

APPENDIX B

INTEGRATED ENVIRONMENT, SAFETY AND HEALTH MANAGEMENT SYSTEM DESCRIPTION

CONTENTS

1.0	INTRODUCTION	1
1.1	Background.....	1
1.2	Flow Down of Requirements	1
1.3	ES&H Standards and Requirements Implementation	2
1.4	Applicability of Project Hanford ISMS to Lower Tiered Subcontractors	3
1.5	Major Subcontractors Sharing Workscope.....	3
2.0	DESCRIPTION OF PROJECT HANFORD ISMS CORE FUNCTIONS AND GUIDING PRINCIPLES	3
2.1	Core Functions	3
2.2	Guiding Principles.....	4
3.0	IMPLEMENTATION OF ISMS CORE FUNCTIONS AND GUIDING PRINCIPLES	5
3.1	Core Function: Establish ES&H Policy.....	5
3.2	Core Function: Define The Scope of Work	7
3.2.1	Translate Mission into Work	7
3.2.2	Set Expectations	9
3.2.3	Set Task Priorities and Allocate Resources	11
3.3	Core Function 3: Identify Hazards, Environmental Impacts and ES&H Requirements.....	12
3.3.1	Identify Hazards and Environmental Impacts.....	13
3.3.2	Identify ES&H Requirements	14
3.3.3	Requirements Basis Documents.....	16
3.4	Core Function 4 : Analyze Hazards and Environmental Impacts and Implement Controls	17
3.4.1	Hazard Analysis and Work Planning	17
3.4.2	Implement Controls.....	19
3.4.3	Emergency Management	20
3.4.4	Authorization Envelope/Authorization Agreements	20
3.5	Core Function 5 : Perform Work Within Controls.....	21
3.5.1	Qualification and Training of Work Force	22
3.5.2	Responsibilities and Interfaces	23
3.5.3	Hanford Occupational Health Process (HOHP).....	25
3.5.4	Confirming Readiness and Performing Work.....	25
3.6	Core Function 6 : Provide Feedback and Continuous Improvement.....	26
3.6.1	Establish Performance Measures	27
3.6.2	Assess Performance and Collect Feedback	28
3.6.3	Identify and Make Changes to Improve Performance.....	30
3.6.4	Oversight and Enforcement	31
3.7	Core Function 7: Management Review	31
4.0	Summary.....	33

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INTEGRATED ENVIRONMENT, SAFETY AND HEALTH MANAGEMENT SYSTEM DESCRIPTION

1.0 INTRODUCTION

The DOE has directed the DOE operations and field offices and contractors to develop and implement an ISMS. The objective of an ISMS and a safety conscientious work environment is to "DO WORK SAFELY". This is accomplished through the effective integration of environment, safety and health management into all facets of work planning and execution. To support this objective, the DOE has issued DOE P 450.4, *Safety Management System Policy*; DOE P 450.5, *Line Management, Safety, and Health Oversight*; DOE P 450.6, *Secretarial Policy Statement, Environment, Safety, and Health*; and the DOE Acquisition Regulations (DEAR) requirements for integration of environment, safety, and health into work planning and execution (48 CFR 970.5204-2) and compliance with laws, regulations, and DOE directives (48 CFR 970.5204-78).

1.1 Background

This Project Hanford ISMS description describes how environmental, safety, and health management at the PHMC Scope level is integrated into the work planning and execution for FDH, the Major Subcontractors, and lower tiered subcontractors. The PHMC Scope level ISMS description and the Major Subcontractors ISMS supporting system descriptions provide information on how FDH and the Major Subcontractors will implement ISMS, incorporate the ISMS Core Functions and Guiding Principles, and integrate an environment, safety and health management process for PHMC activities. This document identifies the Project Hanford mechanisms (policies, plans, procedures, and management directives) that implement the ISMS and flow down ES&H standards and requirements to the PHMC Major Subcontractors and lower tier subcontractors. This document also portrays the means to achieve vertical integration of implementing mechanisms within PHMC organizations and horizontal integration across organizations during performance of work.

1.2 Flow Down of Requirements

The ES&H-related standards and requirements applicable to FDH, and potentially applicable to the PHMC Team are specified in the PHMC (Contract No. DE-AC06-96RL13200 Part III, Section J, Appendix C). These standards and requirements include federal, state, and local laws and regulations and specific DOE directives. In accordance with the PHMC, FDH is responsible for compliance with the specified requirements regardless of which subcontractor performs the work. Consequently, FDH also assumes responsibility for flowing down the necessary requirements to Major Subcontractors.

The *Project Hanford Quality Assurance Program Description* (HNF-MP-599) defines the controls necessary to comply with the contractual requirements. This policy document establishes implementing requirements, assigns responsibilities, and defines the management systems established to ensure the quality of the PHMC activities and products.

To accomplish the flow down of requirements, FDH has incorporated Part III, Section J, Appendix C of the PHMC into the contracts of the Major Subcontractors and lower tier subcontractors. Along with FDH, the Major Subcontractors are responsible for compliance with the requirements made applicable by their subcontract and are responsible for flowing down the necessary requirements to any lower-tiered

subcontractors conducting work in the facilities. This flow down is accomplished by identifying the standards and requirements applicable to the scope of work and including these in the subcontract task order or purchase agreement.

Management directive HNF-MD-4821, Guidance For The Flowdown Of ISMS Requirements To Lower Tier Subcontractors, provides guidance on flowing down ISMS requirements to lower tier subcontractors. The key elements of this process include prescreening the scope of work for ISMS flowdown applicability, a team evaluation of work scope that might be hazardous or complex, and followup review of contractors' proposals to ensure the intent of ISMS will be implemented.

In this process, the requisitioner prescreens the work scope for potential ISMS applicability against prescribed criteria (i.e., questions). If all questions are answered 'no', only standard ES&H provisions are included in the request for proposal and contract documents. If the requisitioner answers 'yes' or is uncertain when responding to the prescreening criteria, further evaluation is required. The requisitioner and subject matter experts (SME) perform this further evaluation as a team using the applicable knowledgeable personnel and various sources of information as needed (e.g., the standard AJHA questions, the pre-screening questions, etc). During the evaluation, the buyer is consulted to assist in defining request for proposal/contract language that reflects the results of the evaluation.

AJHA is used as optional input to assist the SME in determining the ISMS contract language requirements, and is not used for evaluating the risks/hazards associated with the performance of the actual work tasks. Using the AJHA in this manner aids in screening the subcontract work activity and provides insight into ISMS clause and ES&H requirements applicability.

Furthermore, requisition/buyers technical representative and the SME(s) are involved in the technical evaluation of contractor proposals for adherence to applicable ISMS requirements.

Part III, Section J, Appendix C of the PHMC describes the ES&H standards and requirements applicable to nuclear, radiological nonnuclear, and industrial facilities. These standards and requirements are applicable based on the scope of work being performed and the identified hazards of the facility. The Project Hanford implementing procedures provide common direction for implementing ES&H standards and requirements for the PHMC Team.

The standards and requirements specified in Part III, Section J, Appendix C of the PHMC are applicable to all facility operations unless superseded by an approved S/RID or other process approved by DOE. All facilities that are not required by the PHMC to have an approved S/RID are required to comply with the ES&H standards and requirements based on the facility's defined scope of work, identified hazards, and applicability requirements established in the standard or DOE Order.

1.3 ES&H Standards and Requirements Implementation

FDH has developed specific procedures and management directives that implement the ISMS Core Functions and Guiding Principles, and ES&H standards and requirements. These PHMC Team procedures and directives are contained in the PHMS and provide common direction, standardized methods of compliance, and common process execution and product development.

As necessary, Major Subcontractors develop and maintain specific procedures to further implement the ISMS and applicable ES&H standards and requirements. Collectively, the PHMC implementing policies, plans, procedures, and management directives constitute the Project Hanford.

Changes to the ES&H standards and requirements are incorporated into the PHMC by a contract modification. Contract modifications will be required for issues such as, incorporation of newly approved S/RIDs, addition/deletion of DOE Orders, and addition/deletion of DOE Standards and other regulatory requirements.

1.4 Applicability of Project Hanford ISMS to Lower Tiered Subcontractors

The Major Subcontractors are responsible to FDH for compliance with contractual requirements regardless of who performs the work. Major Subcontractors meet this responsibility by ensuring that all facility and project work activities, including those conducted by lower tiered subcontractors, are conducted within the defined Authorization Envelope (HNF-PRO-2701, Authorization Envelope and Authorization Agreement). The Major Subcontractors are responsible for flowing down applicable requirements to lower tiered subcontractors based on the scope of work. This function occurs through the procurement mechanisms (HNF-PRO-123, The Material Request/Purchase Requisition/Contract Requisition Process; HNF-PRO-186, Preparing a Statement of Work for Services; and HNF-MD-4821, Guidance for The Flowdown of ISMS Requirements to Lower Tier Subcontractors). All lower tiered subcontractors are required to conduct work activities within the Authorization Envelope of the Facility or Project they support.

1.5 Major Subcontractors Sharing Workscope

Although each Major Subcontractor is assigned specific workscope, it might be necessary to obtain assistance from one or more Major Subcontractor. The PHMC Team accomplishes this support through Task Packages, Internal Work Orders, and Task Order Agreements (refer to the HNF-MP-001, *Management and Integration Plan* for details on the Task Order mechanism). Delegation of workscope between Major Subcontractors establishes a shared responsibility for meeting standards and requirements and working within a facility's Authorization Envelope.

2.0 DESCRIPTION OF PROJECT HANFORD ISMS CORE FUNCTIONS AND GUIDING PRINCIPLES

Core Functions and Guiding Principles are described in the following.

2.1 Core Functions

- 1. Establish ES&H Policy.** PHMC ES&H policy is clearly documented and communicated to all employees. The highest priority of the PHMC Team is to achieve daily excellence in protection of the employees and the public, and in stewardship of the environment both on and off the Hanford Site.
- 2. Define the Scope of Work.** PHMC missions are translated into work by setting expectations, allocating resources, and prioritizing tasks.
- 3. Identify Hazards and Requirements.** Hazards, environmental impacts, and ES&H requirements associated with PHMC work are identified and categorized.

4. **Analyze Hazards and Implement Controls.** JHA, environmental impact analysis, and work planning are performed, and proper safety and environmental controls are implemented to prevent or mitigate the hazard, in accordance with standards and requirements, to ensure protection of the public, workers, and the environment.
5. **Perform Work Within Controls.** Performing work includes (1) preparing for the work, (2) confirming readiness to perform the work, and (3) performing the work in a safe, environmentally protective, and efficient manner.
6. **Provide Feedback and Continuous Improvement.** PHMC Team confirms readiness before operations begin, and monitors performance throughout the work activity life cycle. Corrective action management, management assessment, worker assessment, independent assessment and lessons learned are mechanisms used to obtain data for analysis and feedback, to measure performance against expectations, and to identify improvement opportunities.
7. **Management Review.** Project Hanford management reviews the ISMS to ensure that it is suitable, adequate, and effective in systematically integrating safety into management and work practices at all levels.

2.2 Guiding Principles

1. **Line Management Responsibility for Safety and Environmental Performance Defined.** Line management is responsible for the protection of workers, the public, and the environment. PHMC Team Line management includes those employees managing or supervising employees performing work.
2. **Clear Roles and Responsibilities Defined.** Clear and unambiguous lines of authority and responsibility for ensuring PHMC ES&H performance expectations are established, documented, and communicated at all organizational and subcontractor levels to achieve effective safety and environmental management.
3. **Competence Commensurate with Responsibility.** PHMC Team personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.
4. **Balanced Priorities.** PHMC Team resources are effectively allocated to address ES&H, programmatic, and operational considerations. Protecting employees, the public, and the environment is a priority whenever work activities are planned and performed.
5. **Safety and Environmental Standards and Requirements Defined.** Before work is performed, the associated hazards are evaluated and an agreed-upon set of ES&H standards and requirements are established that, when properly implemented, provide adequate assurance that employees, the public, and the environment are protected from adverse conditions.
6. **Hazard Controls Tailored to Work Performed.** Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and the associated

hazards. Emphasis is provided on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.

7. **Operations Authorization.** The conditions and requirements to be satisfied for operations to be initiated and conducted are established and agreed-upon through the Authorization Envelope by FDH and the Major Subcontractors. These agreed-upon conditions and requirements are established in the contracts between FDH and the Major Subcontractors. The extent of documentation and level of authority for agreement is tailored to the complexity and hazards associated with the work as outlined in this document.
8. **Worker Involvement.** Workers actively are involved in preparing for work, including planning, hazard and environmental impact identification and analysis, implementation of controls, and readiness review.
9. **Communication and Stakeholder Involvement.** Open and effective internal and external communication supports management of ES&H issues and initiatives.
10. **Continuous Improvement.** Workers, supervisors, and management continually check the adequacy of work processes, procedures, and equipment, and correct deficiencies when identified.
11. **Senior Management Involvement.** PHMC Team Senior management is actively engaged in the implementation and improvement of the ISMS.

