DISTRIBUTION SHEET

To	From	Page 1 of 1
Distribution	Engineering Mgmt. Systems	Date 3/16/95
Project Title/Work Order		EDT No. 609834
Configuration Management Compliance Matrix for K Basins		ECN No. N/A

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
C.L. Bennett	X3-77	X			
H.W. Booth	L4-89	X			
D.C. Boothroyd	R1-30	X			
B.S. Carlisle	X3-71	X			
C.S. Haller	X3-75	X			
T.H. Gronewald	X3-78	X			
R.J. Kuhta	X3-76	X			
T. Laney	L4-89	X			
L.S. Legowik	L4-89	X			
J.P. Schmidt	X3-78	X			
S.A. Slinn	X3-74	X			
S.J. Smith	R2-50	X			
W.R. Weir	L4-89	X			
Central Files (orig. + 1 copy)	L8-04	X			
OSTI (2)	L8-07	X			

RECEIVED**APR 03 1995****OSTI**

DISCLAIMER

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

MAR 16 1995

ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT

609834

2. To: (Receiving Organization) K Basins Cognizant Engineering		3. From: (Originating Organization) Configuration Mgmt Systems		4. Related EDT No.: N/A							
5. Proj./Prog./Dept./Div.: K Basins Cognizant Engineering		6. Cog. Engr.: T. Laney		7. Purchase Order No.: N/A							
8. Originator Remarks: APPROVAL/RELEASE				9. Equip./Component No.: N/A							
				10. System/Bldg./Facility: N/A							
11. Receiver Remarks: INITIAL RELEASE				12. Major Assm. Dwg. No.: N/A							
				13. Permit/Permit Application No.: N/A							
				14. Required Response Date: N/A							
15. DATA TRANSMITTED											
(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	(F) Approval Designator	(G) Reason for Transmittal	(H) Originator Disposition	(I) Receiver Disposition			
1	WHC-SD-SNF-CMD-001	1 - 22	0	Configuration Management Compliance Matrix for K Basins	N/A	2	1	1			
16. KEY											
Approval Designator (F)		Reason for Transmittal (G)			Disposition (H) & (I)						
E, S, Q, D or N/A (see WHC-CM-3-5, Sec.12.7)		1. Approval 2. Release 3. Information 4. Review 5. Post-Review 6. Dist. (Receipt Acknow. Required)			1. Approved 2. Approved w/comment 3. Disapproved w/comment 4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged						
(G)	(H)	17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)						(G)	(H)		
Reason	Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(J) Name	(K) Signature	(L) Date	(M) MSIN	Reason	Disp.
2	1	Cog. Eng. T. Laney	<i>T. Laney</i>	3-2-95	L4-89						
2	1	Cog. Mgr. W.R. Weir	<i>W.R. Weir</i>	3-2-95	L4-89						
		QA									
		Safety									
		Env.									
2	1	S.A. Slinn	<i>S.A. Slinn</i>	3/15/95	L4-89						
18.		19.		20.		21. DOE APPROVAL (if required) Ctrl. No.					
<i>T. Laney</i> Signature of EDT Originator		<i>S.A. Slinn</i> Authorized Representative for Receiving Organization		<i>W.R. Weir</i> Cognizant Manager		☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments					
3-2-95 Date		3/15/95 Date		3-2-95 Date							

BD-7400-172-2 (04/94) GEF097

BD-7400-172-1

RELEASE AUTHORIZATION

Document Number: WHC-SD-WM-SNF-CMD-001, Rev. 0

Document Title: Configuration Management Compliance Matrix for K Basins

Release Date: 3/16/95

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

APPROVED FOR PUBLIC RELEASE

WHC Information Release Administration Specialist:

V. L. Birkland
V.L. Birkland

3/16/95

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

MASTER

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

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.

A-6001-400.2 (09/94) WEF256

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

DT

SUPPORTING DOCUMENT		1. Total Pages 18 22
2. Title Configuration Management Compliance Matrix for K Basins	3. Number WHC-SD-SNF-CMD-001	4. Rev No. 0
5. Key Words configuration management, compliance matrix, assessment	6. Author Name: T. Laney <i>T. Laney</i> 3-2-95 Signature Organization/Charge Code 14210/L1171	
7. Abstract <p>This compliance matrix establishes the configuration management program criteria, identifies the current method that implements this program criteria, and assesses and measures conformance of the implementing program, procedures, and processes.</p>		
8. RELEASE STAMP <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> OFFICIAL RELEASE (20) BY WHC DATE MAR 16 1995 <i>Sta. 21</i> </div>		

CONFIGURATION MANAGEMENT COMPLIANCE MATRIX

FOR K BASINS

MASTER

This page intentionally left blank.

