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HNF-SA-3209-EP

C. List attachments (i.e., copyright permission, copyright transfer)

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D. Document Title

Re-engineering and Health Physics Within the Project Hanford Management Contract

E. WHC Project or Program

Central
Radiation
Protection

F. New or novel (patentable) subject matter?

If "Yes", has disclosure been submitted by WHC?

☒ No or Yes☐ No or Yes If "Yes", Disclosure No(s): _____

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3. COMPLETE THIS SECTION ONLY FOR A JOURNAL SUBMISSION

A. Title of Journal

Not Applicable

4. COMPLETE THIS SECTION ONLY FOR A SPEECH OR PRESENTATION

A. Title for Conference or Meeting

Annual Health Physics Society Meeting

B. Group or Society Sponsoring

Health Physics Society

C. Date(s) of Conference or Meeting

6/30/97-7/3/97

D. City/State

San Antonio, Texas

E. Will material be published in proceedings?

☒ No or Yes

Will material be hand out?

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5. REVIEWS

Reviewers

Signature indicates Approval as Requested unless otherwise indicated

Yes

Name (print)

Signature/Date

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General Counsel

☐

DOE-RL

☒

Communications

☒

Applied Technology-Export Controlled Information or International Program

☐

Other

☐

Other

☐

Brenda Pangborn

B-L-P 6/26/97

See attached for approval from Sarah Snyder 6/26/97

6. Applied Technology Material Referenced

☒ No☐ Yes

7. Release Level

☒ Public☐ Limited Distribution

8. Author/Requestor

Ellen M. Atencio

6/20/97

(Print and Sign)

Date

9. Responsible Manager

Lawrence J. McKenzie

6/20/97

(Print and Sign)

Date

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Re-engineering and Health Physics Within the Project Hanford Management Contract

E. WMC Project or Program

Central
Radiation
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Original Counsel	☐			☐
DOERL	☒			☐
Communications	☐	Sarah Snyder	6/20/97	☐
Applied Technology-Expert Controlled Information or International Program	☐			☐
Other	☐			☐
Other	☐			☐

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Re-engineering and Health Physics Within the Project Hanford Management Contract

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

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

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Re-engineering and Health Physics Within the Project Hanford Management Contract

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Fluor Daniel Hanford, Inc.

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Document Title: RE-ENGINEERING AND HEALTH PHYSICS WITHIN THE PROJECT
HANFORD MANAGEMENT CONTRACT

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V. L. Birkland
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6/26/97

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RE-ENGINEERING AND HEALTH PHYSICS WITHIN THE PROJECT HANFORD MANAGEMENT CONTRACT". E.M. Atencio, R. Ni, J.W. Foster (Fluor Daniel Hanford, Inc., P.O. Box 1000, MSIN G1-17, Richland, WA 99352)

Abstract:

The impending transition of the Hanford Site management and operations (M&O) contract to a management and integrating (M&I) contract format, together with weak radiological performance assessments by external organizations and reduced financial budgets prompted the "re-engineering" of the previous Hanford prime contractor Radiological Control (Rad Con) organization. This paper presents the methodology, identified areas of improvements, and results of the re-engineering process. The conversion from the M&O to the M&I contract concept resulted in multiple independent Rad Con organizations reporting to separate major contractors who are managed by an integrating contractor. This brought significant challenges when establishing minimum site standards for sitewide consistency, developing roles and responsibilities, and maintaining site Rad Con goals. Championed by the previous contractor's Rad Con Director, Denny Newland, a five month planning effort was executed to address the challenges of the M&I and to address identified weaknesses. Fluor Daniel Hanford assumed the responsibility as integrator of the Project Hanford Management Contract on October 1, 1996. The Fluor Daniel Hanford Radiation Protection Director Jeff Foster presents the results of the re-engineering effort, including the significant cost savings, process improvements, field support improvements, and clarification of roles and responsibilities that have been achieved.