3.0 IMPLEMENTATION OF ISMS CORE FUNCTIONS AND GUIDING PRINCIPLES

The process and mechanisms for implementing the ISMS Core Functions and Guiding Principles for the PHMC Team are presented in this section. Specific Guiding Principles that are applied to achieve the ISMS objectives also are identified under each Core Function. The first three Guiding Principles, (Line Management Responsibility for Safety and Environmental Performance, Clear Roles and Responsibilities, and Competence Commensurate with Responsibility) are intrinsic to and support all of the core functions while others apply to many but not all of the Core Functions.

3.1 Core Function: Establish ES&H Policy – ES&H policy is clearly documented and communicated to all employees

The FDH Office of the President has established environmental, safety, and health policies (HNF-5053; Policy for Environment, Safety and Health; HNF-5054, PHMC Team Environmental Policy) that are consistent with the DOE-RL policy and has communicated the policies to employees and stakeholders. The Project Hanford policies state the PHMC Team commitment to reduce accidents, radiological and toxicological exposures, and regulatory noncompliances, and to be responsible stewards of the environment. The PHMC Team is committed to performing work in a manner that protect workers, the public, and the environment. The policies reinforce the meeting of rigorous standards to provide safe and helpful workplaces and protection of the environment in all PHMC Team activities. The policies emphasize the need for all PHMC Team managers and employees to be responsible for conducting work in a manner consistent with Project Hanford policies. The PHMC Team ES&H and Environmental policies are included in the Management and Integration Plan (HNF-MP-001) and can be accessed on the

PHMS Home Page.

The Project Hanford Quality Assurance (QA) Policy (HNF-POL-QA) complements the environment and safety and health policies. The QA Policy sets the framework for establishing a quality management system that ensures activities are accomplished in accordance with requirements. The QA Policy states that Hanford Site Mission requirements intended to protect the environment, and the safety and health of workers and the public are of primary importance. The policy also states that PHMC Team line managers and employees are responsible for understanding and complying with the policies, procedures, and instructions applicable to their activities, and ensuring safety of operations and the quality of their products and services.

Major Subcontractors are required to communicate the ES&H and Environmental policies to their work force including lower tier subcontractors, adhere to the policies, ensure that activities are carried out consistent with the policies. They are also required to ensure that employees are familiar with the policies and perform work consistent with the policies. Managers and supervisors are required to communicate safety and health policy to all workers periodically and to inform workers of their rights and responsibilities per DOE 5483.1A on, at minimum, annually.

Policies provide common-cause direction or requirements that furnish standing guidance for the development and implementation of plans and procedures. Various mechanisms are established to familiarize employees with the ES&H policies, to provide direction for conducting activities consistent with the policies, and to reinforce conformance to policies. These mechanisms include training, company correspondence, work control procedures (including pre-job briefings and post job reviews), periodic, regular safety meetings, organizing and supporting employee safety councils, participation and support of VPP and Enhanced Work Planning (EWP) activities, management self-assessments of safety performance, use of the Lessons Learned process, and implementing safety recognition systems.

CORE FUNCTION: Establish ES&H Policy (HNF-MP-003 Section 3.1)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
		<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P1	FDH Office of the President establishes ES&H policies consistent with the DOE-RL environment, safety, and quality policies and effectively communicates the policies to employees and stakeholders.	<ul style="list-style-type: none"> • DOE-RL ESH&Q Policy • HNF-5053 Policy for Environment, Safety and Health • HNF-5054, PHMC Team Environmental Policy • HNF-POL-QA, Quality Assurance Policy
P2	PHMC Team adheres to the ES&H policies and ensures that activities are carried out consistent with the policies. ES&H performance objectives and measures are consistent with the DOE-RL ES&H Policy to "reduce accidents, radiological and toxicological exposures, and regulatory non-compliance."	<ul style="list-style-type: none"> • DOE-RL ESH&Q Policy • HNF-MP-001, Management and Integration Plan • HNF-5053, Policy for Environment, Safety and Health • HNF-5054, PHMC Team Environmental Policy • HNF-POL-QA, Quality Assurance Policy • HNF-POL-LEGAL, Legal and Ethical Conduct Policy • HNF-PRO-075, Safety Communications

3.2 Core Function: Define The Scope of Work - PHMC missions are translated into work by setting expectations, allocating resources, and prioritizing tasks.

Maintaining clear, risk-informed work definition at each level of the work breakdown structure is a critical element for meeting the PHMC Team commitments in the standards-based manner called for in DOE P 450.4 and the DEAR clause. Effective application of this ISMS Core Function requires an ongoing and iterative, tailored Management Control System process design to define each work element to be done so that the Hanford Site mission can be conducted in a safe and environmentally responsible manner. It is the process by which broadly defined DOE mission expectations are divided into discrete activities that can be planned to account for the associated hazards, requirements, controls, and funding needed to DO WORK SAFELY.

As the facility owner and responsible party under the Tri-Party Agreement, DOE-RL frames the broad site requirements and missions. It is the responsibility of the PHMC Team to establish the specific mechanisms, delineate responsibilities, and implement agreed-upon work priorities through risk-informed planning for the effective use of available resources.

The Federal budget process provides the timing of multi-year forecasts and annual authorization decisionmaking. The PHMC Team provides detailed knowledge of the work and hazards on a continuing basis as an essential input to achieving an appropriate balance of priorities among mission activities and day to day hazard control. Effective work scope definition ensures that resources are allocated effectively to address ES&H, programmatic, and operational considerations. Protecting the public, the workers, and the environment is considered a priority for all activities that are planned and performed.

Formal methods are used among DOE and the PHMC Team to define integrated scopes of work. Each organizational level contributes to this definition (e.g., from the sitewide mission to the processes at an individual facility to the specific operational or maintenance activity within a facility). Only through maintaining clear definition of work and associated hazards is it possible to manage for doing the work safely.

3.2.1 Translate Mission into Work

The assigned mission is translated into broad work assignments, which are in turn broken down into discrete tasks. Formal processes are in place for translating mission into work. The PHMC SOW and the Site Mission Analysis Report defines FDH's role as the M&I contractor for PHMC activities (HNF-MP-001). The SOW establishes overall responsibility and accountability for the performance of all work within the scope of the contract. DOE-RL manages the prime contract with FDH. Execution of the SOW by FDH is performed by entering into contractual agreements with the Major Subcontractors. Each major subcontract includes objectives, expectations, and measures, which are monitored and evaluated against the baseline.

The Fiscal Year (FY) planning (HNF-MD-016, Annual Budget Submittal) is initiated annually through the direction received by FDH from the DOE-RL Planning and Integration Division (PID). The guidance from DOE-RL to FDH provides Budget Updating Guidance consistent with the mechanisms established in the Basic Planning and Work Performance of Hanford Site Environmental Management Activities document (DOE/RL-97-52) and in accordance with Contract No. DE-AC06-96RL13200. Sitewide guidance and project-specific guidance is provided for updating the MYWPs for each of the PHMC Projects (HNF-MD-017, Multi-Year Work Plan). This guidance is conveyed by FDH to the Major Subcontractors.

Major Subcontractors provide data to FDH for the preparation of the ISB, which defines the work to be performed. A systems engineered process (HNF-MP-001; HNF-MP-007, System Engineering Management Plan) is used to produce and maintain a requirements-driven, traceable ISB. This process incorporates consideration of alternatives and risks into baseline development and implements the controls necessary to execute the baseline as planned.

FDH submits the ISB to DOE-RL, who provides authorization to proceed. FDH provides a project authorization document (PAD) (HNF-MD-019, Project Work Authorizations), or similar notice to proceed to execute workscope in the MYWP and the annual work plan (AWP) for ES&H and other indirect support activities.

If the authorized Major Subcontractors need to obtain assistance from one or more subcontractors as defined in the subcontract, this assistance is obtained through the use of Interface Control Documents and Task Packages. Delegation of workscope via the subcontract and Task Order Agreements establishes a shared responsibility for meeting applicable requirements. HNF-PRO-186, *Preparing a Statement of Work for Services* provides direction for assigning work to other subcontractors. Through this delegation process, members of the team are assigned responsibility and authority for meeting discrete parts of the overall workscope, including the mandate to conduct all work in accordance with contractual requirements.

Modifications to the work scope that meet established thresholds are subject to Major Subcontractor, FDH, or DOE-RL approval through the Baseline Change Control process (HNF-PRO-533 Change Control). Configuration management (HNF-MP-013, Configuration Management Plan) at the site and project levels, including change control, ensures the control of these processes and adherence to the contract requirements.

The ES&H Crosscut Report identifies the direct and indirect funded ES&H work planned under various budget scenarios. ES&H related risks are quantified for any budget shortfall (HNF-MP-005, Risk Management Plan). The approved report is provided to FDH. Final budgets for direct funded (project) and indirect funded ES&H activities are documented in MYWPs and AWP. Changes to these baselines are controlled through the formal change control process that ensures the maintenance of a risk-informed balance of priorities.

CORE FUNCTION: Define the Scope of Work (HNF-MP-003 Section 3.2)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Balanced Priorities • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
Translate Mission into Work		
P3	FDH ESH&Q functional area managers develop requirements and documents for the PHMC Team that are used to translate ES&H requirements and obligations from the PHMC mission into work.	<ul style="list-style-type: none"> • Project Hanford Management Contact, Fluor Daniel Hanford, Inc. DE-AC06-96RL13200, Section J, App. C • HNF-MP-005, Risk Management Plan • HNF-MP-007, Systems Engineering Management Plan • HNF-MD-013, Work Breakdown Structure • HNF-MD-015, Cost Account Plan • HNF-MD-016, Annual Budget Submittal • HNF-MD-017, Multi-Year Work Plan • HNF-MD-019, Project Work Authorization • HNF-PRO-116, Managing DOE Directives
P4	FDH ensures that all facilities, waste sites, or other ancillary structures are assigned to Major Subcontractors for execution of cleanup, surveillance and maintenance or operation in accordance to the PHMC requirements; so that the full PHMC Scope, hazards and environmental impacts can be addressed when developing the Integrated Site Baseline.	<ul style="list-style-type: none"> • HNF-MP-001, Management and Integration Plan
P5	The PHMC Team develops the Integrated Site Baseline based on technical, schedule, and cost planning guidance provided by DOE-RL including consideration of the Tri-Party Agreement and other compliance agreements, obligations, and commitments.	<ul style="list-style-type: none"> • HNF-MP-001, Management and Integration Plan • HNF-MP-013, Configuration Management Plan • HNF-MP-007, Systems Engineering Management Plan • HNF-PRO-533, Change Control • HNF-PRO-585, Cost Estimating
P6	PHMC Team uses formal mechanisms (e.g., subcontracts, task orders) to delegate workscope, including ES&H requirements, to other PHMC Team subcontractors and lower tiered subcontractors.	<ul style="list-style-type: none"> • HNF-MD-024, Internal Work Orders • HNF-PRO-186, Preparing a Statement of Work for Services • HNF-PRO-706, PHMC Acquisition System Requirements

3.2.2 Set Expectations

Expectations are set by establishing performance objectives, including safety performance, for the assigned work. The formality of these objectives depends on the amount of work, its complexity, and the hazards associated with the work.

Expectations for work performance as established in the PHMC Appendix D to Section J. Requirements of the DEAR Clause for ES&H are included in the contract.

Performance objectives are established annually by the DOE-RL through the performance agreement (PA) process using the milestones established in the integrated site baseline. The DOE-RL maintains the policy and procedures for development and administration of PAs and maintains a contract administration plan that covers the PHMC. The contract administration plan discusses a performance-based management system used to measure the progress of the PHMC Team in satisfying contract requirements. Safety and environmental performance objectives and measures are identified annually in specific PAs or integrated into the criteria for successful completion of approved work plans. By integrating safety and environmental performance objectives and measures, the PHMC Team is motivated to accomplish the milestone safely and with concern for protecting the environment.

The PHMC Team has formal mechanisms in place for establishing expectations for satisfactorily accomplishing work, prioritizing tasks and allocating resources. Correspondingly, a hierarchy of mechanisms is used such that each successively lower tier provides an increasing level of detail on what work is to be performed (i.e., broad mission objectives are translated into discrete tasks).

Each Major Subcontractor contract includes objectives, expectations, and measures that are monitored and evaluated against the baseline. All work is performed in accordance with the contract requirements established between FDH and the Major Subcontractors.