TABLE OF CONTENTS

TABLE OF CONTENTS	iii
1.0 Introduction	1
1.1 Purpose	1
1.2 Scope	1
1.3 Objectives	1
2.0 Maintenance and Control	2
2.1 Tracking Database	2
2.2 Data Input Form	2
2.3 Reporting	2
3.0 Matrix	3
4.0 References	12
Appendixes	
A - Tracking Database	14
B - Data Input Form	15
C - Report	16

This page intentionally left blank.

1.0 INTRODUCTION

This compliance matrix is based on the program established in WHC-SD-SNF-CM-002, "Configuration Management Plan for K Basins," and uses the criteria of this configuration management plan to assess and measure conformance of the current K Basins programs and procedures that implement configuration management.

1.1 PURPOSE

This compliance matrix identifies the criteria of the configuration management program at K Basins and identifies the current methods, i.e., systems, processes, procedures, and programs, that implement the configuration management criteria. The matrix identifies the current K Basins implementing methods established through an initial assessment. This initial assessment of the implementation is reflected in the compliance matrix and forms the basis for subsequent detailed evaluations to ensure that the identified implementation methods adequately support the configuration management program.

1.2 SCOPE

This matrix applies to the K Basins configuration management methodology that has been defined by WHC-SD-SNF-CM-002 and provides a phased and graded implementation approach during the continued operations of K Basins. The two features of this matrix: 1) identify the configuration management criteria and corresponding implementing methods, and 2) identify and track resolution of discrepancies or improvement recommendation.

1.3 OBJECTIVES

This compliance matrix identifies the implementing systems, procedures, and programs, and assesses conformance of these implementing methods, to support the K Basin configuration management program. Specific objectives of this matrix include:

- Identifying functional elements (criteria) of configuration management and K Basins implementation of these criteria.
- Assessing the conformance of the implementation and providing resolution for discrepancies.
- Recommending corrective actions or improvements for discrepant conditions.
- Providing a tracking database to status the discrepancy resolutions.
- Identifying estimated schedules and resources for implementing discrepancy resolutions.

2.0 MAINTENANCE AND CONTROL

As a supporting document, this matrix will be maintained and controlled in accordance with WHC-CM-6-1, EP-1.12. In addition to the control of the matrix, additional tools will be used to track the day-to-day activities regarding configuration management compliance. These tools are the tracking database, the data input sheet, and reports.

2.1 TRACKING DATABASE

The tracking database (see Appendix A) tracks documented discrepancies or improvement recommendations relative to each configuration management requirement or its implementation method. All identified discrepancies or improvement recommendations will be documented by the data input sheet and statused through resolution.

2.2 DATA INPUT FORM

The data input form (see Appendix B) is used to record all relevant information to be entered into the tracking database.

2.3 REPORTING

Routine reports (see Appendix C for an example) will be generated to inform K Basins management of the status of work to resolve any discrepancies or to implement improvement recommendations.

3.0 MATRIX

KB CMP	CRITERIA	CURRENT IMPLEMENTATION METHOD
PROGRAM MANAGEMENT		
3.1-1	Implementation strategy of the configuration management program will consider the use of existing programs and procedures (including assessments results), determine any weaknesses in the program, and provide improvement recommendations and corrective measures required to align with the program requirements.	This compliance matrix establishes the methodology for implementation compliance.
3.1-2	A configuration management plan for K Basins shall be developed that provides a "road map" for integrating, assessing, and improving existing configuration management functions. The establishment of this plan will also address the development of the design reconstitution adjunct program and establish criteria for the material condition and aging management adjunct program.	WHC-SD-SNF-CM-002, "Configuration Management Plan for K Basins," establishes the program requirements for configuration management.
3.1-3	An implementation strategy and compliance matrix shall be developed to assess the configuration management plan identified in 3.1-1.	This compliance matrix establishes the requirements traceability and statuses associated actions to ensure implementation of the configuration management plan.
3.2-1	A work breakdown structure (WBS) is developed to define the scope of K Basins.	The WBS is established by K Basins management and is controlled by the Financial Data System (FDS), identified by WBS number 1.4.1.1.
3.3-1	Baseline management shall integrate and control quantitative criteria of technical, cost, and schedule that are identified in selected documents.	The baseline management process is established in accordance with WHC-CM-2-5.
3.3-2	The selected documents shall identify specific criteria for the respective baseline.	Selected documents specifying criteria will be identified in the K Basins WBS and system design description (SDD) documents.
3.3.1-1	The technical baseline is the reference set of technical information and is controlled using configuration management principles as described in the configuration management plan and is defined by the systems engineering process.	The technical baseline is defined by the K Basins system design descriptions (future) that will be contained in the "K Basins Technical Manual - Systems Description."
3.3.2-1	Configuration management shall integrate with the cost and schedule issues insofar as changes to the cost and schedule baseline result in or derive from the approved technical baseline.	The integration of technical, cost, and schedule will be managed by the WBS for K Basins.
3.4-1	K Basins SSCs will be identified in the various SDDs that will be prepared for each major system and subsystem that comprise the K Basins.	The SDDs, compiled in the "K Basins Technical Manual - Systems Descriptions" (future), are prepared in accordance with the reconstitution effort (Ref., WHC-SD-SNF-DRP-001).
3.4-2	SSCs identified as safety classification 1 and 2 items.	SSC safety class (Ref., WHC-SD-NR-SEL-001, "Safety Equipment List").