*(Work supported by U.S. Department of Energy under the Project Hanford Management Contract DE-AC06-96RL13200)

I. Introduction:

At the Hanford Site, there are currently four "prime" contracts between the U.S. Department of Energy, Richland Operations Office (DOE-RL) and contractors:

- (1) Battelle Memorial Institute operates the Pacific Northwest National Laboratory,
- (2) Hanford Health Environmental Health Foundation has the contract to provide occupational medical services to Hanford Site employees
- (3) Bechtel Hanford, Inc. is the prime contractor for the Environmental Restoration Contract; and
- (4) Fluor Daniel Hanford, Inc. is the management contractor for the Hanford Site.

The previous contractor's management and operations (M&O) contract with DOE-RL ended on September 30, 1996. Fluor Daniel Hanford was awarded Project Hanford Management Contract (PHMC) for management and integration (M&I) on October 1, 1996. The contractors under the PHMC are referred to as Project Hanford Contractors (PHC). The scope of this paper is limited to the Project Hanford Management Contract.

A. Championed by Mr. Dennis J. Newland, Director of Radiological Control (Rad Con), and supported by Department of Energy, Richland Operations Office, the previous contractor initiated Rad Con re-engineering to address:

- (1) Impending transition of the Hanford Site M&O contract to an M&I contract;
- (2) Weak radiological performance assessments by external organizations; and
- (3) Reduced financial budgets, particularly indirect budgets.

B. A Radiological Control re-engineering team was assembled, led by Mr. Stephen R. Johnson and Mr. Peter B. Chadly to address the significant challenges, including:

- (1) Change Rad Con organization structure to align with M&I structure;
- (2) Improve line management accountability;
- (3) Establish a mechanism for developing sitewide Rad Con standards under the M&I structure;
- (4) Improve efficiency of Rad Con organization to cope with substantial reductions in the overall financial budget, particularly the indirect budget;
- (5) Improve the technical basis and usability of procedures, policies, and clarify requirements;
- (6) Upgrade technical credentials of Rad Con professional staff; and
- (7) Define a vision and strategy for success.

C. Contract Structure

M&O Contract prior to October 1, 1996
Single M&O Prime Contractor Entity

Previous prime contractor operated and maintained majority of facilities

- Plutonium Finishing Plant
- B Plant
- Waste Encapsulation Storage Facility
- Fast Flux Test Facility/Material Examination Facility
- Plutonium/Uranium Extraction Facility
- 300 Area Facilities
- K East Basin
- K West Basin
- T Plant
- Solid Waste Management
- 222S Laboratories
- Liquid Waste Processing Facilities
 - 340 Liquid Effluent Facility
 - 200 Area Liquid Waste Processing
 - 200 Area Evaporator
- East Tank Farms
- West Tank Farms
- Characterizations Projects

ICF Kaiser Hanford operated and maintained the remainder of facilities

M&I Contract after October 1, 1996
Single Management Contract with DOE-RL

Fluor Daniel Hanford Company oversees projects Six subcontractors, four who maintain and operate 23 + Facilities

- Babcock and Wilcox Hanford Company operates the Facility Stabilization Project
- Plutonium Finishing Plant
 - B Plant
 - Waste Encapsulation Storage Facility
 - 327 Building
 - 324 Building
 - Fast Flux Test Facility/Material Examination Fac.
 - Plutonium/Uranium Extraction Facility (recently turned over to BHI)
 - 300 Area Facilities

- Duke Engineering & Services Hanford, Inc. operates the Spent Nuclear Fuel Project
- K East Basin
 - K West Basin
 - Cold Vacuum Drying Facility
 - Canister Storage Building/Hot Vacuum Drying Facility

Waste Management Federal Services of Hanford, Inc. operates the Waste Management Project

- T Plant
- Solid Waste Management
- Waste Receiving and Processing Facility
- 222S Laboratories
- Liquid Waste Processing Facilities
 - 340 Liquid Effluent Facility
 - 200 Area Liquid Waste Processing
 - 200 Area Evaporator