CORE FUNCTION: Define the Scope of Work (HNF-MP-003 Section 3.2)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Balanced Priorities • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
Set Expectations		
P7	FDH Projects accepts DOE-RL performance agreements which reward both task completion and ES&H performance objectives achievement while supporting the Integrated Site Baseline and funded scope of work.	<ul style="list-style-type: none"> • Project Hanford Management Contract, Fluor Daniel Hanford, Inc. DE-AC06-96RL13200, Section H, Special Contract Requirements, Clause H.41, "Performance, Objectives, Measures, Expectation, and Fee Distribution," dated August 6, 1996 • Project Hanford Management Contract, Fluor Daniel Hanford, Inc. DE-AC06-96RL13200, Amendment M026, dated September 30, 1997, "Section J, List of Other Exhibits and Other Attachment, Appendix D, Performance Objectives, Measures Expectations and Incentives" • U.S. Department of Energy, Richland Operations Office, "Performance Incentive Fee Handbook" • HNF-MD-029, Hanford Site Technical Baseline Change Control • HNF-MD-018, Performance Reporting • HNF-PRO-357, Completion and Closure of Performance Agreements • HNF-MP-001, Management and Integration Plan
P8	The PHMC Team ensures that the organizational structure, expectations, and mechanisms for implementing the ISMS using a graded approach are documented, communicated, and clearly understood by employees.	<ul style="list-style-type: none"> • HNF-MP-001, Management & Integration Plan
P9	PHMC Team links employee performance assessments and appraisals to identified ES&H performance objectives and measures.	<ul style="list-style-type: none"> • HNF-MP-001, Management & Integration Plan • HNF-PRO-074, Safety Responsibilities • HNF-PRO-050, Managing Employee Performance

3.2.3 Set Task Priorities and Allocate Resources

The Project Hanford ISMS Plan delineates expectations for facility management to integrate ES&H activities into work planning to ensure ES&H resources are budgeted and adequate to support facility needs, and to resolve ES&H issues. Each Major Subcontractor is required to transform the mission guidance provided by FDH into a well-defined mission statement with clear boundaries and identified top-level requirements.

Resources are effectively allocated to address safety, programmatic, and operational considerations. Protecting the public, the workers, and the environment is a priority whenever activities are planned and performed. Balancing priorities is particularly important when defining work, assessing hazards,

identifying controls, and in designing feedback and continuous improvement programs. Once a decision is made that a work item is to be conducted, all the identified controls are necessary and the process for conducting the work includes a prioritization decision to acquire and apply the necessary resources to meet the agreed-upon controls.

The PHMC Team applies a systematic approach to setting priorities and managing its work scope. The systems evaluate and incorporate a wide range of risks (public health, worker health, environmental impacts, stakeholder priorities, social and economic impacts, compliance, cost, schedule and technical issues) and support PHMC Team's strategic planning and sitewide decisionmaking. The risk management system, as defined in the HNF-MP-005, *Risk Management Plan*, and used in the MYWP, supports the development and management of the ISB in parallel with the DOE EM Annual Planning and Performance reporting. The process is intended to balance priorities by using risk-based analyses to meet regulatory requirements, control hazards, and preclude environmental impacts during work performance.

CORE FUNCTION: Define the Scope of Work (HNF-MP-003 Section 3.2)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Balanced Priorities • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
Set Task Priorities and Allocate Resources		
P10	The PHMC Team recommends work priorities, with consideration for risk elements, to ensure that the most significant hazards and environmental impacts are mitigated in the most cost-effective manner.	<ul style="list-style-type: none"> • HNF-MP-005, Risk Management Plan • Integrated Priority List
P10b	The PHMC Team modifies accepted work scope using the baseline change control process. (P10b)	<ul style="list-style-type: none"> • HNF-PRO-533, Change Control
P11	FDH Projects provide necessary administrative guidance and mentoring resources to support ISMS implementation within the PHMC Scope.	<ul style="list-style-type: none"> • HNF-MP-001, Management and Integration Plan
P12	The PHMC Team ensures that ES&H requirements and activities are properly integrated into the planning, budgeting and work management processes.	<ul style="list-style-type: none"> • HNF-MD-016, Annual Budget Submittal • HNF-MD-017, Multi-Year Work Plan • HNF-MD-020, Capital Funding • HNF-MD-021, Indirect Planning, Rate Development and Control • HNF-PRO-079, Job Hazard Analysis

3.3 Core Function 3: Identify Hazards, Environmental Impacts and ES&H Requirements - Hazards associated with PHMC Team work are identified, analyzed and categorized

Identifying potential hazards and environmental impacts and clearly defining applicable ES&H requirements is important to ensure hazards are adequately controlled and requirement are met. The PHMS of policies, plans, procedures, and management directives provides for consistent application of

ES&H requirements.

3.3.1 Identify Hazards and Environmental Impacts

The defined Requirements Basis represents the fundamental ES&H requirement drivers. The identification process and applicable requirements depend on the type of hazard and environmental impact as well as the magnitude of the risk. A number of different processes are used to identify hazards, environmental impacts, and ES&H requirements.

Hazard and environmental impact identification and analysis are performed per HNF-PRO-430, *Safety Analysis Program*, HNF-PRO-704, *Hazard and Accident Analysis Process*, and HNF-PRO-452, *NEPA, SEPA, Cultural and Natural Resources*. These procedures provide direction for ensuring that hazard and environmental impact identification and analysis are performed.

Hazard categorization and SARs are developed and updated per Project Hanford procedures that are based on DOE guidance, to ensure hazards adequately are identified and analyzed for the facility. Environmental analyses, such as environmental impact statements (EIS) and notices of construction (NOC) also are completed to evaluate potential for environmental impact. Sitewide EISs provide top-level identification and evaluation of programmatic hazards associated with the Hanford Site mission. Contractors performing work as part of this mission evaluate work activities against the bounding conditions of the EIS.

The PHMC Team uses the AJHA in the work planning process to identify hazards and task related requirements in accordance with HNF-PRO-079, *Job Hazard Analysis*. The JHA process is a line management responsibility, including employee involvement and appropriate participation of ES&H and other support personnel.

The JHA process is the primary vehicle by which the ISMS core functions are integrated into work planning and individual work activities. The JHA process is the primary mechanism to identify safety and health hazards and environmental impacts associated with a specific facility or project work activity and the ES&H standards and requirements that apply to the scope of the work. The AJHA tool facilitates identifying job hazards and environmental impacts along with ES&H requirements and ensures these are appropriately analyzed. The JHA process applies to the performance of all work activities involving general plant maintenance, operations, construction, and environmental remediation.

Individual employees are also evaluated for the HOHP using the EJTA in accordance with HNF-PRO-111, *Occupational Medical Qualification and Monitoring*, process to ensure the appropriate level of medical monitoring occurs.

CORE FUNCTION: Identify Hazards and Requirements (HNF-MP-003 Section 3.3)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Safety and Environmental Standards and Requirements Identified • Worker Involvement • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
Identify Hazards and Environmental Impacts		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P13	FDH ESH&Q develops and maintains procedures that describe the requirements for identifying and evaluating the hazards and environmental impacts present in facilities, and the Hazard Classification of the facilities.	<ul style="list-style-type: none"> • HNF-PRO-452, NEPA, SEPA, Cultural and Natural Resources • HNF-PRO-450, Air Quality -- Radioactive Emissions • HNF-PRO-2595, Air Quality Program - Nonradioactive Emissions • HNF-PRO-455, Solid Waste Management • HNF-PRO-451, Regulated Substance Management • HNF-PRO-456, Water Quality Program • HNF-PRO-430, Safety Analysis Program • HNF-PRO-700, Safety Analysis and Technical Safety Requirements • HNF-PRO-704, Hazard and Accident Analysis Process • HNF-PRO-079, Job Hazard Analysis • HNF-PRO-111, Occupational Medical Qualification and Monitoring • HNF-4361, PHMC Expectations for Worker Involvement
P14	FDH ESH&Q develops and maintains a Chemical Management Program which manages and controls chemicals from procurement through use and final disposition.	HNF-PRO-2258, Chemical Management

3.3.2 Identify ES&H Requirements

The ES&H standards and requirements applicable to the PHMC Team are specified in the PHMC (No. DE-AC06-96RL13200), Part III, Section J, Appendix C). Major Subcontractors are responsible for compliance with standards and requirements of Part III, Section J, Appendix C, as specified in the approved S/RIDs (if applicable) and for compliance with FDH policies and procedures.

Implementation of ISMS depends on effective management of ES&H requirements. The *Requirements Management Plan* (HNF-MP-015) provides the systematic approach for identifying, managing, implementing, and integrating requirements for new, revised, and existing requirements. Requirements imposed by contractual, regulatory, statutory, and legal obligations are identified, validated to the established requirements baseline, and implemented in a consistent manner.

Requirements are diverse, come from multiple sources, and are captured in many different forms. Requirements are extracted from approved documents that have been issued for action. These documents include contracts, statutes, regulations, applicable DOE Orders, the Hanford Strategic Plan, the Tri-Party Agreement, DNFSB implementation plans, permits, and NEPA and CERCLA Records of Decision

(ROD). S/RIDs are a subset of the ES&H requirements and are applicable to specific nuclear facilities.

The PHMC Contractors comply with the requirements of the federal, state, and local laws and regulations, ES&H requirements and standards identified in their subcontract. At some of the PHMC facilities, this is accomplished through implementation of the S/RID. S/RIDs encompass ES&H, and safety-related safeguards and security standards/requirements and are prepared for Hazard Category 1 and 2 nuclear facilities and activities and as agreed upon by DOE-RL for selected Hazard Category 3 nuclear, radiological, nonnuclear or industrial facilities and activities. For facilities without SRIDs, ES&H requirements are established by PHMC and Major Subcontractor policy, procedures, and management directives.

Major Subcontractors perform work under a procedure-based system that implements S/RID, the Authorization Basis requirements, and the PHMC Team policies, procedures and directives. Major Subcontractors manage configuration control of requirements into work procedures by designating Functional Area Owners (FAOs) and Facility Experts (FEs) assigned the responsibility of ensuring procedure revisions do not affect the integrity of the requirements management. Review and signoff of procedures ensures traceability between the procedures and the applicable requirements.

ES&H requirements are conveyed to subcontractors through contracts and task order agreements. HNF-PRO-186, *Preparing a Statement of Work for Services*, provides direction for assigning work to other subcontractors. When Major Subcontractors use subcontractors to perform work activities, compliance to requirements is monitored by a Subcontractor Technical Representative (STR) designated to manage subcontractor performance to the contract language. Before the start of subcontractor work, the STR receives, reviews, and approves a safe work plan that demonstrates subcontractors are both aware of and have established a process to comply with necessary ES&H requirements and standards that apply to their work activities.

CORE FUNCTION: Identify Hazards and Requirements (HNF-MP-003 Section 3.3)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Safety and Environmental Standards and Requirements Identified • Worker Involvement • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
Identify ES&H Requirements		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P15	FDH Nuclear Safety and Work Controls develops and maintains a procedure that describes the process by which S/RIDs are developed, approved, and maintained current.	<ul style="list-style-type: none"> • HNF-PRO-265, Standards/Requirements Identification Document Process
P16	FDH ESH&Q and assigned technical authorities identify and assess newly promulgated or revised ES&H standards and requirements.	<ul style="list-style-type: none"> • Project Hanford Management Contract, Section H.14, Laws, Regulations, and DOE Directives • HNF-MP-015, Requirements Management Plan • HNF-PRO-116, Managing DOE Directives • HNF-PRO-265, , Standards/Requirements Identification Document Process

P17	FDH Projects, Contracts, and ESH&Q assess contractual and budgetary impacts of newly promulgated or revised standards and initiate the appropriate modifications to the PHMC and Major Subcontractor contracts and budgets.	<ul style="list-style-type: none"> • HNF-MD-029, Hanford Site Technical Baseline Change Control • HNF-PRO-533, Change Control • DE-AC06-96RL13200, PHMC, Section H.14 • HNF-PRO-116, Managing DOE Directives
P18	FDH Projects ensures that Major Subcontractors comply with all applicable S/RIDs or Requirements Basis Documents.	<ul style="list-style-type: none"> • HNF-PRO-265, Standards/Requirements Identification Document Process • HNF-MP-599, Project Hanford Quality Assurance Program Description

3.3.3 Requirements Basis Documents

The PHMC Team has developed and maintains configuration control of procedures that implement the applicable facility requirements basis. Requirements basis documents are those documents that implement the PHMC standards and requirements. For some PHMC facilities and projects, the requirements basis is defined as the S/RIDs. For facilities without SRIDs, requirements are established by PHMC and Major Subcontractor policy, plans, procedures, and management directives. The *Requirements Management Plan* (HNF-MP-015) provides the systematic approach for identifying, managing, implementing, and integrating requirements for new, revised, and existing requirements. Requirements imposed by contractual, regulatory, statutory, and legal obligations are identified, validated to the established requirements baseline, and implemented in a consistent manner.

The FDH Policies and Procedures System and document hierarchy are defined in the MJ&I Plan (HNF-MP-001). PHMC procedures are under configuration control to ensure that changes carefully are reviewed to evaluate the impact of the change on requirements basis implementation (HNF-PRO-589, Processing Project Hanford Procedures).

