseline; identifies management organizational and programmatic interfaces; establishes the policy and criteria for required information systems; and specifies implementing procedures. This plan describes how the configuration management principles will be implemented by maintaining technical consistency among the requirements, the technical information, and the SSCs. This plan reflects those actions and responsibilities necessary to implement these requirements to achieve technical integrity and consistency. The information associated with configuration items will be maintained as required by procedures throughout the life cycle of the TFC's mission. For specific TFC actions, procedures will be used to communicate how configuration management principles and requirements will be implemented. Personnel involved in the execution will be trained and performance will be measured (see paragraph 3.1.6 of this plan). Configuration management implementation will be assessed to determine compliance and effectiveness, including the need for procedure, plan, or process improvements (see paragraph 3.5.1 of this plan).

Attachment 2 depicts the product relationships that evolve from defining the source requirements to developing the product information and to acquiring the final configuration item. These relationships are active throughout the life cycle of the configuration item and, when any one of these relationships changes, the others will be evaluated to determine impact. A change control process provides a method to revise a product and determine the impact on other attributes of the configuration item. Selected configuration items within the tank farms will be identified and placed under control; the rigor of that control will be graded, and procedures will be established to implement that control.

3.1 CONFIGURATION MANAGEMENT ADMINISTRATION

The TFC Chief Engineer will ensure the successful implementation of configuration management consistent with the requirements established in this plan and HNF-SD-WM-SEMP-002, *Systems Engineering Management Plan for the Tank Farm Contractor* (O'Toole 2000). This configuration management plan supports the identification and control of configuration items. Consistency among requirements, configuration items (products, processes, SSCs), and associated technical information will be maintained throughout the life cycle, particularly as changes are made to a configuration item.

The TFC will perform the following three groups of tasks to implement configuration management: (1) Recovery Tasks -- Work that includes as-building (i.e., field verification and design validation), design reconstitution; material condition and aging management of existing facilities and equipment, labeling, and training, (2) Ongoing Tasks -- Work inherent in current

activities that include documentation of design activities, document control, records management, validation and testing, procedure control, work packages, change implementation, project as-building program, and closure; and (3) Improvement Tasks -- Work that includes implementation of work management tools to link information of the TFC plants and facilities. These configuration management tasks will be addressed and integrated with the programmatic elements in the TFC work breakdown structure as defined in RPP-5044, *River Protection Project FY 2000 Multi-Year Work Plan Summary* (CHG 2000).

3.1.1 Implementing Procedures for Configuration Management

A functional description of configuration management and the basic actions for its implementation is provided in the procedures and processes as defined in the scope of this plan. Emphasis will be placed on the use of existing procedures to the fullest extent practicable. These procedures will be reviewed and evaluated as to their usefulness in implementing the TFC configuration management plan and generated, updated, or deleted accordingly. If the existing procedures are inadequate, they will be revised to support the imposed requirements and mission objectives.

3.1.2 Graded Approach

A graded approach is used to identify and rank products, processes, and SSCs and to determine the type and amount of documentation that is required to define an SSC and ensure that adequate administrative controls exist. In addition, the graded approach is used to determine the level of analysis, documentation, and action necessary to support products, processes, and SSCs commensurate with the selected grade. The graded approach is identified in RPP-MP-600, *Quality Assurance Program Description for the Tank Farm Contractor* (CHG 1999b).

3.1.3 Configuration Management Scope

Configuration management applies to products, processes, SSCs, and technical information performed or provided within the TFC's mission. The TFC technical baseline is developed through the systems engineering process, reference HNF-SD-WM-SEMP-002 (O'Toole 2000), defined by the documents established in the technical baseline summary description, reference HNF-1901, *Technical Baseline Summary Description for the Tank Farm Contractor* (Tedeschi 2000), and controlled within the scope of configuration management. Criteria for the selection of configuration items and associated technical information are provided in HNF-1901 (Tedeschi 2000).

3.1.4 Interface Management

Interface management administers the interface control requirements and physical interface definitions between two or more co-functioning elements. This requires the following:

- Establish the physical and administrative interfaces
- Develop any acceptance criteria at the point of transition
- Provide necessary contractor contributions to all interface control documents that control each interface.

3.1.4.1 ORP Interface Control Program

The Office of River Protection (ORP) interface control program will establish the system to develop and maintain the physical and functional coordination jointly among the prime contractors of CHG and BNFL Inc. (BNFL), and the U.S. Department of Energy Office of River Protection (DOE/ORP). The requirement of interface control will be formally established in the CHG prime contractor with DOE/ORP. The program description is specified in RPT-W375-G00006, *Interface Integrated Product/Process Team Charter* (Curry and Gasper 1999b), and executed through the BNFL interface control documents. These interface control documents recognize the communication links between CHG and BNFL that document and control the design details required to support the orderly program evolution of storage, transfer, treatment, immobilization, and disposal of tank waste. The information at these controlled interfaces are the design features and administrative measures that ensure a safe, efficient, and environmentally sound completion of the RPP mission objectives from the prime contractors.

3.1.4.2 Tank Farm and Privatization Contractor Interface Control Program

The prime contractors of CHG and BNFL and the DOE/ORP will establish an interface control program that ensures joint participation in the management of the identified co-functioning interfaces. This bilateral participation will include the selection and documentation of physical and functional boundaries; identification of interface characteristics necessary to ensure compatibility of hardware, software, and processes; and the institution of necessary controls to preserve the integrity of these interface requirements. It is incumbent on the prime contractors to ensure that these interface requirements, established in the interface control document, are adequately disseminated throughout the contractors' respective document hierarchy to effectively communicate and coordinate the interface control requirements. These interface control measures are: (1) clearly identified in the affected documents; (2) executed within the specified design parameters of the interface control documents; (3) maintained through an interface change process (i.e., RPT-W375-G00005 *Guidelines for Revising External Interface Control Documents* [Curry and Gasper 1999a]) that ensures no changes will be made to a requirement without agreement between CHG and BNFL, and released by the interface control governing body; and (4) implemented in a responsive and comprehensive manner.

Programmatic interfaces/agreements will be controlled using a Memorandum of Agreement, reserving interface control documents for technical definition agreements. The dissemination of interface requirements are identified and controlled within TFC in accordance with HNF-IP-0842, *RPP Administration,* Volume IV, Section 2.8, "Interface Control."

3.1.4.3 Interactions/Interfaces with Balance of Prime Contractors

TFC's interactions and interfaces with the other site prime contractors will be identified and controlled through the formal process of Memoranda of Agreement, as specified in HNF-IP-0842, Volume X, Section 3.3, "Memorandum of Agreement." TFC's interfacing with the prime contractors would be for the purpose of providing or receiving specific expertise or services. The prime contractors include Fluor Hanford (FH) – Project Hanford Management Contract; Bechtel Hanford, Inc. (BHI) – Environmental Restoration Contractor; Pacific Northwest National Laboratory (PNNL) – Research and Development Contractor; and Health Services Contractor.