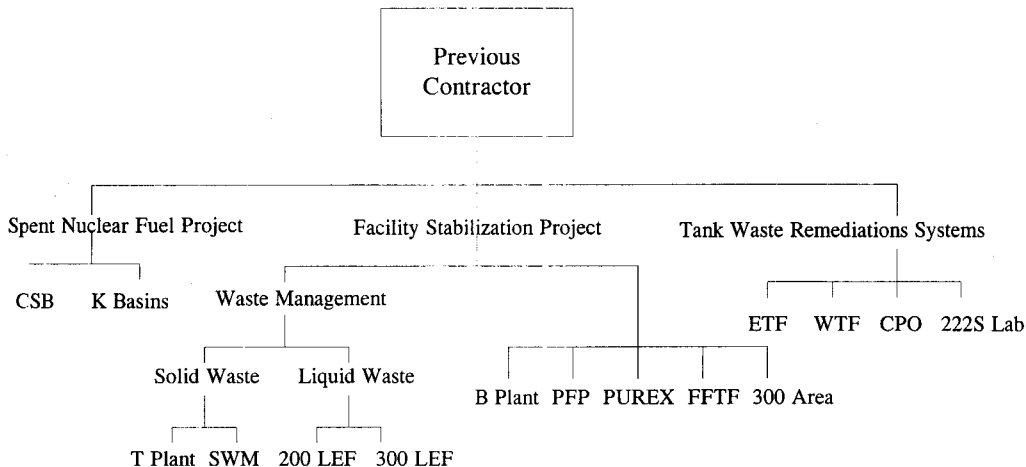
Lockheed Martin Hanford Company operates the Tank Waste Systems Project

- East Tank Farms
- West Tank Farms
- Characterizations Projects

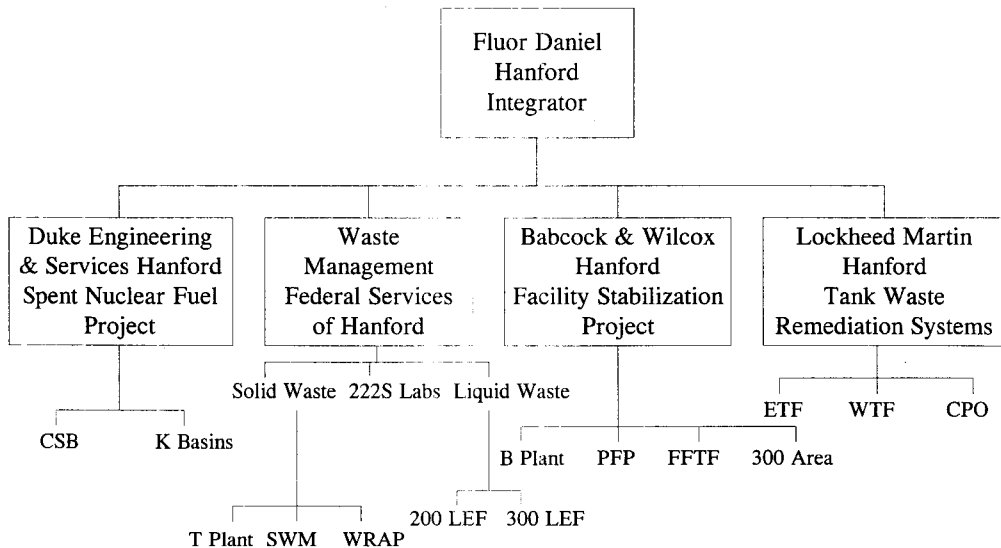
DynCorp Tri-Cities Services, Inc. provides the infrastructure services