CORE FUNCTION: Identify Hazards and Requirements (HNF-MP-003 Section 3.3)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Safety and Environmental Standards and Requirements Identified • Worker Involvement • Continuous Improvement • Communication and Stakeholder Involvement • Senior Management Involvement 		
Requirement Basis Documents		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P19	FDH ESH&Q identifies the initial set of PHMC Scope ES&H implementing procedures	<ul style="list-style-type: none"> • HNF-PRO-589, Processing Project Hanford Procedures • HNF-PRO-229, Technical Procedure Standard
P20	FDH ESH&Q and assigned technical authorities develop and maintain configuration control of Project Hanford ES&H implementing procedures to support compliance with the applicable ES&H standards and requirements.	<ul style="list-style-type: none"> • HNF-PRO-589, Processing Project Hanford Procedures • HNF-PRO-224, Document Control Program Standards • HNF-PRO-229, Technical Procedure Standard
P21	FDH ESH&Q and Project Integration approve new or revised Project Hanford procedures.	<ul style="list-style-type: none"> • HNF-PRO-589, Processing Project Hanford Procedures

P22	FDH Projects and ESH&Q ensure that the Major Subcontractors comply with the applicable Project Hanford procedures.	<ul style="list-style-type: none"> • HNF-MP-001, Management and Integration Plan • Facility Evaluation Board Program Administrative Procedure Manual, FEB Procedure FE 1-1 • PHMC Performance Objectives and Criteria (Facility Evaluation Board), WHC-IP-1232 • HNF-MP-599, Project Hanford Quality Assurance Program Description • HNF-PRO-246, Management Assessment • FDH-5096 Project Integration Implementing Procedure for Feedback and Improvement • HNF-PRO-705, Safety Basis Planning, Documentation, Review and Approval
P23	FDH Systems Engineering develops and maintains procedure guidance for FDH configuration management.	HNF-PRO-589, Processing Project Hanford Procedures

3.4 Core Function 4: Analyze Hazards and Environmental Impacts and Implement Controls - Hazards associated with PMHC work are identified, analyzed, and categorized.

Facility hazard analysis, environmental impact analyses, and job hazard analyses results are used to develop, implement, and maintain controls through the use of procedures, worker training and emergency response planning.

3.4.1 Hazard Analysis and Work Planning

Facility hazard and environmental impacts analysis and job hazard are completed to ensure that facility and project operations are conducted in a safe and environmentally sound manner. The facility hazard analysis is designed to evaluate hazards and environmental impacts associated with the operation of a facility. The depth and rigor of the facility hazard analysis is based on the facility's hazard classification and categorization, life cycle stage, potential environmental impact, and the complexity of facility operations. The results of the facility hazard analysis are documented in the SAR for nuclear facilities, (DOE 5480.23) as required by HNF-PRO-704, *Hazard and Accident Analysis Process*. The analysis for radiological and nonnuclear facilities is documented in Auditable Safety Analysis Reports (or comparable analysis) in accordance with DOE 5481.1B and HNF-PRO-700, *Safety Analysis and Technical Safety Requirements*.

These various hazard and environmental impact analysis processes result in identifying and specifying the facility operational controls necessary to ensure adequate protection of the workers, the public, and the environment.

At the activity level, work management and ES&H management processes are integrated to focus on the necessary elements of work planning combined with safety and environmental protection so that work can be conducted in a manner that ensures safety and environmental protection while optimizing productivity and efficiency. The PHMC Team uses JHA (HNF-PRO-079, Job Hazard Analysis) as the primary vehicle by which the ISMS Core Functions are integrated into the work planning and execution.

Additional key components of effective work planning are using a team approach and tailoring work for risk and complexity. By use of the AJHA tool, a team approach to work planning to improve effectiveness and efficiency in the planning process, an evaluation of risk and complexity to determine the appropriate level of work control, and a determination of whether a task is routine or non-routine can be

made. Each work control system has categories for work based on risk and complexity that assists in determining the formality of planning and review of work packages.

For complex and high risk work, work is planned using a team approach with the planners, workers and crafts, engineering, operations, and ES&H personnel collaboratively planning the work. This team approach intended to streamline the work planning process by reducing or eliminating multiple approval layers, improving communications, and cooperatively developing a set of requirements for conducting the work activity safely and in an environmentally protective manner. An additional benefit is fewer work stoppages in the field that can occur due to unanticipated safety problems and workability issues.

A graded approach to individual work activities based on risk and complexity is necessary to effectively implement safe, environmentally protective, and cost-effective work practices. Likewise, the work planning process considers routine versus nonroutine tasks where the nature of the task contributes to determining the proper balance of work instructions, worker supervision, and craft skills. Once risk and complexity of the task has been defined, the facility history and worker experience must be considered to adequately establish a set of controls and facility job authorization requirements. This process of determining risk and complexity and establishing criteria for level of planning and controls for a given work scope is defined in Major Subcontractor work control procedures.

The JHA process identifies hazards and environmental impacts (facility and task specific) to establish effective work controls and provide for the safe performance of work. Controls are tailored to the work being performed, depending on the risk and complexity of the work.

CORE FUNCTION: Analyze Hazards and Implement Controls (HNF-MP-003 Section 3.4)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Safety and Environmental Standards and Requirements Identified • Hazard Controls Tailored to Work Being Performed • Worker Involvement • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
Analyze Hazards and Environmental Impacts		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P24	FDH ESH&Q develops and maintains the procedures to support preparation of facility SARs (or comparable analysis) as applicable as specified by DOE 5480.23.	<ul style="list-style-type: none"> • HNF-PRO-430, Safety Analysis Program • HNF-PRO-700, Safety Analysis and Technical Safety Requirements • HNF-PRO-701, Safety Analysis Process - Existing Facility • HNF-PRO-702, Safety Analysis Process - Facility Change or Modification • HNF-PRO-703, Safety Analysis Process - New Project
P25	FDH ESH&Q develops and maintains the necessary procedures for the preparation of an ASA (or comparable analysis) as applicable as specified by DOE Order 5481.1B.	<ul style="list-style-type: none"> • HNF-PRO-700, Safety Analysis and Technical Safety Requirements
P26	FDH ESH&Q develops and maintains the procedures to analyze the potential for environmental impacts and to prepare and maintain environmental documentation.	<ul style="list-style-type: none"> • HNF-PRO-450, Air Quality - Radioactive Emissions • HNF-PRO-2595, Air Quality Program - Nonradioactive Emissions • HNF-PRO-452, NEPA, SEPA, Cultural and Natural Resources • HNF-PRO-455, Solid Waste Management • HNF-PRO-451, Regulated Substance Management • HNF-PRO-456, Water Quality Program

P27	FDH Projects approves facility SARs and ASAs, with written ESH&Q concurrence, and Project Direction obtains DOE-RL approval of SARs and ASA (Nuclear and Nonnuclear Classified Moderate or High Hazard). The FDH Office of the President approves Authorization Basis and S/RIDs for transmittal to DOE-RL.	<ul style="list-style-type: none"> • HNF-PRO-265, Standards/Requirements Identification Document Process • HNF-PRO-705, Safety Basis Planning, Documentation, Review, and Approval
P28	FDH ESH&Q develops and maintains a JHA process and associated implementing procedures, and develops and maintains the automated JHA with hazard and environmental impact analysis capabilities consistent with Table 2.	<ul style="list-style-type: none"> • HNF-PRO-079, Job Hazard Analysis • HNF-4361, PHMC Expectations for Worker Involvement
P29	FDH ESH&Q technical managers (e.g., Industrial Safety, Industrial Hygiene, Environmental Protection, Nuclear Safety, Radiological Control, Fire Protection, etc.) maintain the requirements and technical content of their respective modules in the automated JHA.	<ul style="list-style-type: none"> • HNF-PRO-79, Job Hazard Analysis

3.4.2 Implement Controls

The PHMC Team controls, including engineered, administrative, and personal protective equipment features, ensure ES&H requirements are met, and hazards and environmental impacts are prevented or mitigated, to effectively protect the workers, the public and the environment. These controls, which are developed from facility hazard and environmental impact analyses, are documented in SARs, TSRs, environmental documents, process standards, and other facility-specific documents. The necessary activity level hazard and environmental impact controls are identified and developed as part of the work planning and the JHA process and incorporated into work control procedures. Activity level controls that address the specific hazards and environmental impacts of the work are contained in the work package or procedure. These controls are reviewed during the pre-job briefing as required in HNF-PRO-079, *Job Hazard Analysis*. This procedure establishes the minimum requirements for integrating ES&H into the work planning and execution process and for identifying, evaluating, controlling, and communicating potential hazards and environmental impacts associated with work. The procedure applies to the performance of all work activities including general maintenance, operations, construction, and environmental remediation.

The AJHA tool is used as the primary mechanism to identify ES&H hazards and environmental impacts and to determine appropriate activity level controls associated with work. Work planning using a team approach ensures the appropriate level of participation by each group and individual involved in work planning and execution.

The work planning and management process in nuclear facilities includes an USQ review process in conformance with HNF-PRO-062, *Identifying and Resolving Unreviewed Safety Questions* when required to ensure modifications and facility work are conducted within the authorized safety basis.

The facility Authorization Envelope (HNF-PRO-2701, *Authorization Envelope and Authorization Agreement*) is based on identified hazards and environmental impacts and requirements, the analyses of the hazards and impacts, and the facility level controls specified for safe, environmentally protective operation.

Authorization Agreements provide a formally documented agreement of the authorization envelope between DOE-RL and the PHMC Team.

Processes such as the VPP and EWP are employed to obtain worker involvement at the facility and activity levels. Personnel knowledgeable of facility operations (i.e., workers/operators) participate in

disciplined efforts to identify operating hazards and to establish operating controls before performance of work.

3.4.3 Emergency Management

The emergency management program uses facility hazards and environmental impact analyses as the technical basis for emergency response planning. The extent of emergency planning directly corresponds to the type and scope of hazards and environmental impacts present, and the potential consequences of analyzed events or scenarios.

Observable methods of detecting or recognizing an emergency situation are developed as EALs and are included in facility emergency response procedures. The actions in these procedures include the steps necessary to protect workers, equipment, and the environment. The steps also include recommended actions for the protection of offsite populations. The Hanford Site Emergency Response Organization is trained and exercised to ensure the adequacy of emergency response. The *Hanford Site Emergency Management Program* (DOE/RL-0233) includes close cooperation among several agencies and organizations that are defined in MOUs between DOE-RL and the agency, local government, or organization.

Drills routinely are conducted to ensure the adequacy of procedures and the proficiency of personnel. Both emergency preparedness and operational drills are conducted. The drill programs are described in HNF-PRO-424, *Emergency Preparedness Program*.

3.4.4 Authorization Envelope/Authorization Agreements

The facility Authorization Envelope (HNF-PRO-2701, *Authorization Envelope and Authorization Agreement*) is based on identified hazards and environmental impacts and requirements, the analyses of the hazards and impacts, and the facility level controls specified for safe, environmentally protective operation. An Authorization Envelope is defined as “any design barriers, controls, constraints, assumptions, or commitments, which are required, based on the hazards associated with the facility or activity, and which define the limits of safe operation of a facility.” The requirements and controls necessary for safe, environmentally protective operation of a facility and adequate protection of the workers, the public, and the environment are specified in the facility authorization envelope.

The PHMC Team defines the facility/activity Authorization Envelope as the Safety Basis, Requirements Basis and Permit Basis. For nuclear facilities, the Safety Basis is known as an “Authorization Basis” and could be a SAR, FSAR, BIO, or the ISB. The authorization envelope is defined formally in the authorization agreements between the FDH and DOE-RL. For radiological and nonnuclear facilities, the safety basis consists of an ASA. Industrial facilities do not typically have a formal Safety Basis.

The “Requirements Basis” consists of those standards and requirements identified as applicable and necessary for facility operations. For nuclear facilities, this is documented and agreed upon through S/RIDs. For other facilities, the requirements basis consists of those standards, laws, and regulations listed in the contract with DOE or, for PHMC Major Subcontractors, the contract with FDH.

The “Permit Basis” consists of environmental and other applicable permits. As described in HNF-MP-003, the term "permit" is used generically to include environmental permits, such as an air permit per the Clean Air Act, compliance agreements and orders, or a consent agreement. Many of the PHMC facilities are under the authority of various environmental permitting documents. These documents are developed and approved in accordance with PHMC Team and facility procedures.

CORE FUNCTION: Analyze Hazards and Implement Controls (HNF-MP-003 Section 3.4)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Safety and Environmental Standards and Requirements Identified • Hazard Controls Tailored to Work Being Performed • Worker Involvement • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
Implement Controls		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P30	FDH ESH&Q develops and maintains procedures to ensure appropriate facility controls are established. (e.g. TSRs and OSRs)	<ul style="list-style-type: none"> • HNF-PRO-700, Safety Analysis and Technical Safety Requirements • HNF-PRO-704, Hazard and Accident Analysis Process • HNF-PRO-2701, Authorization Envelope and Authorization Agreement • FDH-5096, Project Integration Implementing Procedure for Feedback and Improvement • HNF-PRO-111, Occupational Medical Qualification and Monitoring
P31	FDH develops and operates a PHMC Team Emergency Management Program including planning, preparedness, and readiness assurance for response to emergency events.	<ul style="list-style-type: none"> • DOE/RL-94-02, Hanford Emergency Response Plan • DOE-RL-0223, Emergency Plan Implementing Procedures • HNF-PRO-424, Emergency Preparedness Program • HNF-IP-0263-GEN, Guidance for Building Emergency Plans
P32	FDH ESH&Q develops and maintains the necessary procedures to ensure that Project Hanford and facility-specific environmental permits are obtained and maintained in accordance with compliance agreements and orders.	<ul style="list-style-type: none"> • HNF-PRO-450, Air Quality - Radioactive Emissions • HNF-PRO-2595, Air Quality Program - Nonradioactive Emissions • HNF-PRO-452, NEPA, SEPA, Cultural and Natural Resources • HNF-PRO-451, Regulated Substance Management • HNF-PRO-455, Solid Waste Management • HNF-PRO-456, Water Quality Program • FDH-5096, Project Integration Implementing Procedure for Feedback and Improvement
P33	The PHMC Team develops and maintains a process for documenting an Authorization Envelope consistent with facility life cycle and mission changes.	<ul style="list-style-type: none"> • HNF-PRO-2701, Authorization Envelope and Authorization Agreement
P34	FDH Projects determine the application and content of Authorization Agreements for nuclear (Category 1 and 2) facilities	<ul style="list-style-type: none"> • HNF-PRO-2701, Authorization Envelope and Authorization Agreement

3.5 Core Function 5 : Perform Work Within Controls - Performing PHMC work includes (1) preparing for the work; (2) confirming readiness to perform the work; and (3) performing the work in a safe, environmentally protective, and efficient manner.