3.1.5 Design Engineering

Design control is the technical and management process that begins with (1) identifying design inputs and constraints, (2) processing information, and (3) resulting in the issuance of requirements. For each design, the design process defines and documents the design inputs; identifies and adheres to the design constraints; performs and documents the analyses, calculations, and technical evaluations; and ensures that the design outputs are complete and accurately documented. The engineering process is described in detail in HNF-1947, *Tank Waste Remediation System Engineering Plan* (Rifaey 1998).

3.1.6 Integrated Safety Management System

The Integrated Environment, Safety and Health Management System (ISMS) establishes the systematic structure to integrate environmental, safety and health into management processes and work practices at all levels of administration, physical systems and activities. Comprehensive safety integration, as defined in RPP-MP-003, *Integrated Environment, Safety, and Health Management System Description for the Tank Farm Contractor* (CHG 1999a), enables the assigned work scope to be efficiently and effectively accomplished while protecting the public, workers, and environment. Configuration management provides the controls that (1) implements the established safety requirements in the HNF-SD-WM-SAR-067, *Tank Waste Remediation System Final Safety Analysis Report* (LMHC 1999); (2) disseminates these safety requirements through the design development process; and (3) then manifests safety requirements in the physical hardware (SSC), procedures, processes, and technical information (e.g., drawings, specifications, operating procedures, purchase orders). If an acquisition of a configuration item or the need to change a configuration item occurs during the TFC mission, then an analysis is required to be performed through the Unreviewed Safety Questions (USQ) process, reference HNF-IP-0842, Volume IV, Section 5.4, "Unreviewed Safety Questions."

3.1.7 Training

Training for configuration management is distributed through the execution of the principles of configuration management, i.e., identification, change control, status accounting, and assessments throughout the full life cycle of the TFC's mission. This training program is specific for the function being performed, e.g., engineering, work control, purchasing, maintenance, using training plans, training material, and appropriate procedure information as specified in HNF-IP-0842, Volume III, "Training." The detailed personnel training requirements are categorized by job descriptions that are listed on the Intranet at http://www.rl.gov/twrs/training/maintrnpage.html.

3.2 CONFIGURATION IDENTIFICATION

Configuration identification is the basis from which configuration items are defined, uniquely labeled, controlled, verified, and accountability maintained. These configuration items constitute the technical scope of the TFC mission and will be placed under configuration management. HNF-1901 (Tedeschi 2000) and the *Hanford Site Technical Baseline Database* (HSTD, n.d.)represent this technical baseline that identifies the products, processes, and SSCs, as described by their associated technical information. The Technical Baseline Summary Description will identify the technical baseline information and its predecessor and successor relationships. The technical baseline will be integrated with the cost and schedule baselines as defined by the multi-year work plan.

The configuration management terms are explained to provide a better understanding of their roles in configuration management. A configuration item is a product, process, or SSC that is/will be produced and/or used by the TFC. These configuration items are identified in the technical information (i.e., documentation) and are uniquely identified (e.g., component, equipment identification number) in accordance with HNF-IP-0842, Volume II, Section 6.1, "Tank Farm Operations Equipment Labeling." The unique identifier for the configuration item is required to ensure consistency, retrievability, and traceability to the technical documentation. Documentation that describes the technical characteristics is uniquely identified in accordance with HNF-PRO-604, *Hanford Document Numbering System.* Unique control numbers are obtained through the RIM personnel located in the 2750E building and at 2440 Stevens Center.

The following subparagraphs address the identification of configuration items and associated technical information. Control of changes to those configuration items and associated information is delineated in Paragraph 3.4 of this plan. Attachment 3 represents the basic application of configuration management to configuration items and their technical information.

3.2.1 Configuration Item Selection and Control

Configuration items will be selected in accordance with the criteria specified in HNF-1901 (Tedeschi 2000), for control based on their importance to the TFC mission and risks that would result from inadequacy of the product. The equipment scope controlled by configuration management should be based on the functions provided by the SSCs and includes those SSCs involving safety design requirements (necessary to protect off-site personnel, on-site personnel, and facility workers from nuclear and other hazards), environmental design requirements (SSCs necessary to protect the environment from significant damage or to satisfy environmental requirements or permits), and mission design requirements (SSCs necessary to avoid substantial interruptions of the programmatic mission or severe cost impact).

As configuration items are identified, the related descriptive technical information will be examined to determine control. If control is unnecessary, there should be documentation to justify that decision. Sufficient information will be controlled to ensure the necessary technical, schedule, and cost data to acquire, build, operate (e.g., authorization basis), and provide support for the configuration item throughout its life cycle. This will include both information that will be maintained current to support the TFC and the information that will be archived as a historical resource. The design basis will be identified and traceable to the configuration item and related technical documents.

3.2.2 Tank Farm Contractor Technical Baseline

HNF-1901 (Tedeschi 2000) describes the technical baseline elements and their relationships. A web page has been established to provide an informational overview of the technical baseline for Phase 1 of the RPP Tank Waste Retrieval and Disposal mission. The Intranet address is http://apweb02/rpptech/index3.cfm. This web site provides a convenient identification and linkage to relevant technical baseline information. Presently, this web page is for information only, but the official record documentation is available through Records Information Management. The technical baseline elements will be broken down to lower level work elements to define those configuration items and establish their rigor of control. Attachment 4 illustrates the flow of technical baseline information that is addressed by the HNF-1901 (Tedeschi 2000). The HNF-1901 will be used as a source document and basis for identifying configuration items. The documentation for the configuration item will describe the functional and physical characteristics, interfaces, and other relevant technical information.

3.2.3 Integrated Baseline

The TFC mission integrated baseline also referred to as the programmatic baselines are established in HNF-1946, *Programmatic Baseline Summary for Phase 1 Privatization for the Tank Farm Contractor* (Diediker 2000). The TFC's integrated baseline planning process is a defined system and process that guides all aspects of the TFC to provide a consistent, efficient, and effective means for successful project development, performance, and delivery. It includes a

comprehensive set of management and control processes to identify and control risk, integrate with configuration control, balance competing requirements, and integrate project work scope.

The Level 0 Logic, depicted in TWR-2086, *River Protection Project Mission Logic,* outlines the entire RPP mission including storage, Phase 1 waste vitrification demonstration, Phase 2 full-scale production, storage of immobilized wastes, and tank farms closure. The Level 1 Logic diagrams (see list in Paragraph 9.0 of this plan) define the work scopes and schedules down to work breakdown structure (WBS) Level 7. Technical basis reviews further define the work scope, at the WBS Level 8, and develops associated cost estimates. The Level 1 Logic development provides the detail that maps the work into the retrieval and disposal WBS. The WBS describes the budgeted scope needed to support the critical path schedule.

Upon completion of the Level 1 Logics, the preparation of the Technical Basis Review packages (TBR) is performed. The TBR process provides for development of the lower levels of the WBS and the lower levels of the schedule logic. TBRs document the definition of work to be performed, technical basis, reference documents, enabling assumptions, inputs, deliverables, trade studies, decisions, risk, labor and non-labor resources required to perform the work, organizational responsibilities for work performance, and defines how and when the work will be executed.