Numatec Hanford, Inc. provides technology implementation and nuclear engineering

Prior to October 1, 1996 Management & Operations Contract Structure

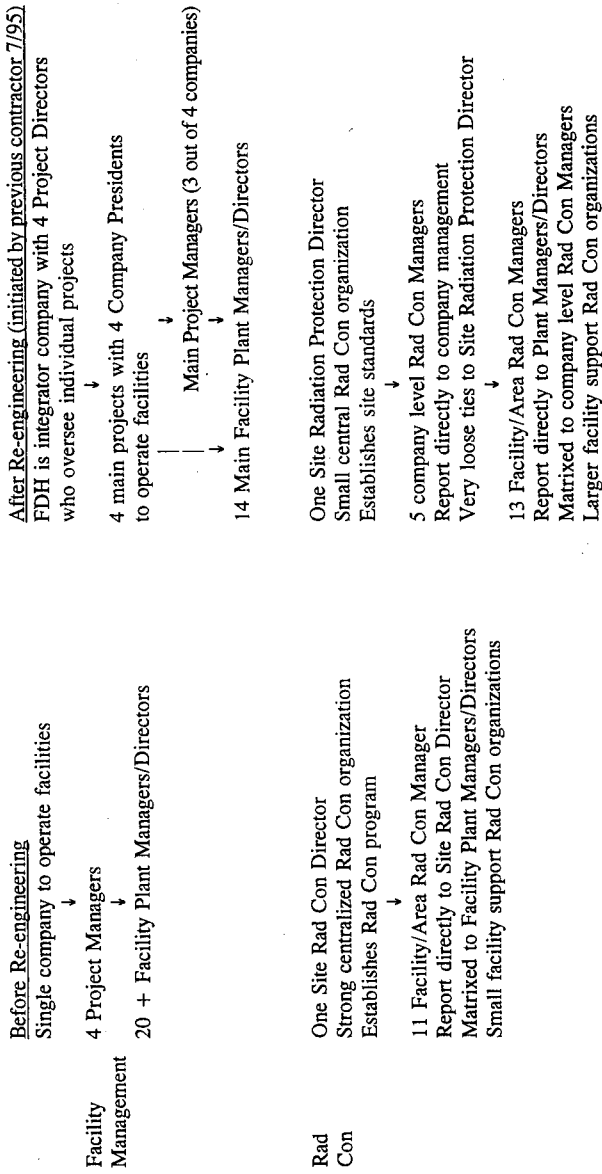


After October 1, 1996 Management & Integrations Contract Structure



II. Initiatives Addressed Through Rad Con Re-engineering:

A. Aligning Organizational Structure/Improving Line Management Accountability:



B. Establishing Site-wide Standards/Improving Line Management Accountability:

Policies & Site-wide Standards

- Before Re-engineering**
Established by Central RC/Site Rad Con Director
Prior to formation of Center of Expertise:
- Facilities less accountable for requirements
 - Slow, bureaucratic and inconsistent decision making
 - Significant rework of decisions
 - Poor site-wide integration

- After Re-engineering (initiated by previous contractor 7/95)**
Established by RPCOE/Radiation Protection Director
Center of Expertise Process:

- Improved facility/project ownership of requirements
- Accountability for requirements given to facility/project
- Decision-making based on documented technical basis reducing rework
- Fully integrated, site-wide process
- Improved documentation results in traceable solutions

Procedures

- Established by Central Rad Con Group
with input from facility procedure reviewers

- Established by Central Rad Con group with input from facility Rad Con experts
Established a Site Technical Authority for developing technical bases and procedures for facilities

Requirements Basis & Clarification
Several different groups within company made interpretive decisions for Rad Con requirements

- Site Radiation Protection Interpretive Authority**
- Responsible for making all site-level interpretive decisions for Rad Con requirements
 - Central authority for all Rad Con requirement interpretations
 - Identifies all non-compliances to 10 CFR 835
 - Final approval authority for requirements basis (S/RIDs, Radiation Protection Program)
 - Approves all Technical Equivalency Determinations to DOE Rad Con Manual
 - Approval authority on all regulatory correspondence
 - NTS Reports for 10 CFR 835
 - Compensatory and Corrective Actions

B. Establishing Sitewide Standards/Improving Line Management Accountability (continued):

Radiation Protection Center of Expertise

Radiation Protection Center of Expertise (RPCOE) is a decision making body with representatives from each contractor. The RPCOE is chartered to make sitewide radiation protection policy decisions for all contractors and subcontractors working under the Project Hanford Management Contract. The voting membership consists of representatives appointed by each facility manager and approved by the Fluor Daniel Hanford Radiation Protection Director. The FDH RP Director acts as chair and can execute "X + 1" authority when consensus cannot be reached among the RPCOE members.