Safe work is conducted in accordance with controls, procedures, and commitments. Key elements for performing work within controls include: (1) having a qualified and trained work force, (2) having clearly

established responsibilities and interfaces, (3) ensuring the workers are medically qualified and that medical monitoring is provided, (4) ensuring readiness to proceed and that work is, and (5) maintaining facility configuration to ensure operations and maintenance activities are conducted within the approved authorization envelope.

3.5.1 Qualification and Training of Work Force

An essential aspect of preparing for work is ensuring that people possess the appropriate level of experience, knowledge, skills, and abilities to safely and effectively discharge their responsibilities. The *FDH Qualification and Training Plan* (HNF-MP-011) provides site-wide information concerning employee training and qualification. HNF-MP-011 establishes the framework and standards to ensure that all training provided to PHMC Team employees meets applicable contractual and regulatory requirements. HNF-MP-011 defines the mechanism to meet the ISMS guiding principle of ensuring that PHMC Team employees have competence commensurate with responsibility (personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities).

Minimum requirements for personnel are defined in individual position descriptions and maintained by Human Resources. Training and qualification requirements are further defined per HNF-POL-EMPLOY, *Employee Training Policy*. Specifically, the policy states that PHMC Team will provide its employees with the tools necessary for them to be capable of safe, environmentally sound, timely, efficient, and quality work; and to encourage employees to improve their performance by learning new skills and qualifying for broader roles throughout their careers.

The PHMC Team specifies appropriate personnel training and qualification in the Training Implementation Matrices and Training Matrix (HNF-PRO-164, Training Matrix Capabilities & Access), ensures employees attend required classes, and ensures that all personnel are qualified and trained to conduct work in a safe, environmentally sound, and efficient manner. Required training for each employee is identified in the Training Matrix System (TMX). The TMX is designed to assist managers in building a training program that ensures employees are trained for their job positions and that continuing/refresher training requirements are met. The Training Implementation Matrix (TIM) defines the organization, planning, and administration of the qualification programs and sets forth the responsibility, authority and methods for conducting training in accordance with requirements. The TIM includes a description of applicable requirements and a matrix that shows the status of training programs relative to requirements.

Management is responsible for periodically evaluating employee skills against the job requirements. HNF-PRO-079, *Job Hazard Analysis*, and HNF-PRO-111, *Occupational Medical Qualification and Monitoring* provide requirements to ensure employee health and safety training is adequate for tasks assigned. The EJTA is the primary mechanism that ensure that employees have the appropriate medical qualification, training, and exposure monitoring based on assigned job functions and the hazards to which they might be exposed. All employees working onsite who might be exposed to hazardous substances or health or safety hazards receive appropriate training.

CORE FUNCTION: Perform Work Within Controls (HNF-MP-003 Section 3.5)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental, and Quality Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Operations Authorization • Worker Involvement • Continuous Improvement • Senior Management Involvement 		
Implement Controls		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P35	FDH Training develops and maintains the <i>FDH Qualification and Training Plan</i> (HNF-MP-011) that includes the ISMS training program description	<ul style="list-style-type: none"> • HNF-POL-EMPLOY, Employee Training Policy • HNF-MP-599, Project Hanford QA Program Description • HNF-MP-011, Sitewide Qualification and Training Plan
P36	FDH Training develops and maintains the appropriate mechanism to ensure that all PHMC Team employees receive training in the ISMS and applicable contractual and regulatory requirements.	<ul style="list-style-type: none"> • HNF-MP-011, Sitewide Qualification and Training Plan • HNF-PRO-057, Hanford General Employee Training • HNF-PRO-168, Employee Training • HNF-PRO-164, Training Matrix Capabilities and Access
P37	FDH ESH&Q assigns technical authorities to identify "new" regulatory requirements for training, and provides oversight of and interprets ES&H training requirements.	<ul style="list-style-type: none"> • HNF-MP-001, Management and Integration Plan • HNF-MP-011, Sitewide Qualification and Training Plan
P38	The PHMC Team maintains the Training Implementation Matrices and Training Matrix Processes.	<ul style="list-style-type: none"> • HNF-MP-011, Sitewide Qualification and Training Plan • HNF-PRO-164, Training Matrix Capabilities and Access

3.5.2 Responsibilities and Interfaces

PHMC Team managers are responsible for properly training personnel to perform assigned tasks in a manner that minimizes risk to themselves, co-workers, and the public; that minimizes negative impacts to the environment; that minimizes risk of damage to structures and equipment; and that demonstrates competent and cost-effective performance. Managers ensure employees receive indoctrination and training in accordance with the scope, complexity, and nature of their duties. Managers (1) provide employees with information on personal and public safety and environmental hazards before beginning work, (2) ensure that employees are registered for and attend classes, (3) administer training records, and (4) ensure visitors and contracted personnel are trained to the extent necessary to safely execute work. Managers systematically evaluate training programs to improve training effectiveness and efficiency and to ensure personnel are given the means to meet job requirements. Managers also provide timely, constructive feedback to instructors as appropriate.

ESH&Q is responsible for developing and administering a safety and accident prevention and detection program, providing guidance and safety services, and continually monitoring operations. ESH&Q provides safety services to management by prescribing personal protective equipment, providing training, performing work place evaluations, and recommending controls.

As a condition of employment, all employees are required to individually familiarize themselves with and comply with health and safety regulations and instructions. Employees are responsible for following all written procedures, controls specified in permits, and additional safety instructions contained in work control documents or conveyed by the supervisor or PIC (Person In Charge). Employees use engineering and administrative controls and prescribed personal protective apparel, equipment, and devices provided for machinery, equipment, tools, and processes. Employees are expected to develop intelligent and safe work habits by following procedures, safe practices, and safety rules and regulations to protect themselves and other workers from injury; and to prevent damage to materials, equipment, and facilities. Employees are encouraged to contribute suggestions that could assist in the effort to prevent accidents and injuries and are not to undertake a job for which they do not understand the risk, hazards, or safety precautions, or a job for which they have not received proper instructions, training, and authorization.

The PHMC Team supports the involvement and participation of the worker in safety and environmental committees and councils, which are focused on continuous improvements and safe and environmentally protective work processes. The PHMC Team maintains several standing councils and committees to review ES&H issues and encourages employee participation in the development of good safety and environmental practices. These committees and councils include the President's Zero Accident Council, Centers of Expertise in Radiological Safety and QA, Environmental Manager Committee, Employee Zero Accident Councils, and VPP committees. In addition, the PHMC Team has established and endorses use of a team approach for work planning and execution that not only includes, but also encourages worker participation. Project Hanford Management Directive HNF-MD-4342, *PHMC Expectation for Worker Involvement*, expects each Major Subcontractor to promote worker and first line supervisor involvement at the earliest stages of work definition for work packages and procedures that affect field activities and user involvement in the preparation and validation of procedures.

This concept of worker involvement is exemplified through the use of the AJHA process, Hanford Worker's Bill of Rights (HNF-PRO-074 and HNF-PRO-075), stop work responsibility (HNF-PRO-3468), Employee Concerns Program (HNF-PRO-410), pre-job briefings involvement (AP MN-7-004) and participation in Employees Zero Accidents Council EZAC. The "stop work" responsibility and Worker's Bill of Rights promote open communications and foster a questioning attitude regarding health and safety issues and concerns for the environment. The "Worker's Bill of Rights" and stop work responsibility are contained in HNF-PRO-074, Safety Responsibilities. These safety councils increase safety knowledge and awareness and instill safety values through employee participation.

The councils are led by the employees and allow direct employee involvement in safety activities and initiatives such as housekeeping inspections, safety improvements, scheduling safety meetings, and communication/awareness activities. The safety councils foster information exchange by providing a forum for safety concerns, potential solutions, and safety statistics. Additional training is available for council members to promote more council involvement in fundamental safety issues such as hazard recognition.

Line Managers personally are responsible for the safety of personnel and property within their respective areas of operations. Line Managers ensure that work is performed in accordance with approved procedures and management direction. Each supervisor, and any other person who immediately directs efforts of a working unit, is responsible and accountable to ensure that the prevention of injuries to employees under their jurisdiction is as much a part of the job as the quantity and quality of production. To accomplish safe work execution, employees are trained to work safely and supervisors observe them closely, correct unsafe acts and mechanical or physical conditions, enforce safety rules and regulations, assist in investigation of accidents and incidents, and take other action necessary to ensure the safety and health of their employees.

3.5.3 Hanford Occupational Health Process (HOHP)

The HOHP, which is administered by HEHF, ensures that Hanford Site workers receive the appropriate medical qualification, monitoring, and related occupational medical services (HNF-PRO-111, Occupational Medical Qualification and Monitoring). This process includes the use of the EJTA, which is a tool used by managers, employees, industrial hygiene specialists, and the HEHF to ensure potential work exposures adequately are monitored and reported to protect the employee. Lower tiered subcontractors are also required to use the EJTA process.

CORE FUNCTION: Perform Work Within Controls (HNF-MP-003 Section 3.5)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Operations Authorization • Worker Involvement • Continuous Improvement • Senior Management Involvement 		
Confirm Readiness / Perform Work		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P39	The PHMC Team provides employees with the specified occupational medical services described in the PHMC and detailed in the MOA between the OMC and FDH.	<ul style="list-style-type: none"> • HNF-PRO-111, Occupational Medical Qualification and Monitoring
P40	FDH ESH&Q develops and maintains processes and procedures (e.g., EJTA, AJHA, and exposure monitoring and reporting) to support the HOHP.	<ul style="list-style-type: none"> • HNF-PRO-409, Exposure Monitoring, Reporting, and Exposure Records Management • HNF-PRO-079, Job Hazard Analysis • HNF-PRO-111, Occupational Medical Qualification and Monitoring
P41	FDH ESH&Q, with the OMC, develops and maintains the automated EJTA system.	<ul style="list-style-type: none"> • HNF-PRO-111, Occupational Medical Qualification and Monitoring

3.5.4 Confirming Readiness and Performing Work

Readiness to perform work, including readiness to implement controls, is confirmed before starting work. A process of confirming readiness and authorizing work at the facility and activity level is established to ensure that (1) hazards and environmental impacts have been identified and controlled, (2) requirements are met, (3) compliance per work instruction is ensured, (4) workers understand and have skills, training, and qualifications to safely perform the work, and (5) work can be performed within the facility authorization envelope. Depending on the hazard category of the facility, Operational Readiness Reviews or Readiness Assessments are required. Pre-job briefings are used as a last confirmation of readiness before beginning individual work activities to ensure that the work team has an understanding of the work tasks and requirements.

Before performing work, a walkdown of the work location based on the risk and complexity of the work is performed. This walkdown can be performed as part of the planning function and/or after the work package has been prepared. The walkdown includes craft workers or operators and if possible the actual persons who will be performing the work.

Work is performed to approved work instructions and procedures that are kept under configuration

control. By following procedures that have been developed, reviewed, and approved in accordance with the established requirements, workers are assured that their work is in compliance with the approved safety basis, requirements basis, and applicable environmental permits. The PHMC Team policy for procedural compliance is outlined in HNF-POL-PROCEDURE, Procedure Compliance Expectations and HNF-PRO-074, *Safety Responsibilities*.

The formality and degree to which work is directed by procedures and the degree of direct supervision is based on the type and magnitude of the hazards and environmental impacts, the confidence that the hazards and environmental impacts are well known, confidence in the controls selected, complexity of the work performed, and worker qualifications.

CORE FUNCTION: Perform Work Within Controls (HNF-MP-003 Section 3.5)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Hazard Controls Tailored to Work Being Performed • Operations Authorization • Worker Involvement • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
Confirm Readiness / Perform Work		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P42	FDH Project Integration develops and maintains the necessary procedures for conducting Operational Readiness Reviews and Assessments.	<ul style="list-style-type: none"> • HNF-PRO-055, Facilities Start-Up Readiness
P43	FDH Projects provides oversight and review of the Major Subcontractors Operational Readiness process.	<ul style="list-style-type: none"> • HNF-PRO-2701, Authorization Envelope and Authorization Agreement • HNF-PRO-055, Facilities Start-Up Readiness
P44	The PHMC Team develops and maintains procedures to ensure appropriate facility guidance is provided in conducting the USQ screening.	<ul style="list-style-type: none"> • HNF-PRO-062, Identifying and Resolving Unreviewed Safety Questions
P45	FDH maintains a uniform stop work authority for PHMC Scope efforts.	<ul style="list-style-type: none"> • HNF-POL-PROCEDURE, Procedure Compliance Expectations • HNF-PRO-074, Safety Responsibilities • HNF-PRO-075, Safety Communications • HNF-PRO-4616, Supervision of Field Work Activities • HNF-PRO-3468, Shutdown and Stop-Work Direction

3.6 Core Function 6 : Provide Feedback and Continuous Improvement - All aspects of the Project Hanford ISMS are subject to continuous improvement through the assessment and feedback process.