Activity-based cost estimating methodology is used to generate all cost estimates and are prepared to a level at which costs are tracked and performance is evaluated. Due to variations in the current phases of the TFC projects, several estimating techniques are used to construct the cost estimate. Approved commercial and government estimating methods used include analogy, definitive, parametric, factored, cost review, and update. In addition, formal construction project estimates are developed and maintained for the life of each line-item construction project in accordance with the U.S. Department of Energy (DOE) policy. Cost estimates are prepared in accordance with RPP-PRO-585, *Cost Estimating.* Each cost-estimating input sheet (CEIS) documents all costs including labor, equipment, materials and subcontracts and include the estimate basis, assumptions, and exclusions for each TBR activity.

The TFC developed an integrated, resource-loaded schedule for Phase 1 privatization. The scheduled prepared in Primavera Project Planner (P3)[1] was developed from, and is traceable to, the Level 1 Logics, formal TBR package data, and WBS. Resources from the CEISs were loaded and priced in P3 to produce the cost for each activity. The integrated resource-loaded schedule provides a time-phased plan with logical sequence of interdependent activities, milestones, and constraints.

Changes to these baselines, the elements that make up these items (e.g., Financial Data System rate structure), or the elements these items support (e.g., MYWP), will be performed in accordance with HNF-IP-0842, Volume VIII, Section 1.1, "Baseline Change Control."

[1] P3 is a registered trademark of Primavera Systems, Inc.

3.2.4 Master Equipment List

The master equipment list (MEL) identifies the specific SSC/configuration item within the technical baseline that defines the physical and functional configuration of the TFC. Within the MEL, resides a smaller subset of SSCs that are classified as the Safety Equipment List (SEL) because of their designed safety function. Both the MEL and the SEL are maintained in databases and include the attributes of a component number, component type, facility, building, system, manufacture, model, serial number, etc. All components requiring routine maintenance by the preventive maintenance/surveillance program are currently maintained in the job control system (JCS) component index database. The SEL is established in HNF-SD-WM-SEL-040, *TWRS Facility Safety Equipment List* (Zaman 1999), maintained on the Intranet at http://apsq101.rl.gov/selr/reports/report_list.asp. The MEL and SEL will be consolidated into a single JCS component index database.

3.2.5 Tank Farm Contractor Work Breakdown Structure

The TFC work breakdown structure (WBS) is the baseline integrating process that defines and displays the products to be developed and/or produced, relates these elements of work to be accomplished, and identifies their associated schedule duration and cost. Fundamentally, the WBS defines work scope based on the supporting logic decomposition, and the technical baseline information that is integrated into RPP-5044 (CHG 2000).

3.3 CONFIGURATION STATUS ACCOUNTING

An accurate and timely information base describing a product, process, or SSC and its associated technical information is required throughout the configuration item's life cycle. Status accounting of configuration items will be accomplished by developing an information system that will list and status the technical information/documentation, including the item/information identifier and ownership (functional organization). The configuration status accounting process will identify the baseline documents (technical, schedule, and cost) and their supplements, including interface documents such as the multi-year work plan, performance incentives, and permits. As configuration items and associated technical information are identified, they will be systematically captured in the document database that is controlled by Records Information Management. The document control database will evolve and its contents will be updated to provide a history and status throughout the configuration item's life cycle. The technical information will be removed from the document control database by the appropriate change authorization as it is decommissioned, dismantled, discarded, destroyed, voided, or superseded. The technical information maintained in the document control database shall be available to TFC participants who need to know and make decisions to ensure integrity in the design evolution and for the conduct of safe operation.

3.3.1 Document Control Process

Technical documents for the TFC will be correlated, stored, maintained, and readily available in accordance with applicable procedures. Only approved revisions of these documents within the configuration management scope should be used in the conduct of operations. Revisions to documents to incorporate pending changes will be completed and available in a timely manner. The number of unincorporated document changes allowed to accumulate before revisions are implemented should be determined according to the priority of the document, the complexity of the changes, and the overlap of the changes (see Paragraph 3.4 of this plan). The following information should be readily available: revision level, current status document owner, information regarding pending changes, and other data necessary for control and tracking, such as storage location and outstanding document change notices. The types of documents that need to be included in the scope of configuration management should be determined, and document owners should be established, for each of these document types. The document owners are responsible for the technical content of assigned documents. The document owners should also establish priorities for document revision and retrieval.

TFC uses the document control services of Records Information Management to process and maintain documents and records. The document control and records management systems will comply respectively with RPP-PRO-224, *Document Control Program Standards* and RPP-PRO-210, *Records Management Program Standards.*

The types of documents that are controlled are identified in the following primary database systems:

- Hanford Document Control System (HDCS) – Serves as the primary document issuance and change control database for the TFC controlled technical documents, i.e., drawings, specifications, supporting documents, and as prescribed by PRO-224, *Document Control Program Standards,* and RPP-PRO-1819, *Engineering Requirements.* The HDCS is administered and maintained by RIM in 2750E/D166 (376-5555). Documents and revisions/changes are entered into this database at release stations located strategically throughout the site. Access to HDCS database to verify document status is available at each release station. View only access to HDCS by document users at their individual workstations may be arranged through the HDCS administrator at RIM services centers.

- Correspondence Numbering System (CNS) – Is used to assign unique control numbers to official TFC correspondence in accordance with HNF-IP-0842, Volume X, Section 3.3. Individuals generating or receiving official correspondence may directly access this database for control numbers through Software Distribution under System Software & Utilities. Assistance with obtaining numbers through this database is available from Project Hanford Correspondence Control at 825 Jadwin/301 (376-8111).

- Engineering Document Management System (EDMS) – Is used to store and manage the Computer-Aided Drawing data sets for drawings created using AutoCAD in accordance with RPP-PRO-709, *Preparation and Control Standards for Engineering Drawings*. The system administrator located at 1981 Snyder/122G (376-9077) authorizes direct access to drawings within EDMS. Authorized points of contact within the engineering functions facilitate the retrieval and revision of drawings from their respective electronic storage vaults within EDMS.

- Records Management Information System (RMIS) – Is a document storage and retrieval system used to file copies of documents in image format. Documents are optically scanned and indexed into RIM for easy retrieval. System users are granted View/Print access through the system administrator at 1981 Snyder/214 (372-0728). This system permits easy access and retrieval of controlled documents, significantly reducing distribution, retrieval, and storage costs.

- (Hanford) Site Drawing File (SDF) – Is used by the Project Hanford micrographic services function (RIM) to facilitate distribution of hard-copy drawings and revisions, including master and diazo aperture cards, to specific stations located throughout the site. Information in the SDF database may be viewed by employees using Insight (a reporting tool available on Software Distribution).

- Certified Vendor Information (CVI) Database – Is used to manage vendor information. Information in the CVI database may be viewed by employees using Insight (a reporting tool available on Software Distribution).