KB CMP	CRITERIA	CURRENT IMPLEMENTATION METHOD
3.4-3	SSCs identified whose failure will result in the inability to accomplish the K Basins' mission.	The SSCs identified in WHC-SD-SNF-EDL-001, "Interim Essential and Support Drawing List" and WHC-SD-WM-SAR-062, "Safety Analysis of Irradiated N Reactor Fuel."
3.5-1	An as-building process shall be developed to produce accurate documents, primarily drawings, that have been validated through field inspection to reflect the actual existing physical configuration and verified to be consistent with the design requirements.	The field verification program (WHC-SD-SNF-FVP-001, "Field Verification Program for K Basins") validates the existing physical configuration. The design requirements and bases are verified to be consistent with the physical configuration through the design reconstitution program (WHC-SD-SNF-DRP-001, "Design Reconstitution Program Plan and Procedures for K Basins") to produce as-built drawings.
3.5-2	A process shall be developed to validate that the existing physical configuration is consistent with the design requirements.	The design reconstitution program plan (WHC-SD-SNF-DRP-001) addresses the engineering evaluation process and provides a methodology to upgrade or, where necessary, recreate required engineering documentation.
3.6-1	Standard configuration management concepts and terminology shall be established and maintained.	The WHC standard configuration management concepts and terminology are established and maintained in WHC-CM-6-1. K Basins configuration management definitions are provided in the glossary of WHC-SD-SNF-CM-002.
3.7-1	Organizational interfaces shall be identified and controlled.	Appropriate program and organization interfaces are presented within this configuration management plan. The technical interfaces are described in paragraph 4.3.3 of the K Basins configuration management plan (Ref., WHC-SD-SNF-CM-002).
3.7-2	Technical interfaces shall be identified and controlled.	Technical interfaces are controlled in accordance with WHC-CM-6-1, EP-1.5.
3.8-1	A database shall be used to track the status of released engineering documents and the subsequent changes to those engineering documents.	The database for K Basins engineering documents is the engineering release system database (ERSDB).
3.8-2	A database shall be used to provide support for K Basins maintenance and modifications.	The database for maintenance and modifications is controlled by the automatic data processing (Ref., WHC-CM-1-8).
3.9-1	A phased and graded strategy shall be used to implement the configuration management program.	This compliance matrix identifies the topical area for implementation and a corresponding schedule to accomplish the task where improvement or deficiencies are identified.
3.10-1	Training will be required to communicate objectives and expectations and to ensure effective implementation.	Training requirements and associated documents are performed in accordance with WHC-CM-2-15.
3.11-1	Vendor and contractor controls shall be reviewed and approved.	Vendor controls established in WHC-CM-6-1, EP-3.3, and WHC-IP-1026, EPG-3.3, and imposed by Statements of Work, Letters of Instruction.
3.11-2	Vendors and contractors will establish controls over the products, data, design, and information for K Basins	Vendor and contractor controls are established in accordance with WHC-CM-6-1.