At each level of work and at every stage in the work process (PHMC Scope, Facility, and Activity Level), feedback and continuous improvement occurs. Feedback information on the adequacy of implementing the ISMS is gathered, opportunities for improving the execution and planning of work are identified and implemented, and line and independent oversight is conducted. Feedback and opportunities for

continuous improvement are obtained through worker, management, and independent assessments; lessons learned, occurrence trending analysis; corrective action management, commitment tracking; causal factor analysis; and inspections by external agencies. Management involvement and review are crucial to successful operation of the feedback and improvement function.

3.6.1 Establish Performance Measures

10 CFR 830.120, "Quality Assurance Requirements", (The QA Rule) requires that performance be monitored, measured, and evaluated to identify and implement improvement opportunities. Within the context of the ISMS, monitoring, measuring, evaluating, and making decisions for improvement occur at multiple levels across the Hanford Site. These processes are continuous and dynamic. The PHMC Team responds to the FDH direction on performance to meet the objectives of DOE Order 210.1, *Performance Indicators and Analysis of Operations Information*.

The establishment of performance measures is necessary for consistent, meaningful analysis of performance trends. As part of the Project Hanford ISMS, performance indicators are established to measure implementation progress and the effectiveness of ISMS implementation. These indicators measure progress toward achieving ISMS management expectations' provide a measurement of the effectiveness of the PHMC Team processes necessary to produce a safe, productive, and quality work environment' and provide information for identifying areas needing additional management attention.

CORE FUNCTION: Provide Feedback and Continuous Improvement (HNF-MP-003 Section 3.6)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Worker Involvement • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
Establish and Analyze Performance Measures		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P46	The FDH PI Plan serves as outcome-based indicator for the success of the ISMS.	<ul style="list-style-type: none"> • PHMC ESH&QA Performance Indicator Plan
P47	FDH Projects and ESH&Q establish ISMS performance objectives and measures and reviews and updates these annually.	<ul style="list-style-type: none"> • HNF-MP-001, Management and Integration Plan
P48	FDH ESH&Q develops and administers a safety and environmental culture survey to baseline and track the effects of implementing ISMS on the PHMC Team safety and environmental culture.	<ul style="list-style-type: none"> • VPP survey conducted as part of the HGET training • ISMS Activity Level Baseline Survey
P49	FDH Projects establish a schedule for presenting ISMS implementation status to senior management.	<ul style="list-style-type: none"> • HNF-4467, Feedback and Improvement Policy • FDH-5096, Project Integration Implementing Procedure for Feedback and Improvement
P49b	FDH communicates ES&H information to DOE-RL, line management, other Hanford Site contractors, and stakeholders.	<ul style="list-style-type: none"> • HNF-POL-TRIBES, Tribes, Regulators, and Stakeholders Participation Policy

3.6.2 Assess Performance and Collect Feedback

The Project Hanford *Quality Assurance Program Description* (HNF-MP-599) establishes the requirements for performing management and independent assessments (HNF-PRO-246, *Management Assessment*; HNF-POL-PERFORM, *Independent Performance Assessment Policy*) to address the adequacy of work. HNF-MP-599 requires line organizations to perform and document periodic management assessments that focus on the effectiveness of the management systems. Assessments are used to identify and correct deficiencies and coach employees as necessary to make process improvements.

PHMC Team executive staff use feedback information resulting from measurements and observations to determine actions and initiatives to improve performance of Project Hanford scope of work (HNF-4467, *Feedback and Improvement Policy*). The information comes from numerous sources, including worker input, management assessments, FEB assessments, the corrective action management process (HNF-PRO-052, *Corrective Action Management*; HNF-PRO-653, *Deficiency Tracking System*), lessons learned process (HNF-PRO-067, *Managing Lessons Learned*), external assessments, project management processes, and many other sources.

Project Hanford-wide QA procedures provide requirements to the PHMC Team for assessing the adequacy of work performed. Major Subcontractor assessment teams, established by line managers, collect operating information, and evaluate performance by analyzing the results of occurrence reports (HNF-PRO-060, *Reporting Occurrences and Processing Operations Information*) investigations and critiques (HNF-PRO-058, *Critique Process*), and develop lessons learned that are incorporated into corrective action plans. PHMC Team line managers also define the requirements of, and assign responsibility for, the identification, categorization, and notification of occurrences, including performance of formal investigations and Price Anderson noncompliance, and preparing, disseminating, and using lessons learned information.

In addition to the results of both internal and independent assessments, FDH and its major subcontractors receive feedback regarding deficiencies in safety, environmental, and quality performance from various external oversight organizations including DOE-RL, DOE-HQ, the DNFSB, EPA, and Ecology, and WDOH. Deficiencies identified by external oversight organizations are handled in the same manner as those identified internally (HNF-PRO-052, *Corrective Action Management*; HNF-PRO-653, *Deficiency Tracking System*).

The PHMC Team process to assess the safety performance of its subcontractors is managed by a Subcontract Technical Representative who is responsible for verifying subcontractor compliance to safety and health requirements. This oversight occurs (1) during subcontractor selection via review of bidder safety records, (2) before the start of work via review of work plans and safety plans for identification of the appropriate standards and requirements, (3) review of JHA and job site walkdowns, and (4) during performance of work by observation and monitoring of subcontractor follow up to noted deficiencies.

CORE FUNCTION: Provide Feedback and Continuous Improvement (HNF-MP-003 Section 3.6)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
Line Management Responsibility for Safety and Environmental Performance Defined		
Clear Roles and Responsibilities Defined		
Competence Commensurate with Responsibilities		
Worker Involvement		
Communication and Stakeholder Involvement		
Continuous Improvement		
Senior Management Involvement		
Assess Performance & Collect Feedback Information		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P50	FDH ESH&Q establishes a multi-element assessment program that includes management assessments and independent assessments using both operational and systems approaches.	<ul style="list-style-type: none"> • HNF-MP-599, Project Hanford QA Program Description, Section 9, "Management Assessment" and Section 10, "Independent Assessment" • HNF-PRO-246, Management Assessment • HNF-POL-PERFORM, Independent Performance Assessment Policy • HNF-4467, Feedback and Improvement Policy
P51	FDH Facility Evaluation Board conducts assessments of facilities operated by Major Subcontractors to ensure compliance with ES&H requirements.	<ul style="list-style-type: none"> • HNF-MP-599, Project Hanford Quality Assurance Program Description, Section 10, Independent Assessment
P52	FDH ESH&Q establishes a process to track deficiencies and recommendations identified during internal and external assessments, reviews, and inspections that supports that supports continuous safety and quality program improvement.	<ul style="list-style-type: none"> • HFN-PRO-052, Corrective Action Management • HNF-PRO-653, Deficiency Tracking System
P53	FDH ESH&Q develops and maintains the requirements and processes to be followed in collecting and analyzing ES&H performance indicator data and reporting the results to FDH, subcontractor, and DOE-RL management, including senior line management.	<ul style="list-style-type: none"> • PHMC ESH&Q Performance Indicator Plan • HNF-PRO-067, Managing Lessons Learned • HFN-PRO-052, Corrective Action Management
P54	FDH ESH&Q establishes and maintains a process for comparing actual safety and environmental performance to defined objectives.	<ul style="list-style-type: none"> • HNF-MP-001, Management and Integration Plan • PHMC ESH&Q Performance Indicator Plan
P55	FDH ESH&Q establishes processes and methodologies common to all the PHMC Team for reviewing, evaluating, investigating, and reporting of operational events, environmental incidents, noncompliance to the Nuclear Safety Rules and worker injuries, including identification of causal factors	<ul style="list-style-type: none"> • HNF-PRO-060, Reporting Occurrences and Processing Operations Information • HNF-PRO-077, Reporting, Investigating, Managing Events • HNF-PRO-453, Environmental Notification and Reporting • HNF-PRO-058, Critique Process • HNF-PRO-67, Managing Lessons Learned
P56	FDH ESH&Q establishes a method to evaluate ES&H performance annually of construction management services (FDNW and Numatec).	<ul style="list-style-type: none"> • HNF-MP-599, Project Hanford Quality Assurance Program Description, Section 9, "Management Assessment" and Section 10, "Independent Assessment"

3.6.3 Identify and Make Changes to Improve Performance

Unsafe and environmentally unsound acts are reported through process such as the problem investigation process, the ORPS (*Occurrence Reporting and Processing of Operation Information*), and other reporting mechanisms. These systems provide a formal mechanism for review and analysis of adverse trends to implement improvements in work practices and processes.

Systematic and repeatable process are used to review available information, analyze trends, and present recommendations to the executive staff as input into the decisionmaking process necessary for performance improvement.

Line managers/supervisors promote a work environment that encourages identification and communication of opportunities for improvement (HNF-POL-OPEN, Open Door Policy). Managers ensure that staff understands the need for a feedback and improvement process and that the staff is equipped with the necessary information, tools, and understanding to support this process.

Employees continually pursue improvement in the way tasks are performed and to communicate these improvement ideas to their supervisors. It is the obligation of employees to strive to be effective in their work and to be good stewards of the DOE funds.

CORE FUNCTION: Provide Feedback and Continuous Improvement (HNF-MP-003 Section 3.6)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Worker Involvement • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
Identify and Make Changes to Improve Performance		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P57	FDH Projects and ESH&Q compares ISMS performance objectives to actual performance. Gaps are identified, ranked in order of priority, and resolved.	<ul style="list-style-type: none"> • HNF-MP-001, Management and Integration Plan • FHD-5096, Project Integration Implementing Procedure for Feedback and Improvement
P58	The FDH Re-engineering/CPI collects lessons learned from on and offsite and disseminates this to facility personnel.	<ul style="list-style-type: none"> • HNF-PRO-067, Managing Lessons Learned
P59	The PHMC Team evaluates the safety and environmental performance indicators for adverse/improving trends in performance to determine causes, and actions needed to reinforce improvements.	<ul style="list-style-type: none"> • PHMC ESH&Q Performance Indicator Plan • HFN-PRO-052, Corrective Action Management
P60	FDH Re-engineering/Continuous Process Improvement establishes common processes for implementing the Lessons Learned and Employee Concern Program.	<ul style="list-style-type: none"> • HNF-PRO-067, Managing Lessons Learned • HNF-POL-OPEN, Open Door Policy • HNF-POL-ZERO, Zero Tolerance for Retaliation Policy • HNF-PRO-410, Resolving Employee Concerns

3.6.4 Oversight and Enforcement

The PHMC Team is required to perform independent assessments to measure the adequacy of work performed in complying with applicable requirements, to evaluate service quality, and to promote improvement in PHMC Team processes and activities (HNF-4467, Feedback and Improvement Policy). Personnel performing the assessments are technically qualified and knowledgeable and have no direct responsibilities in the areas being assessed. Independent assessment are conducted at all PHMC Team nuclear facilities, some nonnuclear facilities, and of cross-cutting support functions.

Codes Of Conduct and Master Safety Rules are established to communicate compliance with the FDH Policies and Procedures and conduct of operations. HNF-PRO-074, *Safety Responsibilities*, outlines the basic rights and responsibilities within the safety and health program including the management commitment and employee involvement tenets of the VPP and provides the foundation to managing activities in compliance with OSHA safety and health requirements. The Legal and Ethical Conduct Policy (HNF-POL-LEGAL) defines the requirement for all PHMC Team employees and associated subcontractor to comply with all applicable laws and government regulations. Violation of policy can result in disciplinary action up to and including discharge (HNF-PRO-033, Employee Discipline).

Reward and recognition programs are established to identify, reinforce, and promote safe and environmental protective work behavior.

CORE FUNCTION: Provide Feedback and Continuous Improvement (HNF-MP-003 Section 3.6)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Worker Involvement • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
Oversight and Enforcement		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P61	FDH ESH&Q establishes and implements mechanisms for independent assessment of PHMC Scope operations.	<ul style="list-style-type: none"> • HNF-MP-599, Project Hanford Quality Assurance Program Description, Section 10 • HNF-POL-PERFORM, Independent Performance Assessment Policy
P62	FDH FEB performs independent assessments of the ISMS Plan expectations and implementation schedules.	<ul style="list-style-type: none"> • HNF-MP-599, Project Hanford Quality Assurance Program Description, Sections 9 and 10
P63	FDH Office of Legal Counsel and ESH&Q establish Codes Of Conduct and Master Safety Rules to communicate compliance with the Project Hanford Policies and Procedures and Conduct of Operations.	<ul style="list-style-type: none"> • HNF-PRO-074, Safety Responsibilities • HNF-PRO-033, Employee Discipline • HNF-PRO-223, Legal and Ethical Conduct • HNF-POL-LEGAL, Legal and Ethical Conduct Policy
P64	FDH ESH&Q establishes a reward and recognition program to promote safe behavior that is safe, protects the environment, and reflects quality values.	<ul style="list-style-type: none"> • HNF-PRO-054, Sharing Fee With Employees • HNF-PRO-050, Managing Employee Performance

3.7 Core Function 7: Management Review – Senior Management Reviews the Project

Hanford ISMS to ensure that it is suitable, adequate, and effective

PHMC Team senior management participates in ISMS implementation and provides support for internal reviews, trending of assessment, and provides direction and oversight to corrective actions and improvements. Senior management is directly involved in promoting and supporting ISMS by communicating its importance through active participation and monitoring of implementation progress. Senior Management provides resources and commitment for implementation of ISMS and preparation for Phase I and Phase I verification.