3.3.2 Records Information Management

TFC will use RIM services center to receive and transmit documentation and information associated with its mission. The RIM services center will provide a document management and digitizing (electronic imaging) process to help reduce the volume of paper and enable automating and streamlining the business process. The RIM services center will provide the technology and services to manage both incoming and internally created documents, including those discussed in this document, so that information is accessible across TFC and is acted upon quickly and efficiently. This documentation and information process will be defined in procedures and desk instructions.

The RIM services center will provide document scanning, indexing, document release, document clearance, distribution, storage, records disposition and transfer, commitment tracking, and other services as required. The TFC documentation will be stamped and logged as it is processed through the RIM services center. Documents not stamped by RIM services center must be forwarded to a RIM services center for processing. RIM services center will perform a quality control check for TFC-generated documents and make appropriate distribution. The originators of TFC correspondence and documents will obtain letter and document numbers from a RIM services center. A document numbering convention will be developed for documents and

information that provides a tie to the WBS. The RIM document and information process flow is delineated in Attachment 5.

3.4 CHANGE CONTROL

The change control process ensures all changes (i.e., scope, technical, schedule, and cost) are properly identified, evaluated, dispositioned, implemented, tested, and documented. Control of changes to the TFC Baseline is delineated in HNF-IP-0842, Volume VIII, Section 1.1. Thresholds for the change categories and the dispositioning change board levels are also delineated in this Baseline Change Control procedure.

This plan incorporates front-end screening of proposed changes to evaluate potential impact to scope, schedule and cost baselines, establishes levels of change control, and integrates the various change control processes. The approval configuration, changes, and departures are contained and tracked in the configuration status accounting system (see Paragraph 3.3 of this plan).

1. **Initiate Change** – Anyone can identify a need for a change. Interfacing processes [i.e., unreviewed safety question (USQ) work management, programmatic change control] often identify the need to prepare a change. A Baseline Change Request Form (change form is identified in HNF-IP-0842, Volume VIII, Section 1.1) is used to initiate scope or programmatic change. This uniquely numbered form identifies the initiator, describes the change accurately, describes the main configuration item and documentation affected, provides a justification for change, describes any programmatic impact (i.e., schedule and cost), describes interface boundary impact, and lists other information that can be defined by the initiator to assist in describing the change.

2. **Classify Change** – Based on the change assessment, either major or minor, the appropriate level of approval is identified for the change based on a set of predefined criteria. The level of change board membership varies within the major change category. The change board (reference HNF-IP-0842, Volume VIII, Section 1.1) is the final approval authority for major changes. This board identifies the person responsible for directing change planning and implementing the change in all affected parts of the technical baseline.

   - Major Change – Major changes are approved by the change board that includes the cognizant design authority and other impacted groups. Allocation of resources to develop the change package is determined in conjunction with priorities of participants. Change package development may be deferred to coincide with field organization priorities or plant mode conditions.

   - Minor Change – Minor changes are assigned by the engineer or the cognizant manager in accordance with HNF-IP-0842, Volume IV, Section 2.3, "Design

Authority Process, Selection and Responsibilities." Change package development may be deferred to coincide with field organization priorities or plant mode conditions.

3. **Change Evaluation and Coordination** – Changes are reviewed and coordinated in accordance with the Baseline Change Control procedure provisions encompassing the preliminary impact assessments, determining the required change effectivity, identifying associated schedule and cost impact, and providing the appropriate change disposition (approving, disapproving, or deferring pending more information).

4. **Revise Affected Documents** – Baseline Change Requests are used to implement the proposed change once it is authorized. The Baseline Change Request(s) is developed, reviewed, and the technical accuracy of the details verified. The sequence will vary according to the category of the change. Major and minor changes will be documented before implementation, but the extent will vary. Technical approval of change notices and documentation is determined in accordance with approval designator criteria (see RPP-PRO-233, *Review and Approval of Documents*).

5. **Change Implementation** – Implementation of the change is authorized through the "Notice to Implement"

6. **Change Closeout and Verification** – Implementation of the change is verified, including testing of physical and procedural changes. Each change should be documented, and that documentation should include a description of the change, as well as an account of the technical reviews, management approvals, as-built information, and post-modification test results. Technical documents that are affected by a change, either directly or indirectly, are work-completed through the ECN process. Closeout of the change is accomplished only when the technical baseline has been verified as being consistent with the approved change.

3.4.1 Programmatic Change Control

Changes that affect the programmatic baselines of the integrated baseline will be processed and dispositioned in accordance with HNF-IP-0842, Volume VIII, Section 1.1. This procedure applies to changes affecting the lower tier data that roll up to the technical, cost, schedule, and work scope baselines contained within the MYWP. When MYWP changes impact the technical baseline, changes will be implemented in accordance with the technical change control process specified in HNF-IP-0842, Volume IV, Section 4.29, "Engineering Document Change Control Requirements."

3.4.2 Technical Change Control

This plan describes the TFC technical baseline change control process at a summary level. Changes that affect technical products, processes, SSCs, and associated technical information is integrated with the change process of HNF-IP-0842, Volume VIII, Section 1.1, and implemented in accordance with HNF-IP-0842, Volume IV, Section 4.29.

3.5 CONFIGURATION MANAGEMENT ASSESSMENTS

3.5.1 Programmatic Assessments

The Engineering Configuration and Processes organization and the Quality Assurance organization will perform assessments for compliance to the configuration management established in this plan, and as specified HNF-SD-MP-SRID-001, *Tank Waste Remediation System Standards/Requirements Identification Document* (Milliken 1999). Assessments will be performed for each configuration management element to determine if the upgraded programs and procedures address identified weaknesses, are effective in accomplishing the configuration management functions, and are workable. Assessments will be planned to determine the strengths and weaknesses of existing configuration management-related processes and procedures with regard to determining where upgrade actions and resources are necessary. Defined metrics (performance indicators) will be used to assess the effectiveness of configuration management implementation. If deficiencies are determined in the implementation of configuration management, then corrective actions and improvement measures will be identified and tracked in the Deficiency Tracking System (HNF-IP-0842, Volume I, Section 2.4, "Corrective Action Management."

3.5.2 Physical Configuration Assessments

Verification that a configuration item's physical attributes (i.e., form, fit, and function) have been met and the product design meeting those attributes has been accurately documented is required to baseline the product configuration. Physical configuration assessments, or walkdowns, will be performed to determine the degree of agreement between the physical configuration and the configuration depicted in the facility documentation. Physical walkdowns should be included as part of the initial assessments, post-implementation assessments, and periodic effectiveness assessments. If substantive discrepancies (either in number or type) are discovered, appropriate and immediate corrective actions should be developed to establish agreement between the physical configuration and the documentation in accordance with HNF-IP-0842, Volume I, Section 2.4. The corrective actions should include additional walkdowns to characterize the problem and to determine the extent of the problem. They should also include design validation to determine whether the physical configuration or the documentation should be changed. TFC has initiated a drawing and labeling program that is identifying and labeling tank farm equipment and updating the essential drawings of the tank in

accordance with HNF-IP-0842, Volume IV, Section 3.13, "Performing Walkdowns." This effort can be considered an ongoing configuration system assessment.