Purpose: RPCOE establishes minimum site wide standards necessary to ensure site consistency

Functions:

- Empowered by the PHC to make all PHC-wide requirements-related decisions for Radiation Protection
- Formalized method to identify, prioritize, and resolve issues and document RPCOE decisions
- Develops Facility Evaluation Board assessment criteria to ensure consistency. (The FEB is the independent assessment organization that functions like an Operational Reactor Safeguards Examination or "ORSE" board and modeled after Westinghouse Savannah River Site FEB)
- Establishes Rad Con Training Standards
- Establishes and maintains requirements basis

Membership: (consists of representatives from each of the major contractors)

- Fluor Daniel Hanford Radiation Protection Director is Chair
- Babcock and Wilcox Hanford Company
 - B Plant/WESF
 - PFP
 - FFTF
 - 300 Area Facilities
- Waste Management Federal Services of Hanford, Inc.
- Lockheed Martin Hanford Company
- Duke Engineering and Services Hanford, Inc.
- DynCorp Tri-Cities Services, Inc.
- Department of Energy, Richland Operations Office attends as a non-voting member

B. Establishing Site-wide Standards/Improving Line Management Accountability (continued):

RPCOE Member Qualifications and Desired Attributes:

- I. Technical Competence:
 - Knowledge of Existing Rad Con Requirements
 - Demonstrated Technical Ability
 - Applied Health Physics Knowledge
- II. Strong Interpersonal Skills:
 - Teaming Ability
 - Communication Skills
 - Negotiating Skills
 - Highly Self-Motivated
- III. Credibility with Plants:
 - Confidence of Management Team
 - Demonstrated Acceptance of Company Goals and Objectives
 - Plant Familiarity
 - Ability to Correctly Prioritize Plant Needs
- IV. Focus and Perspective:
 - Results Oriented
 - Strong Business Sense
 - Ability to Focus Well
- V. Technical Qualifications/Selection Process:
 - Facility Manager or Company Environment Safety & Health Manager selects individual

C. Improving Efficiency and Reducing Financial Budget:

Central Radiation Protection Staffing Levels

Functions	11/94	11/95	After Re-engineering 2/96	Today 6/97
Management	9	5	4 (Includes Site IA)	4 (Includes Site Interpretive Authority (Site IA))
Subject Matter Experts/ Site Technical Authorities	16	8	20	15
Dosimetry Staff - Administrative	15	11	8	0 Dosimetry transferred to PNNL 2/97
Administrative Staff (Secretaries, Clerks, Budget Analyst)	18	6	5	3
Procedures Staff	7	3	(Site Technical Authorities responsible for writing procedures)	(Site Technical Authorities responsible for writing procedures)
Compliance Staff	7	6	(Includes Site IA and STA for compliance)	(Includes Site IA and STA for compliance)
Total FTE*:	72	39	37	22

* Central Organization transition from 72 to 37 FTE includes 12 FTE transferred to facilities and 23 FTE in scope reduction/process efficiency gains.

D. Upgrading the Technical Basis for Policies and Procedures/Improving Usability of Procedures:

Before Re-engineering

- Completed Staff Work
- No formalized process for documenting the technical basis for policies and procedures

After Re-engineering (initiated by previous contractor 7/95)
Completed Decision Making Packages are the cornerstone of the RPCOE process. Completed Decision Making Packages analyze all aspects of a decision prior to an RPCOE meeting.