PHMC Team senior management involvement and review is crucial to successful operation of the feedback and improvement function. FDH Project Integration and ESH&Q will coordinate a top management review at appropriate intervals. The review will include reviewing assessments results and information from several other sources to assess the ISMS and to identify needed improvements.

PHMC Team top management will review the Project Hanford ISMS to ensure that it is suitable, adequate, and effective to systematically integrate safety into management and work practices at all levels so that missions are accomplished while protecting the public, the worker, and the environment. Top management will provide oversight and direction to the management review process to ensure that the necessary information is collected to allow management to carry out this evaluation. The review will be documented and will address the possible need for changes to policy, objectives, and other elements of the ISMS to accommodate worker, management, and independent assessment results, changing circumstances, and the commitment to continual improvement.

CORE FUNCTION: Management Review (HNF-MP-003 Section 3.7)		
PROJECT HANFORD ISMS GUIDING PRINCIPLES:		
<ul style="list-style-type: none"> • Line Management Responsibility for Safety and Environmental Performance Defined • Clear Roles and Responsibilities Defined • Competence Commensurate with Responsibilities • Communication and Stakeholder Involvement • Continuous Improvement • Senior Management Involvement 		
Management Review		
#	EXPECTATION STATEMENT	IMPLEMENTING MECHANISM(S)
P65	FDH Project Integration and ESH&Q establish a process and procedures as necessary for top management review of the ISMS.	<ul style="list-style-type: none"> • FDH-5096, Project Integration Implementing Procedure for Feedback and Improvement

4.0 SUMMARY

The Guiding Principles, Core Functions and Implementing Mechanisms presented in the previous tables are compiled in the table below to show the alignment of Implementing Mechanisms to Guiding Principles. The implementing mechanisms that ingrain the guiding principles of “Competence Commensurate with Responsibility”, “Continuous Improvement” and Senior Management Involvement” are common to all the Core Functions. Even though these mechanisms were previously identified in specific Core Functions in relation to a certain PHMC Scope level expectation, the principles they embody are truly universal and relate to all parts of the PHMC ISMS.

The PHMC Team is committed to "Do Work Safely". This Project Hanford ISMS description discusses the management system that is the framework and infrastructure to achieve this goal. By planning and executing work in the manner described by the core functions and following the implementing mechanisms, ISMS is institutionalized at the PHMC.

Guiding Principle	Core Functions						
	Establish ES&H Policy	Define the Scope of Work	Identify Hazards, Environmental Impacts and ES&H Requirements	Analyze Hazards and Environmental Impacts and Implement Controls	Perform Work Within Controls	Provide Feedback and Continuous Improvement	Management Review
Line Management Responsibility for Safety & Environmental Performance Defined	DOE-RL ESH&Q Policy HNF-MP-001, Management and Integration Plan HNF-5053, Policy for Environment, Safety and Health HNF-5054, PHMC Team Environmental Policy HNF-POL-QA, Quality Assurance Policy HNF-POL-LEGAL, Legal and Ethical Conduct Policy	DE-AC06-96RL13200, Project Hanford Management Contact, Section H.14 and Section J, App. C HNF-MP-001, Management and Integration Plan HNF-MP-005, Risk Management Plan HNF-MP-007, Systems Engineering Management Plan HNF-MD-013, Work Breakdown Structure HNF-MD-015, Cost Account Plan HNF-MD-016, Annual Budget Submittal	HNF-MP-001, Management and Integration Plan HNF-MP-015, Requirements Management Plan HNF-PRO-265, Standards/Requirements Identification Document Process HNF-PRO-079, Job Hazard Analysis	HNF-MP-001, Management and Integration Plan HNF-PRO-430, Safety Analysis Program HNF-PRO-452, NEPA, SEPA, Cultural and Natural Resources HNF-PRO-079, Job Hazard Analysis	HNF-MP-001, Management and Integration Plan HNF-PRO-4616, Supervision of Field Work Activities	HNF-MP-001, Management and Integration Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-POL-PERFORM, Independent Performance Assessment Policy HNF-4467, Feedback and Improvement Policy HNF-PRO-246, Management Assessment HFN-PRO-052, Corrective Action Management HNF-PRO-653, Deficiency Tracking System HNF-PRO-067, Managing Lessons Learned	FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement.

	Establish ES&H Policy	Define the Scope of Work	Identify Hazards, Environmental Impacts and ES&H Requirements	Analyze Hazards and Environmental Impacts and Implement Controls	Perform Work Within Controls	Provide Feedback and Continuous Improvement	Management Review
		<p>HNF-MD-017, Multi-Year Work Plan</p> <p>HNF-MD-019, Project Work Authorizations</p> <p>HNF-MD-024, Internal Work Orders</p> <p>HNF-PRO-116, Managing DOE Directives</p> <p>HNF-PRO-186, Preparing a Statement of Work for Services</p> <p>HNF-PRO-706, PHMC Acquisition System Requirements</p>					
Clear Roles and Responsibilities Defined	<p>DOE-RL ESH&Q Policy</p> <p>HNF-MP-001, Management and Integration Plan</p> <p>HNF-5053, Policy for Environment, Safety and Health</p> <p>HNF-5054, PHMC Team Environmental Management Policy</p> <p>HNF-POL-QA, Quality Assurance Policy</p> <p>HNF-POL-LEGAL, Legal and Ethical Conduct Policy</p>	<p>DE-AC06-96RL13200, Project Hanford Management Contact</p> <p>HNF-MP-001, Management and Integration Plan</p> <p>HNF-MP-005, Risk Management Plan</p> <p>HNF-MP-007, Systems Engineering Management Plan</p> <p>HNF-MD-013, Work Breakdown Structure</p> <p>HNF-MD-015, Cost Account Plan</p> <p>HNF-MD-016, Annual Budget Submittal</p> <p>HNF-MD-017, Multi-Year Work Plan</p> <p>HNF-MD-019, Project Work Authorizations</p>	<p>HNF-MP-001, Management and Integration Plan</p> <p>HNF-MP-015, Requirements Management Plan</p> <p>HNF-PRO-116, Managing DOE Directives</p> <p>HNF-PRO-265, Standards/Requirements Identification Document Process</p> <p>HNF-PRO-079, Job Hazard Analysis</p> <p>HNF-4361, PHMC Expectations for Worker Involvement</p>	<p>HNF-MP-001, Management and Integration Plan</p> <p>HNF-PRO-430, Safety Analysis Program</p> <p>HNF-PRO-079, Job Hazard Analysis</p> <p>HNF-PRO-111, Occupational Medical Qualification and Monitoring</p> <p>DOE/RL-94-02, Hanford Emergency Response Plan</p> <p>DOE-RL-0223, Emergency Plan Implementing Procedures</p> <p>HNF-PRO-424, Emergency Preparedness Program</p> <p>HNF-PRO-450, Air Quality - Radioactive Emissions</p> <p>HNF-PRO-2595, Air Quality Program - Nonradioactive Emissions</p> <p>HNF-PRO-451, Regulated</p>	<p>HNF-MP-001, Management and Integration Plan</p> <p>HNF-POL-PROCEDURE, Procedure Compliance Expectations</p> <p>HNF-PRO-4616, Supervision of Field Work Activities</p> <p>HNF-PRO-074, Safety Responsibilities</p> <p>HNF-PRO-075, Safety Communications</p>	<p>HNF-MP-001, Management and Integration Plan</p> <p>HNF-4467, Feedback and Improvement Policy</p> <p>HNF-MP-599, Project Hanford Quality Assurance Program Description, Section 9, "Management Assessment" and Section 10, "Independent Assessment".</p> <p>HNF-PRO-246, Management Assessment</p> <p>HFN-PRO-052, Corrective Action Management</p> <p>HNF-PRO-653, Deficiency Tracking System</p> <p>HNF-PRO-067, Managing Lessons Learned</p> <p>HNF-POL-OPEN, Open Door Policy</p> <p>HNF-POL-ZERO, Zero Tolerance for Retaliation Policy</p> <p>HNF-PRO-410, Resolving Employee Concerns</p> <p>HNF-PRO-4616, Supervision of Field Work Activities</p> <p>HNF-PRO-074, Safety</p>	<p>FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement.</p>

	Establish ES&H Policy	Define the Scope of Work	Identify Hazards, Environmental Impacts and ES&H Requirements	Analyze Hazards and Environmental Impacts and Implement Controls	Perform Work Within Controls	Provide Feedback and Continuous Improvement	Management Review
		HNF-PRO-074, Safety Responsibilities HNF-PRO-050, Managing Employee Performance HNF-PRO-079, Job Hazard Analysis		Substance Management HNF-PRO-452, NEPA, SEPA, Cultural and Natural Resources HNF-PRO-455, Solid Waste Management HNF-PRO-456, Water Quality Program HNF-4361, PHMC Expectations for Worker Involvement		Responsibilities HNF-PRO-033, Employee Discipline HNF-PRO-223, Legal and Ethical Conduct HNF-POL-LEGAL, Legal and Ethical Conduct Policy	
Competence Commensurate with Responsibility	HNF-MP-001, Management and Integration Plan HNF-MP-011, Sitewide Qualification and Training Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-POL-EMPLOY, Employee Training Policy HNF-PRO-168, Employee Training HNF-PRO-164, Training Matrix Capabilities and Access HNF-PRO-459, Environmental Training HNF-PRO-164, Training Matrix Capabilities and Access HNF-PRO-459, Environmental Training HNF-PRO-057, Hanford General Employee Training	HNF-MP-001, Management and Integration Plan HNF-MP-011, Sitewide Qualification and Training Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-POL-EMPLOY, Employee Training Policy HNF-PRO-168, Employee Training HNF-PRO-164, Training Matrix Capabilities and Access HNF-PRO-459, Environmental Training HNF-PRO-057, Hanford General Employee Training	HNF-MP-001, Management and Integration Plan HNF-MP-011, Sitewide Qualification and Training Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-POL-EMPLOY, Employee Training Policy HNF-PRO-168, Employee Training HNF-PRO-164, Training Matrix Capabilities and Access HNF-PRO-459, Environmental Training HNF-PRO-057, Hanford General Employee Training	HNF-MP-001, Management and Integration Plan HNF-MP-011, Sitewide Qualification and Training Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-POL-EMPLOY, Employee Training Policy HNF-PRO-168, Employee Training HNF-PRO-164, Training Matrix Capabilities and Access HNF-PRO-459, Environmental Training HNF-PRO-057, Hanford General Employee Training	HNF-MP-001, Management and Integration Plan HNF-MP-011, Sitewide Qualification and Training Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-POL-EMPLOY, Employee Training Policy HNF-PRO-168, Employee Training HNF-PRO-164, Training Matrix Capabilities and Access HNF-PRO-459, Environmental Training HNF-PRO-057, Hanford General Employee Training	HNF-MP-001, Management and Integration Plan HNF-MP-011, Sitewide Qualification and Training Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-POL-EMPLOY, Employee Training Policy HNF-PRO-168, Employee Training HNF-PRO-164, Training Matrix Capabilities and Access HNF-PRO-459, Environmental Training HNF-PRO-057, Hanford General Employee Training	HNF-MP-001, Management and Integration Plan HNF-MP-011, Sitewide Qualification and Training Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-POL-EMPLOY, Employee Training Policy HNF-PRO-168, Employee Training HNF-PRO-164, Training Matrix Capabilities and Access HNF-PRO-459, Environmental Training HNF-PRO-057, Hanford General Employee Training

	Establish ES&H Policy	Define the Scope of Work	Identify Hazards, Environmental Impacts and ES&H Requirements	Analyze Hazards and Environmental Impacts and Implement Controls	Perform Work Within Controls	Provide Feedback and Continuous Improvement	Management Review
	Employee Training						
Balanced Priorities		DE-AC06-96RL13200, Project Hanford Management Contact, Section H.41; and Section J, Appendix D HNF-MP-001, Management and Integration Plan HNF-MP-005, Risk Management Plan HNF-MP-007, Systems Engineering Management Plan HNF-MP-013, Configuration Management Plan HNF-MD-016, Annual Budget Submittal HNF-MD-017, Multi-Year Work Plan HNF-MD-018, Performance Reporting HNF-MD-020, Capital Funding HNF-MD-021, Indirect Planning, Rate Development and Control HNF-MD-029, Hanford Site Technical Baseline Change Control HNF-PRO-533, Change Control HNF-PRO-585, Cost Estimating HNF-PRO-357, Completion and					