3.5.3 Post Implementation Assessments

An SSC within the technical baseline should be tested after modification (and before being placed back in service) to determine if it is capable of meeting its design requirements (i.e., the post-implementation acceptance criteria), in accordance with HNF-IP-0842, Volume IV, Section 4.28, "Testing Practices Requirements." If a changed SSC fails to meet its post-implementation acceptance criteria, turnover for operation should be postponed until either a technical review has been completed and any follow-up actions are completed or until the SSC is returned to its original condition and tested satisfactorily.

4.0 CONFIGURATION MANAGEMENT ASSET CONTROL

4.1 ASSET ACQUISITION

The assets of SSCs are acquired to: (1) provide a direct replacement for a failed or otherwise inoperable/unusable SSC, (2) provide a new SSC, or (3) modify an existing SSC in accordance with HNF-IP-0842, Volume V, Section 3.1, "Material Control."

Direct asset replacement is either replacement with the same make and model, if it is available, or a verified like-for-like replacement. New assets are acquired to establish a new function or service. Modification to an existing SSC includes a direct replacement SSC being used to perform a different function (i.e., this is the same as providing a new SSC). The kind of replacement or acquisition will be determined for each asset.

The process for physical asset acquisition shall be an integrated, systematic approach that shall ensure, but shall not be limited to, consideration of maintainability, operability, life-cycle costs, and configuration integrity in designs and acquisitions.

4.2 OPERATION AND MAINTENANCE OF PHYSICAL ASSETS AND SYSTEMS

Assets and system integrity are required to ensure adherence to the technical baseline. As a minimum, the process for the operation and maintenance of physical assets shall ensure that configuration management will maintain the integrity of physical assets and systems as specified in HNF-IP-0842, Volume IV, Section 5.13, "Procurement of Safety Class Items and Management of Spares."

5.0 CONFIGURATION MANAGEMENT OF SOFTWARE AND DIGITAL DATA

Software and digital data used for record material, analysis, evaluations, and other functions that support contract, regulatory, mission, or permit adherence shall be controlled configuration management, as identified in RPP-PRO-309, *Computer Software Quality Assurance Requirements.*

5.1 SOFTWARE AND DIGITAL DATA IDENTIFICATION

Configuration management requires that critical computer software, digital data, and associated documentation be identified and controlled. Computer software, digital data, and associated documentation designated to be controlled will be uniquely identified and established as part of the technical baseline and within the scope of configuration management (see reference RPP-PRO-309).

5.2 SOFTWARE AND DIGITAL DATA CONTROL

Commercially purchased computer software provided for use on the Intranet is provided such control by its specific vendor. Data developed or generated by any computer software must be controlled if it is used for record material, analysis, evaluations, and other functions that support contract, regulatory, mission, or permit adherence (see RPP-PRO-309).

6.0 DESIGN RECONSTITUTION PROGRAM

Design reconstitution is an adjunct program that accomplishes the one-time effort of identifying, retrieving, extracting, evaluating, verifying, validating, and regenerating missing critical design requirements and design bases. Design reconstitution as specified in HNF-SD-WM-CM-011, *Hanford Site Waste Tank Farm Facilities Design Reconstitution Program Plan* (Malinchak 1998), encompasses the following functions: developing associated program plans and procedures; identifying and retrieving design information from identified source documents; evaluating, verifying, and validating the design information; resolving discrepancies; generating missing critical design information; and preparing and issuing system design descriptions.

7.0 MATERIAL CONDITION AND AGING MANAGEMENT

Material condition and aging management screen components to determine those that are potentially life-limiting, evaluates aging degradation mechanisms, estimating remaining lifetime, evaluating feasibility of continued operations and extended operations, performing detailed material condition and aging analysis, and developing necessary life extension techniques to achieve the desired life. This effort is currently being performed through the engineering process involving the reliability, availability, and maintainability (RAM) analyses as described in the HNF-1947 (Rafaey 1998).

8.0 CONFIGURATION MANAGEMENT PATH FORWARD

Configuration management is applied at the initial planning of a program or project through the execution of that plan. The CHG configuration management requirements will address the identification and control of products, processes, and SSCs and their associated information from the point of conception to their final disposition. TFC will apply configuration management throughout the mission's life cycle, including the integration of the schedule, cost and technical baselines with the technical baseline.

TFC configuration management planning will identify the following actions necessary to implement configuration management in a manner that supports contract provisions.

- Configuration Management Administration – TFC developed and issued the configuration management plan to describe the implementation of the principal configuration management. This plan is established as the standard for the family of projects within the scope of the TFC. Projects may elect to develop a project-specific configuration management plan to address these special needs or they may elect to adopt the HNF-1900 as their standard.

- Configuration management plan – This plan defines TFC-specific configuration management concepts and requirements for the storage, retrieval, and disposal missions. It will assign configuration management responsibilities and assign the infrastructure to control the technical baseline and establish the basis for configuration management integration applied to the TFC. This plan establishes requirements for procedures that will be used for the identification of configuration items. Controls will be established to support the criteria and selection of configuration items and associated technical information, capture of technical information, and placing of configuration items and associated information under change control.

- The TFC-developed, produced or acquired physical items verified through physical walkdowns will ensure that the technical information (e.g., specifications, drawings, and procedures) depicts the actual item's characteristics.

- TFC-managed projects (e.g., W-211, W-314, W-320, W-464, W-465, W-519, as defined by the HNF- SD-WM-SEMP-002,[O'Toole 2000]) will address procedures and actions necessary to effectively implement the configuration management requirements consistent with the plan. The controls established by these projects will be effectively integrated with this parent configuration management plan.

- This plan will be an evolving document that will be revised as required to define and improve implementation of the configuration management requirements. It will define program and project interfaces, information systems and activities to be improved, and integrate lower-level configuration management implementation and procedures.