Completed Decision Making Packages:

- Analyze the issue and contain detailed presentation of alternatives and recommended course of action
- Clearly define the scope of the problem
- The staff member responsible for Completed Decision Making Package tracks issues from analysis to completion
- Peer technical review required prior to distribution to RPCOE members
- Become the basis for Rad Con technical procedures and policies
- Fully documented decision that contains:
 - Background and history of issue
 - Identification of all applicable requirements
 - Identification of applicability to company/facility goals
 - Stakeholder analysis and worker input/acceptance
 - Minimum acceptance criteria
 - Cost/benefit analysis of alternatives
 - Identification of training requirements, implementation actions and schedule

D. Upgrading the Technical Basis for Policies and Procedures/Improving Usability of Procedures (continued):

Before Re-engineering

- DOE Standard, "Principles for Excellence Procedure Systems" not yet available

After Re-engineering (initiated by previous contractor 7/95)

- Adopted DOE Standard, "Principles for Excellence in Procedure Systems" as PHC standard, which in contains 15 Principles of Excellence:
 - 1. A policy is established for the role and development of procedures
 - 2. Guidelines are provided on the use of procedures
 - 3. Authority and accountability for procedures and procedure system is defined
 - 4. Procedure system provides integration with other management control programs
 - 5. Procedure process identifies the need for procedures
 - 6. Process includes compiling bases for procedure
 - 7. Procedure process requires procedure development in accordance with established standards
 - 8. Procedure process includes formal review of procedures by all affected organizations
 - 9. Procedure validation is required before use
 - 10. Procedure process includes approval of procedures that attest to their usability/readiness to implement
 - 11. Process controls revisions/evaluations of procedures
 - 12. A document control system ensures that the correct version of procedures are available for use
 - 13. Procedure records program collects and provides access to and retrievability of procedure records
 - 14. An appropriately sized information management resources program supports the procedure system
 - 15. An effective training program supports the procedure system

D. Upgrading the Technical Basis for Policies and Procedures/Improving Usability of Procedures (continued):

<u>Before Re-engineering</u>	<u>After Re-engineering (initiated by previous contractor 7/95)</u>
Procedures System • Technical basis for procedures weak or not well documented resulting in continual rework • Roles and responsibilities of procedure users, developers, and technical authorities not clearly defined • Lack of facility input resulted in procedures not being user friendly • Lack of facility ownership • Many procedures were obsolete, redundant, or conflicted with other procedures - Approximately 140 procedures as of 1/95	• COE approval of technical basis is required prior to procedure development • Clearly defined roles and responsibilities for procedure users, developers, technical authorities, and facility input • Rigorous verification and validation process implemented, involving facilities and individuals who utilize the procedures • Every procedure must be approved by a RPCOE member prior to being issued • Obsolete, redundant and conflicting procedures removed - Approximately 100 procedures as of 6/97
Technical Basis • No centralized filing system for technical basis impeding retrievability of documents	• Technical basis filing system developed • Records centrally located and coded for easy retrievability • Records available electronically as well as hard copy

D. Upgrading the Technical Basis for Policies and Procedures/Improving Usability of Procedures (continued):

Procedure Writers	Before Re-engineering Subject Matter Experts Resided in the central Rad Con Organization Subject Matter Experts on:	After Re-engineering (initiated by previous contractor 7/95) Site Technical Authorities reside in the central Rad Con organization Facility Technical Authorities in each of 21 functional areas appointed at the facilities Formalized process with roles, responsibilities, and technical qualifications clearly defined 21 Functional Areas:
	- Internal Dosimetry - External Dosimetry (including Area Dosimetry) - Release - Radiological Sources - Instruments and Work Place Air Sampling - Procedure writers (several people) - ALARA Program Office - Posting and Entry Control - Radiological Problem Reports - Database Administrator	- Field Activities (Job Control and Coverage) - Portable Survey Instruments - Fixed Instrumentation - Work Place Air Sampling - Area and Personnel Dosimetry - Posting and Entry Control - Radiation and Contamination Surveys - ALARA Methods - Shielding Use and Analysis - Release of Material and Equipment - Radiation Source Control and Rad. Generating Devices - Tracking and Trending - Policies and Procedures - Self-assessment - Requirements Compliance and Interpretation - Radiological Shipments - Emergency Preparedness Involving Rad Con - Radiologically Controlled Vehicles - Internal Dosimetry - Contamination Control - Rad Con Training

D. Upgrading the Technical Basis for Policies and Procedures/Improving Usability of Procedures (continued):

Radiological Control Document Hierarchy:

- A. Legal and contractual requirements
 - 10 CFR 835, Occupational Radiation Protection
 - HNF-SP-1145, "FDH Radiation Protection Program"
 - Hanford Site Radiological Control Manual
- B. Level II Manual (Site level manuals applying to all disciplines, facilities, and organizations)
 - HNF-CM-4-27, "Radiological Control Practices and Procedures"
 - Promotes sitewide consistency as approved by RPOE and provides cross organizational Rad Con guidance
 - Upgrades the ALARA Program (HNF-IP-1043) to a sitewide standard
- C. Level III Manuals (Facility/project/organization/discipline specific manuals with application limited)
 - HNF-IP-0718, "Health Physics Technician Practices and Procedures"
 - Contains implementing instructions for Rad Con Technicians
 - Eliminates redundant procedures
 - HNF-IP-1244, "Rad Con Document Development and Control"
 - Outlines roles, responsibilities for developing procedures
 - Implements the 15 Principles in Excellence for Procedure Systems
 - HNF-IP-1246, "Rad Con Support Practices and Procedures"
 - Contains procedures for central Rad Con groups
 - Specific only to central Rad Con, not facilities
 - HNF-IP-1255, "Instrument Manual"
 - New manual developed by FDH Central Radiation Protection
 - Provides reference material and detailed instruction for instrument calibration, environmental limitations, ranges of instrumentation for types, levels, and energies of radiation for sitewide Health Physics instrumentation

Facility Specific Implementing Procedures

Radiological Control Document Hierarchy Old System

Legal and Contractual Requirements

WHC-SP-1145 (RPP)

10 CFR 835

DOE Orders

HSRCM-1

Level II or Company Level Manuals

NO MANUALS

Level III - Organizational Specific Manuals

ALARA Program
WHC-IP-1043

Health Physics Procedures
WHC-IP-0718

Applied Rad. Controls
WHC-CM-4-14

Dosimetry
WHC-CM-4-16

Level III - Facility Specific Manuals

Facility Procedures

Radiological Control Document Hierarchy New System

Legal and Contractual Requirements

HNF-SP-1145 (RPP)

10 CFR 835

DOE Orders

HSRCM-1

Level II or PHC Level Manuals

Rad Con Practices & Pro.
HNF-CM-4-27

Level III - Discipline Specific Manuals

Instrument Manual
HNF-IP-1255

Health Physics Technician
HNF-IP-0718

RC Doc. Development
HNF-IP-1244

Level III - Facility/Organizational Specific Manuals

Facility Procedures

Rad Con Support
HNF-IP-1246

E. Upgrading Technical Credentials:

Technical Credentials of Radiation Protection Organization

Credentials:	1/95	6/96	6/97
Degrees	Facility RCMs - 1 Central RC Managers - 4	Facility RCMs - 9 Central RC Managers - 4	Facility RCMs - 12 Central RC Managers - 4
BA/AS	Not Available	Not Available	4 in Central Rad Con 117 in facilities - 121 Total
BS/ BA in technical field	33	7 in Central Rad Con 34 in Facilities 41 Total	6 in Central Rad Con 37 in facilities 43 Total
MS	9	9 in Central Rad Con 12 in Facilities 21 Total	6 in Central Rad Con 19 in facilities 25 Total
pHD	0	2 in Central Rad Con 0 in Facilities 2 Total	1 in Central Rad Con 1 in Facilities 2 Total
Certifications NRRPT	29	8 in Central Rad Con 37 in Facilities 45 Total	4 in Central Rad Con 74 in facilities 78 Total
CHP	3 - Full Certification	8 - Full Certification 5 in Central Rad Con 3 in Facilities	9 - Full Certification 5 in Central Rad Con 4 in Facilities

After the Defense Nuclear Facility Safety Board visit in January of 1996, tremendous emphasis was placed on obtaining the Certified Health Physicist (CHP) and National Registration of Radiation Protection Technologists (NRRPT) certifications. In 1996, two personnel were hired who had their CHP, and six personnel passed either Part 1 or Part 2 of the CHP exam. In 1997, two personnel were hired who had their CHP, and six personnel passed either Part 1 or Part 2 of the CHP exam.