KB CMP	CRITERIA	CURRENT IMPLEMENTATION METHOD
3.11-3	All approved changes will be incorporated before final turnover to the K Basins design authority.	Change control turnover requirements are established in accordance with WHC-CM-6-1, EP-2.2.
3.11-4	Pertinent vendor technical information (manuals and notices) will be identified, collected, and controlled.	Vendor technical information will be identified, collected, and controlled in accordance with WHC-CM-6-1, EP-3.3.
DESIGN REQUIREMENTS		
4.1-1	A design engineering process shall be used to: (1) define and document the design inputs; (2) ensure the design identifies and adheres to the design constraints; (3) perform and document the analyses, calculations, and technical evaluations generated during the design process; and (4) ensure that the design outputs are complete and accurately documented.	The engineering process is described in detail in WHC-IP-1026, EPG-1.0.
4.1-2	Design requirements and associated changes shall be maintained consistent with and supported by the design basis.	Design requirements are maintained consistent with the design basis in accordance with WHC-CM-6-1, WHC-IP-1026, and the design reconstitution of WHC-SD-SNF-DRP-001.
4.1-3	The operating, maintenance, and testing procedures shall also be maintained consistent with the design requirements.	The operating and maintenance procedures are controlled in accordance with WHC-CM-1-8; WHC-CM-5-13, Section 3.0; and specific K Basins procedures. Testing procedures are controlled in accordance with WHC-CM-6-1, EP-4.2.
4.2-1	Design inputs on which the detailed design is based shall be identified, documented, and controlled.	Design inputs are identified in the engineering design process as prescribed in WHC-IP-1026, EPG-2.0, and documented in accordance with WHC-CM-6-1, EP-1.11, and EP-1.12.
4.2-2	Design constraints shall be identified, documented, and controlled.	Design controls are identified in the engineering design process as prescribed in WHC-IP-1026, EPG-2.0, and documented in accordance with WHC-CM-6-1, EP-1.11 and EP-1.12.
4.2-3	Design analysis and calculations shall be identified, documented, and controlled.	Design analyses and calculations are controlled in accordance with WHC-CM-6-1, EP-1.12, and WHC-IP-1026, EPG-1.0.
4.2-4	The design bases are formally established, documented, maintained, and correlated with the design requirements.	The design basis is controlled in accordance with WHC-CM-6-1, EP-1.11 and EP-1.12.
4.2-5	Design verifications are performed to determine the adequacy of the design basis for existing SSCs.	Design verification is controlled in accordance with WHC-CM-6-1, EP-4.1.
4.2-6	If the design basis is inadequately documented, inaccurate, or missing, the design basis is recovered through the design reconstitution program.	Inadequate design basis is recovered in accordance with WHC-SD-SNF-DRP-001.
4.2-7	The design bases for modified requirements are established and documented as they are developed.	Design basis is controlled in accordance with WHC-CM-6-1, EP-1.11.

KB CMP	CRITERIA	CURRENT IMPLEMENTATION METHOD
4.3-1	Design output documents specify the functions, capabilities, capacities, physical dimensions, limits and setpoints (such as valve, switch, and relay positions), etc., that are necessary and supported by the design basis.	Requirements are documented by: <ul style="list-style-type: none"> • Drawings (WHC-CM-6-1, EP-1.3) • Specifications (WHC-CM-6-1, EP-1.2) • Supporting documents (WHC-CM-6-1, EP-1.12) • Vendor information (WHC-CM-6-1, EP-3.3)
4.3-2	When requirements exist, a "design verification" will be performed to determine if the requirements are adequate.	Design verification is performed in accordance with WHC CM-6-1, EP-4.1.
4.3-3	Requirements that are inadequately documented, inaccurate, or missing shall be reconstructed.	The requirements are reconstructed through the design reconstitution program.
4.3-4	The requirements for modifications to K Basins and associated equipment shall be established, categorized, and documented as they are developed.	Changes are controlled and authorized by ECNs in accordance with WHC-CM-6-1, EP-2.2. Modifications (physical) are controlled in accordance with WHC-CM-1-8.
4.3-5	The source and traceability of requirements shall be identified that correlate the requirements with the SSCs involved, the SSC grade, technical topics involved, and associated documentation.	Source and traceability of requirements are established in accordance with WHC-CM-6-1.
4.3.1-1	A graded approach shall be used to identify and rank SSCs and to determine the type and amount of documentation that is required to define an SSC and ensure that adequate administrative controls exist.	The graded approach is specified in WHC-SD-SNF-CM-002, Appendix B.
4.3.2-1	The equipment list will be included.	The equipment list is specified in the K Basins master equipment list (future development) and the safety equipment list (Ref., WHC-SD-NR-SEL-001).
4.3.3-1	System and process boundaries are established for K Basins SSCs. The cognizant engineer will identify, establish, document, and control all physical and functional interfaces within the configuration management program.	Interface control documents are established in accordance with WHC-CM-6-1, EP-1.5.
DOCUMENT CONTROL		
5.1.1-1	The K Basins Cognizant Engineering organization determines the types of documents that will be included in the configuration management program.	Document types are specified in the K Basins SDDs.
5.1.1-2	A graded approach identifies the document types and the specific documents that are required for each SSC.	The graded approach identifies types of documents (Ref., WHC-SD-SNF-CM-002, Appendix B).
5.1.1-3	Technical documents will identify the cognizant engineer.	The cognizant engineer will be identified in accordance with WHC-CM-6-1.
5.1.1-4	Document owners will verify the technical content.	The document owner will verify in accordance with WHC-CM-6-1.
5.1.1-5	All technical documents shall have unique identification numbers that facilitate document retrieval, statusing, change development, and linkages to other documents and SSCs.	Documents are identified in accordance with WHC-CM-6-1, EP-1.1.