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- TWR-2088, *RPP Retrieval Level 1 Logic Immobilized Waste (IHLW)*
- TWR-2089, *RPP Retrieval Level 1 Logic Infrastructure Phase 1 Privatization Support*
  TWR-2090, *RPP Retrieval Level 1 Logic Waste Feed Delivery LAW Feed Batches Tank 241-AN-105*
- TWR-2091, *RPP Retrieval Level 1 Logic Waste Feed Delivery LAW Feed Batches Tank 241-AN-104*
- TWR-2092, *RPP Retrieval Level 1 Logic Waste Feed Delivery LAW Feed Batches Tank 241-AW-101*

- TWR-2093, *RPP Retrieval Level 1 Logic Waste Feed Delivery LAW Feed Batches Tank 241-AN-103*
- TWR-2094, *RPP Retrieval Level 1 Logic Waste Feed Delivery LAW Feed Batches Tank 241-AP-101*
- TWR-2095, *RPP Retrieval Level 1 Logic Waste Feed Delivery LAW Feed Batches Tank 241-AY-101*
- TWR-2096, *RPP Retrieval Level 1 Logic Waste Feed Delivery LAW Feed Batches Tank 241-AN-107*
- TWR-2097, *RPP Retrieval Level 1 Logic Waste Feed Delivery LAW Feed Batches Tank 241-AN-102*
- TWR-2098, *RPP Retrieval Level 1 Logic Waste Feed Delivery LAW Feed Batches Tank 241-AN-106*
- TWR-2099, *RPP Retrieval Level 1 Logic Waste Feed Delivery LAW Feed Batches Tank 241-SY-101*
- TWR-2100, *RPP Retrieval Level 1 Logic Waste Feed Delivery LAW Feed Batches Tank 241-SY-103*
- TWR-2101, *RPP Retrieval Level 1 Logic Waste Feed Delivery HLW Feed Batches Tank 241-AZ-101*
- TWR-2102, *RPP Retrieval Level 1 Logic Waste Feed Delivery HLW Feed Batches Tank 241-AZ-102*
- TWR-2103, *RPP Retrieval Level 1 Logic Waste Feed Delivery HLW Feed Batches Tank 241-AY-102*
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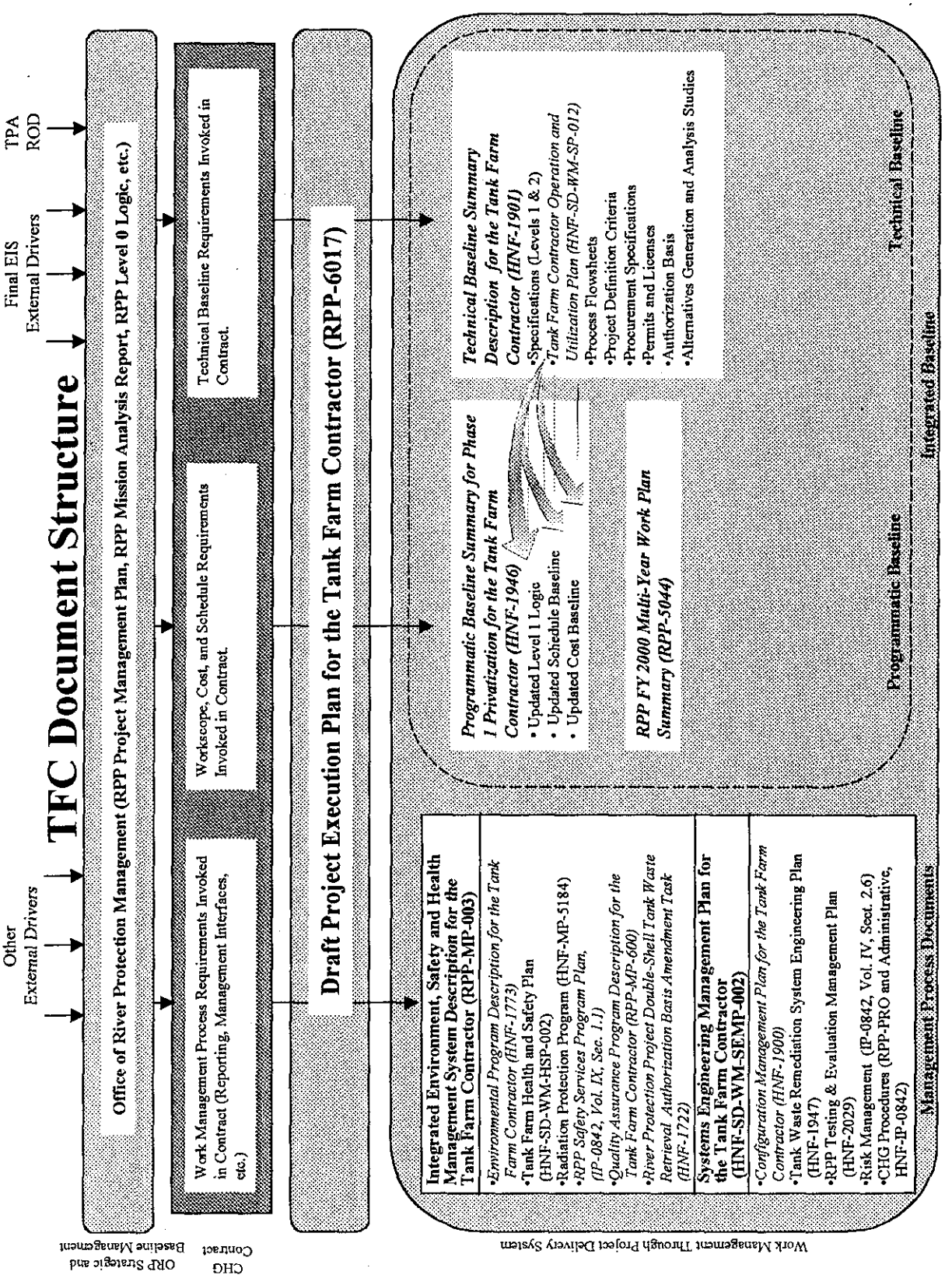
Attachment 1

Tank Farm Contractor Document Structure



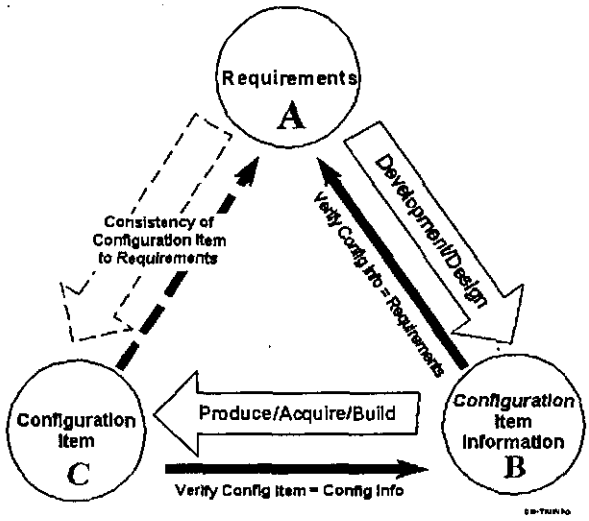
Attachment 2

The Configuration Management Triangle

In the process of developing or designing a CI (e.g., SSC, document, or digital information), sources of requirements (A) are identified and the requirements are interpreted to develop a set of information (B) that defines and supports the CI. Then that information is used to CI, acquire, or build the CI (C) and operate, maintain, and support it. (In many instances a CI can lead to other source requirements or CI information for other products.)

Compliance of the product to requirements is ensured by maintaining traceability and consistency between the requirements, CI information, and CI. When the CI information is developed, its compliance to the requirements *is verified (small B-A arrow). When it is created or acquired,* the CI=s compliance to the CI information is verified (small C-B arrow).. The CI must comply with the requirements and if either the CI or requirements changes, procedures will be activated to bring them in compliance with each other.