F. Vision and Strategy for Continuous Improvement:

After the Defense Nuclear Facility Safety Board visit in January of 1996, the Radiological Control Path Forward (RCPF) was developed to define a mission statement, define a strategy for improving Rad Con, and to establish goals. In Fiscal Year 1997, the Rad Con Improvement Plan (RCIP) replaced the Rad Con Path Forward and became a Performance Agreement under the new PHMC.

Rad Con Path Forward/Rad Con Improvement Plan Initiatives:

<u>Before Re-engineering</u>		<u>After Re-engineering (initiated by previous contractor 7/95)</u>
1.	Upgrade Technical Credentials • 4 of 12 Rad Con/Technical Managers with degrees • Management selected mainly based on Hanford experience • ABHP certification not emphasized	• 13 of 16 Rad Con/Technical Managers with degrees • 4 Rad Con/Technical Managers with commercial nuclear experience • ABHP certification strongly encouraged
2.	Improve Radiological Engineering/ALARA Function • Radiological Engineering function not well defined • ALARA program mostly administrative • Centralized ALARA program	• Developed definitions for Radiological Engineer and Health Physicist; developed functions/desired skills • ALARA Center of Technology developed which promotes ALARA through use of ALARA tools, glovebags, mock-ups, and shielding displays • Facility ALARA programs/staff increased
3.	Upgrade Technical Basis and Procedures • Technical basis files not centrally located • Procedures weak and not user friendly	• Developed new technical basis filing system • Criteria for completed staff work and documenting technical basis for procedure defined • All procedures reviewed/rewritten and field validated

F. Vision and Strategy for Continuous Improvement (continued):

Rad Con Path Forward/Rad Con Improvement Plan Initiatives:

<u>Before Re-engineering</u>		<u>After Re-engineering (initiated by previous contractor 7/95)</u>
4.	• Improve Radiological Work Planning • Rad Con organization not consistently involved in radiological work planning	• Enhanced radiological work planning statewide standard developed
5.	• Improve Performance Indicators/Radiological Problem Reporting • Minimum number of performance indicators • Lagging performance indicators (reactive to trends)	• RCIP FY98 initiative to develop performance measures to monitor Rad Con program performance • Includes leading indicators (more proactive)
6.	• Improve Assessment Process • Multiple organizations performing numerous assessments • Assessment criteria not well defined resulting in confusion regarding requirements basis and findings based on interpretations of requirements • No benchmark for evaluations established	• Facility Evaluation Board provides independent assessment of facilities, (like an "ORSE" Board) Performance Objectives and Criteria approved by RPCOE • Lines of Inquiry developed to assist facilities in self assessment • Benchmarked Rad Con program against INPO guidelines

III. Conclusion:

Continuing Challenges:

1. Defining the relationships between integrator and major contractors and subcontractors. The roles and responsibilities within the Project Hanford Management Contract are still being refined under the M&I contract structure. Under the new structure, the Central Radiation Protection Program role is separated from line implementation. Current initiatives to address roles and responsibilities include: Integrated Safety Management System and Rad Con Improvement Plan.
2. Leading Rad Con improvements through influence. Additional sitewide consistent standards need to be established to improve facility implementation and line management accountability. Under the new contract structure, the FDH Central Radiation Protection Organization functions strictly in a program role that establishes site standards and policies. Implementation is accomplished at the facility level through FDH Project Direction. Oversight is provided by Project Direction.
3. Outsourcing of Radiation Protection training and transfer of Radiation Protection Services organization (dosimetry, dosimetry records, and instrument calibration) present unique challenges. Rigorous standards need to be developed and communicated to the bidding organizations to compensate for training, dosimetry, and instrument programs residing in external organizations. Organizational relationships, establishment of standards, and oversight functions are a few of the issues that have to be addressed.
4. Providing adequate management oversight of subcontractors. The number of companies and subcontractors involved with performing Hanford work under PHC has more than doubled. This poses unique challenges for maintaining control of facilities and radiological work activities and the establishment of sitewide standards for consistency.