KB CMP	CRITERIA	CURRENT IMPLEMENTATION METHOD
5.1.2-1	The SDD shall contain sufficient information to: (1) describe each system and their major components, including system and component arrangements; (2) define system and component functions; (3) document the design basis and requirements for each system and their major components; and (4) provide supplementary information such as maintenance, testing, and inspection requirements; casualty events and responses; drawing lists; operating and maintenance procedure lists; and vendor information lists.	SDDs are developed in accordance with WHC-IP-1026, Appendix E, and WHC-SD-SNF-DRP-001, Appendix C.
5.1.3-1	Drawings shall be formally prepared and released.	Drawings are prepared and released in accordance with Hanford Plant Standards, SDC-1.3.
5.1.3-2	Single-use and multi-use specifications shall be formally prepared and documented.	Single-use and multi-use specifications are prepared and documented in accordance with WHC-CM-6-1, EP-1.2.
5.1.3-3	Vendor information documents shall be identified and controlled.	Vendor information documents are identified and controlled in accordance with WHC-CM-6-1, EP-3.3.
5.1.3-4	Supporting documents shall be formally prepared and documented.	Supporting documents are prepared and documented in accordance with WHC-CM-6-1, EP-1.12.
5.1.3-5	Environmental engineering documents shall be formally prepared and documented.	Environmental engineering documents are prepared and documented in accordance with WHC-CM-3-6.
5.2-1	Document archival storage, permanent storage for one-of-a-kind records, access control, and microfilming of record documents are controlled.	Documents are controlled in accordance with WHC-CM-3-5.
5.2-2	Originals and copies of identified documents (including approved changes) are stored, protected, and readily available to creators and users.	Originals and copies are managed and available in accordance with WHC-CM-3-5.
5.2-3	Document retention times are established.	Retention times are specified in WHC-CM-3-5, Section 4.
5.3-1	The ERSDB is the document control and release system database for status of documents and related changes to controlled documents. The status of each released engineering change notice (ECN) is maintained.	The control and status of approved documents and changes are reported in accordance with WHC-CM-3-5 and displayed in the ERSDB (Ref., WHC-IP-0587, Section 2). Specifications are released in accordance with WHC-CM-6-1, EP-1.2.
5.3-2	A Configuration Documentation Work Station (CDWS) is used to release engineering documents and track and status related changes.	Drawings are released in accordance with WHC-CM-6-1, EP-1.3. Supporting documents are released in accordance with WHC-CM-6-1, EP-1.12. Vendor information is controlled in accordance with WHC-CM-6-1, EP-3.3.
5.3-3	Documents listed in the ERSDB shall identify documents related to: (1) particular SSCs, (2) types of SSCs, (3) technical topics, and (4) other relational information as may be necessary.	Documents identified in the ERSDB shall include information as presented by WHC-IP-0587, Section 2.
5.3-4	Design information shall be retained until turnover to decontamination and decommissioning (D&D) as part of the deactivation turnover package.	Unique requirements for facility transition to D&D are specified in WHC-CM-6-1, EP-1.3, EP-1.10, EP-2.2, and EP-2.5.
5.4-1	Issued documents shall include the identification of outstanding changes and the references to detailed information regarding such changes.	Changes to released documents shall be maintained by the ERSDB (Ref., WHC-IP-0587, Section 2).