This relationship is maintained for the life cycle of the CI Change to requirements (A), CI information (B), or CI (C) requires that they each be examined for impacts to ensure that compliance and traceability is maintained.



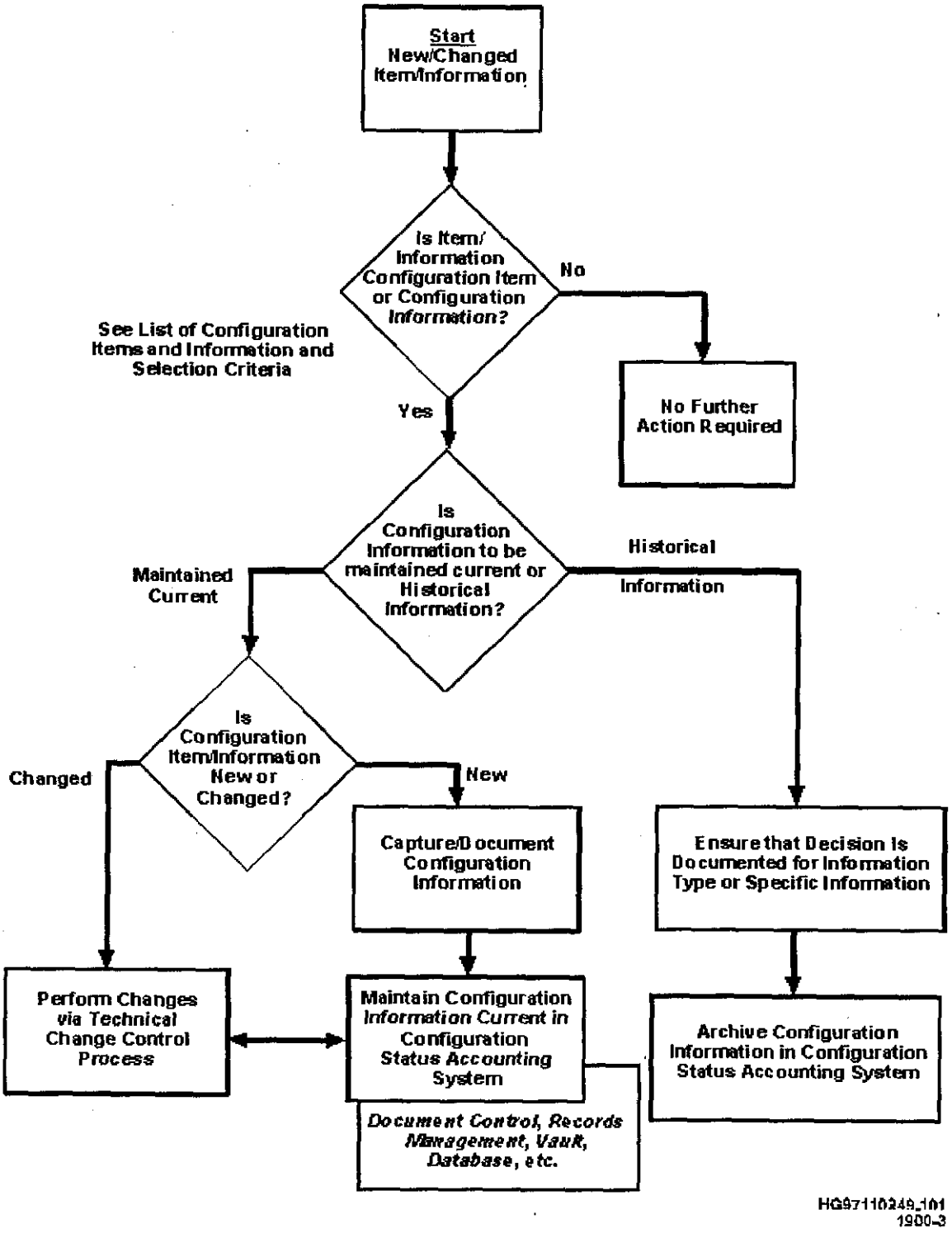
EXAMPLES:

A - Requirements	**B – CI Information**	**C – CI**
• Contracts	• Design dwgs., as-built dwgs.	• RPP MYWP
• DOE orders	• Specifications	• Physical systems
• Federal regs. & codes	• Procedures	• Structures, systems components (SSC)
• Mission	• Authorization Basis	• Performance measures
• NEPA Record of Decision	• Calculations	• Vendor information
• Tri-Party Agreement	• Tech., sched, & cost bases	• Spares
• S/RID	• Reviews and assessments	• Operations and Maintenance procedures
• External ICDs and MOAs	• Interface Control Documents	• Test evaluations
	• Functions and requirements	• Deliverables
	• Labeling	• Permits
	• Plans and procedures	• Equipment history
	• Design concepts	• Data
	• Research	
	• Assumptions, risk analysis	

CI = Configuration Item
ICD = Interface Control Document.
MYWP = Multi-Year Work Plan.
NEPA = *National Environmental Policy Act of 1969.*
SSC = structures, systems, and components.
S/RID = Standards/Requirements Identification Document.
Tri-Party Agreement = *Hanford Federal Facility Agreement and Consent Order.*
RPP = River Protection Project.
MOA = Memorandum of Agreement