	Establish ES&H Policy	Define the Scope of Work	Identify Hazards, Environmental Impacts and ES&H Requirements	Analyze Hazards and Environmental Impacts and Implement Controls	Perform Work Within Controls	Provide Feedback and Continuous Improvement	Management Review
		Closure of Performance Agreements U.S. Department of Energy, Richland Operations Office, "Performance Incentive Fee Handbook" Integrated Priority List					
Safety & Environmental Standards & Requirements Identified			DE-AC06-96RL13200, Project Hanford Management Contact, Section H.14 HNF-MP-001, Management and Integration Plan HNF-MP-015, Requirements Management Plan HNF-MD-029, Hanford Site Technical Baseline Change Control HNF-PRO-533, Change Control HNF-PRO-224, Document Control Program Standards HNF-PRO-229, Technical Procedure Standard HNF-PRO-116, Managing DOE Directives HNF-PRO-589, Processing Project Hanford Procedures HNF-PRO-430,	HNF-PRO-265, Standards/Requirements Identification Document Process HNF-PRO-430, Safety Analysis Program HNF-PRO-700, Safety Analysis and Technical Safety Requirements HNF-PRO-701, Safety Analysis Process – Existing Facility HNF-PRO-702, Safety Analysis Process – Facility Change or Modification HNF-PRO-703, Safety Analysis Process – New Project HNF-PRO-704, Hazard and Accident Analysis Process HNF-PRO-705, Safety Basis Planning, Documentation, Review, and Approval HNF-PRO-079, Job Hazard Analysis HNF-PRO-452, NEPA, SEPA, Cultural and Natural Resources HNF-PRO-450, Air Quality - Radioactive			

	Establish ES&H Policy	Define the Scope of Work	Identify Hazards, Environmental Impacts and ES&H Requirements	Analyze Hazards and Environmental Impacts and Implement Controls	Perform Work Within Controls	Provide Feedback and Continuous Improvement	Management Review
			Safety Analysis Program HNF-PRO-700, Safety Analysis and Technical Safety Requirements HNF-PRO-704, Hazard and Accident Analysis Process HNF-PRO-705, Safety Basis Planning, Documentation, Review, and Approval HNF-PRO-265, Standards/Requirements Identification Document Process HNF-PRO-079, Job Hazard Analysis HNF-PRO-450, Air Quality - Radioactive Emissions HNF-PRO-2595, Air Quality Program - Nonradioactive Emissions HNF-PRO-451, Regulated Substance Management HNF-PRO-452, NEPA, SEPA, Cultural and Natural Resources HNF-PRO-455, Solid Waste	Emissions HNF-PRO-2595, Air Quality Program - Nonradioactive Emissions HNF-PRO-451, Regulated Substance Management HNF-PRO-455, Solid Waste Management HNF-PRO-456, Water Quality Program DOE/RL-94-02, Hanford Emergency Response Plan DOE-RL-0223, Emergency Plan Implementing Procedures HNF-PRO-424, Emergency Preparedness Program HNF-IP-0263-GEN, Guidance for Building Emergency Plans			

	Establish ES&H Policy	Define the Scope of Work	Identify Hazards, Environmental Impacts and ES&H Requirements	Analyze Hazards and Environmental Impacts and Implement Controls	Perform Work Within Controls	Provide Feedback and Continuous Improvement	Management Review
			Management HNF-PRO-456, Water Quality Program HNF-PRO-2258, Chemical Management				
Hazards Tailored to Work Being Performed				HNF-PRO-430, Safety Analysis Program HNF-PRO-700, Safety Analysis and Technical Safety Requirements HNF-PRO-704, Hazard and Accident Analysis Process HNF-PRO-705, Safety Basis Planning, Documentation, Review, and Approval HNF-PRO-265, Standards/Requirements Identification Document Process HNF-PRO-450, Air Quality - Radioactive Emissions HNF-PRO-2595, Air Quality Program - Nonradioactive Emissions HNF-PRO-452, NEPA, SEPA, Cultural and Natural Resources HNF-PRO-451, Regulated Substance Management HNF-PRO-455, Solid Waste Management HNF-PRO-456, Water Quality Program HNF-PRO-111, Occupational Medical Qualification and Monitoring			

	Establish ES&H Policy	Define the Scope of Work	Identify Hazards, Environmental Impacts and ES&H Requirements	Analyze Hazards and Environmental Impacts and Implement Controls	Perform Work Within Controls	Provide Feedback and Continuous Improvement	Management Review
				HNF-PRO-079, Job Hazard Analysis HNF-PRO-2701, Authorization Envelope and Authorization Agreement			
Operations Authorization					HNF-PRO-2701, Authorization Envelope and Authorization Agreement HNF-PRO-062, Identifying and Resolving Unreviewed Safety Questions HNF-PRO-055, Facilities Start-Up Readiness HNF-PRO-3468, Shutdown and Stop-Work Direction		
Worker Involvement			HNF-MP-001, Management and Integration Plan HNF-4361, PHMC Expectations for Worker Involvement HNF-PRO-079, Job Hazard Analysis HNF-PRO-111, Occupational Medical Qualification and Monitoring	HNF-4361, PHMC Expectations for Worker Involvement HNF-PRO-079, Job Hazard Analysis HNF-PRO-111, Occupational Medical Qualification and Monitoring	HNF-POL-PROCEDURE, Procedure Compliance Expectations HNF-PRO-4616, Supervision of Field Work Activities HNF-PRO-074, Safety Responsibilities HNF-PRO-3468, Shutdown and Stop-Work Direction HNF-PRO-409, Exposure Monitoring, Reporting, and Exposure	HNF-PRO-054, Sharing Fee With Employees HNF-PRO-050, Managing Employee Performance,	FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement.

	Establish ES&H Policy	Define the Scope of Work	Identify Hazards, Environmental Impacts and ES&H Requirements	Analyze Hazards and Environmental Impacts and Implement Controls	Perform Work Within Controls	Provide Feedback and Continuous Improvement	Management Review
					Records Management HNF-PRO-079, Job Hazard Analysis HNF-PRO-111, Occupational Medical Qualification and Monitoring		
Communication & Stakeholder Involvement	HNF-MP-001, Management and Integration Plan HNF-5053, Policy for Environment, Safety and Health HNF-5054, PHMC Team Environmental Policy HNF-PRO-075, Safety Communications	HNF-MP-001, Management and Integration Plan HNF-MD-016, Annual Budget Submittal NF-MD-017, Multi-Year Work Plan HNF-POL-TRIBES, Tribes, Regulators, and Stakeholders Participation Policy	HNF-MP-001, Management and Integration Plan HNF-PRO-452, NEPA, SEPA, Cultural and Natural Resources	HNF-PRO-452, NEPA, SEPA, Cultural and Natural Resources		HNF-MP-001, Management and Integration Plan HNF-4467, Feedback and Improvement Policy HNF-PRO-067, Managing Lessons Learned HNF-POL-OPEN, Open Door Policy HNF-POL-TRIBES, Tribes, Regulators, and Stakeholders Participation Policy HNF-PRO-410, Resolving Employee Concerns	FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement.
Continuous Improvement	HNF-MP-001, Management and Integration Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-4467, Feedback and Improvement Policy HNF-4467, Feedback and Improvement Policy HNF-5053, Policy for Environment,	HNF-MP-001, Management and Integration Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-4467, Feedback and Improvement Policy HNF-PRO-357, Completion and Closure of Performance Agreements HNF-PRO-246,	HNF-MP-001, Management and Integration Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-4467, Feedback and Improvement Policy HNF-PRO-246, Management Assessment HNF-PRO-67, Managing Lessons Learned PHMC ESH&Q Performance Indicator Plan	HNF-MP-001, Management and Integration Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-4467, Feedback and Improvement Policy HNF-PRO-246, Management Assessment HNF-PRO-67, Managing Lessons Learned PHMC ESH&Q Performance Indicator Plan	HNF-MP-001, Management and Integration Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-4467, Feedback and Improvement Policy HNF-PRO-246, Management Assessment HNF-PRO-67, Managing Lessons Learned	HNF-MP-001, Management and Integration Plan HNF-MP-599, Project Hanford Quality Assurance Program Description HNF-4467, Feedback and Improvement Policy HNF-PRO-357, Completion and Closure of Performance Agreements HNF-PRO-246, Management Assessment HNF-PRO-060, Reporting Occurrences and Processing Operations Information HNF-PRO-077, Reporting,	FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement.

	Establish ES&H Policy	Define the Scope of Work	Identify Hazards, Environmental Impacts and ES&H Requirements	Analyze Hazards and Environmental Impacts and Implement Controls	Perform Work Within Controls	Provide Feedback and Continuous Improvement	Management Review
	<p>Safety and Health</p> <p>HNF-5054, PHMC Team Environmental Policy</p> <p>PHMC ESH&Q Performance Indicator Plan</p> <p>FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement.</p>	<p>Management Assessment</p> <p>PHMC ESH&Q Performance Indicator Plan</p> <p>HFN-PRO-052, Corrective Action Management</p> <p>HNF-PRO-653, Deficiency Tracking System</p> <p>HNF-PRO-074, Safety Responsibilities</p> <p>HNF-PRO-410, Resolving Employee Concerns</p> <p>FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement.</p>	<p>Managing Lessons Learned</p> <p>PHMC ESH&Q Performance Indicator Plan</p> <p>HFN-PRO-052, Corrective Action Management</p> <p>HNF-PRO-653, Deficiency Tracking System</p> <p>HNF-PRO-074, Safety Responsibilities</p> <p>HNF-POL-PERFORM, Independent Performance Assessment Policy</p> <p>HNF-PRO-410, Resolving Employee Concerns</p> <p>VPP survey conducted as part of the HGET training.</p> <p>ISMS Activity Level Baseline Survey</p> <p>FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement</p> <p>Facility Evaluation Board Program Administrative Procedure Manual, FEB Procedure FE 1-1</p> <p>PHMC Performance Objectives and Criteria (Facility Evaluation Board), WHC-IP-1232.</p> <p>ISMS Activity Level Baseline Survey</p> <p>FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement</p> <p>Facility Evaluation Board Program Administrative Procedure Manual, FEB Procedure FE 1-1</p> <p>PHMC</p>	<p>HFN-PRO-052, Corrective Action Management</p> <p>HNF-PRO-653, Deficiency Tracking System</p> <p>HNF-PRO-074, Safety Responsibilities</p> <p>HNF-POL-PERFORM, Independent Performance Assessment Policy</p> <p>HNF-PRO-410, Resolving Employee Concerns</p> <p>VPP survey conducted as part of the HGET training.</p> <p>ISMS Activity Level Baseline Survey</p> <p>FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement</p> <p>Facility Evaluation Board Program Administrative Procedure Manual, FEB Procedure FE 1-1</p> <p>PHMC Performance Objectives and Criteria (Facility Evaluation Board), WHC-IP-1232.</p>	<p>PHMC ESH&Q Performance Indicator Plan</p> <p>HFN-PRO-052, Corrective Action Management</p> <p>HNF-PRO-653, Deficiency Tracking System</p> <p>HNF-PRO-074, Safety Responsibilities</p> <p>HNF-POL-PERFORM, Independent Performance Assessment Policy</p> <p>HNF-PRO-410, Resolving Employee Concerns</p> <p>VPP survey conducted as part of the HGET training.</p> <p>ISMS Activity Level Baseline Survey</p> <p>FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement</p> <p>Facility Evaluation Board Program Administrative Procedure Manual, FEB Procedure FE 1-1</p> <p>PHMC Performance Objectives and Criteria (Facility Evaluation Board), WHC-IP-1232.</p>	<p>Investigating, Managing Events</p> <p>HNF-PRO-453, Environmental Notification and Reporting</p> <p>HNF-PRO-058, Critique Process</p> <p>HNF-PRO-67, Managing Lessons Learned</p> <p>PHMC ESH&Q Performance Indicator Plan</p> <p>HFN-PRO-052, Corrective Action Management</p> <p>HNF-PRO-653, Deficiency Tracking System</p> <p>HNF-MD-032, Presidents and Employee Zero Accidents Councils</p> <p>HNF-PRO-074, Safety Responsibilities</p> <p>HNF-POL-PERFORM, Independent Performance Assessment Policy</p> <p>HNF-PRO-410, Resolving Employee Concerns</p> <p>VPP survey conducted as part of the HGET training.</p> <p>ISMS Activity Level Baseline Survey</p> <p>FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement</p> <p>Facility Evaluation Board Program Administrative Procedure Manual, FEB Procedure FE 1-1</p> <p>PHMC Performance Objectives and Criteria (Facility Evaluation Board), WHC-IP-1232.</p>	

	Establish ES&H Policy	Define the Scope of Work	Identify Hazards, Environmental Impacts and ES&H Requirements	Analyze Hazards and Environmental Impacts and Implement Controls	Perform Work Within Controls	Provide Feedback and Continuous Improvement	Management Review
			Performance Objectives and Criteria (Facility Evaluation Board), WHC-IP-1232.				
Senior Management Involvement	FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement	FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement	FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement.	FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement.	FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement.	FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement	FDH-5096. Project Integration Implementing Procedure for Feedback and Improvement.

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