KB CMP	CRITERIA	CURRENT IMPLEMENTATION METHOD
CHANGE CONTROL		
6.1-1	All permanent and temporary technical changes shall be identified and documented.	Changes (ECNs) are identified and documented in accordance with WHC-CM-6-1, EP-2.2.
6.1-2	Changes shall provide sufficient information to permit the approval authorities to adequately review the change proposal.	Changes are developed in accordance with WHC-CM-6-1, EP-2.2.
6.1-3	The change proposal shall include a complete, clear, and accurate description of the change.	Changes are prepared to present an accurate description in accordance with WHC-CM-6-1, EP-2.2.
6.1-4	The change proposal shall include a clear and accurate justification of why the change is required.	Changes are justified in accordance with WHC-CM-6-1, EP-2.2.
6.1-5	The change proposal shall include constraints (if there are any limits to what can be done during change implementation).	Changes to the physical configuration provide installation instructions in accordance with WHC-CM-1-8.
6.1-6	The change proposal shall include a description of the impact.	Change impacts are established in accordance with WHC-CM-6-1, EP-2.2.
6.1-7	Source material that requires or requests a change shall be identified or included as part of the change package.	Change packages shall be prepared and include all necessary information (Ref., WHC-CM-6-1, EP-2.2).
6.1-8	The change proposal shall include results of analysis or calculations to support the change.	Design analyses or calculations for design changes are performed in accordance with WHC-CM-6-1, EP-2.2.
6.2.1-1	Programmatic changes to the established technical, cost, and schedule baselines are controlled.	These changes are processed in accordance with the management control system established in WHC-CM-2-5, Sections 2.3 and 4.1.
6.2.2-1	Changes to technical documents are controlled.	Changes authorized through the ECN process are prepared in accordance with WHC-CM-6-1, EP-2.2.
6.2.2-2	A formal process shall be used to address changes to SSCs or related documents if the change involves an Unreviewed Safety Question (USQ) or potential USQ.	If a change involves a USQ or potential USQ, the USQ is processed in accordance with WHC-CM-6-1, EP-2.2, and WHC-CM-1-3, MRP 5.12, and facility-specific USQ implementation procedures.
6.3-1	ECNs shall be evaluated to determine the technical validity of the change.	Changes are evaluated in accordance with WHC-CM-6-1, EP-2.2.
6.3-2	ECNs shall be evaluated to identify all affected SSCs and associated documentation.	Changes identify all affected SSCs and documents in accordance with WHC-CM-6-1, EP-2.2.
6.3-3	ECNs shall be evaluated to determine the appropriate acceptance testing criteria (post-implementation).	Testing of changes are conducted in accordance with WHC-CM-6-1, EP-2.2, and EP-4.1.
6.3-4	ECNs shall be evaluated to identify the impact to other projects or services not associated with the original change proposal.	Changes that impact projects or services will be identified in accordance with WHC-CM-6-1, EP-2.2.
6.3-5	ECNs shall be evaluated to determine the impact on the technical, cost, and schedule baselines and other documents within the K Basins' scope.	Changes are evaluated for impacts to the technical, cost, and schedule considerations/requirements in accordance with WHC-CM-6-1, EP-2.2.
6.3-6	ECNs shall be evaluated to ensure that mission objectives will be met or that the change will not interfere with the accomplishment of the mission.	Mission objectives impacted by the change are evaluated in accordance with WHC-CM-6-1, EP-2.2.

KB CMP	CRITERIA	CURRENT IMPLEMENTATION METHOD
6.4-1	A management review shall be conducted to verify that the technical reviews have been performed adequately, that the change package is complete and ready for implementation, and that any external approvals are obtained before implementation.	Management reviews changes in accordance with WHC-CM-6-1, EP-2.2 (including those that involve a change to cost and schedule baselines).
6.5-1	Changes to drawings shall be incorporated.	Changes to drawings are incorporated in accordance with WHC-CM-6-1, EP-1.3.
6.5-2	Changes to supporting documents shall be incorporated.	Changes to supporting documents are incorporated in accordance with WHC-CM-6-1, EP-2.2.
6.5-3	Implementation of an approved change to an SSC shall be formally authorized.	Implementation of an approved change to an SSC is authorized by an ECN and accomplished by a work request in accordance with the job control system (JCS) established in WHC-CM-1-8.
6.5-4	All completed work requests will be documented, reviewed, inspected, and tested (if required) to determine if the change meets its post-implementation acceptance criteria.	The work request of JCS is controlled and accepted in accordance with WHC-CM-1-8.
6.6-1	The closeout aspect of the change shall include updating all the affected documents (e.g., as-built drawings, acceptance test procedures/reports, operating and maintenance procedures).	The closeout of the work completed change is performed in accordance with WHC-CM-6-1, EP-2.2. As-building is in accordance with WHC-SD-SNF-DRP-001 and WHC-SD-SNF-FVP-001. Acceptance testing is conducted in accordance with WHC-CM-6-1, EP-4.2. Operating and maintenance procedures shall be conducted in accordance with WHC-CM-5-13, Section 3.0.
6.6-2	Traceability between the actual work performed (completed work requests) and the authorizing change document (ECN) shall be developed and maintained.	Traceability between the JCS and ECN is maintained by the ERSDB and is controlled by the ECN number.
6.7-1	A programmatic change control board dispositions all proposed "Change Request" programmatic changes.	The programmatic change control board details are presented in WHC-CM-2-5.
6.7-2	An optional change control board conducts reviews of proposed engineering changes that are within the SSC scope of K Basins.	A model of a change control board charter is described in WHC-SD-SNF-CM-002, Appendix D.
6.8-1	The current status of released technical changes (i.e., ECN) against any technical document shall be traceable.	The current status of released technical changes (i.e., ECN) against any technical document is tracked via the ERSDB and available from a CDWS.
6.8-2	Each ECN will reference other affected technical documents.	References to those documents will be included in the ERSDB.
ASSESSMENTS		
7.1	Programmatic assessments shall evaluate the adequacy of the K Basins configuration management program.	Assessments on the program of configuration management for K Basins will be based on the five program elements of WHC-SD-SNF-CM-002.