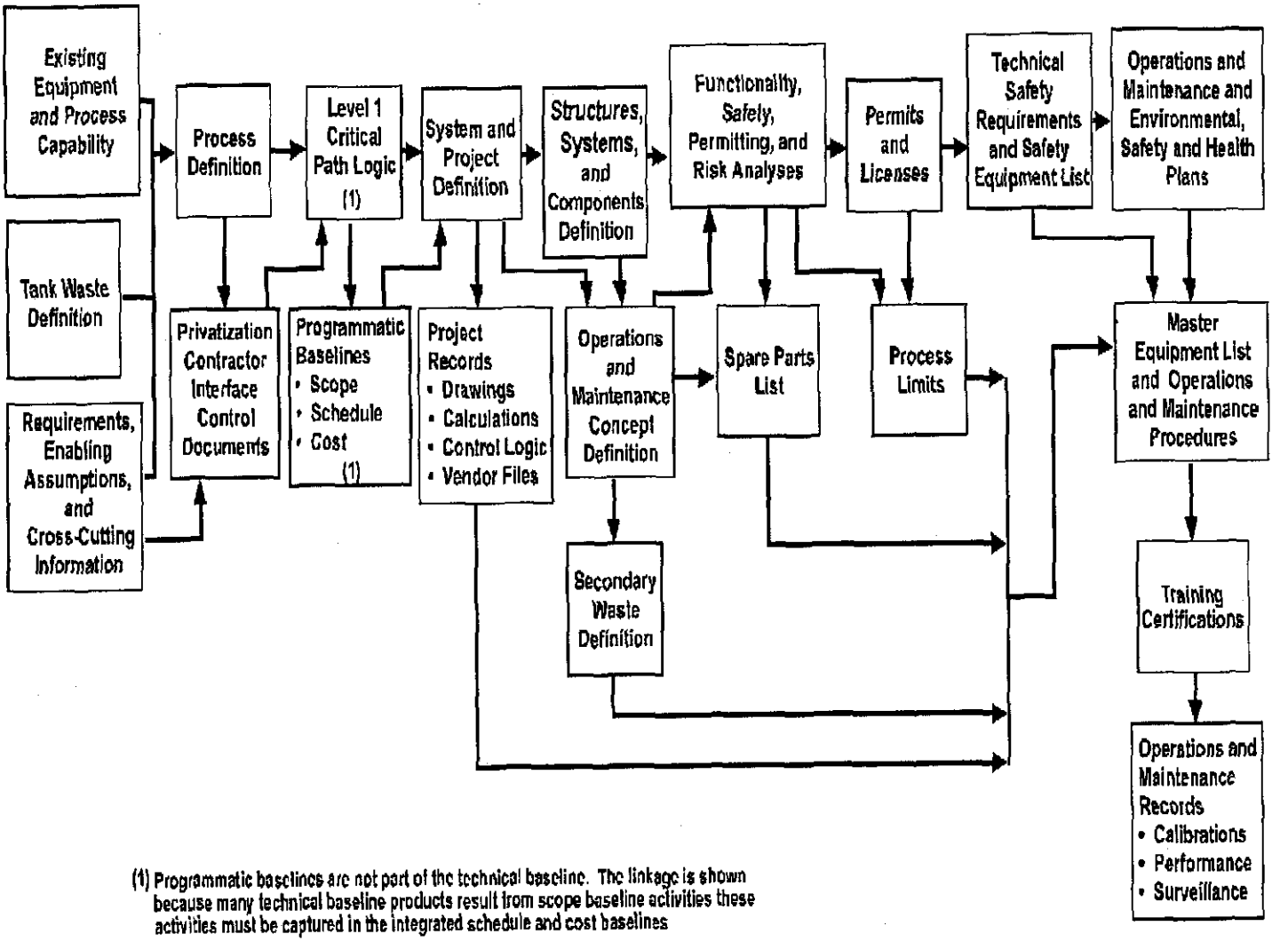
Attachment 3

Configuration Management Application



Attachment 4

Technical Baseline Information Flow Process



(1) Programmatic baselines are not part of the technical baseline. The linkage is shown because many technical baseline products result from scope baseline activities these activities must be captured in the integrated schedule and cost baselines

Note: The process of Reconciling new and changed baseline information with existing information may require reversing the information flow.

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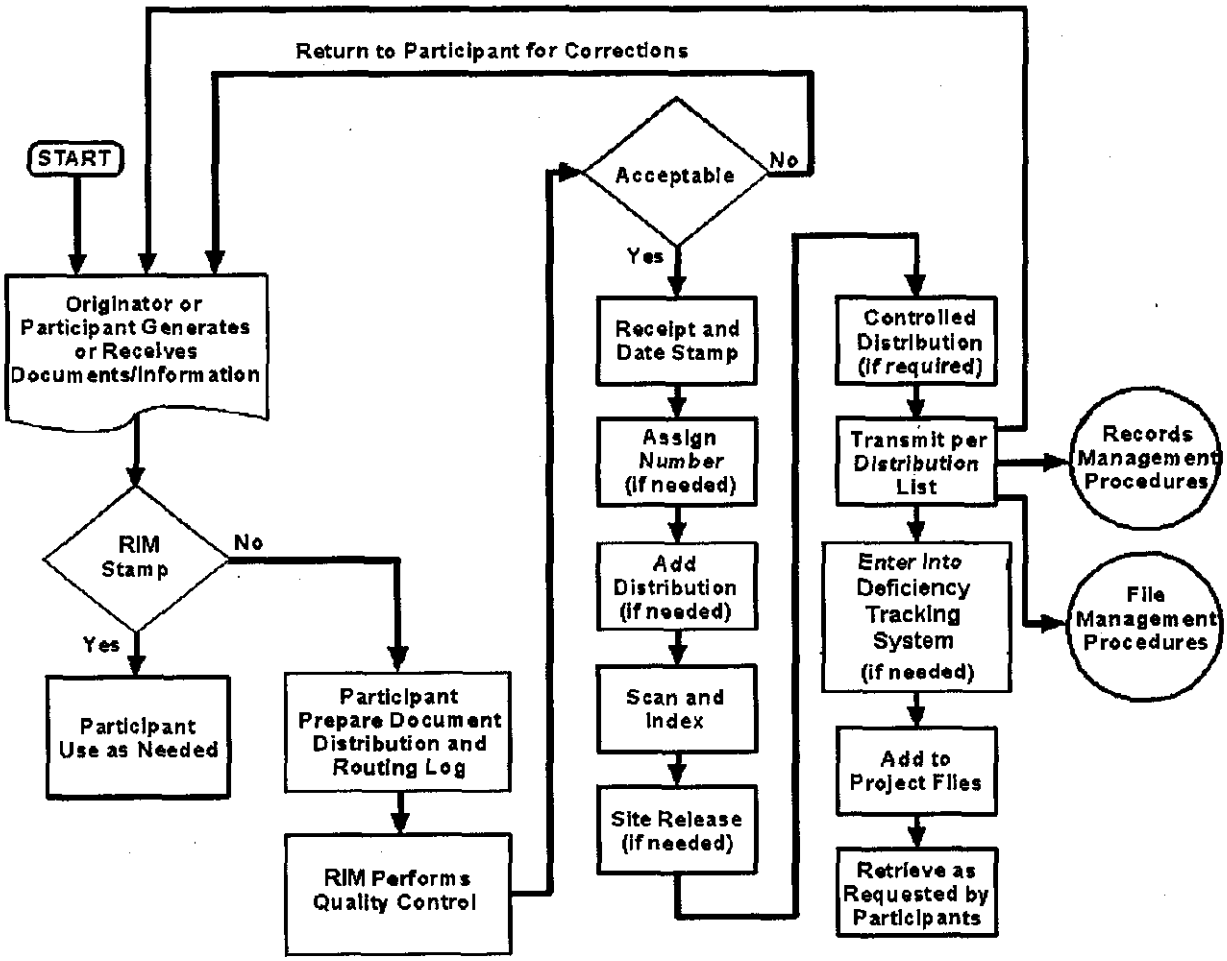
Attachment 5

TFC Records and Information
Management Services Flow Process



RIM = Records and Information Management Service Center

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DISTRIBUTION SHEET

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Distribution	Engineering Config & Process	Date 4/20/00
Project Title/Work Order		EDT No.
Configuration Managment Plan for the Tank Farm Contractor		ECN No. 660080

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
DOE Public Reading Room	H2-53	X			
Hanford Technical Library	P8-55	X			
Central Files	B1-07	X			
Document Processing Center	A3-94	X			
ER Hamm	R1-31	X			
WR Weir	R1-31	X			