KB CMP	CRITERIA	CURRENT IMPLEMENTATION METHOD
7.1.1-1	Initial assessments shall be conducted, during the planning stages of the configuration management program, to determine the strengths and weaknesses of existing programs and procedures to determine where upgrade actions and resource expenditures are necessary.	Initial assessment will be conducted in accordance with this compliance matrix, to determine strengths and weaknesses.
7.1.1-2	Existing assessments generated by audits, safety concerns, evaluations, and oversight reviews shall be identified and tracked.	The existing audits will be identified in this compliance matrix.
7.1.2-1	Assessments shall be performed for each configuration management element and function to determine if the upgraded programs and procedures addressing identified weaknesses are effective in accomplishing the functions of configuration management and are workable.	This compliance matrix provides the visibility for conformance with the configuration management program.
7.1.2-2	A field validation shall be performed to ensure consistency among the requirements, physical configuration, and documentation following post implementation.	The as-building program established in WHC-SD-SNF-CM-002 controls conformance among requirements, physical configuration, and documentation.
7.1.3	Following implementation of the configuration management program, assessments are performed periodically to measure the overall configuration management program effectiveness and to determine if the degree of control is adequate and appropriate.	Periodic assessments (to be developed) will be performed at the direction of K Basins management in selected configuration management functional areas.
7.2-1	Compliance with technical requirements shall be verified through assessment of the technical baseline documents.	Design verification is performed in accordance with WHC-SD-SNF-DRP-001.
7.2-2	Physical verifications shall be performed through the as-building process to ensure that any discrepancies identified between technical documents and "as-found" configurations are documented and dispositioned.	Physical inspection is performed in accordance with WHC-SD-SNF-FVP-001.
7.2-3	Discovered discrepancies and appropriate corrective actions are developed and implemented to establish agreement between the physical configuration and the documentation.	Discrepancies are identified and dispositioned on the Discrepancy Data Sheet (DDS) in accordance with WHC-SD-SNF-FVP-001.
7.3-1	SSCs that require the monitoring of performance will be tested and evaluated periodically to determine if the equipment still meets its design requirements.	SSCs that require the monitoring of performance will be tested and evaluated periodically, in accordance with WHC-CM-6-1, EP-4.2.
7.3-2	Monitoring addresses surveillance actions, periodic inspections and tests, and other monitoring of SSCs to ensure safe and reliable operation of the SSC.	Monitoring of SSCs is conducted in accordance with the JCS (WHC-CM-1-8 and WHC-CM-5-13, Section 2.0).
7.3-3	Monitoring includes measurements to collect and trend data to actual aging degradation of equipment.	Degradation of SSCs is identified and statused in accordance with the material condition and aging management program, if determined appropriate by K Basins management.

KB CMP	CRITERIA	CURRENT IMPLEMENTATION METHOD
7.4-1	After installation, the testing of SSCs shall be planned, conducted, and documented to determine if the equipment meets its design requirements before being turned over for service through the work management process.	Testing of SSCs is planned, conducted, and documented in accordance with WHC-CM-6-1, EP-4.2.
SOFTWARE CONFIGURATION MANAGEMENT		
8.0-1	Software configuration management shall apply to computer software and associated documentation used for scientific analysis, engineering design (computer-aided design) and analysis, and hardware operational applications.	Types of computer software that will use configuration management controls is identified in WHC-CM-3-10.
8.0-2	Acquiring, developing, and maintaining software shall be controlled.	Computer software is identified, documented, changed, and controlled (including access control, backup/recovery, and supplier control), in accordance with WHC-CM-3-10.
8.0-3	Required documentation shall be provided for each stage of software development.	Computer software is documented in accordance with WHC-CM-3-10.
8.0-4	Required documentation shall be provided for each stage of the software operational life.	Computer software is documented in accordance with WHC-CM-3-10.
8.0-5	Procedures shall describe the methods to be used for the qualification of existing and acquired software.	Computer software is qualified in accordance with WHC-CM-3-10.
8.0-6	Software verification and validation requirements shall be identified.	Verification and validation is accomplished in accordance with WHC-CM-3-10.
8.0-7	Software configuration management controls shall be identified.	Configuration management controls are accomplished in accordance with WHC-CM-3-10.
DESIGN RECONSTITUTION		
9.0	A design reconstitution program shall be used to establish, organize, and document the design information where design information for existing SSCs is found to be missing or inadequate.	The design reconstitution program is defined and established in WHC-SD-SNF-DRP-001.
MATERIAL CONDITION AND AGING MANAGEMENT		
10.0	If K Basins management determines a program is warranted, a material condition and aging (MCA) management program shall be developed that assesses the material condition of potentially life-limiting components, estimates the remaining life of components, develops techniques that will extend the life of components, and develops analytical and periodic testing procedures to measure aging degradation trends.	Development of an MCA program is contingent upon management.

4.0 REFERENCES

Hanford Plant Standards, Design Criteria, SDC-1.3, "Preparation and Control of Engineering and Fabrication Drawings."

WHC-CM-1-3, Management Requirements and Procedures.

MRP 5.12, "Identifying and Resolving Unreviewed Safety Questions."

WHC-CM-1-8, Work Management.

WHC-CM-2-5, Management Control System.

Section 2.3, "Baseline Management."

Section 4.1, "Change Control."

WHC-CM-2-15, Training Administration Manual.

WHC-CM-3-5, Document Control and Records Management Manual, Section 4, "Records Inventory and Disposition Schedules."

WHC-CM-3-6, Uniform Publications System.

WHC-CM-3-10, Software Practices.

WHC-CM-5-13, K Basins Policy Manual.

Section 2.0, "Conduct of Operations Policy."

Section 3.0, "K Basins Maintenance Policy."

WHC-CM-6-1, Standard Engineering Practices.

EP-1.1, "Engineering Document Identification Requirements."

EP-1.2, "Engineering Specifications Requirements."

EP-1.3, "Engineering Drawing Requirements."

EP-1.5, "Interface Control Requirements."

EP-1.10, "Engineering TBDs/HOLDS Requirements."

EP-1.11, "Design Analysis Report Requirements."

EP-1.12, "Supporting Document Requirements."

EP-2.2, "Engineering Document Change Control Requirements."

EP-2.5, "Facility Deactivation Requirements."

EP-3.3, "Vendor Information Requirements."

EP-4.1, "Design Verification Requirements."

EP-4.2, "Testing Requirements."

WHC-IP-0587, Configuration Management Desk Instructions, Section 2, "Database Management Process and Control."

WHC-IP-1026, Engineering Practice Guidelines.

EPG-1.0, "Engineering Process."

EPG-2.0, "Engineering System Design Control."

EPG-3.3, "Vendor Information."

Appendix E, "System Design Descriptions."

WHC-SD-NR-SEL-001, "Safety Equipment List."

WHC-SD-SNF-CM-002, "Configuration Management Plan for K Basins."

WHC-SD-SNF-EDL-001, "Interim Essential and Support Drawing List."

WHC-SD-SNF-FVP-001, "Field Verification Program for K Basins."

WHC-SD-SNF-DRP-001, "Design Reconstitution Program Plan and Procedures for K Basins."

WHC-SD-WM-SAR-062, "Safety Analysis of Irradiated N Reactor Fuel."

Appendix A

Tracking Database

Table 1. Discrepancy/Improvement

[illegible]

Appendix B

Data Input

Requirement No.

D/I No.

D/I

Responsible:

Description:

Source:

Current Condition:

Future Condition:

Required Action:

Status:

Appendix C

Report

Requirement No.

D/I No.

D/I

Responsible:

Description:

Future Condition:

Required Action:

Status: